

## SIO NOTES 1919-1925

[transcribed from "SIO Notes 1919-1933" from Scripps Institution of Oceanography ArchivesCollection 2011-81. Not fully proofed so there are typos]

1919 Aug

### Biological Station Personals

All available cottages are occupied and it has been impossible to find room for some people who wished to join the colony during August.

August residents include the following from Escondido: Mr. and Mrs. E.C. Batchelder, their three sons and a maid; Mrs. Dunlap and three children. The family of the rector of the Episcopal Church who is visiting in New York; and the Rev. L.A. Goddard and family of the First Congregational Church.

Miss Dolly Scripps and Mrs. Bessie Howard have come in for a time from Escondido.

Riverside is represented by Dr. and Mrs. H.S. Reed and nephew and by Dr. and Mrs. Fawcett and daughter, all from the Citrus Station.

San Diego representatives are Dr. Wing, the eminent eye and ear specialist and Mr. and Mrs. Libby and Mrs. Libby's mother. Mr. Libby is a teacher of Mathematics in the San Diego High School.

Mrs. H.J. Snook and three children of Stockton continue residence at the Station while Mr. Snook takes a trip in the High Sierras. Mr. Snook has been collaborating with Miss Myrtle Johnson of Pasadena High School in the preparation of a book which is to give the same service to the West Coast that Arnold's Sea Beach at Ebb Tide does to the East Coast. Most of their work to date has been done at the Scripps Institution.

Berkeley is represented by Mrs. H.W. Jackson and daughter and Miss Bangs, and Cambridge, Mass. By Dr. and Mrs. G.H Parker of Harvard University.

President W. E. Clark of the University of Nevada had joined his family who have been here all summer.

Permanent residents who have recently joined the colony, include Mrs. E. L. Michael, who returns from a visit to Alhambra bringing an aunt and nephew for a visit here; miss M. B. Rudolph of Denver who takes charge of some of the office work; a new baby to the home of Mr. And Mrs. Frank Warde; Mr. and Mrs. W. E. Allen and family from Fresno; Mr. and Mrs. N.W. Cummings from work in an eastern arsenal where Mr. Cummings had the rank of lieutenant; and Mr. De-L. Mulhall who comes from Berkeley to work with Dr. Sumner.

The sister of Mr. Charles Copeland, with her three children and their cousin, is visiting him during august.

Dr. F. B. Sumner is spending a week in the mountains while Mrs. Sumner prepares to accompany him to Berkeley, where he is to give some university work during the first semester.

Mr. Conrad Warner recently dropped his work in the laboratory in order to go on a deer hunt before taking up his university studies at Berkeley

Mrs. C. Essenberg spent the week end visiting her brother in Hollywood.

Dr. W. E. Ritter spent the week end with Mr. E.W. Scripps at Mira Mar.

Dr. and Mrs. Ritter and nephew Warner cockerel expect to motor to Berkeley soon.

Mr. Kenneth Shain has enlisted in the aviation service of the United States navy.

1919 Aug

Biological Station Personals and News.

Mr. Collins will leave in a few days to make up the year's work in France where he will teach the biological sciences.

Dr. Holt and party have decided to extend their stay in La Jolla and take further advantage of the mackerel fishing.

Rev. Dunlap of Escondido has arrived after a rather strenuous trip through the strike district, for a visit with his family located at #5. He was on a train on which were carried two carloads of strike breakers and saw the guards placed about the two cars. He came from San Bernardino on by way of auto stages.

Mrs. J. K. Moore and her two children are visiting her sister, Mrs. Snook.

Mrs. Crosby, the sister of Mr. Copeland, had expected to leave for her home in Texas but will remain here until the strike is settled.

Reports from Mr. Kenneth Shain, now at North Island, are that he is enjoying his work and believes that he has good opportunity of having a promotion soon.

Mrs. Irvine is visiting the Hannays.

Dr. and Mrs. Ritter arrived in San Francisco Sunday night after having a delightful trip of ten days on the coastline journey from here. They will remain there for 10 days or two weeks.

Mr. Tom Dewey, who had been with Dr. and Mrs. Reed in cottage #21, left Tuesday for his home by way of Riverside.

Mrs. Stewart started on her trip to New York but was only able to meet Mrs. Sumner by taking an automobile as far as Fresno and getting on the other side of the strike.

Mr. Wesley Allen went north to join a class which will enter the electrical school at Hampton Roads, but returned on the same day on account of the strike.

Mr. Batchelder and friends spent the week end with his family.

1919 Aug? or Sept?

Miss Tracy visited the Michaels over the week end.

Mr. H. H. Collins, who goes to Fresno as head of the Biology Department in the High School and Junior College after a stay of some years here, gave his leaves for residence in Fresno this week.

Mr. Batchelder came down from Escondido on Sunday, spent the day with his family and then took them back home with him.

Rev. Dunlap, who had returned from his New York visit a few days before went back to Escondido with his family on Saturday.

Rev. Goddard, who was an especial enthusiast on fishing, regretfully left for home with his family on Saturday.

Miss Dolly Scripps and friends closed their stay here on Sunday. They were fortunate in being here through most of the good fishing days which they fully enjoyed.

Mr. Libby and family returned to San Diego Monday where Mr. Libby again takes up his work as a High School teacher of Mathematics.

Kenneth Shain visited his parents on Sunday.

Word comes from Dr. Ritter at Berkeley that he and Mrs. Ritter are enjoying many visits with friends in that locality.

Dr. Hold, Miss Rouzee and Mrs. White have returned to Los Angeles after a three weeks stay at the station.

Dr. J. H. Powers of Lincoln, Nebraska, the well known protozoologist, paid a flying visit to the station one day this week for the first time in several years.

Mr. and Mrs. C. Fred Henking visited Dr. Cleverdon last week end.

Wesley Allen has again departed for Hampton Roads, Virginia where he is to enter the electrical school of the Navy. He is one of the many who have been delayed by the railroad strikes.

Dr. and Mrs. J. H. Parker finally got started for the Grand Canyon after several days delayed by the strikes. From the Grand Canyon they intend to go directly home to Cambridge, Mass.

Mrs. Snook and the children have gone to Los Angeles to meet Mr. Snook who has just returned there from his trip to the High Sierra. They will soon return to Stockton where Mr. Snook again takes up the work of the Biology Department in the High School.

Aug Sept, 1919

Mr. R. C. Batchelder of Escondido visited his family over the week end.

Mrs. Snook hears from Mr. Snook that he is now in the high Sierra.

Two nephews are visiting Mr. Copeland.

Miss Beers and her mother from the University of Southern California are until the middle of September.

Mrs. Wing has returned to San Diego after a few weeks stay.

Dr. Ernest Cleveron and family, of San Diego, are here for a short time.

Mrs. Christine Essenberg, the Librarian, has gone to Big Bear Valley to spend her vacation. Miss Sallie P. Hughes occupies her house during her absence and is meanwhile gathering some local material for her research studies. She has spent the past two years in Grinnell College in Iowa and now expects to continue her studies in Columbia University.

Dr. W. E. Clark, President of the University of Nevada, left Monday night to take up his work at the University. He expressed himself as especially pleased with the La Jolla region and hopes to bring his family here again.

Mrs. Cumming's sister, Miss Browning with her friend Miss Turner are visiting the Cummings.

Mrs. Alice R. Stuart leaves Sunday for a visit of several weeks in New York State to be followed later by a visit of several weeks with relatives in Texas.

Dr. G. F. McEwen leaves for San Francisco Monday night on the Admiral Schley for a meeting with the Committee of the Council of Defense which is undertaking investigations of some of the problems of the North Pacific.

Dr. and Mrs. Ritter, who are motoring along the coast, will be in San Francisco and Berkeley for about two weeks. Dr. Ritter is to attend the same meeting as does Dr. McEwen.

Mr. and Mrs. Frank P. Ward are now being visited by Mr. Ward's sister and they are all occupying Dr. Sumner's house during his absence.

Dr. F. B. Sumner is now located at the Hotel Clarendon in Berkeley. On arrival in Berkeley he found it almost impossible to find a house to live in. Many students cannot attend because of lack of housing. Hotel Shattuck, the largest in Berkeley, has even put cots in its ball room for temporary use as a girls dormitory and cots in the basement trunk room for a boys dormitory.

Dr. Adolf Meyer, of Johns Hopkins University, who assisted so ably in the Chautauqua in Science writes from Paxton, Mass. of his favorable remembrance of La Jolla and sends felicitations to acquaintances here.

W. E. Allen is finishing the installation of equipment on the pier for securing measured quantities of water for use in his comparative studies of the numbers of microscopic plants present in sea water at various times and under varied conditions.

Dr. G. F. McEwen has recently finished installing equipment for recording currents in the water which pass the end of the pier in a north or south direction.

Dr. G. H. Parker, of Harvard University, who has been spending some weeks in use of the facilities of the Biological Laboratory for some studies in which he is proficient will give some explanation of his work and its results at a seminar in the library of the Biological Station at 4 p.m. Friday August 22. He will also give a demonstration of the "phosphorescent" light producing powers of the "sea pansy" in the same room at 8 p.m. of the same day.

Attention of the investigators of the Scripps Institution has been called to the fact that statements to the effect that the cutting of kelp in recent years is the cause of the disappearance of the kelp at the present time. The facts are that the beds as far north as Capistrano are in the same condition, as is also the Lower California coast from Cedros Island to Point of Rocks, and that depleted condition is due to the high temperature prevailing again this summer as in the three preceding summers. As the Lower California beds have never been harvested, it is quite evident that cutting has had no effect on the present condition of the beds. Furthermore, the beds from Pt. Firmin northward are beginning to show the effects of temperature and are now rapidly disappearing though in good condition to August 1. Beds in that region which have been harvested are now in better condition than those not harvested. This bears out the views as to causes conditions between here and San Pedro in previous years. Northwest winds and upwelling water are the conditions needed to bring the kelp beds back to their former size and vigor since the temperatures recently found here are fatal to them.

Aug Sept 1919?

Dr. Fawcett, of the Riverside Citrus station, has returned to Riverside whence he goes to Santa Paula for some citrus investigation.

Dr. Jean Holt, Miss Rousseau and Miss White, all of Los Angeles are here for a two weeks stay.

Mrs. Jackson and daughter Carroll and Miss Bangs are returning to Berkeley.

Dr. F. B. Sumner and family, accompanied by his mother, are moving to Berkeley where the Doctor is engaged for the Fall term in carrying in the work of Dr. Holmes of the Zoology Department, in the University. Mrs. Sumner, sen. will go on to New York to visit relatives.

Dr. Scott of the University of New York, who has been motoring over the State was a recent visitor and he is now located at The Strand.

Dr. B. M. Allen, of the Department of Zoology in the University of Kansas who has been teaching in the summer school at Friday Harbor on Puget Sound, the Marine Laboratory of the University of Washington, is again visiting friends at the station and is staying in La Jolla for a month.

Dr. Mary B. Ritter has had her name drawn for Grand Jury service. This may interfere with her contemplated trip to Berkeley.

9-11-19

### Biological Station Personals

Mr. Greeley, father of Mrs. Michael, is visiting the Michaels.

Mrs. Collins and children left on Saturday for Fresno.

Mr. Copeland expects to leave for Texas about the first of the month and his family will move in to La Jolla.

Rev. Barkman and his wife and daughter are located in cottage #12. He is the Field Secretary of the First Baptist Church.

Mrs. Shaw and daughters have taken cottage #13 for the week.

A letter from Wesley Allen states that he has arrived in Northfolk and has been placed in quarantine for three weeks. He enjoys everything but the eating.

Dr. McEwen is autoing back from Berkeley with Dr. and Mrs. Ritter. Dr. and Mrs. Ritter are returning with their niece, Miss Bernadine Hobbs, and she will be a house guest for several weeks.

The Ark has had its last year's hat removed and a new one has taken its place.

A week ago Sunday a wheel came off at the top of the Biological grade, rolled down the entire grade to within a few feet of the ocean and just missed several cottages and jumping both the main highway and the institution service road. The wheel is now held at the station garage waiting for its owner.

A very noticeable feature of the coast line this year, from Spindrifft to the Station, is the depositing of sand which was washed out so completely and to such a depth last winter. This has been deposited to such an extent that although there are no minus tides this month, ordinary low tides give the appearance of minus tides as the shoreline is practically moved out several hundred feet from last winter's shoreline. Within the last week there has also been noticeable an extremely strong northerly current and since this set in pier fishing has become practically negligible.

Mrs. J. P. Scripps of Del Mar and Miramar has been a frequent visitor at the Station during the last few weeks.

## Biological Station Personals

On last Saturday afternoon Mr. and Mrs. E. L. Michael gave a delightful little party to the children resident at the station in connection with the birthday celebration of their little daughter, Marian. It was conducted as a surprise party and it was as successful in that way as in any other. The guests were all assembled at the house about three p.m. while Marian was kept occupied by her father at the laboratory. After a period of playing of games at the house the party spent a considerable time on the beach with games appropriate to that location. Later, all returned to the house for refreshments of pink ice cream and birthday cake, the latter of which was illuminated with nine candles. In addition to eighteen children, four adults attended and everyone had a good time.

Mr. H. H. Collins left the station last Saturday afternoon for Fresno where he is soon to take up his new duties as head of the Biology Department in the High School and Junior College. His family did not accompany him as it is extremely difficult to find either houses or apartments for rent in Fresno and they will have to wait some little time in order that he may make some arrangement for their accommodation.

Mrs. Crosby, sister of Mr. Charles Copeland, has returned to her home in northwestern Texas after an enjoyable visit of a month with her brother at the Station.

Rev. and Mrs. W. B. Thorpe spent a day at surf bathing and fishing with the Cleverdons recently.

Dr. and Mrs. Reed, of the Citrus Experiment station at Riverside, left for home on Saturday last. Dr. Reed is the authority in Southern California on the effects of fertilizers on citrus trees.

Miss Sallie P. Hughes left for the East on Thursday of last week after some very successful collecting of biological material at the Station. She was entertained at dinner by the Cleverdons on the preceding evening.

Mrs. Essenberg has returned from her vacation at Big Bear Lake. She has brought back a large supply of pine cones and lots of energy.

Dr. and Mrs. Ritter and Dr. McEwen left Berkeley on the 10<sup>th</sup> on their return motor trip to the Station.

Miss Browning and Miss Turner who have been visiting Mrs. Cummings for some time, have been taken by Mr. and Mrs. Cummings to Los Angeles for a short visit before continuing on their return journey to Ogden, Utah, where they are to resume their High School studies.

Mrs. Ross and Miss Hazel Ross, of Los Angeles, who have summered in La Jolla spent Saturday and Admission Day with Mrs. And Miss Beers.

## Biological Station Notes.

Almost all of the residents of the colony got into the Station autos and went over to see and hear President Wilson on Friday of last week.

Miss Anthony and Miss Millar have returned to their homes in Los Angeles after a short stay at the Station.

Mr. Charles Copeland moved his family over to La Jolla at the first of this week. He made his last drive for the Station on Tuesday evening. He is leaving to take up work in the oil fields of Texas. Members of the colony and business men of La Jolla will miss Mr. Copeland and his regular visits. All unite in wishing him the best of success in his new venture.

Mrs. and Miss Beers left for Los Angeles on Monday where Miss Beers will resume her work as a teacher of Biology in the University of Southern California. Mrs. Beers will go on East for a visit to their old home.

Mr. Barnhart went to Los Angeles at the end of last week for a ten days stay on his vacation.

Rev. Barkman and Mrs. Barkman have returned to San Diego in order that he may go to Los Angeles to attend a ministerial meeting this week.

Miss Bernadine Hobbs motored down from Berkeley with the Ritters and will remain with them for a time.

Mr. Ward left for the Imperial Valley Monday and Mr. Granzow takes his place at the Station.

Drs. W. E. and Mary B. Ritter returned from Berkeley last Saturday night. Dr. McEwen accompanied them on the return trip. They report very interesting experiences since leaving here. The trip down was made in a leisurely manner and proved very profitable as well as enjoyable by reason of the information gathered at various stopping places. On Sunday September 14 a visit was made to the Fulton Big Trees, the Redwood grove near Santa Cruz. Here were found enormous huckleberry bushes from which the party gathered a goodly supply. The night was spent at Santa Cruz. On the next day a visit was made to Moss Beach to the whaling station. There two humpback whales were observed hauled in out of the water. Dr. W. E. Ritter remarks especially about the number of things which he learned about whale anatomy. They also obtained a great deal of information about whale habits &c. 125 whales have been killed this season, mostly of the humpback species but there were a few sulfur bottoms and one or two sperms also caught. One night and a half day were spent at Atascadero colony in examining the layout, methods of conducting, character and disposition of buildings &c. Another important stop was at Summerland at the Kelp Experiment Plant of the United States Department of Agriculture. A great deal was learned there it is worth noting that while the party were still in Berkeley waiting for their committee meeting Dr. McEwen made a trip to the light house at the Farralone Islands and spent the night there.

A meeting of the scientific staff of the Biological Station was held last Wednesday afternoon at which Dr. Ritter and Dr. McEwen gave a report of proceedings of the Committee on Exploration of the North Pacific whose meetings they attended while at Berkeley The most encouraging thing

about the report was the indication that this committee is going into active and effective service. Another meeting is to be held in the East, probably in Washington, sometime in December.

## Biological Station Notes.

Mr. Ralph Taylor of Lakeside has taken up permanent residence at the station. He comes to take the place of Mr. Charles Copeland who last week departed for Northern Texas. Mr. Taylor was formerly with Mr. Will Rannels in La Jolla. He has recently returned from duties overseas with the American Expeditionary Forces.

Mrs. W. E. Allen expects to leave on Sunday for a short visit with her parents in Oklahoma.

Dr. G. F. McEwen and family spent the week end at Eucanto.

Mr. Ward returned from Los Angeles at the end of the week end and departed at once with his family for his new home in the Imperial Valley. His brother - in - law, Mr. Granzow takes charge of his work at the Station and also assumes the care of Dr. Sumner's house during his absence.

Mr. P. S. Barnhart returned from his visit to Los Angeles on Wednesday.

Mr. E. L. Michael addressed the Station seminar on Monday afternoon. He explained the result of some rather involved statistical studies which he has been making as to the way in which measured quantities of microscopic plants are distributed in the sea at various times of the year and at various distances from shore. While the matter needs further examination, it does seem probable that upwelling water in the sea has a very considerable effect on the amount of microscopic life to be found in certain areas. This is an important point since the life of larger things depends on the abundance of life of smaller things.

Mr. George A. Greeley started on Tuesday to New York for a extended visit to his sister. Mrs. H. A. Greeley is making an indefinite stay with her daughter, Mrs. E. L. Michael, during Mr. Greeley's absence.

## Biological Station Notes.

Mrs. Wenger expects to leave in a day or two for a visit to her son.

Mr. and Mrs. W. C. Crandall are to leave on Saturday for a three weeks vacation.

Miss Hall arrived at Dr. Ritter's last week for an indefinite stay.

Extensive repairs are being made on the main road over the Biological Station hill.

Some nice specimens of fishes from the kelp beds were secured and placed in the aquarium by Mr. Barnhart on Tuesday.

A small exhibit which may interest a good many people has been placed in the museum this week. It contains of a bottle containing some microscopic material obtained from the sea water at the end of the pier together with a list of some of the living things found in it and an estimate of the numbers of each to a liter (about one quart) of the water at that time. The total number of all taken together is over 200,000. Since many escape it is safe to say that there were probably more than 500,000 of these kinds alone, not to mention numbers of other kinds which were not counted. Anyone who took a mouthful of sea water at that time would get hundreds if not thousands in his mouth. The numbers given are not unusual although there are fewer just now. Next Spring the numbers will be far greater.

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Water Temperatures at Biological Station Pier for week ending Oct. 8, 1919. Averages and extremes.

Oct. 2, 65.22

Oct. 3, 65.5

Oct. 4, 65.5

Oct. 5, 66.25

Oct. 6, 65.5

Oct. 7, 66

Oct. 8, 66

Lowest October 4 at 8 a.m. 64

Highest October 4, 5, 7 at 8 p.m. 67.

## Biological Station Notes.

Miss Fields, a teacher from the middle West and a former student of the University of Chicago is spending a three months vacation at the Station. She expects to make considerable use of both library and laboratory facilities here.

Mr. and Mrs. Cragin of Portland, Ore., are spending a few weeks at the Station.

Dr. W. E. Ritter spent the week end at Mira Mar.

Mrs. Essenberg took advantage of a business trip which Mr. Crandall was making to San Pedro to accompany him and Mrs. Crandall to Los Angeles for a week end visit.

Mr. and Mrs. L. S. Simmons, brother – in – law and sister of Mrs. E. L. Michael have been spending several days visiting the Michaels. They came from Sonoma in their auto and stopped several days in Los Angeles to visit relatives there. They expect to be here until Thursday.

Water Temperatures at the Biological Station Pier for the week ending November 11, 1919.  
Averages and Extremes.

Nov. 4 62.5

Nov. 5 62.5

Nov. 6 62.5

Nov. 7 62.25

Nov. 8 61.75

Nov. 9 61

Nov. 10 61.25

Nov. 11 61

Maximum on November 4, 5, 6 at 8 p.m. 63

Minimum on November 10, 11 at 8 a.m. 60.5

### Clerical Assistant at Biological Station Drowned.

Residents of the Biological Station were intensely shocked and pained on Tuesday Oct. 14, 1919 by the drowning of Miss Rudolph while surf bathing. She and Mr. Granzow had gone out for a "dip" at about 5:30. Finding the water cold, they were soon returning through the surf when she fainted and the young man was not able to support her against the strong undertow and cross current. Hence both were swept northward to the pier from which the rescue was finally made. Nearly all of the workers had gone home and the damage was done before any one knew of the sad plight. Use of the pulmotor for over three hours failed to resuscitate her.

Mr. Granzow is an eighteen year old boy, new to the ocean, but he proved himself every inch a man and a hero of the truest sort. Cumbered with the limp body and caught in the whirlpools of the pier amongst the breakers, yet he managed to tie it to a life preserver thrown to him. Almost exhausted and thoroughly chilled by that time, he could do no more than try to cling to the piling while the body was gotten ashore. When he was finally rescued by a rope let down from above he was unable to stand or walk. It was found that his arms and legs were badly lacerated by the barnacles of the pier. Although in danger of pneumonia on account of his suffering and exposure it is expected that he will recover. He did the best that he could in the face of terrible odds in a great emergency and he carried it to a finish.

The passing of Miss Rudolph was most untimely. She was making a winning fight against poor health and at the same time was doing a great deal of efficient work for the Biological Station. Although she had only been working there a short time, her excellent aid will be sadly missed by all of the members of the staff, each of whom she assisted in some way. Her bright smile and genial presence had won her a secure place in the hearts of all of the residents of the colony. Her presence was a great blessing. Her absence is a loss to be long remembered.

## Biological Station Notes.

Mrs. Hinz is a member of the colony for the winter.

Mr. Brero and family of San Francisco are making a ten day stay in the colony.

Dr. Ida Hyde, one of the prominent woman scientists of America is using the Station laboratory facilities for a time. Not only a scientist of note, herself, she is one of the leaders in promoting more extensive scientific interest for women. She is one of the influential officials in charge of the research table for women at the Naples Zoological Station. She was at one time an occupant of this table and still holds an honorary connection with that famous European laboratory. During the war she was occupied with important work for the National Research Council.

Residents of the colony have been variously amused, enlightened and excited by occurrences connected with the public use of the road through the colony while the public road is being repaired. The favorite sticking place is just behind Dr. Ritter's residence and within easy observation of all the residents. Big machines and little, heavy loads and light, all have their troubles or narrow escapes from troubles at that point. During the rain it became impassable but not until several venturesome had been foiled was it given up. Two or three times the exciting spectacle was seen of cars which had incautiously ventured on to the bare slope of the parking place coasting sidewise toward the sea in the slippery ooze. Fortunately no one was injured.

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Water Temperatures at the Biological Station pier for the week ending October 28, 1919. Averages and Extremes.

October 22, 65.5

October 23, 64.6

October 24, 63

October 25, 64

October 26, 63.5

October 27, 63

October 28, 64.5

Minimum on October 25 and 27 at 8 a.m. 62.

Maximum on October 22 at 8 p.m. 67.5

## Biological Station Notes.

Mrs. W. E. Allen has returned from a short visit to her parents in Oklahoma. She reports almost continuous rain since leaving La Jolla and she expresses great appreciation of Southern California sunshine.

Captain and Mrs. W. C. Crandall have returned from their three weeks vacation automobile tripe. They spent some time in the San Francisco Bay region but most of their time was spent about Tahoe. They report being in snow before leaving the Lake Tahoe country. Both of them are looking much better after their much needed rest.

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Water Temperatures at the Biological Station Pier for the week ending November 4, 1919. Averages and extremes.

October 29 62.75

October 30 62.75

October 31 63.25

November 1 63

November 2 63

November 3 62.25

November 4 62.75

Maximum on October 31 and November 2 at 8 p.m. 63.5

Minimum on November 3 at 8 a.m. 61.5

## Biological Station Notes.

Word was received last Saturday from Point Arena that Dr. R. P. Brandt had recently died near there. No particulars were given. Dr. Brandt left the Station only a few months ago after a stay of a year and a half during which he did some very effective and valuable research on the life history of the kelp. His report on this work was finished some time ago and is soon to be published by the Bureau of Soils of the United States Department of Agriculture. Dr. Brandt was one of those quiet workers who accomplished a great deal without attracting much attention. His death is a loss to Science.

Captain W. C. Crandall left on Tuesday, via the new railroad, for the Imperial Valley, for a three or four days collecting trip. He is taking hydrographic collections for the hydrographers of the Station and biological collections (mainly from Salton Sea) for the biologists. He is accompanied by Dr. H. C. Bryant, Game Expert of the University of California and of the California State Fish and Game Commission, and by either Will F. Thompson or Mr. Higgins of the Fish and Game Commission. Dr. Bryant is studying the birds found on the trip, the other man is studying the fishes.

La Jolla residents may be interested in knowing that President William T. Foster of Reed College who speaks for the San Diego teachers institute this week, is president of the institution in which Dr. Harry B. Torrey ( So long connected with our Biological Station ) is located.

Dr. F. B. Sumner and family expect to return here about January 7, 1920, after a five months stay at Berkeley, where Dr. Sumner has been filling Dr. Holme's place temporarily.

Dr. Millspaugh, the noted Chicago Botanist, is using the Station Library this week.

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Water Temperatures at the biological Station Pier  
For the week ending December 16, 1919  
Averages and extremes.

Dec. 10 – 59  
11- 58  
12- 58  
13 – 57  
14 – 57.5  
15 – 57.25  
16 – 58

Lowest December 13, 8 a.m. – 56  
Highest December 10 and 11, 8 p.m. - 59

## Biological Station Notes

Word has been received from Mr. Charles Copeland that he is now located at Lubbock, Texas and that he is much pleased with his prospects.

Dr. and Mrs. W. E. Ritter left on Thursday for a tour of the Eastern states. Dr. Ritter expects to meet most of the prominent scientific educators during this trip, while Mrs. Ritter visits with friends along the way. They expect to be gone about 6 or 8 weeks. Dr. Ritter gave a seminar last week at which he read one of the papers which he is to give on this Eastern trip. A number of La Jolla and San Diego people were present.

Miss Bernadine Hobbs is returning home after a visit of several weeks with her aunt, Mrs. W. E. Ritter.

The Station commons was the scene of a merry party last Saturday night, met to extend best wishes to Dr. and Mrs. Ritter for a pleasant journey and felicitations to Dr. Ritter for having passed another milestone. Refreshments consisted of popcorn and apples. Games, Cards and music furnished amusements. Every one enjoyed the informal time.

A letter from Mrs. Alice R. Stuart, mother of Mrs. Crandall says that she is having an enjoyable visit at her former home in New York.

Mr. E. J. Allen of Whittier gave a short visit to W. E. Allen and family on Sunday.

Mrs. N. W. Cummings left about a week ago to attend the wedding of one of her sisters at Ogden, Utah.

Last Sunday Messrs. E.L. Michael, G. F. McEwen, P. S. Barnhart, N. W. Cummings and W. C. Crandall drove up to the Barrett dam where some of the members of the party started collecting data for hydrographic studies to be correlated with similar studies of the ocean in connection with the effort to forecast weather conditions from study of oceanic temperatures.

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Water temperatures at Biological Station pier for week ending Tuesday November 18, 1919.  
Averages and extremes.

November 12 61  
 “ 13 60.75  
 “ 14 60.75  
 “ 15 60.5  
 “ 16 60.25  
 “ 17 59  
 “ 18 59

Lowest on November 17 and 18 at 8 a.m. 59

Highest on November 12, 13, 14 and 15 at 8 p.m. 6

## Biological Station Notes

Mr. and Mrs. Craven have gone to Los Angeles for a few days. They hope to return here later. Both have said that they have been greatly pleased with La Jolla.

Dr. C. J. Herrick of the University of Chicago is arranging for working facilities at the Station about the first of the year. He intends to do some research work of his own.

Messrs. Shain, Taylor and Granzow, made a visit to Lakeside Sunday.

Mrs. C. Essenberg and Miss Hyde were members of a party of La Jolla Women who drove to Hulburd's Ranch and Cuyamaca Saturday and Sunday. They report variable weather, wind, rain, snow and sunshine on the trip.

Dr. McEwen is preparing papers for delivery in the latter part of December at meetings of the National Research Council at Washington D. C. and of the American Association for Advancement of Science at St. Louis. Mo.

Water Temperatures at the Biological Station  
Pier for the week ending November 25, 1919.  
Averages and Extremes.

Nov. 19 – 60.75  
20 – 61.25  
21 – 61  
22 – 60.5  
23 – 61  
24 – 61.5  
25 – 1.5

Lowest on Nov. 19, 22, and 23 at 8 a.m. – 60.5

Highest on Nov. 20 at 8 a.m. and Nov. 23 at 8 p.m. – 61.5

Mrs. and Miss Tracey of San Diego spent Thanksgiving with the Michaels.

Mr. Taylor of Lakeside, visited his son, Ralph, last Saturday.

Kenneth Shain spent Thanksgiving with his parents.

It is reported that Dr. and Mrs. Ritter are having an enjoyable and successful time on their Eastern trip.

Dr. McEwen leaves for Berkeley Sunday. From there he is to go on his Eastern trip.

Mr. N. W. Cummings is planning a trip to Utah for the Christmas holidays.

Water temperatures at Biological Pier  
for week ending Dec. 2, 1919.  
Averages and extremes.

November 26 – 60.75

27 – 59.5

28 – 59.5

29 – 59.75

30 – 69.5

December 1 – 59.5

2 – 59.5

Lowest on Nov. 30 and Dec. 1 at 8 a.m. – 59

Highest on Nov. 26 at 8 p.m. – 61

## Biological Station Notes

Mr. Granzow visited his son Wilfred last Friday night.

Dr. McEwen left Sunday afternoon for his trip East.

Mr. C. P. Burton, a long time friend of Mr. C. H. Michael spent the week end here. Mr. Burton is a resident of Illinois, making a business trip to this coast. He is an author and lecturer as well as business man. The Bob's Hill series of books for boys is probably best known of any of his works.

Mr. H. H. Collins who left the Station to take up teaching work in Fresno last September, is to be given his formal public examination for the Ph. D. degree at Berkeley on December 13. Dr. F. B. Sumner of the Station who is residing in Berkeley this semester will conduct the examination, preparation for which was done here largely under his direction during the past three years.

The Station staff has been exceedingly interested in the past few days by the election of a president of the University. This department, as well as other departments of the University, has been more or less embarrassed by the uncertainty of affairs pending a decision of this matter.

As stated by the newspapers some days ago, Colonel David P. Barrows, President of the American Legion of California, and Professor of Political Science in the University was elected President of the University of California by the Regents.

President Barrows was a member of the faculty of the State Normal School of San Diego some years ago, and is well known in this locality. He left the Normal for active participation in the Spanish – American war, in the course of which he was sent to the Philippines. There he was transferred from the army to superintendency of the schools of Manila and later to the directorship of education in the Philippines, by order of President Taft. Since his return to the United States he has been connected with the University of California in various important offices. In the world war he was sent to Siberia with the rank of Colonel for service in connection with the intelligence Bureau of the United States Army. His election to the Presidency is very generally approved. Some residents of La Jolla will recall his visit here a few months ago.

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 Water temperatures at the Biological Station Pier  
 for week ending Dec. 9, 1919. Averages and Extremes.

Dec. 3 – 59.25  
 4 – 59  
 5 – 59.25  
 6 – 59  
 7 – 59  
 8 – 58.75  
 9 – 58.75

Lowest on December 4, 8 and 9 at 8 a.m. – 58.5  
 Highest on December 4 and 5 at 8 p.m. – 59.5

Biological Station Notes.

Word has been received that the meeting of the Committee on Pacific Exploration of the National Research Council will be held in the American Museum of Natural History in New York instead of at Washington. The Station will be represented at this meeting by both Dr. Ritter and Dr. McEwen. Dr. and Mrs. Ritter were last heard from in Boston and Dr. McEwen is now on his way east after a stop in Berkeley.

## Biological Station Notes.

Mrs. Dorothy Glover has taken a cottage at the Station for a time.

A letter from Dr. and Mrs. W. E. Ritter brings Christmas greetings from them to all La Jolla friends. They regret that they are so hurried from one appointment to another that they have no opportunity to write to individuals.

On Tuesday afternoon Mrs. W. C. Crandall gave a tea to the ladies of the colony which was a very enjoyable affair appropriate to the season.

Mr. N. W. Cummings left last Tuesday night for Ogden, Utah to join his wife who is visiting with her parents, Mr. and Mrs. Browning. Mr. Browning is the inventor of the machine guns which played such a prominent part in our war equipment.

Mr. P. S. Barnhart and family have recovered from the illness which attacked all of them about a week ago.

Water Temperatures at the Biological Station  
Pier for the week ending December 23, 1919.

Averages and Extremes.

Dec. 17 – 57  
18 – 56.75  
19 – 57  
20 – 57.25  
21 – 57.5  
22 – 57.75  
23 – 57.5

Lowest December 18 at 8 am. 56.5  
Highest December 21 and 22 at 8 p.m. 58

## BIOLOGICAL STATION NOTES.

Messrs. S. M. Shapen and N.J. Pickle, inventory clerks from the Comptroller's office of the University of California are taking the annual inventory of Station equipment this week.

Mrs. C. Essenberg returned from her holiday trip to Los Angeles on Monday evening. Amongst others visited, on the trip, was Dr. Harlow Shapley, who gave some lectures on astronomy in La Jolla some eighteen months ago. Dr. Shapley is one of the astronomers of Mr. Wilson Observatory.

The Biological Station has received notice of a dinner to be given at the Hotel Alexandria February 10, 1920 by University of California Alumni in honor of the new president of the University Dr. David Barrows. The Institution expects to have some members present.

Mr. MacBarker of Oklahoma has taken a cottage for the winter.

Dr. E. J. Merrick, the eminent neurologist of the University of Chicago, writes that he expects to arrive about January 10<sup>th</sup> with a corps of assistants for about six months of research work.

Dr. H. H. Collins who was with the Institution for about tree years was formally granted his doctor's degree last week.

Messrs. Ralph Taylor and Wilfred Granzow spent Christmas with home folks in San Diego.

Kenneth Shain is home on a 10 day furlough from the North Island aviation camp.

Dr. F. B. Sumner and family expect to return next week.

The pier is closed to the public while being overhauled, and painted. The New year coat is battleship grey.

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 Water Temperatures at Biological Station pier  
 for week ending December 30, 1919. Averages  
 and extremes.

Dec. 24 – 57.5  
 25 – 57.25  
 26 – 57.75  
 27 – 57.5  
 28 – 58  
 29 – 58  
 30 – 57.75

Lowest December 25 and 27 – 8 a.m. 57  
 Highest December 26 – 8 p.m. to December 29 – 8 p.m. 58

## BIOLOGICAL STATION NOTES.

Mr. and Mrs. N. W. Cummings have returned from a holiday visit to kinsfolk and friends in Ogden, Utah. They are accompanied by Mrs. Cumming's sister, Mrs. Ford, and small son, who expect to make an extended stay in our milder climate. The party reports lots of snow and cold weather in Ogden, fourteen degrees below zero being mentioned as a graphic feature.

Captain W. C. Crandall has some young kelp plants under observation at San Pedro where he has found a locality unusually favorable for making studies on rates of growth and some other characteristics. The study can only be carried on at very low tides, so he has to make periodic trips to San Pedro for the work. He took advantage of the minus tides at the week end just passed for this purpose. Mrs. Crandall accompanied him. They returned on Tuesday.

Kenneth Shain has returned to North Island after his New Year furlough, spent with his parents.

Mr. Taylor visited his son, Ralph, during the holidays.

Preparations are being made for the coming of Dr. C. J. Herrick and party from Chicago this week.

Word from Dr. and Mrs. Ritter states that they are nearing the end o the eastern trip and will be glad to return shortly.

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 Water temperatures at Biological Station Pier  
 For week ending January 6, 1920. Averages  
 and extremes

Dec. 31 – 57.75  
 Jan. 1 – 58  
       2 – 57.75  
       3 – 57.75  
       4 – 57.75  
       5 – 57.5  
       6 – 57

Lowest January 6, 8 a.m. 56.5  
 Highest December 31, Jan. 1, 2, 3, 4, at 8 p.m. 58

## BIOLOGICAL STATION NOTES

Dr. G. F. McEwen has returned from his Eastern trip. After stopping a few days in Berkeley, he went direct to Washington where he spent about a week mainly at the Weather Bureau, Coast and Geodetic Survey, Hydrographic offices of the Navy and the Cosmos Club in consultation with various experts. Thence he went to New York City to the meeting of the Committee of Pacific Exploration and to lay out a program for discussion of these problems at another meeting scheduled for Honolulu in August, at which formal papers will be given. After about three days in New York, he proceeded to St. Louis to the annual meeting of the American Association for Advancement of Science. He reports a large attendance and an interesting and profitable session. He attended section meetings of the Physicists and Mathematicians, giving one paper before the Physicists and two before the Mathematical Society. After about four days spent at these meetings, he came directly homeward.

A telegram from Dr. Ritter says to expect him to be back this Saturday evening.

Mr. Mitchell and wife are taking residence in the colony this week. Mr. Mitchell is to take up the work in the murarium which Mr. Granzow is dropping in order to return to school.

Dr. C. J. Herrick of the University of Chicago is making use of the Station facilities for some investigation which is necessary in order to finish some books which are nearing completion. He is assisted by Mr. Gaderer who is doing some special research in neurology.

Mrs. Miller, formerly with Mrs. Ritter, has been called East and will not return.

Dr. F. B. Sumner and family have returned. Miss Florence has entered the Bishop's School.

Lieutenant Alias Martin who has charge of the rifle range for the U. S. Marine Corps, is taking up residence at the station this week.

Dr. McEwen and Mr. Cummings attended a meeting of the San Diego Club of the American Association of Engineers, which discussed important developments in the local water question.

Water temperatures at the Biological Station Pier  
For the week ending January 13, 1920, Averages  
and extremes.

Jan. 6 – 57

7 – 56.5

8- 56.75

9 – 55.75

10 – 55.5

11 – 55.5

12 – 56.5

13 – 56.5

Lowest January 10, 11, 8 a.m. – 55

Highest January 6, 8 p.m. 57.50

## Biological Station Notes

On last Sunday afternoon at three o'clock, Dr. and Mrs. Ritter were officially, formally, cordially and delightfully welcomed again into the life of the colony. There was a simple program of unusual excellence after which tea was served by ladies of the colony. The function was held in the community house of the Station which had been tastefully decorated for the occasion.

With Mrs. P. N. Hannay at the piano, Mr. Gaderer of Chicago, gave as the opening number of the program, a vocal solo, an excellent rendition of *Invictus* by Bruno Huhn. Dr. Ritter followed with a sketchy account of his recent trip through the East. Mr. Gaderer again favored the audience with a solo, *Somewhere a Voice is Calling*, Tate, and one encore. The distinguished guest, John Burroughs, then gave a very interesting little talk to the children about the stupidity of bees and the wisdom of flies due to the fact that bees had no enemies while flies had many.

Specially invited guests of the colony for the occasion included Miss Ellen Scripps, Mr. E. E. Scripps, Dr. Barros, Mr. Burroughs, Jr., Miss Henry and Miss Park.

Mr. Ben Greeley is visiting his sister, Mrs. E. L. Michael.

Mrs. Fredericks and daughter are visiting her sister, Mrs. Glover.

Wilfred Granzow has entered High School

Miss Bernardine Hobbs is staying with the Ritters for some weeks.

Mr. Adamson has returned to Los Angeles after visiting with his sister, Dr. Essenberg.

Dr. Sumner's mother has returned from her visit to the Atlantic coast.

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 Water temperatures at the Biological Station  
 Pier for the week ending January 26, 1920.  
 Averages and extremes.

Jan. 21 – 56.75  
 22 – 56.5  
 23 – 57  
 24 – 57.25  
 25 – 57.25  
 26 – 57.5  
 27 – 57.5

Highest on January 26<sup>th</sup> at 8 p.m. – 58.  
 Lowest on January 21, 22, 23 – 56.5

## Biological Station Notes.

On account of eye trouble, Wilfred Granzow has quit high school. He has gone to Imperial Valley for a stay with his sister, Mrs. Frank Ward.

Kenneth Shain came over from North Island for a visit to his parents last Saturday. He now has a regular assignment with the aeroplane mail service to Los Angeles, being one of four mechanics attending a big plane on its trip.

An unusually large number of Station people went over to the Monday afternoon meeting of the La Jolla Woman's Club in order to hear the excellent musical program.

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 Water temperatures at the Biological Station  
 Pier for the week ending February 3, 1920.  
 Averages and extremes.

Jan. 28 – 57  
 “ 29 – 56.75  
 “ 30 – 56.75  
 “ 31 – 56.75  
 Feb. 1 – 57  
 “ 2 – 57  
 “ 3 – 57

Lowest on January 20, 30, 31, and Feb. 1 and 3  
 at 8 a.m. – 56.5

Highest on February 1, 8 p.m. – 57.5

## BIOLOGICAL STATION NOTES.

Dr. and Mrs. Ritter, accompanied by Dr. and Mrs. Herrick, went to Cuyamaca for the last week end, for the purpose of enabling dr. Ritter to check up some observations which he is making on the acorn storing habits of California woodpeckers. They report an interesting trip and a very encouraging rainfall in the mountains.

Through the active interest of Mr. E. W. Scripps in the work of the Station, it has been offered an unique opportunity for some valuable marine studies. Mr. Scripps has decided to bring his private yacht, the Kemah from the Atlantic for use in Pacific waters this summer, and has placed the facilities of the boat at the service of the Biological Station on the trip over here.

In order to take advantage of this important opportunity, Captain W. C. Crandall and E. L. Michael left San Diego last Tuesday morning to meet the Kemah at Jacksonville, Florida. They expect to be gone some six or eight weeks and to do some very extensive collecting on the cruise. One of the most important results hoped for is the securing of nearly a thousand collections of microscopic material taken from measured volumes of water. If this is successful, it will furnish the station with one of the best series in existence.

The usual type of studies of kelp and fishes and of oceanic conditions will also be made and they should prove highly valuable for comparison with our pacific data.

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 Water temperatures at the Biological Station  
 Pier for the week ending February 10, 1920.

Feb. 4 – 57.25  
 5 – 57.5  
 6 – 57.75  
 7 – 57.75  
 8 – 57  
 9 – 57  
 10 – 56.75

Highest on February 5 and 6 at 8 p.m. – 58  
 Lowest on February 4 and 10 at 8 a.m. – 56.5

## BIOLOGICAL STATION NOTES

Dr. Florence Peebles accompanied by Miss Heffers arrived at the Colony on Tuesday afternoon. They expect to spend several weeks here. Both are teachers at Bryn Mawr College.

Dr. Peebles is one of our widely known woman specialists in biological research. To a good scientific education in this country she added a great deal of graduate study in various European universities. She was at one time an occupant of the American Woman's table at Naples. She has made some notable contributions to the literature of experimental zoology, particularly experimental embryology.

Information has been received that Captain W. C. Crandall has made a hurried trip to Washington, primarily to arrange for necessary papers, but partly in order to interview government officials at the Bureau of Fisheries and the Bureau of Soils. He and Mr. Michael expected to sail from Jacksonville on Wednesday for the trip to this coast by way of the Panama Canal.

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Water temperatures at the Biological Station

Pier for the week ending February 17<sup>th</sup>, 1920.

Averages and extremes.

Feb. 11 – 57.5  
12 – 57.75  
13 – 57.5  
14 – 57.5  
15 – 57.75  
16 – 57.75  
17 – 57.5

Lowest on February 11, 13, 14, 17 at 8 a.m. – 57

Highest on February 11, 12, 13, 14, 15, 16, at 8 p.m. - 58

## BIOLOGICAL STATION NOTES

Mr. B. M. Greeley, brother of Mrs. E. L. Michael is making an extended visit to the Station

Word from Captain W. C. Crandall and Mr. E. L. Michael indicates that they were somewhat delayed but that they finally sailed from Jacksonville a week ago.

Dr. F. B. Sumner is starting on one of his extended trapping trips for the collection of new stocks of deer mice for use in his experiments on heredity. This time he is searching for typical desert stocks and will make a trial in the vicinity of Yuma, Arizona. He will probably be gone three or four weeks. He will be accompanied for least a part of the time by Dr. C. J. Herrick who has been visiting the Station for some time. Dr. Herrick will probably come back here in order to start with Mrs. Herrick on their return trip to Chicago.

Mrs. C. W. Turner, of San Francisco is visiting Mrs. Essenberg for several months.

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Water temperatures at the Biological Station  
Pier for week ending February 24<sup>th</sup>, 1920  
Averages and extremes.

Feb. 18 – 57.75  
19 – 58  
20 – 57.5  
21 – 57.5  
22 – 57.75  
23 – 57.25  
24 – 57.5

Lowest on February 20, 21, 22 at 8 a.m. – 57  
Highest on February 18, 19, 20, 21 at 8 p.m. – 58

## BIOLOGICAL STATION NOTES

Mr. Norman McLaren of the firm of McLaren, Goode and Co. auditors of the University of California, visited the Station this week to make the annual audit of the Scripps Institution books.

M. E. L. Ford of Ogden, brother in law of Mr. N. W. Cummings has been making a combined business and pleasure trip through California and is spending the week at the Station with his wife and small son who have been visiting Mr. and Mrs. Cummings for some time. Mr. Ford is an expert with a gun and he took part in trap shooting contests at San Francisco and Los Angeles on his way down here.

Mrs. Martin's brother and wife from Denver are visiting Lieutenant and Mrs. Martin.

Prof. H. H. Kimball, an official in the U. S. Weather Bureau at Washington, is spending a good deal of time at the Station this week in conference with Dr. G. F. McEwen and other members of the staff.

Dr. Ritter returned from his business trip to Berkeley at the beginning of the week. He is very greatly pleased with the appearance of the new Barrows administration of the University and with the hearty support which is being given it by faculty, alumni and students.

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 Water temperatures at the Biological  
 Station Pier for the week ending  
 March 2, 1920. Averages and extremes.

Feb. 25 – 58  
 26 – 58.5  
 27 – 58.75  
 28 – 58.75  
 29 – 58.5  
 Mar. 1 – 59  
 2 – 58.75

Lowest Feb. 25 at 8 a.m. – 57.5  
 Highest Feb. 28 at 8 p.m. – 59.7

## BIOLOGICAL STATION NOTES

Dr. Ritter went to Riverside Monday to a meeting of the Synapsis Club before which he gave a paper on Tuesday.

Mrs. G. A Greeley went to San Francisco by boat at the end of last week.

Mrs. Ford returned Monday from Los Angeles where she had gone with her husband on his return trip to Ogden.

Mr. Cummings is now teaching mathematics temporarily in San Diego High School to relieve Mr. Libby who wished to go East.

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Water Temperatures at the Biological  
Station Pier for the week ending  
March 9<sup>th</sup>. Averages and Extremes.

March 3 – 58.75  
4 – 59  
5 – 58.75  
6 – 59.75  
7 – 59.5  
8 – 59.25  
9 – 59

Lowest on March 5 at 8 a.m. 58.1  
Highest on March 6 at 8 p.m. 60.3

## BIOLOGICAL STATION NOTES

For a long time there has been everywhere a growing recognition of the need for making the results and methods of scientific work and progress more accessible to the general public through newspaper and other available agencies. Nowhere has this need been felt more keenly than at the Biological Station. After a great deal of preliminary work on the problems involved, it finally became possible to get together a few scientists and newspaper men to formulate a tentative plan of operation for attacking these problems and meeting this need.

The meeting of these men was arranged by Dr. Ritter and it occurred in the middle of the last week at Miramar. Those present and active in the conference were Director George E. Hale of Mount Wilson Solar Observatory, Director D. T. MacDougal of the Desert Botanical Laboratory, Tucson, Arizona, Director W. W. Campbell of Lick Observatory, Professor A. A. Noyes, head of the department of Chemistry of the California Institute of Technology, Director W. E. Ritter, of Scripps Institution for Biological Research, Mr. N. D. Cochran, Managing Editor of the Toledo News-Bee, Mr. E. W. Scripps, and Mr. Robert P. Scripps.

The conference was very satisfactory and all of those attending are enthusiastic over the outlook for future effective work.

Dr. A. A. Noyes with a party of five other from the California Institute of Technology at Pasadena spent Thursday night at the Station visiting Dr. Essenberg. They stopped again on Sunday night after a trip by automobile to the Imperial Valley.

Mrs. Ritter entertained the lady scientists of the colony at her home on Thursday of last week.

Miss Bernardine Hobbs is leaving this week to return to her home in Walla Walla, Washington.

Dr. H.S. Reed and wife expect to come to the Station for three or four days at the end of this week. Dr. Reed expects to consult Dr. McEwen about some of this statistical work.

Capt. Crandall, Mr. Michael and Capt. Morse were very agreeably surprised to find as consul at Kingston, Jamaica, a brother of Mr. J. M. Lathrop of La Jolla. They had a very fine time there and a very enjoyable visit. The Kemah is now somewhere on the Pacific Coast, having left Panama on March 19<sup>th</sup>.

Pres. Clark of the University of Nevada, has just written that his family hopes to again spend the summer at the Station

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 Water Temperatures at the Biological  
 Station Pier for the week ending  
 March 23. Averages and Extremes

March 17 – 58.5  
 18 – 58  
 19 – 58.5

20 – 58.75

21 – 57

22 – 57

23 – 57

Highest on March 20, at 8 p.m. – 59.4  
Lowest on March 21, 22, 23 at 8 a.m. and  
8 p.m. – 56.9

Biological Station Notes

Dr. and Mrs. H. S. Reed from the Citrus Experiment Station at Riverside are spending the week at the Station . They also expect to spend some time here this next summer.

Mr. R. R. Huestis, a graduate of McGill University, and now doing some graduate study in the University of California, has been appointed assistant to Dr. Sumner for work in Genetics. He expects to give part time to continued work for the Ph.D. degree in the University of California. He and his wife will probably come to the Station late in May.

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Water Temperatures at the Biological Station  
Pier for the week ending March 30. Averages  
and Extremes

March 24 – 57  
25 – 56.25  
26 – 56.75  
27 – 57.25  
28 – 57.5  
29 – 58.5  
30 – 59

Highest on March 29 at 8 p.m. – 59.4  
Lowest on March 26 at 8 p.m. – 56.5 and  
March 28 at 8 a.m – 57.5

## Biological Station Notes

Dr. J. C. Merriam, Dean of the Faculties of the University of California made an official visit to the Station on Monday.

Mrs. Glover and her sister have returned home to Long Beach.

Mr. Gaderer has accepted the position of organist for the Cabrillo Theater in San Diego. He will take up residence in San Diego a little later. Just at present he is helping to take care of Dr. Sumner's experiments while the latter is away on another collecting trip and so spends part time at the Station.

Dr. Sumner is making a joint collecting trip in Death Valley in company with Dr. Grinnell, Director of the California Museum of Vertebrate Zoology. Dr. Grinnell has a very complete outfit for such explorational work.

Captain W. C. Crandall and Mr. E. L. Michael have returned from the Atlantic to the Pacific Coast via the Panama Canal in the yacht *Kemah* which belongs to Mr. E. W. Scripps. They reached San Diego on Tuesday, April 6, after a very interesting and profitable voyage. They have made some valuable series of observations and collections for use of the scientific staff of the Station. They report some rather rough weather in both oceans in spite of which they finished the trip several days ahead of recent estimates. Both are looking fine.

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 Water Temperatures at the Biological Station  
 Pier for the week ending April 6. Averages  
 and Extremes

March 31 – 58  
 April 1 – 58  
       2 – 58  
       3 – 58.5  
       4 – 59.25  
       5 – 60  
       6 – 60

Lowest on April 1, at 8 a.m. 57.2  
 Highest on April 5, at 8 p.m. 61.4

Biological Station Notes

Official welcome home was given to the returned voyagers, Mr. Michael and Captain Crandall at the Community House of the Station on last Sunday afternoon, at 3.30. The members of the colony assembled at that time under the chairmanship of Dr. Ritter. A short welcoming program was given by Mrs. Turner at the piano, who gave some excellent solos, and then acted as accompanist to a welcoming song by the children. This song was composed by Mrs. Sumner and adapted to the tune "We love you California". This part of the program was then closed with another fine piano selection by Mrs. Turner.

Mr. Michael was next called upon to give some of his views of the trip. He confined his talk mainly to scientific points which were very interesting. Captain Crandall closed the exercises with an entertaining discussion of the trip as a trip.

After the close of the program, very excellent tea and delectable cookies and cakes were served by the ladies of the colony.

Mr. B. F. Greeley has returned home after a month's visit with his sister, Mrs. E. L. Michael.

Dr. Ritter spoke on Tuesday night before the Engineer's Club of San Diego on Science News Service.

Mrs. Ritter is to speak Saturday night at Fallbrook before the Federated Woman's Clubs.

Dr. Ritter leaves for Washington next Sunday over the new San Diego and Arizona railroad.

Dr. Peebles and Miss Jeffers left on Sunday for a visit at Riverside with Dr. H. T. Reed of the Citrus Experiment Station

A group of San Diego business men, including Messrs. Gans, Tucker, Bird, and Riley have made reservation of one cottage at the Station as a summer lodge. They expect to spend week ends in catching finny denizens of the deep.

Dr. F. B. Sumner has arrived at Furnace, Death Valley, after a strenuous experience with a Ford. His trip is evidently interesting as well as trying, however, and he is finding more mice than he knows how to handle.

Water Temperatures at the Biological Station

Pier for the week ending April 13, 1920.

Averages and extremes.

April 7 – 59.

8 – 60.25.

9 – 60.

10 – 60.

11 – 60.25

12 – 61.

13 – 61.

Highest on April 12, at 8 p.m. – 62.24

Lowest on April 7, at 8 a.m. – 58.2

## Biological Station Notes

Dr. Ritter left on Sunday morning at 8 o'clock over the S. D. & A.R.R. on a three weeks business trip to Washington, D.C. and other eastern cities.

Mrs. Ritter spoke before the Woman's Federation at Fallbrook last Sunday afternoon.

Mr. Crandall went to Los Angeles last week to attend a meeting for perfecting "Hoover for President" organization in Southern California.

Mr. W. H. Spear of Ledbetter & Co. of Los Angeles, came down Tuesday for the purpose of inspecting the pier and making arrangements for repairing some injuries which have appeared in the piling.

Mr. Normal McLaren and wife are coming down from Los Angeles this weekend to finish the auditing of Station records and accounts.

Mrs. Stuart has written recently that after her visit in Washington and New Orleans she has reached Breckenridge, Texas, where she is visiting her daughter, Mrs. Wilbur.

Two cousins of Mrs. Ritter are expected here for a visit during the week. They were delayed at the Grand Canyon by the railroad strike.

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 Water temperatures at the Biological  
 Station Pier for week ending  
 April 20. Averages and Extremes.

April 13 – 59.5  
 14 – 59.5  
 15 – 60.  
 16 – 60.  
 17 – 59.  
 18 – 57.5  
 19 – 56.5  
 20 – 56.5

Lowest on April 19 at 8 a.m. – 55.75  
 Highest on April 13 at 8 p.m. – 61.5

## Biological Station Notes.

The Station management has been approached by representatives of a certain oil promotion company with reference to securing a lease for borings on Station property.

Mr. E. Mitchell and wife have moved from the Station to Los Angeles where Mr. Mitchell expects to engage in business. Mr. Tomlinson, Jr. of La Jolla is taking care of the mouse house work in place of Mr. Mitchell until Dr. Sumner returns.

Mr. Heustis who is to continue the work with Dr. Sumner formerly done by Dr. H. H. Collins, is due to arrive May 4 from Berkeley accompanied by Mrs. Heustis.

Mrs. Turner who has been making a several weeks visit with Dr. Essenberg is to leave for San Francisco Saturday morning.

Dr. S. S. Maxwell of the Department of Physiology of the University of California expects to arrive here about May 15 for a two months stay.

The Citrus Experiment Station at Riverside is to be well represented here this summer. In addition to Dr. Reed and Dr. Fawcett, Dr. Vaile has made reservations for August and September.

Dr. Norris of Grinnell College who had expected to spend the summer here has been prevented by an accident and he now plans on coming in October to stay until March.

Mr. Davis of the Davis Educational Film Co. arrived at the Station on Thursday to take some moving pictures of living forms along shore.

Dr. and Mrs. J. E. McDonald of New York, cousins of Mrs. Ritter, left Tuesday morning on a leisurely return trip to New York by way of San Francisco, Portland, Seattle, and Canadian Pacific points.

## Water Temperatures at the Biological

Station Pier for the week ending

April 27. Averages and Extremes.

April 21 – 56.8

22 – 58.

23 – 58.5

24 – 58.

25 – 58.8

26 – 60

27 – 62

Highest on April 26<sup>th</sup> at 8 p.m. 60.8

Lowest on April 21 at 8 a.m. 55.8

## Biological Station Notes

Much to the surprise of every one, Dr. Sumner returned on Saturday night from Death Valley where he has made a very successful collecting trip. He left for Ludlow in San Bonito County on Wednesday for some further collecting work.

Mr. and Mrs. Huestis and their four weeks old baby arrived on Monday night from Berkeley and have taken up residence at the Station where Mr. Huestis is to assist Dr. Sumner on work in Genetics.

Mr. Mary B. Ritter and Dr. Ida H. Hyde together with Miss Minor and Miss Anthony went to Riverside Tuesday with Mrs. Templeton Johnson to attend the California State Conference of Social Agencies.

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Water temperatures at the Biological  
Station Pier for the week ending  
May 4<sup>th</sup>. Averages and Extremes.

April 28 - 61.6

29 - 60.5

30 - 60.6

1 - 61.3

2 - 60.7

3 - 60.3

4 - 60.

Lowest on May 3 at 8 a.m. - 59.7

Highest on April 28 at 8 p.m. - 62.3

## Biological Station Notes

Dr. W. E. Ritter writes that he spent Monday and Tuesday in St. Louis, whence he comes to Sacramento for a conference with Governor Stephens. After a short stay in Berkeley, he expects to reach La Jolla early next week.

Mr. H. J. Snook and family have arranged for their usually accommodations in July and August. Mr. Snook expects to continue work on his book of illustrations and descriptions of Pacific sea shore life.

Mr. Myrtle Johnson together with Miss Munn, another Pasadena High School teacher, has reserved a cottage for the same period as Mr. Snook. This is in order that Miss Johnson who is joint author with Mr. Snook, may collaborate with him in preparation of the book.

Miss Scott, the newly appointed secretary to Dr. W. E. Ritter for the Science News Service, is to arrive on May 22. She will be accompanied by a small family party.

Dr. Jean Holt of Los Angeles is expecting to spend July at the Station.

Dr. Mary B. Ritter reported a fine meeting at Riverside when she returned on Monday.

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 Water temperatures at the Biological  
 Station Pier for the week ending May  
 11. Averages and extremes.

May 5 – 60.25  
 6 – 60.  
 7 – 60.25  
 8 – 60.5  
 9 – 60.  
 10 – 59.7  
 11 – 59.

Highest on May 6 at 8 p.m. – 62  
 Lowest on May 5 at 8 a.m. – 58.25

## Biological Station Notes

Dr. Wm. E. Ritter returned from his trip East on last Sunday evening.

R. C. Batchelder and family of Highland will spend July and August at the Station.

On Wednesday afternoon of last week, an informal tea was given by Mrs. W. C. Crandall in honor of Mrs. Clark and Mrs. Heustis. Mrs. Clark is a sister in law of Mrs. F. B. Sumner, and Mrs. Heustis is the wife of the new assistant to Dr. Sumner.

Mr. P. S. Barnhart is visiting his mother in Los Angeles on a two weeks vacation.

Fishing privileges on the pier are not allowed to only a limited number of people in addition to Station tenants. A considerable number of persons fail to understand that the pier is primarily for scientific purposes, secondarily for accommodation of Station tenants, and only lastly for use of the general public. The Station management is very much pleased to have certain uses made of the pier by the orderly, cleanly and appreciative part of the general public. Restrictions have been made necessary by the relatively few who are so sloppy, careless, unruly, and unappreciative that they spoil the pleasures of those who try to do the right thing. The principle rules are printed on a permit card which is issued from the business office, and it is stated that the hours for the general public are from 8.30 a.m. to 8.30 p.m. The managements reserves the right to cancel all permits and to close the pier if these measures are not sufficient for adequate control. Additional information is available at the business office in business hours.

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Water temperatures at the Biological Station  
Pier for the week ending May 18, 1920.  
Averages and Extremes.

May 12 – 61.  
13 – 60.5  
14 – 60.5  
15 - 62.  
17 – 62.5  
18 – 62.5

Highest on May 16 at 8 p.m. – 63.40  
Lowest on May 12 and 13 at 8 a.m. – 60.25

Biological Station Notes

Dr. Mary B. Ritter has been spending a few days in our local sanitarium recuperating from an attack of bronchitis and from the effects of her recent arduous labors in public welfare work and the Hoover campaign. She is now recovering her characteristic energy as a result of the enforced rest.

Dr. S. S Maxwell, Professor of Physiology in the University of California, arrived last Friday for a stay of some week. He is expecting to make some study of sensory structures in the heads of sharks of this region.

Mr. P. S. Barnhart has returned after an enjoyable visit to his mother in Los Angeles.

Captain Crandall left for San Pedro on Sunday to continue some kelp studies which were interrupted by his recent Atlantic-Pacific cruise in the Kemah. He was accompanied by Mrs. Crandall. They expect to return on Friday.

Dr. G. F. McEwen and Mr. N. W. Cummings took advantages of this trip of Mr. Crandall's to go to Elsinore for a series of evaporation tests of a brackish water lake in that vicinity.

Miss Mary E. Scott, accompanied by her young niece, Mary B. Dedrich, arrived last Saturday. Miss Scott was formerly a librarian for the famous Marine Laboratory at Woods Hole, Mass. She has just come from Washington D.C. where for the last two years she has been serving as Technical Assistant for the Research Information Service of the National Research Council. She has come here to assist Dr. W. E. Ritter in developing the organization of the Science News Service. While her position has not yet been fully defined she may be regarded as an Organization Secretary for that Service. Miss Scott's half brother, Mr. Dedrich is connected with the U.S. Internal Revenue Service in San Diego and he will frequently be a week end visitor to his sister and daughter here in the colony. Miss Scott expresses a very favorable first impression with our locality.

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Water temperatures at the Biological Station Pier  
For the week ending May 26. Averages and Extremes.

May 19 – 61.3  
20 – 62.  
21 – 59.7  
22 – 61.  
23 – 61.3  
24 – 61.7  
25 – 62.

Lowest on May 21 at 8 a.m. 59.3  
Highest on May 24 at 8 p.m. 62.7

Biological Station Notes.

Mr. Gans and family, together with Mr. Riley, Mr. Tucker and Mr. Bird are using Number Two Cottage as a lodge for week end visits to the Station.

Mr. Davis and Mr. Barr of the Davis Educational Film Company are getting some very good results from the work which they are doing with the more active forms of animals.

Mrs. Webster, sister of Ralph Taylor, is visiting with him again.

Mr. Caquin and family of Hemet spent the week end here.

The family of Rev. Hill of La Mesa are spending June at the Station.

Lieutenant Martin who lives at the Station was in charge of a rifle contest between teams from various Southern California localities which was held at the Marine's range last Sunday.

Dr. Sumner has returned from his collecting trips. When he last left here about three weeks ago he went to a place on the Mojave Desert near Ludlow where there were extensive lava flows. He and Dr. Grinnel were especially interested in studying the effect of a black back ground upon the coloration of rodents. After extensive collecting under those conditions they went to Oro Grande and collected specimens of the same species there. This gives opportunities for exact comparison of animals found on two different types of background. Dr. Sumner is quite enthusiastic about the results of his trip and about the beauties and wonders of the localities visited.

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Water temperatures at the Biological  
Station pier for the week ending  
June 1. Averages and Extremes.

May 26 – 64.  
27 – 64.4  
28 – 66.  
29 – 66.6  
30 – 65.5  
31 – 64.5  
June 1 – 64.5

Highest on May 28 at 8 p.m. – 67.4  
Lowest on May 26 at 8 a.m. – 62.75

Biological Station Notes.

Drs. W. E. and Mary B. Ritter left on Monday for Pine Hills Lodge. They were accompanied by Mr. and Mrs. N. W. Cummings. Dr. Ritter and Mr. Cummings went on to Cuyamaca Lake where Dr. W. E. Ritter is carrying on some woodpecker investigations and Mr. Cummings is doing some experimental work on the waters of the lake. Dr. Mary B. Ritter expects to stay at Pine Hills until June 23.

Dr. W. E. Ritter is to leave for Seattle on June 13 to attend the meetings of the Western Division of the American Association for the Advancement of Science and affiliated societies before which he is to deliver some papers of his own and to read others for members of the Station staff who cannot attend.

Dr. G. F. McEwen, Hydrographer and Mr. W. E. Allen, Biologist, for the Station, left on Wednesday evening on the steamer Queen for Seattle to attend the scientific meetings where they expect to deliver papers on their respective lines of work, and to attend some conferences. They also expect to visit the Biological Station of the University of Washington at Friday Harbor.

En route both going and returning, they expect to make frequent hydrographic observations and to take biological collections.

Rev. Hill of La Mesa spent the week end with his wife who is spending some time at the Station.

Mr. and Mrs. Philbert of San Diego are spending this week at the Station.

Mr. Lewis Riley and Mr. J. G. Trucker and members of their families visited the Station last week end.

Mr. R. L. Davis and Mr. A. Barr went to Corpus Christi Island last Sunday for the purpose of making moving picture studies of bird life there.

Pres. Clark of the University of Nevada expects to return to Reno next Monday to look after routine business of the University for a time. He expects to return to join his family later in the summer.

Lieutenant and Mrs. Martin, accompanied by Dr. Essenberg, made a motor trip to the Laguna mountains last week end.

Mr. Lloyd Wall of La Jolla has been employed to act as caretaker for the mouse house and the aquarium.

Biological Station Notes.

A new salt water pump is being installed at the outer end of the pier. It is of the latest design of the newest type of double piston deep water pumps. It is hoped that installation will be completed this week and that it will be possible to immediately restock the aquarium.

Water temperatures at the Biological  
Station Pier for the week ending  
June 8, 1920. Averages and Extremes.

June 2- 65.5  
3 - 66.3  
4 - 66.7  
5 - 66.7  
6 - 66.6  
7 - 67.4  
8 - 67.5

Highest on June 4 at 8 p.m. - 69.5  
Lowest on June 2 at 8 a.m. - 64.7

Water temperatures at Biological Station Pier for week ending June 29, 1920. Averages and extremes.

June 23. . . . .	.68.6
24. . . . .	.69.1
25. . . . .	.68.6
26. . . . .	.68.1
27. . . . .	.68.3
28. . . . .	.68.2
29. . . . .	.69.2

#### Biological Station Notes.

Dr. W. E. Ritter returned from Seattle last Tuesday where he had been attending meetings of the Western Division of the American Association for the Advancement of Science and affiliated societies. Dr. Ritter was elected President of the Western Division for the coming year the meetings for which will probably be held at San Francisco. He also took advantage of these meetings to hold important conferences with other scientists who were there.

Mr. W. E. Allen returned from the same meetings on Thursday after a short stop in the San Joaquin Valley. Mr. Allen read some papers on phytoplankton before some of the societies at Seattle and also spent unoccupied time in visiting kinsfolk and acquaintances there.

Mr. George A. Greely of New York City is visiting his daughter Mrs. E. L. Michael.

Mr. and Mrs. Filbert have returned to San Diego after spending a month at the Station.

Mr. and Mrs. Barker and son Fran returned to Oklahoma this week. They are driving through by way of Yosemite.

Mr. and Mrs. H. J. Snook are expected here for a two months stay about the last of this week.

Mr. and Mrs. Krause left on Tuesday on a trip to Los Angeles and San Francisco before returning to their home in Arizona.

Dr. and Mrs. C. O. Esterly arrived June 15 for a two months stay.

Mrs. E. L. Michael returned on Wednesday of last week from a visit to the mountains near Descanso where she found 215 kinds of wild flowers.

The new salt water pump has been installed on the pier and is delivering water to the aquarium and tanks very effectively. A new house is being constructed to cover and protect it.

## Biological Station Notes.

Mr. Davis and his assistant Mr. Dozier of the Davis Educational Film Co. have returned to Los Angeles after obtaining some very interesting moving pictures of animals found in this locality.

Mr. and Mrs. H. J. Snook and family of Stockton have arrived and will spend most of the summer vacation here.

Ralph Taylor' sister from San Diego was here at the week end and they all went over to Lakeside on Monday for a family reunion upon the arrival of a sister from Texas.

Mr. E. Moberg has arrived from Berkeley to take up the study of the chemistry of ocean water. Just at present he expects to give all of his attention to the chemical composition of the microscopic plants and animals found in the ocean water of this locality. He has been doing some work of this sort at Berkeley recently and has been considerable experience with plankton work for the University of North Dakota at the Devil's Lake Station.

Dr. Jean Holt and party arrived from Los Angeles at the end of last week.

Mrs. C. Essenberg was visited by her brother and party from Los Angeles over the Fourth.

Mr. and Mrs. Currier of El Centro visited Mrs. Clark one day last week. Mrs. Currier and Mrs. Clark are sisters.

Mr. [Pom] Meanly and family party of Mira Mar spent the Fourth at the station.

Dr. and Mrs. F. B. Sumner returned on Tuesday from encampment of the Girl Scouts at Pine Hills.

Captain W.C. Crandall and Mr. P. S. Barnhart accompanied Mr. E. W. Scripps on his yacht Kemah on a trip to the Islands for scientific purposes the latter part of last week.

Captain Crandall, Dr. [G. F.] McEwen and Mr. E. L. Michael left on a similar trip this Thursday which will extend over a period of about ten days.

Water Temperature at Biological Station Pier for week ending July 6, 1920.  
Averages and Extremes.

6/30 69.25

7/1 69.75

7/2 68.5

7/3 70

7/4 66.25

7/5 66.5

7/6 67.5

Highest on July 3, 70.25

Lowest on July 4, 63.25

7-14-20

Biological Station Notes

Dr. G. F. McEwen has returned from his trip to Honolulu where he has been attending an international conference of scientific man for discussion of problems of the Pacific Ocean. He reports a strenuous but very enjoyable and profitable experience. One point of especial local interest is that the University of Hawaii is installing a laboratory at Honolulu similar to our own and that the scientific staff is planning to conduct its work along similar lines, using similar methods. This is a very important step toward practical co-operation in oceanic investigation.

Ralph Taylor is spending a two weeks vacation at Lakeside. Lloyd Wall is carrying on his work for him during this time.

Miss Hazel Field is now located at the Station for an indefinite stay.

The Sacred Films Company, Inc. has been doing a good deal of work at the Station recently. The director, Mr. Wells, reports some very satisfactory films of marine life. The party occupied a cottage here during the week end and the forepart of this week.

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Water Temperatures at the Biological  
Station Pier at 8 a.m. for the week  
Ending September 14, 1920.

September 8 – 67  
9 – 67.2  
10 – 67  
11 – 67.9  
12 – 68.6  
13 – 68.2  
14 – 67.4

July 20, 1920

Biological Station Notes.

Captain W. C. Crandall, Dr. G. F. McEwen and Mr. E. L. Michael returned at the end of last week from an eight days trip at sea in Mr. E. W. Scripps' private yacht Kemah. This trip was made for the purpose of continuing oceanographic studies of former years.

Mr. P.S. Barnhart left on Sunday to spend a few days on the Kemah on a cruise about the Islands. He hopes to get a good deal of valuable material for his supply department.

Mr. Mrs. Southworth, a bride and groom occupied one of the cottages at the Station last week.

Dr. G.F. McEwen left on Saturday night for San Francisco whence he was to take steamer to Honolulu to attend a meeting of the special committee of the Nation Council of Defense which meets there to discuss the Problems of the Pacific from the scientific viewpoint.

Miss Margaret Hill arrived at the Station a few days ago to spend some time with her parents, Rev. and Mrs. Hill.

Mrs. W. Parke is visiting her daughter, Mrs. Heustis.

Mrs. E. L. Michael and children and Mrs. Greeley are spending some time in the mountains near Hulbard's.

Miss Munday of the Pasadena High School faculty and her mother arrived a few days ago. They occupy a cottage with Dr. Myrtle Johnson who is working with Mr. Snook on a sea shore book.

Mrs. Essenberg's brother, Mr. Adamson, is visiting her for a short time.

Misses Elizabeth Browning and Florence Turner of Ogden, Utah, are visiting the Cummings'. Miss Browning is a sister of Mrs. Cummings.

Miss Scott's half brother, Mr. Dedrich, of Los Angeles spent the week end at the Station.

Dr. and Mrs. F. B. Sumner have returned from their vacation in the San Jacinto Mountains. Apparently Dr. Sumner spent most of his vacation at hard work as he reports having captured, killed, skinned, measured, indexed and recorded data for about 100 mice. However, they both enjoyed the trip and that is a good test of a vacation. (P.S. Dr. Sumner questions the accuracy of the term vacation so far as he was concerned.)

Mrs. Mary Sartori, a regent of the University is expected to visit the Station in the first week of next month. She is coming at the time especially to attend meetings of the symposium on Orientals and Occidentals in the Pacific Coast Area.

Water temperatures at the Biological Station Pier for the week ending July 20. Averages and Extremes.

July 14 – 63.9  
15 - 64.3  
16 – 64.3  
17 – 64.8  
18 – 65.6  
19 – 67.1  
20 – 68.5

Biological Station Notes.

Mrs. N. W. Cummings returned Monday night from Riverside where he has been spending a few days using some special apparatus to belonging to the Citrus Station. He also gave sometime to collecting at Elsinore.

Both of Ralph Taylor's sisters are staying with him for a time.

Dr. S.S. Maxwell expects to return to Berkeley on August 1<sup>st</sup>.

Mrs. Bailey has decided to stay another week in order to attend the lectures on Orientals and Occidentals in the Pacific Area which are to be given here and in San Diego Next week.

Misses Elizabeth Browning and Florence Turner gave a beach party to the Ogden Boys in the R. O. T. C. at Camp Kearney last Sunday.

Rev. Hill and family of La Mesa have decided to stay another month at the Station.

Dr. Jean Holt and her companion, Miss Richardson return home to Los Angeles this Saturday.

Dr. H. O. Reed and Dr. Vaile of the University of California Citrus Experiment Station At Riverside expect to arrive with their families August 1.

Dr. G. F. McEwen stopped at Arlight last week to confer with the man who is collecting water samples for the Station at that place.

Mr. Tom Meanly and family, party of Miramar, are spending their vacation at the Station.

Mr. Brero and family of San Francisco are stopping at the station for a few weeks.

Wesley Allen writes that he has almost completed his course of study in Electrical school of the Navy at Hampton Roads, Va. , and that he expects to be assigned soon to westward bound battle ship.

James Allen writes that he is getting settled down to work in the Summer School of the Navy at Great Lakes Training Station, Ill.

Water Temperatures at the Biological Station  
Pier for the week ending July 27. Averages and Extremes.

July 21 – 69.4  
22 – 68.6  
23 – 68.5  
24 – 69.5  
25 – 69.1  
26 – 68.8  
27 – 69.

Oriental and Occidentals in the Pacific Coast Area

Many La Jolla people will be much interested in the forthcoming series of lectures by eminent authorities in departments of science which bear on the meeting of these peoples in this area. In fact the problems and principles the discussed are fundamental to our political and economic integrity and to our social well-being.

Public addresses with opportunities for questions will be given at 8 p.m. each day at the Community Center of the Unitarian Church in San Diego. These Addresses are open and free to the public and all interested people are invited to attend.

There will also be special discussions of a technical nature at the Scripps Institution (Biological Station) each afternoon.

The open program is as follows: (Subjects only approximately stated.)

- |                           |  |
|---------------------------|--|
| Sunday – Aug. 1, 8 p.m.   | General statement of troubles and local problems due to Oriental migration. By Walter B. Pitkin, School of Journalism, Columbia Univ. N.Y.   |
| Monday – Aug. 2, 8 pm.    | Growth of world population, past and future by W.S. Thompson, Sociologist, Dept. Agric. Cornell Univ   |
| Tuesday – Aug. 3, 8 p.m.  | Questions of adequacy of basic supplies for probable world population. By E.M. East, Plant Genetics, Bussey Inst. Harvard Univ.  |
| Wednesday Aug. 4, 8 p.m.  | Characteristics of civilization and their relation to the “struggle for existence”. By W. E. Ritter, Biologist, Scripps Inst. For Biol. Research of the Univ. of Calif.  |
| Thursday – Aug. 5, 8 p.m. | Possible conclusions from comparisons of the oriental and occidental types of civilization as to intellectual, domestic and economic ideals and practices. By Gilbert Reid, Director in Chief, International Institute of China. |

- Friday – Aug. 6 8 p.m. Conditions of a good understanding between East and West. By M.M. Dawson, Attorney at Law, Consulting Actuary, Author of “The Ethics of Confucius”. N.Y. City.
- Monday – Aug. 9 8 p.m. Possible conclusions from comparison of oriental and occidental types of political, esthetic, religious and military ideas and practices. By Gilbert Reid.
- Tuesday – Aug. 10 8 p.m. Problems of “cheap labor”, “race prejudice” and “standards of living” and their importance. By W. S. Thompson.
- Wednesday – Aug. 11 8 p.m. Problems of rural life and industry with special reference to disparity in character of urban and rural development under civilization. B. Elwood Mead, Prof. of Rural Institutions, Dept. Ag. Univ. of Calif.
- Thursday – Aug. 12 8 p.m. Problems of racial fertility and miscegenation. By S. J. Holmes, Dept. Zool. Univ. of Calif.
- Friday – Aug. 13 8 p.m. Problems of differing views in relation to allegiance and citizenship as held by Japan, China, and America. By E. T. Williams, Professor Oriental Lang. and Lit., Univ. of Calif.

Biological Station Notes

Dr. Walter Van Dyke Bingham, the eminent psychologist, of the Carnegie Institute and member of the National Research Council spent a day at the Station last week.

Dr. E. E. Slosson, noted scientist, and Associate Editor of the Independent, made a "flying visit" of two or three hours on Thursday afternoon of last week.

Mrs. Mary Sartori, of Los Angeles, a regent of the University, spent a day of last week in looking over the local plant. This is the first visit by a regent in a period of several years.

Mrs. R. C. Batchelder and her two sons have arrived for a stay through the month of August.

Miss Powers and family party arrived Tuesday for a stay of a week.

Dr. and Mrs. H. S. Reed have brought with them as a guest Miss Vaile who has recently been engaged in hospital work in the East. She is not related to Dr. Vaile who has also arrived from Riverside.

The prominent feature of Station life during this week and next is the series of round table discussions of problems of contact of Orientals and Occidentals on this Coast. The Discussion in the afternoon of each day covers the ground of the popular lecture given in San Diego the preceding evening. Dr. Pitkin of Columbia University led the discussed on Monday.

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Water temperatures at the  
Biological Station Pier for the week ending  
August 3. Averages and Extremes.

July 28 – 68.85  
29 – 70.3  
30 – 70.3  
31 – 71.1  
Aug. 1 – 71.55  
2 – 71.8  
3 – 71.25

Biological Station Notes

On Saturday morning of last week, the visiting scientists who have been participating in the discussions at the Station and in lectures in San Diego, dealing with racial problems of the Pacific area, were taken to Catalina Island as guests of Mr. E. W. Scripps on his yacht, Kemah. They were entertained at the Tuna Club in Avalon that evening and they got a view of the newly caught largest marlin sword fish. They also made a trip on a glass bottom boat. Return to San Diego was made on Sunday

Mr. Norman Hendrickson and family, together with the sisters of Mrs. Hendrickson, the Misses Powers, spent last week at the Station.

Mrs. E.L. Michael and family party have returned from an extended visits to the mountains.

Mr. Snook's mother is visiting the Snook family.

On Monday Mrs. Heustis entertained the ladies of the colony at an afternoon tea in honor of her mother, Mrs. Park, who returns home to Canada this Friday.

Dr. East and Dr. Holmes visited Dr. Summer last week.

Mrs. W. E. Thompson spent the week end with Mrs. Crandall while the men were away on the trip to Catalina.

Dr. W. E. Clark, President of the University of Nevada, has returned for a two week's stay with his family before taking up the routine work of the school year.

On Wednesday the visiting scientists were the guests of Mr. E. W. Scripps at Miramar for luncheon.

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Water temperatures at the Biological Station  
Pier for the week ending August 10.  
Averages and extremes

Aug. 4 - 71  
5 - 73  
6 - 70.5  
7 - 70.5  
8 - 68.5  
9 - 73  
10 - 73

Highest on August 9 at 8 p.m. 73.58

Lowest on August 9 at 8 p.m. 68.

## Biological Station Notes

Dr. G. F. McEwen, the only Southern California scientist in attendance at the first Pan Pacific Scientific Congress in session at Honolulu, has sent newspapers to his family telling of the great interest aroused by the meetings. He also writes that noted scientists from many countries bordering on the Pacific are present and that Dr. H. E. Gregory, director of the Bernice Pauahi Museum in Honolulu, was elected chairman of the convention. A general session occupied the program of the first day in which Dr. McEwen was one of four leaders in discussing the topic "Ocean currents and their significance."

Mr. E. L. Michael has been sick for several days with throat trouble following a recent "cold".

Mrs. Batchelder of Upland who has been in a hospital for some time was able to join her family here at the end of last week.

Mrs. Moore of Los Angeles with her three children is visiting the Snook family. Mrs. Moore is a sister of Mrs. Snook's.

Mr. B.S. Barnhart has sold his home "The Home Acre" at the top of the hill and is moving into one of the cottages at the Station.

Dr. C. S. Vaile has gone to Riverside for a few days but expects to return at the end of this week.

Dr. and Mrs. Ritter entertained the visiting lecturers at dinner last week. The guests were Dr. W. B. Pitkin of Columbia University, Dr. W. S. Thompson of Cornell University, Dr. E. M. East of Harvard University, Dr. Gilbert Reid of the International Institute of China, Drs. Elwood mead, S. J. Holmes, and E. J. Williams of the University of California. On Thursday of this week, Dr. Clark, President of the University of Nevada, and Mrs. Clark, dined with Dr. and Mrs. Ritter.

Miss Esther Andres, recently returned from relief work in France, is visiting the Crandalls.

Water temperatures at the Biological  
Station Pier for the week ending  
August 17, 1920 Averages and Extremes.

August 11 – 73.1

12 – 72

13 – 69.4

14 – 71.6

15 – 71.7

16 – 72.2

17 – 73.3

Highest August 16 at 8 p.m. – 73.8

Lowest August 13 at 8 a.m. – 69.5

## Biological Station Notes

Dr. W. E. Clark, President of the University of Nevada, has returned to the University to take up his regular work of the school year. His family is to remain at the Station a few days longer.

Miss Esther Andrews has gone to Whittier to get ready for her work as a member of the faculty of Whittier College.

Dr. Bennett M. Allen and family of the University of Kansas, arrived at the end of last week for a two weeks stay. Dr. Allen may do some work in the library and laboratory, but he expects to put in most of his time visiting and resting. He has just come from the Biological Station at Friday Harbor where he gave some courses of instruction this summer.

Mr. Snook's father also arrived at the week end for a short stay.

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Water temperatures at the Biological  
Station Pier for the week ending  
August 24. Averages and extremes.

August 18 – 72  
19 – 71  
20 – 71  
21 – 71.5  
22 – 73  
24 – 75

Highest August 23 at 8 p.m. 73.5  
Lowest August 21 at 8 a.m. 71.4

## Ellis L. Michael

Although members of the station staff have known for some time that Mr. E. L. Michael was seriously ill, very few realized that there was any immediate danger, hence his decease at 1.10 p.m. on last Monday afternoon came with a distinct shock to all of us. Although a man of quiet demeanor, Mr. Michael was of such considerate and cordial disposition that his presence was always welcome and his absence has been and is keenly felt.

He has been an active participant in the marine work of the Station for fifteen years, and his efforts have yielded results of great scientific merit. As a zoologist he will be remembered especially for his excellent studies on the Chaetognaths of the San Diego region. In recent years he has given much of his time and strength to the improvement of statistical methods of studying and interpreting biological phenomena and he has been very daring and aggressive in his insistence upon the need for not only such improvement but for a more extensive use of statistics in biological work.

A recent paper written jointly by himself and Dr. G.F. McEwen has excited a great deal of interest and comment in scientific circles. At the time that he was taken from his work by his last illness, he was working on two papers of notable importance. One of these he was preparing at the request of the president of the Ecological Society of America, Dr. Barrington Moore, who had recognized his peculiar fitness for laying out a suggestive program for use in attacking the problems of origin, existence and maintenance of life in the sea.

## Biological Station Notes

Mrs. Moore and her family returned to their home in Los Angeles last Sunday after a fortnight's visit with the Snook family.

Dr. W. E. Ritter is to leave for his vacation on next Monday. He will spend most of his time near Santa Fe in company with Dr. Hewitt who is making archaeological and ethnological studies in that vicinity. Dr. Mary B. Ritter will go to Berkeley about the middle of the week to spend some time with her sister.

The Clark family is returning to their home in Nevada this week, where Dr. Clark has already preceded them.

James Allen has returned home from the Navy Summer School at Great Lakes, Illinois, where he had some interesting experiences. For one thing he does not enjoy swimming in lake water after being accustomed to sea water.

The Shain family report dust and heat and poor fishing in Oregon. They are on their way home.

Mrs. Blakesley is visiting Mrs. Hill.

Miss Fannie Whitman who is engaged in Social Service work in Berkeley is visiting Mrs. Crandall.

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 Water temperatures at the Biological Station  
 Pier for the week ending August 31, 1920.  
 Averages and extremes.

Aug. 25 – 71  
 26 - 71  
 27 – 70.8  
 28 – 71.2  
 29 – 70.5  
 30 – 71.2  
 31 - 71

Highest August 25 at 8 p.m. – 71.5  
 Lowest August 29 at 8 a.m. – 68.75

9-7-20

Biological Station Notes

Mr. Ben Greeley came down to the funeral of Mr. E. L. Michael and remained until Sunday. On his return he was accompanied by Mrs. Michael and the children and by Mr. and Mrs. G. A. Greeley, all of whom expect to go to Sonoma County for the present to the home of Mrs. Michael's sister.

Mr. L. S. Riley, the San Diego Attorney, has rented a cottage for September

Mr. R. C. Batchelder of Upland visited his family last Sunday.

Mr. and Mrs. Shain and son, Kenneth, have returned from their auto tour to Oregon.

Miss Hazel Field called at the Station last Saturday last Saturday. She is located in la Jolla at present.

Dr. C. S. Vaile spent the week end with his family.

Mr. Blakesly is joining Dr. Ritter at Santa Fe for a trip up Chase canon. There are said to be eleven villages of cliff dwellers in this canon. Dr. Ritter expects to spend much time with the Navajo Indians also.

H. J. Snook and family left for Stockton last week.

Mrs. Essenberg writes from Lake Tahoe that she is having a delightful vacation.

Misses Elizabeth Browning and Florence Turner have returned to their homes in Ogden

Dr. and Mrs. H. S. Reed and Miss Vaile returned to Riverside Tuesday.

Professor and Mrs. Lund of the University of Minnesota spent two days at the Station this week.

Dr. Dedrich spent the week end with his sister and his small daughter.

Dr. Mary B. Ritter has gone to Piedmont after spending a few days in San Diego while Dr. W. E. Ritter is away.

Water Temperatures at the biological Station Pier at 8 a.m. for the week ending September 7, 1920.

Sept. 1 – 68.4

2 – 68.5

3 – 67.5

4 – 67.1

5 – 68.

6 – 66.1

7 – 66.9

## Biological Station Notes

Some weeks ago members of the Station staff were called upon to examine specimens of fish obtained in the market under various names but suspected to be shark. After a considerable amount of study and comparison it was found that several specimens actually were shark meat (good enough in itself perhaps) sold under a more popular name, such as yellow tail, sword fish, sea bass and the like. Captain W. C. Crandall had possession of the Station evidence and he was kept busy this past week in presenting it to the court. The accused parties pleaded guilty and the cases are at last closed.

Dr. Norris of Grinnell College in Iowa arrived at the Station Monday for a stay of some months. He is accompanied by Mrs. Norris. Dr. Norris is an expert student of development of nerve tissues and he expects to use the Station facilities for getting large numbers of shark embryos from which to work out important details of formation of nerve tissues and development of nerve centers.

Robert and Henry Batchelder returned to Upland on last Saturday so as to take up their studies in the Chaffee High School this week.

Dr. Christine Essenberg has returned from her vacation, spent mainly at mountain resorts.

Dr. Sumner has gone to Berkeley for a few days.

Dr. Ritter writes that he is leaving Santa Fe for the trip into Chico Canyon.

Mrs. Ritter is visiting her sister in Piedmont.

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Water Temperatures at the Biological Station Pier at 8 a.m. Week ending Sept 21, 1920.

September 15 – 67.8

16 – 67.6

17 – 68.0

18 – 66.1

19 – 61.7

20 – 61.0

21 – 60.7

10-5-20

Biological Station Notes.

Mr. R. C. Batchelder and son Henry came down last week end from Upland and returned on Sunday, taking Mrs. Batchelder with them as far as Escondido where she is to visit for a time.

Mrs. Mary Webster is visiting her brother Ralph Taylor

Miss Field is again resident at the Station.

Captain Crandall and Mr. Barnhart went to Los Angeles in the early part of last week to see the films recently made at the Station. By the sacred films Co. Inc. They report the work as been very successful.

Dr. W. P. Taylor of the U.S. Biological Survey is due to arrive at the Station with his family in a few days. This is to be his headquarters and the family will reside here. Dr. Taylor is now giving stereopticon lectures on a series of Mt. Rainier biological studies. It is hoped that he may be secured to give a lecture in the La Jolla Community house on October 16 or 21.

Mr. Hinds and family of Coronado are living at the Station this month.

Dr. W. E. Ritter returned from his vacation on Monday evening. He reports an exceedingly enjoyable and profitable time while engaged in getting acquainted with the Navajo Indians and their ways.

Dr. Mary B. Ritter is expected to return on October 10.

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Water Temperatures at the Biological Station Pier at 8 a.m. Week ending October 5, 1920.

Sept 29 – 63.2  
30 – 66.6  
Oct. 1 - 66.8  
2 – 66  
3 – 65  
4 – 65  
5 – 65.5

10-12-20

Biological Station Notes.

Mrs. Payson a long time friend of the Ritter's accompanied Mrs. Ritter on her return from Oakland last Sunday.

Jim Ross and his mother have taken up residence at the Station again this week. The station management has been anxious for some time to make some arrangement for again securing Mr. Ross's services.

Lloyd Wall has gone to the Imperial Valley to accept a position with the Irrigation Company of Calexico.

Dr. W. P Taylor and family arrived this week.

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Water Temperatures at the Biological Station Pier at 8 a.m. Week ending October 12, 1920.

October 6 – 65.8  
7 – 64.9  
8 – 63.9  
9 – 63.9  
10 – 64.  
11 – 63.7  
12 – 63.5

10-19-20

Biological Station Notes.

Dr. W. P Taylor did not remain this week as expected but will return with his family in about two weeks.

Captain W. C. Crandall, Dr. G. F. McEwen, Mr. P. S. Barnhart and Dr. H. W. Norris are making a scientific trip on the Kemah this week.

Dr. W. E. Ritter and Mr. N. W. Cummings accompanied by Mrs. Payson and Mrs. Hannay visited Cuyamaca Lake early this week for some scientific work. Mrs. Ritter staying in San Diego during Dr. Ritter's absence.

Mrs. Stuart returned from her visit in Texas last week just in time to greet and cheer her daughter Mrs. Crandall on her return home from the hospital. Mrs. Crandall is recovering nicely.

Lieutenant Chas Martin is getting along very well after an operation to remove some infection due to an old wound.

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Water Temperatures at the Biological Station Pier at 8 a.m. Week ending October 19, 1920.

October 13 – 63.4  
14– 62.6  
15– 61.4  
16 – 60.5  
17 – 61.4  
18 – 62.6  
19 – 62.

10-26-20

In thinking of the many good reasons why we should vote for Amendment 12 which is designed to give to our State University sound and stable financial support, it is not amiss to recall that we ourselves are in close contact with one of its departments, i.e. The Biological Station. For several years this institution has been an integral part of the University and dependent for its efficiency upon University support.

Most of us realize that the station has played an important part in the life of our community, its members interested and active in our local affairs, social, religious, education and political, and its business contacts stimulating to our local commercial interests, not only through necessary expenditures of money, but also through its broader outlook. Many of us know that its management has had most worthy programs of scientific research in mind and that it has made commendable effort to extend our knowledge of the sea under drastic financial limitations. Distressed as the University is at present, it is not impossible that this department may be cut off unless some provision for funds is made such as that indicated in this Amendment. Our votes for this Amendment are votes for the continued integrity of the University including this department which we know so well.

## Biological Station Notes.

Mrs. Mary Webster left on Tuesday for a visit in Los Angeles.

Miss Charlotte Messenger, physical director of Bishop's School spent Sunday with her cousin, Mr. Barnhart.

Mrs. Ritter has returned from a short visit to Fresno where she was called on account of the death of her niece, Miss Laura Cockrill. La Jolla friends will remember that Dr. Cockrill and his family spent the summer at the Station four years ago.

Dr. W. E Ritter has gone to Berkeley on business connected with the University and with the Western Division of the American for the Advancement of science, of which he is president this year.

Professor N. H. Laughlin of the Eugenics Laboratory at Cold Springs Harbor, Long Island, N.Y., has come to spend the winter here. He will use Station facilities until next June while working on same problems of heredity.

Lieutenant Chas Martin was permitted to leave the hospital for a short visit to his wife last Sunday. He is getting along nicely and hopes to get back home in about two weeks more.

Dr. G. F. McEwen and Captain M. C. Crandall went to Elsinore last Friday for some evaporation experiments on the lakes there. They returned Saturday evening.

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Water Temperatures at the Biological Station Pier at 8 a.m. Week ending October 26, 1920.

October 20- 61.7

21 - 60.6

22 - 61.5

23 - 61.2

24 - 61.2

25- 61.3

26- 60.8

Biological Station Notes

Mr. W. V. Shear, potato expert of the California State Department of Agriculture, visited the station on Tuesday.

Dr. D. T. McDougal of the Desert Laboratory at Tucson, Arizona, spent a few hours at the Station Tuesday, discussing matters of business with Dr. W. E Ritter. He also started some plant growth experiments here for comparison with his work at Tucson, Carmel and other places.

Dr. Laughlin brought his family to the station at the end of last week.

Dr. W. P. Taylor returned with his family on Tuesday and they also are now in residence.

Nearly all of the Station cottages are now occupied or engaged.

Mr. Hind and family have decided to stay at least another month at the Station.

Mr. A. D. Barnhart has gone to Los Angeles for a visit of about a week.

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Water temperatures at the Biological Station Pier at 8 a.m. for the week ending Nov. End.

October 27	– 61.2
28	– 61.2
29	– 60.9
30	– 61.7
November 1	– 62
2	– 61.9

11-9-20

Biological Station Notes.

Captain W.C. Crandall and Mr. E. G. Moberg are absent on a four days' trip to Catalina and San Pedro on the Kemag. They expect to do some collecting of surface material for laboratory study and of such other materials as is possible.

Mr. Geo E. Owens from Berkeley and his daughter Miss Owens of Los Angeles called on Mr. and Mrs. Huestis last Sunday.

Dr. W. P. Taylor has consented to show his set of sixty slides of birds and mammals of the Mt. Rainer region at the La Jolla Community House under the auspices of the Playground officials. The date has not yet been set.

Mr. and Mrs. Hinde were suddenly called to Los Angeles last Sunday on account of the death of Mrs. Hinde's mother.

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Water temperatures at the Biological Station Pier at 8 a.m. for the week ending November 9, 1920

November 3 – 61.3  
4 – 61.3  
5 – 60.6  
6 - 60  
7 - 60  
8 – 60.1  
9 – 60

Biological Station Notes

On Armistice Day the three overseas men employed at the Station, Messrs. R. Huestis, E. G. Moberg and R. Taylor, joined in the celebration at San Diego.

On last Tuesday Mr. R. Taylor and Mr. P. S. Barnhart went to Los Angeles to get a self closing water bucket invented, manufactured and presented to the Station by E. W. Wood of the Wood Manufacturing Company. This bucket is especially designed to secure samples of water at any given moderate depth without the use of complicated hoisting machinery. Mr. W. E. Allen and Mr. E. G. Moberg are especially interested in such samples and they hope to be able to get a series of samples from the pier as well as from a boat.

Dr. Walter P. Taylor delivered his illustrated lecture on Birds and Mammals of Mt. Rainier at the la Jolla Community House last night. In spite of short notice given there was a good attendance.

Mr. Hinde and Lieut. Martin drove to Riverside on Monday for a short stay.

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Water temperatures at 8 o'clock at the Biological Station Pier for the week ending Nov. 16

Nov. 10 – 60.1

11 – 60.5

12 – 60.6

13 – 61

14 – 61

15 – 60.5

16 – 60.5

Biological Station Notes

There has been an unusual run of seminars recently. Two weeks ago Dr. Ritter gave a report on his study of the acorn storing habits of the California woodpecker. Last week Dr. H. H. Laughlin of Cold Spring Harbor, N.Y. gave an explanation of his statistical studies of the vita processes in the growing root tips of the onion. On Monday of this week Dr. Harlow Shapley of the Mount Wilson Observatory gave a discussion of some important collecting links amongst the sciences. This Friday, Mr. N. W. Cummings is giving a statement of the results of some of these studies on evaporation.

Captain W. C. Crandall returned last Saturday from a ten day business trip to Berkeley.

Mr. and Mrs. J. F. Sherman of San Jose spend Thanksgiving with the Shains. Mr. Sherman is taking a position with the P. M. Dairy of San Diego.

Dr. Shapley, Mrs. Shapley and their three children spent Thanksgiving with Dr. C. Essenberg. They have decided to stay a month in one of the Station cottages, though Dr. Shapley himself has had to return to Pasadena for about ten days in connection with his astronomical work.

Mrs. P. S. Barnhart has just returned from a visit to relatives in Los Angeles.

Dr. Myrtle Johnson gave, last week, a talk before the National City Woman's Club in which she used some of her recent seashore work for illustration of her discussion of seashore life.

Miss Scott and her niece Mary Dedrich returned on Sunday from a Thanksgiving trip to Los Angeles.

At last report from James Allen he had reached New Orleans en route to the Electrical School at Hampton Roads, Va. He expressed amazement that people should contrive to live in the country through which he had just passed.

Wesley Allen has been working indoors at the Electrical School since graduating two months ago. He has now been assigned to a west bound submarine and expects to be ordered aboard at any time though uncertain about the time of sailing for this coast.

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Water temperatures at the Biological Station Pier at 8 a.m.

November 24 – 5.65  
 25 – 58.4  
 26 – 58.3  
 27 – 59.3  
 28 – 59.9  
 29 – 59.2  
 30 – 58.2

Biological Station Notes

Mrs. H. W. Norris has been at St. Joseph's Hospital for treatment for a few days.

Sir Dr. W. E. Ritter is planning to attend the meetings of the American Association for the Advancement of Science and affiliated societies at Chicago in the Christmas holidays. E also expects to visit New York in connection with the work being done toward organizing and coordinating the work on exploration of the North Pacific.

All of the people who draw gas from the high pressure line from Torrey Road to and including the Biological Station are being greatly inconvenienced by daily fluctuations in gas pressure. At the Biological Station gas is frequently not available for use at times when most needed. Gas users want to know what is the trouble with the La Jolla gas service and how to remedy it.

Mrs. [Noreen?] Martin gave a very enjoyable tea to ladies of the Colony on last Thursday afternoon.

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Water Temperatures at the Biological Station Pier at 8 a.m. for the week ending December 7.

December 1 – 58.6  
2 – 58.3  
3 – 58.1  
4 – 57.9  
5 – 57.6  
6 – 57  
7 – 56.6

## Biological Station Notes

Dr. Harlow Shapley returned from a business trip to Pasadena on last Friday.

On Wednesday afternoon of last week, Mrs. N. W. Cummings gave a tea for the ladies of the colony who reside in the lower section.

On last Saturday Mrs. W. S. Ritter gave an afternoon tea for all the ladies of the colony.

Sir Dr. W. E. Ritter started on his Eastern trip on Wednesday of this week.

On last Monday evening Captain W. C. Crandall gave a talk on his trip through the Panama Canal before the Brotherhood of the Congregational Church at Escondido where Mr. Goddard is pastor. He was accompanied by Mr. W. E. Allen. The going trip was made by way of Lake Hodges on the roads near which the car performed like a bucking broncho.

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Water temperatures at the Biological Station Pier at 8 a.m. for the week ending December 13, 1920.

December 8 – 57  
9 – 57.8  
10 – 57.3  
11 – 57.6  
12 – 57.6  
13 – 57.2  
14 – 57

12-15-20

Captain W. C. Crandall has been active in San Diego affairs for a period of fifteen years or more. He has been especially prominent in educational and scientific lines but he has been by no means neglectful of political and social activities. As manager of the Scripps Institution and master of the Agassiz, he has done an immense amount of practical work in advancing our knowledge of oceanography and marine biology. His membership in the Board of Directors of the San Diego Museum of Natural History and his recent appointment to the Board of Education not only gives further scope for use of his energies, by the community, but they also serve to indicate the high appreciation of the community for his abilities and powers of service.

## Biological Station Notes

Mr. and Mrs. Bain and family visited the Ross's last Sunday.

Mrs. Mary Webster, Ralph Taylor's sister, is spending some time with her father at Lakeside where her small son Herbert is confined with the measles.

Mr. and Mrs. Filbert are again residents of the colony.

Dr. W. E. Ritter gave a talk before the Cooper Ornithological Club at Berkeley shortly after his arrival there on Thursday of last week.

Dr. C. Essenberg has gone to Los Angeles to spend Christmas with her brother and his family.

On last Tuesday Mr. and Mrs. N. W. Cummings left Ogden, Utah to spend the holidays with their parents. Amongst other festivities a big holiday party has been planned at the home of Mrs. Cumming's parents, Mr. and Mrs. John Browning.

Captain John Dahl, Inspector of Hulls in the U.S. Department of Commerce, visited Captain W.C. Crandall last Sunday. Captain Dahl was formerly master of the Alexander Agassiz which was owned and operated by the Station for biological work. Some readers will be interested in knowing that the Agassiz, which was sold by the Station in 1913 and has since led a checkered career in the Mexican coast trade, recently went on the rocks at Tomales Bay and is a total loss.

Dr. F. B. Sumner gave an extended explanation of his work on heredity, at a Station seminar last week.

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Water temperatures at the Biological Station Pier at 8 a.m. for the week ending Dec. 22<sup>nd</sup>.

December 16 – 57.2  
17 – 57.4  
18 – 57.4  
19 – 57.6  
20 – 57.4  
21 – 56.3  
22 – 55.8

## Biological Station Notes

In the late afternoon of Christmas day there was an informal gathering of the members of the colony which was devoted almost entirely to promiscuous conversation and the general visiting together for which most residents at the station usually have so little time. Everyone seemed to enjoy it all thoroughly including the old fashioned accompaniments of popcorn and apples and peppermint candy.

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Water temperatures at the Biological Station Pier at 8 a.m. for the week ending Dec. 28<sup>th</sup>.

December 22 – 55.2  
23 – 56  
24 – 55.4  
25 – 56.2  
26 – 55.8  
27 – 56.1  
28 – 56.1

## Biological Station Notes

Dr. and Mrs. H. W. Norris left for Berkeley on Tuesday where Mrs. Norris is to stay while he returns to Grinnel College. They expect to return to the Station about May 1 in order that Dr. Norris may finish his special study on Sharks.

Miss Darlington and companion have taken the cottage vacated by Dr. Norris. She expects to stay about five weeks.

Dr. Myrtle Johnson spent New Year with her parents at National City.

Dr. Ritter was in Washington, D. C. the first part of this week.

Dr. and Mrs. H. H. Laughlin spent most of the holidays in and about Los Angeles. Dr. Laughlin's date seedlings are now about ready for study and he expects to be doing a good deal of laboratory work for some time.

Mrs. Crandall has arrived safely on her visit to her sister in Breckenridge, Texas.

Captain Crandall and Mr. W. E. Allen went to the football game on New Years day. While in Los Angeles they also visited friends and relatives.

Lieutenant and Mrs. Chas Martin visited relatives in Inglewood at the New Year week end.

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Water temperatures at the Biological Station Pier at 8 o'clock for the week ending January 4, 1921

December 29 – 56  
 30 – 56  
 31 – 55.8  
 1 – 55.6  
 2 – 56  
 3 – 56  
 4 – 56.6

1-5-21

Mrs. Parks assisted by some members of the La Jolla Woman's is conducting the drive for funds from La Jolla for European Relief. She reports to-day that her committee has secured 475.00 in one days canvas, and it is confidently expected that La Jolla will be in the foremost rank of towns giving to this fund.

This drive differs from most drives in that the appeal "save a child for 10 months for ten dollars" or one child per month for one dollar". The fund is being raised for purpose of feeding with a minimum of 6,000,000 children until harvest time at the middle of next October.

## Biological Station Notes.

Dr. Shepley and his family have returned to Pasadena.

Mrs. Webster and her small son Herbert are again staying with her brother, Ralph Taylor.

Miss Scouvard and Miss Rinehart spent three days here last week. Miss Scouvard is a High School teacher in Belgium. She is attending the Graduate School of the University of California at Berkeley, she being the present holder of an exchange fellowship between our University and a Belgium University.

Miss Darlington and Miss Strunech, who are welfare workers in Scotland, are now here for a stay of about a month.

Dr. W. E. Ritter has left Washington and is now on his return trip which includes stops at Kansas City, and one or two other points. He will probably arrive here about January 20.

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Water temperatures at the Biological Station Pier at 8 o'clock for the week ending January 11, 1921

January	5	-	56.5
	6	-	56.5
	7	-	55.6
	8	-	55.6
	9	-	56.4
	10	-	55.6
	11	-	55.1

## Biological Station Notes.

Dr. Myrtle Johnson is preparing for a collecting trip from San Diego to Monterey in the course of which she expects to work on all of the known collecting grounds. This trip is for the purpose of adding to her already voluminous material for the book on Pacific Shore Animals which is being written by Dr. Johnson and Mr. Snook.

Mr. C. H. Michael returned last week from his trip to Texas to visit Charles Copeland and family on a large ranch in the Panhandle. He reports a very fine time and that he found the Copelands all well and with memories of La Jolla friends still fresh in their minds. Mr. Michael is very enthusiastic about his reception by all of the Copeland relatives and about the agricultural opportunities in that section. He brought back many expressions of regard for La Jolla friends from Charles Copeland and his family.

Dr. W. E. Ritter returned on Sunday evening from his trip to the scientific meetings at Chicago and from the meetings of the Science Service at Washington. He reports that Dr. E. E. Slosson, formerly associate editor of The Independent, has been elected editor of the Science Service and that a start has been made in supplying the press with scientific news.

Dr. Mary B. Ritter is recovering from her illness of last week which was much aggravated by the shock of hearing of the death of Dr. Frank Warner, a prominent jeweler of Fresno and a favorite nephew of Mrs. Ritter. Mr. Warner was well known to many La Jolla people. Death came rather suddenly as a result of pneumonia after influenza.

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Water temperatures at the Biological Station Pier at 8 o'clock for the week ending January 18, 1921

January	12	–	54.7
	13	–	55.1
	14	–	55.4
	15	–	56
	16	–	56
	17	–	56
	18	–	56

## Biological Station Notes.

Shortly after Dr. Shapley had returned to Pasadena, with his family, word reached the Station that his small son had been stricken with pneumonia.

Some of the children in the colony have had to stay out of school on account of chicken pox.

Captain Crandall states that \$200.00 additional cash for European Relief was received this past week.

Mrs. C. E. Merriam, wife of the prominent Chicago publicist, who is professor of Economics in the University of Chicago, expects to arrive at the Station this week for an extended stay.

Under the leadership of Dr. Taylor and a few other members of the colony, a meeting was held on Monday night for the purpose of forming a club to discuss current events of general public interest and of either national or local importance. No name was adopted but an informal organization was effected with Dr. Ritter in the chair. A copy of management consisting of Dr. Taylor, Dr. Sumner and Dr. Essenberg was appointed. Dr. Laughlin led a very illuminating discussion of Immigration in which Dr. Taylor, Dr. Ritter, Dr. Sumner and Captain Crandall were participants. This first meeting was distinctly auspicious.

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Water temperatures at the Biological Station Pier at 8 o'clock for the week ending January 25, 1921

January 19 – 56.  
 20 – 55.7  
 21 – 55.7  
 22 – 55.4  
 23 – 55.6  
 24 – 55.4  
 25 – 56

1-14-1921

Editor San Diego Union,  
San Diego, Calif.

Dear Sir:

In view of the prominence of Dr. Ritter and of the extensive acquaintance of people in this section with the Warners, I am sending you the following obituary notice:

Very truly,

The Many friends of Dr. Mary B. Ritter of the Biological Station at La Jolla will be pained to hear of the death of a favorite nephew, Mr. Frank Warner, at his home in Fresno on January 12.

Mr. Warner and his wife were well known to many San Diego and La Jolla residents on account of several visits which they have made here. Mrs. Warner died about a year ago.

Dr. Warner was a member of the prominent jewelry firm, The Warner Company, at Fresno.

He was taken sick with influenza while on a trip to San Francisco but undertook to drive the 250 miles to Fresno. He succumbed to pneumonia soon after his arrival home.

Mrs. Ritter is almost prostrated from the shock, hence it is not likely that she can attend to any social or public duties for some time to come.

## Biological Station Notes

A number of workmen have been busily engaged for several days in repairing the roofs of the laboratory and museum buildings.

A change has been made in the high School transportation service. Instead of a San Diego bus coming over for the children, Mr. Crandall now takes them to La Jolla for the Motor Transit stage which has been reserved for La Jolla pupils.

Mrs. C. E. Merriam was accompanied by her two young children when she arrived last Friday.

Miss Darlington, the prominent welfare worker of war time in Scotland, who lectured before the Woman's club on Monday, left the Station with her companion, Miss Stronack, on last Wednesday.

Mrs. Payson, who has been visiting Dr. Mary B. Ritter for some time, has gone to Manhattan Beach.

Mr. and Mrs. J. H. Strait of Redlands paid a short visit to Captain Crandall's on Sunday.

Mr. and Mrs. John M. Browning of Ogden, Utah, are visiting their daughter Mrs. N. W. Cummings. Mr. Browning is the versatile inventor of many American models of small arms. In spite of his retiring disposition, he came into great prominence in war time through his invention of the Browning machine guns.

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Water temperatures at the Biological Station Pier at 8 o'clock for the week ending February, 1921

January	26 – 56.3
	27 – 56.7
	28 – 57.4
	29 – 56.9
	30 – 57
	31 – 57
February	1 – 56.9

2-7-21

Biological Station Notes.

Ralph Taylor visited Lakeside Sunday in celebration of his Birthday. His Sister, Mrs. Webster, spent the week end in San Diego.

Mr. and Mrs. Huestis gave a dinner party to a few friends last Sunday

Mrs. Kenneth Shain visited Mr. and Mrs. Shain on Sunday. She reports that Kenneth has arrived at Panama, where he has gone in connection with fleet maneuvers.

Mrs. Eaton and companion of San Francisco have taken a cottage at the Station.

Dr. and Mrs. Ritter are preparing to leave next week for a four months stay in Washington where Dr. Ritter has important business in connection with Science Service of which he is president.

Last week Dr. Laughlin made life masks of Dr. Ritter and of John Burroughs. The mask of Dr. Ritter he presented to the Station library.

On Friday of last week Captain Crandall took Dr. Ritter and Mr. Cummings to Cuyamaca for some scientific observations.

This week some material was taken to the San Diego Natural History Society for exhibition in the aquarium of the Society.

Six hundred nineteen visitors to the Station Museum and Aquarium registered this past month. Two hundred twenty-six registered this past week.

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Water temperatures at the Biological Station Pier at 8 o'clock for the week ending February 8, 1921

February	2 – 56.7
	3 – 56.7
	4 – 56.5
	5 – 56.5
	6 – 56.5
	7 – 55.9
	8 – 55.2

3-1-21

Biological Station Notes.

Dr. and Mrs. Ritter spent last week in the Hotel Stewart in San Francisco being delayed on their trip to Washington by illness of Mrs. Ritter. They expect to proceed this week.

Mr. Ridgway of the Smithsonian Institution, Washington, D. C. is spending a few weeks here. He is accompanied by his daughter. He is spending most of his time in preparing for publication some drawings made by Dr. Essenberg for her forthcoming monograph on Appendicularia.

Dr. E. C. Conklin, Professor of Zoology in Princeton University is expected here in a few days.

Dr. Walter P. Taylor's father and mother visited the Taylor family last week.

Dr. McEwen and Mr. Cummings have returned from San Francisco where they attended meetings of the Western Engineering Society and contributed papers.

During the month of February 1205 visitors registered at the Institution.

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Water Temperatures at the Biological Station Pier for the week ending March 1. 8 o'clock A. M.

February 23 – 54.9  
24 – 55.6  
25 – 55.4  
26 – 55.8  
27 – 65.8  
28 – 5.3  
March 1 – 56.5

3-8-21

Biological Station Notes.

Mr. Charles Wright and family of Boston, who came via Panama on the same steamer as Mrs. Pershing and her daughter, are stopping at the Station for a few weeks.

Mr. A. D. Barnhart returned to the Station last week after spending some months in Los Angeles.

Mrs. M. G. Shain suffered a severe knee sprain while on the tide water rocks a few days ago and will be rather closely confined for several weeks.

Mr. C. F. Michael was badly shaken and bruised by a fall from the Station bus on Thursday night of last week, but is getting along very well and expects to be on duty again in a few days. His cheery conversation and cordial welcome have been very much missed by visitors and residents throughout his absence. Prospective visitors will be pleased to know that he will probably be able to resume his duties as museum guide and lecturer some time next week.

Mr. P. M. Hannay has been ill for about a week. He has now sold out his diary interests.

Mr. Ridgway visited Chula Vista last Sunday.

Mrs. Essenberg visited her brother in Los Angeles and the Shapley's at Pasadena last week end. Dr. Shapley is soon to go to Harvard University to take up his work there to which he was recently appointed.

Wesley Allen writes that his ship is in dry dock and that he hopes to be started for this Coast in another month.

James Allen has applied for admission to a class which is being especially drilled to take Annapolis examinations in September.

Dr. G. F. McEwen was laid up with a bad cold last week on return from San Francisco.

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Water Temperatures at the Biological Station Pier at 8 o'clock a.m. for the week ending March 15.

March 2 – 56.3  
3 – 56.5  
4 – 56.1  
5 – 57.6  
6 – 57.8  
7 – 57.8  
8 – 57.9

## Biological Station Notes.

Several children from the Station went to the circus Monday.

Mrs. Merriam was sight seeing in San Diego Monday.

Mrs. Shain is recovering from her injury.

Mrs. Pershing and her daughter are entertaining a young lady visitor this week.

Mr. C. H. Michael is on the job again, apparently none the worse for his mishap.

Mr. P. M. Hannay is visiting in Los Angeles this week. It is his first absence from the Station for five years.

Dr. and Mrs. Ritter are stopping at Hotel Logan, Washington, D. C.

The Laughlins have gone to Los Angeles and to Coachella Valley for several days.

Mrs. Crandall returned from Texas on Thursday of last week. She reports some interesting experience in the oil fields where she was visiting her sister.

Miss. Scott and her niece left for San Francisco on Wednesday of this week.

A good many people will be interested in knowing that the time is near for the first smelt run. The first run will be at about high tide the second night after either this full moon or the next one. It will occur two or three nights in succession and after starting will be repeated after each full moon for two or three times.

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Water Temperatures at the Biological Station Pier at 8 o'clock a.m. for the week ending March 15.

March 9 – 56.

10 – 58

11 – 53.5

12 – 57.

13 – 56.4

14 – 56.4

15 – 57.

## Biological Station Notes.

Dr. Wright and family made a short visit to El Cajon Valley at the end of last week.

Mr. M. G. Shain is confined to his home by a very bad cold.

Mrs. Eaton left yesterday for her home in Salt Lake City. Her Companion, Miss MacVickie, is going to visit her sister in Fullerton.

Mr. C. H. Michael was surprised by a visit from his sister in law, Mrs. Eliza Smith on last Monday. She was able to give him directly a great deal of news about his folks in Michigan and Indiana.

Dr. and Mrs. Ritter are permanently located at the George Washington Inn at the corner of New Jersey Avenue and C Sts. S.E. Washington D. C.

Dr. E. G. Conklin of Princeton University has arrived for a six weeks stay at the Station during which he expects to use the laboratory for some research on early stages of development of various local animals. He is accompanied by Mrs. Conklin. He is a Professor of Zoology in Princeton University. On his trip to our Coast he gave a number of lectures at Universities and Research Institutions in Texas, New Mexico, and Arizona.

Miss Pirie Davison visited the Station Sunday. She assisted Dr. Daniel in research here in the summer of 1916 and Dr. Kofoid in 1917.

Mr. and Mrs. Browning have returned home to Ogden. Mrs. Cummings accompanied them to Los Angeles.

Miss Hanson and her mother and two friends are spending the week at the Station. Their home is in Ontario.

Miss Scott is located at Hotel Cartwright in San Francisco.

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Water Temperatures at the Biological Station Pier at 8 o'clock a.m. for the week ending March 15.

March 16 – 57.

17 – 58.

18 – 58.2

19 – 58.

20 – 57.

21 – 58.

22 – 58.

## Biological Station Notes.

Mrs. Webster has returned from a visit to Lakeside.

Mrs. Merriam has gone to Los Angeles where she expects to spend a week before proceeding to her home in Chicago.

Mr. and Mrs. Shain are both rapidly recovering and hope to be out soon.

Dr. and Mrs. Laughlin have returned from a visit to Los Angeles.

Dr. Conklin discussed the always interesting subject of adaptation before the Seminar last week.

Members of the Colony united for a picnic party in the Eucalyptus Grove last Saturday.

Mr. Hind has made two trips to Riverside to take personal belongings in preparation for a stay there through April. In May the family is to go to Seattle by automobile. Mr. Hind's mother is to visit her sister in Oklahoma.

Miss. Haskins and party returned to Ontario last Sunday.

The Station is to be represented by Dr. Baker of San Diego on a trip for biological survey of Lower California and the Gulf by a party of naturalists from the California Academy of Science at San Francisco. Dr. Baker is to act as conchologist for the party but he will also do some plankton and water sample collecting for the Station. The party is to leave San Pedro April 4 and to spend 4 months mainly in the gulf. They expect to visit most of the fifty or more islands in the Gulf but to give most attention to Tiburon. They will use Mr. Genter's boat, Silver Gate.

The San Jacinto Section of the Western Society of Naturalists meets in San Diego this Friday. On Saturday the members are to make a trip to Torrey Pines to study biological conditions there, after which they will return to La Jolla as guests of Miss Scripps who has invited them to see her paintings of the wild flowers of California by the artist Mr. Valentine.

During the Past four weeks 1100 visitors have registered at the Museum.

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Water Temperatures at the Biological Station Pier at 8 o'clock a.m. for the week ending March 29.

March 23 – 59.2

24 – 58.8

25 – 58.8

26 – 57.7

27 – 58.1

28 – 58.1

29 – 58.1

## Biological Station Notes.

Miss Barnhart is visiting her brother A. D. Barnhart.

Messrs. P. S. Barnhart, Moberg and W. P. Taylor, together with some San Diego scientists went to the north island of the Coronado group on Sunday. They returned on Wednesday afternoon after making various kinds of scientific studies. The weather was rather unfavorable for work the first two days.

Mr. and Mrs. Girard are now resident at the Station where Mr. Girard is using laboratory facilities for chemical investigation in which he is interested.

Dr. and Mrs. Laughlin made a trip to the Coachella Valley this week in order that he might study the growth of dates. They were accompanied by Dr. and Mrs. Conklin.

Last Friday Dr. Conklin spoke at the University Club in San Diego on "the Future Evolution of Human Beings."

Mr. A. E. Williams who assisted in construction of the Library and Museum building at the Station visited the Crandall's Sunday.

Captain Chas Martin has been receiving congratulations from his local friends and by letter from friends everywhere upon his recent promotion from a lieutenancy. Although assigned to a command in San Diego he will retain his Station residence for the present.

The Station was well represented at the Science meetings in San Diego last Friday. Dr. F. B. Sumner was elected president of the San Jacinto Section of the Western Society of Naturalists for the coming year.

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Water Temperatures at the Biological Station Pier at 7 a.m. for the week ending April 5..

March 30 – 57.9  
 31 – 58.2  
 April 1 – 59.  
 2 – 58.8  
 3 – 58.  
 4 – 56.2  
 5 – 56.3

## Biological Station Notes.

Dr. Charles Wright and family party left on Wednesday of this week for a tour of Southern California before their return to Middlebury, Vermont about the middle of next month. Although having visited California many times before, Dr. Wright had not spent much time in the San Diego region and he is very enthusiastic in expressing his enjoyment of his stay here.

Mrs. Pershing and her daughter left on Tuesday morning for their home near Philadelphia. They go by rail to New Orleans and thence by steamer to New York.

Dr. and Mrs. Laughlin are leaving this Saturday for a leisurely return to Cold Springs Harbor, N.Y.

Dr. and Mrs. E. G. Conklin leave this Friday for some short trips about the state before returning to Princeton, N. J.

Captain and Mrs. Chas Martin are moving to San Diego this Friday. Since the captain has been assigned to duty at Balboa Park he finds it too difficult to maintain his residence at the Station.

Dr. Myrtle Johnson has returned from her extended collecting trip up the coast.

On Friday of last week. Mrs. M. C. Crandall gave a tea to the ladies of the colony in honor of the visiting ladies who are leaving this week.

On last Sunday Mrs. Sumner gave a tea for the Conklins, Wrights, Laughlins and Pershings.

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Water Temperatures at the Biological Station Pier at 7 a.m. for the week ending April 5..

April 6 – 55.  
 7 – 56.  
 8 – 57.  
 9 – 58.  
 10 – 57.5  
 11 – 58.5  
 12 – 56.5

## Biological Station Notes

Dr. C. T. Vorhies, Professor of Entomology in the University of Arizona, visited Dr. Taylor the first part of this week.

Mr. Riley and Mr. Gans have engaged a cottage for the summer for the use of their families at weekends.

Mr. P. S. Barnhart has returned from a two weeks stay at Chula Vista.

Dr. F. B. Sumner and Mr. R. Huestis are spending this week on Coronado Island trapping mice for experimental work.

Dr. Finley visited Dr. Taylor the latter part of last week and made a trip to Mission bay with Dr. Johnson to get pictures of some aquatic animals there.

W. E. Allen returned from a trip to Los Angeles and neighboring towns on Tuesday evening of last week.

On account of severe illness from which recovery is slow, Dr. Esterly writes that he will not be at the Station this year.

At last report Wesley Allen had reached Charleston S. C. on U. S. S. Camden en route to this coast with a flotilla of submarines.

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Water temperatures at the Biological Station Pier for the week ending April 26<sup>th</sup>.

April 20 – 56  
21 – 56  
22 – 57  
23 – 57.4  
24 – 57  
25 – 56.8  
26 – 57

## Biological Station Notes

On Thursday of last week Mr. Ernest Windle, editor of the Catalina Islander and Mr. J. A. O'Connor, manager of the Hearst magazines for Southern California, visited the Station and spent a good deal of time in looking over the plant. They were especially interested in Station investigations of oceanic life and the physical conditions affecting it.

On last week Thursday Captain W. C. Crandall visited the Southern Branch of the University of California at Los Angeles. He then proceeded to Summerland in order to participate in a final survey of the kelp groves on the last voyage of the kelp harvester as she came to San Pedro to go out of commission.

Dr. Sumner and Mr. Huestis made a very successful trip to Coronado Island where they spent the whole of last week in collecting. They returned Sunday with a great deal of material and valuable records of observations made.

Dr. W. P. Taylor is to give an illustrated lecture soon before the San Diego natural History Society.

Dr. Norris returned to the Station on Tuesday May 3 to renew his study of distribution of cranial nerves in the sharks which was interrupted in January. Mrs. Norris will visit her children on Colorado while he is here.

The University work at Berkeley is now closing and various members of the staff up there are expecting to be here at some time during the summer.

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Water Temperatures at the Biological Station Pier for the week ending May 3 At 8 a.m.

April 27 – 58  
 28 – 57  
 29 – 58.4  
 30 – 58.5  
 May 1 - 58.5  
 2 – 60  
 3 – 58.5

## Biological Station Notes

Captain W. C. Crandall has secured from the International Packing Corporation the use of one of their boats, the Kaiyo, for May, June and July. This boat will be equipped with mast, boom and hoist and such Station equipment as is necessary for local work. Mr. Ross is giving nearly all his time now to getting her ready for work next week.

A skipper has not yet been employed and it is probable that Captain Crandall and Mr. Ross will have to do that work.

Scientific work will be confined to a ten mile radius but collections will be taken daily from certain points in the local area, thus giving a continuity to outside work which has not been approached for several years.

Much general collecting will be done but special attention will be given to securing water samples and plankton samples from the surface and from moderate depths at designated points. Amongst workers at the Station, Drs. McEwen, Norris and Essenberg and Messrs. Barnhart and Allen will be most directly concerned.

On last Monday the Station purchased a fourteen foot skiff for supplementary use in boat work.

In the first part of this week Mr. Barnhart was at Chula Vista completing a house which he has under construction there.

Dr. S. S. Maxwell with Mrs. and Miss Maxwell arrived last Saturday to stay for the summer. On Wednesday of this week Dr. Maxwell, who is Professor of Physiology at Berkeley, will deliver a paper at the State Medical Convention at Coronado giving some results of his study of semicircular canals, especially as it applies to tests of aviators in regard to their sense of equilibrium. The importance of this may be understood from the report that six per cent of aeroplane accidents are due to mechanical defects and ninety four per cent are due to defects in the pilot's sense of equilibrium.

Mr. and Mrs. Allen of New York are domiciled at the Station for the summer. They were directed here by Mrs. Pershing.

Dr. W. P. Taylor lectured on Mt. Rainier before the Natural History Society last Sunday. Next Saturday, May 14 at 3 p.m. he is to lecture before the Society on the habits of the band Tailed kangaroo Rat. This is an illustrated lecture to which the public is cordially invited. He will also give a lecture at the same place on next Sunday.

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## Water temperatures at 8 a.m. at the Biological Station Pier.

May 4 – 60.5  
5 – 60  
6 – 59  
7 – 59

May 8 – 60.5  
9 – 60.5  
10 – 61

BIOLOGICAL STATION NOTES

Professor Vorhies, Entomologist of the University of Arizona, arrived here June 1<sup>st</sup>. In order to make room for him Dr. Norris vacated his cottage and moved into a spare portion of Captain Crandall's house.

Recent letters from Drs. W. E. and Mary B. Ritter indicate that they do not lose sight and thought of La Jolla friends in spite of the fact that their time is fully occupied. So far as members of the station colony are concerned, they follow the simple and effective plan of writing to them in alphabetical notation. Dr. W. E. Ritter has recently dropped the financial work which he had been temporarily doing for Science Service and is giving all his time to administrative work as President of Science Service.

Dr. G. F. McEwen has arrived in San Francisco.

The Misses Milligan of San Diego, cousins of Mrs. W. P. Taylor, visited at Dr. Taylor's over the week end.

Mrs. Barnhart's sister, Mrs. E. A. Henry, and her little daughter Bettie, who have recently returned from England where they were connected with American lecture work for Prohibition, are making a visit at the Barnharts.

Mr. Barnhart's mother, Mrs. M. E. Barnhart came down from Los Angeles for a visit on Monday.

On last Saturday Dr. David Star Jordan favored the Station with a three hour's visit. About one hour of this time was given to an informal meeting with the scientific workers now at the station in which many biological questions were raised and briefly discussed. Dr. Jordan was indeed to talk somewhat about the distribution, habits and commercial importance of the Pacific Salmon and he did this most entertainingly making use of his abundant experience in studies of salmon.

1941 visitors registered in the Museum during April and May.

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Water temperatures at the Biological Station pier at 7 a.m.

May 25 – 63  
 26 – 63  
 27 – 61  
 28 – 61  
 29 – 63  
 30 – 61.5  
 31 – 62.5

## Biological Station Notes

The collecting work by boat which has now been in daily operation for about two weeks is going smoothly. In addition to the skipper Mr. Pederson, another man, Mr. Green, a retired captain has been employed to keep the records. These two men constitute the permanent crew. To complete the force necessary for doing the work, one (or more) member of the scientific staff of the Station goes out each day in turn. These going on regular schedule are Captain Crandall, Dr. McEwen, Mr. Moberg, Mr. Barnhart, and Mr. Ross. Results of the work so far have been very satisfactory although nothing exceptional has developed. Water samples are secured every day and microscopic living things are also captured at various depths in order to see how they are distributed in the water and why it is so. At least once a week some dredging is done for bottom forma.

Dr. W. P. Taylor left for Seattle the middle of this week from which point he will enter upon his summer field work in the biological Survey of the State of Washington which is to be completed this year. The work this summer will be in the Olympic mountains west of Seattle and north to the straits. On his way north Dr. Taylor will stop for a conference with prominent scientists at Pasadena, San Francisco, and probably Tacoma.

Mrs. Taylor's parents, Mr. and Mrs. Thomas Fairchild of Santa Ross, California, will spend the summer with her while Dr. Taylor is absent.

Dr. G. F. McEwen has returned from San Francisco where he gave two talks before the California Academy of Sciences, and visited various scientific acquaintances. On his return he stopped at Santa Barbara and Redondo to arrange for the beginnings of collecting work for the Station at those places. In these places as in some others, valuable collecting for scientific purposes is made possible through the interest and cooperation of officers and employees of the Southern California Edison Company.

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## Water temperatures at the Biological Station at 7 A.M.

June 1- 63.75  
 2 - 63.75  
 3 - 63.5  
 4 - 63.75  
 5 - 64.25  
 6 - 64  
 7 - 64

## Biological Station Notes

Many of the Station residents went in to San Diego to the performance of the Mikado last Saturday.

On Wednesday of last week a number of pupils from Grossmont High school under the leadership of Mr. Becker visited the Station.

A large number from Encinitas Grammar School spent Thursday at the Station.

Wesley Allen is expected to reach San Diego early next week on the submarine tender Camden.

Dr. S. S. Maxwell is making a ten day trip by auto to Pacific Grove in an effort to get some hog fish for his experiments. He is accompanied by Mrs. Maxwell and their daughter.

Mr. and Mrs. G. G. Allen have returned from their motor trip to Yosemite Valley and the San Francisco section.

Dr. Albert Mann, diatom specialist of the Carnegie and Smithsonian Institutions at Washington, arrived last week for a stay of some weeks during which he will give much time to study of Pacific diatoms. Mrs. Mann is with him. They got through from the East just ahead of most of the floods.

Florence Sumner spent last week in La Jolla in connection with Commencement exercises of Bishop's School. Several people from the Station attended the Bishop's School reception.

The life guard at La Jolla Bath House called up the Station on Monday saying that there was a small turtle over there which might be useful. Having recently had a small marine turtle in our aquarium Mr. Ross went over to help load this one in the Station bus. Inspection showed the monster to have dimensions of shell of about four inches by three and a weight of nearly a pound. It was a land or fresh water turtle which had got into the "big pond". The two men handled it without trouble. Evidently the word "small" had largely different meanings at the two ends of the telephone line.

Every year or two someone strikingly underestimates the dangers of the sea cliffs near the Station or on Station property. Last Sunday two marines tried to scale the cliff about two hundred yards north of the pier. They stopped on a narrow ledge seventy five feet from the top and could get neither up nor down. Their cries for help were heard but they had been there for hours before they were seen. Their khaki suits almost perfectly concealed them. They were rescued about 8:30 p.m. in an almost exhausted condition.

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Water temperatures at the Biological Station Pier at 7 a.m.

June 8 – 63	June 12 – 62.5
9 – 62.5	13 – 62.75
10 – 63	14 – 63
11 – 63	

## Biological Station Notes

On Wednesday of last week the Kaiyo (the boat temporarily in use by the station) made a trip to San Diego Bay for the purpose of obtaining diatom samples for Dr. Albert Mann and water samples for Dr. McEwen. She returned on Thursday after making some satisfactory collections but the high swells prevented landing at the pier and the crew landed through the surf at Spindrift. Heavy swells prevented working with the boat for the rest of the week.

On last Sunday Captain W. C Crandall took Dr. Albert Mann by auto to Laguna for the purpose of collecting diatoms in that region and getting some idea as to desirability of further work by Dr. Mann a little later. They were accompanied by Mrs. Mann and Mrs. Crandall.

A brush fire on the hill above the Station furnished some excitement last Sunday afternoon. Prompt action by Dr. F. B. Sumner and other Station residents together with timely assistance from the La Jolla Fire Station prevented serious injury.

Mr. Moore of San Diego High School together with his family is occupying Dr. Maxwell's cottage in his absence. Mrs. Moore is a daughter of Dr. S. S. Maxwell.

Dr. F. B. Sumner and family will be absent on vacation through July and Dr. Daniel will occupy their house that month.

The Station aquarium is better stocked at present than it had been for some time. All of the tanks have again been put in use after repainting and repairing.

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Water temperatures at Biological Station pier about 7 a.m.

June 15 - 63  
16 - 63  
17 - 64  
18 - 64.5  
19 - 65.5  
20 - 65.5  
21 - 66

## BIOLOGICAL STATION NOTES

Mrs. Annie Springrose visited the Shains over the weekend.

Mr. Huestis is confined to the house by illness.

Dr. Daniel and family are expected to arrive this week.

Mr. Moore and family have returned to San Diego.

Wesley Allen who is an electrician on U.S.S. Camden spent the weekend with his parents. On Saturday one of his friends, Daniel Buckley spent the afternoon with the Allens. The boys had many interesting things to tell about life aboard ship, experiences on the trip for Norfolk around through the canal and the antics of pets picked up by the crew at Panama and other southern ports.

Mr. Skogsberg who has recently been appointed to assist Dr. Thompson in albacore investigations for the California Fish and game Commission arrived at the Station last Saturday for a few days of shore line collecting before assuming his new duties. He came to the Hopkins Marine Laboratory of Stanford University at Pacific Grove in November 1920 direct from Sweden where he has attained considerable prominence amongst marine biologists. Upon coming to Pacific Grove he undertook to collect marine specimens for three different Swedish Museums and his trip down here is for the purpose of getting such material from this locality.

About a month ago Dr. W. E. Ritter made a two week trip to New York State to investigate complaints about damages done by beavers. It seems that a good many years ago there had been a bounty offered for killing beavers until they were almost exterminated. Then a law was passed giving the animals complete protection which resulted in their multiplication and in complaints of damage from the building of their dams and interference with water ways etc. There seems to have been reason for at least some complaints although we are not well informed as yet. At any rate it is interesting to note that man may cause as much disturbance of nature by some cases of protection of animals as he does by destruction in other cases. While Dr. W. E. Ritter was in New York, Dr. Mary B. Ritter made a visit to Philadelphia.

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Water temperatures at Biological Station Pier week ending 6-28-21 at 7:30 a.m.

June 22 – 66.4  
 23 – 67.1  
 24 – 67  
 25 – 67  
 26 – 68.7  
 27 – 69  
 28 – 67.6

## Biological Station Notes

Dr. Halma and family from the Riverside Citrus Experiment Station of the University of California arrived at the end of last week. The family is to stay about three months and Dr. Halma expects to come down from Riverside frequently for short visits.

Dr. Jage Skogsberg has gone to San Pedro for three months of work with Dr. Thompson for the California Fish and Game Commission on albacore investigations.

Dr. J. F. Daniel and family motored down from San Francisco last week and will be quartered in Dr. Sumner's residence while the Sumner family is away. Dr. Daniel expects to continue studies on the morphology of sharks of this region.

Dr. F. B. Sumner and family have gone to Hulburd's grove for a time after which they will continue their vacation camping in other localities.

Mrs. S. S. Maxwell and her daughter have returned to Berkeley on account of damage to their house caused by fire in an adjoining house. Dr. Maxwell will remain here for about a month in order to continue his experimental work.

Pres. W. E. Clark of the University of Nevada arrived by auto on the Fourth. He is accompanied by his family and they hope to be able to stay about two months. They are all very much delighted at again being at La Jolla.

Pres. Dunaway of Colorado College has been delayed by illness in the family and he will not arrive with his family for some time yet.

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Water temperatures at Biological Station pier about 7.30 a.m. for week ending July 5

	June 29	– 67.5
	30	– 67.5
July	1	– 67.7
	2	– 68
	3	– 68
	4	– 67.7
	5	– 68.5

## Biological Station Notes

Prof. Richards of the University of Oklahoma who has given a great deal of attention to structure and development of cells, arrived at the Station on Tuesday of last week. He will stay here for some weeks and while here he expects to give special attention to the earliest stages of development of various kinds of eggs, especially those of starfish and of *Fundulus* (one of the little fishes found abundantly in False Bay). Dr. Richards is accompanied by his family.

A recent letter from Sir Dr. Ritter indicated that Dr. Mary B. Ritter is now on her way to California and that Dr. W. E. Ritter expected to leave Washington for Berkeley about July 15. He will probably reach La Jolla not far from the middle of August.

Captain W. C. Crandall is spending most of this week at the Elks' Convention at Los Angeles and Mrs. Crandall is visiting friends at Whittier and Los Angeles.

Mr. Taylor of Lakeside visited his son Ralph over the weekend.

The boat work by the Station was closed up for this summer on July 15 when the *Kaiyo* was taken out of commission and returned to her owners. The work has been very satisfactory and it is hoped to make such work a regular part of the program of operations by the Station each year. So far no very exceptional results are in evidence but there is excellent support for the idea that daily work in an accessible area is of very high importance.

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Water temperatures at the Biological Station pier about 7:30 a.m. for the week ending July 12, 1921

July 6 – 67  
7 – 67  
8 – 66.7  
9 – 68  
10 – 68  
11 – 68.2  
12 – 69

## Biological Station Notes

Mr. Riley's nieces spent a few days with the Gans girls at the end of last week.

Mrs. McCormick of Los Angeles has been visiting Mrs. Halma for a few days.

Dr. Daniel and family who have been using Dr. Sumner's residence in the absence of the Sumner family have been obliged to return to Berkeley on account of Dr. Daniel's work in connection with the program of the meetings of the American Association for the Advancement of Science to be held there soon. His artist assistant, Miss Bennett, will remain for some time yet in order to finish some of the work which they had in hand.

Mr. and Mrs. Girard returned at the end of last week from a motor trip to Los Angeles, Long Beach, Mt. Lowe and other points of interest in that section. Mr. Girard is again in full swing on his research work at the Station and his employment at the drug store.

Mrs. Essenberg was visited by her brother and his family and by Mr. and Mrs. Wurmser and daughter Olga at the weekend. Miss Olga is to remain for a longer visit with Mrs. Essenberg, whose niece is also making an extended stay.

Dr. W. P. Taylor writes that he is now in the Olympic Mountains and that he is having a very successful collecting trip in that region but that he is anxious to get back to La Jolla and his family.

Dr. F. B. Sumner and family are now located in the Laguna Mountains where they are having lots of fun camping and tramping.

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Water temperatures at Biological Station Pier about 7:30 a.m. for week ending July 19, 1921.

July 13 – 69.8  
14 – 70.2  
15 – 70.8  
16 – 70.9  
17 – 72  
18 – 72.9  
19 – 72.2

## BIOLOGICAL STATION NOTES

Misses Betty and Olive Riley of Idaho have returned to San Diego to visit their uncle A. A. Riley.

Mrs. Huestis and her infant son have returned from the hospital.

Dr. Halma of Riverside visited his family over the weekend

Miss Gause was the guest of Miss Field over the weekend

Sir Dr. and Mrs. Ritter are now at Berkeley where they will remain until after the meetings of the Western Section of the American Association for the Advancement of Science.

Dr. H. W. Norris started on his homeward trip last Wednesday. He expects to stop at Pacific Grove and Berkeley and to join Mrs. Norris at Colorado Springs after which they will proceed to their home in Grinnell, Iowa. Dr. Norris has now spent more than a total of six months at the Station and he is very much pleased with the opportunities for work here. He says that he has been much more successful than he had dared hope to be.

Mrs. W. C. Crandall is again enjoying the companionship of her mother, Mrs. Stuart who arrived a few days ago after a long visit in Texas. Mrs. Stuart brought with her Master Sayre Williams, one of her young grandsons.

Dr. G. F. McEwen and Mr. N. W. Cummings were hosts to the San Diego section of the American Association of Engineers on last Sunday. After a beach luncheon the party of about thirty wandered at will about the Station or indulged in surf bathing. Special effort was used to make them acquainted with the Museum, the Laboratory and the methods of work of the Station

Mrs. W. E. Allen and daughters Esther and Margaret left on Tuesday for a visit to Los Angeles and places in the vicinity.

Messrs. Bledsoe and Bates of the Bledsoe Furniture Co., occupied a cottage over the weekend.

Dr. F. B. Sumner and family have returned from a trip to the Laguna Mountains where they report fine time camping and tramping.

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Water temperatures at the Biological Station Pier for the week ending July 26, 1921, mostly about

7:30 a.m.

July 20 – 72.5

21 – 73

22 – 73

23 – 73.6

24 – 73.5

25 – 73

26 – 70

## BIOLOGICAL STATION NOTES

Mr. and Mrs. Batcheller and daughter of Riverside have taken a cottage for the month of August.

Dr. Clevenger together with Mrs. Clevenger and their small son is spending a week at the Station. Their home is in San Diego.

Mr. Shapro, an inventory clerk of the University of California will be here for several days making the annual inventory of the Station property. He is accompanied by Mrs. Shapro.

Ralph Taylor's father made a short visit to him at the end of the week.

Miss Bennett and her mother have returned to their home in Riverside. Miss Bennett is the artist who has been engaged in work on the illustrations for the monograph by Dr. Daniel which is nearing completion.

Captain W. C. Crandall, Dr. F. B. Sumner, Dr. C. Essenberg and Mr. E. G. Moberg are in Berkeley this week attending the meetings of the American Association for the Advancement of Science and transacting various items of business mostly connected with the Station work. They went up by motor and expect to return by the middle of next week.

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 July 27 – 69.8  
 28 – 70  
 29 – 69.7  
 30 – 69.6  
 31 – 70.7  
 August 1 – 71.3  
 2 – 70.5

## BIOLOGICAL STATION NOTES

President Duniway of Colorado College arrived Monday after a long delay on account of illness in the family. He is accompanied by Mrs. Duniway and their three sons.

Mrs. Shepard and daughter of Logan, Utah, are visiting the Batchelors.

Captain Crandall, Dr. Sumner and Mr. Moberg returned from the Science meetings at Berkeley on Monday evening. Mrs. Essenberg is spending her vacation in the Berkeley on Monday evening. Mrs. Essenberg is spending her vacation in the Berkeley region.

The meetings at Berkeley are reported to have been the best held since the Western Section of the American Association for the advancement of Science was organized five years ago. Dr. Ritter was president this year and he gave the presidential address. He also gave a paper before one of the sections meetings. Papers by Dr. Sumner, Dr. Essenberg and Mr. Allen were also presented at various sections.

Dr. Ritter is expected to return next week. Mrs. Ritter has planned to arrive on Thursday of this week.

Mr. Fairchild, the father of Mrs. W. P. Taylor who has been spending the summer with her, died on Monday evening after a brief illness with pneumonia. Funeral services at Bradley and Woolman's this Friday.

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Water Temperatures at the Biological Station Pier for week ending August 9, 8 o'clock

August 3 – 70.9  
4 – 69.7  
5 – 70.2  
6 – 68.9  
7 – 68.7  
8 – 68.8  
9 – 67.4

## BIOLOGICAL STATION NOTES

Dr. and Mrs. W. E. Ritter arrived home at the end of last week after a stay of some time at Berkeley on their way here from Washington where they have been for the past several months.

Mrs. Charles Copeland and her two younger children are spending a few days with the Barnharts.

Mrs. Frost who has been visiting Mrs. Halma has returned to Riverside and two other lady friends of Mrs. Halma are now visiting her.

Mr. H. J. Snook and family arrived by motor from the Puget Sound region at the end of the week and will be here until about Sept. 1. Mr. Snook was at the Friday Harbor Marine Laboratory of the University of Washington with Dr. Myrtle Johnson with whom he is collaborating in the production of a descriptive guide to the tide pool and shore line animals of the west coast of the United States. They secured many fine specimens and excellent photographs and drawings in the Puget Sound region and they now have a wealth of material from which to select for the finishing touches to their book which will be eagerly welcomed by tourists and students of sea shore life.

Dr. Myrtle Johnson, who also arrived from Puget Sound earlier last week has been called home to National City by the illness of her mother.

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August 10 – 67.7  
11 – 67.3  
12 – 66.8  
13 – 66.4  
14 – 66.7  
15 – 65.7  
16 – 66.9

## BIOLOGICAL STATION NOTES

Mr. Wheeler with his wife and two children are visiting the Gans family for a few days. Their home is in Los Angeles.

Dr. Halma of the Citrus station at Riverside is visiting his family for a couple of weeks.

On Wednesday Mrs. R. Huestis entertained in honor of the fifth wedding anniversary of Mr. and Mrs. Cummings.

Dr. M. Johnson has returned to her home in National City where she will reside this winter while teaching in the San Diego State Teachers' College and Junior College where she is to have charge of work in Biology.

High School students at the Station are looking after registration and other preparations this week in order to be ready for the opening of the schools.

Dr. Stuart of the Agricultural College at Logan, Utah visited Dr. Batchelor and Mr. Cummings on Monday. He expressed special interest in the research work being done at the Station.

Prof. Hilton of Pomona College visited the Station Monday in order to secure some material in which he is interested and to visit friends here.

On last Friday Pres. Duniway and family returned to Colorado Springs where he resumes his work in administration of Colorado College. Just before leaving he addressed the University Club in San Diego on the subject of the University and the Small College.

At the end of last week President Clark of the University of Nevada left with his family for their home in Reno. They went by auto.

On Friday of last week Dr. Ritter spoke before the University Alumni in San Diego.

A letter from Dr. J. B. Johnstone of the University of Minnesota, one of the leading neurologists of America, states that he expects to spend the first three months of 1922 at the Station. He will make studies on sharks and rays somewhat similar to those made by Dr. Norris.

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Water temperatures at the Biological Station pier at about 7 a.m. for the week ending Aug. 23, 1921

Aug. 17 – 67.4

18 – 65.8

19 – 66.9

20 – 62.9

21 – 62.2

22 – 61.4

23 – 65.9

## BIOLOGICAL STATION NOTES

Mrs. Charles Copeland returned to Los Angeles last week.

Mr. and Mrs. H. J. Snook and family returned by auto to Stockton this week where Mr. Snook will soon resume his work in the High School.

Mrs. Mary Webster is visiting her brother, Ralph Taylor.

Mr. Michael gave a talk before the San Diego Rotary Club on Tuesday of last week.

Dr. Batchelor and family returned to their home in Riverside on Thursday of this week.

Dr. C. Essenberg has returned from her vacation which was spend at Berkeley and the Russian River and Los Angeles.

Dr. Ritter, Captain Crandall, Mr. Cummings and Dr. Wood of the Carnegie Institution made an auto trip at the end of last week in which they visited the various sites of dams in the city water supply system. At Cuyamaca Dr. Ritter added to his records of acorn storing by California woodpeckers. A general study of fault systems and other geological phenomena related to earthquake problems was made by Dr. Wood throughout the region covered in the trip. He reports that the Coastal fault line ends in the Capistrano region and does not occur south of that. He finds no evidence of fault lines in our immediate region.

Dr. McEwen visited H. N. Savage the hydraulic engineer at Barrett Dam on Friday of last week.

Mr. Wheeler of the pacific Telephone Company has returned home to Los Angeles.

Mr. and Mrs. G. G. Allen left the Station this week. They expect to return to New York soon preliminary to a trans Atlantic trip.

Dr. Charles Zeleny of the Zoology department of the University of Illinois is expected to arrive at the Station this week for a short stay.

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Water temperatures at the Biological Station pier about 7 a.m. for the weeks ending Aug. 30, 1921

Aug. 24 – 67.1  
 25 – 66.3  
 26 – 64.8  
 27 – 67.6  
 28 – 67.7  
 29 – 68.1  
 30 – 64.4

## BIOLOGICAL STATION NOTES

On last Sunday afternoon at four o'clock a welcoming reception was given to Sir Dr. and Mrs. Ritter in honor of their recent return from a six months stay at Washington D.C. Ladies of the colony served refreshments. Invited guests were Miss Scripps and Miss Gardner, Mr. and Mrs. J. C. Harper, Mr. and Mrs. Alfred Anderson and Prof. and Mrs. Stearns, the latter being from Pomona College.

Miss Tralle and Miss Seif of Los Angeles are here for a stay of two weeks.

On Saturday evening a beach party was given by Mrs. W. E. Allen in honor of Prof. Charles Zeleny of the University who with his family and his sister-in-law is spending a week here. After sundown the party spent a pleasant hour at the home of Dr. and Mrs. Ritter.

Prof. Reynolds of Jamaica High School, N.Y. with his family is here for a stay of a month.

Mrs. Marshall and two children together with her mother Mrs. Thompson and her brother Mr. Thompson arrived on Friday from Pasadena. They expect to stay a month.

Mr. and Mrs. Cummings motored to Elsinore on Sunday where Mr. Cummings is making some special studies of lake waters. Mr. Moberg accompanied them to Riverside where is to do some experimental work in the Citrus Station Laboratory in the two or three days that Mr. Cummings is at Elsinore.

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Water Temperatures at the Biological Station Pier for the week ending Sept. 6, 1921. About 7 a.m.

Aug. 31 – 69  
 Sept. 1 – 70  
       2 – 70.5  
       3 – 70  
       4 – 69  
       5 – 67  
       6 – 64

## BIOLOGICAL STATION NOTES

Mr. and Mrs. Spigney of Ontario visited the McEwens last week. Mrs. Spigney is Mrs. McEwen's sister. Their baby boy is remaining with Mrs. McEwen for a time in order to get the benefit of the sea shore climate.

Mr. Riley has continued his rental of one of the cottages for another month.

Dr. Halma has returned to his work in Riverside.

Miss Hazel Field left on Tuesday to take up her work in Newcomb College in New Orleans where she has charge of part of the work in biology.

Dr. and Mrs. Dickinson and infant child visited Mrs. Essenberg over the week end. Dr. Dickinson is connected with the chemical research work of the Carnegie Institution at Washington. They spent part of the summer in the high Sierra through which they tramped with the baby in a pack sack.

Dr. and Mrs. C. O. Esterly of Occidental College have spent a week at the Station. They returned to Los Angeles on Thursday so that Dr. Esterly can take up his college work.

Mr. and Mrs. G. G. Allen have returned to San Diego after several months at the Station. They will stay in Alexandria Apartments for a time before returning to their home in New York.

At the seminar last Friday Dr. Ritter gave a general explanation of the work of Science Service and the progress which the organization made while he was in Washington. Three lines of work are being followed at present. First distribution of scientific news articles and information through established news syndicates; second distribution through moving picture circuits by means of specially prepared moving pictures of scientific features; and third, distribution direct to an increasing list of newspaper subscribers by Science Service itself. Recent financial stringency in the publishing field has probably delayed progress somewhat but headway is being gained in spite of that.

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Water temperatures at Biological Station pier for week ending Sept. 13, 1921. Mostly taken about 7 a.m.

Sept. 7 – 66.2  
 8 – 66.6  
 9 – 67.3  
 10 – 66.8  
 11 – 66.2  
 12 – 63.6  
 13 – 62.6

## BIOLOGICAL STATION NOTES

Mr. A. D. Barnhart and his sister have returned to Los Angeles after a stay of some months at the Station.

Dr. Halma drove down from Riverside and spent the weekend at the Station and took his family back with him on his return Sunday evening.

Mr. Thompson, brother of Mrs. Marsh returned to Pasadena Sunday.

Mr. J. Z. Tucker and wife, of San Diego, spent the weekend at the Station.

Mrs. Crandall, her mother Mrs. Stuart and her small nephew Sayre Williams are spending this week at Hulburd's Grove.

Miss Tralle and Miss Seib have returned to Los Angeles after a stay of two weeks.

Dr. Stroube and family moved into one of the cottages for an indefinite stay on last Friday.

Captain Charles Martin of the U.S. Marine Corps who was formerly in charge of the rifle range has been assigned to an Asiatic station. He and Mrs. Martin were making farewell calls at the Station on Friday and Sunday.

President Barrows of the University of California is to attend the meeting of the State Teacher's College Presidents in San Diego at the end of this week and the meeting of County and City School Superintendents of California at Coronado next week. It is hoped that he will be able to find time to visit the station.

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Water temperatures at Biological Station pier at about 7 a.m. for week ending Sept. 20, 1921

Sept. 14 – 64.1  
 15 – 62.6  
 16 – 64.4  
 17 – 62.6  
 18 – 65.9  
 19 – 65.8  
 20 – 64.1

## BIOLOGICAL STATION NOTES

President David P. Barrows of the University of California who has been attending important educational meetings at San Diego made a short visit to the Station on Monday and inspected the equipment.

Some of the Station residents have been attending certain sessions of the meetings of Superintendents of County and City school systems at Coronado this week.

Mrs. Crandall and Mrs. Stuart returned from Hulburd's Grove on Sunday.

Dr. W. P. Taylor returned this week from a very Strenuous Summer's work in the Olympic Mountains of Washington where he is aiding in survey work of the U S. Biological Survey of which he is a member.

Prof. C. E. Bradley, emeritus professor of rhetoric in the University of California spent Friday and Saturday with the Ritters.

Mr. and Mrs. J. Z. Tucker of San Diego spent the weekend at the Station.

Miss Barnhart left on Monday for her home in Los Angeles.

Wesley W. Allen, electrician on the U. S. S. Camden submarine tender at San Pedro spent the weekend with his parents Mr. and Mrs. W. E. Allen.

E. J. Allen of Whittier spent Sunday with his brother W. E. Allen.

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Water temperatures at Biological Station Pier about 7 a.m. for week ending Sept. 27, 1921

Sept. 21 – 63.5  
 22 – 64.5  
 23 – 64  
 24 – 62.5  
 25 – 62.6  
 26 – 64.5  
 27 - 66

## BIOLOGICAL STATION NOTES

Dr. and Mrs. Ritter who have been on vacation for several days were at Julian on Monday.

Mrs. Brierly of La Mesa is visiting her nephew, Ralph Taylor.

Mr. Fleming, caretaker of Torrey Pines this past summer, has brought his family over from Lakeside for residence at the Station in order to be in better position for his work with the Pines which is to be continued this winter.

Mrs. Marsh and her mother left for their home in Pasadena Saturday where Mrs. Marsh resumes her work with the Wilson Observatory.

Mr. and Mrs. Gererd left on Monday for a week's visit in Los Angeles. They were accompanied by Mrs. McEwen and son and little nephew who are to visit Mrs. McEwen's sister in Ontario.

Prof. Reynolds and family moved to East San Diego last Friday.

Dr. and Mrs. Wright moved to 2400 B St. in San Diego last Friday.

Dr. G. F. McEwen went to Riverside on Sunday where he gave a lecture before the Synapsis Club on Monday in which he discussed the prediction of seasonal distribution of rainfall.

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Water Temperatures at Biological Station Pier at about 7 a.m. for week ending October 4, 1921

Sept. 28 – 66  
29 – 67  
30 – 63  
Oct. 1 – 63  
2 – 63  
3 – 61  
4 – 62

11-1-1921

### BIOLOGICAL STATION NOTES

Captain W. C. Crandall returned Sunday from his trip to Santa Barbara and other points along the coast where work is being done along scientific lines in co-operation with the Station. He found that some changes had been made in the persons doing the work but that it was going along satisfactorily. At the end of this week he is to make a trip to Berkeley on business with the Comptroller's office.

On Oct. 27 Mr. Harry F. Gerard attended the monthly meeting of the Southern California Section of the America Chemical Society. After a dinner the Section adjourned in a body to the Radium and Oncologic Institute to hear an address by Dr. Rex Duncan on the subject "Radium, its Therapy and Recent developments in its use".

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Water temperatures at the Biological Station pier for the week ending Nov. 1, 1921. Taken mostly about 7 a.m.

Oct. 26 – 61.5  
27 – 62  
28 – 61.7  
29 – 63.7  
30 – 63.7  
31 – 63.5  
Nov. 1 – 63.3

## Biological Station Notes.

Dr. and Mrs. Ritter who have been on vacation for several days were at Julian on Monday.

Mrs. Brierly of La Mesa is visiting for nephew, Ralph Taylor.

Mr. Fleming, caretaker of Torrey Pines this past summer, has brought his family over from Lakeside for residence at the Station in order to be in better position for his work with the Pines which is to be continued with winter.

Mrs. Marsh and her mother left for their home in Pasadena Saturday Mrs. Marsh resumes her work with the Wilson Observatory.

Mr. and Mrs. Gerard left on Monday for a week's visit in Los Angeles. They were accompanied by Mrs. McEwen and son and little nephew who are to visit Mrs. McEwen's sister in Ontario.

Prof. Reynolds and family moved to East San Diego last Friday.

Dr. and Mrs. Wright moved to 2400 B st in San Diego last Friday.

Dr. G. F. McEwen went to Riverside on Sunday where he gave a lecture before the Synapsis Club on Monday in which he discussed the prediction of seasonal distribution of rainfall.

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Water Temperatures at Biological Station Pier at about 7 a.m. for week ending October 4, 1921.

Sept. 28 – 66

29 – 67

30 – 63

Oct. 1 – 62

2 – 62

3 – 61

4 – 62

## Biological Station Notes.

Mr. Ralph Taylor and Mr. Eric Moberg left Tuesday on a vacation motor trip to San Francisco and vicinity. They expect to be gone about two weeks. They were accompanied by Mr. W. E. Allen who is making a business trip to that section in connection with the possible extension of the California Biological Feature Service and who is to deliver a lecture on "Questions concerning distribution of life in the open sea" before the California Academy of Sciences at San Francisco on October 16.

Mr. and Mrs. Girard returned last Saturday from their motor trip to Los Angeles. Mrs. McEwen and son Paul also returned with them.

Dr. W. P. Taylor left for Arizona on Tuesday where he has some work to do for the U.S. Biological Survey.

Dr. Wiegand, Professor of Botany in Cornell University, visited the Station last Saturday and spent some time in looking over the plant. He was accompanied by Dr. Upton of the Engineering Department of Cornell University who is a member of his party. Three automobiles were in the party when they left Ithaca last Spring but one has recently returned in order that some of the men might be ready for this year's work. Dr. Wiegand still has several months left on his vacation but he expects to turn homeward in a few days on account of some special work which he wishes to do. He reports a very interesting and instructive trip through the northern states and down the Pacific Coast to this point.

Dr. and Mrs. F. E. Clements of the Carnegie Institution at Washington and the Desert Laboratory at Tucson, Arizona visited the Station for short time on Saturday.

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Water Temperatures at Biological Station Pier for six days ending October 10, 1921, taken mostly about 7a.m.

Oct. 5 – 62.3  
6 – 63.9  
7 – 63.8  
8 – 64.  
9 – 63.6  
10 – 64.

Oct. 18 1921

Biological Station Notes.

Messrs. Moberg, Ralph Taylor and W. E. Allen arrived in San Francisco on Friday night and report having a good trip that far. They spent a few days in San Francisco where Professor Allen spoke at the California Academy of Sciences, leaving on Tuesday to visit Healdsburg and other points in the Russian River District, and expect to return by way of the San Joaquin Valley, arriving here Monday evening.

Over the week end, Mr. and Mrs. Boughton and friends occupied cottage no.3, Mr. and Mrs. E. Z. Tucker cottage no. 13, and Mr. and Mrs. Harry Bledzoe and Mrs. Bates no. 29.

Mr. Fleming of East San Diego and his family are now located in cottage no.8 for the winter. Mr. Fleming will continue his work as investigator and caretaker of the Torrey Pines during the winter.

Mrs. Mary Webster is visiting her father in Lakeside during the time Mr. Ralph Taylor is away.

Many visitors at the Institution note the absence of Father Michael in the museum and aquarium, and for their benefit we will state the he expects to be back and on the job on Sunday, and will again be pleased to see his many friends who visit the Institution.

Dr. Ritter was in Berkeley attending an Advisory Committee meeting on Saturday and returned to the Station on Tuesday noon.

Mrs. Graham and daughter Patricia are visiting with the Crandalls in no. 24.

Professor Sumner for many years has been bringing mice from the desert to the Scripps Institution and has endeavored to find out the effect that such a change of climatic conditions would have upon them. He is now attempting to invert the condition and give many of the local mice the opportunity of enjoying desert life, having installed a room in the mouse house in which the air is made very dry and where the temperature is kept considerably above that of the prevailing temperature.

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Water Temperatures at the Biological Station Pier for the week ending Oct. 18, 1921

Oct. 12 – 63.5

13 – 63.9

14 – 65.6

15 – 65.7

17 – 65.0

18 – 64.2

## Biological Station Notes

Messrs, R. D. Taylor, Eric Moberg and W. E. Allen returned Sunday from a two weeks trip to the San Francisco section of the state. They report a very enjoyable time. The weather was fine throughout and everything most favorable in every way. The going trip was through most of the beach resorts and Topanga Canyon and the Coast Route to San Francisco. A short visit was made to the Hopkins Marine Laboratory at Pacific Grove and to the Big Trees near Santa Cruz. After a three days stop at San Francisco the return trip was made by way of Sacramento and the San Joaquin Valley. After the heat and flatness of the valley the Ridge Road was especially enjoyed. Mr. Taylor and Mr. Moberg were on a vacation and Mr. Allen was on Station Business. He gave a talk on distribution of life in the sea before the California Academy of Sciences on the afternoon of October 16.

Mr. Harris and Party from Plymouth, Massachusetts are spending the week at the Station. They are touring in two large automobiles.

Mr. C. H. Michael has returned from a visit to his daughter-in-law Mrs. Ellis Michael and her children at Taft. He also stopped for a little in Los Angeles. Aside from a very enjoyable visit with his grand-children he is very much impressed with strike conditions in the oil fields. He especially noticed the fine appearance of the men in the oil fields and the orderly way in which the bitter conflict is carried on.

Captain Crandall made a business trip to Santa Barbara this week, leaving at Wednesday noon. Mr. Adamson of Los Angeles visited his sister Dr. Essenberg last Sunday.

Mr. Brownscombe of Santa Rosa visited his mother Mrs. Fairchild and his sister Mrs. Taylor last week.

Dr. W. P. Taylor is spending this week in and near Tucson, Arizona in connection with his work of the U. S. Biological Survey.

Water temperatures at the Biological Station pier about 7:30 a.m. for the week ending October 25, 1921.

10-19-1921	63.5
20	64.7
21	59.4
22	63.8
23	63.9
24	62.3
25	61.8

11-8-1921

Biological Station Notes.

Mr. Morrison of San Diego and a family party spent the week end at the Station.

Dr. W. E. Ritter went to Riverside Sunday where he delivered an address before the Synapsis Club on Monday evening. This address deals with general aspects of the problems of the Pacific and with the proper place of scientific work in their solution.

Mrs. Ritter spend Sunday and Monday in San Diego.

Dr. Harold C. Bryant, lecturer for the California Fish and Game commission, together with his family spend the week end at the Station. On Sunday Dr. Bryant delivered a very interesting and important lecture on wild animal life in the auditorium of the Natural History Museum at Balboa Park. Four moving picture films of wild animals were shown. Some of them in natural colors. In this Dr. Bryant is probably the most important single individual engaged in the process of teaching us the necessity and desirability of guarding and intelligently using our natural resources.

Dr. H. E. Walter and family of Providence, R. I. have arrived at the Station for a stay of some time. Dr. Walter is a Professor in Brown University and a leading student of problems of heredity.

Captain M. C. Crandall has been delayed in starting on his business trip to Berkeley by pressing business here, in spite of which he was expecting to get away some time this week.

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Water temperatures at Biological Station pie about 7 a.m. for week ending Nov. 8, 1921.

Nov. 2	62
3	62
4	63
5	63.3
6	64
7	64
8	64

## Biological Station Notes.

Count Alfred Korzybski, a Polish engineer whose recent book on "Manhood of Humanity" has attracted a good deal of attention, is spending time at the Station.

Mr. and Mrs. N. W. Cummings returned on Sunday from a short visit to kinsfolk in Los Angeles made the latter part of last week.

Mr. and Mrs. Spigney arrived at the Station last Saturday. They spent the week end with Mrs. Spigney's sister, Mrs. McEwen. Mrs. Spigney expects to stay at the Station for some time.

Mr. Harris and Party from the East have left the Station in order to continue their motor tour.

Captain M. C. Crandall is now in Berkeley where he expects to remain until about Dec. 1.

Dr. Stroube and family have removed to Camp Kearney. The Doctor found it too difficult to make the round trip every day and attend to his hospital duties.

Mr. Gillingham and party from Florida is spending a month at the Station.

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Water Temperatures at the Biological Station pier for the week ending Nov. 15, 1921. Mostly taken about 7 a.m.

Nov. 9	63.8
10	63.7
11	63.2
12	62.3
13	62
14	62
15	62

11-29-1921

Biological Station Notes.

Mrs. P.S. Barnhart and the children are moving to the Barnhart ranch at Chula Vista where it is hoped that the children will find more favorable climatic conditions. Mrs. Barnhart's mother, Mrs. King, accompanies them. Mr. Barnhart will continue his work at the Station for which purpose he will remain during the week and spend the week ends with his family.

Several families at the Station combined energies and supplies for a Thanksgiving dinner at which they disposed of two turkeys with appropriate accompaniments. The combination dinner was a great success.

Dr. H. E. Walter and Mrs. Walter are both very much interested in our local fauna and flora, more especially in our birds in order to facilitate acquaintance and observation with the various forms in this region they have secured an automobile. Although they insist that they are on vacation and taking a rest it is quite evident that they do not intend to remain idle.

Dr. F. B. Sumner and Mr. W. E. Allen were in Los Angeles last Friday and Saturday as representatives of the Scripps Institution at the meetings of the San Jacinto section of the Western Society of Naturalists. Dr. Sumner is President of the section for this year and his time was mainly occupied in performance of the duties of his office. Mr. Allen gave an address before the meeting on Friday entitled "Distribution of Life in the Sea". Some forty or fifty people were in attendance at the meetings which were pronounced unusually satisfactory by those present. On Saturday the members visited the Southwest Museum and the Museum at Exposition Park as guests of the Museums. Time was too short to get much more than a faint idea of the magnificence of the exhibits at the two institutions. A very enjoyable luncheon was served by the Southwest Museum officials.

Dr. Nelson, Chief of the Division of the United States biological Survey visited the Station on Tuesday, and spent some time in consultation with Dr. Taylor.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending Nov. 29, 1921.

Nov. 23 – 58.2  
24 – 59  
25 – 59  
26 – 58.5  
27 – 59  
28 – 59  
29 – 58.2

## BIOLOGICAL STATION NOTES

Mr. P. S. Barnhart has been busy at Chula Vista over the week end and up to Wednesday of this week in getting his family settled in their new home at that place. He resumed the routine work at the Station on Wednesday.

Count Korzybski spoke at the Engineer's Club in San Diego on Wednesday night. He is to speak at the Community House in San Diego on Saturday night Dec. 10 on Human Engineering. He has been spending some days of this week in Los Angeles.

Dr. B. W. Evermann of the California Academy of Sciences, Mr. N. B. Scofield of the State Fish and Game Commission at San Francisco, Dr. W. E. Thompson of the State Fish and Game Commission stationed at San Pedro, Mr. Bryan of the San Diego Museum and Captain Crandall of the Biological Station will hold a conference at the San Diego Museum on Saturday Dec. 10 with Mr. Crandall as Chairman. This conference is under the direction of the Research Committee of the American Association for the Advancement of Science and it is being held for the purpose of discussing a possible program of work for investigating the problems of the Pacific. Dr. Ritter, Dr. Sumner and Mr. Allen of the Biological Station have been requested to attend the conference for consultation.

Members of the Station Scientific Staff who heard Mr. H. H. Cleaves of San Diego Museum give his illustrated lecture on Adventure with Birds at the scientific meetings in Los Angeles are interested in knowing that he has been secured to give this very entertaining lecture before the La Jolla Woman's Club on next Monday.

Moving pictures are now being made covering the life history of the Pacific lobster. Some have been taken in the Station aquarium and others at the Coronado Islands. Mr. Averett of An Diego is doing the work.

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Nov. 30 – 58  
1 – 58  
2 – 58  
3 – 57  
4 – 57  
5 – 56.8  
6 - 56

## BIOLOGICAL STATION NOTES

Plans are under way for a Christmas entertainment by residents at the Station. Special effort is being made on account of the fact that this is the first time for several seasons that Dr. and Mrs. Ritter have been able to spend Christmas at the Station and because the unsettled condition of their plans makes it possible that they may not spend another here for a long time.

The committee on conservation of the San Diego Natural History Society met at the Station on Tuesday of last week. The members present were H. H. Cleaves, A.W. Anthony, Webb Thoms and C. C. Abbott of San Diego and W. P. Taylor and F. B. Sumner of the Station. The principle matters of business consisted of the drafting of recommendations to the proper authorities in regard to regulation of hunting on False Bay, the development of a canyon near San Diego into a Natural Park for preservation of plants in natural surroundings, and a change of the deer open season so as to prevent extermination of deer in this county.

On Sunday Dr. B. W. Evermann of the California Academy of Sciences in Golden Gate Park visited the Station. After looking over the plant he and Dr. Anthony of San Diego took dinner with Dr. Sumner after which they returned to San Diego in time for the lecture at the Natural History Museum which was given by Dr. Evermann. Dr. Evermann is one of the most widely known American scientists. He was at one time in charge of the U.S. Bureau of Fisheries but has been for some years Director of the Museum of the California Academy of Sciences. He was recently appointed director of the Steinhart Aquarium which is soon to be constructed near the Academy of Sciences.

Dr. G. F. McEwen left on Wednesday for Berkeley where he is to act as chairman of the committee on examination of Mr. Cummings for the doctors degree.

Mrs. N. W. Cummings left on Wednesday for a visit to her parents in Ogden while Mr. Cummings is busy with his examination. He also left on Wednesday and will join her in Ogden after concluding his business in Berkeley.

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Water temperatures at the Biological Station pier at about 7 a.m. for the week ending December 13, 1921

Dec. 7 – 56.3  
 8 – 56.3  
 9 – 56.5  
 10 – 57.5  
 11 – 57.8  
 12 – 57.5  
 13 – 57.5

## BIOLOGICAL STATION NOTES

Mr. Marcus Hanna and another young man representing the Department of Palaeontology of the University of California at Berkeley arrived at the Station on Dec. 18 for a stay of several days during which they expect to investigate Eocene rocks near the Station, near Torrey Pines and near Oceanside. They are also giving attention to Pleistocene formations of False Bay near Pacific Beach.

Miss McClellan who has been staying with Dr. Taylor's family during their extended illnesses has returned to her home in Bostonia and her place is being taken by Miss McCaughran who formerly lived at Ontario.

Wesley Allen has been given one week leave from U.S.S. Camden at San Pedro beginning Dec. 21 in order that he may spend Christmas with his parents at the Station. He is accompanied by his friend Daniel Buckley of the same ship.

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Water temperatures at the Biological Station pier about 7 a.m. for the week ending Dec. 20, 1921

Dec. 14 – 58.5  
15 – 58.2  
16 – 58.2  
17 – 58.2  
18 – 58  
19 – 58.2  
20 – 68

## Biological Station Notes.

Mr. Marcus Hanna and Mr. Vorb of the Department of Palaeontology at Berkeley who have been spending the Christmas vacation investigating various geological conditions in this vicinity returned to Berkeley on January 4. They were able to get a good deal of satisfactory work done in spite of the inclement weather.

Dr. Reese of the Department of Zoology at Berkeley returned at the end of last week after about ten days spent in collecting zoological material in this section.

The heavy storm the week before Christmas rendered the private road through the upper portion of the Station grounds impassable by washing out a fill across the ravine in front of Captain Crandall's house. The larger fill between that and Dr. Ritter's house was almost carried away by the similar deluge in the early morning of January 2. It is impassable to vehicles. The highway over the hill is badly weakened in some places. Communication with La Jolla has been difficult on account of the bad road.

The transformer pole in the pier was fired by short circuit in the heavy rain Monday morning and the transformer and other equipment fell off after about an hour of burning. Fortunately it was discovered in time to have the heavy current cut off before the fall occurred thus avoiding danger of fire and injury from the live wires. A crew of eight men was at work on repairs before noon on Monday.

A daughter was born to Mrs. Spigney, Dr. McEwen's sister, who is spending some weeks at Dr. McEwen's, on Monday morning January 2.

Mr. C. H. Michael returned at the end of last week from a visit to his daughter-in-law and grand children in Taft. He was delayed three days in Los Angeles on account of floods.

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Water temperatures at biological Station Pier about 8 a.m. for the week ending Jan. 3, 1921.

12-28	57.7
29	57.7
30	58
31	58
1-1	58.2
2	57.7
3	56.7

## Biological Station Notes.

Mrs. Korzybski arrived from New York on Monday evening.

Last Sunday Dr. Ritter delivered a lecture on the Future of the Navajos before the San Diego Natural History Society. He repeated it on Monday before the La Jolla Woman's Club.

Friday noon of last week Dr. H. E. Walter spoke before the San Diego University club on Biological Cinderellas in which he explained certain difficult technical phases of heredity so clearly that ordinary individuals might grasp the general idea of their meaning.

Dr. C. Essenberg returned from Los Angeles last week after being delayed by the storms.

Mrs. Stuart with her grand son Sayre Williams left for Breckenridge, Texas last Sunday for a visit with her daughter Mrs. Williams.

James Allen surprised his parents and friends last week by appearing at the Station when the last that had been heard of him was from Hampton Roads. He came around on the army transport Chaumont which stopped in San Diego two days, His stay was very short. He is on his way to Mare Island for further transfer to some Pacific service.

Mr. and Mrs. N. W. Cummings returned last week. They reported delightful weather in Ogden which they disliked to leave while we are having such weather exhibits as those of the last three weeks.

Dr. Johnston the eminent Neurologist of the University of Minnesota arrived last week and is planning to do some research on local fishes particularly sharks and rays. He is accompanied by Mrs. Johnston.

Water Temperatures at Biological Station pier about 7a.m. for week ending Jan. 10, 1921.

Jan. 4	56
5	57.3
6	56.3
7	57
8	57
9	56
10	56.2

## Biological Station Notes.

Mr. P. S. Barnhart went to Pasadena Saturday to deliver an automobile belonging to the father of Dr. Taylor which he had been obliged to leave here when cut off by the floods. After delivering the machine Mr. Barnhart spent the week end with his brother who lived at the Station several months last year.

Mr. Taylor of Lakeside visited his son Ralph over the week end.

Dr. and Mrs. Ritter spent the week end with the Templeton Johnsons in San Diego.

Dr. and Mrs. Walter have been surprised by a visit from Mrs. Walter's sister and niece who are spending several weeks in and about San Diego.

James Allen is spending a two weeks leave with his parents. He has not yet assigned to regular duty since coming to this Coast a few days ago.

Mr. and Mrs. Benjamin, Mr. and Mrs. Gaye and Mr. and Mrs. Wells of Hollywood spent the week end at the Station. Mr. and Mrs. Wells may stay for some time. Mr. Wells spent some time here in the summer of 1920 in the production of moving picture giving the story of the Bible, which he reported to be quite successful.

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Water Temperatures at Biological Station pier about 7a.m. for week ending Jan. 17, 1921.

Jan. 11	56.5
12	56.3
13	56.3
14	56.6
15	56.7
16	56.5
17	56.3

## Biological Station Notes.

Mr. Wells and his party returned to Los Angeles about the middle of last week.

Mr. W. C. Crandall and Mr. N. W. Cummings went to Elsinore Monday in order that Mr. Cummings might make the series of observations which has been carrying on periodically for a year or more. The rains about the first of the month have undoubtedly caused some interesting differences in salinities and other characteristics of the water in Lake Elsinore which Mr. Cummings is studying.

Kenneth Shain visited his parents Monday.

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Water Temperatures at Biological Station pier about 7a.m. for week ending Jan. 24, 1921.

1-18	56.5
19	55
20	53.7
21	53.7
22	54
23	54.2
24	54

## Biological Station Notes.

Mr. Huestis is enjoying an extensive visit by his mother whose home is in Canada.

Dr. Bertil Handstrom who has come here direct from Sweden to make some studies on the nervous system of scorpions and various crustaceans will spend about ten weeks on his researches at this place. He expects to work at various other points on the coast in the course of the next few months.

Mr. Gerard attended the meeting of the Chemical Society at Los Angeles last week. He was accompanied by Mrs. Gerard.

Mr. A. O. Warner a prominent jeweler of Fresno visited his aunt Mrs. Ritter this week. He was accompanied by Mrs. Warner.

Mrs. Walter's sister and niece have taken a cottage in La Jolla for a time so as to be near Dr. and Mrs. Walter.

James Allen returned Wednesday to Goat Island where he is stationed while waiting for permanent assignment to the Pacific Fleet.

Friends of the mother of Mrs. F. B. Sumner, Mrs. Clark, who lives at present in New York city gave her a post card shower recently in honor of her 82d birthday.

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Water Temperatures at Biological Station pier about 7a.m. for week ending Jan. 31, 1921.

Jan. 25	54.3
26	54.8
27	55
28	54.3
29	54
30	53.3
31	53

## Biological Station Notes.

Mr. Taylor of Lakeside visited his son Ralph Last Sunday.

A new was added to the Fleming Family on Monday, a Baby girl weighing seven pounds. Mother and daughter are in San Diego.

Little Alice Warner who with her parents, Mr. and Mrs. A. O. Warner of Fresno, is visiting at the Ritters got too near the flame in the fire place the other morning and her clothing was caught on fire. Fortunately Dr. W. E. Ritter was close at hand he succeeded in extinguishing the flames without injury to the little one. His hands were burned but not very seriously although two or three fingers will be in bad order for a while.

Three La Jolla residents came over to hear Professor Johnston's talk on education at the Monday Evening Club last Monday. They as well as the Station residents took a great deal of interest in Dr. Johnston's discussion. La Jolla residents are always welcome to attend these meetings but since they must sometimes be postponed on short notice it makes attendance just a little uncertain.

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Water temperature at Biological Station pier for week ending Feb. 7, 1922. Taken about 7 a.m.

Feb. 1	53.8
2	53.5
3	53.6
4	54
5	54.2
6	54.3
7	54.6

2-14-22

BIOLOGICAL STATION NOTES

Mrs. Fleming is getting along very nicely. She visited at Joseph's hospital in San Diego.

Mr. and Mrs. A. O. Warner and little daughter of Fresno left for home on Sunday morning after a two weeks stay at the Ritters for a visit with Mr. Warner's aunt, Dr. Mary B. Ritter.

Residents at the Station had a very enjoyable party at the Commons last Saturday evening. Games, songs, eats and conversation made the time pass quickly.

On Monday evening a number of Station residents attended the Philharmonic concert in San Diego

Professor C. M. Child of the Department of Zoology of the University of Chicago is expected to arrive soon to start a series of research experiments on planarian worms.

In honor of Mrs. J. B. Johnston of Minneapolis and Mrs. H. E. Walter of Providence, R. I. who with their husbands are winter visitors at the Station, Mrs. W. C. Crandall entertained sixteen La Jolla friends at tea on Wednesday afternoon at the Caves Inn.

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Water temperatures at Biological Station pier about 7 a.m. for week ending Feb. 14, 1922

2-8 54.7  
9 55  
10 55  
11 55  
12 55.3  
13 55  
14 55.2

## Biological Station Notes

Mr. Jack Ross who has visited his mother and brother at the Station left for Mexico on last Tuesday where he is to take up his duties as master of the boat Silver Gate which makes regular runs from Guaymas to Mazatlan, La Paz and other Mexican ports.

Mrs. P. S. Barnhart, who is residing with the rest of the family on their ranch at Chula Vista while Mr. Barnhart attends to his work as curator of the museum, was severely burned on the left hand and arm while carrying a can of flaming grease out of their house last week.

Mr. Whitfield, a naval reserve officer, with his wife and two children are now resident at the Station.

Mrs. Fleming has returned home from the hospital bringing her infant daughter.

Mrs. Essenberg and Mr. Moberg accompanied the Girards to Los Angeles where the men attended a meeting of the Chemical Society and Mrs. Essenberg addressed a meeting of one of the Lettish societies.

Last Tuesday Mr. P. M. Hannay met the last of his naturalization requirements and was admitted into citizenship of the United States.

Last week Mr. C. H. Michael was pleasantly surprised by a visit from his brother who is a banker in La Porte, Indiana.

Dr. and Mrs. Johnston and Mr. and Mrs. W. C. Crandall made an auto tour of Southern California in the latter part of last week. They report a vast amount of damage from the frosts of this winter, especially to lemon and orange groves.

The station has not escaped the "flu" apparently as three or four families have been more or less affected.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending Feb. 28, 1922.

2-22	55.5
23	55.5
24	55.5
25	55.5
26	56
27	56
28	55.5

## Biological Station Notes

The "flu" is still going the rounds amongst the Station residents. NO one has been very dangerously sick as yet.

Dr. and Mrs. Johnston have returned from a trip to Imperial Valley where they visited the Salton Sea basin and the mud geysers.

Mr. and Mrs. Browning of Ogden, Utah, the parents of Mrs. N. W. Cummings, have arrived for a visit with Mr. and Mrs. Cummings.

The two canyon fills which were washed out by the January floods which made the Station road impassable are being replaced this week. Larger drains are being installed in readiness for the next record breaking flood. Ralph Taylor's father who is expert on road building and repair is directing the work.

Mrs. Essenberg has accompanied Dr. and Mrs. Dickinson of Pasadena on a trip to Imperial valley this week.

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Water temperatures at the Biological Station pier for the week ending March 7, 1921. Mostly taken about 7 a.m.

March 1	54.7
2	54.8
3	54.6
4	54.4
5	54.7
6	54.7
7	54.8

## BIOLOGICAL STATION NOTES

Dr. and Mrs. Johnston left on Sunday for San Luis Obispo where Mrs. Johnston is to make a prolonged visit with her sister. Dr. Johnston will continue on his homeward trip after a few days in order to resume his work as dean of the College of Arts and Sciences at the University of Minnesota.

Rev. Earle and daughter have come to the Station for an indefinite stay. Rev. Earle has been until recently a chaplain of the United States Army. He is now on the retired list.

A large number of La Jolla residents attended the symposium on religion at the Monday Evening Club in the Station library last Monday evening.

Dr. W. E. Ritter is to leave for Berkeley on the 20<sup>th</sup>. After a short stay there on business he will start on a two months trip through the East. Most of his time will be spent in Washington in connection with the work of Science Service. Dr. Mary B. Ritter will spend the time of his absence in San Diego where she will be in closer touch with various public service organizations with which she is working.

Dr. C. M. Child and wife, of the University of Chicago, are due here about April 1. They will occupy the Ritter residence through the Month of April.

Dr. Essenberg returned on Sunday from her trip to Imperial Valley and reported a very enjoyable and profitable time. She is especially enthusiastic about the desert flowers.

Water temperatures at the Biological Station pier at about 7 a.m. for week ending March 14,  
1922

3-8	54.7
9	54.7
10	54.5
11	54.8
12	54.8
13	54.6
14	55

## Biological Station Notes

Dr. Hanstrom accompanied Captain Crandall on his periodic trip to Oceanside, San Pedro, Oxnard, Santa Barbara and other points along the coast where work is being done in which the Station is especially interested. Dr. Hanstrom is taking advantage of every opportunity for collecting certain types of spiders and crustaceans for use in his neurological studies. The latter half of this week he is camping with Captain Crandall on Coronado Islands where he is collecting while the Captain makes some general observations on seals and other fauna.

On Tuesday Dr. Taylor, Dr. Sumner, Captain Crandall and Mr. Allen attended a meeting in Balboa Park of the Committee of Conservation of Marine Life of the Pacific appointed by the American Association for the Advancement of Science. Dr. Evermann, chairman of the committee made a special trip from San Francisco to hold this meeting for the benefit of Southern California members of the Committee who are unable to attend the more frequent meetings held in the north. The Committee is now giving especial attention to conservation of seals and other marine mammals.

Dr. W. E. Ritter went to Berkeley on March 20 on University business and he has now gone on east, expecting to get to Washington soon after a few stops on the way.

Dr. Mary B. Ritter has gone to the Hotel Sanford for residence through the month of April, during her husband's absence.

Wesley Allen paid two short visits to his parents last week while the Camden was in port at San Diego.

James Allen came down from San Pedro to spend the week end with his parents.

Mr. Sumner is visiting his brother, Dr. F. B. Sumner, and giving some attention to the possibility of locating in Southern California.

Dr. and Mrs. H. E. Walter left on Monday on a leisurely motor trip to San Francisco where they have passage engaged to Honolulu. They expect to later continue the motor trip through Oregon and Washington.

Water temperatures at Biological Station pier at about 7 a.m. for week ending March 28, 1922.

March 22	54.5
23	54.5
24	57
25	57
26	57.5
27	57.5
28	57

## BIOLOGICAL STATION NOTES

Dr. C. M. Child, professor of Zoology in the University of Chicago and one of the most prominent leaders in experimental zoology in the United States, arrived at the Station Tuesday for a stay of some months. Through the month of April he and his wife will occupy Dr. Ritter's residence.

Mr. Marcus Hanna who spent the Christmas holidays investigating fossils of this region has arranged to return this summer in order to continue his investigations.

Dr. G. Dallas Hanna of the California Academy of Sciences who was for seven years resident naturalist for the U.S. Government on the Pribiloff Islands engaged in investigation of the fur seals visited the Station on Tuesday.

Mr. and Mrs. Browning, parents of Mrs. Cummings, left for their home in Ogden last Sunday. On account of a report of serious illness of their daughter Elizabeth who has been in school in the East this year they were expecting to continue their journey to Washington.

Dr. Hanstrom and Captain Crandall report a very successful collecting and investigating trip to the Coronado Islands the latter part of last week. Captain Crandall has been a good deal interested in the fact that many people in this region seem to be unaware that Coronado is not located on the Coronado islands. The Islands can often be easily seen a short distance off Point Loma when one passes along the highway to San Diego. Small boats make regularly scheduled sightseeing trips to the Islands from San Diego.

Dr. F. B. Sumner attended a conference of scientific men in Los Angeles last week to discuss the place of meeting for the Western Division of the American Association for the Advancement of Science this year. Dr. Sumner is president of the Western Society of Naturalists which is one of the affiliated societies interested in this meeting

Water temperatures at the Biological Station pier about 7 a.m. for week ending April 4, 1922

March 29	57.5
30	57.5
31	57.5
April 1	59
2	57.7
3	59
4	59.1

## BIOLOGICAL STATION NOTES

As a member of the committee on buildings and grounds of the San Diego Board of Education Captain Crandall assisted Monday in laying out the foundations for the new La Jolla High School. The building will consist of five rooms at first.

On last Saturday night thirteen members of the colony had a beach party including a wienie roast and smelt scramble. When they turned in about 2 a.m. they had quite a large catch of smelt.

Mr. Huestis' mother left for her home in Vancouver on last Saturday.

Dr. Handstrom went to Pacific Grove in the early part of last week. He expects to stay there about two months, before returning to his home in Sweden. He hopes to return here some time. He was very successful in his work here having obtained much more material than he hoped for in much less time than he expected.

Dr. Child and family and Mr. and Mrs. Crandall took a trip to Imperial Valley last week giving especial attention to the country between Beaumont and Mountain Springs where Dr. Child took many colored photographs.

Miss. Fannie Whitman who spent some time here a few years ago is a house guest of Mrs. Crandall this week.

Dr. Essenberg gave a scientific address before a Lettish society in Los Angeles last Sunday.

Dr. McEwen returned Sunday from a trip to Pasadena, Los Angeles and vicinity where he visited the California Institute of Technology, occidental College and other institutions.

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Water temperatures at Biological Station pier about 7 a.m. for week ending April 18, 1922.

April	12	-	55.8
	13	-	55.9
	14	-	56.
	15	-	56.
	16	-	53.
	17	-	53.
	18	-	53.7

4-20-22

For La Jolla Light.

Notes from the Biological Station.

On Monday Captain Crandall, as a member of the committee on buildings and grounds of the San Diego board of Education, helped lay out the building site for the new High School which is to be ready for use at the opening of the next school year. Present plans provide for five rooms with provision for more as needed.

Some of the residents of the colony held an informal beach party and wienie roast on last Saturday night. The special program of entertainment was smelt catching which continued to about 1 o'clock. There were two or three hundred fish caught by the party of thirteen.

Mrs. Huestis of Vancouver B.C. who has been visiting her son Ralph for some time returned home on last Saturday.

Dr. Hanstrom closed up his work here the early part of last week and went to Pacific Grove for similar work there during the next two months. While here he gave a good deal of attention to the nervous system in trap door spiders and scorpions but he also studied various other forms more or less allied to these. He was exceedingly well pleased with his results, remarking especially upon the fact that he had accomplished about twice as much as he had hoped to do in the limited time at his disposal. In addition to his own work he also did some collecting for the museums in Stockholm. From Pacific Grove he will return to Sweden. He hopes to come again some time and bring his family.

Mr. and Mrs. Crandall took the Child family for a rapid survey of the flora of the Imperial Valley last week. They gave most attention to conditions between Beaumont and Mountain Springs where Dr. Child took many colored photographs.

Mrs. Crandall is entertaining as a house guest Miss. Fannie Whitman who spent some time at the Station a few years ago.

Dr. C. Essenberg made a special trip to Los Angeles last Sunday to deliver a scientific address before the Lettish Societies.

Dr. G. F. McEwen spent last week visiting the California Institute of Technology, Occidental College and some other institutions in and near Los Angeles. He returned home on Sunday.

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Water temperatures at Biological Station pier at about 7 a.m. for week ending April 20, 1922.

April 14 – 56.  
15 – 56.  
16 – 53.  
17 – 53.  
18 – 53.7  
19 – 55.5  
20 – 55.5

## Biological Station Notes.

W. E. Allen returned on Monday from a business trip to Berkeley. On the return trip he spent a few days visiting friends in Fresno and attending the various Raisin Day celebrations.

Mr. Barnhart, Mr. Ross and Ralph Taylor have all been more or less laid up by sickness this past week. Captain Crandall has had to hustle to keep things going with so many out.

Mr. Gerard spent several days in Los Angeles last week.

Dr. Child together with Professor Bliss of the Riverside Junior High School made a camping trip through the Coachella Valley and the Painted Canyon district last week.

Various residents of the Station attended the meetings of the Welfare League last week. Paul Popinoe, formerly editor of the Journal of Heredity and now a grower of dates in the Coachella Valley, attended a lunch given in his honor by Dr. F. R. Sumner.

Prof. Abrams, Research Professor for the Portland Cement companies of the United States visited the Institution on Friday and together with Dr. W. H. Fillmore representing the Portland Cement Association of Los Angeles assisted Captain Crandall in making a survey of the condition of the Station pier.

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## Biological Station.

There has been a good deal of sickness at the Station the past week or two. Mr. P. S. Barnhart, Mr. J. Ross, and Mr. Ralph Taylor have been laid up part of the time and Captain Crandall has had to look after their work in addition to his own.

Mr. Gerard visited Los Angeles last week to meet other chemists and to close up a deal of commercial use of some of the results of his own investigations.

Dr. F. E. Clements of the Carnegie Institution who is giving especial attention this spring to the flora of Soledad conducted a round table discussion of biological science at the seminar last week.

Several residents of the Station attended the meetings of the Welfare League in San Diego last week. Dr. Sumner gave a luncheon in honor of Paul Popinoe, formerly editor of the Journal of heredity.

For some time the Station management has been concerned by signs of deterioration of the pier and various efforts have been made to determine its actual condition and to find ways to repair it. With a view to getting still more information along that line professor Abrams, Research Professor of the Portland Cement Companies of the United States visited the Station on Friday accompanied by Mr. W. H. Fillmore representing the Portland Cement Association of Los Angeles and they assisted Captain Crandall in making a survey of the pier.

On Wednesday the Station members of the Committee on Conservation of Marine Resources of the American Association for the Advancement of Science attended a local meeting of the Southern section of that committee which was held at the Natural History Museum in Balboa Park. Those attending from the Station were Dr. W. P. Taylor, Dr. F. B. Sumner, Captain W. C. Crandall and W. E. Allen.

On Monday of this week. W. E. Allen returned from a business trip to the University offices at Berkeley. On the return trip he stopped at Fresno for the Raisin Day Celebration which was probably the best yet held there. The weather was delightful and the parade had every opportunity for a good showing. A man from the east said it was the best he had ever seen. The Automobile races were also excellent. Mr. Allen was especially interested in Fresno at this time because his former doubles partner in the Stockton tennis team, Dr. Dewey Powell played through the three days tennis tournament and won the San Joaquin Valley championship for the third time.

Water Temperatures at Biological Station pier at about 7 a.m. for week ending May 3, 1922.

Apr. 27 – 58.5  
 28 – 57.6  
 29 – 58.8  
 30 – 59.4  
 May 1 – 59.4  
 2 – 59.6  
 3 – 59.6

## Biological Station Notes.

Jack Ross visited his mother and brother at the Station this week while his boat was loading for points in Lower California and Mexico.

Mrs. R. C. Batchelder and sons, former summer tenants at the Station, visited friends here last Sunday.

Mr. Fleming has spent much time in the last ten days on the deserts and in the mountains gathering various kinds of flowers and plants for the San Diego Flower show.

D. F. O'Connor with his wife and mother has come to the Station for a stay of two months.

Dr. Mary B. Ritter visited in Los Angeles last week and attended the Convention of the Federated Women's Clubs.

Dr. Child lectured before the University club of San Diego on Friday last week on Processes of Aging.

Mr. and Mrs. Crandall, Mr. and Mrs. Cummings and Mr. and Mrs. Allen attended the performance of the Knight of the Burning Pestle last Saturday night. This Elizabethan burlesque was presented under the direction of the University of California Extension Bureau.

On Tuesday of this week Mr. Crandall addressed the Engineering Club of San Diego on the Biological Station Concrete Pier.

Miss Earle went to Los Angeles the latter part of last week to be with her father who is fast recovering from a serious operation performed at St. Vincent's Hospital. They hope to return soon and again take up residence at the Station.

A number of ladies from the Station attended the May Day Festival of Bishops School as guests of Miss Florence Sumner who was one of the participants.

Water Temperatures at Biological Station Pier at about 7 a.m. for week ending May 9, 1922.

May 3 – 59.5  
 4 – 59.5  
 5 – 61.5  
 6 – 60.7  
 7 – 60.  
 8 – 60.6  
 9 – 60.

## Biological Station Notes.

Dr. C. M. Child spent Sunday and Monday with Professor Bliss of Riverside doing work in color photography in the Mojave desert.

Mrs. N. W. Cummings entertained some of the ladies of the colony at tea at the Green Dragon last Friday afternoon.

Chaplain Earle, accompanied by his two daughters, returned from Los Angeles much sooner than it was supposed that he would be able to do. They arrived on Wednesday of last week and he seems to be recovering very rapidly from his operation.

On last Saturday afternoon Captain. W. C. Crandall spoke before the Natural History Society in San Diego.

Dr. Mary B. Ritter who has been spending some weeks in San Diego and Los Angeles returned to her home at the Station on Wednesday of this week.

Dr. W. E. Ritter has left Washington and is on his way to Berkeley for conference with President Barrows about Station affairs. He will probably reach La Jolla by the end of this week.

Mr. Mark Hanna and an assistant from the Department of Paleontology at Berkeley arrived at the Station last week and they are busily engaged in studying the geological formations of this region with particular attention to fossil bearing rocks. Mr. Hanna spent about two week at the first of the year in making preliminary observations in preparation for this work.

Mr. N. W. Cummings and Mr. E. S. Moberg made a trip to Elsinore and Lake Hodges last Friday and Saturday for further study of water samples in these localities. They were accompanied by Mrs. Cummings.

Ralph Taylor's father came over from Lakeside for a week end visit last Saturday.

The Kaiyo was brought out from San Diego Wednesday and tied up to her mooring off Spindrift ready to begin daily work on plankton and hydrographic conditions such as that of last year at stations five and ten miles off shore from the Station pier. It is hoped that this work can be carried over a longer time and in somewhat greater detail than that of last year.

On Tuesday Mr. Allen went to Santa Ana where he had been asked to speak at the High School and at a regular meeting of the Present Day Club.

Biological Station.

Boat work is being started by the Station this week. On Wednesday the Kaiyo, the boat used last year, was brought from San Diego to her mooring of Spindrift and her first collecting trip was made on Thursday. The same stations, five and ten miles out from the pier, are being visited as last year. Plankton collections are being made with the Kofoid bucket at forty meters in addition to the depths of twenty meters and surface as last year. It is hoped that the boat may be used a month longer this summer also.

W.E. Allen went to Santa Ana on Tuesday to speak at the High School on the "Work of the Biological Station" and before the Present Day Club on "Problems of the Pacific".

Mr. Taylor of Lakeside visited his son Ralph over the week end.

On Saturday Mr. Cummings made one of his periodical trips to Elsinore to study samples of lake water there and he returned by Lake Hodges for similar work on Sunday. He was accompanied by Mr. Moberg who is making chemical studies of various bodies of water and by Mrs. Cummings.

Mr. Marcus Hanna of the Department of Paleontology at Berkeley who spent some time here at Christmas time looking over the geological formations arrived last week with an assistant and they are now engaged in a rather extensive study of this region, giving particular attention to fossil bearing rocks.

A telegram from Dr. W. E. Ritter announces that he is on his way home from Washington and that he expects to arrive here about the end of this week. He will stop at Berkeley for a conference with President Barrows about Station matters.

Dr. Mary B. Ritter returned home on Wednesday after having spent some weeks in San Diego and Los Angeles.

Captain Crandall gave a talk before the San Diego Natural History Society on Last Saturday afternoon.

Station residents were much surprised when Chaplain Earle and his two daughters returned from Los Angeles last week as it was hardly supposed that he would be able to travel for some days. He is rapidly recovering his strength and activity and will soon be around as usual.

Last Friday afternoon Mrs. Cummings entertained some of the ladies of the colony at tea at the Green Dragon.

Dr. Child and Professor Bliss of Riverside were doing work in color photography in the Mojave desert on Sunday and Monday

## Biological Station Notes

Director W. E. Ritter returned from his eastern trip last Saturday. He reports a number of interesting conferences more or less directly connected with the general work of the Station as well as with the progress of science in the country as a whole.

Dr. H.S. Reed of the Citrus Experiment Station at Riverside is spending a few days at the Station this week.

Dr. C. Essenberg is getting ready for her trip to Europe upon which she is to start early in June.

On Wednesday evening Dr. C. M. Child attended a dinner of a Men's Club at Hotel Windansea and gave an address on "Facemakers."

Last Saturday male residents of the Station spent a large part of the afternoon in burning over the areas infested with the Sicilian Snail which threatens to become a pest in this section.

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Water temperatures at Biological Station pier about 7 a.m. for week ending May 23, 1922

May 17 – 61.25

18 – 60

19 – 59

20 – 61.25

21 – 62

22 – 62.2

23 – 61

## Biological Station Notes

Prof. S. J. Holmes of the Department of Zoology of the University of California arrived at the Station last week for a stay of two months and a half. He was accompanied by Mrs. Holmes and their children and maid.

Dr. S.S. Maxwell of the Department of Physiology of the University of California who has on previous summers been doing experimental work on sharks and skates of the San Diego region arrives this week end for a continuation of that work. He and his wife and daughter will stay about eight weeks.

Miss Emelia Peterson of Fresno who has been specializing in Bacteriology at the University of California and who has devoted a great deal of time to research on Eotulinus for the last two years arrived on Tuesday for a stay of eight weeks. She is going to assist Allen in microscopic work on phytoplankton of this region.

On Sunday Pres. M. A. Clark of the University of Nevada reached the Station with his family after a very interesting motor trip of three days from Reno coming on the East side of the Sierra by Mono Lake and Mojave. Dr. Clark can only stay about two weeks at present but the family is to stay through the summer. He may return later.

Miss Lutz, a biologist from the National Museum of Brazil, visited the Station Saturday. She was accompanied by Mrs. Snook and Mrs. Pray-Palmer.

Messrs. Mark Hanna and Vorbe of the Department of Palaeontology of the University of California are making a thorough investigation of the fossils of this region. They are finding a great deal of material.

Dr. Sumner departed for Berkeley on Sunday in order to assist in arrangements for the program and other business of the Salt Lake meeting of the Western Society of Naturalists at which he is to preside. He will proceed to Salt Lake City on June 22 to attend the meetings of the Naturalists and other meetings of the American Association for the Advancement of Science (Western Section) held there.

Dr. Essenberg departed Sunday on a year's leave of absence to be spent mostly in Europe. She will spend some time in Los Angeles, Kansas City and New York on the way. On Saturday night a party was given at the Station commons for a farewell to her and for welcome to the Ritters after their absence.

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Water Temperatures of Biological Station pier at about 7 a.m. for week ending June 6, 1922.

May 30 – 64.

June 1 – 63

2 – 63

3 – 64

4 – 65

5 – 63.5

6 – 64.5

## Biological Station.

Mr. R. Huestis has made arrangements to occupy a cottage with Mr. Moberg when Mrs. Huestis leaves on her trip to Alberta, Canada where she is to visit her mother for a time. She will join Mr. Huestis in Berkeley about Christmas time.

Dr. Edna Bailey, head of the Biology Department of the Oakland City Schools is to spend the month of July here.

On Thursday Dr. Myrtle Johnson of the San Diego Normal School visited the Institution with her class in Zoology for the purpose of viewing the museum exhibits and of seeing illustrations which Dr. Johnston has been preparing for her book of tide water animals of the Pacific Coast.

Dr. C. M. Child made another week end trip with Professor Bliss of Riverside in pursuit of color photography. This time they visited the San Gorgonio region.

On Saturday Mrs. F. B. Sumner entertained a group of girls from the Bishop's School.

The snail situation in La Jolla is attracting a good deal of attention from scientific experts. As is shown by the fact that on last Saturday the following men investigated conditions at the Station:

Dr. L. O. Howard, division of Toxicology of the U. S. Department of Agriculture.

Dr. C. L. Harlatt, expert in pest control of the U.S. Department of Agriculture.

Dr. Sudworth of the Division of Forestry.

Dr. Smith, California State Commissioner of Horticulture

Mr. Vary, Los Angeles County “ “ “

Mr. Pruitt, Ventura “ “ “ “

Mr. Frost, Orange “ “ “ “

Mr. Armitage, in charge of pest control Laboratory at Whittier.

Mr. R. D. Mclean, San Diego County Commissioner of Horticulture.

President Barrows of the University of California visited the Station on last Sunday and after various conferences was entertained at dinner by Mrs. Ritter. The other guests were President and Mrs. Clark of the University of Nevada.

Water temperatures at the Biological Station pier at about 7 a.m. for the week ending June 13, 1922.

June 7 – 65

8 – 65

9 – 65

10 – 65

11 – 63

12 – 63.5

13 – 65

6-27-22

Biological Station Notes.

Every available place of residence of the Station is now occupied the "commons" having just been taken by Superintendent Billingham of the City Schools of Reno, Nev. He and his wife are accompanied by one daughter. Another will join them a little later after attending the Y.W.C.A. convention of Asilomar.

Mr. and Mrs. Gans and two daughters of San Diego are here for a fortnight.

Many of the Station residents attended the funeral of the father of Ralph Taylor and Mrs. Webster at San Diego last week, Thursday. Mrs. Taylor had always been one of the most welcome visitors to the Station where his kindness and geniality made many friends. He will be long remembered also for the efficiency with which he aided in repairing damages to our roadway caused by the winter storms.

Miss. Barnhart is visiting her brother P.S. Barnhart for a few days.

Last week Mrs. R. Huestis was entertained by various ladies of the staff prior to leaving on Wednesday of this week for an extended visit to her mother in Canada. Mr. Huestis is now living with Mr. Moberg.

Dr. Bailey and her children have been living in the Sheldon in La Jolla until a cottage became available for them at the Station. They are moving over to the Station this week end.

Mrs. Ritter entertained visiting scientists, members of the staff and their wives in honor of the Ritter's thirtieth wedding anniversary on Friday evening of last week.

Professor and Mrs. Esterly of Occidental College arrived last week for the summer. Dr. Esterly is doing research along the same lines which he has followed at the Station since 1905.

Dr. C. M. Child accompanied Mr. Fleming on a trip to the El Monte country the latter part of last week. They found a number of very interesting botanical specimens and Dr. Child secured some very fine photographs of vegetation in its natural surroundings.

Mr. Woodward of San Diego has come to the Station to assist Dr. McEwen and Mr. Moberg in some of their routine work.

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Water temperatures at Biological Station pier about 7:15 a.m. for week ending June 27, 1922.

June 21 – 65.

22 – 65.

23 – 66.

24 – 66.7

25 – 69

26 – 68.6

27 – 68.6

## Biological Station Notes.

Under the direction of Captain Crandall of last Saturday evening the men of the Station gave a beefsteak dinner in honor of the Mexican scientists and officials and other scientists taking part in the six weeks trip in Mexican waters for the purpose of studying methods of conservations of marine resources in Pacific waters near the Mexican coast. The dinner was given at Hotel Windandsea was very enjoyable not only for excellent food but for pleasurable companionship and acquaintance.

Senor Romero, executive officer in charge of the Tijuana district.  
 Senor Lopez, secretary  
 Senor Terron, naturalists in charge of the expedition  
 Senor Gallegos, naturalist  
 Senor Rubio, taxidermist  
 Senor Rodriguez, inspector of fisheries.  
 Senor Lazerno  
 Senor Angulo, Captain of the "Tecate" the vessel in use for the expedition  
 Dr. H. W. Evermann, Director California Academy of Sciences.  
 Dr. C. Dallas Hanna, Naturalist " " "  
 Dr. Slevin, herpetologist " " "  
 Dr. Tose, taxidermist " " "  
 Dr. Abbot, director S.D. Society Natural History  
 Mr. Anthony, Naturalist " " "  
 Dr. Baker, President " " "  
 Dr. Ritter, director of Scripps Institution.  
 Dr. McEwen, Oceanographer " "  
 Mr. Allen, Biologist " "  
 Dr. Taylor, U. S. biological survey  
 Mr. Fleming, botanist S.D. Society of Natural History.  
 Mr. Hanna, paleontologist Univ. of Calif.  
 Mr. Vorbe, " " "  
 Mr. Moberg, chemist Scripps Institution  
 Supt. Billinghamurst, City Schools Reno, Nev.  
 Mr. Price, president of Board of Education, Reno, Nev.

Mrs. P. S. Barnhart and children are visiting the Station this week.

Ralph Taylor has returned from a week of vacation.

Dr. W. P. Taylor returned last week from several weeks work at Biological Survey headquarters at Washington and is leaving this week for some field work in the Tuolumne section accompanied by Dr. Vorhis of the University of Arizona.

MR. H. G. Snook and family from Stockton arrived last week. Mr. Snook and Dr. Johnson are beginning to close up their work in preparation of a guide book to beach and tidepool animals.

Dr. Johnson moved over to the Station this week from National City

Dr. Bailey and her family party have moved over to the Station from La Jolla.

Last week Mr. Mark Hanna and Mr. Fleming made a trip into Mexico as far as Pt. San Isidro, 70 miles beyond Ensenada. They are very enthusiastic about the scientific results of their journey.

Ruth Eleanor Bixby arrived for a stay with her uncle and aunt, Dr. and Mrs. C. O. Esterly, last week.

Miss Hamilton, artist for Dr. Kofoid in his work on dinoflagellates at the Station in 1917, is spending some time at the Station. She is accompanied by her brother and sister.

Mr. Price, a lawyer of Reno and president of the School Board, is visiting the Billinghursts. He is accompanied by his family.

Mrs. Ritter is slowly recovering from her accident although she is still confined to her bed.

Mrs. Start has returned from her visit to Texas and has brought her small grandson Sayre.

Dr. Helen E. Murphy of Cornell University has joined the scientific staff of the Station, filling Dr. Essenberg's place in her absence. She is giving particular attention to variations in the occurrence of microscopic animals in local oceanic waters.

Miss Billinghurst has joined the other members of the family after attending the Y.W.C.A. convention near Monterey.

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Water temperatures at Biological Station pier at about 7 a.m. for week ending July 11, 1922.

July 5 – 69.0

6 – 64.0

7 – 65.0

8 – 64.0

9 – 65.0

10 – 68.0

11 – 68.5

## Biological Station Notes.

Dr. and Mrs. Vaile of the Citrus Experiment Station at Riverside arrived Saturday for a stay of two months.

Miss Barnhart has returned to Los Angeles but will return later with her invalid brother, Dr. A. D. Barnhart whose health is improving lately.

Dr. Holmes was visited by his sister and her husband from Berkeley this week.

Prof. Moore of the San Diego High School together with his family visited the Maxwells last week. Mrs. Moor is a daughter of Dr. Maxwell.

Mr. and Mrs. Price and daughter have returned to Reno.

Dr. W. A. Clark arrived from Reno last Friday to spend the rest of the summer vacation here with his family.

Miss Peterson was visited by her aunt and uncle and cousin from Fresno over the week end.

Chancellor David Starr Jordan and wife of Stanford University visited the Station on Monday. Dr. Jordan took a great deal of interest in some of the fish exhibits. The ladies of the colony have an after-noon tea in honor of the distinguished guests at the home of Mr. and Mrs. Crandall.

Dr. Holmes spoke at the University Club on last Friday. His subject was "Characteristics of the Future American".

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Water temperatures at the Biological Station pier at about 7:30 a.m. for the week ending July 18. 1922.

July 12 – 66.5  
13 – 69.  
14 – 69.  
15 – 69.2  
16 – 69.8  
17 – 70.  
18 – 69

## Biological Station Notes.

After a two months stay at the Station Professor S. J. Holmes and family have gone to Camp Baldy for two weeks before returning to their home in Berkeley.

Professor R. S. Vaile of the Riverside Citrus Station visited his family over Sunday.

Mr Fleming and his small son left on Friday for a two weeks stay on Santa Rosa Island for the purpose of making ecological studies. Mr. Fleming goes as the guest of Mr. Vail, owner of the island whose boat was to meet him at San Pedro on Saturday.

Dr. Clark and family of the University of California are visiting MR. Hanna this week.

Mrs. Ritter is gradually recovering from the effects of her accident.

Mrs. C. E. Humiston of Chicago and two daughters is visiting her sister Mrs. W. E. Allen. Although herself a physician Mrs. Humiston considers her husband the important member of the family. He is one of the prominent surgeons of Chicago, best known for his efforts to improve medical profession and standards of medical practice.

The Esterly and Allen families suddenly discovered that they had wedding anniversaries at very nearly the same time so on Monday they joined in an impromptu celebration at the Allen residence.

At last accounts Dr. Taylor was in the Tuolumne Meadows country where he is doing field work through July for the U.S. Biological Survey.

Dr. Child and family departed on Sunday for a two weeks stay at Camp Baldy after which they expect to spend about two weeks at Fallen Leaf Lake Lodge before returning to Chicago.

Mr. Fry of Los Angeles is spending the month of August at the Station.

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Water Temperatures at Biological Station pier at about 7:30 a.m. for week ending July 25, 1922.

July 19 – 69.75

20 – 70.

21 – 70.

22 – 70.

23 – 70.25

24 – 70.

25 – 70.

## Biological Station Notes.

Dr. T. F. Johnson of National City is visiting his daughter Dr. Myrtle Johnson this week.

Mrs. Bailey and Miss Laton left for Berkeley on Wednesday.

Mr. and Mrs. Shain started on a motor tour to the Shasta Springs region on Tuesday. They expect to take the coast route to San Francisco.

Mr. C. N. Smith suddenly became ill with appendicitis last Monday.

Miss Peterson left for her home in Fresno on Wednesday. She expects to stop in Long Beach and Los Angeles on the way.

Dr. W. P. Taylor is now working in or near the Yosemite Valley.

Professor Clark of the Department of Paleontology at Berkeley, who has been visiting Mr. Mark Hanna and doing some work in geology with him this past week returned to Berkeley on Wednesday.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending August 1, 1922.

July 26 – 68

27 – 68

28 – 70

29 – 70

30 – 70.7

Aug. 1 – 70

8-8-22

Biological Station Notes.

Indirect information has been received to the effect that the scientific expedition into Mexican waters under auspices of the Mexican Government has spent some time in and near Guadalupe Island and has been very successful in making studies in that region. It is understood that the party has now proceeded to Cedros Island.

Mrs. R.C. Batchelder and family party of Upland has arrived at the Station for a stay of some weeks. Mrs. Batchelder spent the summer here three years ago.

Mr. Fleming has returned from his trip to Santa Rosa Island and reports success in his botanical collecting there. He also found the trip very pleasurable and the hospitality of the owner of the island very enjoyable.

MR. Shain is now somewhere in the Sacramento Valley on his trip to Shasta Springs.

Mrs. Director Ritter is improving in health but recovery is slow.

On Monday Dr. S. S. Maxwell left with his family for Berkeley to get ready for the opening of the regular work of the University.

Mr. Gerard has moved up on the hill for the winter.

Mrs. C. E. Humiston and daughters left on Thursday for their home in Chicago. They expect to stop a day or two in Los Angeles and at one or two other points on their return. Mrs. Allen accompanied them to Los Angeles.

On Sunday evening Mrs. M. C. Crandall gave a tea in farewell to the Maxwells.

Mr. and Mrs. N. W. Cummings have probably reached the Yosemite Valley on their motor trip.

Paul McEwen has been laid up with an infection in his knee but is able to be out again.

Miss Edith Franzen a guest of the Billinghursts, left for her home in Nevada on Monday.

Mrs. F. B. Sumner is visiting her brother-in-law in Pomona this week. On Friday she is to meet her mother and sister who are coming from the East and will return with them here where they will reside for a time.

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Water temperatures at the Biological Station pier about 7:30 a.m. for week ending Aug. 8. 1922

8 - 2 - 69.0  
3 - 70.0  
4 - 70.2  
5 - 69.  
6 - 70.0  
7 - 68.5  
8 - 68.5

## Biological Station Notes.

Word has been received from Mr. Shain to the effect that they have given up Shasta trip on account of unfavorable reports about the roads and that they have been spending some time at the Big Trees near Santa Cruz. After visiting Pacific Grove they intend to go back into the Santa Cruz Mountains.

Professor Bartholomew of the Riverside Citrus Experiment Station is to arrive with his family this week.

Miss Hazel Field is expected to be here this week.

Mrs. M. E. Ritter continues to improve in recovery from her accident.

Mrs. M. E. Allen returned from her visit to Los Angeles and vicinity on Friday.

Donald Bidwell is visiting the Frys.

An emergency bulkhead is being built at the southern end of the sea wall in order to save the wall from destruction by back cutting and to reduce danger to the cottages along the water front.

A letter from Mr. P. S. Barnhart confirms the report of last week that the scientific expedition has done some very successful work at Guadalupe Island and that it had reached Nagdalena with intent to proceed immediately to Cedros Island.

Mrs. O. E. Dahlen visited the Esterlys over the week end.

The family of Dr. W. P. Taylor is enjoying a visit by Mrs. Taylor's brother Dr. James Fairchild, of Salem, Oregon, his friend Dr. Fitzgerald of Portland and ex- Superintendent Brownscombe of the public schools of Santa Rosa, Calif.

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Water temperatures at Biological Station pier for week ending August 15, 1922 about 7:30 a.m.

Aug. 9 – 68.3  
10 – 68.4  
11 – 70  
12 – 68.4  
13 – 70.1  
14 – 70  
15 – 70.1

## Biological Station Notes.

Mr. Vaile came down from Riverside last Saturday for a week end visit with his family.

Mrs. Vaile's brother visited her on Friday of last week.

Mr. P. S. Barnhart returned last week from the scientific expeditions into Mexico. He reports a very pleasant as well as profitable trip. The members of the expedition were exceptionally congenial and co-operation in the various lines of work was unusually good. Evidently a good foundation has been laid for further scientific work to be done jointly by men from the United States and Mexico. An excellent series of plankton collections was secured by Mr. Barnhart personally by he was unable to find much material for the museum or supply department.

Mr. Fleming, accompanied by Mr. Morley Superintendent of Parks of San Diego made a trip into lower California on Tuesday and Wednesday to investigate certain types of flora with a view to using it in some of our parks.

Mrs. Ritter is now able to be up and about for a short time each day and she has taken a few short automobile rides.

Dr. Fairchild and Dr. Fitzgerald have returned to Oregon and Mr. Brownscombe has taken his mother with him to Santa Rosa thus leaving the family of Dr. W. P. Taylor much reduced in numbers.

Dr. Clark and family left for Reno Tuesday morning in their automobile. They are returning home by the Valley route.

Miss Clark and her mother gave a tea for some of the members of the colony on last Friday.

Mr. Shain was at San Luis Obispo at last reports.

Dr. Rudiger and family of Pasadena are spending the week here.

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Water temperatures at biological Station pier about 7 a.m. for week ending Aug. 22, 1922.

Aug. 16 – 70.

17 – 68.8

18 – 68.8

19 – 69.

20 – 69.3

21 – 69.2

22 – 70.2

## Biological Station Notes.

Mr. Batchelder of Upland is visiting his family this week.

Mr. Shain is returning from his motor trip to the north.

Dr. Bartholomew has returned to Riverside and Dr. Halma has arrived from there with his family.

Miss Hazel Field is spending a few days at the station finishing a piece of research work which she had under way last year.

The Snook family and Miss Hawkins of Stockton left for home on Sunday. Mrs. Snook's sister remained with her family a few days later.

Dr. and Mrs. Esterly have returned to their home in Los Angeles to get ready for the year's work in Occidental College.

Prof. J. G. Needham of Cornell University arrived on Tuesday with Mrs. Needham and their two children in order to pay a short visit to Miss Murphy and the Station. Dr. Needham is taking the work of Dr. Hilton at Pomona College this year on the exchange plan.

Mr. and Mrs. Rose and daughter of Sawtelle are here for a few days.

Prof. H. S. Reed of the Riverside Citrus Station has arrived with Mrs. Reed for a stay of a few weeks.

Mr. and Mrs. Cummings have been at the hotel Crail in Berkeley this week.

Prof. Swarth of the Department of Vertebrate Zoology at Berkeley arrived at the station on Monday and left on Tuesday in company with Dr. Sumner and Mr. Huestis for Southern Arizona where the party is going to investigate the conditions of animal coloration in the lava beds of that section.

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Water temperatures at Biological Station pier about 7 a.m. for week ending Aug. 29, 1922.

Aug. 23 – 70.4  
24 – 70.9  
25 – 71.3  
26 – 72.3  
27 – 71.9  
28 – 73.2  
29 – 72.9

9-5-22

Biological Station Notes.

Mr. R. R. McLean, San Diego County Farm Advisor with a family party spent the week end at the Station.

Dr. Sumner, Dr. Swarth and Mr. Huestis have reached their Flagstaff, Arizona destination by automobile

Ralph Taylor is spending his two weeks vacation at Palomar Mountain.

Mr. Graham and family are visiting Mrs. Mary Webster while her brother is absent.

Rev. Dunlap and family visited the Batchelders this past week.

Dr. Halma of Riverside is now at the Station.

Judge J. Z. Tucker spent the week end home.

Mr. and Mrs. Currier of El Centro are here for a week.

Dr. Needham and family who visited Miss Murphy last week were very enthusiastic in praise of this locality and of Station facilities. His favorable comment is especially gratifying because of his wide experience with Woods Hole and other well known laboratories.

Mr. and Mrs. N. W. Cummings are returning this week from their motor trip to Yosemite and Berkeley.

The McEwen family is enjoying the experience of breaking in a new car "another ash".

Dr. W. F. Taylor and family motored to Pasadena and spent the week end visiting friends and relatives there.

Dr. H. S. Reed and family party are now here for the month.

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Water Temperatures at Biological Station pier about 7:15 a.m. for week ending September 5, 1922.

Aug. 30 – 72.4

31 – 72.1

Sept. 1 – 71.1

2 – 72

3 – 72

4 – 71.3

5 – 66.0

9-12-22

Biological Station Notes.

Dr. Veile came down from Riverside to spend the week end with his family and take them back to their home in Riverside Sunday.

Mr. Graham is taking Ralph Taylor's work as chauffeur while Ralph is on his vacation.

Dr. Sumner reports heavy rains in Arizona but says that does not prevent them from having a great deal of success in collecting.

Dr. Halma and family returned home to Riverside on Monday.

Miss Hagel Field left on Sunday to take up her work in Newcomb College in New Orleans.

Mr. Bennett and family party of Riverside are spending a few days at the Station. Mr. Bennett is in charge of the Arlington Branch of the Bank of Riverside.

On account of the reduced number of visitors while paving is in progress and because of time needed to make repairs in the salt water supply system it has been decided to close the Aquarium for overhauling. It will be closed for about sixty days. The tank will be repaired and repainted and supporting structures renovated.

Mrs. Hannay and son Pat are visiting in Los Angeles.

Mrs. Ritter has gone to Pine hills for three weeks for recuperation. Professor Ritter has gone to Berkeley for two weeks of conferences mainly concerning Station business.

Mr. and Mrs. Currier returned to El Centro on Sunday.

Several Residents of the colony attended the circus on Monday.

Mr. and Mrs. Cummings returned on Monday. They are now trying to find accommodations in San Diego for the winter while Dr. Cummings is teaching the State Normal School.

Dr. Warren and family party of San Diego spent the week end at the Station.

Mrs. Harris is visiting her nieces Mrs. N. B. Sumner and Miss Clark.

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Water Temperatures at Biological Station pier at about 7:15 a.m. for week ending Sept. 12, 1922

Sept. 6 – 66.4

7 – 67.2

8 – 68.0

9 – 68.5

10 – 68.9

11 – 66.4

12 – 65.6

9-19-22

Biological Station Notes.

Ralph Taylor has returned from his vacation which was mostly spent on or near Palomar Mountain.

The Whitfields entertained some of their friends over the week end.

The Batchelders have returned to their home in Claremont where Robert is attending Pomona College.

Mr. and Mrs. Cummings are now living in San Diego at the Corner of Grave and A. Mr. Cummings is teaching mathematics in the State Teachers College.

Mrs. Bannay has returned home from Los Angeles.

Mr. Woodward has moved from his tent into one of the cottages recently vacated.

Dr. Sumner reports that they are making their collecting base at a ranch house twenty seven miles from Flagstaff, Arizona where they will get their mail.

A number of Station residents attended the circus last Friday. Dr. Taylor and family made the trip to San Diego in their new Chevrolet.

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Water temperatures at Biological Station pier at about 7:15 a.m. for week ending September 19, 1922.

Sept. 13 – 65.8

14 – 65.8

15 – 68.9

16 – 67.3

17 – 66.6

18 – 67.1

19 – 67.1

## Biological Station Notes.

Mr. A. D. Barnhart and his sister arrived at the Station on Wednesday for an indefinite stay.

Dr. McEwen, Mr. Moberg, and Mr. Peterson left on Saturday for a trip up the coast as far as Santa Barbara in the boat Kaiyo which has been in use this summer for scientific work of the Station. They returned on Wednesday after making numerous observations on hydrographic and biological conditions and after collecting many samples of water and plankton.

Mr. Michael returned on Monday after a visit of several days with friends in San Diego.

Dr. W. E. Ritter returned on Sunday after a two weeks stay at Berkeley on University business and left on Tuesday to join Dr. Mary B. Ritter at Pine Hills where he is staying to the end of the week.

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Water temperatures at Biological Station pier. for week ending September 26, 1922. Taken about 7:15 a.m.

Sept. 20 – 66.9  
21 – 68.0  
22 – 68.7  
23 – 69.2  
24 – 67.5  
25 – 65.5  
26 – 65.0

## Biological Station Notes.

Mr. and Mrs. McLean returned to San Diego last Sunday.

Mr. A. D. Barnhart and his sister are now settled for a stay of some time at the Station.

Mr. Huestis returned on Monday from the collecting and field study trip in Arizona. Due to picturesque hirsute adornment he is much changed in appearance.

Mrs. Crites and one of her companions left on Monday.

Mr. Levant L. Lee, Native of China, who has been studying at the Universities of Michigan and Wisconsin has arrived at the Station for a stay of several months. He expects to study for marine fauna and also give some attention to genetics.

Dr. and Mrs. Ritter returned from Pine Hills on Saturday. Mrs. Ritter is much improved in health.

Miss. Clark left on Monday to take up her work as Y. W. C. A. travelling official in Northern California. She expects to return for a short time at Christmas holidays. Her mother remains with the other daughter, Mrs. F. B. Sumner, until that time.

The Kaiyo finished the off shore work for the Station last week and spent the early part of this week in dredging in San Diego Bay after which she has returned to the owners.

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Water temperatures at Biological Station pier at about 7:15 a.m. for week ending Oct. 3, 1922.

Sept. 27 – 64.8

28 – 65.7

29 – 67.4

30 – 66.8

Oct. 1 – 67.1

2 – 67.8

3 – 66.6

## Biological Station Notes.

Captain Crandall spent the first half of the month in Berkeley and San Francisco on University business. Mrs. Crandall and small nephew Sayre have gone to Texas for an extended visit with Sayre's mother, Mrs. Crandall's sister.

The McEwens and Rosses went to Los Angeles for the week end three weeks ago. The McEwens and Mr. Moberg spent the last week end in the Los Angeles region, attending a Sigma Xi meeting on Saturday and making some investigations at Elsinore Lake.

Dr. and Mrs. Ritter made a trip to Cuyamaca the first part of this week. Dr. Ritter expected to get further information about food storing habits of the California wood pecker. Dr. Ritter is giving a series of lectures on Science and Religion at the Templeton Johnson home on Saturdays and Mondays. Last Friday he addressed the University Club on the Religion of a Scientist.

The Whitfields moved to La Jolla this week. Mr. Whitfield is building a house there which they hope to have ready for occupation soon.

The Grahams also moved to La Jolla this week where it will be more convenient for Mr. Graham's work in San Diego.

The Allen family had an unexpected informal reunion a week ago when Wesley came down from Fresno and James came from San Pedro on a short leave from the U.S.S. Idaho.

The aquarium has been refitted with an improved system of pipes for the salt water and it will be open as soon as exhibits can be prepared.

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Water temperatures at the Biological Station Pier about 7:15 a.m. for week ending Oct. 31, 1922.

Oct. 25 – 62.8  
26 – 62.  
27 – 61.5  
28 – 60.5  
29 – 60.3  
30 – 59.4  
31 – 59.7

11-7-22

Biological Station Notes.

Dr. Taylor returned last Saturday from his field trip to the Grand Canyon on work for the U.S. Biological Survey. Mrs. Taylor is feeling a good deal better but will not be able to remain so close to the sea. They family will probably move to Tucson, Arizona as soon as arrangements can be made. Tucson is one of the bases for Dr. Taylor's work and it is probable that he will soon receive orders from Washington to transfer his headquarters to that point. It is impossible to express the deep regret felt at the prospect of losing such a family from our community. The Taylors are distinctly aggressive and steadfast in support of all measures for community improvement and there can never been too many of their kind anywhere.

The Grahams had to delay moving on account of the illness of Mrs. Graham but she had recovered so that they were able to move into La Jolla last week.

Dr. F. B. Sumner has returned from his field studies on mice in the mountains of Arizona.

Last Saturday night Dr. McEwen and Mr. Moberg and Mr. Woodward made a series of hourly collections of water samples at the Mission Bay Bridge. They remained through most of Sunday so as to get a variety of conditions of the tides. The intention was to see how they Bay affected the temperature, saltiness and other conditions of the water which flows back and forth under the bridge. Late in the night some one who thought their equipment of bottles looked suspicious evidently informed the prohibition officer as some one came and asked them a number of questions and looked at the contents of their bottles.

Dr. McEwen, Dr. Murphy and Mr. Moberg are making a trip to Lake Elsinore and Riverside this week end. Some investigation of the lake will be made Saturday and Sunday and on Monday Dr. McEwen is to speak at the One Hundredth Meeting of the Synapsis Club at Riverside.

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Water temperatures at the Biological Station Pier about 7:15 a.m. for week ending November 7, 1922.

November 1 – 58.9  
2 – 59.  
3 – 60.3  
4 – 59.  
5 – 60.3  
6 – 59.5  
7 – 59.9

11-14-22

Biological Station Notes.

As a result of his several weeks stay in the Arizona desert Dr. Sumner has brought back five boxes of live mice and several boxes of skins and preserved material for further study of the characteristics of desert mice as distinguished from those in more humid conditions and different types of colored backgrounds.

A new dendrograph has been received from Dr. D.T. McDougal of the Desert Laboratory at Tucson and will be installed on some eucalyptus tree on the Station grounds. The one already in operation has been here about two years and has given some very satisfactory records of the growth of a tree under conditions found at different seasons of the year.

An epidemic of colds has struck the colony, most of the residents being affected. Mr. Shain has been confined to the house for several days.

Captain M. C. Crandall is starting this week on a three weeks trip with U.S. Navy Officials in charge of the testing of some new methods of sounding and making oceanic surveys. He received a special invitation some weeks ago. The ship in use for this work is U.S.S. Hull.

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Water temperatures at the Biological Station Pier about 7:15 a.m. for week ending November 14, 1922.

November 8 – 59.4  
9 – 59.  
10 – 59.2  
11 – 58.6  
12 – 59.1  
13 – 57.9  
14 – 57.9

12-19-22

Biological Station Notes.

Miss Clark, sister of Mrs. F. B. Sumner, is spending the holidays at the Station. She is suffering from injuries received in a stage wreck while on her way here but is able to be about. Dr. Sumner's mother has gone to Pomona to spend the holidays with her other son. She was taken up to Pomona on Monday by Dr. Sumner and Florence in their new Auto.

On Sunday Wesley Allen returned to Mare Island to rejoin the U.S.S Camden. He came down on a ten day leave to visit his parents and sisters and to get some equipment left here while he was getting some civilian experience this Fall. He has re-enlisted the Navy for four years. James Allen arrived Sunday night from San Pedro on a twenty days leave from U.S.S. Idaho.

Mrs. M. C. Crandall is expected to return from her visit to Texas this week. Captain Crandall expects his work in experimental sounding operations as assistant to observers on U.S.S. Cory to end this week. A letter to Mrs. Stuart indicates that he has been busy almost night and day for the last few days, for the last few days, but that he has had very sounding by sound vibrations seems to be very satisfactory where the water is deep enough.

Word has been received that Dr. Taylor and the children have arrived safely at Tucson. Mrs. Taylor will stay at Pasadena until the house is ready for her.

Miss Dr. Helen Murphy expects to visit friends in Fresno at Christmas time.

The Gerards have been at Los Angeles for some time. Mr. Gerard made a brief visit to the Station yesterday. He has bought a drug store at Pico and Figuero in Los Angeles and considers that he has good business prospects there.

Mrs. Ritter is spending most of the time in Berkeley while Dr. Ritter is on his way to this coast on Mr. E. W. Scripps' yacht. They are probably somewhere in the Panama region now.

Mr. Moberg is going to Pacific Grove for some studies in water analysis there. He will remain there for some weeks except for spending Christmas in and near San Francisco.

Mrs. Webster gave a birthday party for her small son Herbert on last Monday which was attended by children of the colony and a few others.

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Water temperatures at Biological Station pier about 7:30 a.m. for week ending Dec. 19, 1922.

Dec. 13 – 58.7

14 – 59.4

15 – 59.2

16 – 59.5

17 – 59.4

18 – 59.3

19 – 59.0

## Biological Station Notes

Mrs. Ritter has been visiting the Kofoids in Berkeley but expects to soon go to Fresno for a visit with the Warners and other kin.

Dr. W. E. Ritter was last heard from at Balboa. The Scripps party was expecting to spend a few days in that section before coming on toward San Diego.

Mrs. R. L. Huestis and her two children arrived from Canada last week to spend the rest of the winter with Mr. Huestis.

Professor O.T. Wilson of the University of Cincinnati and wife are spending several weeks at the Station. They are studying Marine algae of the University.

Mr. P. Hannay has sold off his chickens in preparation to leave the station.

Dr. W. P. Taylor reports that they are finally settle in their own house at Phoenix and that Mrs. Taylor is getting along very well.

Dr. McEwen is expecting a visit from his father soon.

Mrs. Allen is visiting her sister in Chicago and is going from there to visit her parents and other sister in Oklahoma.

Captain M. C Crandall made one of his periodical trips for kelp bed inspection last week. He went as far as Santa Monica.

The Van Lobensell family of Los Angeles has engaged a cottage for the latter part of February. The seven children have been made famous by a book written by their mother entitled "The Blue Jays" or something to that effect. The mother is a daughter of Mr. Ellenworth, recently retired president of the Century Publishing Co.

The Sumners are making good use of the Ford touring car which they purchased recently.

Everybody is pleased with the new pavement. The disagreeable rides to La Jolla over the old dirt road and the detours will soon be forgotten.

Water temperatures at the pier on recent mornings have been near 57.5 Fahrenheit.

Feb. 5 1923

Biological Station Notes.

The U.S.S Pioneer which is doing field work for the U.S. Coast and Geodetic Survey near here his winter has recently made a series of collections of water samples and of microscopic material for study by members of the Station staff. Most of these collections were made near Cortez Tank. The ship has been ordered to Alaskan waters for summer work and cannot continue such co-operation to great extent. It is possible that they may be able to do some work for the local institution on their way north. The work already done has much significance from the standpoint of science since it shows the possibility of different scientific organizations working together to advantage without any loss of efficiency in their specialties. As a matter of fact such co-operation as this is necessary if really satisfactory progress is to be made in oceanic investigation.

Levant L. Lee has left the Station to return to China after four years spent in the universities of this country, mostly in Michigan and Wisconsin.

Miss. Maurine Leslie of San Diego State College has to the Station to statistical and experimental work in assistance to Dr. McEwen in hydrography to Mr. Moberg in Chemistry.

The Hannay family has left the Station and is residing at Spindrift.

Mrs. Ritter returned home about the middle of last week and Dr. W. E. Ritter returned from his yachting trip from the East Coast via Panama in the E.W. Scripps party. He arrived on Saturday and reports many interesting as well as pleasing experiences . He is especially impressed with the greater abundance of living things in Pacific waters over what was observed in the Atlantic side.

Miss Murphy is again at work after an illness of three weeks. Dr. Needham of Cornell University visited the Station again Monday.

Mrs. Allen is now in Oklahoma visiting her parents and sister. She expects to return soon.

Dr. McEwen is conducting two classes in the University Extension Courses in San Diego.

Dr. F.B. Sumner addressed the California Academy of Sciences in San Francisco on Sunday Feb. 4.

## Biological Station Notes.

Mr. and Mrs. Howard R. Hill of Los Angeles used one of the laboratory rooms a few days last week. Mr. Hill was doing some collecting of beach and tide pool material for the Los Angeles Museum with which he is officially connected.

Since his return from Washington Dr. W. F. Ritter has been busy getting things shaped up for leaving for his Australian trip.

For the first time in several months all of the members of the colony got together last Friday when Dr. Mary B. Ritter gave her farewell reception in anticipation of the trip to Australia.

Dr. C. L. Fleming spent some days last week collecting botanical material in the Laguna mountains. He expects to use some of this material for planting in Torrey pines Park.

Dr. Sumner visited Hollard's grove for a few days last week.

Mr. Eldridge, a student in the University at Berkeley, is doing some work in Zoology at the Station this summer.

Ralph Taylor visited friends at the Station Sunday.

Mrs. Storts joined her husband at the Station about two weeks ago.

Col. Ed, Fletcher and party of twenty visited the Station Sunday and were given an explanation of Station activation by Captain Crandall.

On account of reduced income the period of boat work this season is considerably shortened. The HE has been chartered for a month from about May 18. She is a little smaller than the boat used last year but otherwise somewhat more satisfactory. The heavy surf of the last two weeks has made it difficult to use her and a good deal of time has been lost. That weather conditions are peculiar here as well as in other places is shown not only by rougher water and less fog but also by temperatures. On Sunday morning the temperatures at 7 a.m. was about 56.5 F. Which is about what it is most of the winter. Forty-eight hours before it was about eight degrees F. higher than that. Mr. Jack Ross is acting as skipper this year.

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Water temperatures at Biological Station pier about 7 a.m for week ending May 29, 1923

May 23 – 64.8

24 – 64.6

25 – 62.3

26 – 62.3

27 – 56.5

28 – 62.

29 – 60.4

6-5-23

Biological Station Notes.

Miss Peattie of San Diego has rented a cottage for a month.

The university Engineer, Dr. [H?] B. Foster, accompanied by Mrs. Foster was a week end guest of the Crandalls. Dr. Foster gave several hours to inspection of the pier and other University Property.

James Allen is spending a two weeks leave visiting his parents. He is to join his ship U.S. S. Idaho, at San Francisco for the cruise to Seattle.

Florence Sumner has been busy for several days with Commencement activities incidental to her graduation from the Bishop's school.

On Sunday Mrs. Ritter held a cousin reunion with three visiting cousins, Mrs. Campbell, Mr. McDonald and Mrs. Bennet.

Dr. T Wayland Vaughn, an official of the U. S. Ecological Survey at Washington, D. C. was house guest of the Ritters this week.

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Water temperatures at Biological Station pier for week ending 6-5-1923 at about 7:15 a.m.

May 30 – 63.4

31 – 62.2

June 1 – 64.1

2 – 63.5

3 – 64

4 – 64.4

5 – 63.8

## Biological Station Notes.

On Sunday the Station residents gave a farewell party in honor of Drs. William and Mary B. Ritter. For some thirty years Dr. W. E. Ritter has been a leading figure in oceanographic work on the Pacific Coast and through a large part of that time his activities has been mainly in the San Diego Region. For more than ten years he has been Director of the Scripps Institution for Biological Research and is now at the age of retirement from official duties closing up his responsible connection with its work. Captain Crandall gave a brief summary of developments under Dr. Ritter's regime and presented as a memento from Station residents to Mr. and Mrs. Ritter some leather bound photographs of the scientific staff and of the Station premises. In response both Dr. W. E. and Mrs. Ritter gave personal reminiscences connected with the Institution in addition to expressions of appreciation of the associates experienced here. Mrs. Ritter departed for San Francisco this week and Mr. Ritter will follow in a few days. In a few weeks they will proceed to the International scientific meetings in Australia. La Jolla and San Diego friends have kept them busy with farewell dinners and luncheons.

Mr. Brewster and family party from Riverside are spending a few days at the Station.

Mr. Fry, secretary manager of the Los Angeles Union Ice Company, is spending this week at the Station. He is accompanied by his son and a boy friend.

The boat which has been engaged for the past month for scientific investigations near the Station is being returned to the Van Camp Packing Company this week. Weather has not been favorable for work this year and the result of use of this boat has been rather disappointing on that account. It is possible, however that the unusual weather conditions may result in records that are more than ordinarily valuable in interpreting local changes in temperatures, currents and other influences.

Dr. and Mrs. McEwen and Messrs. Moberg and Allen motored to Pasadena Saturday where the men attended a meeting of Sigma Xi, the honor scientific society, which was addressed by Professor Henry Ward of the university of Illinois who spent a summer here some years ago. The return trip has made on Sunday in time for the farewell party.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending June 19, 1923.

June 13 – 65.6

14 – 65.7

15 – 63.8

16 – 65.3

17 – 64.5

18 – 64.

19 – 63.7

## Biological Station Notes.

Mr. A. J. Basinger, State Assistant Entomologist who had charge of investigations of the Sicilian White Snail last year, inspected the Station premises last week and reported that he was unable to find a single specimen, although he had found ten specimens in formerly infested localities in La Jolla. He gave warning, however, that this is no time to relax vigilance since it is possible that he may have overlooked one or two individuals which would be quite able to start the trouble all over again if given opportunity to breed. It will probably be another year or two before eradication can be considered complete and before it will be safe to remove quarantine from the La Jolla section. This may seem irksome to some people but those who were closely connected with the infected area last owner surely are determined to make certain that the pests are entirely removed so that the campaign will not have to be repeated. All the specimens found in La Jolla had their shells sealed and were in condition to live for months if not some years in that resting condition. Poison cannot reach such snails until they are persuaded to open up by the presence of plenty water. Mr. R. R. McLean, County Horticultural Commissioner, and Mr. L. W. Fox, County Horticultural Inspector, are responsible for maintenance of quarantine and other protective plans.

Mrs. Ritter left on Wednesday of last week and Professor Ritter on Wednesday of this week. Dr. T. Wayland Vaughn of the U.S. Geological Survey, who recently visited the Station, has been appointed Director to take charge in February 1924 as soon as he can get arrangements made to close up his work in Washington. Mr. Vaughn as well as Dr. Ritter is one of the official delegates from the United States to the international scientific meetings in Australia.

Professor I. S. Hall of the Department of Bacteriology of the University of California is spending nearly two months at the Station, or rather his family is while he teaches in the Southern Branch at Los Angeles. He will spend week ends with his family here.

Professor Ritter went to Cuyamaca at the end of last week to pay a farewell visit to the wood parkers which he has been studying for some years.

The Brewsters have returned to their home in Riverside.

Dr. Barnhart has gone to Los Angeles to visit his brother who is still very ill.

Mrs. Allen and her two daughters entertained Friday evening the social club of Pacific Beach to which they belong. Mrs. Hannay furnished the music for dancing.

The San Diego Ministerial Association visited the Station last week.

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Water Temperatures at the Biological Station pier at about 7:30 a.m. for week ending June 26, 1923

June 20 -63.5

21 - 64.5

22 - 65.6

23 - 64.6

24 - 65.5

25 - 65.7

26 - 66.8

7-3-23

Biological Station Notes.

Professor Sergius Norguilis of the University of Nebraska Medical School at Omaha is doing some work in experimental zoology in the Station Laboratory this summer.

Dr. F. B. Sumner has been appointed by the University Regents as Acting Director of the Scripps Institution pending the approval of the newly elected Director Mr. T. Wayland Vaughan from Washington in February.

President Clark and family of the University of Nevada arrived at the Station this week for their customary summer residence.

Mr. Jack Hawley is staying with the Crandalls for the Summer.

Mr. Fernstrom has joined the colony for an indefinite stay.

Miss Beatty is extending her stay for two weeks.

Professor and Mrs. Esterly of Occidental College have arrived for a two months stay. Professor Esterly is continuing some of the plankton investigation which he has been doing for the Station for many years.

Mr. Chase of Hollywood is expected to arrive this week.

Dr. C. E. Humiston a prominent surgeon of Chicago, Professor of Surgery in the University of Illinois Medical College and a delegate to the meetings of the American Medical Association at San Francisco visited his wife's sister, Mrs. W. E. Allen, over the week end. He was accompanied by his two sons, Homer and Edward. All were enthusiastic about California is and hopeful of being able to come out again.

Mr. Barnhart has returned from his visit to Los Angeles.

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Water temperatures at Biological Station pier at about 8:00 a.m. for week ending July 3, 1923.

June 27 – 68.5  
28 – 68.  
29 – 67.3  
30 – 66.1  
July 1 – 68.5  
2 – 67  
3 – 68.6

7-10-23

Biological Station Notes.

Dr. Myrtle Johnson of the Biology department of San Diego Normal School who has been working for several years on a guide book to sea shore animals of the Pacific Coast has arrived at the Station to continue her work this summer.

Various members of the colony united in conducting a beach party on Monday night. Several covers to the Station were included in the festivities.

Mr. and Mrs. Filbert are visiting Mr. Michael for a few days.

Mr. Chase and family arrived on Sunday. He is a contractor in Hollywood.

Dr. Mergulis is investigating the composition and characteristics of the blood of arthropods such as crabs, shrimps and lobsters. He will probably give most attention while here to the lobster.

Dr. Sumner left on Wednesday on a business trip to Berkeley.

Mr. and Mrs. Tobyn and family party of Yreka are here for a few days.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending July 10, 1923.

July 4 – 69.0  
5 – 67.5  
6 – 66.8  
7 – 67.6  
8 – 67.4  
9 – 67.5  
10 – 67.7

## Biological Station Notes.

Mrs. Livingstone and her two children are visiting her sister Dr. Myrtle Johnson.

Mr. C. L. Fleming has gone to Cuyamaca with Dr. T. C. Abbot Director of the San Diego natural History Museum, to give talks at the camp of the Y. M. C. A. boys.

Miss Beattie has returned to San Diego.

Mrs. Leslie is visiting her daughter Maurine.

Dr. Eigenmann, Professor of Zoology in Indiana University, visited the Station last week. He was accompanied by Mrs. Eigenmann, This was their first visit to La Jolla Since the Laboratory was located on Bath House Point and they were both very enthusiastic in comment on improvements in both La Jolla and In Station facilities.

President Bird of Occidental College visited the Esterleys on Sunday. His Secretary, Miss Criffitas, spent the week end with them.

The Chases visited Hollywood over the week end.

The Morgulises were guests of the McEwens on a motor trip to Escondido Sunday.

The McEwens are spending the week at Lake Hodges where Dr. McEwen is conducting some experiments.

Mr. R. R. McLean, county Horticultural Commissioner, has taken a cottage at the Station for a time.

Dr. Ivan C. Hall visited his family over the week end. Dr. Stone, Los Angeles County Health Officer, visited the Halls over the week end.

Harry Bledsoe and family party visited the Station Saturday.

Mr. Dobyn and family have returned to Yreka.

Dr. Sumner has returned from his trip to Berkeley.

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Water temperatures at the Biological Station pier about 7:30 a.m. for week ending July 17, 1923.

July 11 – 68.5  
 12 – 68.6  
 13 – 69.6  
 14 – 70.  
 15 – 70.5  
 16 – 69.3  
 17 – 68.5

## Biological Station Notes.

Jack Ross visited his mother over the week end.

Mrs. P. S. Barnhart and son Ray are spending part of the week with Mr. Barnhart, while the rest of the family look after the home in Chula Vista.

Dr. McEwen and Mr. Moberg spent three days of last week doing some experimental study of evaporation at Lake Hodges.

The Belknaps have a new Nash and the Fernstroms a new Chevrolet.

The Gans family rented a cottage through August. The daughters will spend most of that time at the station and the parents will be out as often as circumstances permit.

Miss Leslie's mother and brother have joined her for a time.

Rev. M.N. Smith of Pasadena has arrived with his wife and daughter for a stay through August.

Mr. Popenoe of the Coachella Valley date colony is visiting the Chases. He is accompanied by his wife and baby.

Dr. R. S. Reed and wife of the Riverside Citrus Station have arrived for a stay through August.

Dr. Ivan C. Hall came down from Los Angeles to spend the weekend with his family.

Mrs. McEwen was hostess for a picnic party which spent a very pleasant evening at Torrey Pines last week. The moon was just right to make the Park appear at its best and this added materially to other pleasures of the occasion. Nearly every resident of the colony attended and there was a total of fifty two persons present.

The Sumner family spent a few days camping at La Mesa last week.

Saturday morning Mr. Allen was delighted by a visit from school friends of a earlier days at Springfield, Mass. He had not seen them for twentyseven years. One was Dr. James H. McCurdy, head of the department of Physical Training in the Springfield Y.M.C.A. College, a major official of the Y.M.C.A. in athletic and recreation work Overseas, and an authority on physical education in this country especially in the physiology of exercise. Dr. McCurdy is giving a course of lectures in the Summer Session of the Southern ranch of the University of California Los Angeles. He was making a week end trip to San Diego as a guest of Mr. C. H. Price, a former director of physical training who is now in construction business in Los Angeles.

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Water Temperatures at the Biological Station pier at about 7:20 a.m. for the week ending July 31, 1923.

July 25 – 70

26 – 70.4

27 – 69

28 – 68.7

29 – 67.2

30 – 69.1

31 – 70

## Biological Station Notes.

Dr. Johnston has been enjoying a short visit from her brother who has just returned from several months in Central America after a residence of several years in Chicago where he was employed by Western Electric Company. On Monday he left for Los Angeles where he has a position with the Telephone Company.

Miss Munday and Miss Kelso have arrived from Pasadena for a stay with Dr. Johnston. Miss Munday is a teacher in the Pasadena High School and Miss Kelso is Vice Principle of one of the Junior High Schools.

Mrs. Barnhart has returned home to Chula Vista.

Miss Leslie gave a party to some of the young people of the Colony on Friday of last week.

Mr. Popenoe, just before leaving for his home in the Coachella Valley, gave an extremely interesting talk in the Library for residents of the colony on Wednesday of last week. He gave brief history of cultivation of the date palm in the world and in this country, explained many of its interesting characteristics, told about numerous varieties, described methods of cultivation and handling of the fruit and discussed problems of breeding.

Dr. McEwen spent two days of last week at Sweetwater performing some evaporation experiments.

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Water temperatures at the Biological Station pier at about 7:30 a.m. for the week ending August 7, 1923.

August 1 – 70  
2 – 70.6  
3 – 70  
4 – 70.8  
5 – 70.6  
6 – 70.2  
7 – 69.8

## Biological Notes

There was quite an exodus from the Station Monday morning. Dr. Sumner's brother and family returned to Pomona after a visit over the week end. Dr. and Mrs. Esterly left at about 6:45 for their home at Eagle Rock near the campus of Occidental College. Dr. Hall and family departed at about 7:15 for their home in Berkeley.

Dr. Serguis Morgulis and family leave this week for Pacific Grove and other northern points before going home to Omaha. On Monday afternoon Dr. Morgulis gave a talk at the Station seminar in which he gave some interesting and important information about insulin and the craze for using it in efforts to cure diabetes. He says it is in the sense a cure but only an expedient for tiding the patient over a crisis. In his opinion diabetes still remains one of the incurable diseases, but he adds the explanation that there are certain conditions which superficially resemble diabetes which may be cured or which are not dangerous.

Mrs. Essenberg has arrived in New York on her way to La Jolla from her year in Europe. She is visiting Callows for a time.

Dr. Mark Hanna and Mr. Horte, the geologists, who have been working in this region at various times in the last two or three years, visited the Station Monday.

Dr. McEwen again visited Sweetwater for experimental work on evaporation this week.

On Sunday evening Mrs. Sumner gave a farewell dinner in honor of Dr. and Mrs. Ivan Hall to which Mr. and Mrs. Allen were also invited.

A representative of the new Steinhart Aquarium in Golden Gate Park, San Francisco came down at the week end to get a shipment of live fish of this region which Mr. Barnhart had been collecting for that purpose. He had a number of specially constructed tanks which were to be connected with the salt water system on the steamer so as to give the captives plenty of freshwater on the way north. The lot, consisting of about forty La Jolla Gold fish a number of "Kels", and some kelp fish were loaded into the tanks about four o'clock Sunday morning and rushed down to the steamer at San Diego.

Water temperatures at Biological Station pier at about 7:30 a.m. for week ending August 14, 1923.

August 7 – 69.8  
 8 – 70.8  
 9 – 71  
 10 – 70.3  
 11 – 71  
 12 – 70.2  
 13 – 69.3

## Biological Station Notes

At the suggestion of Dr. Vaughan, the new Director who is to take charge in February. Dr. Ross has installed on the pier a small pump operated electrically which keeps a constant stream of water flowing through a small basin from which its temperature is automatically recorded by a thermograph. Dr. Vaughan wished to have this run for a month in order to see what variations in temperature occurred at the surface of the sea in such a location as this.

Miss Ord and Miss Harper visited the Gans girls last week.

Dr. Myrtle Johnson has had a house full of visitors at the week end, including her sister and family. Miss Katharine Gware of the San Diego State College and Miss Gertrude Peirson of Pasadena.

Dr. Christine Essenberg returned to the Station on Monday accompanied from Los Angeles by her little niece, Hildegard Adamson. Dr. Hean and family visited with her for a few days and then returned to their home in Fresno where Dr. Hean is head of the Biology Department in Fresno High School. Dr. Essenberg reports many interesting and pleasurable experiences in her trip to Europe this past year which she explains delightfully to her friends. She enjoyed the winter in Constantinople in spite of the bad reports of that region so prominent in the American Press. These, she says, must be taken with caution.

Mrs. Seymour and son visited the Chases over the week end.

Dr. Serguis Morgulis and family expect to spend three weeks at Pacific Grove before proceeding homeward to Omaha.

Dr. Batcheller has gone to Oregon to attend some meetings concerned with walnut culture.

Since his arrival last week Dr. Mark Hanna states that the geological studies made by himself and Mr. Vorbe have been very successful and that they will probably be able to finish them on this trip.

President Clark and family of the University of Nevada began their return journey by automobile on Monday morning. They expect to go rather leisurely so as to enjoy the scenery along the route.

Dr. and Mrs. Sumner went to Los Angeles last week to make arrangements for their daughter Florence to attend the Southern Branch of the State University.

Dr. McEwen and Dr. Cummings have gone to Berkeley for the final examination of Mr. Cummings for the Ph.D. degree.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending August 21, 1923.

August 15 – 69.7  
16 – 70.5  
17 – 70.2  
18 – 70.4

19 – 70.7  
20 – 70.5  
21 – 70.8

## Biological Station Notes

The Belknaps are moving to San Diego this week.

Dr. Batcheller and family are returning home to Riverside this week.

The Gans family expects to return to San Diego next Monday.

Dr. H. B. Frost, of the Riverside Citrus Experiment Station, expects to arrive with his family about the end of this week.

Two astronomers from the Mount Wilson Observatory, accompanied by family parties expect to arrive about September 1 for a twelve days stay. They are Dr. Nicholson and Mr. Pettit.

Rev. Smith and family are returning home to Pasadena this week.

Dr. Essenberg left on Monday for a business trip to the University at Berkeley.

Dr. Sumner and Mr. Huestis left on Saturday of last week on a trip by rail to Berkeley where Mr. Huestis is to take his preliminary examination for the Ph. D. degree.

A letter from Mrs. Ritter at Tahiti says that they are very much enjoying their trip to Australia with very fine sailing weather so far. She also says that they have not forgotten La Jolla and the friends there.

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Water temperatures at Biological Station pier for week ending Aug. 28, 1923 about 7:30 a.m.

August 22 – 70.8

23 – 71.4

24 – 71.2

25 – 71

26 – 70

27 – 70.5

28 – 69.5

## Biological Station Notes

Dr. Frost has arrived from Riverside for a stay of a week or two. He is accompanied by his family.

Prof. S. R. Williams of the Department of Zoology of Miami, University, Oxford, Ohio has arrived for a stay of some months during which he will make use of Station facilities for some of his zoological investigations.

Miss Kelso has returned from Pasadena and is again stopping with Dr. Johnston.

Dr. S. H. Nicholson of the Mount Wilson Observatory has arrived with his family party, to remain until after the eclipse.

Prof. R. P. Bigelow of the Department of Zoology of the Massachusetts Institute of Technology at Boston ("Boston Tech") is spending a few days at the Station.

The Chases have moved to La Jolla.

Mr. and Mrs. Shain have returned from their vacation trip to San Luis Obispo and vicinity. In spite of a slight accident to his hand Mr. Shain is very enthusiastic about the fishing and other pleasures of the trip.

The McEwens have returned from their trip to Berkeley.

Prof. H.S. Fawcett of the Riverside Citrus Station has taken the cottage just vacated by Prof. Vaile of the same place.

Prof. Martin of Stanford University is here for a few days.

Acting Director J. P Barrett of the Riverside Citrus Station is here on a vacation with his family.

Miss Sherrigan left on Wednesday, returning to Los Angeles.

Prof. Pettit of the Mount Wilson Observatory has arrived with a family party for a stay of a few days.

Water Temperatures at Biological Station pier at about 7:30 a.m. for week ending Sept. 4, 1923.

Aug.	29	–	69.8
	30	–	69.8
	31	–	70.8
Sept.	1	–	67.6
	2	–	67.4
	3	–	67.8
	4	–	66.8

## Biological Station Notes

Dr. and Mrs. Bigelow left on Tuesday morning for their home in Boston.

Dr. Vaile and Dr. Barrett returned with their families to Riverside on Tuesday.

Miss Kelso returned to Pasadena this week to prepare for the school work of this year.

Miss Newberry and party from Mount Wilson Observatory returned to Pasadena on Tuesday.

Dr. Nicholson and Dr. Pettit returned to Pasadena with their families this week.

Prof. Martin and family has returned to Stanford University.

Mrs. Essenberg returned from Berkeley in time to see the eclipse. Her niece returned to Los Angeles on Tuesday.

Prof. Ulrey of the Department of Zoology of the University of Southern California visited the Station Sunday and gave special attention to the oceanographic investigations which are in progress.

Dr. S. S. Perry visited the Station Sunday.

Professor Kincaid of the Department of Zoology of the University of Washington was a visitor on Saturday forenoon.

Prof. Paul S. Welch of the Department of Zoology of the University of Michigan and Secretary of the American Microscopical Society called to see Mr. Allen Saturday morning and spent some time viewing Station equipment. He was accompanied by his wife and her parents. Prof. Welch and Mr. Allen were in the University of Illinois together one year.

Dr. Sumner, Dr. McEwen, Mr. Fleming, Mr. Crandall and Mr. Allen expect to attend the scientific meetings at Los Angeles next week. They will present a number of papers before various sections of the meetings.

## Biological Station Notes.

On Tuesday Mr. Guy L. Fleming and Mr. Thackeray of the U.S. Department of Agriculture left for a trip of investigation in the Santa Rosa Mountains, entering from the desert side. The special object of study at this time is the Parry Pine which has its northern most limit in that locality. The Parry Pine is mainly found on the peninsula of Lower California and, next to the Torrey Pine, is the rarest of the pines. It is probable that Mr. Fleming will attempt to plant this pine in or about Torrey Pines Park for exhibition with other rare plants which he is assembling.

Mr. D. S. Basquim and wife have taken up residence at the Station for the winter.

Mrs. Storts is visiting in Los Angeles. Mr. Storts drove up with her at the end of last week but returned to the station Sunday night.

Post cards have been received from Mr. Michael announcing his safe arrival at La Porte, Indiana.

The Bennetts have returned to their home in Arlington.

On Monday morning Dr. and Mrs. Reed left for their home in Riverside. Dr. Reed had been absent most of last week in connection with his duties as an official at the Los Angeles scientific meetings.

Members of the Scientific staff of the Station who attended the Los Angeles meetings were Dr. Sumner, Dr. Essenberg, Dr. McEwen, Captain Crandall and Mr. Allen. A number of papers were given at various section meetings by these representatives. Mrs. Sumner and Mrs. McEwen also attended the meetings.

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Water Temperatures at Biological Station pier about 7:30 a.m. for week ending Sept. 25, 1923.

Sept.	19	–	67.5
	20	–	67.7
	21	–	68.4
	22	–	67.5
	23	–	68.1
	24	–	67.3
	25	–	66.2

## Biological Station Notes

Captain M. C. Crandall recently explained the methods of sonic soundings to the Parker School and later to the University Club of San Diego. He spent of the earlier part of the month in Berkeley in consultation with the Business offices of the University and in other activities. On Monday of this week he represented the Station at the birthday celebration of George W. Marston in San Diego. Mr. Marston was a former Director of the Biological Station.

Dr. Sumner and Mr. G. I. Fleming spent the week end in the Santa Rosa Mountains.

Dr. T. Wayland Vaughan, the new Scientific Director of the Station expects to arrive here on January 30, 1924.

The Ritters are expected back to California about December 1.

Mr. Michael is planning to return to La Jolla about November 15.

Mr. Moberg attended the American Legion convention in San Francisco last week and is staying some time in Berkeley doing some special work.

Mrs. L. H. Gilbertson and daughter visited the Shains and Storts for a few days last week. They were on their way home to Snohomish, Washington after a six months tour of the States.

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Water temperatures at Biological Station pier for week ending October 23, 1923. About 7:30 a.m.

Oct.	16	–	64.
	17	–	64.8
	18	–	65.3
	19	–	65.9
	20	–	65.7
	21	–	66.
	22	–	66.
	23	–	65.5

## Biological Station Notes

Dr. Marmer, of the Division of Tides and Currents of the U.S. Coast and Geodetic Survey, recently visited the Station and made preliminary arrangements for the installation of regular and special tide gauges for a permanent series of observations. The intention is to make this the basic station for observation of ocean tides in this region. The San Diego (Point Loma) station being retained for bay work. Installation will probably occur in December.

On Wednesday night Mrs. McEwen acted as hostess for a Halloween party for members of the colony.

Mrs. Johnson visited the Station on Monday.

On Saturday Dr. C.G. Abbott, Director of the San Diego Natural History Museum, acted as leader for a party of 135 members of the San Diego Natural History Society on a visit to the Station. Captain Crandall acted as local guide and lecturer.

A lively new daughter has arrived for permanent residence in the Huestis family.

Miss Maurine Leslie went to Pasadena on Saturday to attend the San Diego – Pasadena football game.

Mr. and Mrs. Martin have taken residence at the Station for the winter. Mr. Martin is working for the U.S. Department of Agriculture in the installation of the new experimental station at Torrey Pines.

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Water temperatures at Biological Station pier about 7:30 a.m. for week ending October 30, 1923.

Oct.	24	–	64.8
	25	–	64.9
	26	–	65.3
	27	–	64.9
	28	–	65.3
	29	–	64.9
	30	–	64.6

## Biological Station Notes.

Mr. and Mrs. Radcliff and Mr. Hemingway have taken a cottage for an indefinite stay at the Station.

Mr. Moberg will remain in Berkeley until January 1.

Mrs. Huestis and the new baby are getting along finely.

Dr. Roy L. Moodie of the Department of Anatomy of the University of Illinois Medical School at Chicago as arrived for a stay of a month or more. He is accompanied by his chauffeur. Dr. Moodie has for some years given a great deal of attention to evidences of disease in fossils and even two or three years ago had accumulated a surprisingly long list of diseases and accidental injuries to animals living some millions of years ago. He has just come from several months work on the La Brea fossils at Exposition Park, Los Angeles where he has found enormous quantities of excellent material. In most of these specimens the skeletons show the effects of disease and accident just as clearly as similar specimens amongst our animals of the present day.

Captain Crandall and Mr. Barnhart are spending this week end in San Pedro collecting Sea Urchins and other material for the Station's supply department.

Dr. and Mrs. Sanford and two friends are spending this week end at the Station. Dr. Sanford is an Astronomer at the Mount Wilson Solar Observatory.

The Sumners entertained Dr. H. C. Bryan at dinner on Tuesday evening.

A large number of Station residents made a special trip to hear Dr. Bryant's lecture at the La Jolla Community House Tuesday evening.

Water temperatures at Biological Station pier about 7:30 a.m. for week ending Nov. 6, 1923.

Oct.	31	–	64.2
Nov.	1	–	63.5
	2	–	63.9
	3	–	63.9
	4	–	63.8
	5	–	62.8
	6	–	61.9

## Biological Station Notes

Jack Ross visited his mother and brother over the week end.

Dr. E. L. Michael is visiting with Mr. Barnhart.

Mrs. Huestis has returned home.

Miss. Maurine Leslie visited Los Angeles over the week end.

Mr. Bowne has bought a Chevrolet. Horseback riding was too slow.

James Allen visited his parents and sisters Sunday. He says that he does not intend to re-enlist in the Navy but is thinking of locating in Los Angeles. He was accompanied on this trip by his friend MR. Omar Foote.

Mr. and Mrs. Cosby have been visiting their s one Del Mar Cosby who is assisting Dr. Moodie in some of his work.

Mrs. Martin's brother and family visited the Martins Sunday.

Dr. S. R. Williams gave a talk at the seminar last week in which he explained some habits and relationships of California millipedes and centipedes. He says more Myriapods have been reported from California than from any other locality in the world. Another boost for California.

Miss Catherine Tilden of the University of Southern California arrived last Thursday for the purpose of getting some special information about the work in oceanic plankton and in hydrography being done at the Station with a view to beginning similar work in the Los Angeles region. She was accompanied by her mother and by a friend, Mrs. Reed. Mrs. Reed returned home on Sunday with her son who called for her. Miss Tilden and her mother returned on Tuesday.

Water temperatures at Biological Station pier at about 7:30 a.m. for week ending Nov. 20, 1923.

Nov. 14 – 63.4  
 15 – 63.7  
 16 – 63.4  
 17 – 62.  
 18 – 62.1  
 19 – 62.4  
 20 – 63.4

## Biological Station Notes.

Mr. G. L. Fleming has gone to Cuyamaca Mountain for a three weeks stay for purposes of biological survey and collecting. He expects to bring some kinds of plants to Torrey Pines Park where he is rapidly assembling representative types from all sections of Southern California and especially from different parts of San Diego County.

Captain Crandall gave a talk to the optimist's Club on Tuesday.

The Cosby's have returned to their home in Santa Monica.

Dr. R. L. Moodie gave a talk before the seminar last Friday in which he described some of the more conspicuous evidence of disease in North America and South America Before the coming of white men. The most dreadful scourges of to-day, tuberculosis and syphilis, were unknown in the Americas before the voyage of Columbus. Both were and are especially destructive in the native peoples. ON the other hand there were some diseases in the Americas, particularly in the high Andean mountains which have not been found elsewhere. These, however, were not especially destructive. Trephining (cutting out pieces of skull) was practiced in Peru in a way similar to that in certain parts of Europe and one or two other localities far removed from each other.

Dr. Moodie went to Los Angeles and Venice on Saturday with the expectation of bringing his family back to the Station to spend Thanksgiving.

Florence Sumner expects to spend Thanksgiving at home.

Miss Leslie closes up her work at the Station this week.

Mr. Woodward is doing some special work in assisting Dr. McEwen. This will probably keep him here several weeks.

Mr. Huestis is informed that this thesis for the Ph.D. degree has been accepted.

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Water temperatures at Biological Station pier at about 7:30 a.m. for week ending Nov. 27, 1923.

Nov. 21 – 63.1  
 22 – 63.1  
 23 – 63.3  
 24 – 63.2  
 25 – 63.3  
 26 – 63.7  
 27 – 63.2

## Scripps Institution Notes.

The New director of the Scripps Institution, Dr. T. Wayland Vaughan, arrived from Washington early last week and assumed active duty on February 1. Dr. Vaughan has been for many years prominent in the United States Geological Survey and in recent years he has been a leader in certain lines of oceanographic work, notably those dealing with the origin and accumulation of sediments. He is also regarded as an authority on corals. In addition to his administrative work at the Scripps Institution he expects to be very active in study of various problems of sedimentation. Mrs. Vaughan and their daughter came at the same time as Dr. Vaughan and the family has been very busy for the past week in getting unpacked and settled in their new home. The daughter has already begun attendance at the Bishop's School and the whole family will soon be ready to take their part in the life of La Jolla. On Wednesday evening a reception was given the family members of the colony for the double purpose of getting acquainted with and of welcoming them.

The U.S.S Guide of the U.S. Coast and Geodetic Survey began at the Institution last week the installation of apparatus for the new method of determination of position at sea by the use cable and radio. A shore party in charge of Mr. Nies was established in one of the Institution cottages and it has been assisted from time to time by larger parties from the ship. Last week was mostly occupied in transporting apparatus to the pier and in installing the antenna and other equipment. Early this week the ship anchored a short distance off the pier and began the work of laying the cable which had been brought out last week. By using the pier for a land station it will probably be possible to reach sufficient depth of water with only about 2000 feet of cable. The outer end of this cable will be connected with a special apparatus for picking up sound in water at the known depth and distance and for conveying it to the shore equipment on the pier where appropriate records will be made and whence radio signals will be given to the ship. From similar installations (probably at Oceanside and Capistrano) the ship can get signals for comparison so that when in any neighboring locality it explodes a bomb under water the signals from the three localities (whose exact latitudes and longitudes are known. Will make it possible to determine exactly where the ship is, even in heavy fog. This method of work has not yet passed the experimental stage and the Guide has been sent to this region because of the very favorable oceanic conditions for experimental work. Her officers are confident that they will here be able to complete the necessary experiments in a few months at most. Since the Guide is also equipped with some sonic depth finding apparatus her officers think that it may soon be possible, without leaving her radio room, to at any time get both depth and position. Such an achievement, though meaning little or nothing to a landsman, is one of the most wonderful and most important in the realm of science, and particularly in oceanographic science.

Mr. and Mrs. Cooper have been employed by Dr. Vaughan for work about the Director's residence.

Mr. Gates' mother and sister have arrived to live with him.

Mr. Moberg returned to the Institution on Tuesday. He has been at Berkeley for the last few months doing special work and on his thesis for the Ph.D. Degree.

Mr. Storts is quitting his work at the Institution next week. He and Mrs. Storts expect to attend the big barbeque of The Times radio fans on the seventeenth and they may stay in Los Angeles permanently.

There has been a good deal of excitement at the Institution the last few days due to the finding by Dr. Williams of a large fossil bone embedded in a rock at the foot of the cliff a little north of the pier. It can only be reached at low tide and there has not yet been enough study to determine the exact character of the find.

Dr. Moody returned to the Institution about two weeks ago and will remain here for some time, possibly until ready to make a trip into the desert for some special studies.

Dr. Sumner returned last week from an extensive trip the Atlantic seaboard where he visited old friends as well as a number of laboratories and educational institutions.

Florence Sumner is home on a short vacation this week. She is accompanied by her roommate.

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Water temperatures at Scripps Institution pier at about 7:30 a.m. for week ending Feb. 5, 1924

Jan.	30 – 58.5
	31 – 58.5
Feb	01 – 58.5
	02 – 57.9
	03 – 58.3
	04 – 58.5
	05 – 59.0

## Scripps Institution Notes.

Last year, shortly before closing up his work as Director of the Scripps Institution, Dr. Ritter told members of the scientific staff that he confidently expected the Institution to soon work into a position as one of the leading oceanographic institutions of the world. He mentions particularly the new lines of expansion to be added by the incoming Directors, Dr. Vaughan, and called attention to the fact that the ordinary understand of the character of the Institution is broad enough (not, for example, the wide range of activities of the Smithsonian Institution) but he also thinks that the local name of "Biological Station" is misleading because too narrow. He suggests that it would be better to have it known as largely as possible by the official name. Since every increase in range and effectiveness of Institution work gives added cause for pride and interest of La Jolla people. It seems only fair to call their attention to the fact that they can aid its progress by using the name which best indicates its broad scope.

Dr. Walter Granger of the American Museum of Natural History in New York, the famous explorer who discovered the dinosaur eggs some millions of years old, visited the Institution last week in company with Dr. Abbott and Dr. Baker of San Diego.

Dr. Loomis, the well known paleontologist of Amherst College, accompanied by his family, visited Dr. Vaughan one day last week. After inspection of the fossil bone recently found by Dr. Williams, he said that it belonged to some ancient proboscidian, (elephant like) animal. He agreed with Dr. Vaughan, Dr. Moody and other experts in saying that its presence there did not necessarily indicate that more bones might be found anywhere near.

Mr. Hecht and Mr. McComb, officers and scientist with the U.S. Coast and Geodetic Survey Steamer Guide have taken a cottage at the Institution for a time while they are testing out the new equipment for exact location of a vessel at sea. In a conversation yesterday Mr. Hecht remarked that the Scripps Institution had done a great deal of oceanographic work which was so directly useful to them that they had been able to begin technical experiments without the usual delay in investigating local hydrographic conditions. He also said that the Coast and Geodetic Survey appreciated the fact that Southern California region was one of the most favorable in the world for oceanographic study and that the Survey kept this region definitely in mind for difficult experimental work.

On Wednesday another Mr. Cooper arrived with his wife. He is to work for the Institution in place of Mr. Storts who leaves this week.

Mr. F. W. Wood visited the Institution Sunday and said that he had decided to move to La Jolla from Los Angeles if he could make satisfactory local arrangements. He recently bought a yacht at Wilmington and is preparing to go after fish when they refuse to come to him.

Water Temperatures at Scripps Institution pier for week ending Feb. 13, 1924. Taken at about 7:30 a.m.

Feb.	7 – 58.8	Feb.	10 – 58.7
	8 – 58.5		11 – 58.7
	9 – 58.5		12 – 58.7
			13 – 59.2

## Scripps Institution Notes.

Dr. O. R. Williams and his family are starting this week on an auto trip to San Francisco. In order to see as much as possible of California before returning to Ohio they expect to follow the Coast route one way and the San Joaquin Valley route the other. They will probably stop at the Institution for a few days on returning from the north.

On Sunday last Mr. G. L. Fleming accompanied Mr. Dyar to Cuyamaca to look over sites for a fine summer home and other building on his big ranch. Mr. Fleming reports that Mr. Dyar is interested in conversation policies and will follow them largely, if not wholly, in handling his mountain properties. Mr. E. Michael, brother of C.L. Michael, who recently came from Indiana to live in Long Beach died a few days ago. Interment was to be in Indiana but Institution people are not informed as to whether Mr. C. L. Michael made the trip to Indiana.

Mrs. Christine Essenberg visited her brother in Los Angeles over the week end.

Dr. Woody returned to Venice to join his family last week but the whole family expects to return here March 1 for a stay of about six months.

On Saturday Dr. Vaughn visited Sweetwater dam in company with Dr. McEwen who made the trip to check up some investigations which he has been conducting there.

Water temperatures at Scripps Institution pier at about 7 a.m. for week ending Feb. 19, 1924.

	Celsius	Fahrenheit
Feb.	13 – 15.0	59.0
	14 – 14.8	58.7
	15 – 14.9	58.9
	16 – 15.2	59.4
	17 – 15.2	59.4
	18 – 15.2	59.3
	19 – 15.2	59.4

## Scripps Institution Notes.

In preparation for a business trip to the President's office at Berkeley, Dr. Vaughan is closely occupied with a survey of Institution affairs. A program of cooperation in several lines of oceanographic investigation is being worked between the Institution and the U.S. Coast and Geodetic Survey, and part of the program has been agreed upon. Through the courtesy of officers of the GUIDE Dr. McEwen and Mr. Moberg will join her for two or three days of oceanographic work next week.

The McEwen family visited Los Angeles and Long Beach over the week end and attended the big Iowa picnic at Long Beach on Friday.

Dr. Sumner visited Los Angeles and Eagle Rock at the week end.

Mr. Crandall made one of his periodic trips to Santa Barbara and intermediate pier and kelp bed points last week end.

Mr. Nies has rejoined the GUIDE and Mr. Tatchell, another officer, has taken charge of the shore party on duty at the Institution pier.

An auto party from Pasadena High School spent the week end in one of the Institution cottages this week.

Mr. I. W. Larrimore of San Pedro, one of the prominent Y.M.C.A. workers of Southern California stopped a few minutes at the Institution last week for a little visit with Mr. Allen.

Mr. Morgan and family has join the Institution colony.

The Storts have returned from their visit to Los Angeles, during which they attended the big barbeque. Mr. Storts says that the crowds were so great that thousands were turned back without ever reaching the site of the barbeque. In spite of very careful organization for traffic control and large numbers of special traffic officers the stream of traffic was stopped for an hour at one time while trying to pass the Saugus tunnel.

Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending Feb. 26, 1924.

Feb.	20	–	59.9
	21	–	59
	22	–	58.9
	23	–	58.6
	24	–	58.4
	25	–	58.7
	26	–	58.6

## Scripps Institution Notes.

The new Director, Dr. T. Wayland Vaughan, is just closing up a series of co-operative arrangements with the U.S. Coast and Geodetic Survey whereby the use of certain laboratory resources of the Scripps Institution are exchanged for the use of certain collecting resources of the Survey. The major points under immediate consideration are as follows: The Institution is to make salinity determination of all water samples collected by the Survey on the Pacific in recent years. The Survey steamer "Guides" is to take serial temperatures and water samples and a sample of the bottom deposit once each week and at a station in the basin east of San Clemente Island. The serial samples are to be taken at very short depth intervals from surface to bottom in order to show characteristics of water at different levels. The "GUIDE" is also to take similar samples on two lines from the above station to La Jolla and Oceanside at 5, 10, 20 mile intervals on some single trip. Miscellaneous series of the same kinds of samples are to be taken as opportunity appears in connection with the "GUIDE'S" routine work of sounding. Another series is the obtained from the enclosed basin 35 miles west of Coronado Islands. It is also expected that the Survey Seattle and Unimak this summer on the regular Alaskan cruise.

Commander Neck, Dr. McEwen and Mr. Moberg doing some field work aboard "GUIDE" this week.

Dr. Roy L. Moody of the University of Illinois Medical School has brought his family to the Institution for a stay of some months.

Mrs. Spigney of Los Angeles visited her sister, Mrs. McEwen, this week.

Dr. Herbert Osborn, Research Professor of Zoology at Ohio State University visited the Institution last week.

Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending March 4, 1924.

Feb.	27 – 58.8
	28 – 58.8
	29 – 59.2
Mch.	1 – 59.0
	2 – 59.3
	3 – 59.3
	4 – 58.8

## Scripps Institution Notes.

Dr. Vaughan announces that residents of La Jolla or other friends of the Institution are welcome at the weekly meetings, called seminars, which are held for more or less informal discussion of scientific matters in which Institution people are interested or in which visitors are interested. Some of these meetings have proved very enjoyable to such members of the "general public" as have taken the trouble to attend. The regular time of meeting is on Fridays at 3:30 p.m. This Friday two officers and scientists of the steamer "GUIDE" are to give talks in the line of their work. Commander Heck will give a general explanation of the work and achievements of the United Coast and Geodetic Survey and Mr. M'Comb will talk about magnetism and Earthquakes.

The steamer "GUIDE" of the U.S. Coast and Geodetic Survey has finally got the cable and radio equipment at the shore stations at the Institution and at Oceanside synchronized and is this week firing depth bombs to test the accuracy of their methods of finding the position of their vessel at sea.

Prof. S. R. Williams and family spent the week end at the Institution on their return from a motor trip to San Francisco. On Monday they began the homeward journey to Oxford, Ohio by way of Arizona, New Mexico, and Texas.

Several former summer residents at the Institution have already engaged cottages. President Clark and family of the University of Nevada will return for their usual stay. Dr. Esterly of the Occidental College will continue some of the work already begun at the Institution and Dr. Reed of the Riverside Citrus Station will spend his vacation here. Mrs. Esterly and Mrs. Reed will accompany their husbands. The Rev. Merle Smith and family of the First Methodist Episcopal Church of Pasadena will spend their vacation here. Dr. C. N. Child of the University of Chicago is coming for some weeks of work in the Institution laboratory.

Water temperatures at Scripps Institution pier at about 7:15 am. For week ending March 11, 1924.

March 5 – 58.7  
 6 – 59.0  
 7 – 58.9  
 8 – 59.4  
 9 – 59.7  
 10 – 59.1

## Scripps Institution Notes.

Dr. Vaughan will represent the Scripps Institution at the Charter Day Exercises and the Inauguration of President Campbell at the Greek Theater in Berkeley on Saturday. He left for Berkeley on Tuesday in order to go over matters of Institution business with various University Officials.

Captain Lukens of the U.S. Coast and Geodetic Survey steamer PIONEER has just written to Dr. Vaughan offering to continue in Alaskan waters this summer the excellent series of collections begun by the PIONEER last year. This year it is probable that he will be able to take water samples and bottom samples in addition to the plankton samples such as were taken last year.

Commander Heck and Mr. M'Comb of the U.S. Coast and Geodetic Survey steamer GUIDE have left their cottage at the Institution in preparation to leaving this Coast for their regular assignments. Commander Heck will return to regular duty in the Washington headquarters of the Survey and Mr. M'Comb will proceed to his regular station in Honolulu after visiting his home in Nebraska.

Mr. Huestis and family are to return soon to spend the summer at the Institution where Mr. Huestis is to continue work with Dr. Sumner.

Dr. Roy L. Doodie and Mr. Fleming are spending this week end on a collecting trip in the Cuyamaca Mountains.

Mr. C. H. Michael visited the McEwens last week.

Mr. Bowne is now living in San Diego.

Mrs. Sumner has word from her sister in New York that their mother is recovering from her recent serious illness.

## Scripps Institution Notes.

Dr. Vaughan returned from Berkeley on Monday after representing the Institution at Charter Day exercises and the Inauguration of President Campbell on Saturday.

This Friday (March 23) at about 2:30 p.m. the Institution Seminar (the weekly meeting for general discussion of scientific problems) will have an unusually comprehensive program of wide popular interest. Captain Heck, of the U.S. Coast and Geodetic Survey will discuss "Methods of Ascertaining the Configuration of the Ocean Floor". Director Vaughan, of the Scripps Institution, has the subject of "The Causes of differences in Relief of the Ocean Floor". Prof. Wood, of the Mt. Wilson Observatory, is to explain "Seismology in its Relation to the Margins of the Ocean and the Configuration of the Ocean Floor." All persons who care to hear popular discussion of these important topics are cordially invited to attend the meeting.

The first trials of the bombs by the GUIDE in testing out the cable and radio devices for position finding were not fully satisfactory. After a delay of a few days the bombs are being used again this week. Mr. Bowie is now the radio officer in charge of the land stations included in this work. Captain Parker, who has general charge of the Coast and Geodetic Survey work on the Pacific Coast is expected to be here this week.

Mr. P.S. Barnhart has returned to work after a few days absence on account of illness.

On his recent cruise in South American waters on his steam yacht, the OHIO, Mr. E.W. Scripps obtained for the Institution a valuable series of collections of water samples and plankton catches. These have just been delivered to the Institution for study. It is expected that collections off the Peruvian Coast and in the region of the Galapagos Islands will be especially interesting because of the strong influence of currents from Antarctic regions on oceanic conditions there.

In order to observe the immediate effect of strong wind on water conditions Dr. McEwen visited Sweetwater reservoir last week end.

Professor Dixon and family party from the California Institute of Technology at Pasadena visited Dr. Essenberg over the week end.

Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending Mch. 25, 1924.

Mch.	19	–	58.9
	20	–	59.4
	21	–	57.9
	22	–	
	23	–	58.6
	24	–	58.5
	25	–	58.5

## Scripps Institution Notes

On last Sunday afternoon Dr. Vaughan, Director of the Scripps Institution, gave a popular lecture on Corals at the Natural History Museum in San Diego. He showed with lantern slides that corals are merely sea anemones which secrete limy skeletons on the lower surfaces of their bodies. Colonies of certain species can live in either quiet or rough water but those living in rough water build much heavier skeletons and are enabled thereby to withstand the waves. In general, corals differ markedly in relation to depth, temperature and light. The deep sea forms are all delicate. They are either simple or form very slender branches. They are below the level to which red light goes and they either have only blue or violet light or no light at all. The temperature about those that live in the deepest water is constantly about that of the freezing point of water. Corals eat only animal food and they spit out vegetable food which they have swallowed when coated with animal matter. Dr. Vaughan reared corals by planting larvae attached to terra cotta discs in the aquarium on iron stages driven into sea-bottom or in boxes floating in the ocean. He also planted fragments in a similar way. Reef building corals live only in warm, shallow water where the light is strong. Their massive structures are in marked contrast to the delicacy of the deep sea forms. It takes between 1000 and 6000 years for this kind of coral to form a mass of rock 150 feet thick.

The shore party of the GUIDE reports that some of the position finding by means of bombs and radio was very accurate in their trials of last week, as close as about thirty feet in some cases. A new shore station is to be established at Catalina to check with the one here and at Oceanside.

Announcement has just been received of the marriage of Dr. Pirie Davidson of the Zoology Department of the Southern Branch of the University of California to Mr. Maverick of Los Angeles. Dr. Davidson assisted Prof. Daniel in some summer work at the Institution and she also assisted Prof. Kofoid at a later time.

Two English ladies, the Hon. Aura Barnes and Miss Catherine Jack, are visiting the Vaughans.

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Water Temperatures at the Scripps Institution on pier about 7:15 a.m. for week ending April 1, 1924.

March	26 – 58.6
	27 – 58.6
	28 – 58.8
	29 – 58.6
	30 – 58.8
	31 – 59.3
April	1 – 59.4

## Scripps Institution Notes.

The scientific staff at the Scripps Institution were very much gratified at the action of the San Diego City Council on last Monday which added to Torrey Pines Park all of the canyon frontage from the present south line of the park to the lake, all of the slough lands north of the park, and the cliff lands overlooking Soledad Valley. The Experiment Station Grounds of the U.S. Department of Agriculture are also included in the park reservation which makes a magnificent gateway to San Diego as well as a very unique and important natural park for the city. Dr. Vaughan considers this an exceedingly favorable region for the study of ocean shore line and he thinks the plan of park reservation will be just as valuable to science as it is to the esthetic and recreational interests of the city.

At the invitation of Dr. Bryan Director of the Los Angeles Museum, Dr. Vaughan joined in a conference last Sunday to consider the geological occurrence of the human remains recently found north of the Baldwin Hills. Other scientists attending the conference on invitation were Messrs. R.T. Hill, H.S. Gale, W.S.W. Kew, Chester Stock and Mr. Tiejje. Although the human skeletons seemed to represent modern man, the depth to which they had been buried indicates considerable antiquity, measured by the human scale. Geologically they are regarded as Recent, perhaps as much as 10,000 years old or somewhat older.

Captain Parker, Chief of the Division of Hydrography at the U.S. Coast and Geodetic Survey, inspected the shore station of the GUIDE at the Institution last week. Captain Heck has returned to his regular duties at the Washington as Chief of the Division of Magnetism.

Spencer Barnhart is spending his vacation with his father at the Institution this week .

Mr. G. L. Fleming is planning another trip of investigation to the mountains.

Captain Crandall made a business trip to Berkeley at the end of last week.

Dr. Sumner has been kept at home by illness a part of this week.

Ivan C. Jagger, Plant Pathologist of the U.S. Bureau of Plant Industry in the Department of Agriculture, visited the Institution on Monday.

Dr. W. T. Swingle, in charge of plant life history investigations in the U.S. Bureau of Plant Industry as expected to arrive at the Institution this Wednesday.

On Saturday forenoon of this week at 10 o'clock Prof. C. O. Esterly of Occidental College will address the scientific conferences of the Institution.

For Friday afternoon of next week at 3:30 arrangements have been made to have the conference addressed by Prof. C.L.A. Schmidt of Berkeley on some subject in Biochemistry.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending April 8, 1924.

April 2 – 58.8

3 – 57.9  
4 – 58.5  
5 – 59.0  
6 – 59.3  
7 – 60.1  
8 – 60.1

## Scripps Institution Notes

At the invitation of Dr. Bryan, Director of the Los Angeles Museum, Dr. Vaughan joined in a conference last Sunday for consideration of the geological occurrence of the human remains recently found north of the Baldwin Hills. Other scientists attending the conference on invitation were Messrs. R.T. Hill, H.S. Gale, W.S.W. Kew, Chester Stock, and Mr. Tiese. Although the human skeletons seemed to represent modern man, the depth to which they had been buried indicated considerable antiquity, measured by the human scale. Geologically they are regarded as recent, perhaps as much as 10,000 years old or somewhat older.

Captain Parker, chief of the Division of Lithography of the U.S. Coast and Geodetic Survey, inspected the shore station of the GUIDE at the Institution last year. Captain Heck has returned to his regular duties at Washington as Chief of the Division of the Magnetism.

Spencer Barnhart is spending his vacation with his father at the Institution this week.

Mr. G. L. Fleming is planning another trip of investigation to the mountains.

Captain Crandall made a business trip to Berkeley at the end of last week.

Dr. Sumner has been kept at home by illness a part of this week.

Ivan C. Jagger, Plant Pathologist of the U.S. Bureau of Plant Industry in the Department of Agriculture, visited the Institution on Monday.

Dr. W. T. Swingle, in charge of plant life history investigations in the U.S. Bureau of Plant Industry was expected to arrive at the Institution this Wednesday.

On Saturday forenoon of this week at 10 o'clock Prof. C. O. Esterly of Occidental College will address the scientific conference of the Institution.

For Friday afternoon of next week at 3:30 arrangements have been made to have the conference addressed by Prof. C. L. A. Schmidt of Berkeley on some subject in Biochemistry.

Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending Apr. 8, 1924.

April	2	–	58.8
	3	–	57.9
	4	–	58.5
	5	–	59.0
	6	–	59.3
	7	–	60.1
	8	–	60.1

## Scripps Institution Notes.

Dr. Vaughan leaves on Saturday for a three weeks trip to Washington where he is to attend the annual meetings of the National Academy of Sciences and the National Research Council and the Dedication of the Building recently constructed for these organizations. He will return via Salt Lake City.

On Wednesday evening Dr. and Mrs. Vaughan entertained the Scientific Staff of the Scripps Institution at the Director's House.

Mr. R. M. Underhill, Assistant Comptroller of the University of California on duty at the Southern Branch in Los Angeles, spent the first of the week at the Institution checking over financial matters with Dr. Vaughan and Mr. Crandall. The finances of the Institution are now being handled by the business office of the Southern Branch. Mr. Underhill and a house guest, Miss Bridges.

Mrs. Allen spent Thursday night of last week with her daughter Esther in San Diego in order to attend the college play.

Dr. Sumner is again at the laboratory after his recent illness.

Dr. Hiram Edwards, Professor of Physics in the Southern Branch of the University of California , and his family is spending the week at the Institution. The family may arrange to spend at least a part of the summer here.

Professor C. L. A. Schmidt, professor of biochemistry, Berkeley, arrived Wednesday and is the guest of Dr. and Mrs. Vaughan for several days.

Mrs. McBride of Los Angeles visited the Institution at the end last week with a view to finding quarters there for next summer when her husband is to give some courses in the summer school of San Diego State College. Mr. McBride is a member of the geography Department of the Southern Branch of the University of California.

Dr. Moodie and Mr. G. L. Fleming and their two boys together with Mr. Miller, a photographer of San Diego, are spending the week in Coachella Valley studying the Indian types there and also the Natural History of the region with particular attention to the plants.

Captain M.C. Crandall has resigned his position as Business Manager of the Institution to take effect April 30 when he enters upon a business association with Mr. J. C. Harper.

Dr. Essenberg is entertaining her sister in law, Mrs. Adamson, and three nieces from Los Angeles this week.

The Gates' had visitors from San Diego on Sunday.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for six days ending April 14, 1924.

Apr. 9 – 60.6  
10 – 60.1  
11 – 60.0  
12 – 59.0  
13 – 59.9  
14 – 60.6

## Scripps Institution Notes

On Monday Dr. Vaughan returned from Washington with a number of items of information of great importance not only to the Institution but to this region. Through his efforts it appears that the way is opening for La Jolla to make rapid advances in scientific enterprises as well as in other activities.

In conference with the officers of the U.S. Coast and Geodetic Survey arrangements were outlined by which, in connection with their work in marine surveying, they are to aid the Institution in its general oceanographic work, particularly, in the collecting of plankton, water and bottom samples off the Pacific Coast of the United States. Furthermore, permanent cooperation between the two organizations in the study of tides is made possible by the installation by the Survey of an automatic tide gauge on the Institution pier. A very recent letter from Col. E. Lester Jones, Director of the Survey, expresses marked appreciation of the work of the Institution, the importance of which is indicated by his closing sentence. "I think I can safely state that it was the exact information which your Institution had concerning the seawater along the southern California coast that proved the Sonic Sounding Machine to be an instrument of sufficient precision for the use of hydrographic surveying."

In other conferences plans were made with the U.S. Geological Survey and the U.S. Bureau of Soils for aiding the staff of the Institution in the study of marine bottom samples.

Cooperation was discussed with other Governmental Bureaus and with the Carnegie Institution. The Carnegie Institution has recently presented to the Institution a considerable number of volumes on the hydrography of the Pacific Ocean and a number of British Admiralty charts. A recent letter from the U.S. Geological Survey states that "the Scripps Institution was made a depository for all Geological Survey publications except the mineral resources reports". It is stated that a complete set of geologic folios is being forwarded to the Institution library.

At the meetings of the National Academy of Sciences, Dr. Vaughan participated with Dr. Hrdlicka in discussing papers on ancient men in California by Dr. J.C. Merriam, and recent discoveries of fossil man near Los Angeles by Dr. Chester Stock.

On his way home Dr. Vaughan stopped at Salt Lake City and at his request in the Inland Crystal Salt Company agreed to send to the Scripps Institution for study water from Great Salt Lake, bottom samples from their settling tanks, and bottom samples from the Lake.

A recent letter from Director Herbert E. Gregory of the Bernice P. Bishop Museum, in Honolulu, indicates an enthusiasm for establishment of such cooperation as may be possible between the two Institutions.

For three days at the end of last week Mr. Guy Fleming and Dr. Moodie assisted Professor Philip A. Munz and party of Pomona College in collecting herbarium specimens for the College in the Laguna and Cuyamaca mountains. They obtained for the College almost two hundred different species of plants.

On last Friday the Huestis family returned for the summer

Dr. Summer left this week for a collecting trip in Florida

Captain Crandall went to Los Angeles on Tuesday and Mrs. Stewart to Redlands.

Miss Helen Gates was married to Mr. McClenan of the U.S.S. GUIDE last week and her mother is returning to their former home in the East this week.

## Scripps Institution Notes.

Dr. Vaughan spent the weekend in Los Angeles. On Sunday afternoon he delivered a lecture on corals at the Southwest Museum. On Monday he visited the Comptroller's Office of the Southern Branch of the University of California in connection with Institution business.

Mr. Harry R. Beard, Assistant Technologist of the Bureau of Fisheries of the U.S. Department of Commerce whose laboratory is at San Pedro, visited the Institution last Friday.

Mr. O. F. Cook, in charge of Acclimatization Investigation for the U. S. Department of Agriculture, visited the Institution last Monday.

James Allen came from Los Angeles to visit his parents and sisters on Sunday.

Dr. Moodie, Mr. Guy L. Fleming and Dr. Huestis spent the weekend in the Laguna Mountains collecting specimens of various kinds.

Captain and Mrs. Crandall spent the weekend in Las Angeles and vicinity. Mrs. Stuart returned from Riverside with them.

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Water temperatures at the Institution pier have been somewhat higher than in the last four years. In 1920 an early morning temperature was of 66.4° F. was reached on May 29 but this height had not been again reached in May until last Tuesday morning. Temperatures for week ending May 20, 1924 follow:

May 14- 64.6° F.  
15- 64.1  
16- 64.6  
17- 65.5  
18- 65.5  
19- 65.7  
20- 66.4

## Scripps Institution Notes.

Dr. and Mrs. Reed of the Riverside Citrus Station are due for a short stay at the Institution at the end of this week.

Dr. Sumner has already had a good deal of success on his collecting trip on Santa Rosa Island near Pensacola, Florida where he has gone to procure specimens of deer mice of an unusual almost white color. As a trial shipment he sent eighteen which have just arrived this week. Dr. Huestis reports that they made the trip in excellent condition. This is doubtless partly due to the fact that these mice do not require water or any other kind of fluid drinking. The only provision necessary is a supply of carrots and oats.

Dr. Guy Stillman Milberry of the Dental College of the University of California visited the Institution a few days ago.

The annual series of studies of marine conditions five and ten miles off shore by means of boat have now been in progress about two weeks. Mr. Moberg has charge of the scientific work and Mr. Jack Ross is handling the boat for a week or two until arrangements can be made for a man to do that work through the summer. In certain features of the work they are assisted by Dr. McEwen, Mr. Barnhart, Mr. James Ross and Mr. Gates. Especial attention this year is being given to differences in characteristics of the water at different levels (depths) and to corresponding differences in the microscopic animals and plants (plankton) with especial reference to chemical conditions. Certain minute animals and plants which are usually few here have been found in great numbers and Mr. Moberg says that the plankton as a whole is quite different from that obtained in preceding years.

On Tuesday morning Mr. Charles H. Sternberg of San Diego one of the most noted collectors of fossil vertebrates in the world called on Dr. Vaughan. He was accompanied by Rev. Peter Allpeter.

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Water temperatures at the Scripps Institution pier at about 7:15 a.m. for week ending May 27, 1924.

May 21 - 66.6  
22 - 64.9  
23 - 65.1  
24 - 63.5  
25 - 64.2  
26 - 64.7  
27 - 62.6

## Scripps Institution Notes.

Dr. Vaughan has recently received a letter from Col. E. Lester Jones, Director of the U.S. Coast and Geodetic Survey, in which he expresses approval of a plan suggested by Dr. Vaughan for organized cooperation of the Survey and the Scripps Institution in extensive investigations of Pacific oceanography. Owing to the fact that rough weather makes operations difficult or impossible for six months of the year in northern waters the Survey is obliged to concentrate its efforts in those waters through the summer months. As a result the cooperative work of the two organizations will vary in locality according to season, mostly north of California in summer and near California in winter.

Dr. and Mrs. Reed and a friend spent the weekend at the Institution. They returned to Riverside on Monday.

Mr. Moodie's mother and sister have been spending a few days at the Institution.

Mr. and Mrs. E. W. Johnson of La Mesa are making a stay for two months at the Institution.

Mr. E. Fernstrom is bringing his family here for an indefinite stay.

Miss Frances Lauderbach, an artist in Pasadena, is expecting to spend the summer at the Institution in order to make some paintings of the La Jolla fishes.

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Water temperature at Scripps Institution pier at about 7:15 a.m. for week ending June 3, 1924.

May 28-	62.4
29-	63.1
30-	64.4
31	
June 1-	64.1
2-	65.5
3-	65.7

## Scripps Institution Notes.

Prof. and Mrs. R. S. Holway visited the Institution last week. Dr. Holway is emeritus Professor of Physiography of the University of California. Since he now has most of his time available for research he is thinking of undertaking in cooperation with the Scripps Institution some important physiographic studies of the coastal region of Southern California. He is especially interested in stream and ocean terraces and the evidence given by them concerning recent earth movements in this region.

Another visitor last week was Prof. K. F. Meyer, Director of the Hooper Foundation for Medical Research of the University of California. He and Dr. Vaughan discussed possible plans of cooperation of the two Institutions in study of disease, immunity, and infection amongst marine invertebrates, various problems of symbiosis in these groups and certain problems in marine bacteriology.

Last week arrangements were made through which Dr. Hosmer W. Stone, Assistant Professor of Inorganic Chemistry in the Southern Branch of the University of California, will assist Dr. McEwen in the Physical Oceanography this summer.

Certain naval officers of the San Diego base have requested the Institution to supply information concerning marine temperatures and oceanic circulation off the Coast of Southern California. They especially wish to use this information in connection with study of local fogs in relation to target practice.

Dr. C. M. Child of the University of Chicago is expected to arrive this week.

On Monday Mr. Michael Shapovalov, Plant pathologist of the Bureau of Plant Industry U.S. Department of Agriculture, visited the Institution to confer with Dr. Vaughan concerning the possibility of establishing on Institution property a plot for experimental work with vegetables.

On Saturday evening of last week a beach party was given in honor of Dr. Essenberg who expects to depart soon to take up educational work for girls in Syria.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending June 10, 1924.

June 4- 66.9  
 5- 67.1  
 6- 68.9  
 7- 67.9  
 8- 66.0  
 9- 65.9  
 10- 66.6

## Scripps Institution Notes.

Professor and Mrs. C. M. Child of the University of Chicago arrived last Wednesday for a stay of some weeks. Dr. Child is using Institution laboratory facilities for some of his experimental work and Mrs. Child is assisting him.

Professor and Mrs. Esterly of Occidental College arrived on Monday of this week for their usual stay through the summer. Dr. Esterly is continuing some of his work on collections which have been accumulating at the Institution for several years.

On last Sunday Dr. Essenberg departed for Berkeley where she is going to attend summer school for five weeks, after which she is to proceed eastward and finally to her new work in Syria.

Mr. Krause and family party have taken a cottage at the Institution for this week.

People along the beach and near the water front have been complaining for some days about the disagreeable odor wafted from the ocean recently. The Institution has not been able to make any special investigation but the following partial explanation may have some interest. About the last week of May it was reported that there was a great deal of "red water" (a sort of dirty brownish brick red in this case) five or ten miles off shore. Near June 1 the water near shore began to show this appearance which was at its worse about June 3 or 4, after which it began to be broken up into smaller streaks and patches. This color was due mainly to microscopic creatures called *Prorocentrum micans* and *Ceratium tripos*. There were also enough diatoms to account for some of the brownish tinge. It is well known that such creatures may become over crowded and die in vast numbers from natural causes. Thus abundant food is furnished for bacteria of decay and other scavenging organisms. Since the water on Monday of this week contained unusual numbers of microscopic animals especially fitted for feeding on such bacteria and since there are also unusual numbers of scavenging organisms it seems probable that the bad odor is largely due to decay of the myriads of tiny creatures which drifted inshore and found adverse conditions which caused their death and decay. A full and trustworthy history or explanation of these conditions would require a colossal amount of expense and effort so all that be ventured at present is a plausible guess.

On Tuesday Dr. Vaughan gave before the La Jolla Men's Club explaining the activities and aims and purposes of the Scripps Institution.

Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending June 17, 1924.

June	11 – 66.9 F
	12 – 66.8
	13 – 66.8
	14 – 68.0
	15 – 66.8
	16 – 64.8
	17 – 64.2

## Scripps Institution Notes.

Dr. Vaughan is giving a talk before the University Club of San Diego at luncheon on Friday of this week after which he is going to Los Angeles for conference with President Campbell and Comptroller Sproule of the University of California. He is also to meet the committee having charge of affairs of the University Southern Branch and of the Scripps Institution.

A letter to Dr. Vaughan from Dr. Gregory of the Bishop Museum of Honolulu states that they are immediately making plans for cooperation with the Scripps Institution in oceanographic work in the Pacific. The establishment of such cooperative connections between institutions and organizations in contact with Pacific waters is of the utmost importance for developing the resources of the Pacific region.

The Leslies have taken up their residence at the Institution for the summer.

Mrs. Hood, of the Isle of Man, is visiting her mother, Mrs. Ross, and her brothers. Mrs. Hood recently won the Ladies' Golf Championship on the Isle of Man.

Professor Snoddy and family have been spending a week at the Institution.

Dr. Stone of the Southern Branch of the University of California has arrived to do some work with Dr. McEwen this summer.

The Morgans have returned from a ten day visit to Los Angeles and vicinity.

Mr. Giddings of San Diego Junior College is assisting Dr. McEwin for some weeks. He takes the place of Mr. Gates who has returned to Kansas.

President Clark and family, of the University of Nevada, is expected to arrive about July 1.

Mrs. Sproule, wife of the Comptroller of the University, expects to arrive on June 29. Mr. Sproule may be delayed slightly but the family is to spend July at the Institution.

On Wednesday Dr. Esterly went to Palo Alto to attend the meetings of the Pacific section of the American Association for the Advancement of Science and allied organizations. Dr. Esterly is Secretary of the Western Society of Naturalists.

Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending June 24, 1924.

June 18- 61.2  
 19- 61.2  
 20- 62.7  
 21- 64.7  
 22- 65.5  
 23- 64.8  
 24- 63.0

## Scripps Institution Notes.

Dr. Vaughan returned on Sunday from his trip to Los Angeles to confer [with] a University Committee and the President and Comptroller.

Prof. N. L. Gardner of the Department of Botany of the University of California is spending a fortnight at the Institution studying local marine algae. Almost immediately after his arrival he found a new species amongst the rock inhabiting forms.

The Comptroller of the University of California at Berkeley, Mr. Sproule, with his family party arrived on Sunday for a stay of about a month. They made the trip by automobile.

Prof. McBride of the Department of Geography of the Southern Branch of the University of California arrived on Tuesday for a stay of about [two] months.

Mr. Blow has been employed to take the place vacated by Mr. Cooper a few weeks ago.

Mr. and Mrs. Storts moved away from the institution on Tuesday.

The installation of a new hoisting engine has so improved the work at sea that the boat crew is now able to make additional collections which will materially aid in estimating the production of plankton at various levels. A new bottle devised by James Ross for taking a very accurate water samples is also nearly ready for use.

The equipment for the official tide gauge of the U.S. Coast and Geodetic Survey which is to be established on the Institution pier has [arrived] and installation will begin in a few days. Very few tide recording stations anywhere and none on our Pacific coast are located on the shore the open ocean. For that reason this station is considered very important and its [records] will be studied with exceptional interest.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending July 1, 1921.

June	25 – 62.2
	26 – 62.8
	27 – 64.8
	28 – 67.1
	29 – 65.0
	30 – 67.3
July	01 – 68.9

## Scripps Institution Notes.

Dr. and Mrs. G. B. Pritchard and daughter of Melbourne, Australia arrived on July 3 and were entertained by the Vaughans for a few days. Dr. Pritchard is Professor of Geology and Metallurgy in the technical college at Melbourne and he is one of the prominent Paleontologists of Australia. During his stay here he spent a good deal of time in acquainting himself with the work of Institution in which he took a lively interest.

On July 1 Prof. and Mrs. J Mckeen Cattell and son of New York City called at the Institution. Professor Cattell is the editor of SCIENCE, the official magazine of the American Association for the Advancement of Science, and some other very important scientific magazines. His special field is Psychology but his general influence in scientific circles is so great that one sometimes forgets his eminence as a specialist.

Mr. G. A. Waring, an oil geologist, called at the Institution last week. He was accompanied by his friend Mr. J. F. Kipp of San Diego.

Prof. Howard E. [McMinn] of the Department of Botany in Mills College at Oakland stopped the Institution last week. He is on an investigating tour in connection with studies of hay fever. Locally his special interest was in the pollen of *Artmeisa palmeri*.

Mrs. Vaughan and Mrs. Huestis organized a beach party for the evening of July 4, which was attended by a large number of Institution residents and visitors. After refreshments the party was entertained by their on fire works as well as by the beautiful display at La Jolla which was nicely visible from the Institution Beach.

Mr. Asano, Marine Zoologist of the Japanese Department of Fisheries visited the Institution on Tuesday. He was accompanied by Dr. Fred Baker of San Diego.

Water temperatures at Scripps Institution Pier at about 7:15 a.m. for the week ending July 8, 1924.

July	2 – 69.3
	3 – 67.8
	4 – 67.5
	5 – 67.3
	6 – 67.8
	7 – 68.9
	8 – 67.9

## Scripps Institution Notes.

Mr. Johnson and his family are returning to their home in La Mesa this week.

Mr. and Mrs. McLean have rented a cottage and will spend a few weeks at the Institution. Mr. McLean is Horticultural Commissioner for San Diego County.

Miss Anna Hamilton arrived this week for a few weeks stay at the Institution. Miss Hamilton is the artist who made the beautiful Illustrations for Prof. Kofoid's monograph on the Dinoflagellates. She is accompanied by her brother and a friend.

Mr. Sproul has returned to Berkeley where University Business requires his attention. He expects to return at the end of the month to take his family home.

A sister and a friend of Mrs. Huestis arrived from Canada this week for a visit with the Huestis family.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending July 15, 1924.

July	09	–	68.6
	10	–	69.5
	11	–	67.5
	12	–	68.3
	13	–	63.0
	14	–	65.6
	15	–	61.8

## Scripps Institution Note.

On July 13 Dr. Arthur L. Day, Director of the geophysical Laboratory and Chairman of the Earthquake Committee of the Carnegie Institution of Washington and Mr. H. O. Woos, seismologist of the Carnegie Institution, called on director Vaughn and arrangements were completed for cooperation between the Scripps Institution and the Earthquake Committee of the Carnegie Institution. The Earthquake Committee will supply three seismographs which will be installed in the basement of the Museum-Library building of the Scripps Institution, which undertakes the care and operation of the instruments. The study of the earthquake phenomena in Southern California is the most intensive research of its kind being conducted anywhere in the world. Besides the Carnegie Institution of Washington, the U.S. Coast and Geodetic Survey., the U.S. Geological Survey, the Scripps Institution and other organizations are participating in the investigation.

Installation of the official tide gauge of the U.S. Coast and Geodetic Survey was finished on our pier last week and it is now in operation. The regular equipment is somewhat complicated owing to the mechanism for continuous recording and there is also included a small supplementary gauge with a measuring device which can be read at any time for comparison and check with the main record.

Since Dr. Sumner's return from Florida he reports that he collected and sent back to the Institution 230 deer mice, 216 of which arrived in living condition. These are all being used for breeding experiments . In fact three broods have already arrived as a result of breeding of the first lot sent in. In the regular stock of California mice which Dr. Sumner has been breeding for some years various new types have from time to time appeared. One of these types has a peculiar grayish color which Dr. Sumner calls "grissled". On Santa Ross Island near Pensacola, Florida, there is a race of wild mice having a strikingly similar color. It is hoped that breeding experiments with these will throw some light upon the of the occurrence of the color in local forms and that comparison of mice from such distant locations as Florida and California will help to explain the origin of a whole race of that peculiar color on the island.

Dr. McEwen leaves on Saturday for Toronto, Canada where he is to represent the Institution at the meetings of the British Location for the advancement of Science. He is to give three papers dealing with oceanography at these meetings.

Miss Chapin of Springfield, Mass is visiting Mrs. Vaughan this week.

Mr. Giddings is leaving this week to get ready for the opening of college.

## Scripps Institution Notes.

Early last week Professor McBride arranged with Dr. Vaughan for [pencil: an] exhibition and explanation of the work of the Institution to the class in which Dr. McBride is teaching in the San Diego State College Summer Session. Over sixty persons arrived at the Institution at about 9:00 a.m. on Saturday and they shortly afterward assembled in the library where Dr. Vaughan talked on the aims and activities of the Institution and on the lines receiving his personal investigation. He was followed by Dr. McEwen with an explanation of the work on physical oceanography, by Mr. Allen with a statement of the character of the work being done on by Dr. Sumner with some exhibits of deer mice and a summary of some of the more prominent results obtained from field work and breeding experiments with this group. After [pencil: some] exhibits the party proceeded to the pier where Mr. Allen exhibited the tide gauge and other important apparatus and demonstrated certain methods of collecting plankton material. The enthusiasm of many of the visitors concerning what they learned shows that oceanographic problems are fascinating to great numbers of people when they really stop to think about them.

Dr. Vaughan has entered very actively upon policy of improvement of Institution grounds. About forty trees and shrubs are being planted [pencil: by him] in the area near the Director's house and about ninety are being planted nearer the main buildings at the Institution. Mr. Guy L. Fleming has given valuable advice as to selection and planting and Mr. Blow is taking an interest in doing the work planting well and quickly.

On Monday Mr. Sproul came after his family and they returned to Berkeley by motor. They have asked to have a cottage reserved for them for next summer.

Rev. Merle Smith and family from the First M.E. Church of Pasadena expect to arrive this week by a stay of about a month.

Dr. Obchinnikoff has arrived and will act as assistant to the librarian for a few weeks. She has recently come from Russia.

Prof. A. P. McKinley of the Department of Latin in the Southern Branch of the University of California has taken a cottage for August.

Prof. Harriet E. Glazer of the Department of Mathematics in the Southern Branch has also come for a stay through August.

The Gans family is spending the week at the Institution.

Miss Hamilton and party have returned to Los Angeles.

Dr. Essenberg visited the Institution Monday on her way East.

Prof. Gardner has returned to Berkeley.

Miss Lauderbach has gone to Los Angeles for a few days.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending July 29, 1924.

July	23	–	67.1
	24	–	66.2
	25	–	63.9
	26	–	63.4
	27	–	66.7
	28	–	66.1
	29	–	67.5

## Scripps Institution Notes.

Miss Howland of San Francisco is visiting Mrs. Vaughan this week.

Dr. H.B. Foster, the University of California Engineer, spent the first part of this week inspecting Institution properties. He gave especial attention to the pier, the salt water tank, the roads, the bulk heads, and some of the general problems of erosion as it affects Institution grounds. He finds that maintenance and repair work is badly needed in all of these lines and that the tank is urgently in need of attention. Stormy weather or heavy rains may at any time make one or more of the other matters a seriously urgent problem.

Mr. Johnson and family of La Mesa have returned to the Institution cottages for a few more weeks.

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Water temperatures at the Scripps Institution pier at about 7:15 a.m. for the week ending Aug. 5, 1924. These reports cover surface temperatures only and possibly readers should be reminded that there is often a difference of a few degrees at a depth of no more than fifteen feet. On the other hand temperatures at bottom and surface are often the same at the pier and in similar shallow water situations.

July	30	–	68.2
	31	–	67.0
Aug.	01	–	67.6
	02	–	66.5
	03	–	68.3
	04	–	68.8
	05	–	69.8

## Scripps Institution Notes.

Mr. Frank L. Hess of the U.S. Geological Survey visited the institution last week. Mr. Hess is the specialist in charge of studies of rare earths and minerals such as radium and tungsten.

On Friday of last week Mrs. Vaughan gave a party for the children of the colony.

Miss Griffiths of La Mesa Heights is visiting Col and Dr. Ovchinnikoff this week.

Charlie Leslie left this week to enter the University of Berkeley.

Miss Park, who has been visiting her sister Mrs. Huestis, left this week for her home in Canada.

Dr. Esterly and Mrs. Esterly returned to their home in Los Angeles this week to get ready for the opening of college.

Mrs. Clark, accompanied by Euphemia and Walter, left on Sunday for a visit to Los Angeles before proceeding homeward. Pres. Clark with David and Miriam started later in the week and will join the rest of the family in Los Angeles.

Dr. L. D. Batchelder and family of the Riverside Citrus Station are expected to arrive this week for a stay of a month.

Mr. R. F. Sanford of Arlington is also expected to arrive this week.

Mr. Barnhart suffered a broken arm when cranking his auto Monday. It is not expected that the injury will be more than ordinarily serious.

Most of the routine [pencil: boat work] which was started earlier is now confined to two successive days. Although detailed studies have not yet been made of the material the general appearance indicates that the diatoms are showing some interesting differences from preceding years. Even more important advances in knowledge of chemical and physical conditions in this locality are being made.

Water Temperatures at Scripps Institution pier at about 7:5 a.m. for week ending Aug. 12, 1924.

Aug.	06	–	69.7
	07	–	69.8
	08	–	68.0
	09	–	69.0
	10	–	70.2
	11	–	71.0
	12	–	71.1

## Scripps Institution Notes

Dr. W. T. Swingle, specialist in charge of crop physiology and breeding investigations of the U.S. Department of Agriculture and noted for originating and introducing various fruits and plants amongst which he is still giving particular attention to figs and dates, visited the Institution the first of this week. While here he discussed with Dr. Vaughan plans for introducing by means of seeds to be planted on Institution grounds for a number of representative plants from the coastal arid climate of New South Wales. Dr. Vaughan had already found means for procuring the seeds in line with his intention to make plants on the Institution property as widely as possible representative of plants of the world adaptable to local conditions.

Numerous inquiries are coming to the Institution concerning prospects for rainfall this winter as indicated by ocean temperatures. On Monday Mr. J. E. Phillips, Assistant Engineer of the Bureau of Water, City of Los Angeles and Mr. Chas. L. Kaupke, Water Waster King's River District, Bakersfield called in person to make inquiries about probabilities. Since statements of probabilities cannot be made until records are received for a few more weeks and since it has not yet been possible to summarize all of the records already received no definite answers can be given to such inquiries for some weeks yet but the information will be made public as soon as possible.

On Tuesday of last week Dr. C. C. Adams, Director of the Roosevelt Wild Life Forestt Experiment Station with headquarters at Syracuse, N.Y., visited the Institution and renewed his acquaintance with various members of the scientific staff. He is one of the leaders in this country in movements for investigation and conservation of wild life and he was very enthusiastic in examining the work of the Institution and of Torrey Pines Park.

Prof. W. C. Morgan of the Department of Chemistry of the Southern Branch of the University of California at Los Angeles and his family has been visiting Dr. Stone for several days. Mr. Barnhart's family returned to the home in Chula Vista.

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Surface water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending Aug. 19, 1924.

Aug. 13- 71.7  
14- 70.9  
15- 71.4  
16- 68.8  
17- 71.1  
18- 71.0  
19- 70.0

8-26-24

Scripps Institution Notes

On Tuesday afternoon President W. W. Campbell and Comptroller R. G. Sproul of the University of California arrived for a visit of inspection of the Institution as a department of the University.

Dr. J. Volney Lewis, Professor of Geology at Rutgers College and the State University of New Jersey, was a visitor to the Institution and a house guest of Dr. Vaughan the first part of the week. Dr. Lewis is a specialist in economic geology and he is much interested in marine sediments because of their relation to a number of problems in economic geology.

Dr. T. H. Kearney, of the U.S. Bureau of Plant Industry in which he has charge of alkali and drought resistant plant investigations, called at the Institution on Saturday. He is especially interested in Dr. Vaughan's plans for planting drought resistant plants from other countries on Institution property.

Mr. John Johnston, a mining engineer of Escondido, also called at the Institution on Monday to make inquiries concerning the solution of metals in sea water and the possibility of doing certain kinds of metals experiments to determine the amounts of such solutions in sea water.

Prof. David Hilton of the department of Zoology of Pomona College visited the Institution this week for the purpose of using the library.

Mr. Guy L. Fleming left on Tuesday for a two weeks trip to Sequoia National Forest and the King's River section, principally for the purpose of studying vegetation.

Prof. H. S. Noble and family party from the Southern Branch of the University of California at Los Angeles are spending a week at the Institution.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for the week ending Aug. 26, 1924.

Aug. 20- 69.3  
21- 67.0  
22- 67.9  
23- 67.5  
24- 67.0  
25- 66.9  
26- 65.6

## Scripps Institution Notes.

President Campbell and Comptroller Sproul exhibited a lively interest in the work of the Institution and its problems when on their official visit last week. They are strongly in favor of the plans for development of the Institution as outlined by Director Vaughan. All officials are agreed that these plans require time for maturing and that it is scarcely possible to get them in full operation in less than four years, although a general forward movement is to continue from the present.

Prominent visitors to the Institution the past week were Prof. G. M. Turner, Head of the Department of Petroleum at Pomona College who is much interested in the proposed investigation of marine sediments by the Scripps Institution which he hopes may throw some light on the origin of petroliferous substances: Prof. J. B. Pollock of the University of Michigan, who is especially interested in marine algae of rock forming types: Mr. W. B. Lang, who has charge of potash investigations for the U.S. Geological Survey: and Dr. L. W. Austin, physicist of the U.S. Bureau of Standards, in charge of research work in radio telegraphy, who is now doing some work with the officers of the U.S. Navy at San Diego.

Mr. Robert Underhill, in charge of the comptroller's office of the Southern Branch of the University of California, has arrived with his family for a few days stay.

Dr. McEwen returned on Thursday from attendance at meetings of the British Association for the Advancement of Science at Toronto in August.

Mr. L.J. Quayle arrived on Monday to take up work as student assistant in the plankton investigations of the Institution.

Week end visitors were Dr. and Mrs. H. S. Reed of the Riverside Citrus Experiment Station with the Batchelors, and James Allen and Omar Foote of Los Angeles with the Allens.

Prof. Seth Nicholson of the Mount Wilson Observatory with his family is spending a few days at the Institution.

Summer residents who left the Institution this week include Prof. Stone and his mother, Col. and Dr. Occhinnikoff, and the McBride, McKinley, Clasier and Smith families. Dr. Moody also left for Chicago but his family remains for the winter.

A fine collection of diatomaceous earth from the Los Angeles region has been presented to the Institution by Messrs. W. S. W. Kew and H. S. Gale, consulting petroleum geologists at Los Angeles. Dr. Kew is a native of San Diego.

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Water Temperatures at Scripps Institution pier at about 7:15 a.m. for week ending Sept. 2, 1924.

Aug.	27 – 66.4
	28 – 65.9
	29 – 65.3
	30 – 66.5
	31 – 66.3
Sept.	01 – 66.9
	02 – 66.8

## Scripps Institution Notes

Director Vaughan and his family spent the week end at Hulburd's grove. They returned on Tuesday.

Dr. and Mrs. McEwen went to Los Angeles for the week end.

Dr. V. Bjerknes, Professor of Geophysical Institute at Bergen, Norway returned from Los Angeles with Dr. McEwen and will remain a few days. Dr. Bjerknes is especially interested in practical application of hydro-dynamic theory to problems of meteorology and oceanography. On special invitation of Professor Millikan he is soon to give a two months series of lectures on Physical Hydrodynamics at the California Institute of Technology in Pasadena.

Dr. McEwen reports that he gave three papers in the International Mathematical Congress at the British Association for the Advancement of Science in Toronto which he recently attended. Two of these were mainly mathematical in character while the other dealt with the application of mathematics to study of flow of ocean currents. While in Toronto he had consultations with Professor Huntsman and Gilchrist who are engaged in annual studies of biological and physical conditions of the waters near the mouth of the St. Lawrence. He also had some conversation with such meteorological experts as Professor Patterson and Sir Frederick Stupart.

Professor and Mrs. C. N. Child started on Monday for their home in Chicago. Professor Child says that he has had very satisfactory results from his experimental work here this summer. Some of the material in this locality is the most favorable to be found anywhere and he would like to do additional work with it at another season of the year. It is possible that he may be able to arrange to spend a winter here soon.

Professor Bachellor and his family home to Riverside on Monday.

Water Temperatures at Scripps Institution pier at about 7:00 a.m. for week ending Sept. 16, 1924.

Sept.	10	–	61.8
	11	–	61.8
	12	–	61.5
	13	–	59.0
	14	–	61.8
	15	–	61.8
	16	–	63.0

## Scripps Institution Notes

On Last Friday afternoon the scientific conference at the Institution was favored by a lecture by Professor Bjerknæs of Bergen, Norway, the leading world authority on practical work in Meteorology and Hydrography. The lecture attracted several scientists and others interested in Science from La Jolla and San Diego who have not usually attended the weekly conferences. The outstanding points of the lecture are briefly given as follows.

The importance of his contribution comes from the fact that he has developed a mathematical theory that can be applied to problems in practical meteorology and oceanography. In practical meteorology, his theory has led to methods of forecasting based upon a detailed analysis of the various weather factors, and physical interpretation of such results in which discontinuities between cold and warm areas are of fundamental importance. During the war when Norway was isolated from other countries, his theory led to means of making local forecasts based upon reports from 90 observation stations in Norway, thus rendering a valuable service to his country. In oceanography the determination of circulation is one of the important and difficult problems, and the greatest advance made in the computation of ocean currents from their causes has resulted from the work of Professor Bjerknæs and his students. His lecture was illustrated by several diagrams showing how the intersection of surfaces of equal pressure with those of equal density formed a network from which the circulation could be computed. Local land and sea breezes and two ways in which storms originate were among these examples. The interesting, but more difficult problem of "boundary waves" between cold air supporting a layer of warm air and travelling in horizontal direction was presented. The great extent of these waves renders the deflecting force due to the earth's rotation of special importance, in changing their plane and forming cyclones.

After the conference those in attendance were invited by Director Vaughan to a tea in the Director's house given by Mrs. Vaughan in honor of Professor Bjerknæs and Professor and Mrs. Ashworth.

Professor Ashworth spent a large part of Thursday and Friday of last week in looking over Institution equipment and exhibits and in getting acquainted with the work and methods of members of the scientific staff. He is Professor of Zoology in the University of Edinburgh and prominent amongst British scientists. His principal publications have dealt mainly with Insects and Worms but he also showed keen appreciation of problems of the sea.

Mr. S. Chambers of Coronado began work on Monday as scientific assistant to Dr. McEwen.

On Monday Miss Center returned from her vacation at Palomar and Mr. and Mrs. Chain from their vacation at Los Angeles and Warner's Hot Springs.

Dr. Frost and his family returned to their home in Riverside at the end of the week.

Mr. and Mrs. Benjamin and their friends returned to Hollywood last Sunday.

Dr. Huestis and his family began their trip to Eugene, Oregon last Saturday morning. They went to San Francisco by steamer and by rail from that point. Dr. Huestis takes charge of work in Genetics in the department of Zoology of the Oregon State University at Eugene.

Residents of La Jolla who have been long familiar with the peculiar "bad lands" formation near the Director's house at the Institution will be interested in noticing that the upper part is being graded and partly leveled in an effort to reduce erosion. A retaining wall is to be built on a part of it and an effort will also be made to have some soil holding plant at the start there.

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Water Temperatures at Scripps Institution pier at about 7:00 a.m. for week ending Sept. 23, 1924.

Sept.	17	–	62.6
	18	–	61.9
	19	–	62.6
	20	–	63.8
	21	–	64.5
	22	–	64.8
	23	–	64.9

## Scripps Institution Notes

The Director, in consultation with the other members of the Scientific Staff has recently completed plans for weekly seminars and scientific conferences for the academic year. The Seminars are to be held regularly on Tuesdays at 10:30 a.m. after October 15 but on Mondays before that date. They are for the purpose of discussion of oceanography in all of its branches, the work in each branch to be presented by the appropriate specialist. A meeting for general discussion of oceanic problems will be held next Monday and thereafter Dr. McEwen will begin a series of eight lectures on Physical Oceanography. The scientific conferences are to be held on Friday afternoons at 3:30. In some cases they will be used for further discussion of topics introduced in seminars, in either case reports on individual work will be given by members of the Scientific Staff or by visiting scientists, and in still other cases there will be reviews of important scientific publications. Anyone who is interested is welcome to attend either seminars or scientific conferences. Discussions in both will usually be popular or semi-popular but the seminars are more likely to be technical at times.

A telegram to Director Vaughan says that Prof. Frits Haber of the University of Berlin, a former recipient of the Nobel prize and a world leader in investigation of fixation of nitrogen from air, is to arrive at the Institution this week for a stay of a few days. He is greatly interested in chemical studies of ocean water.

At a recent meeting of the Regents of the University an official note of thanks was given to Mr. Guy L. Fleming for his advice in regard to improving the grounds of the Scripps Institution.

Mr. Davie, engineer from the Comptroller's Office of the Southern Branch, visited the Institution this week and inspected equipment and grounds.

Messrs T. A. Panter, H. C. Cardett, and A. R. Arledge, engineers from the Department of Public Service of Los Angeles, called at the Institution last week to get information about oceanic hydrography and surface temperature records of the current season with reference to the probable rainfall during the coming winter. Many similar requests for information about prospects of rainfall continue to arrive by mail.

Mr. H. C. McMillin, Scientific Assistant at large for the U.S. Bureau of Fisheries, visited the Institution on Monday. This summer he has been giving especial attention to the life history and living conditions of razor clam. The special object of his visit here was to get information about plankton and the influence of certain conditions upon it in connection with his studies of the minute, free swimming stages of young clams.

For greater convenience in business and community activities in which they have been prominent for so many years, the Crandalls are moving into La Jolla this week.

Mr. Hill and his family Moved into one of the Institution cottages this week.

## Scripps Institution Notes

Professor Haber, the eminent Carman chemist, was not able to stay at the Scripps Institution so long as he had intended. Most of his time was spent in conferences with Director Vaughan and Mr. Moberg. Other members of the Scientific Staff and Dr. Pierce of San Diego had an opportunity to meet him at the scientific conference on Friday afternoon and at the tea given by Mrs. Vaughan in honor of Professor and Mrs. Haber. One of the activities of Professor Haber, which especially interested local chemists, is his method for determining precise amounts of gold and silver in sea water. While these metals are not present in commercial quantities they are constantly present in quantities which vary in such a way as to make them valuable indicators of certain changing conditions in masses of sea water. At his request the Scripps Institution gladly agreed to co-operate in every practicable way in procuring for him samples of sea water. Professor Haber is also interested in other problems of oceanic chemistry and he gave careful attention to local methods which might be useful in the work of the proposed German expedition for oceanic investigation in southern oceans. Mr. Moberg's recently devised methods for measurement of quantities of phosphorus in sea water received especial notice from him and he also gave favorable attention to Mr. Moberg's device for determining relative amounts of acids in samples of sea water. At the scientific conference he also mentioned some work done by Director Vaughan in applying chemical methods to study of certain marine bottom deposits. It is certainly a matter of gratification that a leading European scientist should come to our local Institution for the purpose of extending his information concerning methods of oceanographic research.

On Tuesday Mr. W. D. Clark of the Comptroller's Office at Berkeley paid an official visit to the Institution for the purpose of bringing valuations on buildings and equipment up to date.

Mr. Whetzel of the U.S. Agricultural Experiment Station at Torrey Pines was taken one of the cottages for the winter.

A new arrival in the colony is Mr. Dean and his family.

Mr. Michael has gone to Del Mar for an indefinite stay.

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Water temperatures at Scripps Institution pier at about 7:15 a.m. for week ending Oct. 7, 1924.

Oct.	1	–	66.6
	2	–	64.6
	3	–	64.4
	4	–	61.2
	5	–	62.6
	6	–	63.7
	7	–	64.3

## Scripps Institution Notes.

Director Vaughan has recently finished three important papers for a geological symposium on correlation of certain American Tertiary formations with those of Europe. He has also made studies of a collection of Foraminifera sent for examination by the State Geologist of Florida. The laboratory work and actual composition of these papers has taken all available time for some months. The more voluminous of the papers is presented by Dr. Vaughan as a presidential address upon his retirement from the presidency of the Paleontological Society (of America).

Prof. C.V. Raman of the Department of Physics in the University of Calcutta visited the Institution last week. He is also a Fellow of the Royal Society of England and he was in attendance upon the meetings of the British Association for the Advancement of Science at Toronto. He has recently been doing a great deal of work on the causes of the diffusion of light in liquids and he is greatly interested in problems of the penetration of light into sea water. He is also much interested in some of the physical problems presented by marine sediments. From here he went to Pasadena where he is to deliver a course of lectures at the California Institute of Technology on thermodynamics.

Dr. McEwen's latest calculations indicate that about fourteen inches of rain may be expected this season. His general statement will appear in Southern California papers in a few days.

Boat work for the season was closed last week with a series of water and plankton collecting from a large number of different depths. The boat in use this season came ashore in the storm on Friday on a count of parting her anchor chain and she will probably not be floated. She was to have been returned to the owners, the Van Camp Company this week.

Prof. F. N. Seerley of the Y.M.C.A College, Springfield Mass. and Mr. C. H. Price of Los Angeles called to see Mr. Allen on Saturday.

Water Temperatures at Scripps Institution pier at about 7:30 a.m. for the week ending Oct. 14, 1924

Oct.	8 – 64.3
	9 – 64.4
	10 – 64.2
	11 – 63.2
	12 – 63.2
	13 – 63.0
	14 – 61.2

## Scripps Institution Notes.

At the Australian meetings of the Pan-Pacific Science Congress in 1923. Definite steps were taken toward forming a permanent organization of the scientific activities of the Pacific area. Director Vaughan of the Scripps Institution has recently been appointed chairman of a committee on the investigation of Temperature, Salinity, Hydrogen ion Concentration, and Currents of the Pacific Ocean. He has also been asked to give advice and assistance in formulating a Constitution and By Laws for permanent Pacific Science Congress to be submitted to the Pacific Science Congress which is to meet in Japan in 1926. Correspondence relative to permanent organization with Professor Joji Sakurai of the National Research Council of Japan and various other Pacific scientists is now under way. As a resident of the country holding the next meeting Professor Sakurai is taking the lead in these matters. The Japanese Government has already set aside about \$100000 toward defraying the expense of the Congress.

Dr. W. H. Osgood of the Field Museum in Chicago called the Institution last week. He was accompanied by Mr. Donald Dickey, the man who has made remarkable moving picture studies of birds and mammals, and by Dr. C. G. Abbot of the San Diego Museum. Dr. Osgood is seeking the aid of the institution in obtaining representative material of marine animal and plant life.

Mr. F. H. Lollar, recently a research student in Vanderbilt University and now Instructor in Biology at the San Diego Army and Navy Academy, called on Saturday to make inquiry concerning the wild life of this region.

Mr. E. R. Davis, manager of Construction of the Southern California Edison Company came down from Los Angeles last week and discussed the installation at certain coastal points of machines for taking continuous records of ocean temperatures.

At the regular scientific conference of the Scripps Institution to be held this Friday at 3 p.m. Director Vaughan will give a talk on arrangements which have been made or are being made for cooperation in the scientific work between the Scripps Institution and a number of organizations and individuals. La Jolla citizens who are interested in seeing how rapidly contacts with the scientific world are being extended and established for our community will find this general statement illuminating. All persons interested in scientific activities are cordially invited to attend.

A recent letter to Director Vaughan from Dr. Walter Swingle of the U.S. Bureau of Plant Industry is highly commendatory of the efforts of the Institution to improve its grounds by use of plants especially adapted for seaside planting. He closes saying "I want to assure you that the work you are doing at the Scripps Institution in finding good ornamentals that will stand salt spray is the greatest importance in all Southern California". For much of the success in this work the Institution is deeply indebted to Mr. Guy L. Fleming for advice and information.

Twelve boxes of bottles containing water samples and plankton samples collected by the U.S.S Pioneer in Alaskan waters this summer and fall have just been received for study by the Institution.

## Scripps Institution Notes.

From time to time these notes have called attention to actual or perspective arrangements for cooperation between the Scripps Institution and various other persons, organizations, enterprises and activities. In a talk before the Scientific Conference last Friday Director Vaughan summarized existing arrangements which make a showing which must be very gratifying to our ambitious and growing La Jolla community. The U.S. Coast and Geodetic Survey is making valuable observations and collections for our Institution in return for the use of some of its observations and shore base for the installation of instruments. The Carnegie Institution is furnishing instruments for study of earthquakes. The U.S. Geological Survey is undertaking detailed chemical analysis of sediment being studied at our Institution. The U.S. Bureau of Soils undertakes to study the same materials from a somewhat different view point. The U.S. National Museum, of which Director Vaughan is an associate, is donating important specimens and samples of sediments. The U.S. Bureau of Lighthouses is collecting water samples and making observations. The Hopkins Marine Laboratory of Standofr University at Pacific Grove is doing similar work .And the Bishop Museum in Honolulu has agreed to make extensive collections and observations in the two expeditions sent out under the joint auspices of the U.S. Navy and with the Southern California Edison Company. Increasing interest in the research work being done in this locality is also shown by the number of requests from individuals, and from organization smaller than those mentioned above, for information and for cooperative assistance.

On Saturday Morning Dr. G. Dallas Hanna of the California Academy of Sciences called at the Institution and held a sort conference with Director Vaughan. Dr. Hanna is deeply and very actively interested in the small organisms found in sediments, particularly diatoms and foraminifera.

At about 10:30 Saturday forenoon Dr. Abbot of the San Diego Museum of Natural History brought a party of about two hundred "Nature Hikers" for a visit to the Scripps Institution. They were welcomed with a short speech of explanation of Institution worked by Dr. Vaughan. This was followed by short explanations by Dr. Sumner and Mr. Moberg of the exhibits which they had on hand, after which the party spent some time looking at exhibits which they had on hand, after which the party spent some time looking at exhibits of various lines of work as shown on the library tables and in visiting the permanent exhibits of the Museum and Aquarium and the pier. A large number of the visitors made very intelligent inquiry concerning various details of the work and showed keen appreciation of Institution activities.

On Monday Captain Field, U.S. N. retired, visited the Institution. He was accompanied by Mrs. Field and by Mr. and Mrs. Leovy.

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Water Temperatures at Scripps Institution pier at about 7:30 a.m. for the week ending Oct. 28, 1924.

Oct. 22 – 59.0  
23 – 59.3  
24 – 58.5  
25 – 59.7  
26 – 60.1  
27 – 60.8  
28 – 61.2

## Scripps Institution Notes

Recent requests for information and assistance sent to Director Vaughan by leading scientists of the East include two concerning workers available for study of oil field sediments and of microscopic creatures found in geological sediments, one concerning a report on activities in measuring ocean depths by sound and in recording ocean temperatures and two for scientific papers discussing progress in oceanography and the character and distribution of life on the part of the Atlantic Coastal Plain submerged by the sea.

On last Friday Dr. Sumner and Mr. Allen Attended at the Southern Branch of the University of California in Los Angeles a meeting of the San Jacinto section of the Western Society of Naturalists. Dr. Sumner gave an illustrated talk on the results of study of plankton collections taken along the Pacific Coast from Peru to the Aleutian Islands.

Preceding the meeting Mr. Allen had a conference with Professor Ulrey of the University of Southern California in which there was preliminary discussion of plans for cooperation in oceanographic work of their two institutions in the Southern California region. Mr. Allen was asked to give assistance in the final preparation of a report written by one of Professor Ulrey's students concerning some recent work on marine plankton done by their institutions. That these efforts toward cooperation may be highly important in the progress of oceanographic science in California is indicated by an article in the Los Angeles Times of November 1 stating the probability that the Long Beach City Council would act favorably toward providing a site and buildings for use by the University of Southern California For oceanographic research. The tone of the article indicates that people of the Los Angeles section are marketing to the importance of oceanographic research, which is surely gratifying to all of us, even though we of La Jolla and San Diego may seriously question the assertion that the Los Angeles locality is the most favorable in the world except Naples. There is, however, no question that effective oceanographic work done in the vicinity of Long Beach will materially aid the Scripps Institution in some of its interpretations of oceanic phenomena.

New residents of the Scripps Institution colony include Mr. D. R. Hooton of the U.S. Agricultural Station at Torrey Pines. Mr. S. W. Chambers and MR. H.V. chambers, assistants in the scientific work of the Institution and Mr. F. Fernstrom.

Mrs. Piguay arrived at the week end for a visit with her sister, Mrs. G. F. McEwen.

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Water temperatures at Scripps Institution pier at about 7:30 a.m. for week ending Nov. 4, 1924

Oct.	29 – 60.3
	30 – 59.1
	31 – 59.4
Nov.	01 – 59.2
	02 – 56.7
	03 – 59.4
	04 – 58.3

## Scripps Institution Notes.

Last Saturday Mr. W. C. Mendenhall, Chief Geologist of the United States Geological Survey, spent a half day at the Institution and looked over all the different lines of oceanographic work being done here. In each of these he showed keen interest. The geological Survey is one of the organizations cooperating in the study of earthquake phenomena in Southern California. Mr. Mendenhall also discussed in detail with Director Vaughan the work now being done by him in connection with Geological Survey, in which organization he is still a senior geologist.

The Class Organizer of the University of California Extension Division in San Diego made formal request a few days ago for a course of lectures on Oceanography in the Extension Division to be given by the Scientific Staff of the Scripps Institution. In response to this request the Institution will prepare a course of ten lectures on oceanography to be given next Spring by the members of the Scientific Staff. Definite announcements will be made later by the Extension Division. The Request came as a direct result of the series of discussions of oceanographic subjects in the weekly seminar the Institution.

In regard to the matter of plants suitable for seaside planting Dr. Wilson Popenoe, Agricultural Explorer Acting in Charge of the U.S. Bureau of Industry, recently wrote to Director Vaughan saying in closing, "We shall be glad to supply you, as far as possible, with the material you desire to test at La Jolla. I believe we have a number of things which are worth trying there. Dr. Popenoe also sent a list of descriptions of "Plant Introductions" (plants introduced from other countries" and a "Check List of Plants Ready for Experimenters". From the former the Institution will be able to obtain information as to plants most favorable for setting in this locality and from the latter Director Vaughan will be able to select varieties for experimental planting specimens of which will be supplied by the Bureau. Dr. Vaughan has been working on such a list of selections for several months and he will soon be able to decide what varieties are most promising or desirable.

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Water temperatures at Scripps Institution pier at about 8:30 a.m. for week ending Nov. 11, 1924.

Nov. 5 – 57.9  
 6 – 57.2  
 7 – 57.6  
 8 – 58.1  
 9 – 58.3  
 10 – 58.1  
 11 – 56.5

## Scripps Institution Notes

Professor W. N. Davis, formerly Sturgis Hooper Professor of Geology in Harvard University and the most eminent American Geographer, is expected to visit the Scripps Institution on January 2 where he is to be a guest in Director Vaughan's house for several days. While here we will speak before the Scientific Conference and the Seminar in Oceanography of the Institution, at the San Diego Museum of Natural History, and, perhaps at the Community House in La Jolla. Later a more detailed announcement will be made concerning his address before the Scientific Conference at the Scripps Institution, to which all interested persons are invited.

Two hundred and fifty cuttings of Athel Tamarisk, sent by Dr. W. T. Swingle of the U.S. Department of Agriculture Date Farm in the Imperial Valley, have been received by the Institution and are being slanted along the lower margin of the private road running from the pier up the hill below the Director's house. It is hoped that these trees will form a wind break and also aid in preventing erosion.

Director Vaughan has regretted the necessity of closing the trail from the beach across Institution ground near the end of the pier because of cutting of the soil by horses hoofs and consequent increase of erosion and in cooperation with the La Jolla Rider's Club he is now making arrangements for a properly built trail at that point which will avoid injury to Institutions property when the entrance to the beach is opened again.

Arrangements have been completed for the employment of Miss Isabelle D. Collins of Pasadena as Assistant in Chemical Oceanography. She will report for work at the Institution on or near the first of December.

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Water temperatures at Scripps Institution pier at about 8 a.m. for week ending Nov. 18, 1924.

Nov. 12 – 57.4  
13 – 58.2  
14 – 58.0  
15 – 61.2  
16 – 57.3  
17 – 57.4

## Scripps Institution Notes.

In order that those interested may have plenty of time to arrange their dates so as to hear Professor W. N. Davis the following program presented now:

Friday, Jan. 2, 3 p.m. Scientific Conference at Scripps Institution Subject – Marginal Belts of the Coral Sea

Sunday, Jan. 4, Lecture on the Grand Canyon at the San Diego Natural History Museum.

Monday, Jan. 5, 7p.m. Lecture on the Grand Canyon on the Community House in La Jolla.

Tuesday, Jan. 6, 10:30 a.m. Seminar in Oceanography at Scripps Institution. Subject – Illustrations of Tides by Waves.

Those who are interested are cordially invited to attend the meetings at the Scripps Institution.

Director Vaughan has just received from Captain Luce, Commanding Officer of the U. S. S. GUIDE of the U.S. Coast and Geodetic Survey a letter and records concerning the collecting of water samples and plankton samples done by the GUIDE off the Oregon Coast this summer. The letter states that the collections are being shipped by steamer. They include 175 water samples, 105 plankton samples, and 36 bottom samples. Most of the collecting was done in the region between Coos Bay and Fort Orford at varying distances from shore. Some of the records obtained while collecting are useful to the Coast and Geodetic Survey immediately and the salinity determinations to be made by the Scripps Institution will also be highly valuable as soon as these records can be obtained and sent to them. This is one of the instances in which cooperation between the two organizations brings quick results of value to both organizations.

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Water temperatures at the Scripps Institution pier at about 8:15 a.m. for the week ending November 25, 1924.

Nov. 19 – 57.4  
 20 – 57.7  
 21 – 57.7  
 22 – 57.8  
 23 – 59.4  
 24 – 57.7  
 25 – 58.0

## Scripps Institution Notes.

Mr. C. L. Vander Bie, recently a graduate student in the University of Wisconsin where he has done a considerable amount of work in hydro-biology under Professor Pearse and has made some connection with the work of President Birge on freshwater plankton problems, visited the Institution on Saturday getting information about oceanography in general and local marine life in particular. He is now a teacher in the Los Angeles High School.

Drs. R. W. and M. W. Gerard (Mr. and Mrs.) of the Los Angeles General Hospital spent several hours at the Institution Saturday when they showed great interest in all of the different lines of work now being carried on. Mrs. Gerard has been and is still connected with the Children's Hospital in Chicago.

Mr. A. J. Basinger, who gave expert aid in destroying the small pest here two years ago, visited the Institution on Saturday and manifested particular interest in the experiments being conducted at the Institution in testing plants for sustainability to sea side environment. He is now located at Riverside in connection with the Citrus Experiment Station.

Director Vaughan has also received a collection of large fossil Foraminifera from Mr. Herman Gunter, State Geologist of Florida, who is cooperating in a study of these important organisms.

Miss Isabelle Collins arrived on Sunday to take up her work as Assistant in chemical oceanography. She graduated from the University of California in Chemistry in 1923. And has since been connected with the Pasadena Hospital, doing biochemical work along medical lines.

Mr. Harold Chambers enjoyed a visit from his mother over the week end.

On Monday Mr. Quayle was pleasingly surprised by the arrival of his grandmother and his sister from Utah whom he had not expected vfor about a month. They have come for an indefinite stay.

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Water temperatures at Scripps Institution pier at about 8:15 a.m. for week ending Dec. 2, 1924.

Nov.	26 – 56.9
	27 – 56.9
	28 – 56.3
	29 – 56.9
Dec.	1 – 56.9
	2 – 57.4

## Scripps Institution Notes.

Some time ago Director Vaughan received assurance from authorities of the U.S. Navy that they would be pleased to try to arrange for cooperation with the Institution in oceanographic investigations. On Tuesday morning, at the same time that the article concerning cooperation appeared in the San Union, Dr. Vaughan received from Admiral Robertson a very cordial letter assuring him that an active interest in much cooperation was being taken by local officers of the U.S. Navy. The information in the Union, which was evidently obtained by interview with Naval Officers, enumerates the following lines of study for immediate attention; "sea temperatures, oceanic physics, oceanic meteorology, solar radiation, Measurement of sea currents, nitrates of sea water and chemical analysis of plankton with special reference to food value. This is one of the most important announcements in the recent history of the Scripps Institution and of oceanic investigations in the Pacific Ocean.

On Tuesday morning an important addition to Institution equipment, a Bausch and Lomb Balopticon of highest grade was received. This instrument has full provision for both ordinary and opaque projection and it will now be possible to use all types of illustration in connection with lectures and scientific discussions. It is being placed in immediate service this week at the scientific conference on Friday afternoon.

On this Friday afternoon at 3 o'clock Director Vaughan will give the first of his illustrated lectures introductory to the series by Professor Davis in January. Discussion will be especially directed to preparation for the lecture by Professor Davis on "Marginal Zones of the Coral Seas". The subject of Dr. Vaughan's lecture this Friday (Dec. 12) is the "The Natural History of Corals". It will be largely devoted to answering the popular question, what are corals. On Friday, Dec. 19, the subject will be "Theories of the Formation of Coral Reefs". All persons interested are cordially invited to attend these illustrated lectures as well as other scientific meetings at the Institution.

On Wednesday afternoon a meeting of residents of the institution was held to discuss improvement and care of Institution grounds. The plantings of the past several months are making improvements in appearance which it is hoped may be rapidly increased.

Through cooperative effort between the Director of the Institution and officers of the La Jolla Bridle Club the trail from the beach through Institution ground, arranged in such a way as to avoid injury to State property, has been completed and opened for use by horseback riders.

On Wednesday Messrs. Julius Zahn, S. C. C. Lapman, and R. J. Collins of Los Angeles called at the Institution for the purpose of getting information about kelps that has been accumulated by the Scientific Staff and also for the purpose of discussing the new kelp manufacturing organization which has its central plant at National City. When the organization gets into full operation it may

open another line of cooperation for the Institution which ought to yield valuable results for both organizations.

## Scripps Institution Notes

Dr. S. Matsuura, Professor of Chemistry in the College of Technology at Hiroshima, Japan, called at the Institution a few days ago. He was especially interested in the work being done by Mr. Moberg in Chemical Oceanography. He came here from Berkley where he had been spending some time after making a tour of European universities and scientific institutions. Japan is consistently carrying on a definite policy of sending representative scientists to other parts of the world for direct observation of advances being made in science and she is not slow to adopt in her own activities those methods which are promising.

The lecture last Friday by Dr. Vaughan on "What are corals" was so illuminated by the use of the new projection lantern that the audience voted to select an evening hour for the lectures of popular type which will be given by various speakers hereafter. On this Friday at 3 p.m. Dr. Vaughan will speak on "Theories of Formation of Coral Reefs". This lecture will be unavoidably technical to a large extent but it will be made as simple as possible. Discussion will cover the principal theories of coral reef formation, especially the Chamisso, Dana and Darwin, Murray, and Andrews-Vaughan. They will be briefly reviewed and the criteria for determining the validity of each will be given.

Mr. Moberg and Mr. Quayle have recently undertaken some special investigation of the effects of stream flow and other run off from land upon oceanic conditions inshore. They are giving particular attention to Oceanside and Mission Bay, making collections of water samples for chemical analysis and of microscopic plankton for comparison of conditions before and after rains.

At the meeting of residents at the Institution last Wednesday renewed impetus was given to the movement for improving and beautifying the grounds. The most important single decision was to install some play-ground equipment in the open area between the main building and the highway and to plant shrubbery for coincident improvement in general appearance.

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Water temperatures at Scripps Institution pier at about 8 a.m. for week ending Dec. 16, 1924.

Dec. 10 – 56.7  
11 – 55.8  
12 – 57.6  
13 – 57.8  
14 – 58.3  
15 – 57.6

## Scripps Institution Notes.

Last Thursday Director Vaughan and Dr. McEwen called on Admiral Schofield, in command of the U.S. Destroyer Fleet at San Diego, and Captain Moses, in command of U.S. Aircraft Squadrons of the San Diego Battle Fleet, to discuss ways and means of cooperation between the U.S. Navy and the Scripps Institution. It is believed that a practicable plan of work can be arranged and put in operation in the near future.

Mr. Woodward, a former assistant to Dr. McEwen who is now attending the University of California at Berkeley and who is spending his Christmas vacation with his parents in San Diego, called at the institution twice in the last few days. His work at the Institution led him to take a great interest in various problems of the ocean and especially those dealing with certain combined or interactive influences of bacteria and general chemical conditions. He is therefore selecting his courses at Berkeley with a view to specializing along those lines as he is able to find opportunity.

Miss Maurine Leslie and her brother Charles, both of whom have assisted in the work of the institution at various times, visited the Institution last week end.

Dr. Moody arrived from Chicago this week to spend the holidays with his family.

Mr. Chambers' mother is visiting him through the holidays.

Miss Collins has gone to San Jose to spend the holidays with her parents.

James Allen is expected to spend the holidays with his parents.

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Water temperatures at Scripps Institution pier at about a.m. for week ending Dec. 23, 1924.

Dec. 17 – 56.7  
18 – 56.7  
19 – 58.1  
20 – 56.8  
21 – 57.6  
22 – 56.0

### Scripps Institution Notes.

Mr. Woodward, a former assistant to Dr. McEwen who is now attending the University of California at Berkeley and who is spending his Christmas vacation with his parents in San Diego, called at the Institution twice in the last few days. His work at the Institution led him to take great interest in various problems of the ocean and especially those dealing with certain combined or interactive influences of bacteria and general chemical conditions. He is therefore selecting his courses at Berkeley with a few to specializing along those lines as later opportunity offers.

## Biological Station Notes.

Mr. Balluff and the Hemenways have moved to Los Angeles.

Mr. Huestis has gone to Berkeley with his family where he is to finish residence requirements for his Ph. D. degree.

Mr. Moberg expects to return next week from Berkeley where he has been doing some special work in chemistry.

Mr. G. L. Fleming has been spending a great deal of time lately in study of biological conditions in the Cuyamaca Mountains.

Mr. Shain was in Los Angeles for a day or two at the first of the week.

Captain Crandall has returned from his eastern trip. After finishing the meetings on harbor affairs at New Orleans, Houston and Galveston he visited kinfolks in Kansas and Missouri and attended the meetings of the American Association for the Advancement of Science in Cincinnati.

Dr. Sumner also attended the Cincinnati meetings and is spending the month of January on the Atlantic Coast in connection with scientific matters.

The Martins have moved to Bard, California where they are to stay for some months.

The furniture belonging to the Vaughans has arrived from Washington and the family will be starting westward soon. They expect to make several stops on the way.

Mr. Woodward and Mr. Stahl, two Stanford students have been doing some work for Dr. McEwen during their vacation.

Mr. Gates is to arrive soon to do the work formerly done by Miss Leslie.

James Allen spent Christmas with his parents and sisters. He is now employed in Los Angeles.

Notice has just been received that W. E. Allen was elected Second Vice President of the American Microscopical Society at the Cincinnati meeting.

On Monday Captain Luce, Commander Hecht and Mr. Ormond of the U.S. Coast and Geodetic Survey steamer GUIDE visited the Station. On their way from the Atlantic Coast they made numerous collections and observations on the water and the material is being turned over to Dr. McEwen for study. They will be operating in this region for several months with San Diego as a base.

One object of their stay is to perfect new methods of getting bearings at sea (position of the ship in latitude and longitude) in spite of fog and similar difficulties. They expect to establish one operating station (apparently some sort of micro-radio-phone) at the Scripps Institution, employing two or three men. Two other stations are to be established, one at Ocean side and the other at San Juan Capistrano, probably. It is probable that extensive cooperation will be developed between the GUIDE and the institution highly beneficial to both lines of work.

## Scripps Institution Notes.

Director Vaughan has just been notified by the Secretary of the National Research Council that has been nominated to serve as a member of the committee on Permanent Organization of the Pacific Science Congress, and that he is to represent the National Research Council of the United States on that Committee. The next meeting of the Pacific Science Congress is to be held in Japan in 1926. The Japanese Government has already appropriated about \$100,000 to be used in defraying the expenses of that meeting.

On December 23 Col. E. Lester Jones, Director of the U.S. Coast and Geodetic Survey, wrote to Director Vaughan of the Scripps Institution expressing great satisfaction at the good results already obtained through cooperation of the two organizations in oceanographic investigations. He also makes suggestions for continuing such cooperation and for keeping the Scripps Institution in direct contact with U.S. Coast and Geodetic Survey steamers at work in Pacific waters.

Director Vaughan, Mrs. Vaughan and Miss Caroline, accompanied by Mrs. Bevans and Miss Nancy Bevans, spent the week end at Palm Springs. They visited the U.S. Government Date Farm at Indio where Director Vaughan made a study of some of the plants, particularly those which are being introduced at the Farm. The best wind-break is the Athel Tamarisk which is being used in the Coachella Valley. Dr. Swingle recently sent 250 cuttings of this plant for trial by the Scripps Institution. He will later send some specimens of Australian Arid Climate Citrus Plants. Dr. Vaughan brought back with him six species of cactus, half a dozen shoots of the Mohave yucca, and some other plants for trial planting on Institution grounds.

On next Friday, January 2, at 3 p.m. Prof. W. M. Davis will deliver his lecture on "Marginal Belts of the Coral Seas". On Sunday at 3 p.m. he will lecture on the "Grand Canyon" at the San Diego Natural History Museum, On Monday evening at 7 p.m. he will give the same lecture in the Community House in La Jolla, and on Tuesday at 3 p.m. he will deliver his last lecture at the Scripps Institution on "Illustrations of Tides by Waves."

Miss Arneson, a college friend of Miss Florence Sumner, has returned to Los Angeles after spending Christmas week at the Sumners.

James Allen and two of his friends arrived from Los Angeles early on Christmas morning. His companions returned in the afternoon but James expects to make an extended visit with his parents and sisters.

A letter has just been received from Wesley Allen at Callao, Peru telling a little about the trip of the U.S.S. Utah conveying General Pershing on his special mission and telling about some of the formalities observed after arrival in the port of Callao. He says the Callao bears much the same relation to Lima that San Pedro does to Los Angeles.

Mr. and Mrs. Cummings are spending the holidays with Mrs. Cummings' sister in San Diego and they are making occasional visits to the Institution.

## Scripps Institution Notes.

Director Vaughan goes to Berkeley Saturday night for a series of conferences with President W. W. Campbell and other officers of the University.

The Seminar on Oceanography on Tuesday afternoon was conducted by our distinguished visitor Professor W. M. Davis, who gave a remarkably illuminating talk on "Tides Illustrated by Waves". His explanations of waves, white caps, surf and tidal movements were astonishingly clear and satisfying.

Dr. Noodle gives a talk this Friday afternoon at 3 o'clock on "Evidences of Ancient Diseases". He is one of the foremost authorities in the world in this line of study and he has an enormous amount of interesting information concerning it. He is to return to Chicago on Saturday.

Dr. Myrtle Johnson called at the Institution on Tuesday to use library for checking up some material in her very fine manuscript (prepared jointly with Mr. Snook) giving popular descriptions and illustrations of animals inhabiting the shallow waters and tide lands of our coast. Dr. Johnson and Mr. Snook are in the unusual predicament of having done a piece of work so remarkably well that it has become too valuable for them to handle. It will cost about \$6000 to print the illustrations alone. The energy which might have earned that amount of money they have put into the work. Meanwhile there is great loss to the many nature loving visitors to our sea shore who would have so much use for this wonderful book. Delay in publication is due to the fact that publishers fear that they will not be able to sell enough copies to cover the great expense of publications.

## Scripps Institution Notes.

Director Vaughan returned from his visit to Berkeley on Thursday of last week, reporting that his conferences were very satisfactory. While there, arrangements were completed for him to give a set of seven lectures between March 5 and April 2. Of these, one is to explain the oceanographic work of the Scripps Institution, five are to discuss corals, coral reefs and associated phenomena, and one dealing studies on fossil, Larger Foraminifera, is to be especially for students of Paleontology.

While in Berkeley Director Vaughan arranged with the College of Agriculture to have Professor J. W. Gregg visit the Institution and prepare plans and a program for planting and developing the Institution grounds over a period of years. Satisfactory development of the campus in Berkeley is largely due to plans laid out ten to fifteen years ago.

On February 7 a meeting of the Pacific Committee of the National Research Council is to be held in the Director's office at the Institution. On the preceding evening Dean Merrill of the College of Agriculture is to give a very important illustrated lecture on "The Correlation of Biogeographic Distribution with the Geological History of Malaysia", on which he is the foremost living authority. It will be moderately technical but highly appealing to all people interested in problems of distribution of life on land, particularly plant life.

It is hoped that at about the same time Prof. H. E. Gregory, Director of the Bishop Museum in Honolulu will give a lecture on investigations of native races of Pacific Islands conducted under the direction of his institution.

Dr. W. E. and Mary B. Ritter are expected to visit the Institution about February 1.

On Thursday of this week Prof. H. G. Richards, Professor of Geology in the University of Queensland, Brisbane, Australia visited the Institution. He was accompanied by Mrs. Richards and her mother, Mrs. Christian. Professor Richards is Secretary of the Great Barrie Reed Committee of Australia which is directing an extensive series of investigations of that wonderful reef.

Dr. O. F. Cook of the U.S. Department of Agriculture, in charge of the Torrey Pines Experiment Station called at the Institution on Tuesday.

## Scripps Institution Notes.

Dr. Arnold, a member of the Earthquake Committee of the Carnegie Institution at Washington and an old friend of Director Vaughan of the Scripps Institution, called last week in connection with the proposed installation of seismographs. He expressed great pleasure at the local progress in preparing for the instruments and stated that the Scripps Institution was farther advanced in preparation than any other of the cooperating institutions. Excavation for the concrete piers to support the seismographs has been completed and arrangements are being made to begin construction.

Dr. C. W. Townsend, of Boston, famed as physician, author and ornithologist, called at the Institution last week. He was accompanied by Mr. Lawrence Huey, curator of Mammals in the San Diego Museum of Natural History.

Dr. Crile, the eminent surgeon of Cleveland, visited the Institution on Monday of this week. He made a special trip out from San Diego to see what was being done here in the line of research. He was accompanied by Mr. McCray the newspaper publisher.

Dean Merrill, of the College of Agriculture at Berkeley, who lectures at the Scripps Institution this Friday at 7:30 p.m. spent many years in scientific work in the Philippines where he was for some time Director of the Philippine Bureau of Science and Professor of Botany in the University. His opportunities for studying distribution of life on the earth have been very great and he has taken advantage of them. Professor Gregory who lectures at the Institution at 7:30 p.m. on Saturday of this week, is Professor of Geology in Yale University as well as Director of the Bishop Museum in Honolulu. He too has had wide experience in Pacific Ocean territories. While Dean Merrill's lecture will deal largely with distribution of plants Professor Gregory's lecture will deal largely with distribution of man in Pacific regions. The similarity in general trend of the two lectures will certainly add to their interest for many people. All who are interested are cordially invited to attend.

Mrs. W. H. Fitkin of the Science Department of the High School of West Toledo, Ohio, spent the last week in January at the Scripps Institution studying local plants and animals and with the assistance of Mr. Barnhart, making some special collections representative of this locality.

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Temperatures of surface water at Scripps Institution pier at about 7 a.m. for the week ending Feb. 3, 1925.

January	28 – 56.3
	29 – 55.8
	30 – 55.8
	31 – 55.8
February	1 – 55.8
	2 – 55.8
	3 – 55.4

## Scripps Institution Notes.

The Pacific Coast members of the Committee on Pacific Investigations of the National Research Council met in the office of the vice chairman, Director Vaughan of the Scripps Institution, on Saturday forenoon, Feb. 7. Other members attending were Chairman H. E. Gregory, Professor in Yale University and Director of the Bishop Museum in Honolulu, Director B. W. Evermann of the Museum of the California Academy of Sciences, Dean E. D. Merrill of the College of Agriculture of the University of California and formerly Director of the Philippine Bureau of Science, Emeritus Director W. E. Ritter of the Scripps Institution, and Mr. W. T. Swingle, in charge of the U.S. Government Date Farm at Indio, Calif.

Messrs. Evermann, Gregory, Merrill and Swingle were week end guests of Director and Mrs. Vaughan and Professor and Mrs. Ritter are guests of Miss Ellen Scripps.

Professor Merrill lectured at the Institution on Friday Evening, giving a summary of the results of his two decades of study of distribution of plants in the Philippines and other Pacific Islands.

Professor Gregory lectured at the Institution on Saturday evening and gave a general explanation of work being done by the Bishop Museum in Studying native races of men in the Pacific Islands.

Dr. Ritter attended the seminar on Feb. 3 and took part in the discussion and on Tuesday of this week he delivered a lecture at the Institution on "What is Consciousness"?

Dr. Evermann and Mr. Swingle are expected to give lectures at the later date.

Dean Merrill went over the whole property of the Institution with Director Vaughan with reference to future planting of trees and shrubs both for grounds adjacent to buildings and for slops and ravines farther away.

The recent visits of so many distinguished men of science have been very stimulating and helpful to the scientific staff of the Institution.

Plans for extensive cooperation between the U.S. Navy and the Scripps Institution have been made by which the Institution is to get records of surface temperatures of water and of meteorological conditions over the ocean, and samples of water and plankton from many places off the Pacific Coast of the United States, and from areas between California and Hawaii and Australia.

Last week a letter was received from Director W. A. Clemens of the Pacific Biological Laboratory at Nanaimo, B. C. asking for information and suggestions which they may be able to use in starting plankton work there.

Director Vaughan is adding 125 shrubs and young trees to the plantation about his house. This includes a Raphiolepis hedge along the entire frontage of the grounds adjacent to the Director's house.

Mr. Quayle is recovering rapidly from his recent operation.

Miss Collins entertained visitors over the week end.

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Water temperatures at the Scripps Institution pier at about 7a.m. for week ending Feb.10, 1925.

Feb.	4	–	55.2
	5	–	53.8
	6	–	55.6
	7	–	55.8
	9	–	56.1
	10	–	56.3

## Scripps Institution Notes.

Director Vaughan has been invited to give a set of six lectures at the Stanford University during the week beginning April 5. The first five will deal with corals, coral reefs and associated phenomena, while the sixth will be especially for advanced students of paleontology and will deal with the larger foraminifera. He is also invited to talk to the Science Club of the students of Roosevelt Junior High School in San Diego on the subject of Oceanography.

Mr. Underhill, Comptroller of the Southern Branch of the University of California, visited the Institution on the business last Thursday.

Mrs. Calkins, representing the California Monthly, the official organ of the alumni of the University of California, visited the Institution last week getting information regarding its conditions and activities. She requested the Director to write two articles for the California Monthly, one to be a general account of the Institution, and a later one to discuss some special aspect of its work.

Emeritus Director Ritter and Mrs. Ritter called at the Institution on Monday to say good bye before leaving for Washington D.C.

Mr. Quayle returned home from the hospital on Tuesday of this week. He is still improving rapidly.

Mr. Shain is getting better after an illness of several days.

On this Friday evening at 7:30 p.m. in the Institution library Dr. F. B. Sumner will give an illustrated lecture on "How some fishes adjust their colors and color patterns to their surroundings". This lecture deals largely with experiments made by himself and will include an explanation of how he induced a flounder to change the size and location of spots of color on its skin. All who are interested are cordially invited to attend.

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Temperatures of surface water at Scripps Institution pier at about 7 a.m. for week ending Feb. 17, 1925.

Feb.	11	–	55.9
	12	–	55.1
	13	–	55.5
	14	–	56.1
	15	–	
	16	–	55.6
	17	–	56.3

## Scripps Institution Notes.

Director Vaughan received a few days ago a letter from Colonel F. Lester Jones, Director of the U.S. Coast and Geodetic Survey, expressing his interest in continuing cooperation in Hydrographic and oceanographic work with the Scripps Institution. Rough weather prevented some work on Monterey Bay which was attempted by the Survey but Col. Jones thinks it's probably that work in other localities similar to that of last year can be carried through. He suggests a conference between a representative of the Institution and Commander Parker of the Survey at Los Angeles this week end. Since Dr. McEwen is to be in Los Angeles at that time he will meet Commander Parker.

Dr. Charles D. Walcott, Secretary of the Smithsonian Institution at Washington, has just written to Dr. Vaughan to congratulate him on his presidential address before the Paleontological Society of Washington which has just been published in the Bulletin of the Geological Society of America.

Mr. Donald M. Baker, a Director of the National Association of Engineers and now in business as a consulting engineer in Los Angeles, called at the Institution last week to confer with Dr. McEwen about investigations of rain fall, ground water run off etc.

Dr. McEwen goes to Los Angeles this Friday to attend a meeting of the newly organized Southern California Section of the Mathematical Association of America, to be held on Saturday. He is to give a paper on "mathematics of Fluid Convection as the Mechanism of Heat Conduction in Large Bodies of Water".

Mrs. Morgan, Sister of Mr. Guy L. Fleming, and her three children is going to Oregon this week.

Mr. Quayle's Brother and family visited the Quayles over the week end and his mother returned with them to Los Angeles on her homeward trip to Idaho.

Water temperatures at Scripps Institution pier at about 7 a.m. for week ending Feb. 24, 1925.

Feb.	18 – 56.3
	19 – 56.3
	20 – 56.5
	21 – 56.5
	22 –
	23 – 56.7
	24 – 56.7

## Scripps Institution Notes.

On Friday of last week Dr. McEwen had a conference at Los Angeles with Captain Parker and the Commanding Officer of the U.S.S. Guide, of the U.S. Coast and Geodetic Survey, in which plans were made for additional cooperation in oceanographic work in Southern California waters. For the next two months the GUIDE will be used in making studies of the outer part of the continental shelf, largely seaward from Santa Catalina and San Clemente Islands out to the 1000 fathom line and between the latitudes of Oceanside and Santa Barbara. Samples of water, plankton and bottom materials in this area will be taken for study by the Scripps Institution and hydrographic observations will also be made for use by the Institution.

A new combination for cooperative investigation was made last week when representatives of the Air Station of the U.S. Navy at San Diego, the San Diego office of the U.S. Weather Bureau and the Scripps Institution met to plan a program of study of fog problems near and on the coast of Southern California.

Professor Jonson of the Department of Botany of the University of Southern California visited the Hootons over the week end and called on Director Vaughan. He was deeply interested in recent plantings of vegetation on Institution grounds.

Also on Monday, Dr. Kammerer, of Vienna, Austria in company with director Abbott of the San Diego Museum, visited the Institution and Dr. Sumner. He gave special attention to Dr. Sumner's work in breeding experiments with deer mice.

Mr. G. S. Radford and old friend of the Institution and now a consulting engineer in New York, visited Mr. Allen and over acquaintances last week and presented to the Institution library an excellent copy of the Abbe Trembley's book on the "Fresh Water Hydra", published in 1744. Director Vaughan is especially pleased with this addition to the library because it deals with the new kind of the corals and is probably the best piece of pioneer work done with such animals.

Sixty additional trees and shrubs are being set on the south side of the ravine which empties into the sea just north of the pier. It is hoped that they will soon grow so as to make an attractive park there. Director Vaughan recently received from Australia, from Mr. R. H. Cambage, the foremost authority on Australian acacias, a large number of acacia seeds including several species not known in California. These are all being germinated by the U.S. Agricultural Experiment Station at Torrey Pines. The Division of Foreign Seed and Plant Introduction of the U.S. Department of Agriculture has sent eleven specimens of plants of three species not before represented in California for trial planting at the Institution.

Dr. McEwen was called to Palo Alto Monday by the death of his mother.

Mrs. Hood left for Australia at the end of last week after several months visit with her mother, Mrs. Ross, and her brothers Messrs. James and Jack Ross.

Mr. Fleming gave his illustrated lecture on local wild flowers on last Friday evening.

On Tuesday evening of this week Mr. Barnhart gave the first of two illustrated lectures on "Economic Fishes of Southern California". The second will be given on Tuesday Evening of next week at 7:30 p.m. all who are interested are invited to attend.

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Water temperatures at Scripps Institution at about 7 a.m. for week ending Mch. 3, 1925.

Feb.	25	–	56.4
	26	–	56.6
	27	–	56.6
	28	–	56.7
Mch.	01	–	
	02	–	55.8
	03	–	56.5

## Scripps Institution Notes.

Director Vaughan has just received from the United States National Museum several samples of manganese nodules taken by the U.S.S. Albatross in deep sea dredging. A large number of samples of deep sea bottom deposits were already in possession of the Scripps Institution, which has the best collection of such materials in America outside of the National Research Museum. These samples are very valuable, not only for research, but also for study by less advanced students.

Last Monday afternoon Director Vaughan gave an illustrated lecture on "The Ocean" to the Science Club of the Roosevelt Junior High School in San Diego.

Dr. Victor C. Vaughan, Member of the National Research Council, formerly Dean of the School of Medicine of the University of Michigan, distinguished as a pioneer and leader in American Medicine and Hygiene, visited Director Vaughan and his family for a few days recently and on Friday gave a talk on his pioneer work in study of bacteria and their relation to disease. He was accompanied by Mrs. Vaughan.

Prof. C.L.A. Schmidt, Chief of the Division of Biochemistry in the University of California at Berkley, spent a few days at the Institution at the end of last week. He gave most of his time to advising concerning the development of the local work in biochemistry.

Mr. W. T. Knowlton, Sanitary Engineer, Dr. Carl Wilson, Bacteriologist, and Mr. G.A. Parkes, Engineer, representing the city of Los Angeles, visited the Institution on Thursday of last week and held a conference with Director Vaughan and Mr. Allen with a view to establishing cooperative investigation of marine conditions in the region of the outlet of the Los Angeles sewage system. Arrangements were made for further conferences. One in particular with Dr. McEwen who could not be present at this one. These official engineers of Los Angeles are especially anxious to learn the best methods of study of problems of the effect of sewage on local sea water and ocean conditions. This will evidently involve such studies of currents, temperatures, salinities, and plankton as are already in progress at the Scripps Institution and some additional studies which our Institution has not yet been able to undertake. It appears to be an excellent opportunity for advancement of oceanographic science at the same time that practical benefit is conferred upon the Los Angeles community.

Mrs. L.V. Pirsson, wife of the late Prof. L.V. Pirsson of the Department of Geology at Yale, and Mrs. E. P. McLaughlin, both daughters of Professor George J. Brush formerly Professor of Mineralogy at Yale and one of the most distinguished early mineralogists of America, visited the Institution last week.

Mrs. Barnhart gave his second lecture on Economic Fishes on Tuesday evening of this week.

Mr. Fleming gave Arbor Day talks at Memorial Junior High School on Thursday and La Jolla High School on Friday of last week.

The Morgans welcomed a new son last week.

The Moodies moved to Santa Monica on Sunday.

The Quayles are preparing to move to Palo Alto.

Dr. McEwen and Mrs. McEwen returned from Palo Alto on Monday.

Several very fine specimens of sea plumes have been on exhibition in the Aquarium this week.

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Water temperatures at about 7 a.m.

Mch. 4- 57.6  
5- 57.4  
6- 57.6  
7- 57.7  
8-  
9- 57.7  
10- 57.2

## Scripps Institution Notes.

A letter has just been received by Director Vaughan from Dr. Joseph A. Cushman of Sharon, Mass. an eminent authority on foraminifers, in which he agrees to work up the smaller kinds found in collections made by the Scripps Institution. He will prepare from the material three sets of representative specimen, one set (including "types") to go to the U.S. National Museum, another to the Scripps Institution, and the third to be kept for his own use.

Official notices recently been sent to Director Vaughan that he has been elected a Corresponding Member of the Royal Italian Geographical Society in recognition of his investigation in geology and oceanography.

On last Friday, Director Vaughan gave an illustrated lecture on the "Larger Foraminifera" Remains of foraminifera (very small marine animals many of which are microscopic cover about 25% of the Earth's surface and they are therefore highly important in the studies of geography, geology, and oceanography. The larger forms are useful in geological studies because certain species give very definite indications of certain kinds of geological history. At the end of this week Dr. Vaughan goes to the San Francisco section where he is to give several lectures at Berkley, one at the California Academy of Science, and sic at Stanford University.

On last Tuesday Mr. Hovey, Chief Purchasing Agent of the University and Mr. Dimbleby, Purchasing Agent of the Southern Branch visited the Institution on university business.

On Monday, Mr. Porcher, representing the U.S. Coast and Geodetic Survey made an accurate determination of the elevation of the bench marks and the tide gauge staff at the pier and on Institution Grounds.

Dr. McEwen returned on Sunday from a trip to Los Angeles to confer with Sanitary Engineers concerning oceanographic studies in the region near Redondo. He made a trip with them over the ground to be studied and gave the benefit of his experience in selecting stations for collecting water samples and plankton samples. It is probable that the Scripps Institution will be able to handle some of the material obtained but on account of already being overloaded it is probable that assistance in this enterprise will mainly be limited to conference and advice.

At the end of this week Dr. Summer is starting to New York where he is to deliver a paper on birth control before the Eugenics Congress.

Mr. Ross went to Los Angeles on Monday to discuss with the Braun Specialty Company details on the manufacture of a closing bucket recently designed by Mr. Allen, for taking water and plant samples at levels below the surface without use of complicated equipment.

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## Water Temperatures

March- 11- 57.7

12-57.2

13- 57.7

14-57.7

15-

16-57.7

17- 57.7

## Scripps Institution Notes.

In the past week considerable advance has been made in arranging for cooperative study by the Scripps Institution and the Sanitary Engineers of Los Angeles on the effects of discharge of sewage into the sea near White's Point and Pt. Vincente. Plans are being discussed for a trial series of investigations running for about five months. According to these plans the Los Angeles Engineers will make records of temperatures at various levels down to a depth of 200 feet at several stations, will study direction of currents at various points, and will collect samples of water, plankton, and of bacteria. About once a month for five months the Scripps Institution offers to spend four or five days in that area with the boat and equipment in use for a regular oceanographic work near La Jolla. With this equipment special series of water and plankton samples can be taken and some important chemical studied can be made. The Scripps Institution will undertake to determine salinities for all water samples but it is probable that all bacteriological study will be done at Los Angeles. It has been suggested by the Los Angeles officials that they may be able to do a great deal of plankton study if the Scripps Institution will provide guidance and supervision. Both organizations are to exchange all such records as are useful to each.

At a conference on Thursday of last week, preliminary arrangements were completed by representatives of the Air Service of the U.S. Navy, the U.S. Weather Bureau, and the Scripps Institution for the study of fogs. One man from the Air Service is to specialize on fog problems, particularly high fogs, and the other two organizations are to collect and give him such data as they are able to obtain. The Air Service is to be in charge of the investigations and is to formulate plans for procedure. All information accumulated is to be interchangeable amongst the three organizations.

For nearly two weeks the Institution has been receiving collections of water and plankton samples taken by the Destroyer Fleet and the flagship, U.S.S. OMAHA, on the trip to Guadalupe Island. There are several scores of water samples well disturbed from over a wide area, six boats taking them at the same hours on the run. Such a series has never been obtained before in any ocean. In addition, thirty six boats took observations of surface temperatures hourly throughout the trip. This is also unique. Such work is very highly valuable in trying to learn the characteristics of the ocean.

Director Vaughan is giving a series of lectures in Berkley this week.

Dr. Summer is attending a Eugenics Conference in New York this week.

Mr. Leach, formerly Director of the Mint under President Roosevelt and now a resident of Oakland, visited the Institution last week.

On last Friday Mr. Guy L. Fleming gave a talk on pines at Riverside Junior College. With Mr. Blics of Riverside he spent the weekend on San Jacinto Peak. They found about six feet of snow in drifts and got a fine view of the desert.

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Water temperatures at Scripps Institution Pier at about 7 a.m. for the week ending Mch. 24, 1925.

Mch. 18- 58.4  
19- 58.0  
20- 59.0  
21- 58.5  
22-  
23- 58.8  
24- 59.0

## Scripps Institution Notes.

On Tuesday of this week 700 bottles for plankton samples and 360 bottles for water samples were delivered to the U.S.S. OMAHA for use in obtaining oceanographic collections and observations on the trip to the Hawaiian Islands and Australia. On Wednesday 576 bottles for water for water samples were delivered to six destroyers (144 to each) for taking water samples on the trip to Hawaii which they are making with the OMAHA. The rest of the destroyer fleet (24 vessels in all) will aid these other vessels in oceanographic observations by taking temperatures at hourly intervals between here and Hawaii. Arrangements for these extensive movements in cooperation between the U.S. Navy and the Scripps Institution in oceanographic observations made by the OMAHA and the destroyer fleet off the coast of Lower California showed very plainly the high value and great practicability of such cooperation.

Dr. McEwen is in receipt of a letter from the Superintendent of Lighthouses at San Francisco assuring him of the desire of the Lighthouse Service to cooperate in oceanographic work and suggesting dates for conference concerning methods and plans. He offers to arrange for Dr. McEwen to visit the Lighthouse at Farallone Islands at certain dates in order to determine just what work can be undertaken and how it may be done to best advantage.

Mr. Fleming is busy this week arranging for the big celebration at Torrey Pines on Saturday of the 75<sup>th</sup> anniversary of their discovery. There will be talks by members of the Park Board and other leaders in conservation and study of natural conditions. The La Jolla High School Orchestra will furnish music and parties will be escorted about the grounds of the Park so that they may be sure to see all of the points of major interest.

Dr. and Mrs. H. S. Reed of the Riverside Citrus Station spent the last few days of March at the Institution.

Mr. and Mrs. A. E. Swarthout of Los Angeles visited the Shains over the weekend.

Mrs. Vaughan left on Monday for San Francisco and Berkley. She and Dr. Vaughan will leave Berkeley for Sanford University on Saturday and will spend a few days there.

Miss Caroline Vaughan made the horseback trip to Ramona with Mrs. Stephens' party over the weekend.

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Water temperatures at Scripps Institution Pier at about 7 a.m. for the week ending Mch. 31, 1925.

Mch 25- 59.2

26- 59.9

27- 59.4

28- 58.6

29-

30- 57.2

31- 57.2

## Scripps Institution Notes.

In the study of ocean conditions there is constant need for increasing the extent and accuracy of our knowledge of ocean temperatures. For many years the Scripps Institution has felt the need for getting continuous records of temperatures of sea water at some one or more representative locations. Instruments for giving continuous records are very expensive and difficult to get and the Institution has not yet been able to spare funds from routine uses to make the purchase. It is therefore a very important step in cooperation in study of ocean temperatures which was recently announced by the Los Angeles office of the Southern California Edison Company in a letter to Dr. McEwen. According to this letter that Company together with the Southern Sierras Power Company of Riverside and the Bureau of Power and Light of the City of Los Angeles has arranged to provide a fund for purchase of two recording thermometers. Dr. McEwen is now arranging for purchasing the necessary equipment which will probably be installed at the La Jolla pier and at Balboa. It may be possible to equip one of the machines for making simultaneous record of surface and bottom temperatures. If that cannot be done there is still another possibility that a machine for recording light can be installed with one of the others. In any case the Institution will get a great increase in information concerning temperatures of the sea water near shores.

Judging from the letters of inquiry recently received there will probably be a larger number of visitors using the Institution laboratory for research this summer than there has been for two or three years.

Robert Batchelder and one of his college friends visited the summers on Sunday.

James W. Allen of Los Angeles visited his brother, W.E. Allen, at the end of last week.

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Water temperatures at Scripps Institution Pier at about 7 a.m. for the week ending April 7, 1925.

April 1- 57.3

2- 58.1

3- 58.1

4- 57.7

5-

6- 57.9

7- 58.3

## Scripps Institution Notes.

On last Saturday Director Vaughan returned from a two weeks trip to the San Francisco region where he delivered a lecture at the California Academy of Sciences and a series of lectures at the University of California and at Stanford University. The lectures at Stanford were the result of a special invitation given a year ago by Professor Blackwelder of the Department of Geology of Stanford University. At the time Professor Blackwelder said that he was opening a general policy of having each winter some well known geologist visit his institution to give a brief course of lectures, and that he hoped Dr. Vaughan would be willing to be the first.

Before leaving here Director Vaughan wrote to the head of each department in the University of California which might be interested in using local facilities and invited them to make such use to the limit of our capacity. As a result there will be two or more advanced students here during the summer and probably two or more through the academic year beginning this fall. They will do work in the fields in the fields of Zoology, Bacteriology and Geology.

In a recent letter to Director Vaughan Major Bowie, in charge of the U. S. Weather Bureau at San Francisco, expresses great pleasure at the possibility of cooperation between the Weather Bureau and the Institution in the study of Pacific meteorological conditions. He especially emphasized the need for extensive studied of water temperatures at considerable distances from the shore and he mentions the possibility of cooperation in filling out and publishing charts to show prevailing weather conditions, especially over the northwest Pacific. He also says that he thinks the center of control of of seasonal rainfall in California is probably about midway between the California Coast and the Hawaiian Islands, and that area needs observation. As soon as Director Vaughan returns from Washington, in the latter part of May a conference in meteorological investigations on this Coast. Major Bowie will take part in this conference, which will include officers of the U.S. Navy and officials of the U.S. Weather Bureau, Representatives of Power Companies and others interested will be invited to participate.

Certain of the special problems in micro-biology, biochemistry, and their interrelationships with geological problems were discussed by Director Vaughan with members of the faculty at both the University of California and the Stanford University. Sometime this Summer it is planned to hold a conference between bacteriologists, plant physiologists, biochemists, and geologists on order to formulate a program for such work. Cooperation by both Universities is assured.

As Chairman of an International Committee for Investigation of the Physical and Chemical Features of the Waters of the Pacific Ocean, Director Vaughan announces that subcommittees from the following countries have been organized: Australia, Canada, Japan, New Zealand, and the United States. Dr. G. F. McEwen of the Scripps Institution is chairman of the subcommittee for the United States. Other organizations represented on this subcommittee are the Hydrographic Office of the U.S. Navy, the U.S. Weather Bureau and the U.S. Bureau of Fisheries.

On next Monday Director Vaughan leaves for Washington to attend the annual meetings of the Division of Geology and Geography, the Division of Foreign Relations, the Geophysical Union of the National Research Council and the National Academy of Sciences. He represents the United States on the Committee for Permanent Organization of the Pacific Scientific Congress.

Prof. C. A. Kofoid, of the University of California at Berkeley and formerly Assistant Director of the Institution made a short visit last Friday.

On this Monday Dr. Med. Katsuji Inouye, Biochemist in the Imperial University of Japan at Sendai, visited the Institution.

A brief inspection trip to the Institution was made on Monday by the Mexican Scientists Prof. Francisco Contreras, Director of the National Museum of Natural History at Mexico City and Octano Solios of the Botanical Garden of Chapultepec in Mexico City. They were accompanied by Dr. Fred Baker of San Diego who acted as interpreter.

Other callers were Arthur Newton Pack and friend of Washington D.C., accompanied by Dr. Clinton Abbott of San Diego.

Surface water temperature at Scripps Institution pier at about 7:15am for the week ending April 14, 1925.

Apr 8 – 58.6

Apr 9 – 58.9

Apr 10-58.5

Apr 11-59.9

Apr 12

Apr 13-59.9

Apr 14-58.9