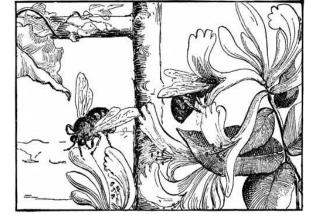
"Holy Ethogram, Batman!" How to describe Honeybee Foraging Behavior

Introduction

Why study animal behavior? In the case of Bees, it could be to learn how complex communication evolved. What can observing an animal's behavior tell you about its world? It could indicate what information that animal considers important, can detect, and potentially communicate.

Materials

Flowering Plants Bees and other flower visitors



Methods:

Observe the behaviors of honey bees foraging on flowers. Record the behaviors you observed in the data table below with a tally mark. After ten minutes, switch from one observation site to another.

| Behaviors | Feeding | Buzzing Wings | Antennae Cleaning | Proboscis Cleaning | Searching | Resting | Aggression | other |
|------------|---------|------------------|----------------------|-----------------------|-----------|---------|------------|-------|
| 0 - 10 | | | | <u> </u> | | | | |
| minutes, | | | | | | | | |
| Location A | | | | | | | | |
| 10-20 | | | | | | | | |
| minutes, | | | | | | | | |
| Location B | | | | | | | | |
| Total | | | | | | | | |

Conclusions:

Which Behaviors were more pronounced? How do these behaviors benefit the bee?

Which behavior was seen the least? Why?

| Which Behaviors are hardest to identify? |
|--|
| What is the purpose of antennal cleaning and proboscis cleaning? Be specific! |
| What is the purpose of "buzzing" on a flower? (Hint: it isn't for communication) |
| If you noticed aggression, what might be the cause? |
| Do you think there are aggressive behaviors between bees of the same colony? |
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For more information, please contact Meg Eckles (meg.eckles@gmail,.com). This exercise was made possible by funds from the NSF Socrates Fellowship Program. The research was partly supported by funds from NSF IBN 0545856.