

To Eat or Not to Eat? Feeding Patterns in Two Groups of Captive Snakes

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Introduction

Captive snakes, especially wild-caught individuals, often inexplicably reject food for periods of time. The degree to which this occurs varies from species to species. Using both wild-caught and captive snakes we wanted to answer two questions:

- Do wild-caught, temperate snakes (*Thamnophis elegans*) maintained in similar conditions show a periodic changes in feeding?
- Do captive-bred snakes of a different species show the same behavior?



A *Thamnophis elegans* found by Logan River.

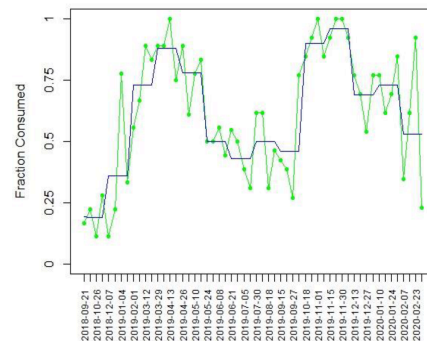
Methods

- 13 individual *Thamnophis elegans* were collected from the wild over a period of three years.
- We compared them to 11 captive-bred of a tropical species (*Lamprophis fuliginos*).

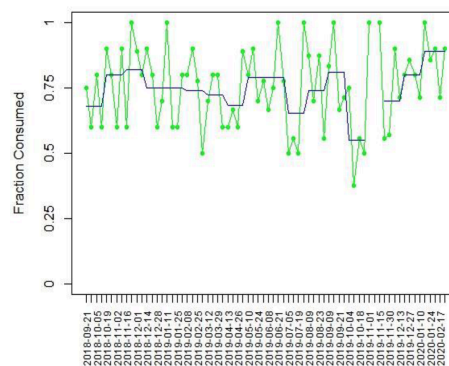
- Both males and females were included, but individuals that had health problems or were gravid were not included in the study.
- Food was offered weekly and average fraction of food consumed was recorded.
- Dramatic changes in appetite were compared to the average for test period.

Results

- *Thamnophis* showed two marked periods of time exceeding a month when snakes consumed significantly less, and then more than they ate on average ($p < .05$).
- *Thamnophis* individuals showed significant difference from each other feeding behaviors.
- There is a significant difference between the feeding behavior of *Thamnophis* and *Lamprophis*.



THEL Feeding



Pattern

LAFU Feeding Pattern Figure 1: We used data for *Thamnophis elegans* (THEL) and *Lamprophis fuliginos* (LAFU) for more than a year and a half. Average fraction of food consumed per colony is shown in green and average fraction of food consumed per four-week-period is shown in blue.

Conclusions

While the *Thamnophis* colony did show dramatic periodic changes in feeding behavior, there is much variation between individuals at all periods. This makes it uncertain whether marked changes in feeding behavior are species wide, or a product of random chance. However, whatever causes changes in feeding behavior in *Thamnophis* does not affect individuals of another species kept in similar conditions.



An adult *Lamprophis fuliginos* feeding