Thursday Lecture

2024-09-05

**Early studies of habitat selection and the role of learning**

Quiz questions:

What reason for behavior would you study if you were interested in the physiological mechanisms involved in a particular behavior? *Proximate reasons*

What type of genetic program allows for the additional input during the lifespan of the organism? *Open genetic program*

Learning Habitat Selection

**Sign stimulus**: the most impactful stimulus out of all in the environment. What is that one or more that elicits a response from the organism.

What are the sign stimuli that an adolescent leaving to find it’s own home range will see and decide whether or not to take occupancy there.

*Imprinting*: Rapid and rigid conditioning – Ernst Mayr paper example: some finch sp. can imprint on their foster parents.

Wecker paper:

Control II, if these mice had all inhabited the fields, we would be able to say that this behavior is in a very closed genetic system.

Time spent with parent seems to matter

Exp II, lab raised parents, raising offspring in a field environment: preference for field.

Exp III, wild caught parents, offspring raised in woods: preference for field

Exp IV, lab raised parents, raising offspring in a forest: equal preference for field and woods.

Conclusions: there appears to be some genetic component, but there is a learned aspect that can change the genetic template.

Follow up: cross-fostering of offspring to determine open/closed.

Tuesday: talk about what we think of Weckers explanation for why the lab raised mice are so different from wild-caught mice.