

BEHAVIORAL ECOLOGY

1. Define the following terms:

Ethology	
Behavior	

2. Match the description/example with the correct behavior category.

- A. Classical conditioning**
- B. Fixed-action pattern**
- C. Habituation**
- D. Imprinting**

- E. Insight**
- F. Instinct (innate)**
- G. Observational learning**
- H. Operant conditioning**

_____ Behaviors that are inherited

_____ Performed virtually the same by all individuals regardless of environmental conditions

_____ In mammals, the female parent cares for offspring

_____ Highly stereotyped sequence of behaviors that, once begun, is usually carried to completion

_____ Triggered by a sign stimulus

_____ When a graylag goose sees an egg outside her nest, she will methodically roll the egg back into the nest. The egg outside the nest is the stimulus. Even if the egg is removed or slips away, she completes the behavior by returning an "imaginary" egg to the nest

_____ Male stickleback fish defend their territory against other males. The red belly of males is the stimulus for aggressive behavior. Nikolass Tinbergen discovered any object with a red underside triggers the same aggressive behavior

_____ Learning that occurs during a specific time period; generally irreversible

- _____ Konrad Lorenz discovered that during the first two days of life, graylag goslings will accept any moving object as their mother (even a human)
- _____ Association of irrelevant stimulus with a fixed physiological response
- _____ Animal performs a behavior in response to a substitute stimulus rather than the normal stimulus
- _____ Pavlov's dogs; dogs were conditioned to salivate in response to a bell
- _____ Trial and error learning
- _____ Animal associated a behavior with a reward or punishment
- _____ B.F. Skinner trained rats to push levers to obtain food or avoid painful shocks
- _____ Learned behavior that allows the animal to disregard meaningless stimuli
- _____ Sea anemones pull food into their mouths by withdrawing their tentacles; if the tentacles are stimulated with nonfood items, the tentacles will ignore the stimulus after several futile attempts to capture the "food"
- _____ When animals copy the behavior of another animal without having experienced any prior positive reinforcement
- _____ When an animal, exposed to a new situation and without any prior relevant experience, performs a behavior that generates a desirable outcome.

3. Identify the type of movement described in each of the following.

A. Kinesis

C. Taxis

B. Migration

- _____ Change in activity rate in response to a stimulus
- _____ Sowbugs become more active in dry areas and less active in wet areas
- _____ Oriented movement toward or away from a stimulus
- _____ Houseflies automatically move away from light after feeding
- _____ Long-distance, regular movements that often involve a round trip each year