

## BEHAVIORAL ECOLOGY

1. Define the following terms:

<b>Ethology</b>	
<b>Behavior</b>	

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