

## Reproductive Behavior

What is the ultimate goal of reproduction?

Pregnancy, successful embryogenesis and parturition

Why is it important to expose young males to mating?

Male mating is a learned behavior

Negative experience will reduce the male's desire for reproducing

What are the stages of male behavior?

1. Precopulatory
2. Copulatory
3. Postcopulatory

What happens in the Precopulatory Phase?

- Search for sexual partner
  - o Requires the use of most senses
  - o Olfactory & vomeronasal system -> flehmen response
  - o Visual signals
  - o Auditory signals
  - o Tactile stimulation
- Courtship
- Sexual arousal
- Erection
  1. Erotogenic stimuli causes sensory nerves to fire
  2. Sensory nerves activate "reproductive behavior center" in hypothalamus
  3. Stimulation of parasympathetic nerves that innervate penile arterioles -> blood supply
  4. Parasympathetic nerve terminals release nitric oxide (NO) -> causes increase in blood supply
  5. NO initiates biochemical cascade that causes erection -> engorgement of blood in tissues
- Penile protusion

What happens in the Copulatory Phase?

- Mounting
- Intromission
- Ejaculation
  1. Intromission
  2. Threshold of sensory nerves in the glans penis is reached and impulses are sent to the spinal cord
  3. Ischiocavernosus and bulbospongiosus muscles contract
  4. Mixture of seminal plasma and sperm -> semen

What happens in the Postcopulatory Phase?

- Dismount
- Refractory period
  - o Length of time before a second ejaculation can occur
- Memory

What is the difference between satiation and exhaustion?

Satiation- further stimuli will not cause immediate responsiveness

Exhaustion- no further sexual behavior can be induced even if sufficient stimuli are present

What is the refractory period influenced by?

Sexual rest, age, species, female novelty, and number of previous ejaculations