

Importance of Snakes in the Ecosystem:

Snakes as Population Controllers:

- Snakes, as carnivores, play a crucial role in regulating prey populations, especially rodents.
- They are effective in controlling rodent populations, preventing damage to crops and property.
- Snakes can access burrows and tight spaces where other predators may struggle to reach.

Snakes in the Food Chain:

- Snakes, not always at the top of the food chain, become prey for higher predators, contributing to the balance in ecosystems.
- Some snakes specialize in preying on other snakes, creating a cascade effect in the food web.

Disruption by Invasive Snakes:

- Introduction of invasive snake species can disrupt the natural food chain.
- Examples include constrictor snakes in Florida threatening various prey populations and the brown tree snake affecting bird populations in Guam.

Cascading Effects:

- Snakes contribute to complex inter-species relationships with both positive and negative effects.
- For instance, timber rattlesnakes help control Lyme disease by reducing the population of mice, which are hosts to disease-carrying ticks.
- Conversely, brown tree snakes have negatively impacted native plant regeneration by preying on pollinators and seed distributors.

Economic Importance of Snakes:

- Snakes have economic significance in various industries.
- The pet industry, valued at over \$72 billion worldwide, includes snakes as key contributors.
- Snakes indirectly contribute to healthcare through pest control, reducing the spread of tick-borne and rodent-borne diseases, and the anti-venom industry, estimated at \$2.9 billion by 2025.

Source: The internet.