

Name _____

Web of Life: The Crucial Role of Spiders in Ecosystems

Open-Ended Response Answer Key

1. Spiders contribute to ecological balance as both predators, controlling insect populations, and prey, sustaining higher trophic levels in food webs. This helps maintain population dynamics and prevents ecosystem imbalances.
2. One example of spiders modifying habitats is the creation of burrows by trapdoor spiders. These burrows provide shelter for the spiders and create microenvironments that support diverse communities of organisms, influencing soil structure and moisture levels.
3. The loss of spider populations could disrupt ecosystem dynamics, leading to increased insect populations and potential pest outbreaks. This could have cascading effects on other organisms that rely on spiders as prey, leading to imbalances in food webs and ecosystem functioning.
4. Besides controlling insect populations and serving as prey, spiders contribute to ecosystems by pollinating flowers, dispersing seeds, and providing food for other animals through their role as scavengers. These additional contributions further highlight the ecological importance of spiders.

