

Name _____

Silent Predators: Exploring the Enemies of Butterflies

Open-Ended Response Answer Key

1. One adaptation that butterflies have evolved to evade capture by predators is cryptic coloration, which allows them to blend into their surroundings and avoid detection. This adaptation helps butterflies survive by making them less visible to predators, increasing their chances of escape.
2. As a bird hunting for butterflies, one hunting strategy I might use is to perch on a branch near a patch of flowers and wait for butterflies to come within striking distance. When a butterfly approaches, I would quickly launch myself into the air and snatch the butterfly with my beak before it has a chance to escape.
3. Butterflies play an important role as prey in ecosystems, providing a food source for a wide range of predators including birds, insects, spiders, reptiles, amphibians, and mammals. Predator-prey relationships help regulate butterfly populations and maintain ecosystem balance. However, excessive predation pressure or disruptions to predator populations could have negative effects on butterfly populations, leading to declines in biodiversity and ecosystem health.
4. Human activities such as habitat destruction and pesticide use can have both direct and indirect effects on the predators of butterflies. Habitat destruction can reduce the availability of suitable habitat and prey for predators, leading to declines in predator populations. Pesticide use can directly harm predators through poisoning or indirectly by reducing their prey populations. These effects can have cascading impacts on butterfly populations, disrupting predator-prey relationships and potentially leading to population declines.

