

Name _____

Shaken, Not Stirred: Understanding Ecosystem Disturbances

Open-Ended Response Answer Key

1. Disturbances can enhance ecosystem resilience by creating opportunities for new species to colonize, promoting genetic diversity, and stimulating ecosystem recovery processes.
2. Disturbances can create spatial and temporal heterogeneity in ecosystems, fostering diverse habitats and supporting a wide range of species.
3. Human-induced disturbances can have far-reaching consequences, including habitat fragmentation, loss of biodiversity, degradation of ecosystem services, and exacerbation of climate change impacts.
4. Disturbances can trigger trophic cascades, affecting interactions between species and altering ecosystem dynamics. For example, a decline in predator populations due to habitat loss can lead to an increase in prey species, which in turn can impact plant communities and ecosystem structure.

