

Biotic and Abiotic Factors

Discuss biotic and abiotic factors in the context of salt and the Baltimore streams.

- A. Introduce the ecological principles of biotic and abiotic factors
- B. Connect the principles to this case study about Baltimore streams.

Discussion

Key Idea: Ecosystems have a natural balance of abiotic and biotic factors.

Question: What is the definition of an ecosystem?

Answer: An ecosystem is an area that includes all the interconnected living (biotic) and non-living (abiotic) components.

Question: In science we call living things biotic factors and the non-living things abiotic factors. What are some abiotic and biotic factors in the Baltimore stream ecosystem?

Answer: Biotic: fish, plants, algae, bacteria

Abiotic: salt, water, rocks, sediment, trash

Ecosystems need a balance of both types of factors to be healthy. The ecosystems that we have been exploring are the fresh waterways around a city – in this case the city of Baltimore.