

Why do Invasive Species like Artificial Lakes?

Free Response Question Analysis

- a) Identify the hypothesis tested in the study.
- b) Identify the independent variable.
- c) Identify the dependent variable.
- d) Explain how the experimental modification to the study could alter the results.

Invasive species can be accidentally or deliberately introduced into a non-native environment. Most invasive species can cause an ecological, economic, or environmental effect in the introduced area. Based on the article, water hyacinth was probably introduced into the area through ornamental trade.

- e) Describe the type of ecosystem service the water hyacinth served as.

Invasive species are often classified as generalist species.

- f) Describe why, in general, invasive species like the water hyacinth are able to grow out of control when introduced into new territories when they live in perfect balance in their native ecosystems (not related to their reproductive habits)

Very often invasive species, such as water hyacinth, are generalists and can threaten the existence of other species. Explain the following:

- g) Provide two reproductive style strategies of an r-selected species which makes it less vulnerable to extinction for generalist species.

The theory of island biogeography describes how organisms colonize (migrate) and become extinct on islands or fragments.

- h) Describe the relative size and distance to the shoreline of an island that has poor colonization and high extinction rates.