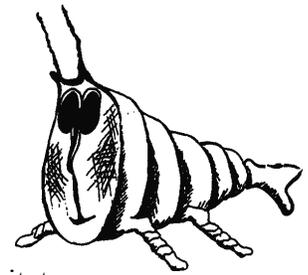


CREATE AN INVERTEBRATE



Scenario

It is the year 2050 and due to overfishing, pollution of the estuaries and habitat destruction, many species of shrimp, crabs, and shellfish that were a popular food source in the 20th century are disappearing. You are a marine biologist who has been hired by the University of Georgia Marine Institute to create a new species of invertebrate that can live in the salt marsh estuary. Your new invertebrate will be different from the invertebrates of the 20th century because it will be able to eat the stems of *Spartina alterniflora* (smooth cord grass), the primary plant of the salt marsh. Your invertebrate is to be a food source for man as well as the marine organisms that depend on invertebrates for food.

Your invertebrate must have special adaptations to enable it to survive the harsh conditions of the salt marsh estuary: rapid changes in temperature, salinity, water depth, and oxygen supply. It must also have special adaptations to protect it from predators. It will need to have a predator or predators so that it will not become overpopulated and deplete the salt marsh grasses. Your invertebrate should also have some type of adaptation to enable it to live in the polluted environment of 2050. It should not look like any known invertebrate! Use your imagination and be creative.

You are to write a newspaper article describing your new creation. In the article you should explain the following:

- ◆ A description of your invertebrate.
- ◆ How is your invertebrate adapted to living in its environment?
- ◆ How does your invertebrate obtain its food? (Does it have any special appendages for food getting?) Does it move? If so how.
- ◆ How does your invertebrate reproduce? (Sexually or Asexual). How is fertilization accomplished?
- ◆ How do the juveniles develop? Do they begin their life looking like the adult or in a planktonic form? Explain where in the estuary the juveniles live and their adaptations for survival.
- ◆ Describe the predator or predators of your invertebrate. What defense mechanisms or special body structures does it have to enable it to hide or escape predation?

Draw a picture of or create a three dimensional model of your invertebrate.

Give your new creation a scientific and common name. Scientific names are written with the genus capitalized and underlined or italicized while the species name is in lower case and underlined or italicized.

Present your new invertebrate to the class.