

Source: Great Barrier Reef Marine Park Authority. Project Reef-Ed: Educational Activities. Used with permission.

32. FOLLOWING A FRIENDLY FISH

Concepts: Fish structure, Fish behavior, Interrelationships, Adaptations

Skills: Observing, Recording underwater

Aim: To investigate the lifestyle of a single fish. This activity consists of two parts—an introductory exercise and an in-depth exercise for those who wish to investigate their fish further.

You will need:

Snorkeling gear and appropriate protection from the sun
Underwater slate and pencil

What to do:

Introductory activity

1. In a reef pool or harbor follow a particular fish quietly.
2. Observe its feeding behavior. How much searching and “working” for food is performed?
3. What structural adaptations possessed by the fish help it to find and take its food?

In-depth activity—a single fish

4. Select one fish which you can observe carefully. (A parrotfish, butterfly fish or puffer fish is suggested.)
 - (a) Observe and record its general structure. Note its size; sketch it, noting scale; record exact color patterns, relative size and position of fins, size, shape and position of mouth.
 - (b) Observe and record its
 - method of locomotion (note use of all fins, tail, etc.)
 - method of catching/obtaining food and ingesting—snorkel around with the fish to observe
 - method of perceiving and reacting to the environment
 - sense organs
 - response to changes (waves/depths/other fish/other groups/you)
 - special behavior, e.g., territoriality, special relationships (symbiotic, commensal, parasitic).

Note: To get definitive data you will need to devise a record sheet which

- is easy to use and record on in the field,
- allows you to record factual data such as measurements, numbers.
- allows you to obtain statistically valid data, i.e., number of observations, to enable you to put forward an hypothesis on behavior.

5. After your snorkel, identify your fish by reading.

Ideas for further things to do

6. Refer to library books and other resources and compare the authors’ notes with your own observations.
7. Check previous research findings on the species you’ve observed.

Correlation to National Standards from McREL (<http://www.mcrel.org>) :

Life Sciences

5. Understands the structure and function of cells and organisms