



Join in Citizen Science efforts and get involved with community-based monitoring!

As someone who is in the water, you get to see things that could be very important ecologically to the health of Maui's reefs. The Hawaii State Department of Land and Natural Resources (DLNR) Division of Aquatic Resources (DAR) and the Coral Reef Alliance need your help to collect fish data on roi, uhu, and large schools of herbivores (fish that eat limu).

In partnership with DAR, with support from NOAA and Hawaii Tourism Authority, CORAL is developing and hosting a Web Portal to enter information about Roi, large and terminal phase Uhu over 1 ½ feet, and large grazing schools (fish that eat limu, such as manini, palani, kala, uhu, maiko, yellow tangs, etc.) of more than 300 fishes. These data will help DAR to manage the health our reefs and fish populations.

Access the web portal at <http://monitoring.coral.org>

Roi: In 1956, roi were introduced to Hawaiian waters to enhance the grouper fishery. Due to the common occurrence of ciguatera fish poisoning, roi are not usually targeted for food. Roi populations have become widespread throughout the Main Hawaiian Islands. A recent study by the University of Hawaii showed that roi's diet consists primarily of fishes (>80%), usually juveniles of a species, which has the potential to influence the composition of fish on the reef.



Photo by Skippy Hau

Parrotfish: In Hawaii the Parrotfish family (uhu) is very important for many reasons. Recreational and subsistence fishers have developed a preference for these large-bodied fishes, with many spearfishers considering them prized catches. Commercial harvesting of parrotfish has also increased, with commercial fishers now supplying parrotfish to various markets throughout the State. In addition to their value as food fish, parrotfish, being the largest grazing fishes on Hawaii's reefs, also play a critical role in controlling seaweed growth and creating sand, and thereby helping to maintain healthy coral reef ecosystems. Larger parrotfishes (>1½ft or 45cm) can scrape up to 40 times more algae than smaller ones, making larger uhu the most important grazers on the reef.



Grazing schools: Schools of herbivorous fishes such as surgeonfishes (manini, palani, kala, etc.), parrotfishes (uhu), and chubs (nenu) are critical to maintaining the health of the reef by grazing down algae that can outcompete corals for space. Grazing schools are like the lawn mower of the reef, able to overwhelm territorial fishes that may otherwise defend the grazing area, and also acts as a safety measure to protect the fishes from predators. Schools are frequently made up of multiple species.



Photo by Darla White

**Coral Reef Monitoring Data Portal
Special/Other Observations Form**

Your Name:	Date:	Site/Location:
Time arrived at site:		
Time left site (pau):		GPS coord. (if known)
Your drive time:		Lat:
Your roundtrip mileage:		Long:

In-water Visibility (circle): not recorded • poor (0-15') • fair (15-30') • good (30-60') • excellent (60'+)

Survey Information

1. Roi Fishing: Did you fish for roi (peacock grouper) at this site (circle)? YES • NO
 How long were you fishing? ____ hr ____ min
 How many roi did you catch? _____
 Approximately how many other roi did you see at the site (not caught)? _____

2. Large & Terminal Parrotfishes:
 Did you observe any **large (over 45 cm/1.5') parrotfishes** (circle)? YES • NO
 If Yes, How many did you see (circle)? Single (1) • Few (2-10) • Many (11-100) • Abundant (>100)
 If Yes, did you see any **large terminal phase** ("blue") parrotfishes (circle)? YES • NO
 If Yes, How many did you see (circle)? Single (1) • Few (2-10) • Many (11-100) • Abundant (>100)

3. Large Grazing Schools: Did you observe a large (over 300) grazing school (circle)? YES • NO
 Please note what species made up the school, and note which were most abundant:
example: kole (#1), manini (#2), palani (#3)

4. Other Notes/Observations from this site:

Your Signature: