

West Anacapa Island

Frenchy's Cove Tidepools



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The rugged shoreline of Anacapa looks like an inhospitable place. However, Raymond “Frenchy” Le Dreau thought otherwise, and built a little camp on West Anacapa Island, where he lived isolated from society for twenty eight years. The small beach on West Anacapa, is just one of a few beach areas on the entire island, and the only site where the public can access the remote protected tidepools.

Arriving by boat on the north shore of the west islet, passengers are skiffed to a cobble beach. To access the tidepools you actually have to walk through a gap in the island which leads to the southern shore and rocky intertidal zone. South Frenchy's Cove tidepool area is a research site for the Channel Islands National Park's monitoring program.

Rocky Intertidal Monitoring



Researchers at work using a quadrat & transect line to monitor organisms.

Long term monitoring plays an important role in helping park biologists understand the health of the various ecosystems within the Park. The rocky intertidal zone, sandy intertidal zone, and the kelp forest are the ocean habitats currently monitored. Frenchy's cove is one of 15 rocky intertidal zones within the National Park that have been monitored since 1982. The main goal of this research is to monitor trends in population dynamics of certain indicator species. This helps biologists understand normal limits of variation, and to discover what is abnormal as well.

Preserve and Protect

It is a privilege to come to a remote island where the plants and animals of the rocky intertidal zone are virtually untouched by the masses. Many rocky intertidal zones on the mainland coast have suffered from over collecting. All life at Frenchy's cove has been protected since the island was designated as a National Monument back in the 1930's. Yet, plants and animals that inhabit this area, live in a very harsh environment. Just imagine living part of each day exposed to the hot sun, and the other part of the day being pounded by the waves and covered by the cold pacific tides. Organisms that make their home in the intertidal zone must adapt to the following conditions • wave shock • dehydration • temperature extremes • salinity extremes • predation from above and below the water • Competition for space • varied feeding conditions, and • human impacts or disturbance. Be gentle while exploring the tidepools, respect living things, and preserve and protect special places like Frenchy's Cove.



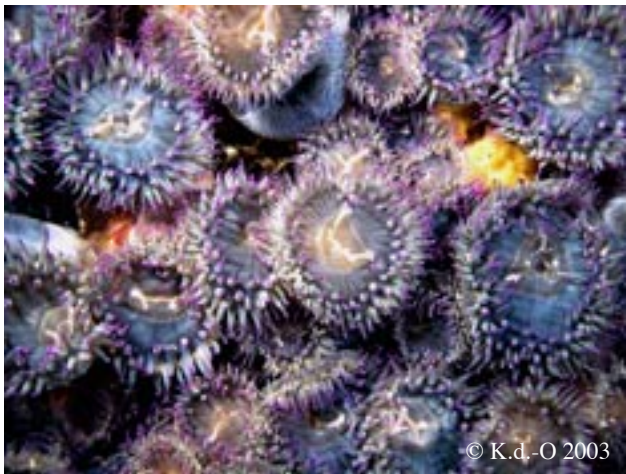
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Learning to See and Identify Life in the Rocky Intertidal Zone



At first glance the picture above may not look like much. However, it is a colony of aggregating anemones protecting themselves from the drying sun with bits of sand and shell that they have collected on their columns. When the tide comes in, they will open up, and look somewhat like a flower as seen below.

Aggregating anemone: this anemone is almost always seen in colonies. This species can divide by longitudinal fission (like cloning).



The aggregating anemone and the sunburst anemone have a brownish-colored algae growing in their tissues. The algae gain protection, nitrogen & CO₂ from the anemone, and provide the anemone with oxygen and nourishment. The anemone produces a greenish fluorescent pigment that also helps protect the algae. This special relationship between organisms is known as symbiotic. The mouth of the anemone is central and surrounding by stinging tentacles.

Sunburst anemone: this anemone is usually solitary and can be distinguished from giant green anemones by the presence of the radiating lines on the disk. Giant green anemones are not common in the warmer temperate waters around Anacapa.



The tiny buckshot barnacle is one of the species monitored in the park. They are hard to spot on the rock below, touch the rocks & you will feel them.





California Mussel

California mussel: this is another species the park monitors. The barnacles represent the upper intertidal zone, while the mussels are representative of the lower intertidal zone. Mussels and barnacles both feed on plankton that they filter from the water at high tide.



brown algae example

Rockweed

Rockweed: this is a brown algae that is monitored in the park. Varieties of algae are an important food sources for many intertidal animals.



Owl Limpet

Owl limpet: these limpets can grow to 4 inches, and were used by the Chumash for food. Owl limpets graze on algae and return to the same home area (called "home scar") after feeding .



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Ochre star: this star can be purplish or orange in color, and is found in the middle and low intertidal zone. This star has a big appetite and feeds on barnacles, mussels and snails.



Sand-Castle Worm

Sand-castle worm: single worms form large colonies by cementing sand grains on the tube that protects their body. Look on the sides of the rocks for these interesting worms, they can be hard to spot.



Shore Crab

Lined shore crab: this crab is common but you will have to look in cracks and crevices. The shore crab feeds on both plants and animals .

New State Marine Protected Areas



In October 2002, the State of California created the West Coast's largest network of marine reserves which is in the Channel Islands National Park and Channel Islands National Marine Sanctuary. There are twelve fully protected zones and two conservation areas totalling 175 square miles. This represents about 10 percent of the Sanctuary waters. The north shore of Anacapa is now both a State Marine Reserve (SMR, from Arch rock to Frenchy's Cove), and a State Marine Conservation Area (SMCA from Frenchy's Cove to the West end). There is no collecting of living organisms in the SMR, and only lobster (seasonally) and pelagic finfish in the SMCA. Prior to these reserves being put into effect in April of 2003, Island Packer (IPCO) divers would collect some subtidal invertebrates to include in our Frenchy's Cove education experience. Though the reserves are open for boating and diving, you are not allowed to remove any animals from their natural habitat. Due to this new limitation concerning collecting areas, IPCO can not guarantee the inclusion of subtidal animals when visiting the tidepools. We now include more details on monitoring and research, as well as beach ecology and geology.

Long term monitoring of the kelp forest revealed that the quality of the kelp forest habitat around the Channel Islands was declining. It is believed that the ecosystem was thrown out of balance by a combination of environmental conditions, as well as fishing. Some reefs today show low biodiversity, and many are overrun by urchins and sea stars. By creating these new protected zones, scientists hope that the area will be enhanced and restored to a more natural condition. In other places around the world, protected zones also enhanced local fisheries near the reserves, this is known as spill over effect.



Trip Logistics

- Anacapa is about 12 miles from the Channel Islands harbor in Oxnard or about 14 miles from Ventura Harbor. Travel time by boat will vary from under one hour to about one and a half hours. If you are traveling to the islands during the migration of the Pacific gray whale (January-March), time on the boat may be extended to look for and observe whales.
- Island Packers recommends that you call: **(805) 642-1393** after 5:30AM on the day of your trip. This number will provide you with confirmation of your scheduled trip, or inform you of any cancellations due to unsafe sea conditions or inclement weather.
- Check your reservation information to confirm the time and location (Oxnard or Ventura) of your departure. Please plan to arrive 30 minutes prior to your departure time so you can check in at the office.
- Dress for outdoor activity, wear sturdy shoes for both your safety and comfort, it is very likely your feet will get wet when exploring the tidepools. Dress in layers, and bring a jacket since it can be cool and breezy even on a sunny day. Sunscreen, and a visor or a hat can also make you more comfortable.
- Pack a lunch and beverages, as there are no snack bars on the island, and no running water. Some snacks and beverages can be purchased on the boat. There are no trash cans or trash services on the island, and there are no rest rooms at Frenchy's Cove.
- Please come to enjoy the isolation and natural beauty of the ocean and the islands. Bring a camera, binoculars or note pad, but leave electronic music and games at home.

We look forward to having you aboard!
www.islandpackers.com 805-642-1393

