



Outdoor CALIFORNIA

March–April 2018

Volume 79 No. 2 \$2.50

Crystal Cove

Orange County's
Surf to Shore
Wilderness

Middle of Nowhere

Camp Cady Wildlife Area
an Outpost for Research

Along a protected stretch of Orange County's coastline, the mean high tide line represents the transition from where Crystal Cove State Marine Conservation Area stops and Crystal Cove State Park begins. Across the rocky shore, deep tidal pools have been carved out over time. When the tide is out, intertidal habitats act as natural aquariums with an array of marine life often hidden beneath the water's surface.

Crystal Cove

Exploring California's Undersea Wilderness
off Orange County's Protected Wild Coast

Story by Amanda Van Diggelen

2 MARCH—APRIL 2018



Imagine for a moment the sound of Pacific Ocean waves surging across the distant shore while overhead gulls call out as they float on rising air currents. Dive beneath the surface and the coolness of the saltwater embraces you fully. Light and sound fade as you allow yourself to slip deeper, shadows of giant kelp forests spread out below just as a flash of color reflects off the leisurely movements of a fish. Now change the scene, imagine emerging from the sea and wading ashore as the afternoon sun reflects off the low surf. Cross the fine-grained sand and take a moment to bask in the coastal breeze before charging up a foothill trail. Follow it to the crest where you can marvel at what lies below. Imagine time slows and the sun slips beneath the horizon, leaving behind red and yellow streaks that darken and give way to twinkling stars.

What the mind has imagined—a vast underwater landscape that merges across a stretch of beach to rise atop rolling hills—nature has already provided. This idyllic environment is nestled in the most unexpected location, amidst Southern California’s congested urban area with high-rise business centers and crowded freeways. Located near the middle of Orange County’s 42 miles of coastline, Crystal Cove State Marine Conservation Area (SMCA) joins Crystal Cove State Park to offer outdoor enthusiasts an all-inclusive sea-and-shore experience.

The Crystal Cove combination offers more than 3½-square miles of ocean to explore, four miles of beach to stroll and 2,400 acres of coastal parkland to hike. From the top of the bluffs, visitors can envision the Pacific Ocean disappearing in the West as they enjoy the rich history and natural beauty of this coastal and underwater wilderness.



Opposite page: A curious Garibaldi investigates scuba divers amidst one of the giant kelp forests that are found across the ocean floor of Crystal Cove State Marine Conservation Area.

CDFW Photograph by Amanda Van Diggelen

Tribal History

According to the California Department of Parks and Recreation, the area now known as Crystal Cove State Park was home to native ancestors before explorers ever found this land. Using resources available to them, and crafting tools of their own, members of the Acjachemen tribe used nets, fishhooks, baskets and tule canoes to hunt, fish and gather plants. Within the state park, more than 40 pre-historic sites have been identified, including camps, settlements, rock shelters and shell middens. These invaluable archeological sites and the preservation of traditional knowledge of the Acjachemen are vital for understanding the region's cultural heritage.

Crystal Cove SMCA resides within the southernmost region in a network of marine protected areas (MPA) that stretches from the California-Oregon border to the California-Mexico border. Similar to the way state and national parks protect special habitats and wildlife on land, MPAs provide protection to key habitats and marine life in the ocean. The California Department of Fish and Wildlife manages and enforces the regulations for each of the marine areas. By positioning a MPA adjacent to a state park, Crystal Cove may help preserve and restore marine life to a condition characteristic of the area's history.

Implemented in 2012, Crystal Cove SMCA was designed to maintain protection of intertidal invertebrate species, like black abalone, limpets and mussels, said Steve Wertz, a CDFW senior environmental scientist. Wertz supervises the MPA management project. "However, it still allows

for popular fishing, like diving for California spiny lobsters, to persist," Wertz points out.

Crystal Cove SMCA area safeguards all the marine species and habitats found below the mean high tide line along more than four miles of Orange County's coast. The rocky shoreline holds an amazing array of sea creatures. The day's low tide will strand fish, and beach walkers can sometimes see sculpin and opaleye in the natural pools. Smaller pools are havens for marine life and can include algae, snails, hermit crabs, anemones, sea hares and potentially nudibranchs, which are colorful sea slugs.

Farther offshore, snorkelers and scuba divers are common beneath the gentle swells of the ocean surface. Through their facemasks, they will find surfgrass beds and soft bottom habitats that spread out for great distances. Occasionally, surfperch, kelp bass, garibaldi and blacksmith will approach, curious about the intruders that



CDFW Photograph by Amanda Van Diggelen



© 2012 California State Parks



CDFW Photograph by Amanda Van Diggelen

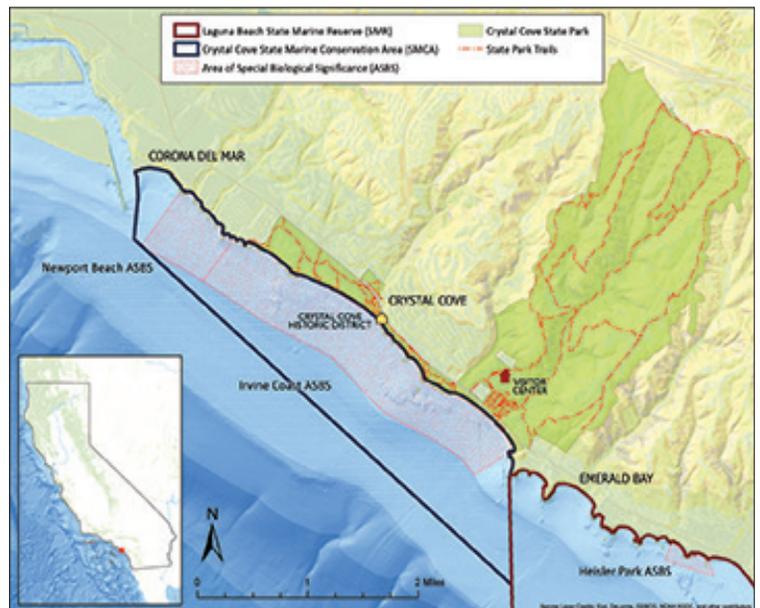


© 2012 California State Parks

Helpful Tip

Everyone who travels to the Crystal Cove shoreline should use caution when walking around the tidal pools. The ragged outcroppings offer ideal habitat for a surprising number of marine species. Visitors are urged to use care when exploring the surface of the tidal pools. The edges along some of the tidal pools are fragile. Tread carefully and don't overturn loose rocks. Observe animals where they are, rather than trying to pick them up. Everyone should respect the marine life in the tide pools, as misplaced footsteps and curious fingers can do a lot of damage to these delicate organisms.

Upper left, the view beyond a coastal bluff looks out across the Pacific and the 3½-square miles of the Crystal Cove State Marine Conservation Area. Upper right, ochre sea stars, clinging to a tidal pool's rocky wall, may be yellow, orange, brown, purple or reddish in color. Center right, a green sea anemone appears to shine through reflected light from the surface. Center left, a great egret works its way across the rocky surface as it searches the pools for trapped prey. At right, a map shows how Crystal Cove State Park's 2,400 acres stretches along the coast before jutting inland, and how Crystal Cove SMCA extends north to Corona Del Mar State Beach.



CDFW map by José Ayala and Paulo Serpa

have slipped through the giant kelp forests and passed the rigid reefs.

Spiny lobsters hide within the near-shore rocky crevices, and emerge at night to hunt urchins, mussels and clams. Farther out, the sleek and graceful Pacific harbor seals, California sea lions and an occasional pod of dolphin streak by silently in search of a variety of prey.

Eric Johnson and Cole Roberts emerged offshore following a scuba dive from “Little Corona,” a popular dive site within the Crystal Cove SMCA. Both divers seemed more than satisfied with their underwater adventure. On the western horizon, not far from where they surfaced, flocks of pelicans cruise above the shimmering water and scan ahead for fish.

“I love diving here,” said Johnson. “No

matter how many times you dip beneath the waves, you never know what you’re going to see.”

On that day’s dive, the pair spotted garibaldi, sea hares and green anemones—species they have seen on a regular basis. Then a horn shark came close as it passed the pair and that turned the day into something special.

“Plus, this is a relatively shallow site,” added Roberts. “We can spend more time beneath the surface exploring all of the nooks and crannies of the reef. I have walked away from here with some amazing photographs.”

Where Crystal Cove SMCA ends at the mean high tide line, Crystal Cove State Park takes up the call to conserve wildlife and habit. The state park contains some of the

last undeveloped wilderness along Orange County’s coastline. The park contains back-country habitat with more than 15 miles of hiking, mountain biking and equestrian trails. Numerous routes allow park visitors to explore the wooded Moro Canyon, up steep ridges with endangered coastal sage scrub and annual grasses, all the way to Moro Ridge with its spectacular view of the coast. Other options allow hikers to follow the seasonal Moro Creek as it curves through large ravines shaded by sycamore, oak and willow trees.

The park’s backcountry portion offers 2,400 acres of undeveloped habitat. The coastal portion features a 2½-mile paved trail that runs along the bluff tops. On one of the moderate loop trails, day-hiker Amber Warner called the park wonderful, and said

CDFW Photograph by Amanda Van Diggelen

Black perch swimming amongst the giant kelp forest. The Crystal Cove State Marine Conservation Area waters are sought after by snorkelers and scuba divers.

there is a sense of tranquility when she and friends hike the trails.

“This park is amazing,” Warner said. “We only live about 30 minutes away, but coming here feels like another world.”

Warner noted how the seclusion allowed her to hear birds singing rather than the normal Orange County soundtrack of backed-up traffic on a freeway. The group of hikers encountered wildlife earlier in the day. They recalled rabbits, lizards, squirrels and mule deer. Park rangers confirmed an even wider diversity of wildlife within the borders, listing coyotes, bobcats, wood rats, gopher snakes, rattlesnakes and more than 150 bird species that live or fly over the protected areas.

“We love seeing all the animals running around,” Warner said. “There are lizards

everywhere, and a cottontail rabbit crossed the trail in front of us not too long ago, which is always fun to see.”

The park offers short and accessible trails, which inexperienced hikers might find more to their liking. The fit enthusiast can log time on longer paths, like the nearly 9-mile park perimeter trail. The different levels offer an escape amongst ridges and canyons from the surrounding urbanization.

About 30 percent of CDFW’s marine protected areas adjoin with state parks and their beaches. Establishing such safe areas adjacent to one another provides one of the best chances to preserve and restore terrestrial and marine life to a condition typical of the area’s history, said James Newland, an assistant superintendent with Parks’ Orange

Coast District.

“Ideally, this state park and the marine protection area combination will help increase education and outreach for the area, as well as marine resource stewardship along with cultural preservation and education of the region’s maritime history and recreational opportunities,” said Newland.



Amanda Van Diggelen is an environmental scientist with the California Department of Fish and Wildlife, Marine Region. She has written before for Outdoor California. For more information about California’s network of MPAs, visit www.wildlife.ca.gov/MPAs. For more information about California’s State Parks, visit www.parks.ca.gov.

From Black Brant

Continued from Page 9

Money from the purchase of the California duck stamp-validation, required to hunt waterfowl in California, is funding research into the eelgrass decline along with restoration efforts.

In addition to fewer numbers of brant frequenting Morro Bay, Roser has noticed behavioral changes in the birds that still show up. Increasingly, the brant are foraging on secondary food sources that include salt marsh vegetation and green algae species such as sea lettuce with eelgrass in short supply.

Roser takes some solace that the overall Pacific Flyway brant population is holding steady if not increasing, estimated between 130,000 to 165,000 birds. Roser says waterfowl biologists are seeing flyway-wide changes in brant behavior that they suspect may be linked to climate change.

Fewer brant are migrating to Mexico for the winter. More are remaining in Alaska and their northern range throughout the year. Some scientists believe that as Arctic conditions warm, the climate is becoming more hospitable year-round and as ice melts it exposes more eelgrass for the geese. A decade ago, less than 10 percent of the population wintered in Alaska. By 2017, almost 40 percent of the Pacific Flyway population spent the winter there.

“This bird is tied to Morro Bay, our culture and our identity,” Roser said. “A robust wintering brant population needs abundant eelgrass beds. Eelgrass needs a healthy bay and watershed. Our actions as stewards of Morro Bay really do reverberate across the globe.”

Peter Tira serves as an information officer with the California Department of Fish and Wildlife. He covers CDFW’s Bay-Delta and Central regions. His stories have appeared before in Outdoor California.

