Chapter 2
The California Channel Islands

Southern California is one of the world's most densely populated metropolitan areas. A virtual megalopolis along the Pacific coast for several hundred miles from the Mexican border to Ventura, it is home to 13 million human inhabitants. It sprawls with mass-graded housing developments, urban centers with clusters of tall buildings, vast industrial areas, clogged freeways, polluted air.

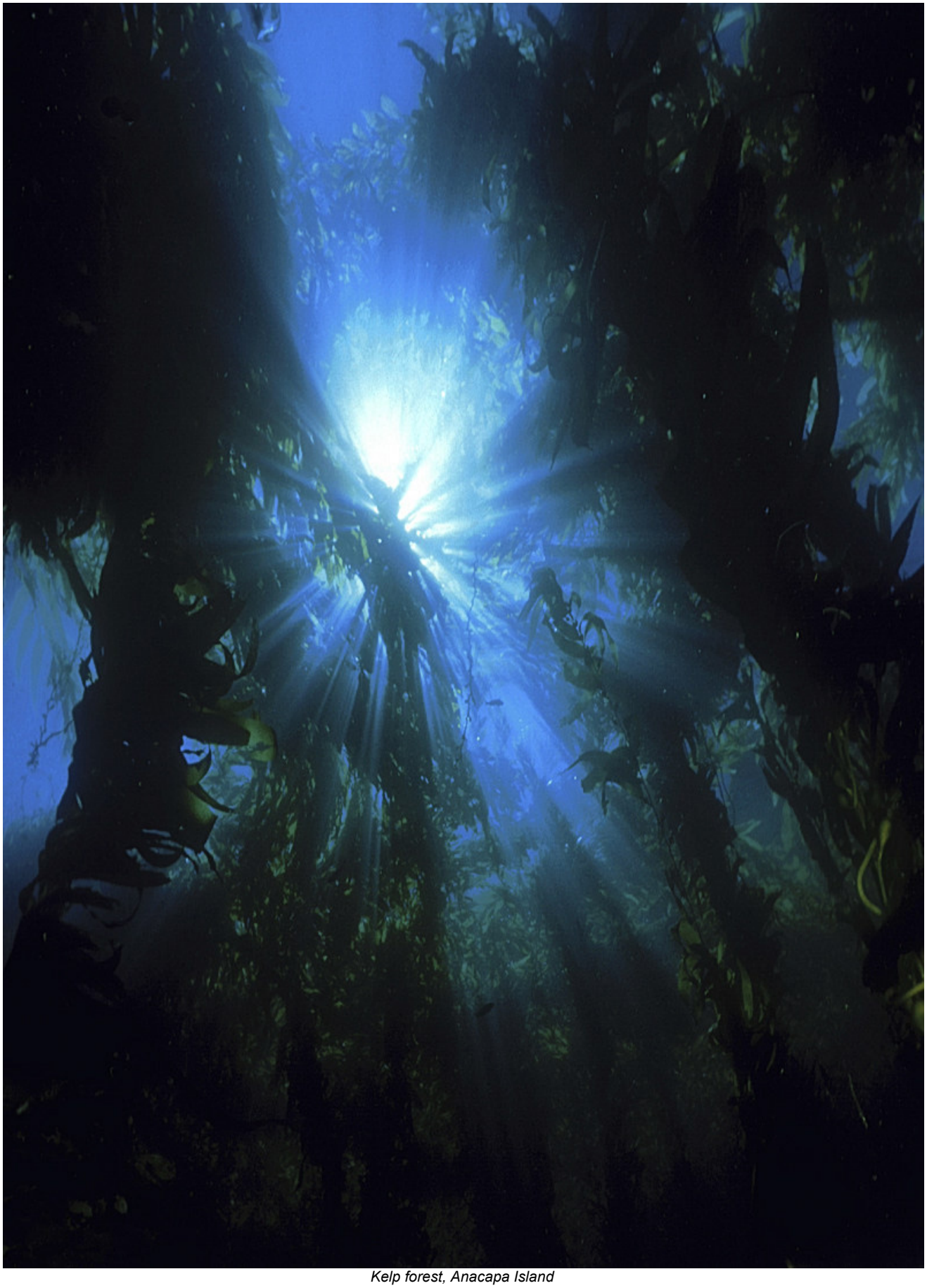
Unbelievably, only ***eleven*** miles from this glut of civilization is a beautiful uninhabited island, unchanged for tens of thousands of years. It was named "Anacapa" centuries ago by the Chumash Indians, California's original inhabitants. Wild and free, it is a nesting place to thousands of seabirds, gulls and pelicans; home to colonies of California sea lions and harbor seals. Twice a year, gray whales pass by in their 5,000 mile trip between Alaska and the calving lagoons in Baja California. Blue whales visit every summer. In the spring the Anacapa cliffs change color from brown and green to bright yellow as the *Coreopsis* flowers bloom.

Anacapa Island in the foreground, Santa Barbara Island in the background, the two smallest of the eight California Channel Islands

Underwater its clear, cold waters reveal forests of giant *Macrocystis* kelp, the world's fastest-growing plant, often getting to be one hundred feet tall. The tops of the kelp plants, taller than the water is deep, collect at the surface in amber clusters called "canopies." On sunny days shafts of sunlight pierce the golden canopy like daylight starbursts. Bright orange garibaldi fish wander in and out of the kelp shafts, decorating the seascape like jewels. The California kelp forests are one of the most beautiful sights to be seen underwater. The kelp is home to hundreds of species, providing shelter, camouflage, and food.

California kelp forest

Kelp forest, San Miguel Island



Kelp forest, Anacapa Island

Coleen in kelp canopy

Coleen under kelp canopy

Anacapa is one of a group of eight islands off the Southern California coast known as the California Channel Islands. Five of the islands (Anacapa, Santa Cruz, Santa Rosa, San Miguel, and Santa Barbara) form the Channel Islands National Park. Two of the other three, San Clemente and San Nicolas, are managed and controlled by the U. S. Navy, the third, Santa Catalina, is privately owned, and has the only permanent city or settlement. It is comforting to me knowing that, if things work out as planned, when my grandkids, and their kids, and their kids…go to these islands, they will see the same things that I saw in my lifetime.

The dichotomy of this place, the vast difference in ecology between civilization and wilderness in only eleven short miles, did not escape the eye of Jacques Cousteau, who named his 1987 film on the Channel Islands "*At the Edge of a Human Tide.*" Coleen and I, by the way, make a brief appearance in that film.

Kelp is an icon of California diving. Everything seems to revolve around it. It is beautiful at every level:

Kelp detail

The giant kelpfish tries to look like kelp:

Giant kelpfish, Santa Cruz Island

Giant kelpfish

Wide-angle scenic images in the kelp forest are some of the most dramatic photos that can be made underwater:

Reef scene, Anacapa Island

Kelp scene, Anacapa Island

Mike Watkins under the dive boat PEACE, Anacapa Island

Coleen at Ship Rock, Catalina Island

Jack mackerel school in kelp

Jack mackerel school in kelp, with diver (Dona Perry), Anacapa Island

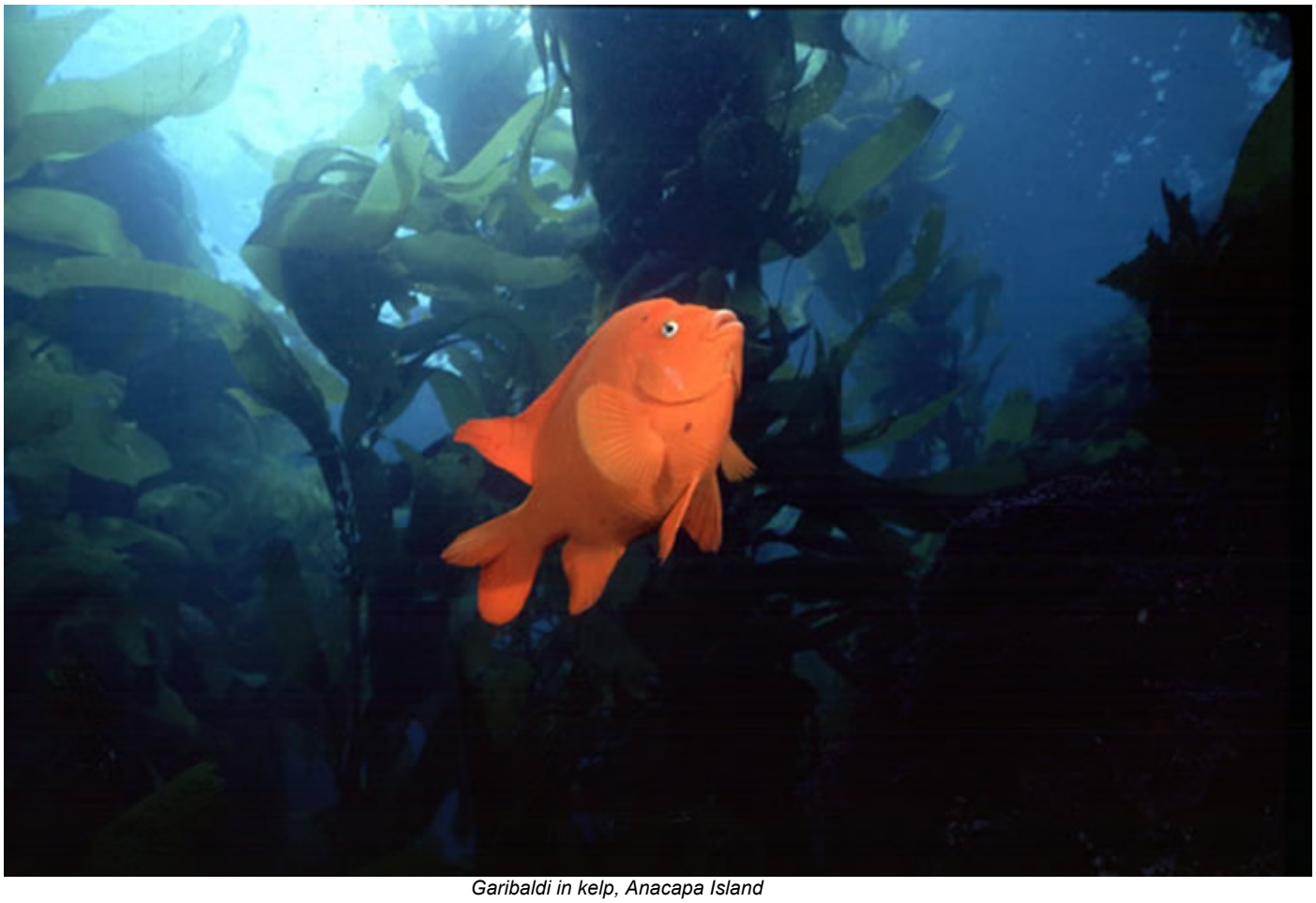
Deep reef scene at Santa Rosa Island

Bat ray in kelp, Anacapa Island

Kelp scene with red gorgonian (that's where you find simnias), Anacapa Island

Kelp scene with golden gorgonian, Anacapa Island

Another icon of California diving is the bright orange Garibaldi fish. Extremely common, protected by state law, it is seen on almost every dive. They add a touch of color to the kelp forest:



Garibaldi in kelp, Anacapa Island

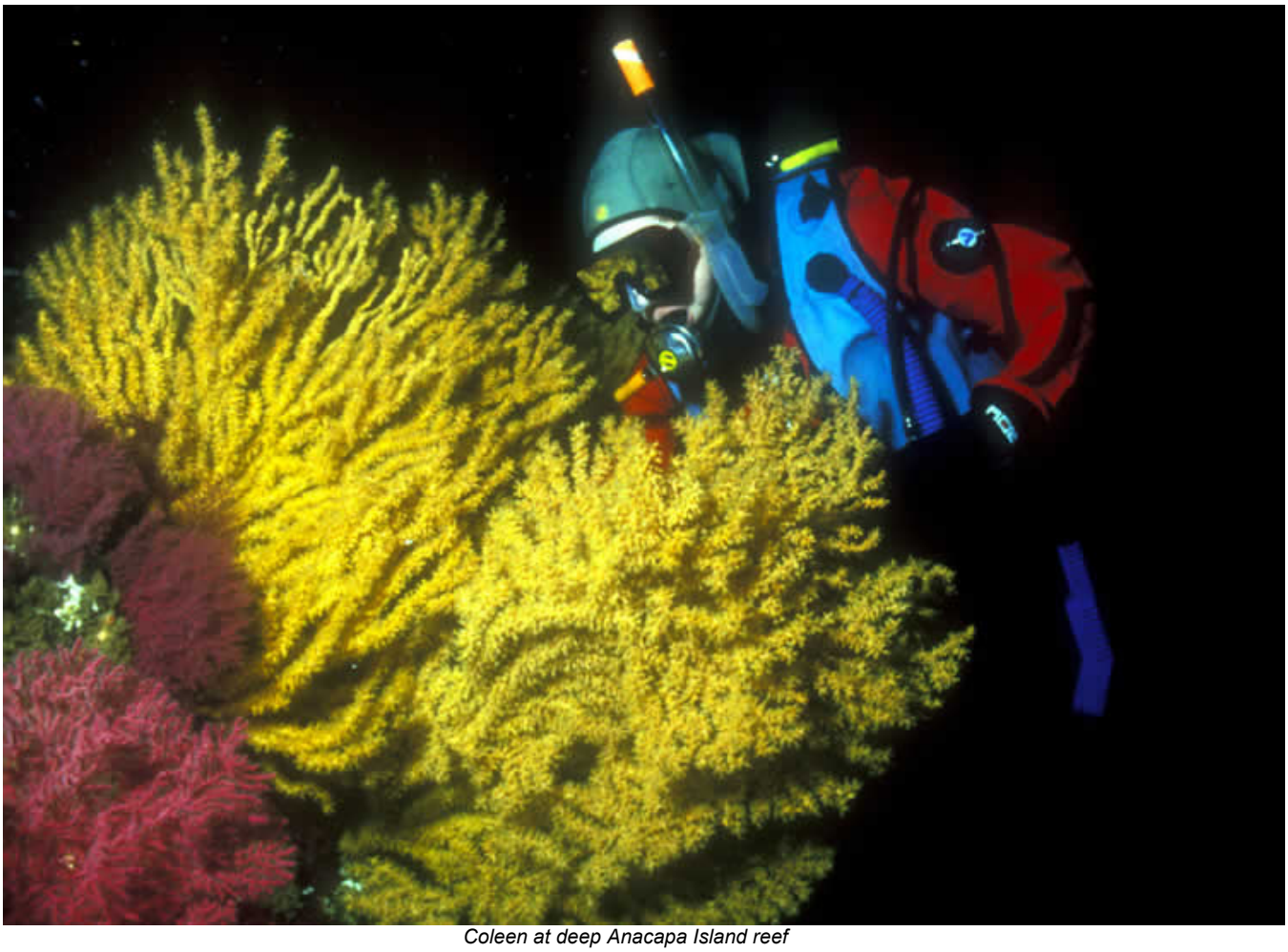
Garibaldi and red gorgonian, Anacapa Island

Garibaldi, Santa Cruz Island

Garibaldi, Anacapa Island

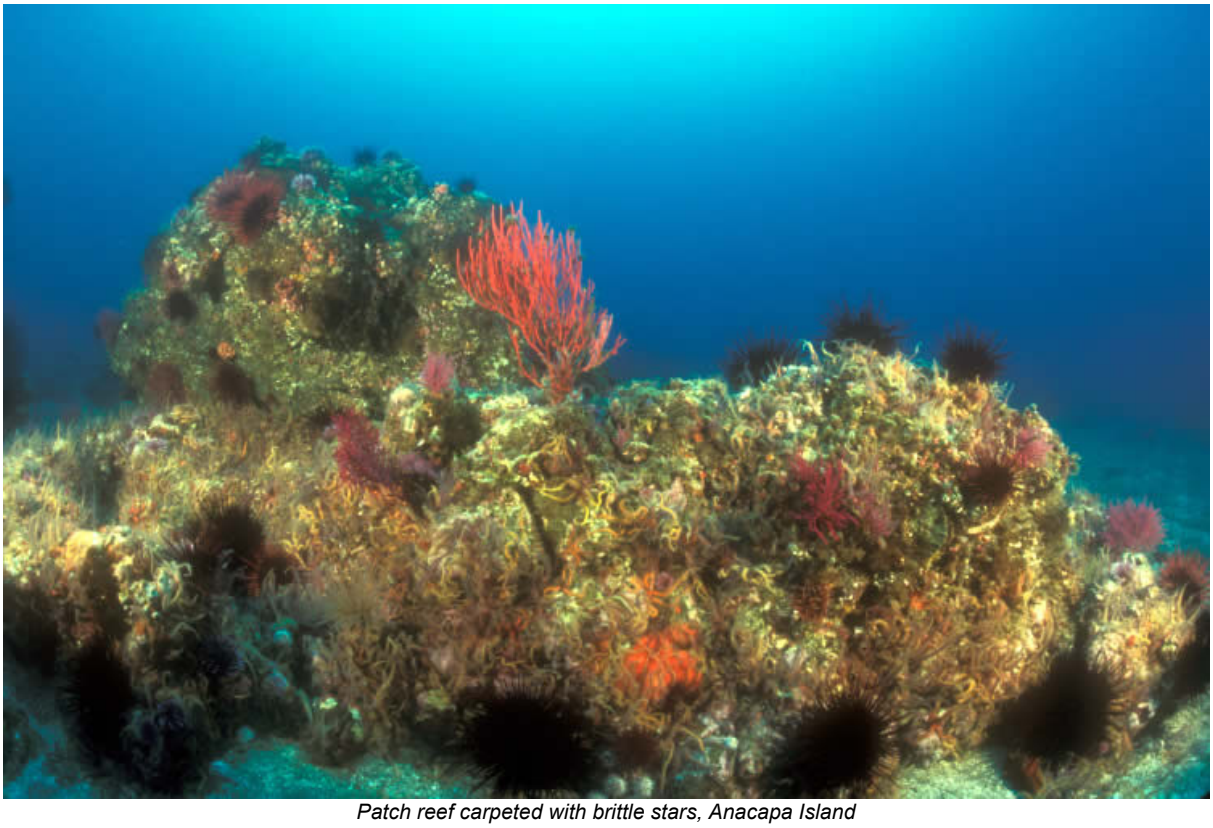
Jack mackerel school above reef, Anacapa Island

Coleen and I used to dive on “six-pack” boats that specialized in Anacapa diving. With only six passengers, many of them regulars, the skippers of these boats could get to know the skill levels of the divers better than the crews of the bigger boats like the ***PEACE*** and the ***Spectre***, which carry 30-40 divers, most of whom are unknown to the crews. The six-packs could thus drop divers on more advanced sites. One of these sites was a deep reef at the northwest end of Anacapa which had these beautiful large yellow gorgonian fans. I never saw these fans anywhere else in the Channel Islands:



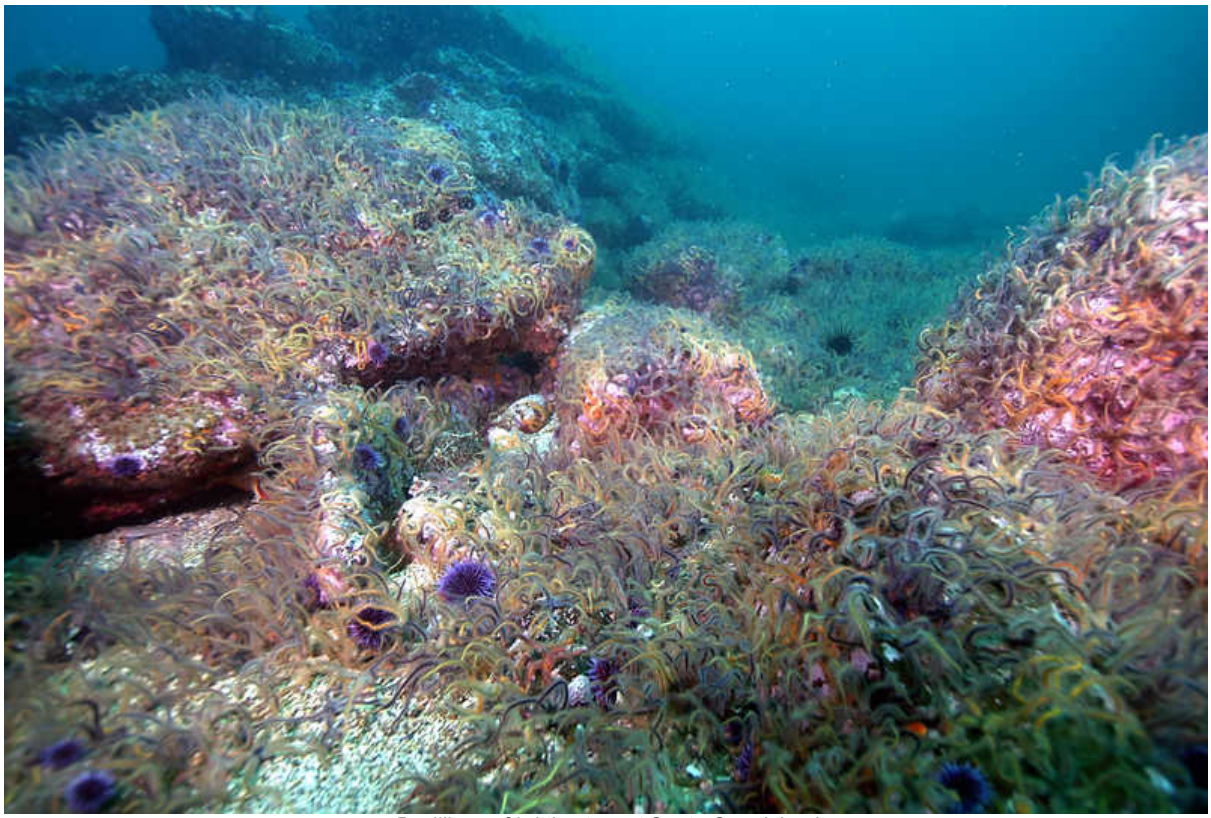
Coleen at deep Anacapa Island reef

In the late summer something special happens underwater at the Channel Islands. It probably happens at all eight islands, but to the best of my recollection I have only seen it at Anacapa, Santa Cruz, and Santa Barbara. Some prehistoric bell rings, and millions, maybe hundreds of millions, of brittle starfish (*Ophiothrix spiculata*) come out of hiding and carpet the reefs, extending their beautiful little multicolored arms up and around anything they can wrap them around. They are stunning little animals, each colored differently, some with blue arms, some red, some yellow, some with combinations of colors. If you look closely in the following photo of a small patch reef at Anacapa, you can see them covering every surface:



Patch reef carpeted with brittle stars, Anacapa Island

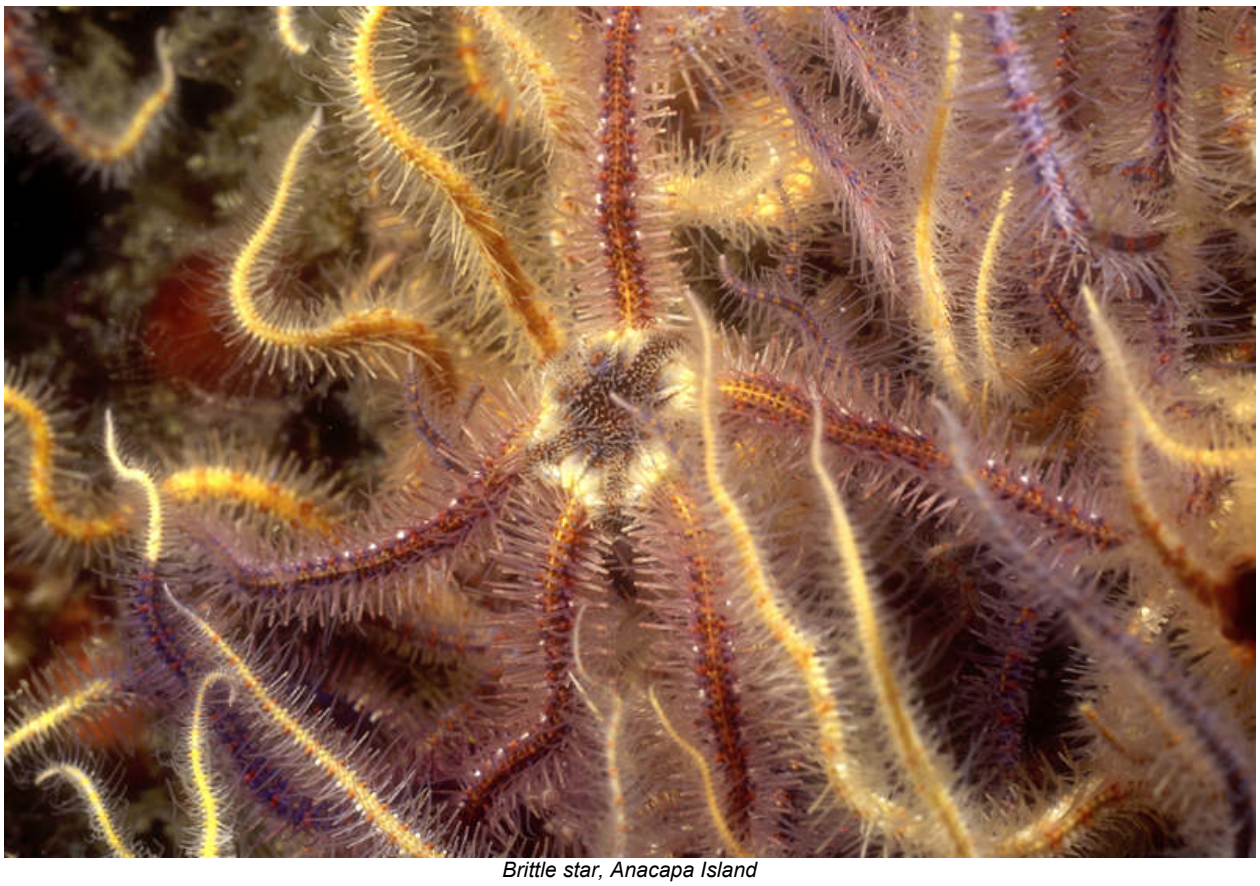
And this one at Santa Cruz:



Bezillions of brittle stars at Santa Cruz Island

They are beautiful in their own right:

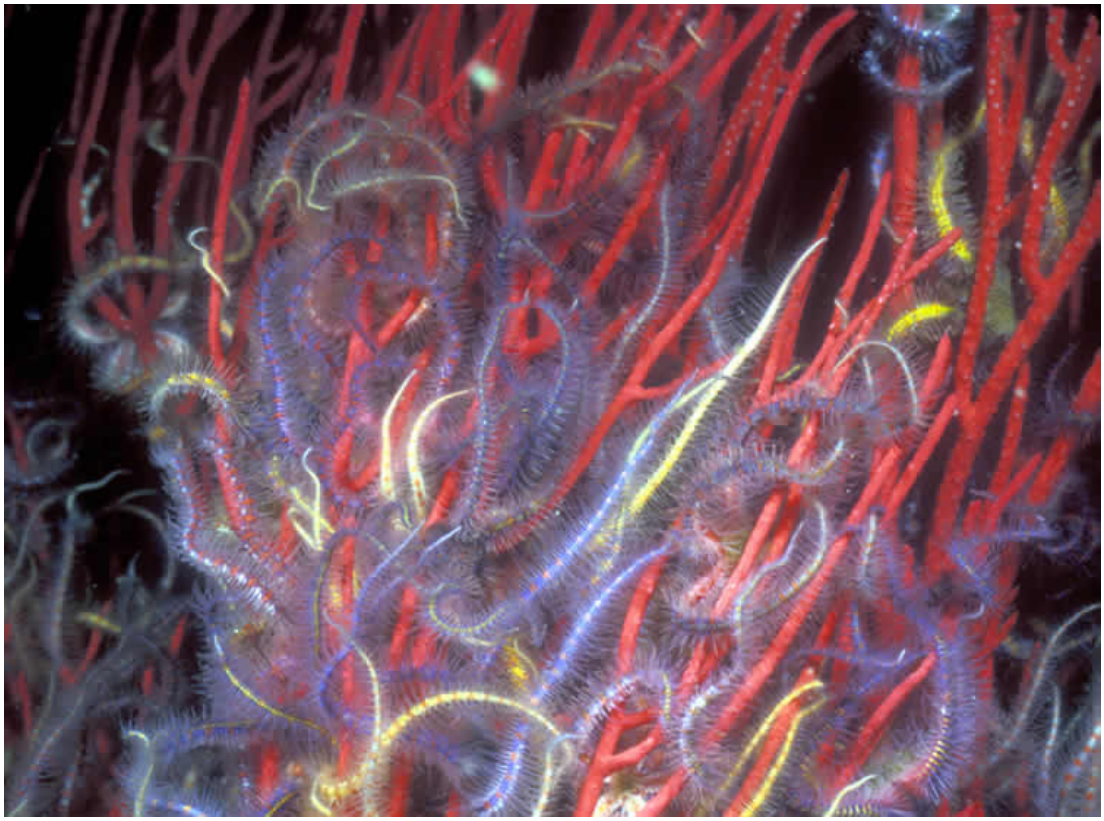
Brittle star (Ophiothrix spiculata), Anacapa Island



Brittle star, Anacapa Island

Brittle stars on red gorgonian, Anacapa Island

Brittle stars on red gorgonian, Anacapa Island



Brittle stars on red gorgonian, Anacapa Island

Brittle stars on red gorgonian, Anacapa Island

As pretty as they are themselves, they are even better photographically when used as a background to other California critters. With brittle stars as a background, even the most average subject can make an outstanding image. A common black-eyed goby, normally not a very exciting subject, gets beautiful when it sits on a bed of brittle stars:

Black-eyed goby on brittle stars, Anacapa Island

Black-eyed goby in brittle stars, Anacapa Island

As does this painted greenling:

Painted greenling in brittle stars, Anacapa Island

Benthic anemone, orange starfish, and brittle stars, Santa Barbara Island

And even one of the least attractive of the California nudibranchs can be made beautiful framed in brittle stars:

Lemon dorid (Anisodoris nobilis) in brittle stars, Anacapa Island

Navanax inermis in brittle stars, Anacapa Island

Black-eyed goby in brittle stars, Anacapa Island

Tube anemone in brittle stars, Santa Cruz Island

Brittle stars on giant starfish, Anacapa Island

Hermit crab in brittle stars, Anacapa Island

Brittle stars on blood starfish, Anacapa Island

Rockfish in brittle stars, Santa Barbara Island

Earlier I mentioned the beautiful little *simnia*, a marine snail that is found only on the arms of the red gorgonian. They are less than an inch long and very hard to find. They look like lumps on the gorgonian arms. To find one, you locate a red gorgonian and carefully examine the arms for suspicious lumps. It helps greatly to have a modeling light. Without a light the red color of the snail blends with the red color of the gorgonian, both dull because red colors are not seen well at depths below about 20 feet. But the artificial light brings out the yellow and white colors in the mantle, and makes the snail easier to see. Here are two examples of California *simnias*:

Two simnias (Delonovolva aequalis) Anacapa Island

Simnia depositing eggs on red gorgonian, Anacapa Island

When I first started taking pictures underwater in the Channel Islands I got obsessed with the little blue-banded goby (also called the Catalina goby). Only about an inch to two inches long, it is strikingly beautiful with its red body and iridescent blue stripes. It is very common at the Channel Islands, but very difficult to photograph because it is so spooky. You can see them, but you can't get very close to them. Here's the view that you usually get of a blue-banded goby:

Blue-banded goby guarding scallop

They have a "personal space" of only about a foot. If all of you is more than a foot away from a blue-banded goby, you can pretty much do anything and it will stay put—it doesn't consider you a risk. However if anything (like a lens port) gets within a foot, ***poof*** they are gone, back in some nook or cranny in the reef and out of sight. When I was using Nikonos cameras with extension tubes and framers, I tried many times to photograph blue-banded gobies, but it was virtually impossible. They would never allow a framer to be placed around their bodies. Even after I had graduated to a housed SLR system (a Nikon F3 in a Tussey housing), I still couldn't consistently get close enough to one of these little fish to make a decent photograph, even with the classic Nikon 105mm micro lens.

I decided to get creative, so I put a 2X teleconverter and a magnifying diopter on the 105. That would allow me to get a 1:1 image (that means the actual size of the subject, and its

size on the film, are the same.) So with this setup, when you looked through the camera viewfinder, the plane that was in focus was only 1.5 inches wide and 1" high, and was 16 inches from the front of the lens port. This was easily outside the personal space of even the spookiest blue-banded goby. The problem was that with all the hardware and extra glass on the lens, the focus and aperture control rings on the housing wouldn't engage in the right place on the lens. The only camera control I had was the shutter. Not to worry, I set everything in advance before buttoning up the camera in the housing. I experimented topside with strobe positions, power settings, and apertures for a subject at minimum focus distance. It turned out that with my strobes set at full power, aimed directly at the subject 16 inches in front of the port, f16 gave me the correct exposure in air. I knew from past experience that there was about a one-stop difference between air and underwater exposures at close distances, so the aperture was preset at f11 for use underwater. Now all I had to do on the dive was to turn on the strobes, verify they were on full power and aimed correctly, find a blue banded goby, move in slowly on him until he was precisely in focus, and fire the shutter. No thinking was necessary underwater, a big advantage.

The disadvantage, of course, was that I had to devote the whole dive to subjects located exactly 16 inches in front of the port, and small enough to fit into the 1:1 frame. Another disadvantage was that when you looked through the viewfinder, you were looking for a subject about the same size as the film (1-1/2" by 1") sixteen inches in front of you. When you saw a goby, you then had to find it in the viewfinder. With even the slightest movement of the housing, things shot by in the viewfinder at about 100 miles an hour. It was extremely difficult to find what you where looking for, and hold it in the viewfinder once you found it. But all of that was doable, it took some perseverance but it worked for blue-banded gobies. After several such "no-controls" dives I was able to get many "head shots" of blue-banded gobies like this one, where even some of his little teeth can be seen. Remember, this fish is only about an inch long. It was all worth it:

Blue-banded (Catalina) goby, Lythrypnus dalli, Anacapa Island

Using this technique I was even able to get some decent photographs of the beautiful zebra goby, as spooky as its blue-banded cousin, but seen much less frequently:

Zebra goby, Lythrypnus zebra, Anacapa Island

My favorite type of underwater photograph is one with a common subject beautifully photographed. This preference probably originated and evolved from my exercise with blue-banded gobies. With luck, you can capture an unusual ocean event or an extremely rare and unusual subject, like a white shark eating a sea lion. While of obvious interest, photographically the quality of those images of spectacular events and/or subjects is largely a function of luck. You usually don't have a lot of time to set up a shot of a white shark eating a sea lion—when you come across it you shoot from the hip, take what you get, and rely on the interest of the subject or event itself to make the image. But with a common subject, one seen on almost every dive, the photographer has many opportunities and often the time to make the right photographic decisions, lighting, composition, angle, negative space, depth of field, point of focus—all of which make a really good image. A good photograph of a common subject combines the best of the art and the science of underwater photography. Here are a couple of examples of this type of image:

Purple hydrocoral, Santa Barbara Island

Starfish, Anacapa Island

I can’t resist hermit crabs; they are one of my favorite subjects. California has some really good ones:

Hairy hermit crab, Anacapa Island

Hairy hermit crab leaving home, Anacapa Island

Blue-eyed hermit crab, Anacapa Island

Hermit crab, Whaler's Cove, Point Lobos

Hermit crab, Anacapa Island

In August of 1995 I spent a week on the dive boat ***TRUTH*** out of Santa Barbara with Howard and Michele Hall and their crew while they were making an episode for their video series *"Secrets of the Ocean Realm."* We made stops at Santa Barbara and Anacapa Islands. One morning we were anchored near Cat Rock on the ocean (south) side of Anacapa. Here Howard and the crew were filming the interesting "mouth-flaring" territorial behavior that male sarcastic fringehead fish exhibit when they get close to each other. Howard and Bob Cranston were underwater when those of us still on deck noticed a young gray whale very close to the boat. This was extremely unusual. The gray whale migration takes them southbound by the island in December and January, northbound in about March and April. A gray whale at Anacapa in August was extraordinary. At this time of year he should have been porking up in Alaska, not hanging out in Southern California.

But in spite of the fact that he shouldn't have been there, here he was, big as life (so to speak), and he hung around the boat for hours. The whale was in fact eating; the area he was in had a sandy bottom at about 60 fsw (feet of sea water) and Howard observed the whale dredging the bottom in the classic gray whale feeding behavior. We all had the opportunity to get some very rare underwater photos (and footage) of a gray whale in relatively clean water. Finally he tired of us or the food or something, and he rounded the east end of the island and disappeared in the channel. Howard, who is a trained marine biologist and an expert on gray whale behavior, told us that "strays' like this young whale are occasionally seen alone in places where they are not supposed to be, and there is evidence that they can eventually rejoin the herd. But he may have said this just to make the rest of us feel better. Howard wrote a terrific article about this incident which appears on his website at www.howardhall.com/stories/greymorning.html.

California gray whale, Anacapa Island

California gray whale, Anacapa Island

California gray whale, Anacapa Island

Michele Hall took a picture of me alongside the whale. I'm the one in the red dry suit with the snorkel. The whale is the one with the big gray back:

Author snuggling up to a gray whale, Anacapa Island (Michele Hall photo)

Here are some photographs of big and little California fish:

Sarcastic fringehead, Anacapa Island

Sarcastic fringehead, Anacapa Island

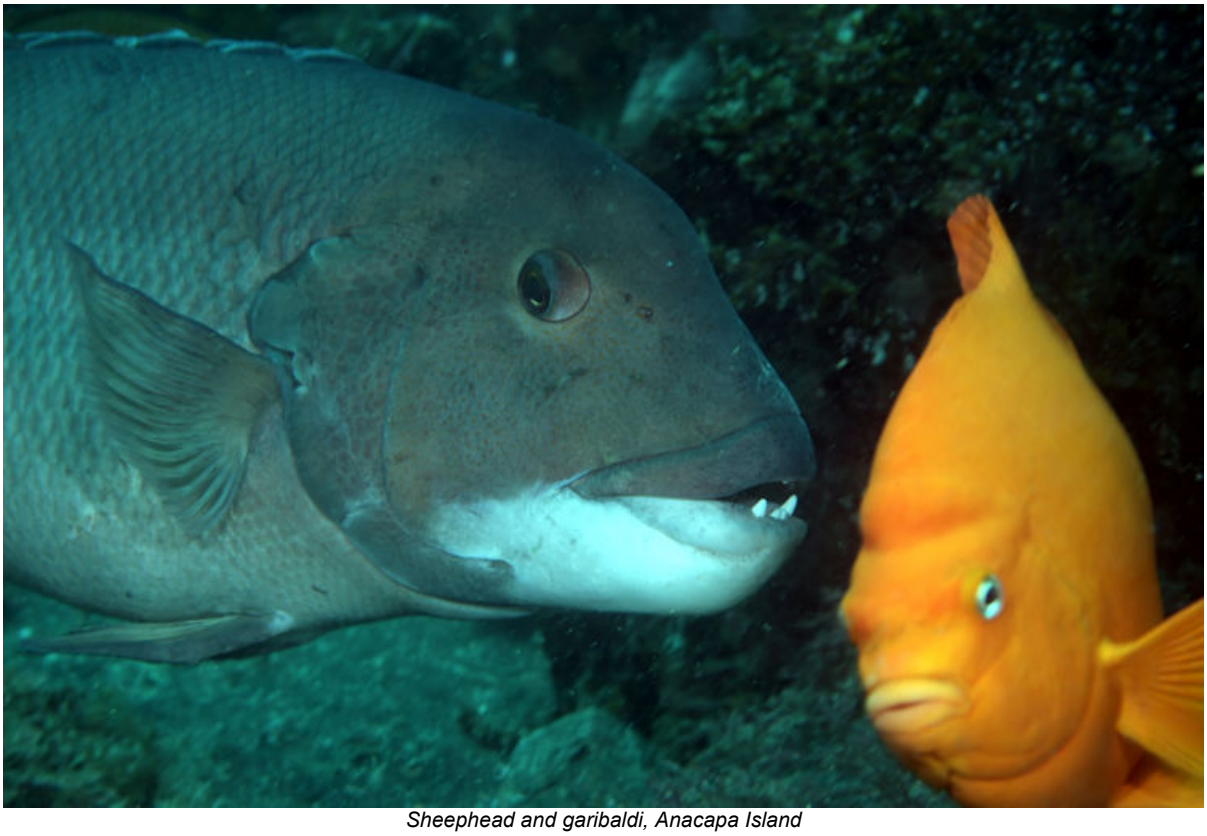
One-spot fringehead blenny, San Miguel Island

Island kelpfish, Anacapa Island

Rockfish face, Santa Cruz Island

Treefish, Santa Cruz Island

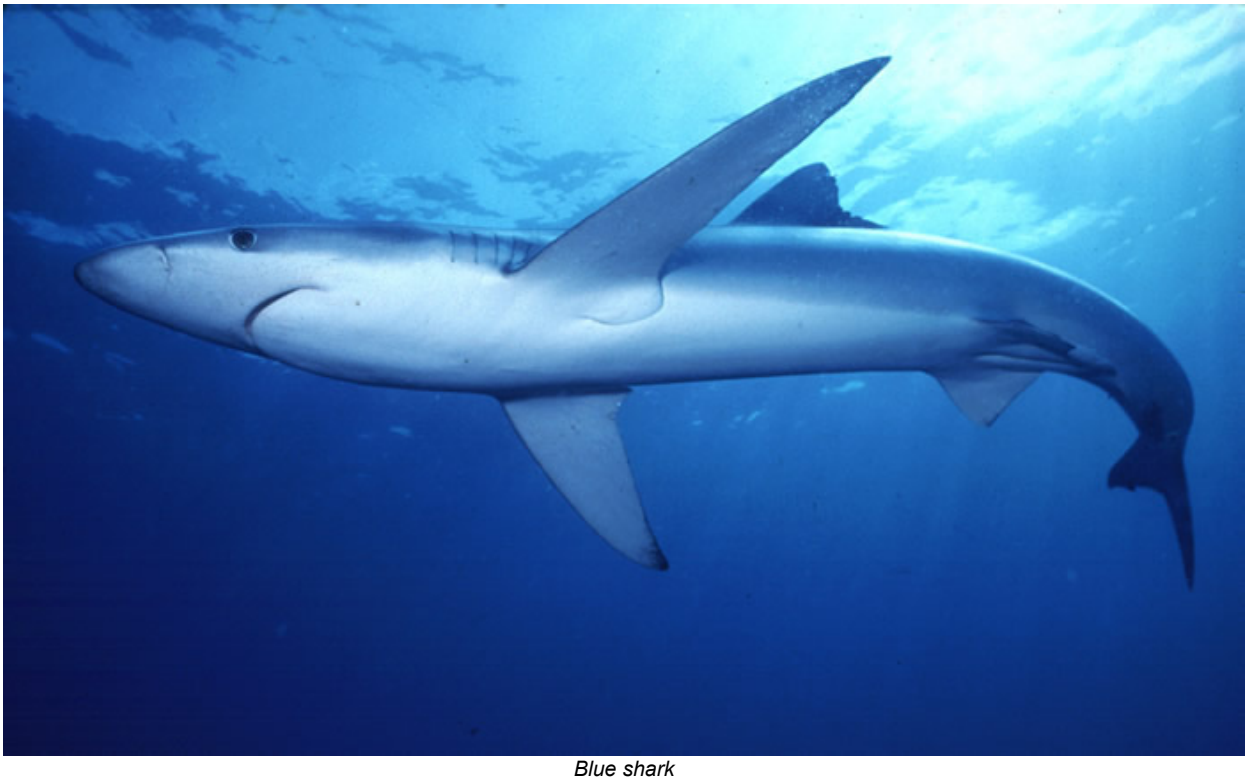
Calico bass, Anacapa Island



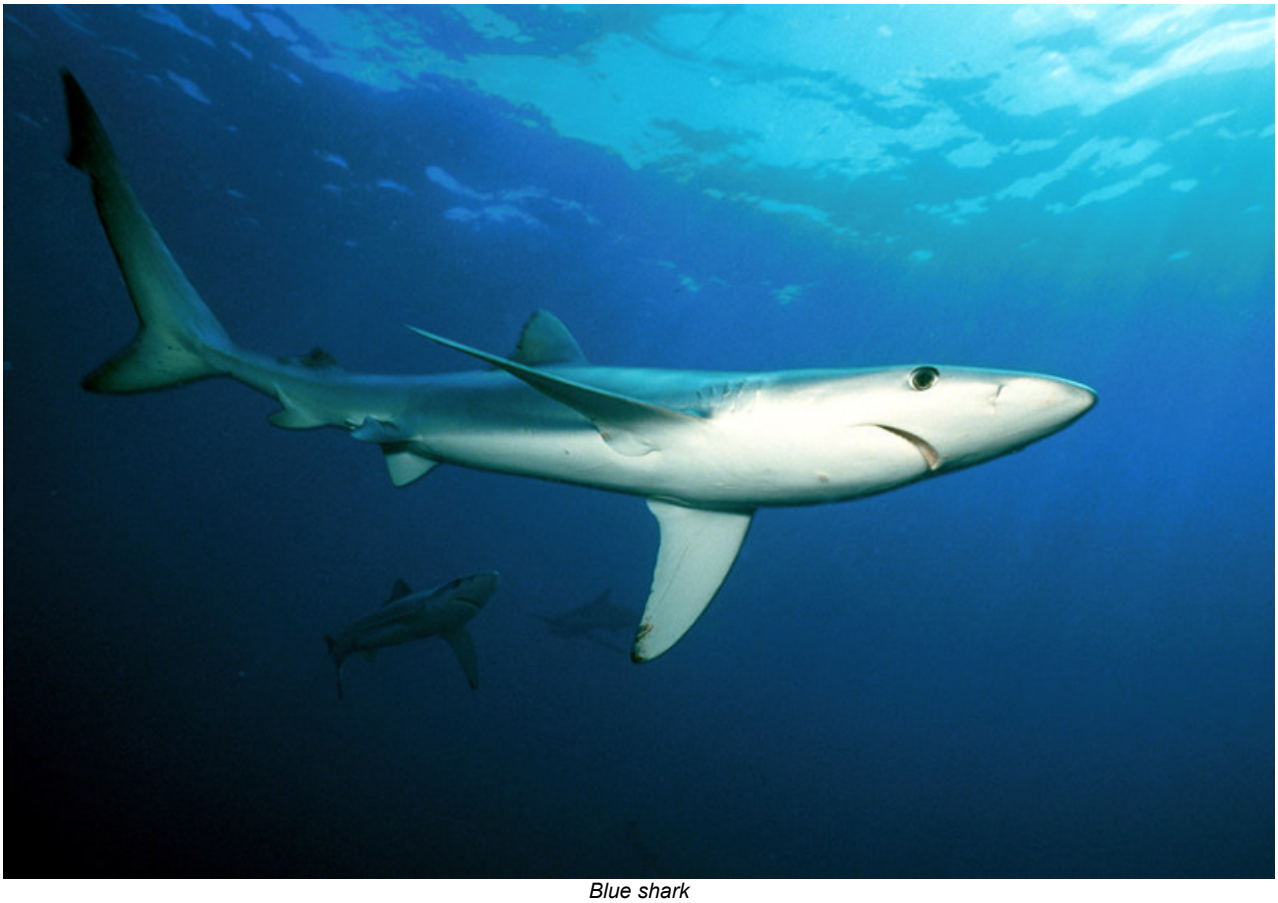
Sheephead and garibaldi, Anacapa Island

Painted greenling, Anacapa Island

I have done several caged blue shark trips in blue water about 25 miles west of San Diego. These trips are a great way to see this beautiful animal:



Blue shark



Blue shark

Anemones provide a lot of the beautiful color on California reefs:

Corynactis anemones

Tealia anemone, San Miguel Island

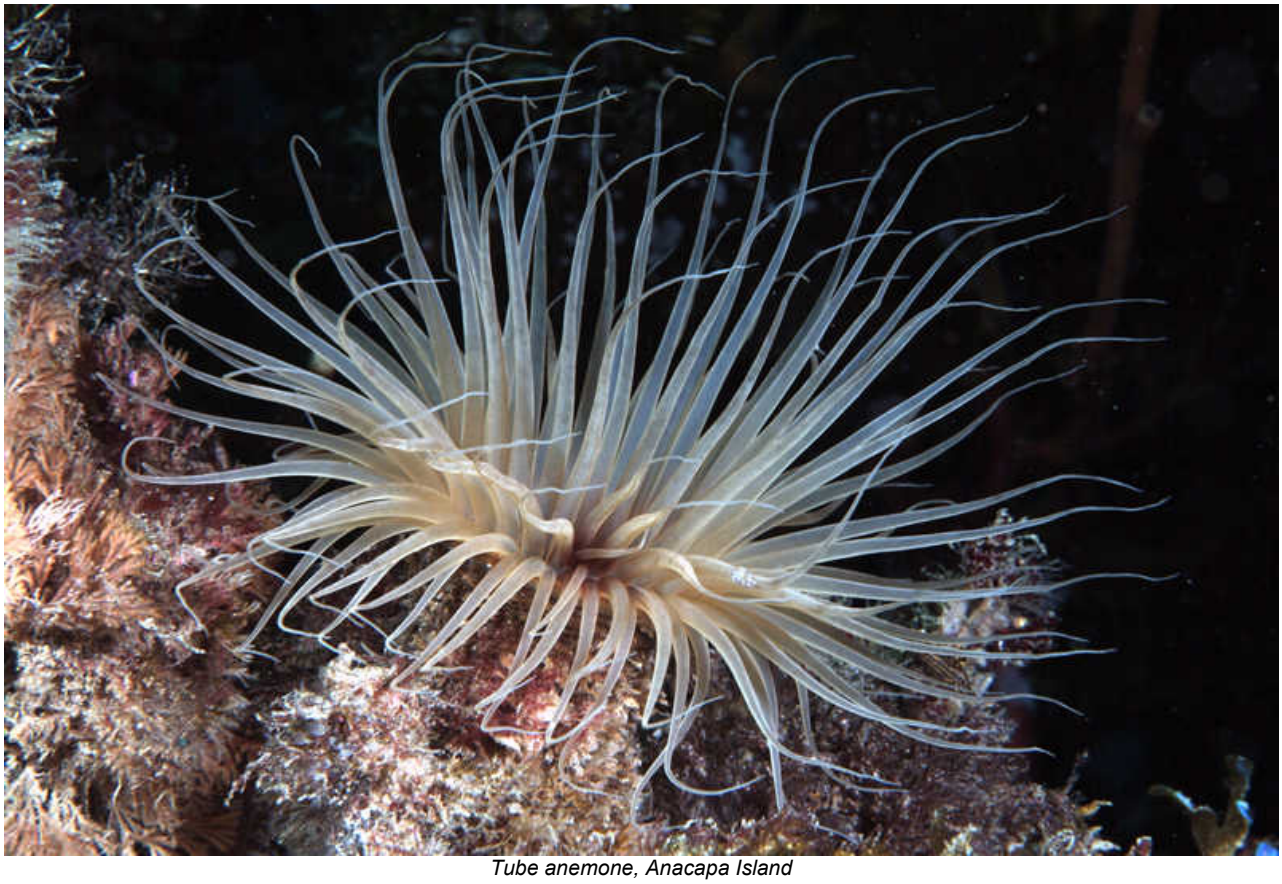
Green anemone, oil rig in Santa Barbara Channel

Red tealia anemone and giant starfish, Monterey Bay

Rose anemone, Anacapa Island

Sand rose anemone, Santa Rosa Island

Green anemone mouth



Tube anemone, Anacapa Island

The big rainbow nudibranch preys on the tube anemone. They climb up the stalk and attack with a lunge at the tentacles at the last second. They don't kill the anemone; they just take a few tentacles. Here is one stalking a tube anemone:

Rainbow nudibranch (Dendronotus iris) stalking tube anemone, Anacapa Island

The Channel Islands have a rich and varied population of nudibranchs. One of the most beautiful of them is the *Hermissenda crassicornis*, but I spent so much time and space with them in Chapter 1 that I won't include any additional photos here. Suffice it to say that they are seen regularly at the Channel Islands. Probably the most common California nudibranch is the lovely Spanish Shawl. They, like *Hermissenda*, are one of the world's most beautiful nudibranchs, but because they are so common they are taken for granted. Here are some nudibranchs I have photographed over the years at the Channel Islands:

Spanish shawl (Flabellina iodinea), Anacapa Island

Spanish shawl, Anacapa Island

Spanish shawl, Santa Cruz Island

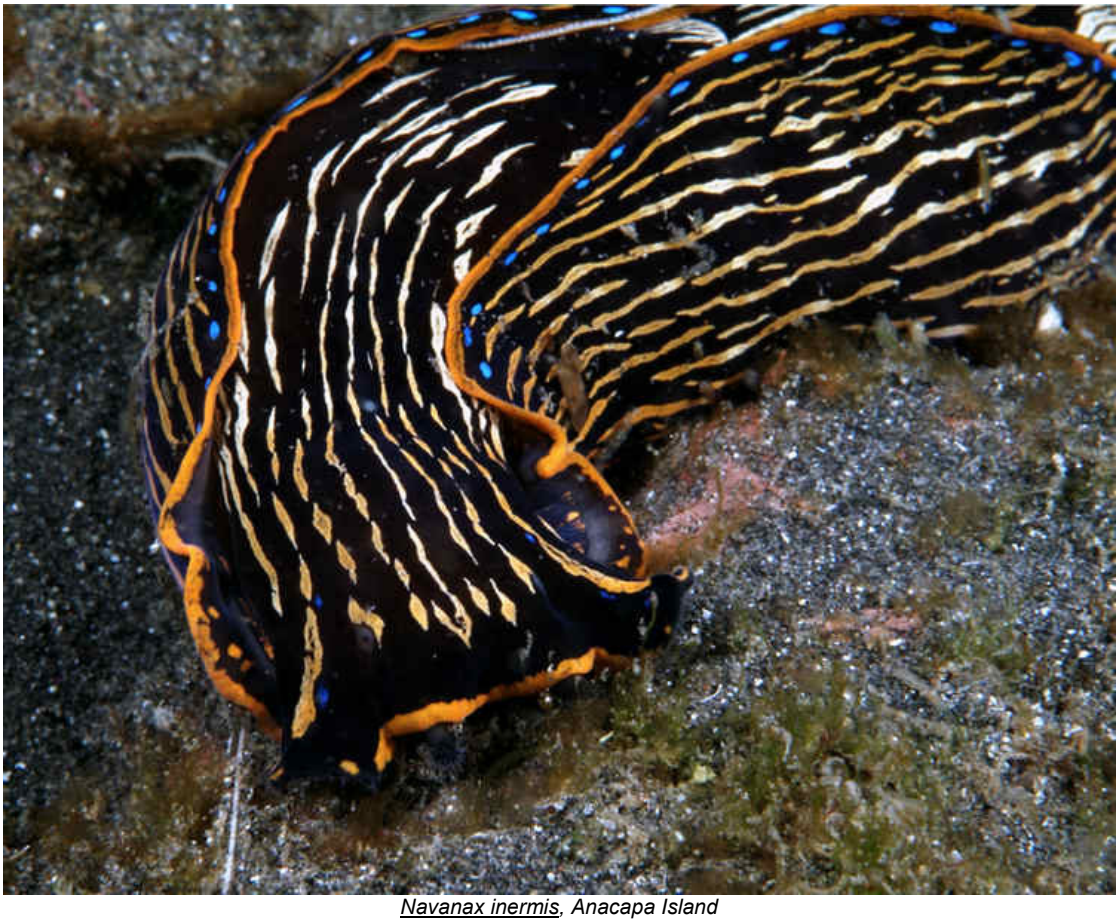
Hopkins Rose (Okenia rosacea), Whaler's Cove, Point Lobos

Mexichromis porterae, Santa Cruz Island

Flacelina stearnsi, Anacapa Island

Phidiana hiltoni, Santa Rosa Island

Dendronutus albus, San Miguel Island



Navanax inermis, Anacapa Island

Noumeaella rubrofasciata, Santa Cruz Island

Janolus barbarensis, Santa Cruz Island

One day in 1987 Coleen and I were diving in about 35 feet of water from a six-pack boat at Cathedral Cove, a nice spot near the east end of Anacapa on the north side. Early in the dive we noticed a young harbor seal watching us. (I am going to refer to the seal as “he” or “him” in the following discussion. I have no idea whether the seal was a male or a female; the use of the masculine here is for simplicity. I promise it is not sexist ☺.) Slowly, he approached us and began circling at very close proximity, at one point allowing a very tight face shot:

Harbor seal, Anacapa Island

Smitten with us, he began to touch us with his flippers, mouthing our hands and arms, brushing our hoses. The animal couldn't get enough of us. It was astounding, he could hold his breath for about 10 minutes, but then he would have to go to the surface for a breath. He would immediately head back down to us. That was kind of amusing, this beautiful sea creature that had to periodically breathe at the surface while we waited for him at the bottom with our tanks and bubbles. At one point he peered directly into Coleen's mask, bracing himself by holding her gloved hand gently. I managed to capture that image; it is one of my favorite photos. It has been published many times and has won several awards in underwater photo contests. Ted Danson used it in his *American Oceans Campaign* literature.

Coleen and harbor seal, Anacapa Island

We spent about 50 minutes with the harbor seal before we had to surface, at which point we lost sight of him. This was one of the most magical experiences I have had in several thousand hours underwater.

Brown pelican in flight