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'Unusual year' imperils sea life: Rescue groups, researchers puzzle over environmental shift

Food supply down, number of sick, 'starving' birds up this year

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□ Lupin Egan places a common murre in a tank for a swim at Native Animal Rescue in Santa Cruz. (Bill Lovejoy / Sentinel)

Animal rescue groups in the region have had a busy summer.

And warmer ocean waters could be to blame.

Common murres have been getting sick and dying along the Santa Cruz County coast this summer, exemplifying a trend occurring on the Northern California coast as well as the Northwest.

"We're not seeing tons more here, but we're seeing more dying on the beach," said Jay Holcomb of the International Bird Rescue Research Center.

The birds coming to the center, from five to 10 of them every few days, appear to be malnourished, looking emaciated with poor feather covering.

"Basically, they are starving," Holcomb said.

Members of the Santa Cruz group Native Animal Rescue have been collecting sick birds to send to the center. That's not uncommon this time of year, but there appears to be an uptick in the numbers this year.

The group rescues sick birds and keeps them until they can be transported to the International Bird Rescue's Bay Area rehabilitation facility.

"I would say we're getting more this year, but not an extreme," said Molly Richardson of Native Animal Rescue in Santa Cruz.

Warm Water

Earlier this year, it was more likely to be other species of seabirds such as cormorants, which were turning up dead on area beaches in exceptionally large numbers, said Hannah Nevins of Moss Landing Marine Laboratories.

During the spring, those birds are gearing up to breed. But this year, the upwelling that brings food to the surface wasn't present. Nevins said the birds likely were malnourished and were unable to make up the energy consumed during their breeding period.

The species affected are pelagic, or open ocean birds, she said. Species that fly through the area, such as sooty shearwaters, aren't showing up dead.

The warm surface water is like a seal that the murrens have to dive through to get to food. Normally at the surface, the food is now deeper in the water.

While murrens are reputed good divers — they can plunge about 180 meters into the water — this time of year they are trying to raise their young and molt at a time when it is more difficult to find food, Nevins said.

"That takes a lot of energy," she said.

Tales of warmer water-surface temperatures affecting sea life have been reported up and down the West Coast in recent weeks.

Food Supply Down

There have been fewer jellyfish, fewer rockfish and less krill, a building block of the food web in the sea.

"Basically, it is a very unusual year," said Baldo Marinovic, researcher at UC Santa Cruz's Long Marine Lab.

Marinovic and other scientists attribute the puzzling phenomena in part to a lack of upwelling this past spring.

Normally, northwest winds blow in the spring at enough of a force to push warm surface water out to sea and allow cold, nutrient-rich water to rise nearshore.

Winds later in the season keep that process going. Marinovic likens it to a swing — it takes a big push to get started and less energy to keep it going.

"We didn't get that big push this year," Marinovic said.

The result is warmer-than-normal surface water in May and June. Water temperatures were recorded at 59 degrees during that time, compared with about 50 to 54 degrees in normal years.

The cold, nutrient-rich water allows minuscule forms of a plant known as phytoplankton to grow. In turn, phytoplankton is gobbled up by zooplankton, or krill, which in turn is munched on by seabirds and by marine animals big and small.

With the water warmer, that did not happen as usual. It also could be the explanation behind this summer's emerging red tides, caused by dinoflagellates that flourish in warmer ocean water.

The result is a lack of krill-devouring sea life in the Monterey Bay and elsewhere in Northern California.

Blue whales, which eat tiny krill, have been few and far between this year in the area, Marinovic said, adding that surveys are showing fewer rockfish and jellyfish in the Monterey Bay this year.

On the other hand, there are reports of an abundance of anchovies and sardines, researchers say.

Why is this happening? The jury is still out.

Scientists say it's not an El Niño event, as waters in Southern California seem to be following their usual patterns.

"We're trying to put the pieces together to see what caused the conditions we have," Marinovic said.

For information about volunteering to transport sick birds to the International Bird Rescue Research Center rehabilitation facility in Cordelia, call (707) 207-0380.

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