

# Pacific Nearshore Project uses sea otters as barometer

## GLACIER BAY: Researchers gather for three weeks to watch marine mammals.

By MIKE CAMPBELL  
mcampbell@adn.com

Published: May 23rd, 2011 10:22 PM  
Last Modified: May 23rd, 2011 10:23 PM

### More Marine Wildlife stories »

- Scientists find no radiation in Alaska's sick ringed seals
- Video: Sea lions caught in marine debris is cautionary tale
- Wayward ribbon seal receives checkup, is found to be healthy
- Satellite tags show ties between Pacific gray whale groups
- Federal Marine Mammals Commission begins Anchorage meeting

More than two dozen marine researchers -- including seven from the Alaska Science Center -- are at sea near Glacier Bay this week studying sea otters for clues about the ecological health of the Pacific coast stretching as far south as California.

**Story tools**

- 1 Comment
- E-mail a friend
- Print
- Share on Facebook
- Digg this
- Seed Newsvine
- Send link via AIM
- Tweet this



Font size : A | A | A

The Pacific Nearshore Project brings together 16 researchers from four institutions, performing exams, biopsies and blood tests on the otters while observing them for three weeks.

"Sea otters are the perfect health indicators of our nearshore waters," James Bodkin, a U.S. Geological Survey research biologist and the project's chief scientist, said in a press release.

"They're entirely dependent on nearshore marine habitats and are keystone species in kelp forest food webs," said Bodkin of the Alaska Science Center. "Some populations are abundant and stable, while others are either declining or struggling. Can these differences be explained by ocean influences, or by human impacts to the adjacent watersheds?"

The three-week expedition wraps up a series of sampling missions that began three years ago on the Katmai coast and at Big Sur in California.

In contrast to Southwest population of sea otters that in 2005 was listed as threatened under the U.S. Endangered Species Act, Southeast otters are by and large flourishing. According to Douglas Burn of the U.S. Fish and Wildlife Service in Anchorage, the Southeast population has grown 13 percent a year over the past decade while expanding its range.

"The otters in southeast Alaska were actually translocated from the Aleutians over 40 years ago," Burn said. "Now the parent population is in trouble while the new population is doing just fine."

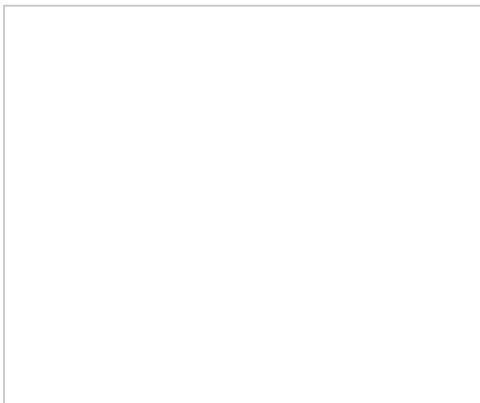
Wednesday was the first day in Southeast, marked by the expedition's first sea otter capture.

"The first animal is always the most difficult," wrote Mike Murray, the chief veterinarian at the Monterey Bay Aquarium, wrote on the expedition's blog. "No matter how many times the team does this work in the field, you always find a few little bugs.

"The first was a 69-pound female, feisty as the dickens and not convinced that she saw the value in our work. But after administering the sedatives, we were able to work with her quite safely.

"She was a beautiful animal -- luxurious fur, good subcutaneous fat stores, and she was pregnant."

After field work is complete, researchers will complete DNA analysis, disease and toxin studies



while also looking at sea otter diets and satellite imagery to assess the health of the coastline.

"It's not so much 'CSI: Sea Otters' as it is 'CSI: Coastal Health,' " Seth Newsome, a University of Wyoming researcher who will analyze the chemical signature of otter whiskers collected during the expedition, said in a press release. "Sea otter health and diet tells us a great deal about the quality of their marine habitat -- the same habitat that supports our fisheries and our recreational waters."

Taking whiskers from wild otters isn't easy.

"We actually use the same anesthetics that doctors use for colonoscopy exams in humans," said Murray, who's operating a mobile "otter examination clinic" on the research vessel deck.

"We have colleagues who are using groundbreaking techniques to solve this mystery, including a blood test that can show whether an otter has been exposed to oil, parasites or other types of stress," added U.S. Geological Survey ecologist Keith Miles of Davis, Calif. "This is an extraordinary collaboration among government agencies, research institutes and universities working together."

The expedition will wrap up June 10.

Reach reporter Mike Campbell at [mcampbell@adn.com](mailto:mcampbell@adn.com) or 257-4329.

### Comments

**NEW STORY COMMENTS:** [Learn about our upgrade](#) | [Create an avatar in the new system](#) »

By submitting your comment, you are agreeing to adn.com's [user agreement](#).

Hide comments

Like



### Add New Comment

[Login](#)



Real-time updating is **enabled**. ([Pause](#))

### Showing 1 comment



**Matthew Lorig**

Sea Otters in Southeast AK are more like an invasive species. They were introduced from another area and are expanding their range and population very rapidly. I have trouble understanding what they are trying to study. I think the "cuteness" of the otters distracts even scientists from the fact that what they are studying is not a true baseline situation. An introduced population can never give you an accurate representation of overall coastal health.

05/24/2011 04:35 PM [Report Abuse](#)

[Like](#) [Reply](#)