

Getting Up Close and Personal with Kodiak's Whales

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Marine mammal researcher Bree Witteveen takes aim with her air rifle at a humpback whale just offshore of Spruce Cape Friday. The air rifle fires a dart that samples the whale's skin and blubber. Marine Advisory Program researchers have a special federal permit (NMFS Federal Research Permit # 14296) to approach the whales so closely and to collect the samples. There are more photos after the jump Brianna Gibbs/KMXT photos

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Marine mammal researcher Kate Wynn navigates past Spruce Cape in search of humpback whales.

The sun is high in the sky when Witteveen and Wynn pull away from the boat launch in Saint Herman Harbor on Near Island. Wynn steers the small open skiff with ease, as Witteveen checks the equipment. The two have brought their research necessities: a digital camera with impressive zoom lens, and a dart gun for taking skin and blubber samples of whales they hope to come across.

They've barely made it out of the channel when the first sprays are seen. A young humpback puts on quite a show for the seasoned researchers, but it's a whale they've seen before. The two take a moment to admire the spectacle, then head north in search of new giants. A short skiff ride later, they get what asked for.

-- (Whale Biopsy 1 :14 "Whale sprays. Guys there's a couple of whales in front of us. They are the big black things. Laughs. Don't want to miss them. Whale sprays.")

A pair of humpbacks emerge from the depths and flash their giant tails, a process known as fluking.

The fluking sends Witteveen to the bow of the boat, camera in hand, trying to capture clear images of the individual black and white color patterns on the bottom of their tails. This, along with images of dorsal fins, allows Witteveen and Wynn to identify each individual whale. Since 1999, the two have identified more than 1,200 humpback whales in the Kodiak archipelago.

Back on the boat, Witteveen uses the handful of minutes between whale sightings to flip through images on her camera. She said she doesn't recognize the whales right away, but that doesn't mean they haven't already been identified. Still, Witteveen has absorbed enough of the whales' characteristics to tell the two apart. Her skills are put to the test when another humpback surfaces, and she instantly says it's a new whale, bringing the total to three for that area.

The new whale is hard to photograph, despite Wynn's skill and grace at navigating the waters around it. She and Witteveen decide to ditch the camera and go for a biopsy instead.

Pulling the dart gun from its case, Witteveen said a biopsy can give researchers a plethora of information about a whale.

-- (Whale Biopsy 2 :16 "Mostly what we do is stable isotope analysis, but other labs will do genetics and fatty acids or contaminants. You get this one little chunk of skin, there he is, and there are a lot of things you can do with it. ")

As Wynn steers the skiff closer to the target, Witteveen loads the gun with small biopsy darts.

-- (Whale Biopsy 3 :19 "So this is the only part that goes into the whale, this stainless steel part, and this little collar is what stops it, and it will bounce back out. So then you'll see that this kind of bounces in the water and we go scoop it up. So that to the whale, is nothing, it's like a pin prick.")

Stepping back onto the bow, she takes her readied dart gun and aims.

-- (Whale Biopsy 4 :04 "Whale sprays. I've got this one right

here. OK. Fires gun.")

It's a perfect shot, and just as she described, majority of the dart pops off into the water. Wynn slowly steers the boat up to the floating sample and Witteveen scoops it up in small net.

-- (Whale Biopsy 5 :15 "You can see that's blubber sticking out on this end. And then you can see there's a little bit of skin oozing out right here. So the whole sample is about that long then. So you're getting the whole skin, and just the top layer of blubber.")

In total, the sample is less than an inch long, and barely three centimeters in diameter, but for these two, it's a scientific goodie bag.

As the afternoon rolls into early evening, the two women set off to photograph more whales, bringing the day's total to six. At each sighting, Witteveen charts the location and any notes she can, snapping photos along the way. She and Wynn speak of the whales like they are old friends, and in a way, they are. The two have been surveying humpback and fin whales in Kodiak's archipelago for more than a decade. They've logged thousands of hours, both at sea and buried in lab work, learning the mysterious lives of these marine giants. They'll spend the next few days analyzing data from the day's research, and weather permitting, be back on the water next week. Their work seems never ending, but if you ask them, they're always glad to be back out with their old friends. I'm Brianna Gibbs.

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