# NOAA Fisheries Testing Surveillance Drone

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Jay Barrett/KMXT

NOAA Fisheries scientists are using a new method for surveying the southern edge of the Bering Sea ice pack for seals as they both move north. A remote-controlled, pilotless drone is being flown off the deck of the NOAA research vessel McArthur II. The ship was recently in Kodiak, before heading to the Bering Sea and launching the Scan Eagle, a 40-pound drone with a 10-foot wingspan. It's not unlike the surveillance drones being used by the military in the Middle East.

Peter Boveng, the leader for the Polar Ecosystem Program at National Marine Mammal Laboratory in Seattle, says the price of remote-controlled drones has fallen, while increasing the margin of safety for wildlife managers:

-- (Drone 1 45 sec "I'd say the capabilities ... to wildlife management.")

The Scan Eagle is owned and operated by the University of Alaska, and was built by a subsidiary of Boeing.

Both NOAA and the university's Institute for Arctic Research will use the still and video images taken by the Scan Eagle during a month-long test, to determine if drones can be used to estimate the number and location of spotted, bearded, and ringed seals on the ice pack.

Robyn Angliss, the Deputy Director of the National Marine Mammal Laboratory, says

there is any number of missions for which NOAA could use drones like the Scan Eagle.

-- (Drone 2 26 sec "Just in a broader perspective ... kind of civilian projects.")

She said the same technology could be used in fisheries enforcement, keeping an unblinking eye on the fishing grounds.

The cost of the drone itself is about 40-thousand dollars, though the remote control, launch and retrieval equipment are extra. Boveng says video signals from the Scan Eagle are sent back to scientists via radio, though the higher resolution digital still images must be downloaded once the drone returns to the ship.

The FAA is currently limiting the flights of the Scan Eagle to within five miles of the research vessel, but as soon as the technology is proven, it can roam farther.

The Scan Eagle can fly for about 20 hours on two gallons of fuel, at up to 75 miles per hour, after being launched by a pneumatic catapult. To land, hooks on the drone's wings catch a line hung from a crane aboard the McArthur II.

The data gathered this month will help NOAA to understand seal habitat better, and gauge their sensitivity to climate change.

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