Satellites spy on sandhill cranes as bird-study technology increases

by Todd Eskelin

This spring, while conducting the annual snow goose count at the Kenai Flats, I spotted a sandhill crane with a yellow colored band on its left leg that read A05. On the right leg just above the knee joint was a band that contained a small transmitter and antenna.

Spotting a banded bird is like opening a Christmas present for me. The band number is sent into the bird banding lab, and they send you all of the information that is known about that bird. I always wait anxiously to find out where the bird came from, when it was banded, how old it was and if it had been seen by anyone else. That is why I always scan for banded birds when I am at the flats.

Two years ago, I spotted a sandpiper that was banded in Ecuador the previous winter. So, I reported the band number from the sandhill crane to the bird banding laboratory in Laurel, Md. Soon after I was notified that the bird had been banded in Palmer by the Alaska Department of Fish and Game. I contacted Mike Petrula with Fish and Game in Anchorage and he directed me to the Web page on the sandhill crane project. He said the bird I spotted could be identified on the Web page as bird #13387.

Technology in bird studies has come a long way in the last 10 years. I pulled up the Web page to find a complete map of the bird's movements. As a colt it was banded last fall at Palmer Hay Flats, then migrated down to the wintering grounds in California's Central Valley, and then back to the Kenai Peninsula.

All of this information was obtained using a satellite transmitter placed on the crane's leg. These satellite transmitters only weigh 35 grams and allow researchers to pinpoint a bird's location. It is like a scene from a James Bond movie. The satellite transmitter is slightly heavier than a AA-battery and can track a bird's movements for over a year depending on the programming.

These transmitters were programmed to send out a signal every two days during migration and every four days while on the wintering grounds. Unfortunately, we cannot track a colt to its breeding grounds as it takes two to seven years before they begin to breed. The oldest known sandhill crane from a banding record lived 29 years and three months.

We often think of cranes dancing around with their elaborate courtship dances or circling overhead with those prehistoric calls while we are out moose hunting. Tracking cranes with satellites we find they are also very fast fliers. The bird I saw was in Kamloops, British Columbia, on April 23; Chichagof Island, Southeast Alaska, on the April 27; and Kenai Flats on the morning of April 30.

I read that they average 150 miles per day during migration, but for that last leg from British Columbia to the Kenai Peninsula, this bird averaged over 200 miles per day. Sandhill cranes have been clocked at over 50 miles per hour. These speeds are accomplished by flying high and catching a good wind. Cranes have been spotted flying in the V formation at nearly 12,000 feet.

Using satellite transmitters also revealed that both the adults and the colts follow the coast of Alaska to Southeast, and then cut inland around the Stikine River. From there they head south through British Columbia, Eastern Washington and Eastern Oregon to the wintering grounds. The maps also revealed where many of the important staging areas are in Central and Eastern Washington and Oregon.

If you would like to see these maps for yourself, I highly recommend you visit the Fish and Game Web page at the address listed at the end of this column.

If you spot any banded birds, you can call the Kenai National Wildlife Refuge at 262-7021 or you can call the bird banding lab at 1-800-327-BAND.

Todd Eskelin is a Biological Technician at the Kenai National Wildlife Refuge. He specializes in birds and has conducted research on songbirds in many areas of the state. For more information on the maps: http://www.state.ak.us/local/akpages/FISH.GAME/wildlife/duck/crane/crane.htm. Previous Refuge Notebook columns can be viewed on the Web at http://kenai.fws.gov.