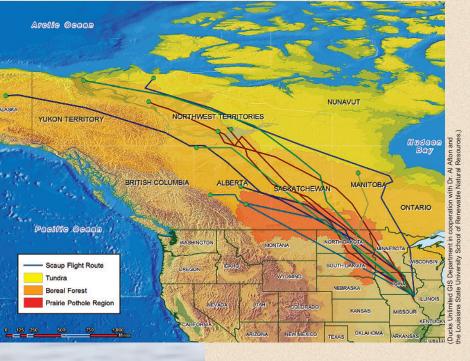


History Survey flight data, in the spring of 1958, 465,200 lesser scaup were

recorded on Pool 19, compared with an

impossible from the traditional research

vessel, an airplane.



Using satellite technology, biologists are tracking the migratory paths of selected female scaup.

During spring migration, traps placed on Pool 19 of the Mississippi River provide biologists the opportunity to band bluebills.

Recovered bands provide migration information.





Leading a diverse team of biologists working to solve the scaup mystery is Al Afton, a U.S. Geological Survey biologist and adjunct professor at Louisiana State University. Afton and other researchers have formed three hypotheses for the scaup decline: accumulation of contaminants, climate and habitat changes on the boreal forest breeding areas, and decreased quality and quantity of food resources on winter and spring migration areas. The latter is the focus of a pilot study initiated on Pool 19 of the Mississippi River in March 2007.

"Pool 19 is a critical area for scaup because of the number of birds passing through the area each spring from a number of different wintering areas," Afton explained. "Traditionally, food supplies there have been very good and the birds have been able to build fat reserves, which is especially important for females to ensure their survival through migration and during the egglaying and incubation periods."

Equipped with a band and radio transmitter, movements of this duck can be tracked on near-daily basis. in a small sample of female scaup.

Biologists spent several weeks on the river last March, trapping, banding and weighing 2,500 scaup. From that large sample, 17 females were selected for a state-of-the-art study involving implanted radio transmitters.

Thanks to this technological advancement, biologists from throughout the country simultaneously receive—on a nearly daily basis—updated locations of those females.

"The use of satellite technology has taken the logistics of being on the ground, or in the airplane, out of the equation of tracking these birds," Afton said. "Radios are expensive, with each one costing approximately \$2,750 plus an annual fee of about \$800 to obtain the data, but the batteries last two years so we are able to gather considerable information with relatively minor effort

in terms of hours in the field."

This month, biologists return to Pool 19 to trap scaup—some will be recaptures that will provide valuable information on survival rates while others will be new birds that will be equipped with a leg band. And from the sample, 20-25 females will be outfitted with radio transmitters, boosting the information biologists will gather on their migration routes.

Collectively, this information will provide biologists with necessary information on how to focus management efforts and prioritize habitat work. It's all in the name of removing bluebills from a state of jeopardy.

or updated information on the project, visit www.ducks.org/ scaupstudy.

Project partners include: the Upper Mississippi River and Great Lakes Joint Venture; Prairie Pothole Joint Venture; U.S. Fish and Wildlife Service; Minnesota, Illinois and Iowa Departments of Natural Resources; USGS-Louisiana Cooperative Fish and Wildlife Research Unit; Louisiana State University; Louisiana Department of Wildlife and Fisheries; University of Illinois College of Veterinary Medicine; USGS-Northern Prairie Wildlife Research Center; Ducks Unlimited Inc.; North Dakota Game and Fish Department; Long Point Waterfowl and Wetlands Research Fund; Kibbe Research Station of Western Illinois University; Ontario Ministry of Natural Resources; Des Moines County Conservation Board; Mississippi Valley Calling Association; Louisa County Conservation Board; Tri Oak Foods; and, Mis-

