

2010 Waterfowl Survey: A Biologists First-Hand Account

Northeast Regional Biologist Caleb Spiegel provides a “bird’s eye view” of his experience during the annual North American Waterfowl Breeding Population and Habitat Survey:

“Since mid May I have been taking part in the annual North American Waterfowl Breeding Population and Habitat Survey. Initiated in the late 1940s, it is one of the longest running surveys of its kind in the world. Survey data collected by me and my veteran pilot will be added to that of nearly a dozen other aerial survey teams currently flying in small planes across the northern US and Canada. This long-term dataset allows scientists to track and effectively manage populations of North American waterfowl.

The survey route began in Northern Alberta, and zigzagged into far eastern British Columbia, and over much of the Northwest Territories. During this time I have had the great fortune to observe one of the largest and most intact boreal forests on the planet, a massive sanctuary for plants and animals, and a huge moderator of greenhouse gas emissions. The expansiveness of this wilderness is difficult to convey. We often fly hundreds of miles over forests dominated by black spruce and aspen, and giant wetlands without seeing a road, or any other sign of human activity. Large mammals such as moose, bear, bison, caribou, and musk ox range freely across the landscape. Occasionally we see something truly rare -- a couple of weeks ago we flew over a highly endangered whooping crane tucked onto its remote nest in Wood Buffalo National Park, the sole breeding location for the species.

And, of course, there are the ducks! Our survey area, largely dominated by boreal and tundra wetlands, includes critical breeding habitat for scaup, scoter, green-winged teal, and a variety of other waterfowl populations. The wetlands we have surveyed are structurally diverse, ranging from beaver impoundments to glacial ponds and lakes. As we fly over potential habitat of all shapes and sizes we are continually scanning for ducks. Pilot-biologist Fred Roetker, who has decades of experience surveying ducks in Canada, says that duck numbers appear to be higher in our survey area this year, likely because spring has arrived early to this often frosty section of the continent. Many wetlands that were frozen at this time last year have thawed and the ducks have moved in to nest.

Recently we crossed the Arctic Circle in the Northwest Territories. The trees of the boreal forest are giving way to open tundra, and many lakes are still locked in ice. Here, the sun does not set this time of year. Hardy human residents of Arctic communities, such as Inuvik and Tuktoyaktuk, are in nearly constant motion, embracing the brief summer. The lives of these northern people are inextricably linked to dramatic changes among seasons, much like the lives of the ducks we have been surveying.

Soon we will complete the 2010 waterfowl survey at the edge of the Arctic Ocean. I consider myself exceptionally lucky to have been able to contribute to a survey so crucial

to waterfowl conservation. In the process, I have witnessed a vast and uniquely wild place, crucial to the vitality of the planet; an experience unrivaled in my career as a wildlife biologist.



Biologist Caleb Spiegel



Boreal waterfall