

Canvasback comeback

Nearly 70,000 “cans” on Lake Christina proves that legendary waterfowl lakes can be bountiful once again

Last fall, Jim Dickson drove from St. Paul to Lake Christina in the hopes of seeing a canvasback. A devoted birder whose life list includes a whooping crane, the retired railroad employee had never once set eyes on the slope-headed ducks known to waterfowlers as “cans.” On a windy October afternoon at Lake Christina, a 4,000-acre shallow lake between Alexandria and Fergus Falls, Dickson finally saw his bird—and then some.

Duck magnet

Fifty years ago, Lake Christina was considered one of the finest canvasback duck lakes in the world, on a par with Chesapeake Bay for number of birds and quality of gunning. With an average depth of approximately 4 feet and a profusion of water plants, Christina was a duck magnet. Single-day counts by Minnesota wildlife biologists during the 1930s and '40s tallied an average of 50,000 canvasbacks at the lake.

Then the cans stopped coming. By 1959, at most only 250 were spotted during single-day counts. Though canvasback numbers increased somewhat in the 1960s and 70s, their use of Christina was clearly on the decline. In 1984, only 15 showed up during the peak of migration.

“The situation at Christina was bleak,” says Tom Carlson, DNR waterfowl habitat specialist at Fergus Falls.

Christina was traditionally where up to 20 percent of the continent's canvasbacks camped for a few weeks each October to fill up on sago pondweed. The protein-packed plant fueled further flights to wintering grounds in Chesapeake Bay and Louisiana. During its heyday, Christina was a three-mile-long salad bar for ducks. But during the late 1970s and '80s, the restaurant closed down. The problem: murky water.

As often happens on other shallow lakes, Christina's water got so murky that sunlight couldn't reach underwater plants, which then died. Without plants, winds whipped waves that stirred up more sediment further clouding the water. Ducks stopping for their traditional food fest found nothing to eat and moved on.

The fish factor

No one can say for certain why Christina's water got so cloudy. But a study funded by the U.S. Fish and Wildlife Service and conducted by North Dakota State University researchers in the late 1980s may have uncovered a clue. The study found that in Christina a profusion of bullheads and bigmouth buffalo were stirring up bottom sediment and overgrazing zooplankton.

Without zooplankton to keep it in check, the algae population exploded, clouding the water further and preventing even more sunlight from reaching plants.

Believing that the fish populations' and the canvasbacks' use of the lake were linked by water clarity, waterfowl biologists decided the key to Christina's restoration was to revive plants by ridding the lake of bullheads and buffalo.

A fish kill had been tried before, in 1965, but with limited success. This time, the DNR worked with local conservationists to get Christina designated as a wildlife management lake, which gives the DNR authority to improve it for waterfowl, using state duck-stamp money.

In the fall of 1987, the DNR applied two tanker truckloads of a short-term fish poison, whipping out most of the lake's fish population. To prevent bullheads and buffalo from entering from adjacent Pelican Lake, they installed an underwater electric fish barrier in the channel that connected the two waters. Hoping to control the offspring of any rough fish that might have survived the fish kill, the DNR stocked bass and walleyes.

The lake responded faster than anyone imagined. Today, water plants cover 97 percent of Lake Christina's surface.

And how the ducks have noticed. The number of canvasbacks soared from 15 in 1984 to 68,000 in 1993. Numbers of other waterfowl, such as ringnecks, have risen as dramatically. Coot numbers climbed from 1,000 in the mid-1980s to 156,000 last fall.

Countless cans

After a three-hour drive from his home in St. Paul, Dickson reached Christina's south shore, where he scanned the water for ducks. A few ringnecks and a dozen coots swam a hundred yards from shore, but no cans.

Discouraged, he headed north to where the road kisses the shore and provides a view of a large bay. There he looked out onto the lake below and saw a hundred or so big, broad-shouldered ducks, their chunky bodies bobbing in the water's steady chop. Canvasbacks.

That was just the beginning. Around the next bend, swimming among floating islands of uprooted sago pondweed, were 50- to 100-foot-long rafts of cans. Thousands of plump white breasts sparkled in the setting sun. Dickson says he doesn't know if he saw all 68,000 canvasbacks that DNR wildlife managers estimate were on the lake that day, but by the time the sun had set he had seen more ducks than it was possible to count.

The significance of such a sight to an ardent birder is obvious. In addition, Christina's restoration is a boost to the world's canvasback population, which becomes more vulnerable to disease and malnutrition when concentrated on fewer and fewer lakes. The dramatic increase

in stopovers at Christina doesn't mean that canvasback numbers are rising—the breeding population has remained near 500,000 for the past 20 years—but it does mean that the existing population is safer.

Christina demonstrates what “coordination” can produce. Closely involved in the lake's restoration were members of the Evansville Sportsman's Club, Minnesota Waterfowl Association, Coots Unlimited, and the U.S. Fish and Wildlife Service. Within the DNR, fisheries and wildlife managers worked together to address the ecological problems hurting duck habitat.

“Conservationists are now talking about the importance of “integrated resource management,”” says Roger Holmes, Division of Fish and Wildlife director. “The people responsible for restoring Christina were integrating management before most people had even heard of IRM.”

Lake Christina shows that the news about wetlands and waterfowl is not gloomy. As one of the largest wetland restoration projects ever attempted by the DNR, Christina has inspired other ambitious restorations, such as those at Swan Lake and Heron Lake.

It has also inspired awe in at least one birdwatcher. Says Dickson, “Before last fall I'd never seen a single canvasback. Now I could probably say I've seen more canvasbacks than any other duck.”