

Duck Manager: 'I am the wolf, the bison, the prairie fire.'

Roger Hollevoet's management philosophy may sound like the lyrics from a 1960s pop song, but this innovative, boots-on-the-ground refuge manager knows how to raise ducks. A peek inside Hollevoet's two-state plan for ground-nesting birds.

By Dan Nelson, Editor

Roger Hollevoet is explaining his philosophy of waterfowl management to a group of visitors touring the Nikolaisen Waterfowl Production Area (WPA) near Cando, North Dakota. It's mid-June, and the luxuriant prairie cover is bursting with ducks.

"Why do you have to manage predators here?" one of the visitors asks as the group huddles around a mallard nest. "This seems like perfect duck habitat—isn't that enough?"

"A lot of people have the perception that you can acquire the habitat and walk away, and everything will be fine," the soft-spoken Hollevoet chooses his words carefully, "but that only works if you have an ecological process taking place, and here

that process has been disrupted.

"That's where I come in," he says, listing some of the functions that prior to settlement were performed by Mother Nature. "I'm now the raging prairie fire, I'm the grazing ungulate and I'm the dominant predator that keeps the number of smaller predators in check."

Roger's other, official, title is that of refuge manager for the Devils Lake Wetland Management District, a position he's held for 22 of the 33 years he's been with the U.S. Fish and Wildlife Service. Devils Lake lies in the heavily farmed geographic region known as the drift prairie, and Hollevoet is one of the continent's foremost authorities on raising ducks in fragmented landscapes like these.

It's an important job, because year-in and year-out the drift prairie attracts about half the ducks that settle in North Dakota, a state that in recent years has contributed heavily to North America's fall flight of ducks.

Roger explains that the 2,640-acre Nikolaisen WPA was a black field before the Fish and Wildlife Service breathed life into it by restoring the original wetlands and planting the nesting cover 20 years earlier. Still, like other WPAs and refuges in the region, Nikolaisen struggled to produce ducks until the Service partnered with local sportsmen's clubs and Delta Waterfowl to remove predators during the nesting season.

Since predator removal began in 1999, nest success at Nikolaisen has averaged 72 percent, according to Hollevoet. That dramatic result—what he calls "a manager's dream"—was the product of securing and restoring habitat, creating partnerships and managing predators.

Nest success at all sites since 1999 has averaged a whopping 52 percent.

Roger was so impressed with the results that in 2005 he and coworker Cami Dixon wrote a management plan that examined the impact of predator management on overall success. Two years later they presented the plan at the 72nd North American Wildlife and Natural Resources Conference in Portland. The paper is titled "Integrating Science with On-the-ground Management: A Two-state Plan for Ground-nesting Birds", or "the two-state plan" for short.

Their goal: "To get information out to other waterfowl managers, letting them know predator management has been tested and it works," Roger says. "A lot of managers have been cau-

Goals of the two-state plan:

- To increase recruitment of ground-nesting birds in these habitats,
- To protect, restore and enhance habitat to address landscape-level needs,
- To synthesize the background and research related to these landscapes,
- To provide a management plan for state and federal agencies in the Dakotas,
- To manage risk by ensuring that optimal habitat will be available across physiographic regions when climatic variable provide for optimal conditions, and, to provide background documentation for potential partners and contributors.

"The cropland-dominated landscape (has been) altered to such a degree that even though habitat protection is implemented, it does not guarantee migratory bird recruitment above maintenance levels on a consistent basis," the authors wrote.

"These purposes echo visions of the designers of the North American Waterfowl Management Plan (NAWMP), which

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tious to try it, but there's been a wealth of research conducted on predator management. It's been evaluated from every standpoint, and proven effective. We wanted managers to know that."

The two-state plan explains that much of the original talland mixed-grass prairies have been converted to cropland and many of the wetlands drained. The predator community has been altered as well, with coyotes, red foxes, raccoons, skunks, badgers and ground squirrels filling the void after the gray wolf and grizzly bear disappeared.

If wolves were highly territorial and intolerant of other canids, these small mammalian predators exist in far greater densities, and without wolves to keep them in check, their numbers exploded in the second half of the 20th century.

Farmsteads abandoned over the years provided ideal den sites, while narrow strips of cover along ditches, fences and wetland margins provided predators with easy access to ducks and other ground-nesting birds.

The two-state plan provides several pages of scientific documentation confirming that predators are a significant limiting factor to duck production across the PPR, and that managing predator numbers during the nesting season dramatically boosts success for upland-nesting species.

address the need to reverse population declines of waterfowl caused by habitat fragmentation and degradation.

"Predator management is one tool that will address these deficiencies, and, as (research conducted by Marsha) Sovada et al. (2001) indicate, the long-term conservation of waterfowl must incorporate strategies to limit predation impacts."

Since the report was published, the North Dakota Game and Fish Department and South Dakota Department of Game, Fish and Parks have undertaken predator management projects, and now Hollevoet is talking to his peers at the Minnesota Department of Natural Resources about the results he's experienced.

Hollevoet says managing waterfowl is an adaptive process, which is another way of saying managers must play the cards they're dealt. "This adaptive process—be it science-driven or innovation-driven—will be a key to ensuring that our planning and management actions are successful. Adaptive management means that if refuge managers aren't successful, they have to adapt their strategies (in an effort) to achieve success.

"As a manager, my job is to raise ducks," Hollevoet says flatly. "That's what managers do. Predator management is part of a holistic management plan—if you want to raise ducks, it has to be one of the tools."

Veteran Fish and Wildlife Manager **Knows What it Takes to Raise Ducks**

It doesn't take an FBI profiler or a clinical psychologist to recognize Roger Hollevoet's passion for waterfowl—he wears it on his sleeve, right next to the patch with the U.S. Fish and Wildlife Service emblem.

Hollevoet has devoted his career to protecting the natural resources necessary to provide ducks and geese for North America's waterfowl enthusiasts. He defends wetlands with the fervor of an evangelist, finds creative ways to manage habitat despite ever-shrinking refuge budgets and has created numerous educational facilities for youngsters and adults alike.

A significant percentage of the continent's ducks now settle on the U.S. side of the "duck factory" in a heavily farmed, wetlandrich geographic region known as the drift prairie, where for the last 23 years Hollevoet has served as refuge manager for the Devils Lake Region Wetland Management District.

Here's what Roger has to say about managing ducks in these often-fragmented landscapes:

How important is the drift prairie to North American duck populations?

Fifty-five percent of the breeding duck pairs in North Dakota settle in the drift prairie region of North Dakota. It has about 55 percent of the wetland acres and 65 percent of the wetland basins in the state, and more than half of them are the seasonal and temporary basins so important for breeding ducks. In North Dakota our surveys of spring duck pairs over time (1989-2008) is 3.1 million breeding pairs, and the drift prairie attracts about 1.7 million on an annual basis. So, the two Dakotas are very important to the long-term success and future of North American duck populations.

When (how) did you first recognize the impact of predation on nesting ducks in your region?

I was introduced to the impact of predation in 1976. I had just started working for the U.S. Fish and Wildlife Service and I was told to look for evidence of waterfowl wings and parts around fox dens on the refuge.

I was very enthusiastic about the ground-breaking research being done at Northern Prairie Wildlife Research Center in Jamestown, North Dakota by scientists like Al Sargeant, Ray Greenwood, Harold Duebbert, John Lokemoen, Leo Kirsch and others. These accomplished scientists became my mentors and friends. All these guys are retired, but I still communicate with (scientist) Marsha Sovada, at Northern Prairie on predator management. Science plays a vital role for wildlife managers in making management decisions.

What is the role of predator management in your overall management plan?

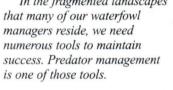
There is no silver bullet in waterfowl management—it's a mixture of science and art. You listen to science, make plans, implement management actions and finally evaluate what you did. Then you ask yourself: Did my actions work? If not, you have to change what you did until you get the desired result. Once successful, you need to continue to test your work, review science, and adapt to what the landscape or the critters are telling you. This prairie pothole landscape is a dynamic place. Wildlife managers must consider many factors and provide ourselves with a variety of tools. Predator management is one of the tools that are part of an overall management plan that we use to be successful.

We have demonstrated the success of a multiple-layered management approach—on our refuges and wetland management district we have often doubled and even tripled nest success by applying predator management techniques.

Isn't habitat alone enough to maintain healthy duck populations?

It is very rare that any one strategy is enough. If we could acquire a stellar amount of wetlands and grasslands-ves-habitat alone would maintain healthy duck populations. But we as humans need food, and the area known as 'the duck factory" is also the food pantry for the continent. On the U.S. side of the Prairie Pothole Region it has taken a major agricultural program along with the National Wildlife Refuge System, state game and fish agencies and many non-governmental organizations to get us where we are. If that agricultural program were to go away—I'm talking about programs like the

Conservation Reserve Program—it would leave a big hole in our success. In the fragmented landscapes



Why not use predator fences or other tools to create secure nesting areas?



