

## **Ripple Effect # 71**

### **Understanding our Northern Plains Wetlands**

With fall hunting season underway, the special role and unique features of the Northern Prairie wetlands of Manitoba, Minnesota and North Dakota are front and center once again.

Wetlands take a number of forms, but in this area of the Northern Prairies, we most often associate wetlands with prairie potholes (depressions that fill with snowmelt and rain in the spring) or vernal pools (seasonal wetlands that predictably form permanent basins during the cooler part of the year), both of which, in this area of the Upper Midwest, were formed by retreating glaciers.

Wetlands can come in many sizes, ranging from 500-acre lakes to small pools only several feet across. Some can hold freshwater from rainfall and melting snow; others can be alkaline and recharged by ground waters. Most share several features: their soils developed in wet conditions, they host standing water for at least part of a season, and their vegetation is adapted to wet soil conditions.

Whatever the size or exact features of wetlands, we know that the retreating “Wisconsin” glacier left lots of them, with estimates of 25 million original potholes or 83 per square mile in an area stretching from northwest Iowa to central Alberta.

Many original prairie wetlands have, of course, given way to agricultural production and transportation needs. These economic imperatives have resulted in reductions in wetland areas since the mid-1800s of somewhere between 45%-52% in North Dakota and Minnesota—and, perhaps, upwards of those numbers in Manitoba.

Even with about half the original amount of wetlands, the remaining areas of our Northern Prairie wetlands are still the most productive habitat for waterfowl in North America, producing half of the duck population for the continent—considerably more in bumper years—from a relatively small area.

Waterfowl especially known to nest in the Northern Prairie wetlands include mallard, blue-winged teal, gadwall, northern shoveler, northern pintail, canvasback, lesser scaup and redhead. In addition to waterfowl, wetlands also provide habitat for many other species of birds, animals, fish and plants.

Because the loss of wetlands can contribute to flooding, soil erosion, and water-quality problems, efforts are in place to “add ground” to wetlands. The rate of loss has slowed in Minnesota and North Dakota, and in Manitoba, Ducks Unlimited Canada has reached an agreement with the provincial government to add 3,443 hectares of secured wetlands in Manitoba’s southwest prairie area.

Those depressions left by glaciers some 12,000 years ago still affect our lives today in many parts of the Red River Basin. Many of us experience wetlands for a brief time

during hunting season, some of us live and work with and around wetlands for a good part of the year, but all of us in the Red River Basin share the landed heritage of our “Pothole Prairie.”

Sources include County Wetlands Data Guidebook (2007); Manitoba Conservation, “Protected Areas Initiative”; North Dakota Water Science Center’s “Wetlands of North Dakota”; Peterson Field Guides: The North American Prairie (2004); USGS Water Science Center, “USGS Programs in Minnesota Fact Sheet.”

Until the next Ripple Effect,

The Red River Basin Commission (RRBC)

The RRBC is a grassroots organization that is a chartered not-for-profit corporation under the provisions of Manitoba, North Dakota, Minnesota, and South Dakota law. Our offices in Moorhead, MN and Winnipeg, MB can be reached at 218-291-0422 and 204-982-7254, or you can check out our website at [www.redriverbasincommission.org](http://www.redriverbasincommission.org).

