

NABCI IN CANADA

Bird Conservation Region 11: Protecting Habitat in Prairie and Parkland

By J. Alexander (Sandy) Burnett

It's a bright May morning across the Canadian Prairies. Near the town of Brooks, Alberta, a Western Meadowlark perches on a fence post and watches a movement in the tall grass beside an irrigation reservoir. Half-hidden, a research biologist kneels to examine four eggs in a nest of dry grass. Their rich buff colouring, marked with blotches of brown and purplish-grey, confirms that they belong to a pair of Marbled Godwit, large, prairie-nesting shorebirds that have been seen in the area.

Five hundred kilometres to the east, near Assiniboine, Saskatchewan, a volunteer observer for the Grassland Bird Monitoring Project stops her truck, by the side of a gravel road that winds through the broken hills of the Missouri Coteau, and listens. The parti-coloured form of a Chestnut-collared Longspur bursts from a tuft of grass. High overhead, a Sprague's Pipit trills a territorial song. The observer records both species in her notebook before driving 800 metres to the next stop on her assigned route.

Yet another 500 kilometres eastward, in the Rural Municipality of Odanah, Manitoba, a farmer stops his tractor and steps down from the cab. Last winter, he signed a management agreement with Ducks Unlimited Canada's Prairie Care program to restore waterfowl nesting cover on a portion of his farm. He stretches and pauses to admire the view before adjusting the rate at which he spreads the mixture of native grass and wildflower seeds upon the land.

Besides celebrating the sheer pleasure of being outdoors on a beautiful a spring morning, these vignettes have another feature in common. All three reflect the diversity and energy with which the program of the Prairie Habitat Joint Venture (PHJV) is expanding to achieve the bird conservation objectives of the North American Bird Conservation Initiative (NABCI).

NABCI is an initiative of Canada, the United States and Mexico to develop and implement plans for the long-term health of all bird species in all habitat regions of North America. Its rationale is simple. Birds are numerous, highly visible, economically significant and ecologically essential components of the biodiversity of all three countries. If all the bird populations of the continent are in good health, abundant, and distributed throughout their known ranges, relative to historical norms, it can be inferred that the environmental health of North America is good. If not, then like the celebrated canary in the coalmine, those species in trouble will serve as indicators of an urgent need to take remedial action.

To facilitate the initiative, the natural habitats of the continent have been mapped into 67 Bird Conservation Regions (BCRs), each representing a set of related and contiguous ecosystems.

The grassland ecosystems of western Canada extend for 1500 kilometres, east to west, from the tall-grass prairie remnants south of Winnipeg to the aspen parkland transition zone northwest of Edmonton. They form the northern portion of Bird Conservation Region (BCR) 11, the Prairie Pothole region. After the retreat of the last ice age, this terrain was dotted with tens of thousands of “potholes” — sloughs, ponds, and small lakes — that made it the most productive habitat in North America for ducks and other wetland-dependant birds.

Today close to 90% of Canada’s prairie grasslands have been converted to agricultural use and thousands of potholes have been drained to facilitate cultivation. Nevertheless, the wetlands of the region still provide critical habitat for more than half the continent’s waterfowl. In addition, they support more than 200 breeding bird species in all, including priority species such as Piping Plover, Long-billed Curlew, Western Grebe, Black Tern, Baird’s Sparrow, Chestnut-collared Longspur, Sprague’s Pipit, and Marbled Godwit. Amazingly, despite its being one of the most profoundly altered ecozones in Canada, it remains one of the richest in wildlife resources and productivity.

Such biodiversity and productivity do not automatically mean that all is well from an ecological standpoint. Relative to the vast area and thinly dispersed human population of the region, the number of its native wildlife species known to be at risk is disproportionately high.

Wildlife agencies at the federal, provincial, and non-government levels have been monitoring waterfowl populations and pressing for wetland habitat conservation measures on the prairies for more than 40 years. In the late 1980s, the formation of the Prairie Habitat Joint Venture (PHJV) of the North American Waterfowl Management Plan accelerated the process. The PHJV began as a waterfowl initiative, but has been consciously broadening its perspective for many years. Today it is a major partner in the development and delivery of NABCI all-bird strategies that, since 1998, have encompassed initiatives aimed at conserving all four bird groups: shorebirds, landbirds, waterbirds and waterfowl. The concept is captured in the current PHJV vision of prairie and parkland landscapes capable of sustaining bird populations in harmony with human use of the environment.

In essence, NABCI is a framework for developing effective partnerships to achieve that vision. On the Prairies, where waterfowl habitat conservation has been a priority since the 1940s, the development of conservation plans for each of the additional bird groups is an important step. The first of these documents, the Prairie Canada Shorebird Conservation Plan, is already complete. Landbird and waterbird plans are in progress, and will be completed in 2002.

It is in the implementation of plans and the delivery of programs that the quality of partnerships is truly tested. The fact that the Canadian tier of the Prairies spans three provinces adds weight to this observation. While all three are dealing with similar conservation challenges, each has its own set of wetland, agricultural, and taxation policies. The expansion of the PHJV vision to all bird conservation provides an excellent framework from which to integrate and coordinate conservation actions on the ground, such as monitoring and evaluation, research, and habitat conservation. The expanding partnership of the Joint Venture is the key to effective implementation

A long-standing prairie tradition of cooperation in community ventures helps to achieve results. Wetland habitat development in the Eastern Irrigation District (EID) of Alberta is a good example of this principle at work. The EID was established in 1935 to provide water in an area of the province that would otherwise be too dry to sustain agriculture. It supplies water to some 1400 users, including farmers and ranchers, local industries, and a dozen municipalities located within an area of more than 600,000 hectares.

Working closely with other PHJV partners, the EID has undertaken more than 70 cooperative habitat conservation projects, protecting more than 14,000 hectares of wetland basins. It has also involved more than 130 landowners in restoring upland habitat through tree planting and establishment of winter food plots for wildlife. While its foremost purpose is to support agriculture, it delivers important ancillary benefits for bird populations. The value of managed wetlands in preserving prime habitat for waterfowl, waders, and prairie-nesting shorebirds such as the Willet, Long-billed Curlew, and Marbled Godwit has been demonstrated in carefully documented ecological research through Environment Canada's Prairie and Northern Wildlife Research Centre in cooperation with other partners.

When so little of the natural Prairie bird habitat remains unaffected by human intervention, it follows that stewardship, rather than preservation, must be the keystone of bird conservation initiatives. It has been demonstrated repeatedly that good stewardship provides outstanding benefits to wildlife and producers alike. Consider Saskatchewan's Missouri Coteau district, a 2 million-hectare expanse of rugged hills and valley wetlands where much of the terrain is better suited to grazing than to cultivation. Data-gathering activities such as the Grassland Bird Monitoring project are important steps in developing an understanding of what native species are present and how their presence can best be sustained through a combination of land management, habitat enhancement, and securement of critically important habitat locations.

Stewardship is also the watchword of farmers, conservationists, and government land management agencies in Manitoba. The Little Saskatchewan Conservation District one of 13 such districts in the agricultural region of the province. It is located in the rural municipality of Odanah, just south of Riding Mountain National Park and an area long known for the production of waterfowl.

Conservation district status enables landowners in the Odanah area to benefit from a cost sharing arrangement with the province on a variety of projects. These include such

initiatives as the establishment of buffer strips between cultivated fields; stabilization of erosion gullies and riparian zones; restoration of permanent cover on marginal lands; and construction of water control structures. The Prairie Care program is also active in the area, promoting restoration of upland habitat by planting permanent native prairie cover. The area offers an excellent example of how well multiple partners can work towards a common conservation goal.

No single, uniform approach could fully satisfy the needs of conservation, or of stakeholders, across the enormous expanse of BCR 11. Differences from province to province, from project to project, and from habitat to habitat dictate that flexibility is an essential key to success. So, too, is the manifest dedication of the participants in NABCI-related programs, and the latitude inherent in the NABCI/Joint Venture approach. When the objectives of the prairie conservation plans for the various bird groups have ultimately been achieved, that success will be due, in no small part, to the program's capacity for diversity and inclusiveness.

J. Alexander (Sandy) Burnett, naturalist and environmental writer, wrote this article as one in a series on Canadian Bird Conservation Regions, commissioned by NABCI Canada.