



CHAPTER 7.0

Wildlife Habitat

Natural ecosystems are a vital component in sustaining ecological functions. This chapter describes beneficial management practices for enhancing three main types of farm habitat: cropped land, non-cropped land, and wetland and riparian areas.

Natural ecosystems are a vital component in sustaining ecological functions. They are essential for a healthy environment for plants, animals, and humans, as well as for human activities like agriculture (see Section 2.8). Conserving diverse ecosystems is the responsibility of everyone, including those in agriculture.

Food, water and cover are the three essential components of wildlife habitat. To retain and restore habitat, begin by taking stock of your farm. Consider the natural soil conditions and vegetation communities on the land before it was converted to agricultural use. Assess the different habitat types and consider what options would work best given your finances, management style and long-term goals. The options can be simple, like retaining existing treed areas or adding fall-seeded cereals to your crop rotation, or more involved, like planting natural areas to link existing habitat areas so animals can travel safely between these areas.

The following sections provide options for enhancing three main types of farm habitat: cropped land; non-cropped land; and wetland and riparian land.



➔ Natural ecosystems are important in sustaining ecological functions.

Courtesy of DUC

7.1 Cropped Land

Cropped lands can provide cover and food for ground-nesting birds and many small mammals. Practices that improve habitat also benefit soil, water and air quality.

BMPs to improve habitat on cropped land include:

- ▶ Convert lands that are marginally productive for annual crops into long-term forage production. This provides habitat for ground-nesting birds and small mammals.

- ▶ Add perennial or annual forages to your crop rotation to provide habitat for ground-nesting birds and small mammals. Manage perennial forage stands for longer life.
- ▶ When haying, use a flushing bar to flush out wildlife (see box).
- ▶ Delay haying near wetlands to reduce nesting losses for ground-nesting birds. Wait until at least July 1, and, whenever possible, delay until about mid-July, when nesting is usually near completion.
- ▶ Plant fall-seeded crops to improve habitat for ground-nesting birds.
- ▶ Reduce or eliminate tillage to minimize damage to nests and to increase the diversity of life in the soil (e.g. earthworms and **mycorrhiza**).
- ▶ Eliminate fall tillage to provide some cover and food during the winter.
- ▶ Rather than using conventional fallow, use strip cropping to provide some habitat.
- ▶ Use integrated pest management to minimize harm to non-target species.

Wildlife Flushing Bar

A flushing bar is an aluminum bar attached to the front of a tractor during haying operations. As the tractor moves along, chains or belts hanging down from the bar drag through the hay. The motion and noise scare ducks, songbirds, fawns and other wildlife out of the way of the equipment, saving their lives.



➔ Flushing bar mounted on a tractor.

Courtesy of DUC



For more information, contact your nearest Ducks Unlimited Canada office.

7.2 Non-cropped Land

Non-cropped land includes land used for native hay, pasture, shelterbelts, woodlots, bush, abandoned farmsteads and field borders. This land often has patches of native plants needed for wildlife habitat.

BMPs to improve habitat on non-cropped land include:

- ▶ Retain existing natural areas to provide habitat for birds, small mammals, and insects.
- ▶ Enhance the habitat value of treed areas, including shelterbelts, by such practices as adding fruit- and nut-producing trees and shrubs and leaving dead trees, to provide habitat for birds, small mammals, insects and fungi.
- ▶ Provide or retain corridors between key habitat areas to provide shelter for wildlife moving between these areas. Fencelines and shelterbelts can be used as corridors.
- ▶ For hay land, use a flushing bar during haying. Delay haying near wet areas to minimize nesting losses for ground-nesting birds; wait until at least July 1, and, whenever possible, delay until about mid-July, when nesting is usually near completion.
- ▶ For pasture land, avoid overgrazing, and delay spring grazing near wet areas to minimize damage to nests.
- ▶ Enhance the habitat value of idle areas like field borders and abandoned farmyards by such practices as planting a variety of grasses, legumes or shrubs, and adding nesting boxes.
- ▶ Maintain the edges between habitat types because these areas usually have more diverse food and cover.



➔ Fencelines can be used as travel corridors.

Courtesy of Agriculture and Agri-Food Canada – PFRA



➔ Spruce trees provide high quality winter cover.

Courtesy of Agriculture and Agri-Food Canada – PFRA



➔ Northern saw-whet owls often nest in standing dead trees with old woodpecker cavities.

Courtesy of Agriculture and Agri-Food Canada – PFRA

7.3 Wetland and Riparian Land

Wetlands are lands covered by water for all or part of the year. They are wet long enough to influence soil characteristics and to support water-loving plants. Healthy wetlands and riparian areas are important in reducing flooding, preventing erosion, protecting water quality and providing habitat.

BMPs to improve habitat in wetland and riparian areas include:

- ▶ Retain temporary wetlands. Small spring ponds provide important early spring breeding habitat for wildlife.
- ▶ Grow perennial forages for hay in wet areas to provide habitat for birds, small mammals, amphibians and insects, and hiding cover for fawns.
- ▶ Avoid cultivating near the edges of wetlands.
- ▶ Maintain, restore or enhance riparian vegetation to provide: breeding, feeding, nesting sites, travel corridors, food and cover for many bird species; critical habitat for deer, moose, elk and pronghorn antelope; shade and temperature regulation for improved fish habitat.
- ▶ Delay mowing and haying of grassed waterways and other wet areas until mid-July to reduce nesting losses and fawn mortality. Use a flushing bar when haying.



➔ Winter wheat provides benefits to nesting water fowl and other ground nesting birds.

Courtesy of DUC



➔ Habitat and wildlife are inseparable.

Courtesy of DUC

7.4 Information Sources

7.4.1 Contacts

- ▶ Ducks Unlimited Canada, phone: 1-780-489-2002; website: <http://www.ducks.ca/index.html>
- ▶ Cows and Fish Program (the Alberta Riparian Habitat Management Program), phone: 1-403-381-5538; website: <http://www.cowsandfish.org/index.html>
- ▶ Partners in Habitat Development, 1-403-362-1414
- ▶ Alberta Fish and Game Association, phone: 1-780-437-2342; website: <http://www.afga.org/Start/startfg.htm>
- ▶ Your district office of Agriculture and Agri-Food Canada – PFRA, or the PFRA website: www.agr.gc.ca/pfra
- ▶ Alberta conservation Association (ACA), phone toll free: 1-877-969-9091; email: info@ab-conservation; website: www.ab-conservation.com
- ▶ Nature Conservancy of Canada (NCC), phone toll free: 1-877-262-1253; email: Alberta@natureconservancy.ca; website: www.natureconservancy.com

7.4.2 References

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