

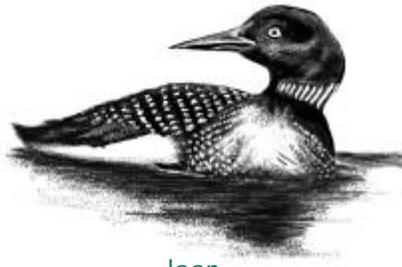
WETLAND BIRDS



Found throughout Michigan, wetlands, such as wet meadows, marshes, swamps, and peatlands, originally covered 11 million acres or about one-third of the state's landmass. During the last 200 years, over 35 percent of these wetlands have been drained or filled for agricultural fields, building projects, or other human purposes. Chemical contamination, isolation, and fragmentation have also contributed to the loss of wetlands. Fragmentation occurs when roads, trails, homes, and other forms of development break up the wetland area.

Since wetland birds rely on moist areas for food and cover, wetland losses have caused the decline of many of these species including least bitterns, yellow rails, black-crowned night herons, Forster's tern, and marsh and sedge wrens. More than half of all remaining Michigan wetlands are less than one acre in size. Bird species that inhabit small swamps and other wetlands include red-winged blackbirds, yellow warblers, green herons, woodcock and tree swallows. Therefore, protecting or restoring wetlands on your property may help increase wetland bird populations. The wetlands and associated uplands that are present on your property will determine what species of wetland birds will be attracted.

It is important to remember that some wetlands are not always wet. Seasonal wetlands, for example, may contain water only during wet periods in the spring and fall. All wetlands, however, are important to wildlife.



loon

Waterfowl, shorebirds, wading birds, raptors, loons, grebes, cranes, woodcock, kingfishers, and many songbirds depend on wetlands during all or part of their life cycles. Wetlands associated with springs and seeps may be as small as a few square feet while some Great Lakes marshes or peatlands cover thousands of acres. The identification and management of this habitat is explained in the **Wetland Management** Section.

Many different wetland birds are attracted to a variety of wetlands based on the type of food and cover provided. For example, plovers and sandpipers are attracted to shorelines with little vegetation where they nest, and find insects and other food. Bitterns, yellow rails, and herons are wading species that depend upon shallow water with cattails, bulrush, and smartweed to provide food such as small fish, frogs, and invertebrates such as snails, crayfish, and insects. The type of food and cover present in a wetland is based on water levels and vegetation composition. Throughout the year, different types of wetlands contain varying depths of water, or no water at all, which determines the type of vegetation that will grow there.

Wetlands with both dense and sparse stands of vegetation provide food and cover for specific types of birds. Some wetland cover types include dense cattail stands, grassy meadows, and wooded swamps. Sedge fields, wet meadows, mud flats, and beaches all provide good food sources, including insects and seeds, for a variety of wetland birds. The food and cover needs of many bird species also varies by seasonal activity. Migration stop-over, pair bonding, nesting, and brood rearing often require different components of a wetland.

In general, if you want to attract and manage for a diversity of wetland birds, restore and protect several wetlands or a diversity of wetland types, which will provide a variety of food and cover.

Cover Types for Wetland Birds

Because each wetland is different from the other, a different manage-



marsh wren



great blue heron

ment prescription may be involved for each. For more information refer to the **Wetland Management** section.

Wet meadows are seasonally wet and often have less than six inches of water depth at any given time. The following are options to consider when managing for wet meadows.

Marshes normally have water depths of at least several inches and typically contain perennial vegetation such as cattails, bulrushes and water plantain. Some species that frequent marshes are marsh wrens, common yellowthroat, American goldfinch, Virginia rails, great blue herons, and sandhill cranes. The common snipe, American and least bittern, and northern harrier are species that require marshes of 10 acres or more.

Shorelines can consist of beaches, mud flats, and rocky areas. At times, shorelines can border ponds, lakes, streams, or marshes. Shorebird species that use mud flats include dowitchers, common snipe, semi-palmated sandpipers and dunlin. Plover, sandpipers, yellowlegs, and gulls can be found on beaches.

Swamps, that are located near rivers, lakes, and streams are usually wet in spring, and dry in summer, and

sometimes wet again in fall. Lowland hardwoods, or swamps, typically have water less than a foot deep, and they harbor ash, maple, swamp white oak, basswood, cottonwood, and other broadleaf trees. The rose-breasted grosbeak, eastern wood-pewee, red-eyed vireo, white-breasted nuthatch, downy woodpecker, veery, and willow, alder and great-crested flycatchers are forest songbirds that inhabit forested wetlands. Swamps are also important to red-shouldered hawks, and can provide the structures for great blue heron rookeries.

Another type of swamp is the wet conifer forests which contain tamarack, balsam fir, black spruce, and white cedar. These wetlands attract forest-dwelling species such as the yellow-bellied flycatcher, golden-crowned kinglet, white-throated sparrow, red-breasted nuthatch, nashville warbler, black-and-white warbler, American goldfinch and cedar waxwing.

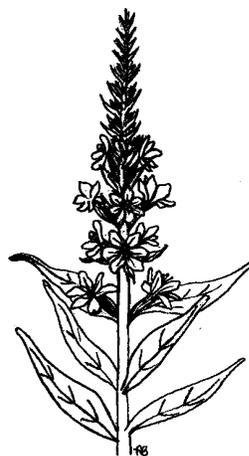
Peatlands are classified into bogs and fens. They contain a wide variety of vegetation from sedges or brush to broadleaf trees or evergreens. Alder flycatchers, swamp sparrows, rufous-sided towhees, palm warblers, hermit thrushes, and sandhill cranes are attracted to peatlands. Open peat-

lands may also contain shrub wetlands, which are favored by common yellowthroats, chestnut-sided warblers, song sparrows, and red-winged blackbirds.

Management Considerations

To meet the diverse needs of wetland birds, landowners should protect existing wetlands and restore former wetlands when feasible. What follows are general management considerations that apply to most wetlands.

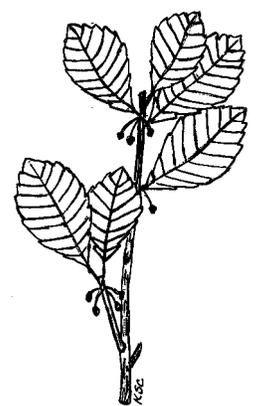
- Do not fragment any wetland on your property with roads, trails, or buildings regardless of the wetland size.
- Provide a buffer of upland vegetation of 100 feet or more around the wetland to protect it from sediment and chemical runoff, and other degradation.
- Plant buffers to dense grass. If necessary shrubs or trees can also be maintained within the grasses. Maintain this buffer along streams and rivers, and on lake front properties as well. In the process you will help maintain a healthy fringe of the wetland vegetation at the



purple loosestrife

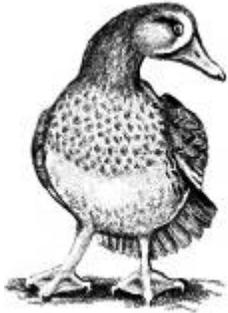


garlic mustard



glossy buckthorn

WETLAND BIRDS



blue-winged teal

edge of lakes and streams.

- Leave naturally dying and decaying trees standing in swamps because they provide insects for woodpeckers and homes for cavity dwellers.

- Use proper timber management techniques if timber harvest is an economic necessity. For more information refer to the **Lowland Hardwoods** or **Lowland Conifers** chapters in the Forest Management section.

- Prevent pesticide, lawn and farm chemicals, including fertilizer, and petroleum products, from reaching the wetland so they do not kill invertebrate food by contaminating the water body.

- Restore or create corridors of grass and/or shrubs that connect two or more wetlands. These areas are important for travel, especially for females with flightless young.

- Expect and allow natural fluctuations in water levels. Do not artificially manipulate water levels without assistance as you may alter the present vegetation composition. Incorrect manipulation of water levels may be harmful to wildlife or result in the invasion of undesirable plants. Landowners should seek professional advice before artificially manipulating water levels.

- Remove invasive plants such as purple loosestrife, phragmites, and glossy buckthorn, through the careful use of prescribed herbicides such as Rodeo. Be sure to follow all label directions. Invasive species tend to eliminate native species reducing plant diversity.

- Allow development of smartweed, wild millet, cattails, bullrush, sedges, reeds, and other valuable plants, which produce food and cover for wetland birds and a variety of other wildlife.

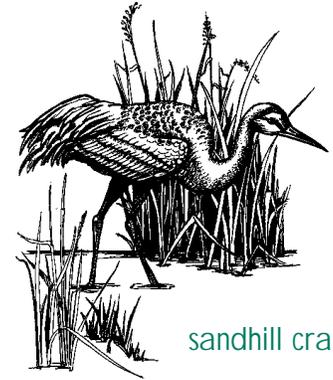
- Minimize disturbance to your wetlands. Enjoy birds and other wildlife from afar. Too many disturbances by people or free-roaming pets may deter breeding, cause nest abandonment, and reduce hatching success and fledgling survival.

- Do not drain or plow meadow as they are important producers of grasses and forbs that provide food and cover for many species of wildlife.

- Restrict forestland and grassland manipulation such as logging, min-



downy woodpecker



sandhill crane

ing, mowing, burning, and grazing until after July 15 and before August 30 to minimize impact to nesting birds and allow sufficient new growth for winter and spring cover.

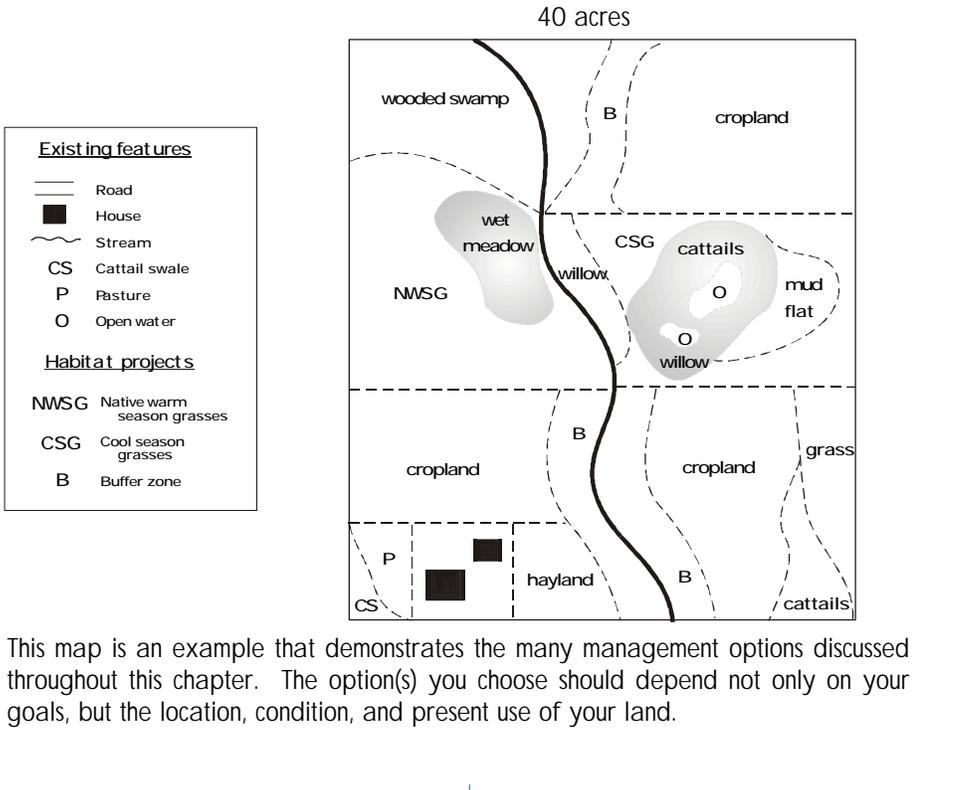
- Mow only one-third of grassy areas each year. The other two-thirds should be left alone to provide wildlife habitat.

- Burn in late winter or early spring (before April 1) to aid in the regeneration of warm season grasses and forbs, cattails, sedges, and other wetland vegetation, and to minimize impacts to frogs and turtles.

- Do not excavate for ponds and do not dam streams to create impoundments because such manipulation will change the wetland integrity by creating unnatural water fluctuations and possibly destroy rare plant species.

- Manage uplands in association with wetlands for nesting cover.

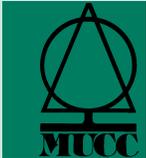
In summary, many bird groups rely on wetlands for food, shelter, water and living space. The more diverse a wetland is, the greater variety of birds it will attract. Multiple wetlands in close proximity, connected by grass/woody corridors, result in greatest wetland bird abundance and diversity. Healthy wetlands are dynamic and diverse, and when coupled with abundant upland



This map is an example that demonstrates the many management options discussed throughout this chapter. The option(s) you choose should depend not only on your goals, but the location, condition, and present use of your land.

cover, provide habitat to a greater variety of birds for nesting, brood rearing, and migrational stages. Protect all wetlands on your property and restore former wetlands when feasible.

FOR ADDITIONAL CHAPTERS CONTACT:
 Michigan United Conservation Clubs
 PO Box 30235
 Lansing, MI




Private Land Partnerships: This partnership was formed between both private and public organizations in order to address private lands wildlife issues. Individuals share resources, information, and expertise. This landowner's guide has been a combined effort between these groups working towards one goal: Natural Resources Education. We hope this guide provides you with the knowledge and the motivation to make positive changes for our environment.

FOR ADDITIONAL ASSISTANCE: CONTACT YOUR LOCAL CONSERVATION DISTRICT