

# Your Neighbor, the Kirtland's Warbler



*A few counties in the northern lower peninsula of Michigan are home to one of the world's rarest birds—the Kirtland's warbler. If you live in this part of Michigan, you may have heard its bubbly song. You might have seen its yellow and gray body flashing among the young jack pines. And you have probably noticed that some state and federal lands near your home are closed during certain times of the year, or that there are large areas where jack pine trees have been cut down and burned. If you have questions about this endangered bird or how forest managers are trying to help it from becoming extinct, read on . . .*

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## ***Why is this bird endangered?***

There are two main reasons why the Kirtland's warbler is in danger of becoming extinct.

1 *Limited Nesting Habitat.* Over the years, humans have changed Michigan's forests and now there is a shortage of good nesting habitat (a place to live) for the bird. The Kirtland's warbler is very selective in choosing where it nests. It nests only in the young jack pine forests of the northern lower peninsula of Michigan and nowhere else in the world!

2 *Cowbird Parasitism.* The brown-headed cowbird, originally a bird of the prairies, has spread from the Great Plains into Michigan and is causing problems for the Kirtland's warbler. The cowbirds lay their eggs in the nests of Kirtland's warblers and other songbirds. These "host" birds then raise the more aggressive cowbird young instead of their own.

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## ***Where do the birds nest?***

The Kirtland's warbler nests only in young jack pine forests growing on a special type of sandy soil. This soil is found only within a few counties in northern Michigan. The warblers nest in dense young jack pine forests that have numerous small, grassy openings.

The jack pine trees in its special nesting habitat must be just the right height (about five to 16 feet tall). Kirtland's warblers build their nests only on the ground among thick grass or other plants like blueberry bushes.

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***What does a Kirtland's warbler look like?***  
*The Kirtland's warbler is a small gray bird with a bright*

This active, energetic bird constantly twitches its tail when perching and the males sing a loud, clear, and melodious song. Even though you may live very near these birds, chances are that you have never noticed them. One of your best opportunities to see and hear a

Kirtland's warbler is to join one of the many guided tours that are offered during the spring and early summer at the Mio Ranger District of the U.S. Forest Service, (517) 826-3252, and at Grayling by the U.S. Fish and Wildlife Service, (517) 337-6650.

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## *How does fire help the Kirtland's warbler?*



Under natural conditions, the type of jack pine forests that have attracted the Kirtland's warbler (and other animals) for centuries has been produced by large wildfires. Fire has always occurred in the jack pine forest. In fact, jack pine forests are dependent on fire. **Intense heat from fire is needed to open the jack pine cones to release their seeds.** Fire also removes plants that compete with the pines for forest space and creates a bed of ash that enriches the soil and helps the new seeds to germinate and grow into trees.

When lumberjacks moved across Michigan in the late 1800s, they found large areas with abundant jack pine trees. After these trees were cut down, wildfires burned out of control over tens of thousands of acres. This

helped create vast areas of young jack pine trees and provided more nesting areas for the Kirtland's warbler. After the lumberjacks left Michigan, settlers moved in. New roads and fire breaks were built. Fire protection was necessary to protect the settlers' homes and lives. With fewer fires, there were fewer young jack pine forests — and fewer warblers.

Recognizing the Kirtland's warbler was in danger of becoming extinct, forest managers set aside special jack pine areas for this bird. In these Kirtland's warbler management areas, forest managers imitate what used to happen naturally. Sometimes, carefully managed fires are set on purpose in small areas. These fires are called prescribed burns.

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## *How can I protect my home and property from wildfire?*

Forest fires, started by lightning and Native Americans, have always occurred in jack pine forests. Today, however, 98% of the wildfires are caused by careless humans. Because jack pines are very flammable, it is critical that people living in jack pine forests protect their homes and property from fire.

Follow these suggestions to reduce the threat of fire around your home:

- Remove dense underbrush: cut excess small pine trees, brush and other dense plants that burn rapidly. At least a 30 foot wide fuel break should be established and maintained around all structures. Trees and shrubs should be at least 6-10 feet apart and trees and other plants should be at least 10 feet away from a chimney or stove pipe.
- Cut tall grass: dried, dead grass burns rapidly. Do not allow grass to grow tall near your home.
- Remove fallen leaves and twigs from your roof as well as the ground around your structures.
- Prune branches: remove branches of large trees to a height of 15 feet. This will prevent surface fires from spreading to the tops of these trees.
- Encourage growth of broad leaf trees near buildings and discourage coniferous trees.
- Dispose of all trash properly: dispose of cut grass and underbrush, leaves, twigs, and other refuse in a backyard or community compost, if possible.
- Keep firefighting equipment handy and well maintained. This includes fire extinguishers, buckets, shovels, ladder, and hoses.
- Develop a fire escape plan and route: this includes an escape route from your home, yard, and county roads. Practice it with your family regularly!

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***Why are forest managers cutting down the older jack pine trees?***

In addition to fire, there are other ways to create good nesting areas for the Kirtland's warbler. In most of the bird's management areas, forest managers harvest the mature jack pine trees. The areas are then replanted with jack pine seedlings. At least 1,200 seedlings are planted in each acre to recreate the dense

nesting conditions that the warblers require. Several million seedlings are planted each year by the Michigan Department of Natural Resources and the U.S. Forest Service. When the trees reach about five feet high (around eight years old), the Kirtland's warblers begin nesting in the area.

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***Aren't the clearcut and burned areas unsightly?***

If you live near one of the harvested or burned areas, it may look unattractive for a while, but soon the new trees and other plants begin to grow. The new growth attracts a variety of songbirds (like bluebirds, kingbirds, and nighthawks), snowshoe hare, and white-tailed deer. Blueberries may be abundant. And, if you put up a nest box, there is a good chance you

will attract a pair of tree swallows or bluebirds. In a few years, Kirtland's warblers will probably move into the area and you may see their yellow breasts flashing among the young pines. You can proudly tell visitors that you share the forest with one of the world's rarest and most endangered birds!

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***Does jack pine management help other animals and plants?***

The jack pine forest is a natural part of the northern Michigan landscape. Some of the animals that share jack pine habitat with the Kirtland's warbler include: white-tailed deer, black bear, snowshoe hare, Eastern bluebirds, spruce grouse, Lincoln sparrows, upland sandpipers, prairie warblers, and wild turkeys. Badgers, owls, woodpeckers, beautiful

wildflowers, blueberries, big bluestem, and other plants, such as sweet fern, are found in the unusually dry habitat. At least three kinds of rare plants grow in the jack pine area (Hill's thistle, rough fescue, and pale agoseris). These other animals and plants also benefit from the jack pine burning, harvesting, and replanting.

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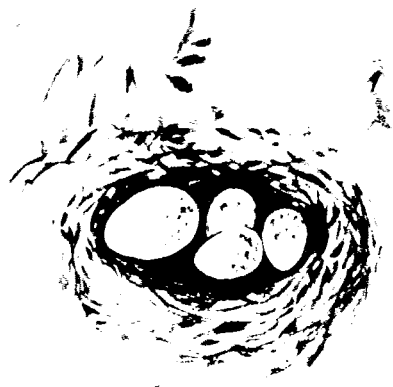
### *Why are some warbler areas closed to the public?*

Some human activities can be harmful to Kirtland's warblers when they are nesting, so areas in which these endangered birds are known to nest are closed to the public during nesting time. These areas are closed from May 1 to August 15 (some areas are closed until September 10) to protect warblers from disturbance by pedestrians, off-road vehicles, and noise. Kirtland's warblers nest on the ground and they could easily be disturbed, trampled, or run over. More serious than direct harm to individual birds or nests is the threat of fire from people (discarding hot matches, smoking, open campfires, etc.) and mechanized equipment without proper spark arresters. A major fire could destroy jack pine habitat, nests, eggs, young, and even adult birds.

The closure dates are based on **both** the birds' needs and human needs. Recent studies have shown that although most of the Kirtland's warblers have left Michigan by mid-September, there have been cases where birds have been seen on the nesting grounds until October 1. The end of the closure period is usually August 15, but to protect these late-staying birds and still allow people to use the land in the fall, some of the areas are closed until September 10. If you like to hike or hunt snowshoe hare or other game species, the Kirtland's warbler areas are reopened in August or early September.

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### *What is being done about the cowbird problem?*



The brown-headed cowbird was originally a bird of the open plains and is not native to northern Michigan. As the forests were cleared and farming and open habitat progressed northward into Michigan, so did the cowbird. Because cowbirds lay their eggs in warbler nests, Kirtland's warblers end up raising cowbird young instead of their own. This greatly lowered the number of Kirtland's warblers raised each year and reduced the Kirtland's warbler population.

You might have noticed large, chicken-wire pens in some of the Kirtland's warbler nesting areas.

These are traps designed to catch cowbirds. During the spring and early summer nesting season, the traps are baited with seeds and water, stocked with a few live cowbirds as decoys, and tended daily. About 4,000 cowbirds are removed each year while other kinds of birds are banded and released.

Forest managers have been trapping cowbirds since 1972, and the program is working. Kirtland's warbler nesting success has greatly improved since cowbird trapping began. Other songbirds in the area also benefit from cowbird removal.

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## ***Why should we spend so much effort to save the Kirtland's warbler?***

People have different reasons for wanting to save the Kirtland's warbler:



*Ecological reason.* All living things depend on each other to survive. If we lose one type of plant or animal, then the whole system of living things might be thrown off balance. If we allow the Kirtland's warbler to become extinct, we may be doing much more damage than realized, just as if you were to pull on a loose thread in your sweater.

*Economic reason.* The jack pine trees that are cut down in the Kirtland's warbler nesting areas provide valuable wood products and jobs that are important to Michigan's people and economy. Tourists that are attracted by the Kirtland's warbler also have a positive impact on the northern Michigan economy.

*Inheritance reason.* If we save the Kirtland's warbler, our children and our grandchildren will have a chance to enjoy this special bird and its habitat in the future.

*Scientific reason.* Every type of plant and animal is different. If we lose the Kirtland's warbler, we have lost a model that can never be replaced. By destroying a type of plant or animal, we give up forever the chance to learn how valuable it might have been.

*Stewardship reason.* By saving the Kirtland's warbler and its habitat, we are being good caretakers of the land and natural resources.

*Aesthetic reason.* The Kirtland's warbler is a natural wonder and adds beauty to our world. Many people enjoy watching the Kirtland's warbler.

*Educational reason.* The Kirtland's warbler is an interesting bird and its story can help teach the public about forest ecology, birds, nature, how humans are impacting the environment, and how to help endangered species and other wildlife.

*Historical reason.* The Kirtland's warbler nests only in Michigan and nowhere else in the world. This bird is a part of Michigan's (and our nation's) natural heritage and should be preserved. Some people even think it should become Michigan's state bird!

*Recreational reason.* Each year, hundreds of tourists come from all over the world for a chance to learn about and perhaps see the Kirtland's warbler. The land where the warbler lives is home to other wildlife that may be enjoyed by wildlife watchers. Some of the wildlife, such as white-tailed deer and snowshoe hare, are valued game animals.

*Endangered Species Act.* The Kirtland's warbler is officially listed as endangered and is given full protection under the federal and state Endangered Species Acts. Restoring the Kirtland's warbler to the point where it is no longer in danger of extinction is required by the Act.

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## Are the number of Kirtland's warblers increasing?

Each year in early June, Kirtland's warblers are censused by counting the number of singing males. **The number of Kirtland's warblers is now on the rise.** Most important, there has been an increase in the number of warblers living in the special areas created for them by

forest managers. However, the birds have a long way to go before they are no longer in danger of becoming extinct. The Kirtland's warbler won't be taken off the endangered species list until there are at least 1,000 nesting pairs. Today there are approximately 400 nesting pairs.

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## How can I help?

- You can help brighten the future for the Kirtland's warbler by learning more about this bird. Participate in a summer tour of Kirtland's warbler habitat. Visit your local library and read books and magazine articles about the bird. Contact one of the offices listed below for more information. Tell others about what you've learned.
- Join a conservation organization, such as the Michigan Audubon Society, that helps protect the Kirtland's warbler.
- Find out how to manage your jack pine forest for the Kirtland's warbler.
- Participate in the management of your Federal and State lands.
- Make a donation of time or money to a conservation organization that helps protect the Kirtland's warbler.
- Tell your local, state, and federal elected officials how you feel about the Kirtland's warbler.

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## Where can I get more information?

U.S. Forest Service  
421 South Mitchell Street  
Cadillac, Michigan 49601  
1-800-821-6263

Michigan Department of  
Natural Resources  
Wildlife Division  
Natural Heritage Program  
Box 30028  
Department KW  
Lansing, Michigan 48909  
517/373-1263

U.S. Fish and Wildlife Service  
East Lansing Field Office  
301 Manly Miles Building  
1405 South Harrison Road  
East Lansing, Michigan 48823  
517/337-6650

Michigan Audubon Society  
6011 West St. Joseph, Suite 403  
P.O. Box 80527  
Lansing, Michigan 48908-0527  
517/886-9144

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