

MAKING A COMEBACK?

KIRTLAND'S WARBLER



**The
increase
in numbers
of singing
males on
their
breeding
grounds
is cause for
hope.**

**JOHN D.
ASHCRAFT**

With more and more birds and mammals being added to the endangered species list, it's gratifying to know that one of North America's rarest bird species is not only holding its own but is staging a comeback. The Kirtland's warbler has been in a population decline for many years, and though it's far from out of serious trouble, its numbers are steadily increasing, due to joint efforts by the Michigan Department of Natural Resources (DNR), the U.S. Forest Service, and the U.S. Fish and Wildlife Service.

The blue-gray and yellow Kirtland's warbler is a bit smaller than a house sparrow. It has been a victim of habitat loss in the only place in the world that it nests—a small area in Michigan's northern lower peninsula. The most interesting fact about this habitat loss is that it isn't due to condo construction or the opening of a new golf course, but to the *control* of forest fires.

The Kirtland's warbler is a ground nester with very precise nesting requirements: It breeds only in central Michigan in *young* stands of jack pine with low-hanging branches that nearly touch the ground. In the past, immature stands of jack pines regularly sprang up as the result of naturally occurring forest fires, caused by lightning. In modern times such fires have been suppressed to prevent loss of large stands of timber. As a result, young stands of jack pine became rare—and with them the Kirtland's warbler.

RON AUSTING (2)

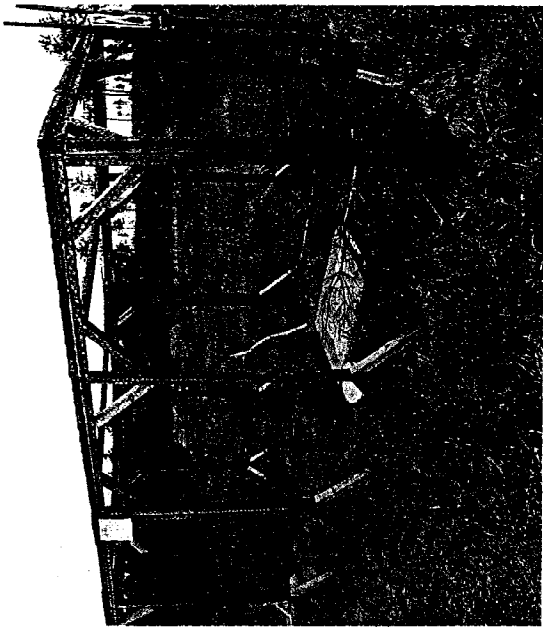


Male Kirtland's warblers. This warbler, once one of our rarest songbirds, is making a steady recovery.

Trapping of brown-headed cowbirds has reduced this parasite's impact on Kirtland's warblers.
Below: A female cowbird at a cardinal nest.



MASLOWSKI PHOTOGRAPH



RON AUSTING

An all-time low was reached in the Kirtland's numbers in 1987, when only 167 singing males were counted during the annual census. Now, through aggressive programs instituted by the federal and state agencies mentioned above, the birds have made a significant recovery. In 1993, 485 singing males were counted, and the 1994 census yielded 633 males—the highest number since the Kirtland's warbler census began back in 1951.

In the late nineteenth century (1880-1890), there were perhaps 2,000 pairs of these warblers, as fires, from cut-over areas left from lumbering, opened up territory for new pine growth. Stands of young jack pines thrived, and the small songbird did well.

The recent recovery is primarily attributed to a program that combines clear-cutting, controlled burning, and replanting, with cowbird removal, a program that

Listen to a Jack-Pine Warbler!

If you have never traveled to the Mio, Michigan, area to see the rare Kirtland's warbler, you can now travel to your telephone and hear the song of this endangered species. Call the BWD Bird Information Line at 614-373-2181 to hear a singing male Kirtland's warbler. The Kirtland's warbler will be calling on the BIL from mid-June through mid-August, 1995.

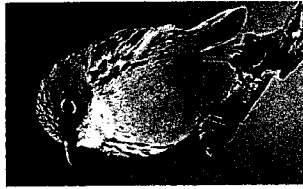
Bird songs are supplied by the Borror Laboratory of Bioacoustics.

Our Cover Birds: KIRTLAND'S WARBLER

Dendroica kirtlandii

WHAT TO LOOK AND LISTEN FOR:

This fairly large warbler is blue-gray above, yellow below, and heavily streaked with black on its back and sides. Its white eye-ring does not completely circle the eye and its wingbars are faint. The Kirtland's warbler is a loud and persistent singer on its breeding territory, though studies have shown that males sing during spring migration, from the Carolinas, northward. The song, which sounds like *chip-chip-che-way-o*, is described as clear and not as buzzy as many other warbler songs. The Kirtland's warbler has a habit of wagging or bobbing its tail.

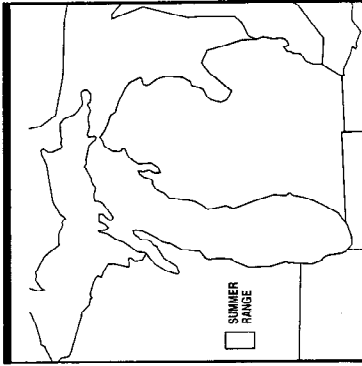


RON AUSTING

WHEN AND WHERE TO LOOK: This warbler, classified as an endangered species, nests only in a now strictly protected area in north-central Michigan. Its preferred habitat is in stands of young jack pines, where it nests on the ground. Kirtland's warblers arrive in Michigan in early May and depart between August and October for their wintering grounds in the Bahamas. The best way to see a Kirtland's warbler is to take part in an organized tour sponsored by the U.S. Fish and Wildlife Service or the Forest Service. The tours run between May 13 and July 3 annually. For more information, call 517-337-6650 or 517-826-3252.

FEEDING BEHAVIOR: These warblers forage on the ground and low in trees, where they glean or flycatch small insects such as sawflies, grasshoppers, and moths. Ripe fruits are also eaten, especially on the wintering grounds. Nestlings are fed a mix of insects and soft fruits.

NESTING BEHAVIOR: Kirtland's warblers form pairs about a week after arriving on the breeding grounds in mid-May. By the last week of May, weather permitting, egg laying begins. Eggs hatch in mid-June after a two-week incubation period. Young birds fledge after about nine days. Brown-headed cowbirds are a major threat to the nesting success of these warblers. A female cowbird can access and lay her egg in an unattended Kirtland's nest and depart within 15 seconds. She may return later to remove warbler eggs to enhance the survival of her own offspring. Cowbird nestlings hatch earlier and are larger than warbler young, and so they are much more likely to survive in times of cold weather and food shortage. Efforts to control cowbirds have increased nesting success of the Kirtland's warbler.



The breeding range of the Kirtland's warbler is limited to a small area in north-central Michigan. Above: A male Kirtland's warbler.

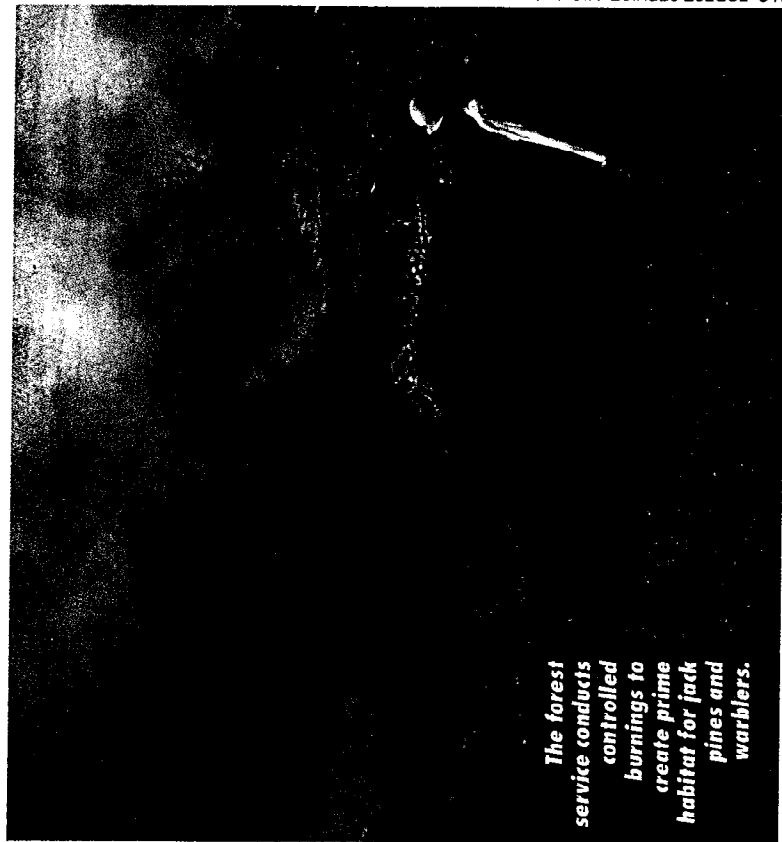
Source: *The Birds of North America*, Vol. 1, No. 19, 1992. ANSP

The warbler's recovery is the result of actions funded by the Endangered Species Act and is a testament to scientific wildlife management and cooperation among state and federal biologists.

mimics conditions that favor the natural replacement of jack pines. In 1994 alone, nearly four million trees were planted on 3,380 acres of state and federal lands. These trees will provide the warblers with additional nesting grounds in six to ten years. Planting is scheduled for future years as well.

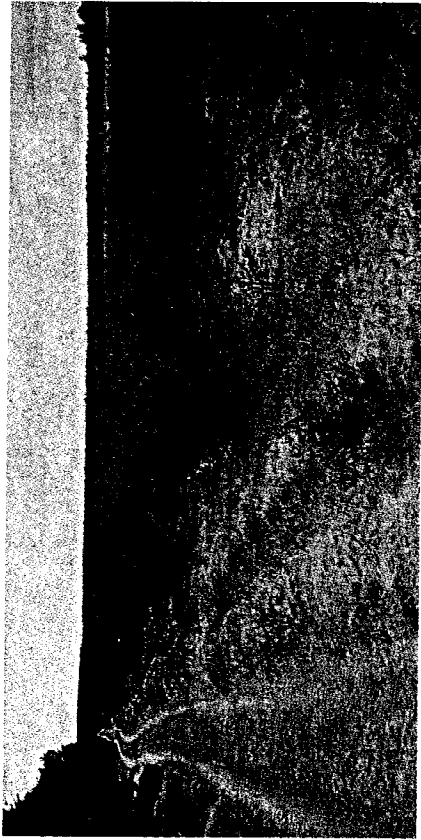
A large part of the warblers' recent comeback is also attributed to

a huge fire some years ago that burned 20,000 acres near Mack Lake, just south of Mio, Michigan. Jack pine stands soon blanketed the area, providing nesting habitat for the warbler. These Mack Lake trees will be past their prime for nesting purposes in five to ten years, when they reach a height of 18 feet and shade out the undergrowth needed for nest concealment. The Michigan



The forest service conducts controlled burnings to create prime habitat for jack pines and warblers.

U.S. FOREST SERVICE, MIO, MICHIGAN



U.S. FOREST SERVICE, MIO, MICHIGAN

DNR hopes, however, to provide replacement stands of young jack pines. Michigan DNR Director Roland Harnes says that the warbler's recovery is the result of actions funded by the Endangered Species Act and is a testament to scientific wildlife management and cooperation among state and federal biologists.

The Kirtland's warbler must also contend with the problem of nest parasitism by another native species, the brown-headed cowbird. While the warblers' habitat has steadily decreased, cowbird habitat had concurrently increased, with the spread of farms and pastureland. The cowbird finds a warbler's or other bird's nest, waits until the parents are away, then sneaks in to lay its own egg in the nest. Cowbird chicks grow faster and larger than warbler chicks and may push the latter from the nest or simply outmuscle them for the food provided by the surrogate parents. A program has been underway for 10 to 15 years to trap cowbirds, and it seems to be having a favorable impact on the warblers.

This land may not look like much to you, but it is paradise to a Kirtland's warbler. Short, scattered jack pines provide both foraging and nesting areas for these endangered songbirds.

The Kirtland's warbler annual survey is conducted over a ten-day period during the first two weeks of June. Workers from state and federal agencies as well as citizen volunteers help count the number of males singing each year. Results from the 1995 census should be available later this summer.

Kirtland's warblers winter in the Bahamas and are only rarely spotted during their long migrations to and from Michigan. The loss of yearlings is large, either during these migrations or on the wintering grounds, and the cause is a mystery. But the warbler's current numbers are a tribute to a concerted effort to restore nesting habitat for an endangered species. □

John D. Ashcraft, a native of Michigan, is an avid outdoorsman, hunter, trapper, and bird watcher. He writes for a variety of outdoor publications.

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