

'VENTURE OUTDOORS

THE GRAND RAPIDS PRESS

HOWARD MEYERSON
OUTDOORS EDITOR

Bird specialist Cameron Kepler examines a hermit thrush caught in a net set for the Kirtlands warbler.

PRESS PHOTO/HOWARD MEYERSON

A BIRD IN HAND

A decade of banding research paying big dividends for warbler

By Howard Meyerson

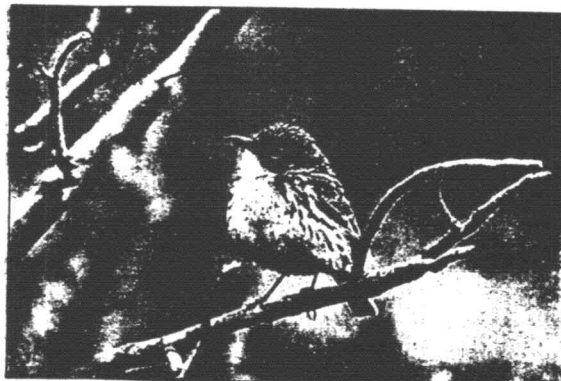
Grand Rapids Press Outdoors Editor

MIO - Cameron Kepler is unshaken and even chuckles as a warm stream of digested blueberries streaks down his hand. The little bird he holds is not so amused. It angrily screeches at the good doctor.

"It's a hermit thrush," says Kepler, a prominent ornithologist with the University of Georgia who has spent 30 years studying endangered birds all over the world.

"We've caught over 120 bird species in this forest using these nets," Kepler adds. "Lots of migrant warblers and all of the thrush species in eastern North America."

Today, however, he is looking for just one.



The Kirtlands warbler is steadily recovering from being nearly extinct.

He gently strokes the brown feathered bird before letting it fly.

It is gone in a wink, flitting among the stout, gnarly trees of this jackpine forest planted specifically for the Kirtlands warbler.

It is the blue-grey and yellow warbler that Kepler and others seek today, a petite songbird on the federally protected list. Virtually the entire world population nests in Michigan.

Kepler's field demeanor is casual but his procedures are not. Every 20 minutes, without fail, he or his assistants along with biologists from the Department of Natural Resources and U.S. Fish and Wildlife Service set out to walk the maze of mist nets strung through the forest.

The fine black mesh is strung between poles as though for badminton. They are tucked into tight rows between the planted trees. The net's

see WARBLER, D2

WARBLER

Bird making strong comeback in Michigan

CONTINUED FROM D1

loose folds drape over birds that inadvertently fly into it while making their rounds to feed.

Kirtlands warblers that are captured will be banded and released. The others will just be released. The rigorous regime minimizes the chance of trauma or injury.

"We are fair-weather biologists," Kepler says while walking in the morning dew. "If it gets too hot, too windy or it rains, we roll up the nets. These birds quickly get hypothermic in the rain. We've lost only four or five warblers in ten years."

That is five out of more than 1,000 that have been banded and released. Kepler, a researcher for the U.S. Department of Interior, says a decade of banding research is about to end.

It is an effort that has paid huge dividends, allowing biologists to realize the precipitous decline in the warbler's population was due to a loss of habitat in Michigan rather than predation and other hazards in the Bahamas where it winters, or along its several thousand mile migration route.

That knowledge allowed biologists to develop the management strategy behind the recovery seen in recent years. Put simply: create more habitat for the birds and protect it from cowbirds. Cowbirds lay their own eggs in the warbler's nest. Its chicks are larger and more vocal than the warblers and get fed at the expense of the more vulnerable warbler chicks.

Today, 728 pair of Kirtlands warblers are known to inhabit the state's jackpine forests. Eleven years ago, there were just 167 pair. Federal and state recovery plans call for taking the bird off the endangered species list when 1,000 nesting pair can be identified for five consecutive years.

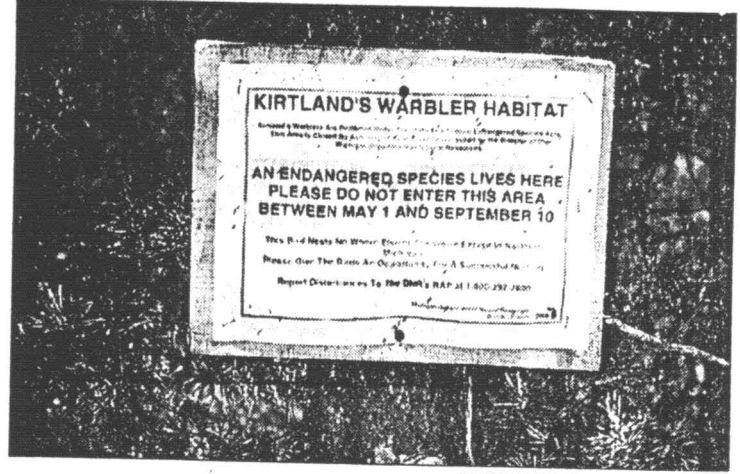
"We have gotten the results we needed from the banding study," Kepler says. "When we started in the mid-1980s, we weren't at all sure of the major factors stressing the population."

Kepler says efforts were made to study the birds in the Bahamas but that proved impossible because of the number of islands and the density of the habitat. In Michigan the birds are located and mapped by finding the males, which sing to warn others of their nesting territory.

"During the winter the males don't sing," Kepler said. "And it was impossible to find them."

Banding showed that 70 percent of the adults and 30 percent of the juveniles returned to Michigan in the spring. The rest are presumed to have died in migration or in the Bahamas.

Of those that return, 98 percent return to the same square mile of habitat, eliminating the likelihood



PRESS PHOTO/HOWARD MEYERSON

Good sign: A notice is posted on actively managed Kirtlands warbler habitat. A banding program is largely responsible for the species making a strong comeback in Michigan.

that the missing birds simply flew to a far away place to nest.

The population rebound also coincides with dramatic expansions in the habitat on public lands. Approximately 150,000 acres have been planted with jackpine by the DNR, FWS and U.S. Forest Service. About 25,000 acres is actively managed for the warbler, which nests only under jackpine trees from 5 to 16 feet tall.

The land is managed on 50-year rotations. Harvest of the older timber helps pay for the program. Clearcut areas are

ics, both Weinrich and Kepler point out that the massive land base for the birds is also good for other species. Each points to thriving populations of wild turkey, whitetail deer, snowshoe hares and black bear, not to mention the myriad of songbirds that at one time or another have been tangled in the nets.

Federal budget cuts are also affecting the viability of the cowbird trapping effort in this forest. Money for the program has declined from \$100,000 annually to \$20,000.

Christie Deloria of the U.S. Fish and Wildlife Service, who heads the cowbird trapping effort, says the agency live traps and removes approximately 4,000 cowbirds each year. Without the traps, many experts say the warbler population would be decimated inside of 20 years.

Trapping cowbirds raised the average number of successful young warblers that were bred and fledged from less than one per nest each year to between three and four per year, according to Kepler.

"If we don't do cowbird trapping, having other jackpine plantations would be useless," Deloria said. "We will continue trapping, but with government downsizing we have to deal with the financial constraint."

Deloria said she now utilizes volunteers to help where they can, but even a bare bones program costs the agency \$90,000.

"That's where Cameron's computer model will help," she said.

Kepler says he is developing a computer model from the data gathered over the last ten years. The model is expected to further refine biologists' ability to predict what will happen with the birds in different types of jackpine habitat. It would also predict possible outcomes if warbler trapping is done only in core areas of the forest as opposed to on the periphery.

But Kepler doesn't need a computer to predict what might happen when he sees a black-capped chickadee caught in the net, a bird he calls very "feisty."

"That one we call 'The Oh-No! bird,'" he said.

Today, 728 pair of Kirtlands warblers are known to inhabit the state's jackpine forests. Eleven years ago, there were just 167 pair.

burned and seeded and eventually become active management areas where the birds will nest.

In time, biologists say, they would like to see one-third of the acreage actively managed. It will take perhaps 40,000 acres to provide enough habitat for the bird to thrive and reach the federal recovery goal.

"That's what it will take to delist the bird," says Jerry Weinrich, the DNR biologist in the field with Kepler this day. Weinrich has worked with the warbler program since the 1970s.

"We've found a direct correlation between the amount of habitat and the population size. We can now predict the census based on the amount of habitat," Weinrich said.

"We haven't been able to produce the amount of 5- to 7-year-old jackpine that we need. The limitation is money. Money from timber goes into regeneration, but what we get is still not enough."

As though to counter the unspoken concerns of possible crit-