



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
FEDERAL BUILDING, FORT SNELLING  
TWIN CITIES, MINNESOTA 55111

IN REPLY REFER TO

FWS/AFWE-SE

JUN 7 1990

Log #: 3-90-F-MI-1-ELFO

Colonel Edgar E. Wilkins, Jr.  
Chief, Construction & Facilities Office  
Michigan Department of Military Affairs (DMA)  
2500 South Washington Avenue  
Lansing, Michigan 48913-5101

Dear Colonel Wilkens:

This responds to your letter of January 22, 1990, requesting formal consultation with the U.S. Fish and Wildlife Service (Service), in accordance with the Endangered Species Act of 1973, as amended, on proposed construction and operational activities due to military training at Camp Grayling, Michigan. During informal consultation it was previously determined by our respective staffs that proposed activities may affect endangered resources in the State of Michigan, thus necessitating formal consultation under Section 7 of the Act.

This letter transmits my Biological Opinion on proposed construction and operational activities as described in the Draft Environmental Impact Statement (DEIS) for the Camp Grayling Army National Guard Site, dated March 1989, and the impacts of these activities on the endangered Kirtland's warbler.

This letter provides comment only on the endangered species aspect of the subject under review. Comments on other aspects of the proposed activities were provided previously and were sent under separate cover (see attached letter from Sheila Minor Huff dated July 10, 1989).

This precludes the need for further action on this project as required by the Endangered Species Act. The Department of Military Affairs has a continuing responsibility to review its actions in light of Section 7 and to reinstitute this consultation if new information becomes available which indicates that the proposed project may affect listed species, if critical habitat is designated that may be affected by the project, or if a new species is listed that may be affected by the project.

We appreciate the Department of Military Affairs' cooperation (particularly that of Mr. Huntington) throughout the Section 7 process. Please advise if we can be of further assistance.

Sincerely,

Marvin E. Moriarty  
Acting Regional Director

Enclosures

cc (w/enclosures):

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BIOLOGICAL OPINION FOR  
CONSTRUCTION AND OPERATION OF MILITARY TRAINING FACILITIES  
AT CAMP GRAYLING, MICHIGAN

INTRODUCTION

On November 3, 1989, the U.S. Fish and Wildlife Service (Service) was asked to enter into informal consultation on several issues dealing with proposed construction and operational activities due to military training programs at Camp Grayling, Michigan. An informal consultation meeting occurred on December 8, 1989. It was decided at that meeting that the Michigan Department of Military Affairs (DMA) should request formal consultation in regard to the impacts of these activities on the endangered Kirtland's warbler.

The Service has reviewed the project description and biological assessment included with the January 22, 1990, letter from the DMA, as well as additional information, reports, and data acquired through our general coordination activities, the Cooperative Agreement between the Michigan Department of Natural Resources (DNR), and DMA dated May 22, 1986, and the Draft Environmental Impact Statement (DEIS) for the Camp Grayling Army National Guard Site dated March 1989.

BACKGROUND

The following species have been included in this consultation:

<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>
Houghton's goldenrod	<u>Solidago houghtonii</u>	Threatened
Bald eagle	<u>Haliaeetus leucocephalus</u>	Threatened
Kirtland's warbler	<u>Dendroica kirtlandii</u>	Endangered

Houghton's Goldenrod

This plant is found at a single site at Howe's Lake. Its location is known to DMA and a snow fence is erected to point out its location to military training units and prevent any incursion onto the site. With this protective action, the proposed project will not affect this species.

Bald Eagle

This species nests at only one location on DMA lands. This current nest is located on the north end of Camp Grayling. This nest, and any future bald eagle nests, will annually be protected by order of the Director of the Michigan Department of Natural Resources. This closure order will prevent all activities, including DMA activities, which have the potential to adversely impact bald eagles. With this protective measure in place, the proposed project will not affect this species.

Kirtland's Warbler

Kirtland's warblers are typically found among young jack pines (Pinus banksiana), in stands 6 to 20 years old and of 80 acres or more in extent. The primary breeding range is in the north central Lower Peninsula of Michigan, but a few males have recently been sighted in Wisconsin. Primary wintering habitat is in the Bahamas. The chief factor limiting the population of the warbler is believed to be a shortage of suitable nesting habitat. In addition, tall lighted towers and low flying aircraft may present a hazard during migration. Last year it was estimated that 212 breeding pairs existed

In Michigan, and the breeding population has been less than 245 pairs since 1971. There is no designated critical habitat for the species at this time.

As pointed out in your letter of January 22, 1990, there are five issues remaining from our informal consultation meeting of December 8, 1989. The Service concurs that these are the only activities covered by the DEIS which may affect this species, and therefore require formal consultation. These five activities are:

- 1) Proposed construction and operation of the Multi-purpose Range Complex (MPRC),
- 2) Proposed construction and operation of an Assault Landing Strip (ALS),
- 3) The fate of old growth Jack Pine stands on military-controlled lands that are no longer suitable for Kirtland's warblers but may return to suitability for warblers after a fire or timber cut,
- 4) The fate of two small parcels (approximately 200 and 100 acres) which are identified as developing Kirtland's warbler habitat and may be occupied by the species in the near future, and
- 5) Whether ongoing training is likely to jeopardize the species.

### IMPACT ANALYSIS

#### Construction and operation of the Multi-purpose Range Complex (MPRC)

The operation of the MPRC, which would include Infantry, armor, and fixed-wing aircraft (FWA) overflights without FWA weapons firing, would occur on lands within older habitat that no longer attracts Kirtland's warblers. Recently-occupied warbler habitat does occur about 2 miles from the site, and FWA and other aircraft do pose a potential disturbance hazard that may affect the warbler. With the minimum altitude restriction of 1000 feet above ground level for all aircraft flying over habitat occupied by Kirtland's warblers (with the single exception noted in the following section), there will be no adverse effects on the warbler. ✓

#### Construction and operation of an Assault Landing Strip (ALS)

Normal construction and operation of the ALS are not expected to affect the Kirtland's warbler, as the nearest occupied habitat is 1.5 miles west of the strip. Under prevailing wind (north-north-westerly) scenarios the proposed flight paths will avoid flying over occupied habitat. In the unusual circumstance of an east wind, landings would occur in which aircraft will glide onto the strip as low as 200 feet over a small portion of the Sharon Kirtland's Warbler Management Unit west of the strip.

The noise level of aircraft approach under the east wind scenario is expected to be small due to the approaching aircraft being in a glide mode. Significant disturbance to warblers occupying the Sharon Unit is not expected. However, to ensure that disturbance (i.e., incidental take) is insignificant, measures to monitor the extent of disturbance are specified in Attachment 1, Incidental Take Statement.

#### Developing habitat parcels on military land

If a fire or timber cut provides an opportunity for potential regrowth of sufficiently dense and appropriately aged Jack pine stands on military lands, the DMA plans to use land management practices to keep the affected area from revegetating as Jack pine stands. The Service agrees that areas on Michigan

DMA land which are not incorporated into designated Kirtland's Warbler Management Units or special use agreement land may be managed by DMA to avoid Jack pine regeneration suitable for Kirtland's warbler nesting habitat. This habitat manipulation will not decrease currently available suitable habitat for the warbler, and will not affect the species.

This management would not be carried out on lands identified for Kirtland's warbler management in the Kirtland's Warbler Recovery Plan, on the Down River Road Kirtland's Warbler Management Unit, or on other lands that currently support warblers. These latter lands will be closed in accordance with the agreement, except for the two areas discussed in the following section.

Developing Kirtland's warbler habitat parcels totaling 300 acres on the Range 30 Complex (tank range) covered by the DMA/DNR Management Plan

The military plans to continue training activities in these two areas (portions of sections 17 and 19, T27N, R2W) in accordance with the DMA/DNR Cooperative Agreement of May 22, 1986. That agreement resulted in over 4000 nearby DMA acres (in the southeast portion of the tank range, all in T27N, R1W and R2W) being formally designated as a new warbler management unit. This new management unit (Down River Road Kirtland's Warbler Management Unit, refer to Attachment 2, which is an excerpt from the May 22, 1986 Cooperative Agreement) currently supports nesting Kirtland's warblers and is expected to continue to do so indefinitely if habitat management is continued by the DNR, as provided for in the agreement.

The Service finds that continued military training use of the two areas totaling 300 acres may affect individual Kirtland's warblers. Kirtland's warblers have not used these two areas in recent years, but it is reasonable to assume that use will occur in the near future. These areas may be used by one or several unmated male warblers, or a small number of nesting pairs may move into these two Jack pine stands. Annual Kirtland's warbler surveys will be made whenever it is judged to be possible that the habitat is suitable for warbler occupancy. The surveys will be run by the DNR and the results promptly communicated to the Service and DMA.

Possible adverse effects of the ongoing military activities are lowered pairing, nesting, and fledging success due to frequent disturbance of adult and young warblers. Mortality of adults is not expected, but deaths of nestlings or fledglings could occur as a result of starvation induced by excessive disturbance. Because such disturbance results in incidental take of the species, an Incidental Take Statement addressing this part of the operational plan has been added as Attachment 1.

The continuation of ongoing training at Camp Grayling

Most of the habitat on military lands that formerly supported Kirtland's warblers has matured beyond the age suitable for these birds. The three remaining Kirtland's warbler management units and two small parcels of occupied habitat at Stephens Bridge/North Down River Road and Sections 13 and 14 just west of the Bald Hill Road adjacent to the Down River Road Management Unit, will be closed during the nesting season to protect any Kirtland's warbler there. Through training and distinct marking of training site maps of the Camp Grayling area, military units will be kept abreast of Kirtland's warbler restricted areas. In addition, a 200-foot clear cut of unsuitable warbler habitat has been made around Sections 13 and 14 of the Bald Hill area to clearly delineate the protected areas and minimize accidental incursions by military training units. The continuation of training activities (other than

those discussed in the previous section) will not affect the Kirtland's warbler.

#### CONCLUSION

Based on our review of your biological evaluation; the informal consultation meeting on December 8, 1989; the Draft Environmental Impact Statement of March, 1989; the Cooperative Agreement of May 22, 1986; the Kirtland's Warbler Recovery Plan; and other information provided, it is my biological opinion that the proposed project is not likely to jeopardize the continued existence of Kirtland's warblers or result in the adverse modification of critical habitat.

Two of the five activities discussed above may impact the species by increasing disturbance during the nesting season and may reduce reproduction of Kirtland's warblers nesting in the disturbed areas. Incidental take statements (Attachment 1) are provided for these two activities, as well as terms and conditions which will minimize the affects of the anticipated incidental take.

ATTACHMENT 1  
INCIDENTAL TAKE STATEMENT

In the case of non-jeopardy biological opinions, Section 7(b)(4) of the Act requires the Service to specify the amount of incidental take anticipated to occur from the proposed activities. That section also requires that the Service specify reasonable and prudent measures to minimize the impact of the incidental take, and set forth terms and conditions which must be complied with to implement those measures. Compliance with the terms and conditions is mandatory.

Of the five activities covered by this biological opinion, three have been determined to have no adverse effect on Kirtland's warblers. For the remaining two activities, anticipated incidental take levels are specified below, and terms and conditions are prescribed to monitor the actual level of incidental take and to minimize the impact of that take.

Construction and operation of an Assault Landing Strip (ALS)

The operation of the ALS has the possibility of causing a disruption of the normal feeding and reproductive behaviors of individual Kirtland's warblers directly beneath the glide path. However, because the planes will be largely gliding over the warbler management unit, the anticipated disruption is likely to be insignificant. Therefore, the incidental take anticipated and allowed by the operation of the ALS is zero.

In order to ensure that the incidental take is not larger than anticipated, and therefore ensure that the species is not being significantly impacted by ALS operations, the following condition must be carried out whenever the ALS is operated under east wind conditions:

In every case where an east wind coincides with low level overflights of the Sharon Area management unit (when occupied by Kirtland's warblers) occurs, the Department of Military Affairs or its agent shall employ an appropriate number of qualified monitors (in accordance with the list of volunteer monitors' names to be provided by the Michigan Department of Natural Resources, upon request to Jerry Weinrich, 517/422-5191) to record any disturbance reactions by the Kirtland's warblers present in the overflow areas. If disturbance reactions are observed to occur during this monitoring, the overflights should cease, the Service should immediately be notified, and consultation should be reinitiated. It is recognized that the portion of the Sharon Area management unit affected by these overflights might not be occupied for as long as eight more years due to the age class of current vegetation. If Kirtland's warblers do not occupy the overflow area, monitoring is not necessary.

Developing Kirtland's warbler habitat parcels totaling 300 acres on the Range 30 Complex (tank range) covered by the DMA/DNR Management Plan

Because these areas are small and relatively isolated from Jack pine stands currently occupied by the warbler, there is no way to determine the extent of warbler use of these areas in the absence of ongoing military activities. Therefore, it is not possible to anticipate the extent of incidental take in terms of numbers of Kirtland's warblers, reduced reproductive output, diminished longevity, or in any other terms relating to the warbler itself.

Therefore, training activities within these two areas (100 acres and 200 acres) are authorized, and their impacts to the species will be minimized, by the following incidental take statement:

The Department of Military Affairs is authorized to take (i.e., disturb occupied habitat) up to 300 acres of Kirtland's warbler occupied habitat on the Range 30 Complex (tank range) of Camp Grayling, Michigan. The DMA will be responsible for allowing access to the DNR and the Service, in accordance with the Management Plan of May 22, 1986, for the purpose of censusing singing males in these two parcels and, if male Kirtland's warblers are located, to afford both agencies the opportunity to locate any nests which may also be present. Upon notification of nest site determination, DMA will fence off an area of not less than a 500-foot radius around any identified nest site prior to reinitiating training activities in the vicinity of these areas. The fenced-off nesting areas are to be posted as "no entry" zones for the remainder of the nesting season (through August 15) of the year they are discovered. The Service will also be afforded necessary access to the nest sites to carry out cowbird trapping activities.