



United States
Department of
Agriculture

Forest Service
Huron-Manistee N.F.'s

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Reply to: 1410 Management Reviews
2670 Threatened and Endangered Plants & Animals

Date: December 3, 1981

Subject: Threatened, Endangered, and Sensitive
Species Activity Review, 10/1/81

To: Management Team

Enclosed is a memo which recommends new direction in regards to Kirtland's Warbler Habitat Management. The changes recommended are critical to meeting the Recovery Plan and the Forest Management Plan's primary objective of supplying a continuous area of habitat suitable for nesting. The changes recommended will require interdisciplinary review and approval in line with the Kirtland's Warbler Habitat Management Plan. Because of the importance of meeting the acreage requirement for nesting habitat (and our past inability to treat the needed 1,000-1,100 acres annually with prescribed fire) I am approving the recommendations and proposed actions. In reaching the recommendations and my decision, it's important you understand the rationale and specific reasons of employing site preparation techniques other than prescribed fire. They are as follows:

1. No research presently exists which specifically relates Kirtland's Warbler Habitat needs and prescribed fire. Based on historical observations, those individuals most involved with Warbler studies have found that virtually all nesting occurred in jack pine stands that had regenerated following a fire.
2. Prescribed fire, as we are using it, is not natural and probably does not produce the same vegetative effects as wildfire. Again, research is lacking.
3. Observations and surveys indicate the Kirtland's Warbler are occupying natural burns, prescribed burns, and no burn areas (specifically the McKinley area).
4. State and Forest Service plans call for the need of regenerating 3,500 acres per year for the next 7 years; then 2,800 acres per year on a sustained basis to meet the primary objective of obtaining suitable nesting habitat.
5. Since 1976, the State DNR and the Forest Service have only been able to prescribe burn about 1,290 acres per year or 34% of the need.



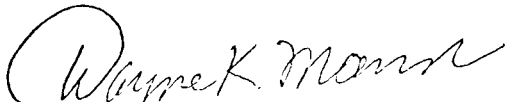
6. The primary reason for our inability to meet habitat needs through prescribed burning is weather conditions. Nine years of data (excluding Saturdays and Sundays) indicate there are only 12 days per year that fall within the prescribed burn weather factors. This does not consider fuels being too green to burn. The cured fuel season (May and October) average only 2.6 desirable days for prescribed burning. Also, there is no consistency between years.

Using this information, the responsible agencies would need to prescribe burn about 300 acres per day during the 12 day period or 1350 acres per day if we only burn during the May and October cured seasons.

To accomplish these acreages is organizationally and humanly impossible because of training and qualification requirements, mop-up and holding needs on prior fires, wildfire responsibility, lack of back-up between agencies, and other resource responsibilities.

7. New insights which, as a result of the Mack Lake Fire, also are factors not to be ignored in planning and implementing prescribed burning:
 - a. In northern Lower Michigan, the spring fire season appears to be typified by wide fluctuations in fire danger. 90% of the days are either low or high; only 10% or fewer are in between. The periods of moderate fire weather for prescribed burning rarely last more than 1 day. This complicates prescribed burning decisions.
 - b. The ten day period between May 5th and 15th appears to be particularly critical fire period. Fire managers should use extra caution and possibly more conservative prescriptions during this time.
 - c. There is a difference between fire danger peaks using the NFDRS or the Fire Weather Index. This causes fire managers to respond differently to the two portrayals of fire danger.
 - d. There are many large, relatively flat areas where jack pine predominates. Once a crown fire begins to run in this timber type, only a change in weather can slow such a fire.
 - e. Fuel consumption as light as 2.6 tons per acre is sufficient to initiate a crown fire in sapling size jack pine.

- f. The moisture content of old jack pine foliage is at a minimum during the onset of new growth in the spring. This increases crowning potential and may increase crown fire spread rates by a factor of 2 relative to the fall.
 - g. The average rate of spread of the Mack Lake Fire was 2 mph and exceeded all but two major fires for which data was available. The maximum rate of spread of 6.8 mph equals the fastest recorded rate.
8. The Mack Lake Fire has the potential of creating ideal Kirtland's Warbler habitat in the next 7-10 years which gives us some flexibility in our approach to habitat management.
9. Increased research is critical if we are to carry out Congressional direction and the habitat requirements for sustaining and increasing the Kirtland's Warbler habitat. Present research efforts will not adequately provide the needed answers to successfully carry out the Congressionally-mandated program of sustaining and increasing the Kirtland's Warbler population.


WAYNE K. MANN
Forest Supervisor

Enclosure

cc: Mann (3)



Reply to: 1410 Management Reviews
2670 Threatened and Endangered Plants and Animals

Date: November 13, 1981

Subject: Threatened, Endangered and Sensitive Species
Activity Review, 10/1/81

To: Forest Supervisor, Huron-Manistee National Forests ✓

On September 30, 1981, you, Bill Jarvis, and I met with District Rangers Vendell Bosman, Don Krejcarek, and Cal Norton to discuss the status of the Kirtland's Warbler Habitat Improvement Program.

We discussed the fact that the Recovery Plan and the Management Plan for Habitat has a primary objective of supplying a continuous area of habitat suitable for nesting. It stresses the fact that area regulation by Management Units will be used. This means that about 1,000-1,100 acres of National Forest Critical Habitat should be regenerated annually.

Historically, fire has been associated with the Kirtland's Warbler and its habitat. Whether the fire itself or the effects of fire on the composition of ground vegetation is the significant factor, is a debatable point. Initially, it was felt that all areas needed to undergo a prescribed fire treatment. Due to circumstances beyond their control, land managers have been unable to treat with fire the acres necessary to maintain a sustained yield. This is true for both the Forest Service and the Michigan Department of Natural Resources.

At this meeting a decision was made that it was more important to regenerate 1,000-1,100 acres on an annual basis than to have every acre burned. This is supported by the Recovery Plan and Management Plan in their stated primary objective of supplying habitat on a sustained basis.

On October 1, the above mentioned persons from the Huron-Manistee met with members of a T&E Species Review Team looking at T&E activities in R9 and on the Huron-Manistee National Forests. Review Team Members were:

Barbara Holder - W.O. Endangered Species Program Manager
W.B. Gallaher - Director, R-2 Division of Range and Wildlife Management
Robert Radtke - R-9, Wildlife and Fish Program Leader, Member, K.W. Recovery Team

Others participating in the review and present at the meeting were:

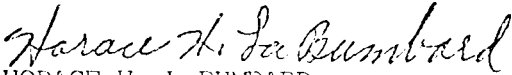
Jim Engle - U.S. Fish and Wildlife Service, Endangered Species Team Leader
Richard R. Roth - NE Area State and Private Forestry
Sylvia Taylor - Michigan DNR Endangered Species Coordinator
Jerry Weinrich - Michigan DNR Wildlife Biologist



During the meeting, we discussed the status of our K.W. Habitat Improvement Program and the fact that we have a backlog in excess of 2,000 acres harvested, but awaiting regeneration treatments. Under current conditions we would not be able to burn this entire area. We presented them with our decision of the previous day and our plans to inventory the backlog and develop regeneration prescriptions which might or might not include the use of fire. We also explained that the planning of future sales would consider alternatives other than prescribed burning.

This group of individuals endorsed our planned actions, agreeing that the primary objective was to create sustained habitat, either with or without fire.

We have subsequently designated a team to inventory our backlog and develop regeneration prescriptions for the area.


HORACE H. LABUMBARD
Timber and Wildlife Management
Staff Officer

cc: LaBumbard
Review Folder