

Reply to: 4000 Research

Date: January 21, 1981

Subject: Research Needs for Kirtland's Warbler
Habitat Establishment

To: Regional Forester, R-9

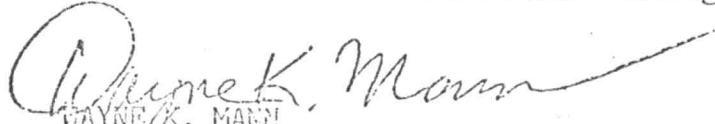
We have developed the final Action Plan for accomplishing the recommendations of the Mack Lake Fire Analysis and Fatality Reports.

Action Item F1 identifies the need for Research to tie together all Kirtland's Warbler research into a common effort to obtain answers to questions concerning habitat establishment. This Action Plan is reinforced by the needs expressed in the KW Recovery Plan and the Washington Office Reforestation Review of 6/11-22/79 and Action Item E3.

We feel a more concerted interdisciplinary effort is needed to bring together current research and to plan future research efforts to determine the need of fire, regeneration methods, and alternative methods of establishing suitable KW habitat. This will require efforts in silviculture, soils, wildlife, and fire. Current research is underway by universities in Michigan, the Michigan Department of Natural Resources, and the Forest Service, but there seems to be no general plan to reach a common objective.

As a start, we suggest a meeting of individuals from these organizations to determine how the problem should be approached and to make plans to get a review of past and current research.

We need to be involved in these meetings.


WAYNE K. MANN
Forest Supervisor



United States
Department of
Agriculture

Forest
Service

Huron-Manistee N.F.'s

FaBumbard

Reply to: 5190 Management

Date: December 10, 1980

Subject: Fire Management Action Plan - Mack Lake Fire

To: Management Team

Enclosed is the final action plan for accomplishing the recommendations on the Mack Lake Fire Analysis and Fatality Reports incorporating revisions made at the last Team meeting.

Clifford A. Reedy

CLIFFORD A. REEDY
Fire, I&E, WS, HF
Staff Officer

Enclosure

cc: RO - 5 copies



FIRE MANAGEMENT ACTION PLAN

For Accomplishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
Documentation of procedures for Doing Things	Letter to Districts (5120-Presuppression dated 10/1/80)	Reedy	To avoid confusion with Fire Load Index used previously (Analysis Report Rec. J)	Done 10/1/80
Follow-up letter to Districts	Letter	Reedy	To avoid confusion with Fire Load Index used previously (Analysis Report Rec. J)	3/15/81
Clarify Forest responsibility for providing PPE to VFD's	Letter to Districts (6700(5100)-Safety and Health Program dated 9/30/80)	Reedy	Clarification of Forest interpretation of coop. agreements with VFD's (Analysis Report Rec. L)	Done 9/30/80
Letter to VFD's reminding them of our concern for safety	Letter	District Rangers	Promote safety among VFD's; Shows our concern	4/1/81
Develop standard operating procedures for 6 x 6 scankers, 4 x 4 scankers and tankers/ plows	Working Group	Bob Porter, Leader Joe Benz, Cadillac Tom Bates, Mio Tom Striker, Harrisville Dwain Bowman, Tawas	Will provide safe yet effective use of key pieces of fire equipment in suppression actions (Analysis Report Rec. C) (Fatality Report Rec. 2)	3/15/81
Firefighting tactical procedures to include solo operation as well as operating in conjunction with tractor/plows and other equipment				

FIRE MANAGEMENT ACTION PLAN

Accomplishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

WHAT HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
(a) Revise radio guide to reflect changes in new Forest System; incorporate procedures for any existing network with fire departments and other fire protection agencies	Review current guide and revise as needed	Cliff Reedy Bud Kroepel	Full utilization of new 4-channel radios and proposed network with other agencies (Fire Analysis Rec. M) (Fatality Report Rec. 4)	3/15/81
(b) Explore feasibility of a common frequency for all cooperating agencies during emergency and disaster situations	Work through DNR and State Fire Marshall's Office	FMO Forest Supervisor Hiawatha N.F. Ottawa N.F. Michigan DNR State Fire Marshall R.O.	Provide common frequency to be used during emergency and disaster situations (Fatality Report Rec. 4).	6/1/81
5. Interdisciplinary Team Planning of Prescribed Burning Plans (on-the-ground)	<p>(a) On-the-ground review of current approved plans</p> <p>(b) On-the-ground planning of future prescribed burns</p> <p>(To be covered in Prescribed Burning Guide)</p>	<p>FMO or Forest Fire Specialist Ross Frid, LA Bill Irvine, WL Bill Child, Soils District Fire & Timber Specialists</p> <p>FMO or Forest Fire Specialist Bill Child, Soils District Fire & Timber Specialists</p> <p>FMO or Forest Fire Specialist Landscape Architect Wildlife Biologist Soil Scientist District Fire Specialist Other Specialists as needed</p>	<p>Comply with NFMA direction (Analysis Report Rec. B) (Fatality Report Rec. 6)</p> <p>Continuing</p>	<p>11/80 - Do Spring 1981</p>

FIRE MANAGEMENT ACTION PLAN

Establishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

<u>HAS TO BE DONE</u>	<u>METHOD FOR ACCOMPLISHING ACTION</u>	<u>WHO WILL ACCOMPLISH ACTION</u>	<u>OBJECTIVE OF ACTION</u>	<u>TARGET DATE</u>
<u>Organization</u>	<p>Study the feasibility of organizing Specialized Forest Prescribed Burning Team(s) VS District Teams, based on current and future needs and personnel qualifications</p> <p>Consider Joint DNR/FS Team(s)</p> <p>Development and/or Implementation of Plans & Guidelines</p> <p>Implement Michigan Interagency Fire Prevention PLAN when completed</p>	<p>Ven Bosman, Team Leader</p> <p>Cal Norton, Tawas Bill Spinner, Cadillac DNR Representative</p> <p>Fire Staff Officer</p> <p>District Forest</p> <p>Joint Forest/DNR Zone, etc.</p> <p>As provided for in the plan</p> <p>Plan being developed by an Interagency Fire Prevention Team</p>	<p>To be able to execute all burns in an efficient, professional and safe manner. (Analysis Report Rec. O) (Fatality Report Rec. 3)</p> <p>Provide better coordination, efficiency, and results in fire prevention activities (Analysis Report Rec. E)</p> <p>Mack Lake Fire Revegetation Team</p> <p>LMP Team</p> <p>FMO</p> <p>District assistance as needed</p> <p>Horace LaBumbard or a member of Revegetation Team</p>	<p>9/81</p> <p>1982</p> <p>1983</p>
<u>Establishing Fuel Break System</u>	<p>Develop alternatives for various Team Organizations in conducting burns; example:</p> <p>qualifications</p>	<p>District Forest</p> <p>Joint Forest/DNR Zone, etc.</p>	<p>Break up large contiguous stands of conifers into more manageable units for controlling fires. (Analysis Report Rec. F)</p>	

FIRE MANAGEMENT ACTION PLAN

Completing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

WHAT HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
<p>Revegetation planning measures implemented on the Mack Lake Fire will be used as a guide in the Land Management Process</p> <p>Complete the revision of the Forest Aviation Plan. Revision to include, but not limited to, the following:</p> <ul style="list-style-type: none"> (a) Qualifications for observers (b) Training Plan for observers and observer pilots (c) Guidelines for observers to use in reporting fire situations 	<p>Land Management Planning Process</p> <p>Review and revise current plan. Submit draft copy to Management Team for comments</p>	<p>FMO Chandler Management Team District Specialists</p> <p>Cliff Reedy Bob Olson S.O. Management Team</p>	<p>Incorporation of fire management considerations in LMP</p> <p>Bring existing plan in line with recent changes to FMP 5700</p> <p>Formalize training needs to qualify observers for fire detection flights (Fatality Report Rec. 1)</p> <p>Provide format of information needed by the fire boss to make sound tactical decisions (Fatality Report Rec. 1)</p>	<p>3/30/81 (To Management Team by 3/1/81</p> <p>To more clearly fix the range of burning parameters to safely accomplish remote source objectives(Analysis Report Rec. A & D)</p>
	<p>Working Group</p> <p>Develop Prescribed Burning Guidelines</p>	<p>Cliff Reedy, Leader Horace LaBumbard, Alt. Leader Fire & Wildlife Research Staff or Representative Bill Irvine</p> <p>Recovery Team Michigan DNR Staff Cal Norton, Tawas</p>		1981

FIRE MANAGEMENT ACTION PLAN

Completing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

WHAT HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
Evaluate the merits of going to a central Dispatch Plan. Develop and implement if decision is made to go to this type system	Working Group (a) Submit proposed plan to Management Team by February 27, 1981 (b) Implement Plan	Cliff Reedy, Leader Roger Moore, MIO Bob Olson, S.O. Jerry McKain, Baldwin	Improve Forest ability to organize, mobilize, and act in all types of fire situations (Analysis Report Rec. N)	3/15/81
Management Team Meeting	Management Team Working Group	Management Team Working Group	Review of Plan. Revise as needed	2/27/81
	Letter of direction by Forest Supervisor Forest Supervisor District Rangers	Forest Supervisor FMO District Rangers	Implement Plan	3/15/81
	<u>Training</u>	Some of the training listed is not as a result of either of the Mack Lake Reports, but are a part of annual training needs to keep fine people qualified for specific jobs	Train operators to use specialized equipment in a safe and efficient manner on all types of fires. (Analysis Report Rec. 1 C & P) (Fatality Report Rec. 2)	3/15/81
	Classroom Field Demonstration	Tractor/plow and AWD tanker operations training (See A-3, Standard operating procedures for 6 x 6 tanker).	District Rangers FMO Equipment Operators Fire Specialists DNR Rep.	

FIRE MANAGEMENT ACTION PLAN

Accomplishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

WHAT HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
S-110 Basic Fire Orientation	Classroom	Districts	Needed for Squad Boss Qualification	4/1/81
S-130 Basic Firefighter	Classroom	Districts	Needed along with S-190 for firefighter qualification	
S-190 Introduction to Fire Behavior	Classroom	Districts	(Fatality Report Rec. 5)	4/1/81
S-215 Firing Methods and Equipment-Firing Boss	Classroom Field	FMO - check out possible zone training with Hiawatha and Ottawa	To qualify fire personnel for firing boss job	7/1/81
S-230 CREW Boss (16 hours)	Classroom	Cliff Reedy Dave Snyder Dick Lord Frank Kollar	Crew Boss qualification for selected candidates	2/15/81
S-320 Organizing for Fire Suppression (24 hrs.)	Classroom	FMO Gordon Joiner Bill Spinner Tom Bates	Training for initial attack fire bosses (Fatality Report Rec. 5)	3/15/81
S-356 Supply Officer	Classroom	R.O. - George Clark	Employee Development	3/31
Prescribed Fire and Smoke Management	Classroom	National Advanced Resource Technology Center (Florida) Nominees: 3 Huron Rangers	Employee Development	1/81

FIRE MANAGEMENT ACTION PLAN

Accomplishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s		METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
Fire Behavior for Managers	S-590	Classroom	NARTC Trainees: Tom Bates	Employee Development	2/81
Fire Behavior Officer		Classroom	NARTC Nominee: FMO	Employee Development	2/81
Advanced Fire Management		Classroom	NARTC Nominees: Forest Supervisor, Chandler, two DNR Staff if finances available	Fire Considerations in LMP	3/81
Managing Fire Effects		Classroom	NARTC Nominee: Jarvis	Employee Development	4/81
Coordination with Michigan Department of Natural Resources			Cliff Reedy	To better coordinate Forest Service and MDNR Program Development and Budgeting, Annual Budgeting and Programming System to handle major adjustments in short range schedule changes for prescribed burning (Analysis Report Rec. H)	1984
Explore programming and budgeting process of two agencies to determine feasibility of providing money and forces to take advantage of good burning conditions as they occur		Letter to R.O. to initiate action	Cliff Reedy Support & Coordination Hiawatha Ottawa R.O. Fire Michigan DNR	(Initiate Action, FY 81)	
				Use KV as priority in prescribed burning	
				Look at our KV plan to make sure we are utilizing KV money for prescribed burning	

LINE MANAGEMENT POLLUTION PLAN

Accomplishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

WHAT HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
1. Coordinate Forest Service and DNR activities in all phases of fire management. These activities will include, but not limited to, joint planning, exchange of techniques, sharing of forces and equipment, better communications, dispatching and integration of overhead teams	Joint planning, meetings, etc.	FMO DNR Representative District Rangers	Expand and improve coordination between the Forest Service and DNR (Analysis Report Rec. K)	Initiate FY 8 items 2, 3, 4 & 5 in Report Complete items 1 & 6 by FY 8
Research Needs	Letter 4/20/81	Horace LaBumbard Bill Irvine	Tie together all KW research into a common effort to obtain answers to questions concerning habitat establishment (Analysis Report Rec. G)	1983
2. Research on the need for fire to create useable KW habitat	Research Techniques R.O. Research (FS) Forest Specialists as needed Recovery Team	R.O. Research Forest Specialists as needed Recovery Team	Find alternative ways to create KW habitat in a safe and efficient manner (Analysis Report Rec. G)	1983
3a. Find alternative ways	Research Techniques R.O. Research Forest Specialists as needed Recovery Team	Same as 2.		1983

FIRE MANAGEMENT ACTION PLAN

for Accomplishing Recommendations of the Fire Analysis and Fatality Reports, Mack Lake Fire, Huron-Manistee N.F.'s

WHAT HAS TO BE DONE	METHOD FOR ACCOMPLISHING ACTION	WHO WILL ACCOMPLISH ACTION	OBJECTIVE OF ACTION	TARGET DATE
3. Develop conversion system for comparing the old and new National Fire Danger Rating Systems (NEDRS). DNR uses old system; ES uses new system	Research Techniques R.O. Research (ES) DNR Staff FMO	R.O. Research (ES) DNR Staff FMO	To better coordinate FS and DNR manning based on fire danger rating systems	1982
4. Determine predictability of sudden substantial changes using current weather observations and calculations	Research Techniques (If present system is not capable of predicting these sudden drops)	R.O. Research (Fire) FMO District Rangers	To be able to better predict sudden abnormal drops in relative humidity (Fatality Report Rec. 7)	1982



Kirtland's Warbler Recovery Team

JOHN BYEUCH CHAIRMAN
MICH. DEPT. OF NATURAL RESOURCES
GEORGE W. IRVINE
U.S. FOREST SERVICE
NELS I. JOHNSON
MICH. DEPT. OF NATURAL RESOURCES

WESLEY R. JONES
U.S. FISH AND WILDLIFE SERVICE
HAROLD MAYFIELD
WATERVILLE, OHIO
WILLIAM MAHALAK
Mich. Dept. of Nat. Res.

ROBERT E. RADTKE
U.S. FOREST SERVICE
RICHARD O. WINTERS
U.S. FISH AND WILDLIFE SERVICE
PAUL L. AIRD
Univ. of Toronto

P. O. Box 306
Mio, Michigan 48647

Mr. Horace LaBumbard
USFS
421 South Mitchell Street
Cadillac, MI 49601

At our last Recovery Team meeting it was decided to form a standing committee for the purpose of advising the Team on and giving impetus to various phases of research on the Kirtland's Warbler. The job of this committee would be to formulate a list of research needs that are pertinent to the survival of the Warbler, develop a plan for implementing the needed research, and review and make recommendations on research proposals.

I am asking the following people to serve on this committee:

Bill Irvine, Chairman
Mike DeCapita
Nels Johnson

Horace LaBumbard
Larry Ryel
Sylvia Taylor

It is felt that a more concerted interdisciplinary effort is needed to bring together current research and coordinate future studies to obtain the knowledge needed to better manage this species and its habitat. The major areas of study will be in the biology and habitat requirements of the bird and the silviculture of jack pine including the relationships of soils and fire. It will be necessary for the committee members to obtain input from the more knowledgeable people in the various disciplines. I am asking the following people to serve as primary resource advisors to this committee:

Kirtland's Warbler Biology and Habitat

Jerry Weinrich, DNR
John Probst, NCFES

Paul Aird, U. of Toronto (Potential Canadian range and forest ecology)

Harold Mayfield (including migration and winter range)

Jack Pine Silviculture

John Cooley, NCFES
James Hart, MSU

Paul Marshall, U of M

Soils

Dave Cleland, USFS

Fire

Al Simard, NCFES

Don Grant, DNR

3/10/81



Kirtland's Warbler Recovery Team

JOHN BYELICH, CHAIRMAN
MICH. DEPT. OF NATURAL RESOURCES
GEORGE W. IRVINE
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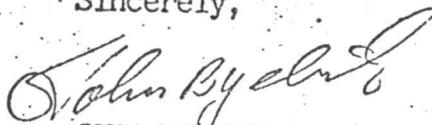
2.

I would like to have a meeting of the six committee members on March 23 to develop a first draft of a list of research needs and an outline of a plan. If possible, we would meet at a central location like the Clare DNR District Office between 9:00 a.m. and 3:00 p.m.

After this meeting, the committee should meet with as many of the resource advisors that could make it in mid-April, probably in Lansing.

Please let Bill Irvine (USFS, 421 South Mitchell Street, Cadillac, MI 49601 - 616-775-2421) know if you will serve on this committee and if the date of the meeting is o.k.

Sincerely,



JOHN BYELICH
KWRT Leader



Kirtland's Warbler Recovery Team

JOHN BYELICH, CHAIRMAN
MICH. DEPT. OF NATURAL RESOURCES
GEORGE W. IRVINE
U.S. FOREST SERVICE
NEIL I. JOHNSON
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ROBERT E. RADTKE
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UNIV. OF TORONTO

P.O. Box 306
Mio, Michigan 48647

Mr. David Cleland
USFS
421 South Mitchell Street
Cadillac, Michigan 49601

The KW Recovery Team is in the process of forming a committee for the purpose of advising the Team and giving impetus to various phases of research that were expressed in the KW Recovery Plan or that for additional needs that have been or will be recognized. Those persons who will be serving on the committee are listed in a copy of the letter enclosed.

The Team and others have recognized that research on the Kirtland's Warbler should be a coordinated interdisciplinary effort. In order for the research committee to develop this approach, they will require input from the more knowledgeable persons within the several fields involved.

We would appreciate it if you would serve as a resource advisor to this committee. This would involve reviewing various proposals, plans, etc., and making your recommendations on the development of various phases of the programs and how to implement studies. This would be accomplished through mail, telephone, and personal contacts with committee members. It would probably also be advantageous to have an occasional one day meeting between the committee members and as many of the resource advisors as possible.

The committee will be meeting in late March to initiate their work. After they have met and had a chance to look at the needs and outline a plan, it would be advantageous to the committee to meet with the resource advisors to establish lines of communication, review what has and is being done in direct and related research, obtain additional ideas, etc.

If you would be willing to assist this committee, or if you feel you cannot and would like to suggest an alternate, please get in touch with Bill Irvine, U.S. Forest Service 421 South Mitchell Street, Cadillac, MI 49601 - 616-775-2421.

Sincerely,

JOHN BYELICH
KWRT Leader

Enclosure



United States
Department of
Agriculture

Forest Service Huron-Manistee National Forests
421 South Mitchell Street
Cadillac, Michigan 49601

Rec'd by 2630

Date March 16, 1981

Mr. John Bylick
P.O. Box 306
Mio, Michigan 48647

Dear John:

I have seen your letter to Horace LaBumbard and Dave Cleland concerning working with the Recovery Team for the Kirtland's Warbler.

They along with Bill Irvine, will work with you as much as possible under current situations to accomplish this task.

I do have a concern about one statement in your letter to Horace. It is the task to "develop a plan for implementing the needed research". I am not sure exactly what you mean, however, to satisfy the requirements of our Fire Analysis Action Plan, I believe it will be necessary for the North Central Forest Experiment Station or some other research unit to coordinate and plan this effort. Horace will discuss this with you at the March 23, meeting.

Sincerely,

WAYNE K. MANN
Forest Supervisor





United States
Department of
Agriculture

Forest
Service

R-9

Reply to: 4000 Research

Date: March 19, 1981

Subject: Research Needs for Kirtland's Warbler Habitat
(Your January 21, 1981)

50 File

To: Forest Supervisor, Huron-Manistee NF

Your suggestion concerning an interdisciplinary effort to coordinate future research needs for Kirtland's Warbler habitat is valid. You should coordinate this effort with the Michigan Department of Natural Resources, and appropriate conservation organizations. We will request involvement by the North Central Forest Experiment Station.

We understand this subject was discussed at a recent meeting of the Recovery Team, and that an interdisciplinary group will meet to discuss various approaches to better coordinate efforts in silviculture, soils, wildlife, and fire. The Huron-Manistee N.F. should work through this Committee to organize a meeting in FY 82 to review past and current research efforts, and develop coordinated direction for future research efforts to achieve the objectives of the Recovery Plan.

for *H. J. Yurich*
STEVE YURICH
Regional Forester

3/27/81

Horace: lets discuss reply
further.

WBW

Rec.
~~DR. COV~~
F.I.E.
Hydrlog.
Soils.
MnpwslA'1
TM.
Complex.
Sales.
Silv.
Wildlf.
Fisheries.
ENG.
CvEng#1.
CvEng#2.
Fleet.
RECRTH.
Archlgt.
LA.
PLNR.
LUP.
RvrPlnr.
LANDS.
Ass't 1.
Ass't 2.
RlySpt.
Rvrlg.
Geolog.
AO.
AdmStr.
B.R.F.
Pers.
Supv.Clk.
RGR.
C&E.



Huron-Manistee N.F.'s

4000 Research

March 20, 1981

Research Needs for Kirtland's Warbler Habitat Establishment

Regional Forester, R-9

Reference our January 21 letter on this subject. We have not yet received a response.

Enclosed is a copy of a letter addressed to Horace LaBumbard from the Kirtland's Warbler Recovery Team.

The first paragraph indicates the Team has appointed a committee to:

1. Formulate a list of research needs.
2. Develop a plan for implementing the needed research.
3. Review and make recommendations on research proposals.

I am concerned about item 2. I believe this is a duplication of what is needed to satisfy the requirements of the Mack Lake Fire Analysis Action Plan. It appears to me the Recovery Team is attempting to plan and initiate needed research which is really the responsibility of the Forest Service.

We are having problems in determining our Regional Office contact in initiating research activities. Would you let us know who this contact should be.

WAYNE K. MANN
Forest Supervisor

Enclosure

cc: LaBumbard



United States
Department of
Agriculture

Forest
Service

R-9

Reply to: 4000 Research

Date: April 7, 1981

Subject: Research Needs for Kirtland's Warbler Habitat Establishment

S.O. File

To: Forest Supervisor, Huron-Manistee

In response to your March 20 letter.

Overall responsibility for research coordination and leadership and coordination of technology transfer activities is assigned to the Planning, Programming and Budgeting Staff. James Hagemeier is the specific individual responsible for research coordination.

To be effective, research recommendations coming from the Kirtland Warbler Recovery Team would be coordinated through the Directors of the Experiment Stations for incorporation into their overall programs. It goes without saying that the state of Michigan or Universities certainly can do research independently if they so desire. However, that course would seem to lead to very poorly coordinated efforts between the various agencies.

Since Regional Biologist, Robert Radtke, is a member of the Kirtland's Warbler recovery team, perhaps he is the ideal person for channeling additional research needs into the Regional Plan or working with Jim Hagemeier directly to the stations.

If you have additional questions, contact Hagemeier or Radtke for a direct response.

James H. Freeman

JAMES H. FREEMAN
Director of Planning,
Programming and Budgeting

Enclosure

cc: Hagemeier (w/enclosures)
Radtke - RRWL (w/enclosures)

*Enclosure
over need for further
discussion
WKL*

No



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
HORACE H. LABUMBARD
Timber and Wildlife Management
Staff Officer

cc: LaBumbard
Review Folder

Reply to: 1410 Management Reviews
2670 Threatened and Endangerd 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.



Management Team

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.

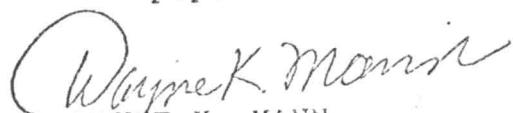
To accomplish these acreages is organizationally and humanly impossible because of training and qualification requirements, mop-up and holding needs on prior fires, wildfire responsibility, lack of back-up between agencies, and other resource responsibilities.

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.

Management Team

- 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)