

ADMINISTRATIVE STUDY
MASTER PLAN OF THE MONITORING PROGRAM
FOR THE 1964 SPRUCE BUDWORM PROJECT

OUTLINE

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I. PURPOSE OR OBJECTIVE OF STUDY

The purpose of this monitoring program has been set out in the memorandum of April 13 to the Regional Forester from the Chief's Office. A copy of this memorandum is attached.

Objectives for this Administrative Study Program are:

A. Evaluate protective controls specified in the project plan, to verify the adequacy of the controls or recommend modifications in project operations as needed.

B. Measure and analyse insofar as possible, the impacts and effects of the DDT aerial spray program on various components of the Forest environment other than the target insect.

C. Measure and analyse insofar as possible, the impacts and effects of the Cygon (Dimethoate) test on various components of the Forest environment other than the target insect.

II. MULTIPLE USE COORDINATION

The Forest Supervisor of the Salmon National Forest has submitted a Multiple Use Survey for this treatment project. Monitoring the project will be coordinated with other forest resources and uses as indicated in the Multiple Use Survey. A copy of this study plan will be sent to the Forest Supervisor of the Salmon National Forest for his review and comments.

III. ASSIGNMENTS

The Monitor Coordinator is directly responsible to the Spruce Budworm Project Leader. For the monitoring program his responsibilities will be:

A. Develop detailed study plans for all phases.

B. Request, train, and supervise forest personnel in the conduct of the studies.

C. Evaluate the program and findings.

D. Submit reports of findings to the Project Leader.

E. Make contact, enlist participation, and coordinate activities and work of other agencies that may cooperate in monitoring studies.

A Forest Service Fishery Biologist is assigned to the project and is responsible to the Monitor Coordinator, charged with handling the aquatic phases of the monitoring program.

A Forest Service Game Biologist is assigned to the project and is also responsible to the Monitor Coordinator. He is assigned the terrestrial wildlife phases of the monitoring program.

Up to four Forest Service personnel, in addition to those listed above, will be assigned to the project during the spray period. They will assist the Fishery Biologist and Game Biologist in the collection and recording of field information.

Cooperating agencies will submit study plans to the Monitor Coordinator. Each detailed study plan will outline the responsibility of the respective agency. After Forest Service approval, it will be the responsibility of the Monitor Coordinator to administer these study programs. Agencies thus far indicating an interest in participation are:

A. Idaho Fish and Game Department. A contract will be developed to do some of the aquatic monitoring and possibly a minor amount of the terrestrial game monitoring.

B. Bureau Sport Fisheries and Wildlife.

1. The Division of Fisheries Research, Denver Laboratory, will monitor the trial spray of Cygon. They will also furnish consultation on the aquatic monitoring of the DDT spray areas.

2. The Division of Wildlife Research, Denver Laboratory, has indicated an interest in terrestrial wildlife monitoring. The extent of participation is still to be worked out.

C. Agricultural Research Service. The Entomology Research Division has indicated an interest in monitoring big game impacts from the DDT portion of the project. Extent and design of participation are still to be worked out.

D. Idaho State Public Health Board. Extent of their participation is undecided. They contracted for analyzing water samples last year and will be contacted for their interest in doing this again for this year's project.

E. Idaho State Department of Agriculture. Has indicated an interest in participating in some of the agricultural aspects of monitoring.

Other agencies will be contacted. Who may participate and to what extent is not known at this time.

It is intended that the Forest Service, through the Project Leader and Monitor Coordinator, will maintain control of all monitoring on National Forest lands and resources therein.

IV. TIME AND MONEY REQUIREMENTS

A. Time.

Planning for monitoring studies started approximately April 27, 1964. The Monitor Coordinator and Fishery Biologist (both Forest Service detailers) reported at that time. They will continue on the studies until the last of July. An additional approximately two pay periods will be needed by the Coordinator and Fishery Biologist to make post-spray collections and to firm up reports.

A Game Biologist (also Forest Service detailer) will be assigned to the project from about May 11 through July 15. An additional pay period may be required for his reporting.

It is planned to request additionally, two trained Forest Service Biologists for detail to the project for three to four weeks during actual spraying operations----approximately June 20 through July 17. Arrangements will also have to be made to furnish two assistants for this work.

Cooperating agencies will make their own arrangements for the manpower they expect to assign to the project.

B. Money Requirements (Estimated).

1. Forest Detailers:

Salaries	\$12,185
Per Diem	4,450
Travel	2,400
Misc.	<u>965</u>
	\$20,000

2. Contract with Idaho Fish and Game Department:

Estimated	\$ 5,000
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3. Total Estimated Cost:

\$25,000

V. METHODS

Methods, techniques, and procedures are in the process of being developed. Detailed study plans for each phase of the monitoring program are being developed and at a later date will become addendums to this preliminary plan.

Three generalized fields of investigation are planned:

A. Aquatic Environment. To be done by Forest Service personnel, by the Idaho Fish and Game Department, and by the Fisheries Research Division of the Bureau Sport Fisheries and Wildlife.

B. Terrestrial Wildlife. To be done by Forest Service personnel, by Idaho Fish and Game Department, the Wildlife Research Division of the Bureau Sport Fisheries and Wildlife, and by the Agricultural Research Service.

C. Agricultural Aspects. Will include monitoring beef and dairy cattle, vegetation, soils, apiaries, and domestic and irrigation water. Responsibilities and assignments for these phases have not yet been made. It is anticipated that most of this work will be done by cooperating agencies.

VI. PREPARATION OF APPROPRIATE REPORTS

Time allowance and financing shown in Item IV above include scheduled preparation and submission of reports to the Project Leader.

Contracts for financing work by other agencies will include the proper clauses requiring reports as part of the total job.

Reports from cooperating monitoring agencies will be submitted to the Monitor Coordinator for review and transmittal to the Project Leader.

VII. PROVISION FOR FOLLOWUP

The gathering of monitoring information and sampling will continue at least through the big game hunting season in October 1964. There is a possibility that some collections of biological or vegetal materials may be made a year to one and one-half years after spraying. Any such plans will be shown in the detailed study plans which will become addendum to this master plan.

If data and situations warrant, there may be articles written or speeches given on the monitoring aspects of this program. Needs for these possibilities cannot be anticipated at this time, but should the occasion arise, plans for this type of followup will be correlated with the I&E phase of this project and with the Regional Office Division of I&E.

Reviewed By:

D. E. Parker
Chief, Division of Forest Insect Research

May 14, 1964
Date

Approved:
John R. Rydman
Chief, Division of Timber Management

May 14, 1964
Date

D. M. Gaudin
Chief, Division of Wildlife Management

May 14, 1964
Date

J. W. Heinema
Acting Regional Forester

May 15, 1964
Date