

**INDIANA DEPARTMENT OF NATURAL RESOURCES
DIVISION OF FORESTRY**

**Cooperative Forestry Program Grant
Forest Health Monitoring – Evaluation Monitoring**

**Application for USDA Forest Service Federal Assistance
Program Narrative**

FY2004

**Forest Health Evaluation
of Reported
Yellow Poplar, Ash, and Bitternut Hickory Decline**

Burnell C. Fischer, State Forester
Philip T. Marshall, Forest Health Specialist

Title: Forest Health Evaluation of Reported Yellow Poplar, Ash, and Bitternut Hickory Decline
Indiana Department of Natural Resources, Division of Forestry, and the USDA Forest Service

DESCRIPTION

Project Objectives: The project goal is to demonstrate whether reported off-plot decline and mortality in yellow poplar, white and green ash, and bitternut hickory can be confirmed on-plot through FHM and FIA data.

Justification: The project will link off-plot and on-plot forest health monitoring. In particular, the proposed project will help explain the extent and severity of tree mortality and decline (as expressed through crown conditions) of drought-sensitive species following the 1999 and 2002 droughts. The Indiana Department of Natural Resources, Division of Forestry requests federal assistance to evaluate FHM and FIA data for evidence of increased decline and mortality of the above-noted species.

Background: Off-plot forest health reports from Indiana indicate pockets of yellow poplar, white and green ash, and bitternut hickory decline and mortality in the south-central and southeastern portions of the state. Similar decline and mortality have been historically noted both in Indiana and other states sharing ecosections with southern Indiana. These declines have been especially prominent in years following severe drought events.

Methods:

- I. During the summer (leaf on season):
 1. Actual field data from 1996 to present will be collected from FHM and FIA plots in south-central and southeastern Indiana.
 2. Data will be reviewed and evaluated for indications of a greater than expected decline and mortality in the targeted species.
 3. FHM/FIA plots will be visited as needed to verify the field data and to possibly evaluate the reason for decline and mortality.

- II. During the fall (leaf-off season):
 1. Data collected and evaluated will be summarized.
 2. Evaluation report explaining extent and severity of on-plot of yellow poplar, white and green ash, and bitternut hickory decline and mortality in the south-central and southeastern portions of the state.

The Forest Health Section of the Division of Forestry will conduct the evaluation and analysis. Key personnel involved in the project are the following:

Philip T. Marshall, Forest Health Specialist, Vallonia State Nursery, 2782 W. Co. Rd. 540 S., Vallonia, IN 47281 812-358-3621, fax 812-358-9033, pmarshall@hsonline.net

Zachary Smith, Forest Entomologist, Jasper-Pulaski State Nursery, 15508 W. 700 N. Medaryville, Indiana 47957, 219-843-4827, fax 219-843-6671

Stephen G. Krecik, Program Coordinator V, Forest Health Section, Vallonia State Nursery, 2782 W. Co. Rd. 540 S., Vallonia, IN 47281 812-358-3621, fax 812-358-9033, krecik@sisna.com

Cooperating personnel in the program.

Manfred Mielke, Forest Pathologist, U.S. Forest Service, Northeast Area, State and Private Forestry, Forest Health Protection (USFS, FHP), St Paul, MN

Dan Johnson, U.S. Forest Service, North Central Forest Experiment Station, Forest Inventory & Analysis, Brownstown, IN

Gary Stachozicx, U.S. Forest Service, North Central Forest Experiment Station, Forest Inventory & Analysis, Brownstown, IN

FEDERAL ROLE

The Cooperative Forest Health Program provides states with federal funds to detect, monitor, and evaluate forest health conditions on state and private lands. Federal financial assistance for Forest Health Monitoring was authorized by the 1990 Farm Bill (PL 101-624). The FHM program provides funds to collect, evaluate and analyze data on the health of the forests.

The IDNR, Div. of Forestry is requesting \$7,500 to conduct an evaluation of the extent and severity of yellow poplar, white and green ash, and bitternut hickory mortality and decline in the south-central and southeastern eco-sections of Indiana. The grant will be used to support the salary and expenses of Div. of Forestry, Forest Health staff - forest health specialist, forest entomologist, and program coordinator V. The grant will also support the cost of conducting data research and analysis, fieldwork to verify data and costs of preparing an evaluation report.

Funds may also be used for: personal services; utility payments; services by contract; repairs to equipment, vehicle and other repairs; purchase of materials, parts and supplies; purchase of equipment; meetings and related expenditures; and in-state and out-of-state travel to support the operation of the program.

ACCOMPLISHMENTS/TARGETS

The goal of the project is to verify the extent and severity of yellow poplar, white and green ash, and bitternut hickory mortality and decline in the south-central and southeastern eco-sections of Indiana.

REPORTING

An evaluation report on the status yellow poplar, white and green ash, and bitternut hickory mortality and decline in the south-central and southeastern eco-sections of Indiana will be written by December 15, 2004.

BUDGET INFORMATION

Total Federal Funds Requested - \$7,500

The Division of Forestry is requesting \$5,000 to be used for salary expenses, travel, supplies and printing. The non-federal resources used in this project include the state funds for the salary and office expenses of the Forest Health Specialist, Forest Entomologist, and program coordinator.

Budget:

Salary	\$6,500
Fringe	\$500
Travel	\$250
Supplies	\$250
Total	\$7,500

424A
 2004 Federal Grant

Program Name – Insect & Disease – Forest Health Evaluation
 Prepared by – Philip T. Marshall
 Total Amount of Grant (Federal Portion) - \$7,500.00
 Total Amount of Match (State Portion) - \$7,500.00
 Total Match (Local or Other Portion) - \$0.00
 Grand Total - \$15,000.00

Section B – Budget Categories					
6. Object Class Categories	Grant Program, Function or Activity				Total (5)
	Federal Portion	State Portion	Other Portion	(4)	
a. Personnel	\$ 6,500.00	\$ 7,500.00	0		\$ 14,000.00
b. Fringe Benefits	\$ 500.00				\$ 500.00
c. Travel	\$ 250.00				\$ 250.00
d. Equipment					\$ -
e. Supplies	\$ 250.00				\$ 250.00
f. Contractual / Pass-through					
g. Construction					
h. Other					\$ -
i. Total Direct Charges (sum 6a-6h)	\$ 7,500.00	\$ 7,500.00	0	0	\$ 15,000.00
j. Indirect Charges					
k. Totals (sum of 6i and 6j)	\$ 7,500.00	\$ 7,500.00	0	0	\$ 15,000.00
7. Program Income					
	0	0	0		0