

## Kirtland's Warbler Habitat Improvement Program

### Huron-Manistee National Forests

Activity	Description	Accomplishment	Unit Cost	Direct Cost	Indirect Costs (30%)	Program Cost
Silviculture Examination		1100-1600 acres/year	\$3-4/acre	\$3,300 \$6,400	\$1,100 \$1,900	\$4,300 \$7,300
NEPA Documentation		1100-1600 acres/year	\$350/acre	\$385,000 \$560,000	\$115,000 \$168,000	\$500,000 \$728,000
Sale Preparation/Administration		1100-1600 acres/year	\$350/acre	\$385,000 \$560,000	\$115,000 \$168,000	\$500,000 \$728,000
Reforestation		1100-1600 acres/year	\$350/acre	\$385,000 \$560,000	\$115,000 \$168,000	\$500,000 \$728,000
Stocking Surveys/Certification		1100-1600 acres/year	\$10/acre	\$11,000 \$16,000	\$3,300 \$4,800	\$14,300 \$20,800
Annual Census		16,000-24,000 acres/year		\$25,000	\$7,500	\$32,500
Volunteer Contributions						
Kirtland's Warbler Program Management and Coordination				\$20,000	\$6,000	\$26,000
Kirtland's Warbler Tours		May & June		\$5,000	\$1,500	\$6,500
Information and Education Efforts		Yearlong		\$4,000	\$1,200	\$6,200
Total				\$1,223,300 \$1,756,400		\$1,589,800- \$2,283,300

### Michigan Department of Natural Resources

Activity	Description	Accomplishment	Unit Cost	Direct Cost	Indirect Costs 25%)	Program Cost
Silviculture Examination		2000 acres/year	\$7.50/ac	\$15,000	\$3,750	\$18,750
NEPA Documentation		acres/year	NA	NA	NA	NA
Sale Preparation/Administration		2000 acres/year	\$60.00/ac	\$120,000	\$30,000	\$150,000
Reforestation		1500 acres/year	\$170/ac	\$255,000	\$63,750	\$318,750
Stocking Surveys/Certification		1500 acres/year	\$7.00/plot	\$5,250	\$1,300	\$6,550
Annual Census		18,000 – 22,000 acres/year		\$22,000	\$5,500	\$27,500
Volunteer Contributions						
Kirtland's Warbler Program Management and Coordination				\$30,000 (includes recent habitat planning effort)	\$7,500	\$37,500
Information and Education		Yearlong		\$1,000	\$250	\$1,250
Total				\$448,250	\$112,050	\$560,300

USDI Fish and Wildlife Service

Activity	Description	Accomplishment	Unit Cost	Direct Cost	Indirect Costs	Program Cost
Silviculture Examination	Part of sale preparation	231 acres/year	-	-	NA	-
NEPA Documentation	Part of sale preparation	231 acres/year	-	-	NA	-
Sale Preparation/Administration		231 acres/year	\$57.00/ac	\$13,116	NA	\$13,116
Reforestation	Grant to MDNR in FY2000	163 acres/year	\$28.00/ac	\$4,500	NA	\$4,500
Stocking Surveys/Certification	1/3 grant to Ohio State Univ.	1,143 acres/year	\$0.88/ac	\$1,000	NA	\$1,000
Annual Census		5,000 acres/year	\$1.11/ac	\$5,556	NA	\$5,556
Volunteer Contributions	Seneey ELFO	100 hours	-	-	\$2,000	\$2,000
Kirtland's Warbler Program Management and Coordination	Meetings, general oversight, etc.			\$5,556-Seneey \$6,270-ELFO		\$11,826
Kirtland's Warbler Tours		May 15 – July 4 7:00am – 11:00am		\$5,000	\$1,000	\$6,000
Information and Education Efforts	2/3 grant to OSU ELFO	Yearlong Yearlong	\$1.75/ac	\$2,000-Seneey \$1,000-ELFO	-	\$3,000
Cowbird Trapping		April – June		\$60,000	\$40,000	\$100,000
Total				\$103,998	\$43,000	\$146,998

Hiawatha National Forest

Activity	Description	Accomplishment	Unit Cost	Direct Cost	Indirect Costs	Program Cost
Silviculture Examination		670 acres/year	\$4/acre	\$2,680	\$804 (30%)	\$3,484
NEPA Documentation		670 acres/year	\$140/acre	\$93,800	\$28,140 (30%)	\$121,940
Sale Preparation/Administration		670 acres/year	\$300/acre	\$201,000	\$56,280 (28%)	\$257,280
Reforestation; planting (50%)		335 acres/year	\$590/acre	\$197,650	\$104,755 (53%)	
Reforestation; natural regeneration, with or without supplemental seeding (50%)		335 acres/year	\$275/acre	\$92,125	448,826 (53%)	
Reforestation; total (100%)*		670 acres/year	\$433/acre	\$290,110	\$153,758 (53%)	\$443,868
Stocking Surveys/Certification		670 acres/year	\$10/acre	\$6,700	\$3,551 (53%)	\$10,251
Annual Census		10,000 acres/year	\$1/acre	\$10,000	\$3,000	\$13,000
Volunteer Contributions**						
Kirtland's Warbler Program Management and Coordination				\$8,000	\$2,400	\$10,400

Information and Education Efforts				\$1,000	\$333	\$1,333
TOTAL***				\$296,380	\$88,947	\$861,556

\* Note that total reforestation cost is an average of planting cost and natural regeneration. The Forest is considering stewardship contracting options (i.e., sale operator accomplishes timely site prep in exchange for wood) to increase efficiency and lower cost.

\*\* Could be a subtraction from total cost to account for volunteer contributions (i.e., \$1000 on Hiawatha).

\*\*\*Since we achieve timber, fuel reduction, reforestation, salvage, other wildlife, recreation and other resource management goals with the KW program, perhaps we should add a disclaimer or "discount" the cost of the KW work to prorate it across all benefiting functions.

**Totals – All Four Resource Management Agencies**

Activity	Accomplishment	Program Cost
Silviculture Examination	4500 acres/year	\$29,534
NEPA Documentation	2500 acres/year	\$849,940
Sale Preparation/Administration	4500 acres/year	\$1,148,396
Reforestation	3933 acre/year	\$1,495,118
Stocking Surveys/Certification	4913 acres/year	\$38,601
Annual Census	61,000 acre/year	\$78,556
Volunteer Contributions	100 hours	\$2,000
Kirtland's Warbler Program Management and Coordination		\$85,726
Kirtland's Warbler Tours		\$12,500
Information and Education Efforts		\$11,783
Cowbird Trapping		\$100,000
Total		\$3,852,154