

1996 Hiawatha NF Kirtland's Warbler Summary

The Kirtland's Warbler (KW) population in the Upper Peninsula continued to grow in 1996, reaching a historic high of 20 total birds. This years known population included 14 males and 6 females. Of this total population, 13 birds were counted on the west unit of the Hiawatha NF. 1 male bird was located on the Baraga plains (State Land) and 6 birds (including 1 female) were observed near Gwinn in Marquette Co. on State and private land. Recent UP population trend is as follows:

<u>Year</u>	<u># Males</u>	<u># Females</u>	<u>Totals</u>
1993	1	0	1
1994	2	0	2
1995	7	1	8
1996	14	6	20

Census results for the Hiawatha portion for 1996 include:

<u>Area (district)</u>	<u>County</u>	<u>Survey Acres</u>	<u># Males</u>	<u># Fem</u>	<u>Habitat Est</u>
Stockyard (RR)	Delta	1200	2	1	fire
8-Mile (Mstq)	Schoolcraft	585	6	4	fire/plant
Jack Pine Lake (Mstq)	Delta	785	0	0	plant
Munising (Muni)	Alger/School	600	0	0	plant/NR
Raco (Soo)	Chippewa	1026	0	0	plant/NR
		4196 acres	8	5	

Exact location information is on attached forms/maps.

Existing Hiawatha habitat which was found suitable for the KW consisted of large blocks (most larger than 300 acres) of jack pine which was less than 10 feet tall. Some areas holding singing males were created by wildfires in the late 80's (stockyard, 8-mile), while other areas were chopped and chained for natural regeneration or planted or seeded to jack pine. In 1996 harvested and regenerated jack pine held far fewer birds compared to the burned habitat (9 in burned vs. 4 in managed). At 8-mile the burned portion contained 4 males and 2 females while the planted portion held 2 males and 2 females. Managed blocks tended to be associated with near-by recent clearcuts and burns resulting in rather large areas of multi-aged but early successional jack pine. A relative large patch (@ 300 acres) of plantation just south of the 2 northern-most breeding pairs (8-mile north) will reach good warbler habitat structure (height) in 1-2 years. This was the first year of breeding evidence at Stockyard. The Jack Pine Lake KW area which held 2 males and 1 female last year was censused again this year but no birds were located.

Banding

On June 19, 1996, 5 new UP birds were banded on the Hiawatha NF by Carol Bocetti and crew with biologists from the Hiawatha. This banding effort resulted in color banding 4 males and 1 female. 4 birds were banded at 8-mile and 1 male was banded at Stockyard. One bird was observed at 8-mile which was already banded (hatchling) in 1988 at Bald Hill. Band locations and color combinations are as follows: 8-Mile north (#1 male=OY/AY, #1 female=OY/AR, #2

male and female are unbanded). 8-Mile south (#1 male=OA/PP, #3 male=OA/PO, #2 male=unbanded, #4 male=old band 1988 bald hill AB/YB). Stockyard (#1 male=OA/PJ). Numbering of birds are from north to south for a given colony or area. Band locations, bird number and color combinations are also on attached maps. The objective of this monitoring effort is to learn more about KW survivorship, movement between stands, and duration of stand use. This information will be useful in making future management decisions regarding KW habitat management in the UP.

#### Breeding

The following methodology was used to attempt to determine mating or the presence of female KW's; Stay with the male for up to 45 minutes, observe behavior, look for female with or near male, listen for female chipping, observe male going to ground with material in beak, stay back and watch do not push birds, attempt to locate female bird do not search for the nest.

#### Cowbirds

This was the first year of cowbird trapping in the UP. 4 traps were provided by the USFWS with the objective of learning more about the cowbird situation in the UP as well as trap cowbirds from potential breeding sites. The traps were set up on or around May 2, 1996. Some traps were moved later due to snow in the woods which prevented setting in the desired location. In addition we had many more KW's at 8-mile this year, including females, and no birds at Jack Pine Lake which had females last year, so that trap was moved from Jack Pine Lake to 8-mile in mid-June. The 4 traps are currently operating at Raco, 8-mile, Stockyard, and Baraga.

Trap Site	# Cowbirds Trapped	Remarks
Baraga	40	
Stockyard	23	
8-Mile/Jack	13	10 at Jack Pine Lake, 3 at 8-mile
Raco Sta/Raco	284	Trap moved from Raco station to woods 5/24/96 (273 caught at Raco guard station, 11 in habitat)

#### Monitoring Crews

Many individuals contributed many hours towards monitoring the 1996 KW Upper Peninsula population. Individuals and volunteers like Mike Berg, LSSU interns (Jahn, McNett, Smith, Schafer), Carol Bocetti, and John Probst are increasing our understanding and making recovery of Kirtland's Warbler in the UP possible. The Hiawatha NF sincerely appreciates the contribution of these individuals. Census crew for 1996 consisted of: Mike Berg (Volunteer) covered Stockyard, 8-mile, Gwinn & Jack Pine Lake: John Probst (NCFES Research Biologist) covered Stockyard and 8-mile: Paul Thompson (Rapid River Biologist) covered Stockyard, 8-mile and Jack Pine Lake: Steve Sjogren (East Hiawatha Biologist) covered Raco with assistance from 4 LSSU interns. Carol Bocetti and crew assisted with determination of matedness and banding.