

Memo

To: Harold J. O'Connor, Director, Patuxent Wildlife Research Center
Through: H. Randolph Perry, Chief, Endangered Species Research Branch
From: Cameron B. Kepler, Leader, Kirtland's Warbler Research Project
Date: 1 March 1989

Subject: Past and Future Kirtland's Warbler Research: cuts (2), deferrals (2), data (3), extensions (4-5-6), redirections (6-7), and obligations (8-9).

1. Two study plans under 964.04 are scheduled for completion at the end of FY 90.
2. One plan (964.04.02) has been deferred for two years, while the second has suffered budget reduction (TABLE 1). In total, our project has been forced to give up \$108,070 (plus one new vehicle) in FY 88 and FY 89. Expected shortfalls of \$26,580 (our entire budget) are predicted for FY 90.

TABLE 1. LOSS OF FUNDS FOR KIRTLAND'S WARBLER RESEARCH, FY '88-'90.

		FY '88	FY '89	FY '90
Approved Budget:	964.04.01	\$33,560	\$36,480	\$14,780
	964.04.02	56,590	37,440	11,800
	Total	\$90,150	\$73,920	\$26,580
Actual Budget:	964.04.01	\$30,000	\$26,000	0?
	964.04.02	0	0	0?
	Total	\$30,000	\$26,000	0?
Shortfall (Total)		\$60,150	\$47,920	\$26,580?

3. Intensive banding in Michigan (964.04.01) was begun in FY 87 to discover if Kirtland's Warblers were surviving over winter in numbers adequate to sustain or augment the breeding population. In 1988, the first year we could evaluate this program, we had a return rate of 46% for birds banded as hatching year birds (HY), and a 61% return rate for birds banded as adults (TABLE 2). The return rates for HY birds were five times those found for immature Kirtland's Warblers by Walkinshaw! This is the first hard data in 40 years of research that indicates that the factors limiting Kirtland's Warblers do not occur on migration or on the wintering grounds.

TABLE 2. 1987-1988 KIRTLAND'S WARBLER RECAPTURES

1986-87 Kirtland's Warblers	No. Banded	1987-1988 Recaptures	
		No.	%
AHY Males	26	18	62
AHY Females	17	10	59
AHY ? Sex	6	2	33
HY	50	23	46!
Total	99	53	54

- One year's data could be an artifact of an unseasonably good winter. At least three additional years of comparable information are needed to state unequivocally that the major stresses to the species do not lie outside the breeding grounds. This would culminate four decades of guessing about "what might be happening" in the Bahamas or on migration, and point directly to habitat management in Michigan as the major bottleneck for the species. This fact alone would add additional incentive to land-owning agencies in Michigan to effectively manage their land for the protection of the Kirtland's Warbler.
- At present, FY 90 is approved as a write-up year. We propose that FY 90 be a field year (this would require \$22,420 of additional funding, possibly obtained as matching funds from the Forest Service), and that FY 91 be primarily, but not exclusively, a write-up year. A limited netting effort (6 weeks) in Michigan in FY 91 is required to determine if birds returned that we missed in FY 90: this would provide complete coverage of 1990 for a quantitative evaluation of banding returns that year. The required budget is given in TABLE 3.

TABLE 3. PROPOSED KIRTLAND'S WARBLER BUDGET, FY 90-91, FOR SP964.04.01 AND REDIRECTED SP964.04.02.

	FY 90	FY 91
Temp. Salaries	\$ 5,000	\$ 3,000
Expenses	26,000	22,000
Res. Support	10,000	10,000
Travel	12,000	6,000

