

Work Task C1: Brown-Headed Cowbird Trap Assessment

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
\$80,000	\$52,464	\$52,464	\$85,000	\$0	\$0	\$0

Contact: John Swett, (702) 293-8574

Start Date: FY05 **Expected Duration:** FY06

Long-term Goal: Species research to evaluate brown-headed cowbird (BHCO) control program.

Conservation Measures: MRM4

Location: Alamo Lake State Wildlife Area (SWA), Bill Williams River NWR, AZ

Purpose: Assess the effectiveness of BHCO trapping on southwestern willow flycatcher (SWFL) and other neotropical birds' productivity and nest success.

Connections with Other Work Tasks (past and future): This work task was previously listed as C2 in FY05 Draft Work Tasks. This study will provide information necessary for managing created habitats proposed under Work Tasks outlined in Section E that target covered species susceptible to BHCO parasitism. Additional BHCO trapping studies are being conducted at SWFL life history study sites being conducted under Work Task D2.

Project Description: BHCO control may become necessary to reduce parasitism rates for covered species, especially SWFL. The FWS issued a BO on the SIA in 2001, which calls for initiation of a BHCO trapping program under Reasonable and Prudent Measure 5 (RPM5) if:

1. Nest monitoring of SWFL nests found between Parker and Imperial Dams show a 40 percent or greater parasitism rate in any one year or averages more than 20 percent in any two or more consecutive years.
2. No nesting covered species can be detected at occupied sites due to poor sub-population stability.

In addition, the LCR MSCP states that research be conducted to determine and address the effects of BHCO parasitism on reproduction of covered species. In order to effectively and efficiently conduct BHCO control, trapping effectiveness needs to be determined. Post-trap monitoring will be conducted until BHCO population numbers and/or parasitism rates reach pre-trap numbers. These data will enable Reclamation to determine potential BHCO trapping intervals to protect LCR MSCP covered species.

Previous Activities: From 1998-2001, Reclamation implemented a BHCO control program in accordance with the 1997 Biological and Conference Opinion. BHCO traps were placed at

Alamo Lake SWA, Bill Williams River NWR, and Havasu NWR (1998 only). Trapping was suspended after the 2001 breeding season and post-trap monitoring was implemented in 2002 to measure the effectiveness of the control program and to determine when BHCO populations, parasitism rates, and host nest success reached pre-trap levels. Data obtained will help determine trapping interval for future BHCO control programs.

FY05 Accomplishments: Activities in FY05 included conducting a series of point counts to document BHCO and host species abundance in areas within Alamo SWA and the Bill Williams River NWR where BHCO trapping occurred from 1998-2001. Host species nests were monitored, when detected, and parasitism rates and nest success recorded. Data was analyzed to determine any change in BHCO abundance, BHCO/host species ratios, and nest success.

Data collected during the BHCO control follow-up study at Alamo Lake SWA and Bill Williams River NWR showed an increase in BHCO abundance through 2005. In addition, the number of SWFL nests detected decreased in 2005. Parasitism rates and BHCO/host ratios increased through 2004, causing a decrease in host nest success. Parasitism rates and BHCO/host ratios decreased slightly during the 2005 breeding season. Throughout the study, BHCO parasitism rates for SWFL nests found at Alamo Lake SWA and Bill Williams River NWR remained relatively low.

Results from the 2005 breeding season indicated that BHCO parasitism rates remained relatively low four years after trapping was halted. An additional year of data collection was proposed to see if BHCO abundance and parasitism rates approached pre-trap numbers five years after cessation of BHCO control.

FY06 Activities: Point counts are being conducted at Alamo Lake SWA and Bill Williams River NWR to record density of cowbirds and passerine species susceptible to cowbird parasitism. Monitoring nests of passerine species susceptible to cowbird parasitism, including the SWFL, is being conducted throughout the breeding season.

Proposed FY07 Activities: This Work Task will be closed in FY06.

Pertinent Reports: *Brown-headed Cowbird Control Program: Results of Follow-up Monitoring-Years 2002-2005* will be posted on the LCR MSCP website.