

Work Task C21: Yellow-Billed Cuckoo Demographics Study

FY05 Estimate	FY05 Actual	Cumulative Accomplishment Through FY05	FY06 Approved Estimate	FY07 Proposed Estimate	FY08 Proposed Estimate	FY09 Proposed Estimate
\$115,000	\$112,964	\$112,964	\$0	\$0	\$0	\$0

Contact: John Swett, (702) 293-8574

Start Date: FY05 **Estimated Duration:** FY05

Long-Term Goal: Species research

Conservation Measures: AMM1, AMM2, AMM3, AMM5, AMM6, MRM1, MRM2, YBCU1, and YBCU2

Location: San Pedro River, AZ

Purpose: Conduct demographic studies of YBCU to better understand life requisites, especially necessary habitat requirements. Information obtained from this study will be used to develop a system monitoring program for YBCU and to plan future LCR MSCP riparian habitat creation projects.

Connections with Other Work Tasks (past and future): This work task was previously included in the Draft FY05 Work Tasks as Yellow Billed Cuckoo Demographics Study (C6). Information obtained in conjunction with C23 helped define the survey protocol being used in FY06 under D7. In addition, data defining habitat requirements will be used in the future to develop cottonwood-willow habitat for YBCU planned in E1, E3, E4, and E5.

Project Description: In 2002, a life history study of YBCU began along the San Pedro River in southeast Arizona. Populations along the LCR have not been adequately defined, so this study was conducted where known populations of YBCU occur. Presence/absence surveys were conducted along the San Pedro River, near Sierra Vista, Arizona. After YBCU were detected, mist nets were used to capture individual cuckoos and radio telemetry transmitters were attached to monitor their behavior. Data was collected to determine nest success, territoriality, intra-specific interactions, diet, and other important demographics.

Previous Activities: The first three years of this study were implemented by Reclamation prior to LCR MSCP initiation.

FY05 Accomplishments: Tasks completed during this phase of the study included surveys, telemetry, nest searching, survey methods testing, and video monitoring of nests. One hundred and sixty-three cuckoo detections were recorded, representing an unknown number of pairs. Observations confirmed that YBCU move hundreds of meters every day, making population estimates extremely difficult. Analysis of current methodology found a 37 percent detection rate

from tape playback surveys. This methodology detected up to four times the numbers found during comparable point count surveys. Video monitoring recorded a variety of prey items, including arthropods, caterpillars, and lizards.

Information obtained from the San Pedro River will be incorporated into a refined protocol for presence/absence surveys using the tape playback method. Demographic data will be used to define habitat characteristics to guide future creation and management of habitat.

FY06 Activities: While this work was completed in 2005, the final report is anticipated in 2006. The report preparation was funded in FY05.

Proposed FY07 Activities: This Work Task is closed.

Pertinent Reports: *Surveys and Life History Studies of the Yellow-billed Cuckoo: Summer 2005* will be posted on the LCR MSCP website.