

Work Task C52: Gilded Flicker Riparian Habitat Use and Seasonal Movement Research

FY14 Estimates	FY14 Actual Obligations	Cumulative Expenditures Through FY14	FY15 Approved Estimate	FY16 Proposed Estimate	FY17 Proposed Estimate	FY18 Proposed Estimate
\$300,000	\$290,368.44	\$333,727.06	\$160,000	\$300,000	\$300,000	\$0

Contact: Beth Sabin, (702) 293-8435, lsabin@usbr.gov

Start Date: FY12

Expected Duration: FY17

Long-Term Goal: Evaluate current distribution and abundance of gilded flicker on the LCR by conducting species-specific, non-random surveys

Conservation Measures: GIFL1 and MRM1

Location: The LCR MSCP planning area and other areas in Arizona where gilded flicker are located

Purpose: The purpose of this work task is to: (1) evaluate year-round habitat use, seasonal movements, and size of the breeding home range of the gilded flicker; (2) determine how often gilded flicker are using riparian habitat as nesting or roosting cavities; and (3) determine approximate dates of pair formation, incubation, nestling, and fledgling stages.

Connections with Other Work Tasks (Past and Future): Information obtained through this work task will be used in conjunction with data collected during post-development monitoring of habitat conservation areas (F2) and system-wide surveys conducted under Work Tasks D6 and D13 (closed). Information obtained through this work task will also be used in association with Work Task C24 to help define requirements for riparian obligate bird species.

Project Description: General bird surveys conducted under Work Task D6 have not detected gilded flicker breeding in riparian habitat within the LCR MSCP planning area or the western portion of the Bill Williams River. However, there have been incidental observations of gilded flicker using the riparian habitat in this area as family groups during the fall and winter months and occasionally during the summer months.

Additional research and monitoring is needed to understand how and when the gilded flicker is most likely to use riparian habitat within its range. This study will: (1) estimate time periods of breeding and post-breeding stages and

document breeding season behaviors to help interpret results of sightings, (2) document gilded flicker travel distances during and after nesting season to document if it is possible that birds nesting in saguaro habitat may also utilize disconnected riparian habitat, (3) help define habitat use (Anderson and Ohmart structural types) of the gilded flicker during the breeding and non-breeding season.

Previous Activities: The existing species profile and annotated bibliography were updated, and historical and recent reports and accounts were examined for detections within the LCR MSCP planning area and along the Bill Williams River. In FY12, preliminary surveys to locate breeding gilded flicker within the LCR MSCP planning area and adjacent areas were conducted. Areas where gilded flickers were observed include a family group in mesquite habitat along the Bill Williams River north of Mineral Wash Road; a pair of gilded flickers at McIntyre Park in Blythe, California; an incidental sighting of a gilded flicker at Yuma East Wetlands; and numerous gilded flickers readily detected in the saguaro habitat adjacent to the LCR MSCP planning area in Arizona.

In FY13, a study was initiated to document the breeding chronology, seasonal movement and breeding home range size, and year-round habitat use (Ohmart and Anderson structural types) of the gilded flicker. Existing methods to document species movements needed to be tested to ensure reliable study results before animals in riparian areas could be used in the study. An upland ephemeral wash study area was selected south of Quartzite, Arizona. Capture and radio telemetry tracking methods were tested, and information on the breeding chronology of the gilded flicker was collected. Four male gilded flickers in the study area were captured, fitted with backpack-mounted radio transmitters, and banded. Two male reference gilded flicker were captured and banded.

FY14 Accomplishments: In FY14, the study continued at the FY13 study site south of Quartzite. Testing continued on capture and radio telemetry tracking. Additional information on the breeding chronology of the gilded flicker also continued to be gathered.

Males and females were captured, banded, and outfitted with backpack-mounted radio transmitters; reference females were also captured and banded only to allow for comparisons. Different year-round tracking techniques were employed to allow for comparison to determine which was the most effective and cost efficient. Three males were fitted with GPS locators to test feasibility of tracking with this method. The feasibility and best techniques to capture juveniles post-fledge were explored, and two juveniles were outfitted with smaller retrix-mounted radio transmitters and monitored for 3 months to provide information on their tracking feasibility, habitat use, average home range size, and behavior while in family group formation. Due to various technical difficulties with the

backpack-mounted radio transmitters, not enough were functioning during the summer months to warrant tracking by plane to look into family group movements.

To document the timing of the different breeding stages, eight active nest cavities were monitored on a regular basis until nestlings fledged using the methods developed in FY13. The types of vocalizations made during different activities and time periods were also documented in FY14 using the same methods as in FY13.

FY15 Activities: Testing of tracking methods will be completed. This will involve tracking birds during the spring. Information on the gilded flickers gathered at the upland site will be summarized: (1) time periods of breeding and post-breeding stages and breeding season behaviors, (2) gilded flicker travel distances during and after nesting season, and (3) habitat use (Anderson and Ohmart structural types) of the gilded flicker during the breeding and non-breeding season.

It is anticipated that the reduced field effort in FY15 will require fewer funds.

Proposed FY16 Activities: Surveys will be conducted on gilded flickers in riparian habitat along the LCR and, if necessary, other Arizona watersheds. Flickers will be fitted with approved tracking equipment to: (1) estimate time periods of breeding and post-breeding stages and document breeding season behaviors to help interpret results of sightings, (2) document gilded flicker travel distances during and after nesting season to document if it is possible that birds nesting in saguaro habitat may also utilize disconnected riparian habitat, (3) help define habitat use (Anderson and Ohmart structural types) of the gilded flicker during the breeding and non-breeding season.

Pertinent Reports: The report titled *Literature Search and Exploratory Surveys for the Gilded Flicker along the Lower Colorado River, 2012* is posted on the LCR MSCP Web site. The 2013 and 2014 annual reports will be posted on the LCR MSCP Web site upon completion.