

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

FY16 Estimates	FY16 Actual Obligations	Cumulative Expenditures Through FY16	FY17 Approved Estimate	FY18 Proposed Estimate	FY19 Proposed Estimate	FY20 Proposed Estimate
\$300,000	\$151,012.21	\$632,616.85	\$300,000	\$0	\$0	\$0

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Start Date: FY12

Expected Duration: FY17

Long-Term Goal: Evaluate the current distribution and abundance of gilded flickers (*Colaptes chrysoides*) on the lower Colorado River 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 flickers are located

Purpose: The purposes of this work task are to (1) evaluate year-round habitat use, seasonal movements, and size of the breeding home range of the gilded flicker, (2) observe how often gilded flickers are using riparian habitat as nesting or roosting cavities, and (3) identify 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 during post-development monitoring of habitat conservation areas (F2) and system-wide surveys (D6).

Project Description: Surveys conducted under the LCR MSCP have not resulted in the detection of gilded flickers breeding in riparian habitats within the LCR MSCP planning area. However, there have been incidental observations of gilded flickers 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 habitats within its range to improve the effectiveness of surveys and confirm their habitat characteristics. This study will help (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 (*Carnegiea gigantea*) habitats may also use disconnected riparian habitats, and (3) define habitat use by the gilded flicker during the breeding and non-breeding seasons.

Previous Activities: The species profile and annotated bibliography were updated, and historical and recent records were examined for detections within the LCR MSCP planning area and along the Bill Williams River. In FY12, preliminary surveys were conducted to locate breeding gilded flickers within the LCR MSCP planning area and adjacent areas. Areas where gilded flickers were observed include a family group in honey mesquite (*Prosopis glandulosa*) 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 FY13–15, a study was conducted to document the breeding chronology, seasonal movement and breeding home range size, and year-round habitat use of the gilded flicker and test existing methods to document species movements. Capture and radio telemetry tracking methods were tested, and information on the breeding chronology, behaviors and vocalizations during pair formation, nesting, and family group formations of the gilded flicker was collected at an upland ephemeral wash study area that was selected south of Quartzsite, Arizona. Different year-round tracking techniques were employed to compare effectiveness and cost, including backpack and retri-mounted radio telemetry and Global Positioning System (GPS) locators; the GPS locator tracking method was least successful. Techniques and equipment were studied for effectiveness on adult males and females and juveniles. To document the timing of the different breeding stages, active nest cavities were monitored on a regular basis until nestlings fledged. Juvenile habitat use, average home range size, and behavior while in family group formation were also studied.

FY16 Accomplishments: In FY16, the study continued at the study site south of Quartzsite, Arizona. The previous studied territories and adjacent nesting habitat was monitored to recapture the males who were fitted with GPS transmitters in FY14. They were not relocated. Solo and paired gilded flickers, as well as active nest cavities and family groups, were monitored, and vocalizations during different activities and time periods throughout the year were documented.

Exploratory surveys were conducted at 20 sites throughout the lower Colorado River and western Arizona to identify gilded flickers in riparian habitat to be studied in FY17.

Territory monitoring could not be conducted in FY16 because gilded flickers were not located in riparian habitat. This resulted in less obligations.

FY17 Activities: Exploratory surveys will continue in riparian areas in order to locate a sufficient number of gilded flickers to test the new survey methods and confirm if gilded flicker behaviors and vocalizations in upland habitats occur in riparian areas. Testing of survey methods will be conducted at the Quartzsite, Arizona, study area and selected riparian areas. Presence survey methods and biologist training methods will be finalized, an updated species natural history will be prepared, and reports will be finalized.

Proposed FY18 Activities: This work task will be closed in FY17.

Pertinent Reports: The report titled *Development of Appropriate Radio Telemetry Techniques for Gilded Flickers (Colaptes chrysoides) in Western Arizona, 2013* is posted on the LCR MSCP Web site. The 2014 and 2015 annual reports will also be posted upon completion.