

Work Task F6: MacNeill's Sootywing Monitoring of Conservation Areas

| FY13 Estimates | FY13 Actual Obligations | Cumulative Expenditures Through FY13 | FY14 Approved Estimate | FY15 Proposed Estimate | FY16 Proposed Estimate | FY17 Proposed Estimate |
|----------------|-------------------------|--------------------------------------|------------------------|------------------------|------------------------|------------------------|
| \$80,000 | \$83,708.30 | \$310,605.91 | \$80,000 | \$80,000 | \$80,000 | \$80,000 |

Contact: Carrie Ronning, (702) 293-8106, cronning@usbr.gov

Start Date: FY09

Expected Duration: FY55

Long-term Goal: Post-development monitoring for MacNeill's sootywing.

Conservation Measures: MNSW2.

Location: Habitat-creation sites: Palo Verde Ecological Restoration Site, Cibola Valley Wildlife Conservation Area, Laguna Division Conservation Area, Hart Mine Marsh.

Purpose: The purpose of this work task is to monitor vegetation, plant-quality, and populations of MacNeill's sootywing in habitat created for the species.

Connections with Other Work Tasks (past and future): Habitat requirements were determined in Work Task C7, Survey and Habitat Characterization for MacNeill's sootywing.

Project Description: Habitat use by sootywings will be monitored. Habitat requirements of the species will be monitored in Conservation Areas that have the appropriate land cover type available.

Previous Activities: Habitat created for MacNeill's sootywing at CVCA and PVER was surveyed for adult sootywings beginning in 2009. In 2009 and 2010, sootywings were most abundant at CVCA Phase 4W, with >200 adults counted during September along a dirt road bisecting the plot. Sootywings were also abundant at a detached CVCA Phase 4W plot. Sootywings were rare (<5 adults per date) or absent at the other CVCA plots and at all of the PVER plots.

In 2011, the large population of sootywings previously recorded in 2009 and 2010 at CVCA Phase 4W were not present during 2011 surveys. In 2011, the most observations of sootywing were at PVER Phase 4. Sootywing populations were low (<5 adults per date) but increasing late in the season. Sootywing populations at the remaining CVCA and PVER plots were low or absent.

Sootywing monitoring methods changed during FY12. One random-transect was walked in each check monthly from April through August. Plots were monitored in CVCA Phases 2 and 3, CVCA Phase 4 West (2 checks) and East (3 checks), CVCA Phase 5 (2 checks), PVER Phase 4, and PVER Phase 5 (2 checks). Sootywings were generally absent throughout the season. A total of 7 sootyings were counted at CVCA, and a total of 13 sootyings were counted at PVER.

FY13 Accomplishments: Planted quail bush habitat was surveyed for adult sootyings during June-September 2013. Plots were located at Cibola Valley Conservation Area (CVCA) and Palo Verde Ecological Reserve (PVER). There were differences observed in habitat quality between the two locations, with low soil moisture and a high percentage of dry quail bush observed at CVCA relative to PVER. Lower numbers of adult sootyings were detected at CVCA in association with these habitat differences. Six sootyings were counted at CVCA during 2013 and 98 were observed at PVER.

FY14 Activities: Sootywing monitoring is planned for the summer in FY14. A new protocol will be developed to meet data requirements necessary to manage created habitats.

Proposed FY15 Activities: Sootywing monitoring will continue in FY15.

Pertinent Reports: Annual reports will be posted on the LCR MSCP website.