

Work Task F6: Post-Development Monitoring of MacNeill's Sootywing in Habitat Creation Sites

FY07 Estimates	FY07 Actual	Cumulative Accomplishment Through FY07	FY08 Approved Estimate	FY09 Proposed Estimate	FY10 Proposed Estimate	FY11 Proposed Estimate
\$0	\$0	\$0	\$0	\$10,000	\$25,000	\$50,000

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Start Date: FY09

Expected Duration: FY55

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

Conservation Measures: MNSW2.

Location: Habitat-creation sites, initially Palo Verde Ecological Restoration Site.

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 are being determined in C7: Survey and Habitat Characterization for MacNeill's Sootywing. F6 will be phased in as C7, to be completed during FY09-10.

Project Description: Preliminary results from C7 have determined that sootywings require host plants (*Atriplex lentiformis*) that are larger than 1.6 m in height, greater than 64% in plant water content, and greater than 3.2% in leaf nitrogen content. Sootywings also require plants other than *A. lentiformis* for nectar (e.g., *Heliotropium curassavicum* [Boraginaceae] and *Sesuvium verrucosum* [Aizoaceae]). These attributes will need to be monitored in created habitat. Monitoring host plant water content is especially critical, as it will be driven by the timing and amounts of irrigation. Utilization of new habitat by sootywings also will need to be determined. This work task will need to allow for additional determinations (i.e., adaptive management) of habitat needs if created habitat fails to become colonized.

Previous Activities: None. This is a new start for FY09.

FY07 Accomplishments: None.

FY08 Activities: None.

Proposed FY09 Activities: Habitat requirements described above (host- plant size and water content and nectar sources) will be monitored throughout the period when sootywings fly (April

1 to October 1). Leaf nitrogen content will be measured if apparently suitable habitat is not colonized. Utilization of created habitat by sootywings also will be monitored by surveying adults, eggs, and larvae. Other factors not previously examined (i.e., sootywing dispersal or transplantation) may need to be examined if created habitat is not colonized.

Pertinent Reports: N/A.