



**CESU Final Report Summary for
Roseate Spoonbill Nesting in Florida Bay Annual Report 2009-2010 - W912HZ0920021**

Purpose: Determine where Roseate Spoonbill breeding birds disperse during the non-breeding season, investigate the possibility of breeding bird exchanges between Florida Bay and other breeding locations around the state, state-wide regional movements of the entire population, and nesting success.

Location: Spoonbills nest on 40 keys in Florida Bay. The keys were divided into regions – Northwest, Northeast, Southeast, Central, and Southwest based on the primary foraging areas.

Methods: During the 2009-10 nesting season (Nov 2009-May 2010), complete nest counts were performed in all five regions of the bay by entering the colonies and thoroughly searching for nests. Nesting success was estimated for four of the five regions through mark and revisit surveys at the most active colony or colonies within each region (hereafter referred to as focal colonies). These surveys entailed marking up to 60 nests shortly after full clutches had been laid, and then revisiting the colonies on a seven to ten-day cycle. Nests were monitored until failure or until all surviving chicks reached at least 21 days of age, the age at which chicks begin branching and can no longer be assigned to a nest. A colony was considered successful if it averaged at least one chick to 21 days per nesting attempt. Spoonbill nestlings were banded at six of the 12 colonies that were active that season.

Results: Overall, spoonbill nests in Florida Bay were initiated later than usual during the study period. While productivity was extremely low overall, those nests that were initiated later in the season at Sandy Key were considerably more successful than those initiated during the first wave of nests. Spoonbills time their nesting to coincide with the annual drawdown during the Florida Bay dry season. The unusually high water levels on the spoonbill foraging grounds during the study and the resulting lack of concentrated prey likely led to the delayed, and ultimately unsuccessful, nesting baywide. The extreme cold event in early to mid-January may have played a role in the low nesting effort and productivity as well. In all, only 24 chicks were banded from 16 nests across Florida Bay. Of those, 12 (50%) were found dead, and only seven (29%) were observed as fledglings before leaving their natal colonies. These data continue to demonstrate that Florida Bay is no longer the principal source location for spoonbill recruitment into Florida's breeding population.

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