

WINTERING PIPING PLOVERS IN SOUTH TEXAS: COMPARING REMOTE AND MANAGED BARRIER ISLAND GULF BEACHES. Anthony F. (Tony) Amos, Research Fellow, University of Texas Marine Science Institute, 750 Channel View Drive, Port Aransas, TX, 78373; afamos@utmsi.utexas.edu.

As part of a long-term study of two South Texas barrier island Gulf beaches, Piping Plover (*Charadrius melodus*) populations have been monitored for 27 years on Mustang Island (MIGB) and 10 years on San Jose Island (SJGB). The Mustang Island transect covers 11.7 km of Gulf shoreline (n=3645) and is impacted by beachgoers, vehicular traffic and beach management techniques using heavy equipment. The San Jose Island transect (37.0 km, n=354) is accessible only by boat and is impacted by occasional ranch vehicles and cattle. Both are affected by tides, storms, wind, and marine debris. A total of 115,000 Piping Plovers have been counted to-date. Group size, guild associations, site fidelity, and behavior are monitored. The ratio of per kilometer Piping Plover density (when present) on MIGB to that on SJGB is 5.7:1, contrasting dramatically with densities for Snowy Plover (*C. alexandrinus*) (1:6.1) and Wilson's Plover (*C. wilsonia*) (1:9.2) indicating that the Piping Plover is more adaptable to disturbance than the other two locally common Charadriid plovers. Other factors considered are foraging v/s roosting and loafing, tidal stage, beach surfaces, and weather conditions. Both Snowy and Wilson's plover populations are declining on MIGB, while Piping Plover numbers are stable with some long-term oscillations. Recently, color-banded Piping Plovers have provided remarkable insight into their site fidelity and territoriality on MIGB. The term "wintering" may be a misnomer as some individuals remain on MIGB beach from July to May the following year.