

MOVEMENTS AND MORTALITY OF AMERICAN WHITE PELICANS BREEDING AT MEDICINE LAKE NATIONAL WILDLIFE REFUGE^{TWS}

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Status of American white pelicans (*Pelecanus erythrorhynchos*) has been of conservation concern because the species nests in large colonies vulnerable to disturbance and habitat loss. Improved protection and greater public awareness are credited with arresting population decline after the 1960s. During recent decades, populations have increased to levels where they are now considered a nuisance on some wintering grounds, e.g., depredation on fish farms. Knowledge of colony dynamics and migratory movements from the northern Great Plains may help alleviate human-pelican conflicts in the Mississippi Delta region. We analyzed encounter data from pelicans banded at Medicine Lake National Wildlife Refuge (MLNWR) from 1957 to 1984 to determine long-range movements. MLNWR contains one of the largest nesting colonies in North America, with an average of 4000 nests counted annually the past decade. Band encounters ($n = 253$) revealed that pelicans from MLNWR use the Mississippi and Central flyways to reach wintering areas primarily along the Gulf of Mexico. Movements of five satellite-tagged pelicans in 2002 corroborate patterns inferred from banding data. Most band encounters were of dead birds with cause of death including shooting, electrocution/collision, and entanglement. To help guide proper management by USDI Fish and Wildlife Service, on-going research at MLNWR will focus on determining habitat use and foraging areas of breeding pelicans, assessing local population dynamics, and investigating factors influencing productivity and survival.