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REPRODUCTIVE HEALTH OF THE FLORIDA FLOCK OF INTRODUCED WHOOPING CRANES

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Abstract: We examined the reproductive parameters of the introduced non-migratory flock of whooping cranes in Florida. Of 289 cranes introduced, 67 males and 65 females survived at least 3 years. The first behavioral pairs appeared in 1995, and eggs were first laid in 1999. In total, eggs were laid in 47 nests, 17 chicks hatched, and 4 young fledged by 2005. Severe drought conditions through 2001 were thought to be the reason for low reproductive nest success. In 2003 nesting conditions improved and 71% of nests with eggs, hatched chicks. During the next 2 years, with continued wet conditions, the proportion of pairs that laid eggs increased, but only 17% of those nests hatched. Embryos could not be seen in most of the decomposed eggs that were examined. In an effort to determine the cause for the low reproductive success of the flock, we examined the effects of behavioral pair formation, mortality, gonad size and histology, age, egg laying, hatching success, egg size, fertility, and egg microbial culture results on nesting success. When compared with the natural wild Aransas/Wood Buffalo flock, the productivity of birds reaching 8 years (100% egg laying, hatching, 60% fledging) was very low. When compared with the originating captive flock, however, evidence of fertility was similar. Productivity did however, increase in the captive flock beyond 8 years of age. At the time of this report, the reproductive birds in the Florida resident flock remain relatively young when compared with the captive flock. Therefore there may be improvement of reproductive success as the Florida flock ages.

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