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THE ONE-BY-ONE METHOD FOR RELEASING CRANES

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Abstract: Although the trend for the past 2 decades has been toward releasing naive groups of juveniles after a lengthy acclimation period, in 5 separate releases (1996–2000) we tested the idea that naive juvenile greater sandhill cranes (Grus canadensis tabida) would survive better if released singly into a wild flock of predator-wary birds than if left as a group, inexperienced at foraging and ill prepared to avoiding predators. We released 3 groups of hand-reared juveniles (n = 12 [1996]; n = 8 [1998], n = 12 [1999]) into a wild flock of sandhill cranes (ca 300 birds) on wintering grounds near Gila Bend, Arizona. Another 8 parent-reared colts were released into a small group (4) of subadult greater sandhill cranes (survivors of the 1996 trucking experiment [Ellis, et al. 1997; Ellis et al. 2001, Mummert et al. 2001]) in northcentral Arizona. Another 8 juveniles, costume-reared from hatching, were released into wild sandhill crane flocks in central Wisconsin at autumn staging areas. In all of these tests, cranes were released 1 or 2 at a time, either at the periphery of a wild flock or at a known roost site. Most birds were released in daylight at a foraging area, but because this was a pilot project, we tried a variety of methods. We released a few individuals at odd times (e.g., midnight) and in odd ways (e.g., by flushing a release crane as a wild flock passed overhead). A few birds were initially left stranded after we placed them at ephemeral roosts that had been used recently, but not subsequent to our visit. However, once we made the necessary adjustments, and regardless of release time or situation, all of our cranes very quickly joined their adoptive flocks. We experienced excellent survival, including 100% survival for all 8 of our parentreared fledgling colts released on the summering ground and followed until they disappeared at the time of migration. Further, all (32) hand-reared birds released on the wintering grounds survived the winter. Also all 8 of the juveniles reared and released in Wisconsin successfully migrated south and returned north to Central Wisconsin the following spring. These results recommend the one-by-one method as a promising strategy for releasing juvenile cranes with minimal training, handling, and maintenance. The method provides a likely strategy for building wild flocks of endangered cranes once a core group is established by some other method.

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