

2022

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Recommended Citation

Johnson, Lacrecia A.; Butler, Matthew J.; Chester, Rebecca; Goodwin, John G. Jr.; Harris, Grant M.; Sesnie, Steven E.; and Wolfe, Donald H. (2022) "Masked Bobwhite Recovery: The Need for a Multifaceted Approach," *National Quail Symposium Proceedings*: Vol. 9 , Article 39.

<https://doi.org/10.7290/nqsp09YuyH>

Available at: <https://trace.tennessee.edu/nqsp/vol9/iss1/39>

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MASKED BOBWHITE RECOVERY: THE NEED FOR A MULTIFACETED APPROACH

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ABSTRACT

Masked bobwhite (*Colinus virginianus ridgwayi*) is a critically endangered quail historically found in the Sonoran grasslands of southern Arizona, USA and Sonora, Mexico. Native populations of masked bobwhite may already be extinct in the wild, but captive populations exist in the United States at G. M. Sutton Avian Research Center (Oklahoma, USA), Buenos Aires National Wildlife Refuge (Arizona, USA), and various zoos. The 47,000-hectare Buenos Aires National Wildlife Refuge, located in south-central Arizona, was established primarily for reintroduction of this bird. Recovery efforts within the refuge boundary in the 1980s and 1990s were initially successful but suffered debilitating setbacks that ultimately resulted in failure. Substantial releases were suspended in 2005. Improved habitat restoration efforts and promising conditioning and release techniques led to the belief that reintroductions could again be attempted and successful. In 2016–2017 plans were developed to increase captive propagation and reinitiate release efforts. Releases began in 2018. Over-winter survival of birds released in 2018–2019 was encouraging, and reproduction of wild birds was documented in 2019. An existing base of wild birds established from these releases could help masked bobwhite populations recover in the state. Habitat restoration, better methods of rearing, release, and conditioning, and improved production from captive facilities also inspire hope that a full recovery of the species in Arizona is possible.

Citation: Johnson, L. A., M. J. Butler, J. G. Goodwin, Jr., R. Chester, G. M. Harris, S. E. Sesnie, and D. H. Wolfe. 2022. Masked bobwhite recovery: the need for a multifaceted approach. National Quail Symposium Proceedings 9:167. <https://doi.org/10.7290/nqsp09YuyH>

Key words: Buenos Aires National Wildlife Refuge, call-box, *Colinus virginianus ridgwayi*, conditioning, covey augmentation, endangered species, foster parent, habitat restoration, masked bobwhite, over-winter survival, quail releases

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