

# Biological Case Against Downlisting the Whooping Crane and for Improving Implementation under the Endangered Species Act

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## Abstract

The Whooping Crane (*Grus americana*; WHCR) is a large, long-lived bird endemic to North America. The remnant population migrates between Aransas National Wildlife Refuge, USA, and Wood Buffalo National Park, Canada (AWBP), and has recovered from a nadir of 15-16 birds in 1941 to ~540 birds in 2022. Two ongoing reintroduction efforts in Louisiana and the Eastern Flyway together total ~150 birds. Evidence indicates the U.S. Fish and Wildlife Service (USFWS) is strongly considering downlisting the species from an endangered to a threatened status under the Endangered Species Act (ESA). We examined the current status of the WHCR through the lens of ESA threat factors, the USFWS's Species Status Assessment (SSA) framework, and other avian downlisting actions to determine if the action is biologically warranted. Our research indicates that WHCRs are facing an intensification of most threat drivers across populations and important ranges. The AWBP is still relatively small compared to other crane species and most birds of conservation concern. To date, only one avian species has been downlisted from an endangered status with an estimated population of <3,000 individuals. Representation in terms of WHCRs historic genetic, geographic, and life history variation remains limited. Also, the lack of spatial connectivity among populations, reliance of the reintroduced populations on supplementation, and continued habitat loss suggest that WHCR populations may not be resilient to large stochastic disturbances. Given that reintroduced populations are not self-sustaining, neither supplies true redundancy for the AWBP. Proposed downlisting before recovery plan population criteria have been met is objectively unwarranted and reflects USFWS inconsistency across ESA actions. Only by incorporating basic quantitative criteria and added oversight into ESA listing decisions can we avoid an action as misguided as downlisting the Whooping Crane without consideration of its recovery plan criteria or ostensibly its population ecology.

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