

Whooping Crane Survey Results: Winter 2024–2025

557 Wild Whooping Cranes Estimated (95% CI = 478.7–645.1)

The U.S. Fish and Wildlife Service estimated the abundance of whooping cranes in the Aransas-Wood Buffalo population for the winter of 2024–2025. Preliminary analyses of the survey indicated 557 whooping cranes (95% CI = 478.7–645.1; CV = 0.137) inhabited the primary survey area (Figure 1). This estimate included at least 41 juveniles (95% CI = 37.7–53.4; CV = 0.172) and 193 adult pairs (95% CI = 167.5–221.4; CV = 0.135). Recruitment of juveniles into the winter flock this winter was 8.1 chicks (95% CI = 6.3–10.5; CV = 0.132) per 100 adults.

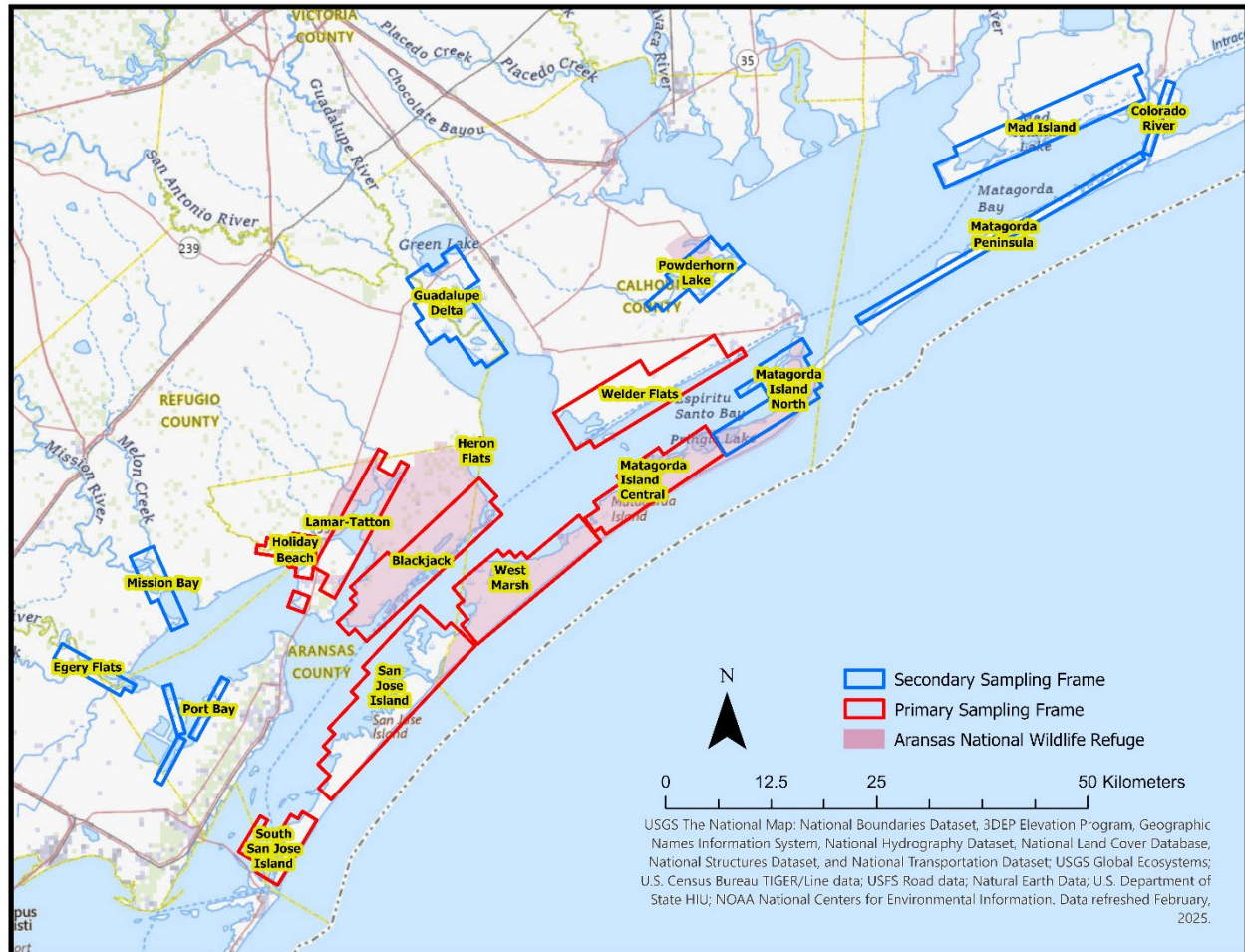


Figure 1. The sampling area used to monitor whooping crane abundance on their wintering grounds along the Texas coast of the Gulf of America, USA.

During winter 2024–2025, the U.S. Fish and Wildlife Service conducted surveys in late January and early February using a Quest Kodiak aircraft. The primary survey areas (approximately 170,500 acres; Figure 1) were flown six times during January 22–31, 2025 (6 surveys each). The secondary survey areas (approximately 85,250 acres; Figure 1) were flown twice between February 1–2, 2025. This survey was a cooperative effort conducted by the U.S. Fish and Wildlife Service National Wildlife Refuge System in

Region 2, U.S. Fish and Wildlife Service Migratory Bird Program, U.S. Fish and Wildlife Service Ecological Services, Guadalupe-Blanco River Authority, and Canadian Wildlife Service.

The long-term growth rate (winter 1938–1939 to winter 2024–2025) in the whooping crane population has averaged 4.33% ($n = 83$; 95% CI = 1.78–6.80%). The population has appeared to remain stable over the last two years (Table 1; Figure 2). The Canadian Wildlife Service reported at least 33 whooping crane chicks were fledged at Wood-Buffalo National Park in summer 2024. We estimated 41 juveniles (95% CI = 32.7–53.4) on the wintering grounds this year. Although juvenile plumage color can be less distinct in late-January, biasing estimates of productivity low, the Canadian Wildlife Service reported productivity was below the 20-year average this year.

During the survey period, many whooping cranes were observed outside of the primary survey areas. Table 2 provides our best understanding of whooping cranes outside the primary survey areas during the survey period. We cannot ascertain if all or some of these birds moved in and out of the primary survey area during the survey period. Therefore, some unknown number of birds may be missed while others counted.

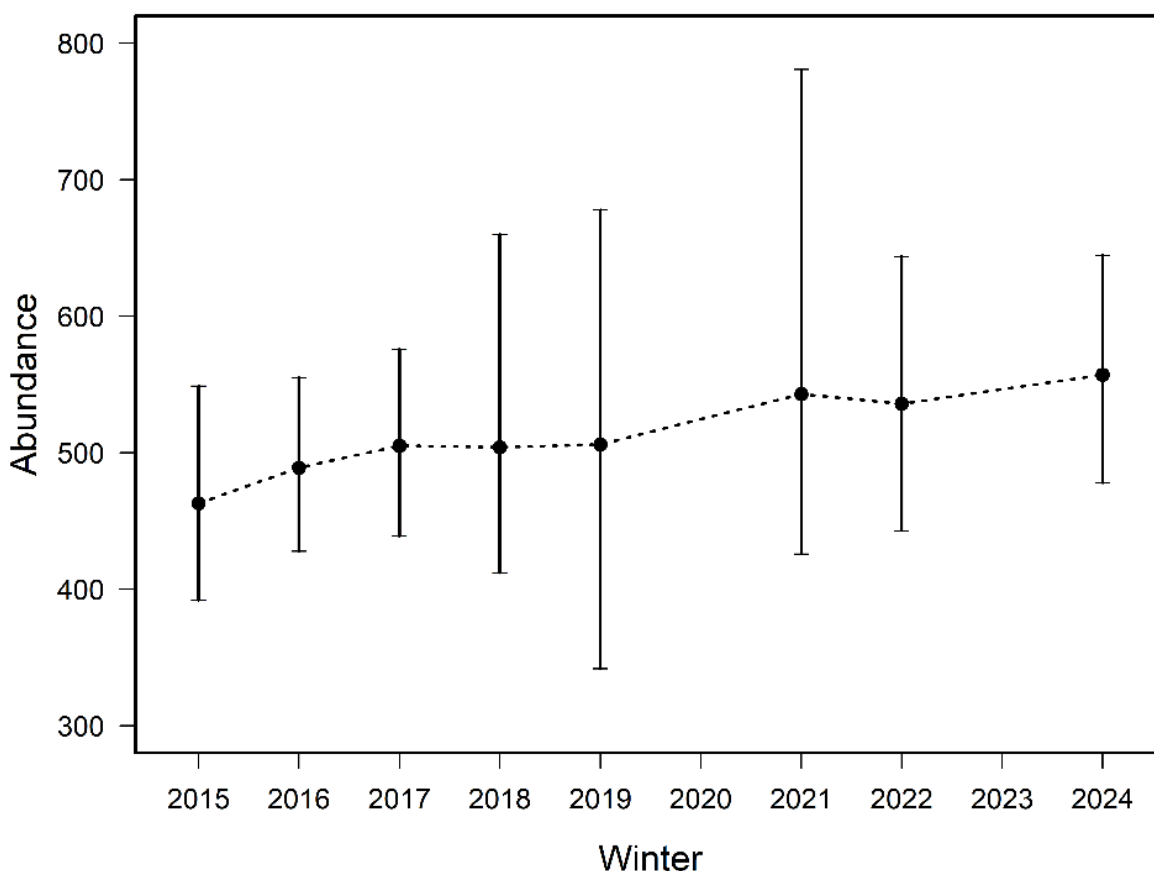


Figure 2. Time-series of whooping crane abundance estimates and 95% confidence intervals for the Aransas-Wood Buffalo population on their wintering grounds (primary sampling frame), winter 2015–2016 through winter 2024–2025.

The survey protocol contains guidelines for promoting secondary survey areas into the primary survey areas. During winter 2021–2022, we observed enough whooping crane groups in the Heron Flats and the South San Jose Island survey areas to promote them into the primary survey area. These two areas were included as part of the primary survey area beginning in winter 2022–2023. During winter 2024–2025, the observed number of whooping cranes within the Guadalupe Delta survey area met the criteria for inclusion in future surveys.

Table 1. Preliminary whooping crane abundance estimates for the Aransas-Wood Buffalo population on their wintering grounds, winter 2015–2016 through winter 2024–2025.

Survey year ^a	Survey month	Aircraft	Abundance ^b	CV	95% LCL	95% UCL	No. assumed beyond primary survey area ^c
winter 2015–2016	March	Kodiak	463	0.095	392	549	8
winter 2016–2017	March	Kodiak	489	0.116	428	555	6
winter 2017–2018	February	Kodiak	505	0.069	439	576	21
winter 2018–2019	February	Kodiak	504	0.122	412	660	12
winter 2019–2020	January	Kodiak	506	0.168	342	678	29
winter 2021–2022	January	Kodiak	543	0.182	426	781	38
winter 2022–2023	January	Kodiak	536	0.146	443	644	14
winter 2024–2025	January	Kodiak	557	0.137	478	645	68

^a Surveys were not conducted during winter 2020–2021 and winter 2023–2024.

^b Estimated whooping crane abundance in the primary sampling area using aerial surveys and hierarchical distance sampling. CV = coefficient of variation, LCL = lower confidence limit, and UCL = upper confidence limit.

^c Provides our best understanding of the number of whooping cranes, at the time of the aerial surveys, that were outside of the primary survey areas. This information was based on data from Texas Whooper Watch, eBird reports, iNaturalist reports, the whooping crane GPS tracking study, and aerial surveys conducted in the secondary survey areas.

Table 2. Whooping cranes documented outside of the primary survey area during January 22–February 2, 2025.

General area ^a	Data source	Adults	Juveniles	Total	Notes
Nueces County, Texas	eBird, iNaturalist	2	1	3	One family group reported near Leonabelle Turnbull Birding Center during the survey period.
Wharton and Colorado counties, Texas	GPS tracking study, International Crane Foundation, iNaturalist	16	2	18	Multiple family groups reported during survey period using flooded agricultural habitat; observed throughout the winter period.
Guadalupe Delta (secondary survey area)	Aerial Survey, GPS tracking study	29	1	30	Multiple family groups detected during survey period.
Matagorda Island North (secondary survey area)	Aerial Survey, GPS tracking study	4	0	4	Multiple family groups detected during survey period.
Mad Island (secondary survey area)	Aerial Survey	8	1	9	Multiple family groups detected during survey period.
Powderhorn Lake (secondary survey area)	Aerial Survey, GPS tracking study	3	1	4	Multiple family groups detected during survey period.

^a All the secondary survey areas were flown twice during winter 2024–2025.

The data and results presented in this report are preliminary and subject to revision. This information is distributed solely for the purpose of providing the most recent information from aerial surveys. This information does not represent and should not be construed to represent any U.S. Fish and Wildlife Service determination or policy.

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