

Note

Great Egret (*Ardea alba*) × Great Blue Heron (*Ardea herodias*) hybrid nestlings observed in Parkland County, Alberta

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Abstract

We report multiple observations of four Great Egret (*Ardea alba*) × Great Blue Heron (*Ardea herodias*) hybrid nestlings in Parkland County, Alberta, in July 2025. To our knowledge, this is the first published report of an observation of this hybrid combination in Canada and the first report of a nest with young of this hybrid combination anywhere. We outline the timeline and nature of the observations, provide photographs of the nestlings and an adult Great Egret visiting the nest, and briefly discuss the breeding ecology of Great Egrets and Great Blue Herons. Finally, we note observations, including photographs, of an apparent hybrid Great Egret × Great Blue Heron observed in Calgary, Alberta, in September 2025.

Key words: Great Egret; *Ardea alba*; Great Blue Heron; *Ardea herodias*; herons; hybrid; hybridization; interspecific mate choice; nest; Alberta

Although Great Egret (*Ardea alba*) and Great Blue Heron (*Ardea herodias*) are congeneric and breed in sympatry from southeastern Canada across much of the contiguous United States to northern Mexico and the Caribbean, they are believed to hybridize rarely. Apparent Great Egret × Great Blue Heron hybrids have been documented in Pennsylvania, Alabama, and Florida (Malosh 2004; eBird 2025a). To our knowledge, before 2025, this hybrid combination had not been observed in Canada, nor had an active nest with Great Egret × Great Blue Heron hybrid offspring been observed anywhere. We report observations of a nest with four individuals with characteristics consistent with hybridization between the two species in Parkland County, Alberta, in July 2025.

Great Blue Herons are a common breeding species across much of Alberta, particularly in the grassland and aspen parkland natural regions (FAN 2007; eBird 2025b). Conversely, Great Egrets are rare in the province, although they appear annually and have been recorded breeding (Hudon *et al.* 2007; Royal Alberta Museum 2025). The single documented occurrence of breeding in Alberta was at Big Lake, near St. Albert, where four young fledged in late October 2005.

Beginning in 2021, at least one Great Egret was

reported and photographed regularly near Spruce Grove, a small city situated ~10 km west of Edmonton (eBird 2025c). It had not been documented nesting before 2025. In late June and early July 2025, several observers became increasingly convinced that the egret was visiting a heronry in the Glory Hills area, ~12 km northwest of Spruce Grove. The heronry (location purposely not reported) is on private property and has been in use for at least 25 years, although it has shifted by as much as 300 m during that time (P. Klak pers. comm. 24 September 2025). Currently, it is in a stand of spruce, aspen, and birch overlooking a small wetland (~10 ha), and we estimate it contains 15–20 nests. The surrounding area includes forest, wetland, and grassland, much of which has been converted to cropland. It is largely rural, with many acreages and farms.

Following multiple visits to the site, on 12 July, D.S. found and photographed a nest in a White Spruce (*Picea glauca* (Moench) Voss) with four young birds appearing to be Great Egret × Great Blue Heron hybrids. He noted that they were markedly paler than nearby Great Blue Heron nestlings and lacked the extensive dark streaking on the foreneck and chest typical of juveniles of that species (Dunn and

Alderfer 2017). Further, the birds had largely yellow-orange—rather than dusky—upper mandibles and did not exhibit rusty fringes in the plumage, which is also expected of Great Blue Heron young (Vennesland and Butler 2020). Although leucism has been recorded in Great Blue Herons (Butler and Clermont 2011), the consistency of the colour pattern exhibited across all four nestlings rules out leucism as a reasonable explanation for the paler plumage. In addition, the grey tones on the birds' upperparts were clearly inconsistent with Great Egret (Figure 1). No adult birds were observed visiting the nest at this time.

On 15 July, D.S. returned with avid birders Aubrey Robson and Percy Zalasky. They watched the nest for 2.5 h (0830–1100). Again, no adult bird attended the nest. Two days later, D.S. and Robson returned to the site at 0730. At ~0930, an adult Great Egret visited the nest and fed the young (Figure 2). On 26 July, D.S. and Zalasky returned, observing only two of the hybrid nestlings, one of which had moved from the nest site to another limb of the tree. This was the last observation of the nestlings at the heronry.

A Great Egret continued to be seen and photographed near Spruce Grove through early October (eBird 2025c); however, none of the hybrid offspring were sighted in the area. An apparent hybrid Great Egret $\times$ Great Blue Heron was documented in Beddington Creek, Calgary (51.149°N, 114.035°W) at two locations less than 1 km apart on 17, 29, and 30 September (Figure S1). Although this site lies ~280 km south of the heronry described above, considering how rare this hybrid combination is, we believe there is a good chance that this bird is one of the nestlings photographed near Spruce Grove in July. It exhibited characteristics intermediate between Great Egrets and Great Blue Herons, with upper parts largely blue-grey, under parts white from foreneck to belly, pale head and upper neck, mostly yellow-orange bill, and very dark legs and feet.

Both Great Blue Herons and Great Egrets typically nest colonially, and it is common for such colonies to include multiple heron species (Custer *et al.* 1980; McCrimmon *et al.* 2020; Vennesland and Butler 2020); however, hybridization appears to occur only rarely. In this case, it may be that a Great Egret mated with a Great Blue Heron because it was unable to find a conspecific with which to breed. Qvarnström *et al.* (2023) found that among species where mate choice errors (a term used by those authors) occur rarely, hybridization is more likely where one species is scarce. Although this is the only observation of this hybrid combination at the edge of either parent species' range (in this case, where Great Egret conspecifics might be scarce), it offers the strongest evidence of hybridization between the two species to date: an



FIGURE 1. Four Great Egret (*Ardea alba*) $\times$ Great Blue Heron (*Ardea herodias*) hybrid nestlings, near Spruce Grove, Alberta, 17 July 2025. Photo a: Dan Stoker. Photo b: Aubrey Robson.

adult Great Egret feeding young with hybrid characteristics at a nest in a Great Blue Heron rookery.

Barring nest failure, both Great Blue Herons and Great Egrets typically raise only one brood per season, as nest cycles require ~95–100 days (COSEWIC 2008; McCrimmon *et al.* 2020; Vennesland and Butler 2020). Clutch sizes vary from one to six, averaging three, for Great Egrets (Pratt and Winkler 1985; Vennesland and Butler 2020), and one to eight, averaging three to five, for Great Blue Herons, with average clutch sizes larger at higher latitudes (COSEWIC 2008). In both species, both parents incubate eggs and care for young (Pratt 1970; McCrimmon *et al.* 2020; Vennesland and Butler 2020). Frequency of feeding visits declines as young near the fledgling stage (Pratt 1970; Vennesland and Butler 2020), which may explain why only one adult bird was observed attending the nest during several non-consecutive hours of observation.

We are interested in learning whether this instance of hybridization will prove to be an isolated incident in Alberta. We would be happy to learn of any other observations of apparent hybrid Great Egret $\times$ Great Blue Herons in the province or neighbouring jurisdictions.



FIGURE 2. Adult Great Egret (*Ardea alba*) visiting the nest and feeding the hybrid young, near Spruce Grove, Alberta, 17 July 2025. Photos: Aubrey Robson.

Author Contributions

Observation: D.S.; Conceptualization: D.S. and D.R.S.; Writing – Original Draft: D.R.S.; Writing – Review & Editing: D.S. and D.R.S.

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Literature Cited

- Butler, R.W., and T.J. Clermont. 2011. Leucistic Great Blue Heron (*Ardea herodias*) in British Columbia, Canada, with comments on white and blue groups. *Journal of Heron Biology and Conservation* 1: 3.
- COSEWIC (Committee on the Status of Endangered Wildlife in Canada). 2008. COSEWIC assessment and update status report on the Great Blue Heron, *Ardea herodias fannini*, *fannini* subspecies, in Canada. COSEWIC, Ottawa, Ontario, Canada.
- Custer, T.W., R.G. Osborn, and W.F. Stout. 1980. Distri-

- bution, species abundance, and nesting-site use of Atlantic coast colonies of herons and their allies. *Auk* 97: 591–600. <https://doi.org/10.1093/auk/97.3.591>
- Dunn, J.L., and J. Alderfer. 2017. National Geographic Field Guide to the Birds of North America. 7th edition. National Geographic, Washington, DC, USA.
- eBird. 2025a. Hybrid Great Egret × Great Blue Heron. eBird range maps. Cornell Lab of Ornithology, Ithaca, New York, USA. Accessed 1 November 2025. <https://ebird.org/map/x00677>.
- eBird. 2025b. Great Blue Heron (*Ardea herodias*). eBird range maps. Cornell Lab of Ornithology, Ithaca, New York, USA. Accessed 1 November 2025. <https://ebird.org/map/grbher3>.
- eBird. 2025c. Great Egret (*Ardea alba*). eBird range maps. Cornell Lab of Ornithology, Ithaca, New York, USA. Accessed 1 November 2025. <https://ebird.org/map/greegr>.
- FAN (Federation of Alberta Naturalists). 2007. The Atlas of Breeding Birds of Alberta: a Second Look. Federation of Alberta Naturalists, Edmonton, Alberta, Canada.
- Hudon, J., R. Klauke, R. Knapp, M.R. Lein, J. Riddell, B. Ritchie, and R. Wershler. 2007. Seventh report of the Alberta Bird Record Committee. *Nature Alberta* 37(2): 31–33.
- Malosh, G. 2004. Great Blue Heron × Great Egret in Washington County. *Pennsylvania Birds* 18: 72–73. Accessed 1 August 2026. <https://pabirds.org/pabirds/backissues/PBV18N2.pdf>.
- McCrimmon, Jr., D.A., J.C. Ogden, G.T. Bancroft, A. Martínez-Vilalta, A. Motis, G.M. Kirwan, and P.F.D. Boesman. 2020. Great Egret (*Ardea alba*), version 1.0. *In* Birds of the World. Edited by S.M. Billerman. Cornell Lab of Ornithology, Ithaca, New York, USA. <https://doi.org/10.2173/bow.greegr.01>
- Pratt, H.M. 1970. Breeding biology of Great Blue Herons and Common Egrets in central California. *Condor* 72: 407–416. <https://doi.org/10.2307/1366387>
- Pratt, H.M., and D.W. Winkler. 1985. Clutch size, timing of laying, and reproductive success in a colony of Great Blue Herons and Great Egrets. *Auk* 102: 49–63. <https://doi.org/10.2307/4086822>
- Qvarnström, A., T. Veen, A. Husby, M. Ålund, and F.J. Weissing. 2023. Assortative mating in an ecological context: effects of mate choice errors and relative species abundance on the frequency and asymmetry of hybridization. *American Naturalist* 201: 125–137; <https://doi.org/10.1086/722156>
- Royal Alberta Museum. 2025. Official list of the birds of Alberta: taxonomy. Royal Alberta Museum, Edmonton, Alberta, Canada. Accessed 2 November 2025. <https://tinyurl.com/2sa7bupd>.
- Vennesland, R.G., and R.W. Butler. 2020. Great Blue Heron (*Ardea herodias*), version 1.0. *In* Birds of the World. Edited by A.F. Poole. Cornell Lab of Ornithology, Ithaca, New York, USA. <https://doi.org/10.2173/bow.grbher3.01>

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SUPPLEMENTARY MATERIAL:

FIGURE S1. An apparent Great Egret (*Ardea alba*) × Great Blue Heron (*Ardea herodias*) hybrid in Beddington Creek, Calgary, Alberta, on 17 (a) and 30 (b) September 2025. Photo a: Neena Jordan. Photo b: Parminder Kaur.