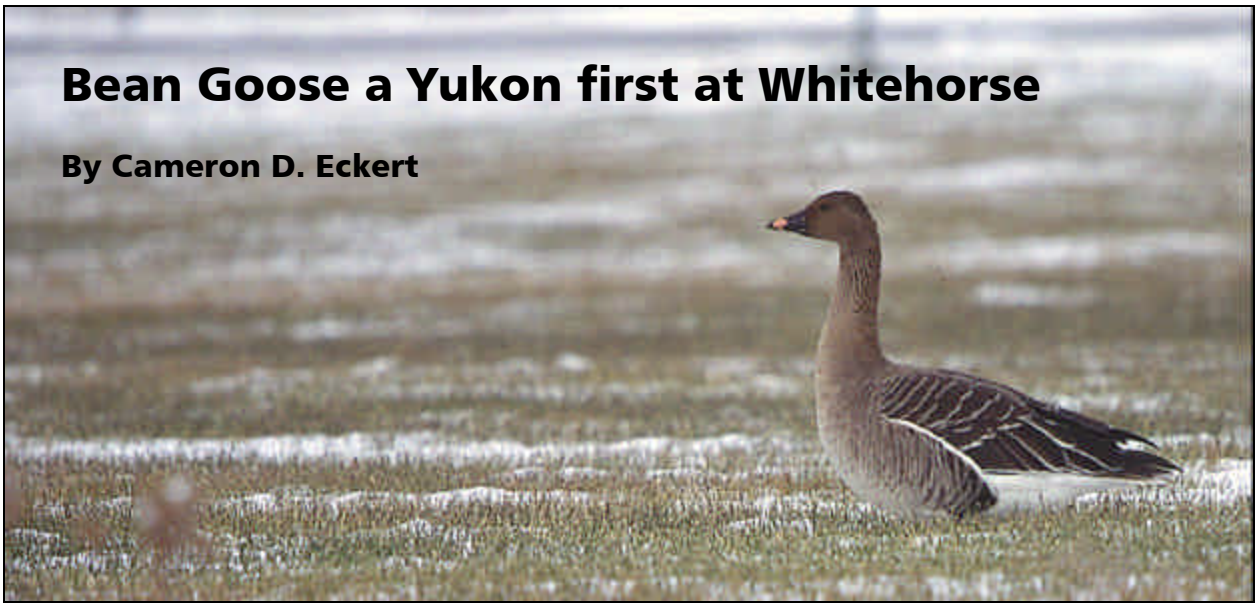
# Bean Goose a Yukon first at Whitehorse

**By Cameron D. Eckert**



**Bean Goose, October 23, 1999. Whitehorse, Yukon. Photo by Cameron D. Eckert.**

On the morning of Saturday October 23, 1999 I received a call from Marten Berkman that a goose, possibly a Brant *Branta bernicla*, had been seen by Greg Hare at the Whitehorse airport. While a Brant seemed unlikely, I headed to the airport to check. I quickly found the goose, which from a distance looked like a Greater White-fronted Goose *Anser albifrons*, feeding on an open grassy field. A closer view revealed that it had a black bill with a narrow sub-terminal pinkish-orange band. As well, the overall colouration did not seem right for Greater White-fronted. My thoughts drifted to Bean Goose *Anser fabalis*. I made a few notes, took a few photos and headed home to check a field guide.

A quick check of various field guides confirmed that this goose, with its black and pinkish-orange bill, bright orange legs, and overall colouration was indeed an adult Bean Goose. A heightened level of excitement filled our kitchen. Following a quick flurry of phone calls, Pam Sinclair and I headed back to the airport to study the goose. We had to put our elation on hold as it was not there when we arrived. For the next hour we checked other fields around Whitehorse and then returned to the airport just in time to see the Bean Goose landing at its original spot. In a state of happy disbelief, we studied and photographed the Bean Goose and pondered the chance circumstances that led us to such an extraordinary rarity on an otherwise ordinary Saturday morning.

## Description

***Size and shape:*** From a distance it appeared similar to a Greater White-fronted Goose. This was a medium sized, full-bodied goose, with a relatively short, thick neck. Its neck looked shorter when the relaxed and feeding. Its head was rounded with a noticeable angle between the base of the forehead and the bill.

***Plumage:*** In general its plumage looked fresh and in very good condition. Its head and neck were dark brown, the plain face appearing quite dark depending on the lighting. This explains Greg Hare's initial impression that the goose was possibly a Brant as he saw it briefly without binoculars from a car while rushing to the airport. Four very short thin, pale beige marks could be seen at the base of the bill, one on each side, top and bottom. The sides of the upper neck showed long thin vertical ruffs like those of a Greater White-fronted Goose. The front side of the lower neck was paler brown fading to pale brownish-grey at the belly. The lower belly and undertail were white. The flanks had broad brownish-black scallops with pale whitish fringes which contrasted sharply with the pure white feathers of the undertail. Its back, scapulars and tertials appeared dark brown with pale beige fringes becoming white on the

tertials. A line of white feathering showed between the wings and body as it tucked its wing into its body feathers. In flight it appeared very similar to a White-fronted Goose. The wings, from above and below, appeared dark brown with a vague wash of grey at the base of the outer upper-wing. It had dark brown secondary coverts with pale fringes, dark greyish-brown primary coverts, dark brown secondaries, and dark brown primaries with pale feather shafts at the base. Its tail had a white base, a broad dark brown band, and white along the sides and tip.

***Bare parts:*** It had bright orange legs and black eyes. Its bill was black, marked only with a pinkish-orange subterminal band from the lower nostril forward to the base of the nail. The band was pinker along the cutting edge, and more orange on top. The bill seemed relatively short, thick and broad based. It had a conspicuous grinning patch and lower mandible which was convex near the base. The culmen showed a very slight bulge between the base and the nostril and was straight between the nostril and the tip. The nail was oval.

***Behaviour and voice:*** The goose spent most of its time feeding on domestic grasses in front of the airport. It appeared healthy and wary. It was frequently harassed and occasionally flushed by passing Common Ravens *Corvus corax*, and Black-billed Magpies *Pica pica*. No vocalizations were heard.

**Bean Goose, October 23, 1999. Whitehorse, Yukon. Photo by Cameron D. Eckert.**

## Discussion

The identification of the Bean Goose was confirmed by its size, plumage colouration, black and pinkish-orange bill, and bright orange legs. The well defined ruff of feathers on the neck, blackish feathering along the flanks, and pale beige to white margins on the back feathers, scapulars and tertials indicated that it was an adult. Greater White-fronted Goose and Lesser White-fronted Goose *A. erythropus* have entirely pale bills (with limited dark areas in some juveniles), and adults show black speckled bellies. Similarly, Greylag Goose *A. anser* has an entirely pale bill. While orange legs are possible on Pink-footed Goose *A. brachyrhynchus*, usually on juveniles, this species was further ruled out as it has a pale grey, not dark brown back. As well, our goose did not look particularly petite as would be expected of a Pink-footed Goose. While identification to species was relatively straightforward, the question of subspecies is more complicated.

**Bean Goose, October 23, 1999. Whitehorse, Yukon. Photo by Jukka Jantunen.**

To date, my experience with Bean Goose is limited to this individual. To address possible subspecies I have relied on literature accounts (Cramp and Simmons 1977; Jonsson 1992; Madge and Burn 1988; Nat. Geo. Soc. 1999; Oates 1997; Ogilvie and Young 1998; Mullarney et. al. 1999), discussions with fellow observers and comments from observers familiar with the species. Bean Goose subspecies are grouped into tundra forms (*A. f. serrirostris* and *A. f. rossicus*) and taiga forms (*A. f. fabalis*, *A. f. johanseni*, and *A. f. middendorffii*). Bill structure and neck and body proportions are key criteria for separating tundra and taiga forms (Cramp and Simmons 1977; Oates 1997; Ogilvie and Young 1998). In general, the tundra form has a relatively short neck compared to the longer neck of the taiga. In tundra forms, the bill is heavy, high at the base, with the culmen gradually sloping to an oval nail. In taiga forms, the bill is more slender, with the culmen concave between the nostril and the tip, and a rounded nail. The lower mandible tends to be conspicuous, heavy and convex near the base in tundra forms, and less obvious, straight and slender on taiga forms. The degree of serration and the space between the upper and lower mandible (the grinning patch) is most pronounced on *serrirostris*, less so on *rossicus*, and almost lacking on taiga subspecies. Within the tundra form, *serrirostris* tends to have a bulkier, broader bill, while *rossicus* has a smaller, stubbier bill closer to that of a Pink-footed Goose. These differences are matters of degrees with much variation within subspecies.

How does this all relate to the Whitehorse goose? To put the Whitehorse record in context: To date, there are two previous Canadian records for Bean Goose both from Cap-Tourmente, Quebec. One on 14-21 October, 1982 was shot by a hunter and subsequently identified as *rossicus* (Godfrey 1986), and the other on October 14-15, 1987 was reported to be *middendorffii* (Pierre Bannon and Kayo Roy *via* Jukka Jantunen). This species is a rare spring migrant in southwestern Alaska (Aleutian Islands) with four specimens of *serrirostris*, and one of *middendorffii* (Gibson and Kessel 1987; Kessel and Gibson 1978). Geographically, the most likely contenders for the Whitehorse Bean Goose are the Siberian taiga form, *middendorffii*, and tundra form, *serrirostris*. Despite the distance between Whitehorse and Cap-Tourmente (~ 4500 km), the tundra form *rossicus* must also be considered.

The first consideration is whether the Whitehorse goose is a taiga or tundra Bean Goose. Its bill did not appear overly long, rather, it appeared broad based with a conspicuous grinning patch and lower mandible which was convex near the base. The culmen was straight, not concave, between the nostril and the tip. It had an oval, not round nail. Its neck appeared rather short and thick especially when the bird was relaxed or feeding. My conclusion is that our bird was a tundra Bean Goose. This was supported by the unanimous opinion of experienced observers who reviewed the photos. Thede Tobish and Daniel Gibson of Alaska both indicated that our bird did not match the taiga

form, *middendorffii*. John Oates and Malcolm Ogilvie of the United Kingdom each identified our bird as a tundra Bean Goose. But *serrirostris* versus *rossicus*? I found that my lack of experience with Bean Goose combined with a dearth of available photos showing the range of subspecific variation made it difficult for me to arrive at a confident identification. Thede Tobish and Daniel Gibson ruled out *middendorffii* and concluded that our bird appeared to be *serrirostris*. John Oates commented that its very thick looking base of the bill could fall into the normal range of variation shown by *serrirostris*, but that it closely resembled *rossicus* (at least the ones he has seen). Malcolm Ogilvie felt that its bill was on the large size for *rossicus*, but not massive enough for typical *serrirostris*. Further, he felt that its rounded head shape, relatively short neck, and noticeable angle between the forehead and the bill also suggested *rossicus.* His conclusion was that our bird was closer to *rossicus* than *serrirostris.* While I would have preferred a unanimous and conclusive opinion by all reviewers, the subspecific identification of a lone Bean Goose can be daunting. As well, individuals which are transitional between subspecies do occur. For one more kick at the can I followed a suggestion by Malcolm Ogilvie and looked for a mathematical solution.

I used bill measurements listed in The Birds of the Western Palearctic (Cramp and Simmons 1977) to calculate average lower mandible depth to bill length ratios for male and female geese. The ratios for *rossicus* were 1:7.3 (males) and 1:7.5 (females), and for *serrirostris* were 1:6.3 (males) and 1:6.8 (females). These ratios show that *serrirostris* has a relatively thicker lower mandible than *rossicus*. It's important to note that these ratios are based on averages and that calculations using the full range of bill measurements showed that overlap between the subspecies is theoretically possible. Taking measurements from a profile photograph an apparent *rossicus* (Todd 1996), I calculated a ratio of 1:8.1. While this ratio is more extreme than average, it is in the right direction for the subspecies.

**Bean Goose, October 23, 1999. Whitehorse, Yukon. Photo by Cameron D. Eckert.**

To calculate the ratio for the Whitehorse Bean Goose, I projected the sharpest bill profile photographs and measured bill length and lower mandible depth. The result was a ratio in the range of 1:6.2 to 1:6.4 which suggests *serrirostris*. However, I tend to have more faith in the opinions of experienced observers and do not feel that this simple mathematical exercise has necessarily provided the answer. Malcolm Ogilvie's impression that our bird tended toward *rossicus* carries a lot of weight. In summary, our bird was clearly a tundra Bean Goose, but it seems that the exact subspecies remains uncertain. Bill measurements taken from photographs suggest *serrirostris*, while the impression of two experienced reviewers was of

*rossicus*. I would be very interested to hear comments from others experienced with both *serrirostris* and *rossicus.*

The question of origin usually arises with rare waterfowl. In this case, there are no aviaries or waterfowl collections anywhere near Whitehorse. This bird appeared wary, was not banded, tagged or clipped, and nothing about it indicated prior captivity. Its apparent subspecies suggests that it traveled to Whitehorse from the Bering Sea region *via* Alaska. This is apparently the first documented western North American record of Bean Goose outside of southwestern or western Alaska. Various reports of a lone goose indicated that the Bean Goose had likely been around Whitehorse for about a week prior to its discovery on the Saturday. A heavy snow fall on Saturday night significantly reduced its feeding opportunities and it departed for good at noon on Sunday. More than any other Yukon rarity, the Bean Goose captured the interest of our birding community, and on Saturday and Sunday morning at least twenty birders enjoyed very fine views of this remarkable bird.

## Acknowledgments

The subspecific identification of the Whitehorse Bean Goose was aided by discussions between Pam Sinclair, Helmut Grünberg, Jukka Jantunen, and myself. Pam Sinclair reviewed a draft of this note. Thede Tobish and Daniel Gibson kindly reviewed the photos and provided comments. John Oates and Malcolm Ogilvie kindly reviewed the photos, provided comments with a wealth of information on subspecies, and reviewed a draft of this note. Paul Lehman pointed us in the direction of John Oates' work on Bean Goose. The courteous behaviour of twenty or so Whitehorse birders ensured that everyone was able to enjoy this rarity. Finally, our sincere thanks to Marten Berkman and Greg Hare for alerting us to the fact that an unusual goose was in our midst.

## References

Cramp, S., and K.E.L. Simmons (eds.). 1977. The Birds of the Western Palearctic. Vol. 1. Oxford University Press, Oxford, UK.

Gibson, D.D., and B. Kessel. 1987. Inventory of the species and subspecies of Alaska birds. Western Birds 28(2):45-95.

Godfrey, W. E. 1986. The Birds of Canada, revised edition. National Museum of Canada. Ottawa. 595 pp.

Jonsson, L. 1992. Birds of Europe with North Africa and the Middle East. Princeton University Press, Princeton, New Jersey.

Kessel, B., and D.D. Gibson. 1978. Status and Distribution of Alaska Birds. Studies in Avian Biology No. 1.

Madge, S., and H. Burn. 1988. Waterfowl: An Identification Guide to the Ducks, Geese and Swans of the World. Houghton Mifflin Company, Boston, MA.

Mullarney, K., Svensson, L., Setterstrom, D., and P.J. Grant. 1999. Collins Bird Guide. Harper Collins Publishers Ltd., London.

National Geographic Society. 1999. Field Guide to the Birds of North America, third edition. National Geographic Society, Washington, D.C.

Oates, J. 1997. Identification of Taiga Bean Goose and Tundra Bean Goose. Birding World 10(11):421-426.

Ogilvie, M., and S. Young. 1998. Photographic Guide to the Wildfowl of the World. New Holland Publishers, London. UK.

Todd, F. 1996. Natural History of the Waterfowl. Ibis Publishing Company, Vista, CA.

**Original citation:** Eckert, C.D. 2000. Bean Goose a Yukon first at Whitehorse. Birders Journal 8(6):305-309.

**Snow cover on October 24 greatly reduced feeding options for the Bean Goose. Photo by Cameron D. Eckert.**