

BLACK BRANT IN NEW YORK STATE

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ABSTRACT

Black Brant is a rare winter visitor to New York State with seven records this century. During the winter of 1997/98, three Black Brant wintered with a flock of Atlantic Brant in the vicinity of Riis Park in Queens. The occurrence of this many individuals at one location is unprecedented, both in New York State and the entire eastern seaboard of North America. In 1983, based primarily on reports of extensive interbreeding in the Canadian Arctic, the American Ornithologists' Union lumped all forms of Brant into a single species. The validity of this decision has recently come into doubt, based on newer molecular analyses and detailed studies of breeding populations, all of which argue for the reinstatement of Black Brant to full species status. In this report, we describe this latest record of Black Brant in New York and briefly review previous occurrences in the state.

INTRODUCTION

Brant (referred to as Brent Goose in Europe) is a small and rather attractive dark goose with a circumpolar breeding distribution along the coasts and islands of the Arctic Ocean. Outside of the breeding season, Brant are found on mudflats and short-grass habitats along the Pacific and Atlantic coasts of North America and Eurasia where they feed on marine plants, especially eelgrasses. In recent years, Brant have successfully adapted to man-made coastal grasslands such as ornamental lawns and golf courses. Three subspecies are recognized with two occurring in North America - the Atlantic Brant (*Branta bernicla hrota*) and the Black Brant (*B. b. nigricans*). As its name implies, Atlantic Brant winters in the mid-Atlantic States with a significant fraction wintering in New York. Black Brant is restricted to Alaska and the Pacific flyway as far south as

Baja, Mexico. Here we describe the remarkable occurrence of three Black Brant that wintered with Atlantic Brant in the vicinity of Riis Park, Queens County during the winter of 1997/98.

DISCOVERY OF THREE INDIVIDUALS AT RIIS PARK IN QUEENS

On Sunday, 7 Dec 1997, the authors located an adult Black Brant on the public golf course at Riis Park in Queens County, NY. The bird was observed feeding near the northeast corner of the golf course with a flock of at least five hundred Atlantic Brant. It was first seen through the chain-link fence from the northeast corner of the golf course at around 9:50 am. Notes and photographs were taken while watching the bird through telescopes (up to 60x). When we left the park at around 12 noon, the Brant flock was not present on the golf course but was observed together with the Black Brant later that day (Peter Shen, pers. comm.). Following our initial observation, we alerted the local birding community and the bird was seen several more times in following days, either on the Riis Park golf course or the open lawns at Floyd Bennett Field less than one mile to the north (Doug Futuyma, pers. comm.).

On 22 Dec, Ethyl Hill and Marty Sohmer reported two Black Brant at the golf course, and a string of reports of either one or two birds followed through the month into January of 1998. On 17 Jan, the authors observed three birds, all adults, simultaneously on the Riis Park golf course. Scanning through the large Brant flock spread across the whole golf course, we found two individuals grazing together on one side and an additional bird feeding on the opposite side. *To our knowledge, the presence of three individuals at one location is unprecedented in eastern North America.*

Despite wandering extensively, "the pair" remained within a few feet of each other at all times. With respect to plumage, we could not discern any tangible differences between the three birds. The accompanying pair of photographs by Guthrie (Figures 1 and 2) were taken on 17 Jan 1998 and show a single Black Brant with Atlantic Brant at the entrance to Floyd Bennett Field. We presume this corresponds to the unpaired individual. On subsequent occasions, we observed either a single bird or two birds close to each other, suggesting there may have been three birds all along, with observers happening upon either "the loner" or "the pair". Indeed, the Brant flock was usually broken into several smaller flocks feeding on different areas of lawn at Riis and Floyd Bennett and we presume the Black Brant were simply spread among these. The last Black Brant sighting was made on 12 Apr 1998, when Wilson observed a single bird in a small Brant flock (~150) on the grassy embankment leading onto the Marine Parkway.

IDENTIFICATION OF THE RIIS PARK BIRDS

The first Black Brant (discovered on 7 Dec 1997) was initially picked out among the several hundred Atlantic Brant by its overall darker color, more distinct neck collar and dark belly extending between the legs to the vent. The belly and lower flanks were much darker than on neighboring adult Atlantic Brant, creating a striking 'white wedge' between the dark lower flanks (the edges of belly patch) and the dark folded wings. The flank feathers appeared to be dark based with broad white, slightly frayed, tips. The flank feathers nearest the base of the tail showed the greatest amount of dark color, creating an ill-defined posterior boundary to the white wedge. This boundary thus separated the flank from the immaculate white tail and upper and undertail coverts. The scapulars and coverts were slightly darker than on the accompanying adult Atlantic Brant. The dark feathering of the breast extended across the belly and between the legs to the base of the vent region. Thus, when the bird was facing directly away, it was still easily identified by this dark wedge extending between the legs. The white collar (or neck ring) was broader and more evident than on any of the adult Atlantic Brant, meeting at the front of the throat. The wing coverts were all dark (lacking the white tips of first-years) confirming that this was an adult bird.

Although the separation of Black Brant from Atlantic Brant is relatively straightforward, it was important to rigorously eliminate Dark-bellied Brant (*B. b. bernicla*). The nominate Dark-bellied Brant, breeds in north-western Siberia and winters in western Europe. Like Black Brant, Dark-bellied Brant shows more extensive dark underparts than Atlantic Brant but according to the literature and all of the photographs we have examined, there is always a clear contrast between the black upper breast and dark brown lower breast (Millington, 1997; Ebels, 1997; Garner, 1998). In the Black Brant at Riis Park there was virtually no contrast. We would also expect the white flank patch of Dark-bellied Brant to be much reduced and the white neck collar to more closely resemble that of Atlantic Brant, which was not the case with the Riis Park birds.

OCCURRENCE IN NEW YORK AND NORTHEASTERN NORTH AMERICA

Black Brant breeds in eastern Russia, Alaska and NW Canada primarily on the Yukon-Kuskokwim Delta as well as Alaska's North Slope (reviewed in Reed et al., 1998). In fall, Black Brant gather in staging grounds such as the Izembeck Lagoon in western Alaska and then

migrate some 3000 miles down the length of the Pacific seaboard of North America to wintering grounds in California and Baja, Mexico. Black Brant is a vagrant to eastern North America with a small numbers of records from Atlantic coastal states. There are approximately eight previous records from New York State and these are summarized in Table 1. Every record involves single birds and all but one or two come from Long Island. The distribution and timing of these records closely parallel the movements of Atlantic Brant. The paucity of inland records reflects the strong preference for marine habitats and ability to travel almost nonstop to and from staging grounds in the Canadian arctic. The extensive intertidal mudflats and grasslands of Jamaica Bay (Queens and Kings counties) host a large wintering population of Atlantic Brant and correspondingly account for the most records. The brief summary in *Bull's Birds of New York State* (Levine, 1998) omits two documented records: a specimen from Oneida Lake which according to Bull was not confirmed by an ornithologist and, more surprisingly, a well-documented spring record from Jamaica Bay Wildlife Refuge in 1976. This bird was seen by many experienced observers and an excellent photograph was published in *The Kingbird* (Costa and Davis, 1976).

Black Brant is equally rare in neighboring coastal states. There are at least seven reports of Black Brant from New Jersey this century. Again all were singles with four of the records being from Brigantine NWR (T. Halliwell, pers. com.). There are at least nine records for Massachusetts and again all reports are of single birds (Veit and Petersen, 1993). As far as we can determine, there are no accepted records for Connecticut (Zeranski and Baptist, 1990), Virginia, Maryland or the District of Columbia (M. Iliff and E.S. Brinkley, pers. com.).

ORIGINS OF VAGRANCY

The breeding grounds of Atlantic Brant and Black Brant meet in arctic Canada (Reed et al., 1998) and it is possible that the New York birds joined up with migrating Atlantic Brant within the arctic. Indeed, there is evidence from banding recoveries that post-breeding movements such as from the nesting grounds to sheltered areas where adults gather to molt their flight feathers increases the possibility of a small group of Black Brant becoming mixed with molting Atlantic Brant and then migrating south with them. Interestingly, Black Brant is a more regular vagrant in western Europe than in eastern North America. For example, there were thirteen accepted records for Britain in 1997 alone (Rogers, 1998). Black Brant in Europe are found with both Atlantic Brant and

Dark-bellied Brant suggesting North American and Siberian origins. The higher numbers probably also reflect greater scrutiny of goose flocks in general and a greater interest in subspecific identification.

TAXONOMIC STATUS

The taxonomy of Brant is complex and in need of revision. At least three subspecies are currently recognized, Atlantic Brant (*B. b. hrota*) Black Brant (*B. b. nigricans*), and Dark-bellied Brant (*B. b. bernicla*). The American Ornithologists' Union lumps all of these forms into a single species. The merging of Black Brant and Atlantic Brant is based on a supposed zone of intergradation in the central Canadian Arctic (Delacour and Zimmer, 1952). However, more recent analysis of mitochondrial DNA from birds collected on Melville Island (the supposed intergrade zone) challenges this assertion and argues that these "intergrades" are not recent hybrids but are a separate population and perhaps even a separate subspecies, the "Gray-bellied Brant" (Shields, 1990). Breeding on Melville Island and wintering in the Puget Sound area of the Pacific Northwest, there is little published information on "Gray-bellied Brant" and it has not been assigned a scientific name. According to Martin Garner, "Gray-bellied Brant" differs from Black Brant in having slightly greater contrast between the upper and lower sections of the breast, a reduced black apron that does not extend much beyond the legs and a less complete neck collar (Garner, 1998). Clearly, none of these features agree with the Riis Park birds.

To further muddy the waters concerning the status of these forms in the eastern states, there is a strong resemblance between "Gray-bellied Brant" and "Lawrence's Brant" - a supposedly extinct form described by George Lawrence based on several specimens collected in New Jersey during the 1880's (Lawrence, 1846; Delacour and Zimmer, 1952). Published accounts and extant specimens are scheduled for review by the New Jersey Bird Records Committee which added Black Brant to the review list in 1996 (T. Halliwell, pers. com.). To make matters worse, one of Lawrence's extant specimens (AMNH #3211) a female shot near Egg Harbor, New Jersey in January 1846, is widely cited as the type specimen for Black Brant and this may well be incorrect (Garner, 1998).

Suffice to say that the new genetic data, combined with plumage and range differences, has led to calls for Black Brant, Atlantic Brant and Dark-bellied Brant to each be granted full species status (De Benedictis, 1991; Millington, 1997; Sangster et al., 1997; Reed et al., 1998), with a possible fourth species, Gray-bellied Brant, on the horizon. Very few mixed

nigricans x *hrota* pairs have been recorded despite a small overlap in their breeding ranges (reviewed in Garner, 1998). In contrast, more frequent interbreeding between *nigricans* and *bernicla* occurs in the Olenyok Delta, in eastern Siberia, which marks the current zone of overlap. Mixed pairs constitute as much as 9% of the breeding population and may reflect the recent westward expansion of Black Brant that winter in North America (Syroechkovski et al., 1998). Occasional hybrids have been sighted in Europe, including one *nigricans* x *bernicla* pair with two hybrid young observed in Holland (Berrevoets and Erkman, 1992). Whether this small degree of mixing presents a serious challenge to the calls for specific status will require further study and debate. Although much research is needed, the potential change in the status of Black Brant underscores the importance of fully documenting identifiable forms even when they do not appear on species checklists.

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Figure 1



Figure 2

Figures 1 and 2. Two photographs of the 'lone' Black Brant with Atlantic Brant at the entrance to Floyd Bennett Field, Kings Co., NY on 17 Jan 1998. The very black upper parts, discrete white flank patch and striking collar are clearly visible in these photographs. In Figure 2, the black apron can be seen to extend between the legs to the vent. Photographs by Andrew Guthrie.

OCURRENCE OF BLACK BRANT IN NEW YORK STATE

1840-one off Islip, Suffolk Co. (*Auk* 10 p.271; Bull,1974)

1889-one, spring, Babylon, Suffolk Co. (*Auk* 10 p.266; Bull 1974)

1889-one*, 30 Oct, Oneida Lake. (*Auk* 10, p.266; Bull, 1974)

1908-one, 31 March, Babylon, Suffolk Co. (Bull, 1974)

1946-one, 30 March ,Merrrck Bay ,Nassau Co. (Bull and Komorowski in Bull (1974)

1949-one, 13 November, Burntship Creek, Niagara Co. (Byron, Clement, Nathan, Seeber and Wright in Bull, 1974)

1959-one, 25 October, Mattituck,Suffolk Co. (E. Morgan in Bull, 1974)

1974-one, 14 October to 29 November, Jamaica Bay Wildlife Refuge, Queens Co., (Ash, Davis et al. In Davis 1975)

1979-one, 22-25 May, Jamaica Bay Wildlife Refuge, Queens Co.
(M Larsen, N.Larsen, Ash, Burke et al, in Costa and Davis, 1976)

1987-one, 3 March, Riis Park, Queens Co. (Baumann in *Kingbird* 27: p.174)

1998-maximum of three, Riis Park, QueensCo. (A.Wilson, A. Guthrie et al., this paper)

*specimen not examined by an ornithologist

