

UNPRECEDENTED NUMBERS OF NORTHERN PINTAILS (*Anas acuta*) ON THE LOWER NEW YORK BAY

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Northern Pintails (*Anas acuta*) are a widespread species of dabbling duck that has undergone precipitous declines in North America since the 1970s (Miller and Duncan 1999, Baldassarre 2014, U.S Fish and Wildlife Service 2018). Understanding their patterns of annual habitat use, including transient periods, is particularly important to their conservation (Clark et al. 2014). Northern Pintails congregate in large flocks during migratory stopovers and begin their spring migration just prior to the thawing of bodies of freshwater in late February, making them one of the earliest migrating species of waterfowl on the continent (Baldassarre 2014, Clarke et al. 2014). In New York, Northern Pintails have historically stopped over in their greatest abundances at inland freshwater marshes (e.g. Montezuma National Wildlife Refuge). Recently, however, these numbers have been greatly reduced (Levine 1998), and the species is now considered a Species of Greatest Conservation Need (SGCN) as defined under the New York State Wildlife Action Plan (New York State Department of Environmental Conservation [NYSDEC] 2015). In the coastal plain, they are at times locally abundant, with peak counts on the order of hundreds occurring during the fall and winter. The coastal maxima, as reported by Bull (1985) are 600 from South Haven, Suffolk County on 26 December 1934, and 600 from Jamaica Bay, Queens on 28 October 1967. Since the mid-1970s, they have not attained such high numbers, and counts from southeastern New York State have seldom exceeded 100 individuals in recent decades. Here we report on two observations of Northern Pintails stopping over in very large numbers on the Lower New York Bay in southeastern New York, representing a new coastal maximum for New York State. This event occurred during a record-breaking temperature in New York City.

We conducted a waterfowl survey at Gateway National Recreation Area, Great Kills Park (40°32'54", -74°07'24") on the east shore of Staten Island, New York on 21 February 2018. From the southern edge of the remnant *Spartina alterniflora* mudflats, we observed a large raft of Northern Pintails approximately 500 meters from shore. Several dozen were also in the tidal marshes behind the mudflats, which eventually flew out into the Bay and joined the larger flock. We counted approximately 1250 on the Lower Bay. At 17:31

EST, the flock flew southwest, and after scanning the Lower Bay for several minutes, it appeared that they did not resettle in the vicinity of Staten Island.

The next morning, 22 Feb 2018, at 10:23 hrs, we returned to the Great Kills mudflats to check if any Northern Pintails had returned. At least 250 were present about 200 meters from the shoreline. At 16:50 hrs, we again returned to the mudflats, this time counting approximately 3000 on the Bay. At about 17:37 hrs, the birds flew southwest, and like the previous day did not appear to resettle on the Bay. Following these observations, we continued to return to the site daily until 1 March. We found 36 Northern Pintails on 24 February in a flock with nine Redhead (*Aythya americana*) and four American Wigeon (*Anas americana*) but did not observe any in the following days.

On 20 and 21 February 2018, the northeastern United States experienced a record-breaking heatwave. On 21 February, the temperature rose to 78°F in New York City, the warmest February day on record for New York State (Di Liberto 2018). These unseasonably warm temperatures melted the ice that had covered the marshes on the south shore of Staten Island, revealing bodies of freshwater that the migrating Northern Pintail used to feed and roost.

To our knowledge, this is the first time that Northern Pintails have been documented using the Lower New York Bay as a migratory stopover site in significant numbers. After searching the eBird citizen science database (Sullivan et al. 2009), and consulting publications of ornithological record (*North American Birds* and its predecessors; *The Kingbird*) we conclude that our observations on 20 and 21 February 2018, of approximately 1250 and 3000 birds, respectively, represent the new coastal maxima for Northern Pintails in New York State. We also checked regional works for the surrounding states (Veit and Petersen 1993, Zeranski and Baptist 1996, McWilliams and Brauning 2000, Boyle 2011, Keith and Fox 2015; Ferren, unpub. manuscript), which confirmed that our totals were the highest at a coastal locality in eastern North America north of Edwin B. Forsythe National Wildlife Refuge, New Jersey.

As of April 2019, the U.S. Army Corps of Engineers (USACE) are investigating various storm-risk mitigation measures for the New York City Area, including a surge gate between Sandy Hook, New Jersey and Breezy Point, New York (USACE 2019). This particular alternative has the potential to interfere with waterfowl that stop over on the Lower New York Bay during migration, including species considered SGCN in New York like Northern Pintails, Black Scoters (*Melanitta americana*), and Long-tailed Ducks (*Clangula hyemalis*). In the future, the Lower New York Bay and its tidal marshes should be monitored for Northern Pintail during the final weeks of February. This would allow for data to be collected on their habitat use during spring migration, which is lacking for this species (Clark et al. 2014).

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