A Migration of Juvenile Bonaparte's Gulls at Wheatley Harbour, Ontario

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THIS PAPER DESCRIBES an exceptional count of juvenile Bonaparte's Gulls (Chroicocephalus philadelphia) that was made at Wheatley Harbour in southwestern Ontario on 1 September 2010. Wheatley Harbour is on Lake Erie and straddles the boundary between Essex County and the Regional Municipality of Chatham-Kent. The observation site is part of the official Point Pelee Birding Area, which is a standard 24 kilometre (15 mile) diameter Christmas Bird Count circle. Wheatley Harbour is located in the northeast section of the Point Pelee Birding Area, which is hereafter referred to as simply "Point Pelee". For comparative purposes, data on the status of juvenile Bonaparte's Gull at Point Pelee are also presented.

Observation on 1 September 2010

On the day of observation, I arrived at Wheatley Harbour at 0705h. Almost immediately, I noticed distinct groups of juvenile Bonaparte's Gulls in flight, all flying from northeast to southwest. This is the orientation of the shoreline here, and the birds were flying offshore at or just above eye level. I was standing at the end of the east pier, and although some birds were passing overhead, the majority were flying slightly farther offshore. All birds had a "determined" flight, and it was obvious that a major movement was in progress. I remained at Wheatley Harbour until 0905h, when the passage appeared to be mostly over. During the two hours that I was present, I counted a grand total of 3,450 juveniles.



Figure 1. A juvenile Bonaparte's Gull at Seacliff Beach (Learnington) on 8 August 2009. This is a favourite loafing location within the Point Pelee Birding Area for Bonaparte's Gull during summer and early fall migration, and it is here where the first juvenile birds are often detected (including 2010). Photo: Alan Wormington

The passing flocks typically consisted of 10 to 60 birds each. I did not count the number of actual flocks, but assuming an average of 35 birds per flock, then approximately 100 separate flocks passed my observation point. Most flocks were purely juvenile birds, but some flocks also contained from one to several individuals of the other age classes of Bonaparte's Gull, namely adults or second-winter (one-year-old) immatures. Birds other than juveniles totalled only 80 individuals, which was about 2% of all that were counted (3,530 birds in total).

During the 2-hour period of observation, there was a moderate southwest wind that was slowly veering to the west. Visibility at the time was good, and some cloud cover was present. The temperature was unusually warm during the early-morning observation period, ranging from 23.2° to 26.7° C. (as reported by the Windsor Weather Office of Environment Canada).

Discussion

The juvenile age class (see Figure 1) is probably the least studied population of Bonaparte's Gull. For example, the definitive account for Bonaparte's Gull in the online "Birds of North America" series barely mentions the juvenile age class, let alone describes it in detail (Burger and Gochfeld 2002). Birds in juvenile plumage can be surprisingly elusive. Compared to the population of the species as a whole, they are not overly common, and they tend to be seen in few places (and known concentration areas are fewer still). At Point Pelee, it has been documented that the first juveniles typically arrive in late July, they then quickly increase in numbers during August, but by mid-September (at the latest) the vast majority have already departed. Those that remain are few in number and shortly thereafter their moult into first-winter (first-basic) plumage has been completed (Wormington 2001, in prep).

Several aspects concerning the observation of 3,450 juveniles on 1 September 2010 are of interest: (1) it is an exceptionally high count for this age class; (2) the fact that the birds were actively migrating (or at least had the appearance of migrating); and (3) they were clearly separate from other age classes that were present in the area. All of these points are discussed below.

Very high counts of juvenile Bonaparte's Gulls at Point Pelee are relatively few, even though the species as a whole is abundant here (Wormington *in prep*). Prior to 2010, the highest count for this age class was of 1,500 birds on 18 August 2006. These were part of a massive flock of birds that also included 5,500 adult Bonaparte's Gulls, all of

which were loafing in the "Onion Fields" that are located just north of Point Pelee National Park. The next-highest count for juveniles at Point Pelee drops down to 715 birds, recorded on 25 August 1987; then down to 60 juveniles observed on two different occasions (Wormington *in prep*). These lower high counts clearly indicate that the 3,450 juveniles observed on 1 September 2010 was indeed significant.

Additional sightings during 2010 at Point Pelee also indicate an exceptional season for juvenile birds that year. On 29 July, 120 juveniles were recorded. This was not only a very high count for so early in the season, but was also the highest July count ever (the previous monthly high was 60 juveniles on 29 July 1988). For the month of September, in addition to the 3,450 birds counted on 1 September, 260 juveniles were seen on 13 September and another 200 on 16 September. The previous high juvenile count for the month of September at Point Pelee (prior to 2010) was of only 60 birds (7 September 1982).

Since the number of juvenile Bonaparte's Gulls observed at Point Pelee during 2010 was considerably higher than any previous year dating back to the early 1980s (Wormington *in prep*), this would suggest that the species had an exceptional breeding season. Indeed, for the summer of 2010, Crins (2011) stated that northern Ontario experienced its fifth warmest summer on record. Likewise for northern Manitoba (Koes and Taylor 2011) and Nunavut and Northwest Territories (Eckert 2011), where a

generally early and good nesting season was reported. Thus in 2010, virtually the entire breeding range of Bonaparte's Gull potentially had very favourable conditions for nesting and raising young.

During the years that I have been monitoring Bonaparte's Gull at Point Pelee (since the early 1980s), there has never been a previous occasion when juvenile birds have outnumbered any other age class (or outnumbered all other age classes combined). Instead, during the entire fall migration period which extends from July to January inclusive, adult birds without exception have always greatly outnumbered all other age classes combined (Wormington in prep). Thus, the 3,450 juvenile birds on 1 September 2010, comprising 98% of all birds counted, represent an extreme aberration compared to normal conditions. The fact that the juvenile birds were effectively isolated from all others, were present in very large numbers and, finally, were passing a fixed observation point, would indicate that they were actively migrating. Furthermore, since the vast majority of juvenile birds depart Point Pelee by early to the middle of September but adult birds remain in large numbers through late fall into January, this also strengthens the idea that the juvenile birds observed on 1 September 2010 were indeed migrating.

Literature Cited

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