

Gleanings from the Northumberland Bird Database

THE DATABASE: WHY BOTHER?

By Clive E. Goodwin

Last month I mentioned the number of 19th century records we had, starting with an 1813 junco by Charles Fothergill. Afterwards I was idly looking over the 1800's set, and just at random I opened another record. It was Fothergill again, this time an Osprey on Rice Lake, on April 19, 1821; with his note "Fishing Hawk arrival. Common". Forty years back that in itself would have been noteworthy: Ospreys were almost gone. But they're common enough now, and that date didn't seem out of line either. Maybe a little late, I wondered? Out of curiosity I looked for the arrival dates for Osprey. It turned out it was rather tricky, and I had to use Days from January 1; April 19 is day 109.

I prepared a table showing me the arrival days between 1972 and 2008 [prior to 1972 we had few consistent arrival records], and it appeared that day 109 was dead on for the decade of the 70's, with arrivals between days 101 and 122. But by the 2000's it is indeed late: arrivals range between day 69 and day 105, with most by day 91. By today's reckoning, Fothergill's Osprey was over two weeks late, and more significantly, so were all the birds in the 70's.

So a chance opening of an 1821 record leads to possible evidence of global warming! This is typical: you never know just where a query is going to lead; and for me that is one of the huge fascinations of the database, and probably a major reason that I maintain it.

But has it any broader value? Readers may recall that I also mentioned in my last article that the conventional wisdom used to be that such records were not worth much anyway. Fortunately that has changed.

Over time more appreciation has developed among ornithologists – the scientific community – for the potential value of these kinds of records. True, the observers are mostly amateur birders with a huge range of skills and experience, and the sightings themselves are not gathered in a rigorous manner; in fact, mostly they are quite hit and miss. But there are potentially a very large number of them, gathered over long periods of time, and no

other bird data of this breadth and scope exists. Modern statistical methods can factor in the irregularities to some extent, but really the sheer volume of material is the thing that can compensate for the individual variations – the 12 million birds we mentioned last time. So gradually the dismissive attitude towards birders' records has changed.

We now have e-bird, where individual sightings can become part of a vast international database maintained by Cornell University, and our 12 million is multiplied many times over. At present the sets of daily observations on our database have already been supplied to e-bird Canada, and I am currently checking the location details, ensuring the conversions from NAD map references to the required latitude and longitude format are correct, prior to transferring the rest. When this is done and all the records transferred I understand that the size of e-bird Canada will be increased by about 30%!

Quite apart from e-bird, however, the county records are now accessible in a way that was formerly impossible. Using more traditional methods of note-keeping, the individual variations in records over, say, a decade are too great to be confident about longer term trends, and the detail becomes too overwhelming over longer time periods. Data on *Wings* can be readily be manipulated to provide such information. We now receive requests periodically for information on the status of species either over time or by location. In some cases we can help, in others not, but without the database any information provided would have been limited to individual impressions, which can be very inaccurate.

There's no question that the availability of daily, or close to daily, records for some locations is a major boon. It means we have a 15-20 year record of the numbers of many species from two or three locations, which may prove invaluable depending on the information being sought. On more general records the interests of the observer can also influence the picture – for example, both Doug MacRae's records and those of the Thomsons have good numbers of shorebirds represented.

Valuable as the very detailed records are, the more general picture provided by *The Curlew* provides quite a different perspective. The emphasis is broader, so there is a far better cross-section of species. The information used in looking at Osprey arrivals above came almost entirely from records obtained from *The Curlew*, with a few from Presqu'île.

The ideal would be to attain the degree of detail provided by the large datasets for all species – but that would mean many more records of every kind, and it is quite unrealistic to expect there would ever be more than a tiny minority of people with the time and interest to keep data in this detail. Similarly it's unlikely that many persons would be interested in keeping running counts of all the birds seen on a field trip, although doing so often provides a quite different [and fascinating] perspective on a day's outing. If you do, we'd love to hear from you!

More generally, what should you do to provide database-friendly material? Unfortunately guesstimates of the numbers seen at the end of the trip – a traditional birder approach- can fall short. The persistent tendency is to over or underestimate, so running counts are really the best answer. But for individual sightings really the detail provided by *The Curlew* is usually satisfactory. We cannot handle two variables at once, such as '10-12 birds, October 3-8' and in these cases it is usually best to provide a high count and date, and numbers on the first and last days recorded. Unfortunately we often see internet posts mentioning 'lots' of one species or another, or giving vague locations or dates; and to be useful for the database we need a date, a place and at least an approximate number seen.

Certainly the more data we can gather the more valuable the database becomes. In fact, it is remarkable that a county with one of the smallest populations in southern Ontario has such an extensive record of birding, over so many years. It's a tribute to the keenness and perseverance of Northumberland birders past and present.

[The summaries of the bird records can be seen at the website –
homepage.mac.com/wings_4d/bonc/bonc_index.html

We've recently updated the records there, and Steven and I are currently working on making some of the material more user-friendly and easier to maintain. For those of you who send records to Elizabeth and Roger by e-mail, you can eliminate a step by simply keying me a copy – clivegoodwin@sympatico.ca . Some of you already do this (many thanks) and it makes things significantly easier by simplifying entries and spreading the work out] .

