

An endless supply of new adult Reed Warblers?

This analysis looks at the proportions of new-for-the year adults in catches at the Wicken Reedbed in 2011.

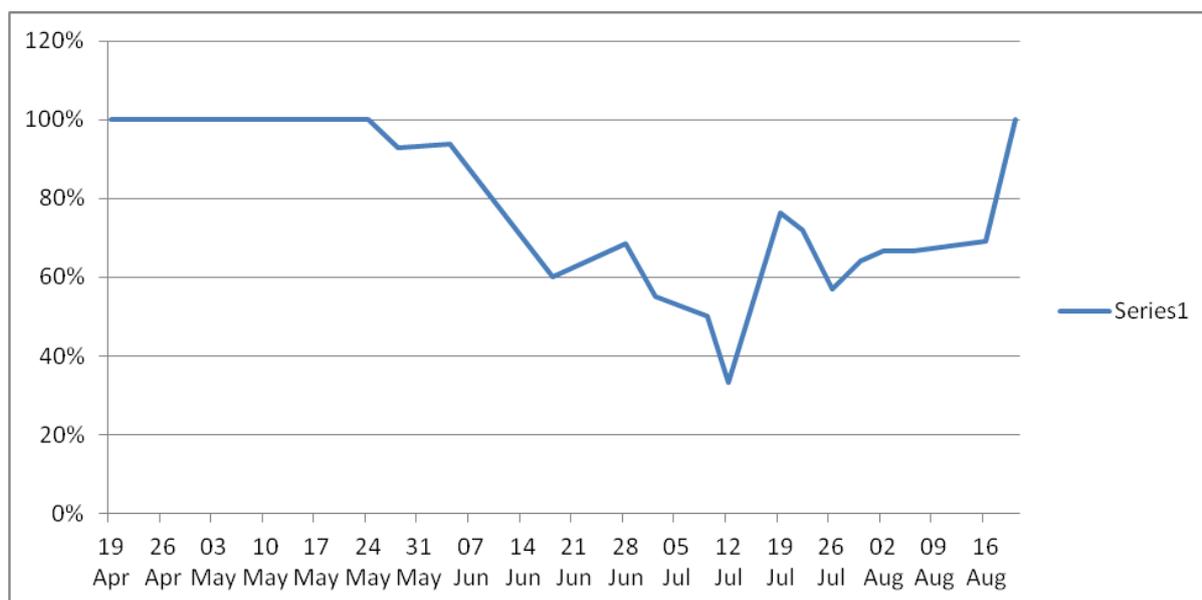
Any catch potentially catches a mix of birds caught and ringed for the first time, and birds already carrying rings. The latter will be birds carrying rings from a previous season (new-for-the-year on their first capture this year); and newly-ringed birds caught earlier in this season and thus no longer new-for-the-year.

The first catch would obviously comprise 100% new-for-the-year birds. If the catching were effective and the catching area contained, then you might expect that percentage to decline progressively over subsequent catches. In theory, you might reach a late-season stage where all the available different birds had been caught, and the new-for-the-year percentage had fallen to zero.

This first table shows the results for the twenty 2011 catches where more than two adult Reed Warblers were caught.

	New for year	Total
19 Apr	4	4
22 Apr	3	3
14 May	4	4
22 May	9	9
24 May	11	11
28 May	13	14
04 Jun	15	16
18 Jun	9	15
28 Jun	13	19
02 Jul	11	20
09 Jul	5	10
12 Jul	1	3
19 Jul	26	34
22 Jul	31	43
26 Jul	12	21
30 Jul	18	28
02 Aug	10	15
06 Aug	2	3
16 Aug	9	13
20 Aug	4	4

The chart below shows the same data:



These percentages aren't quite what one would expect. Until the end of May, all birds pretty much are new-for-the-year. The decline through June is as expected, but the proportion only just dips once below 40%. The second peak in the second half of July has been noted elsewhere.

This high number of 'new' adults and the July peak could represent several things. We probably catch all the immediately local birds, breeding within the Reedbed catching area, but birds breeding at some distance may only visit rarely (and very rarely when the nets are up), thus providing a steady supply of 'new' birds. They may visit more frequently when feeding young, or when moving around with dependent young. It's equally possible that there might be an almost continual arrival and departure of adult birds – with late arriving adults; or adults from other overcrowded reedbeds; or simply unmated birds; merging with early departing adults which had failed for one reason or another and were trying their luck elsewhere; or even with early finishers from further North. We don't know how many unpaired birds are naturally within the population, or how many birds there are which don't breed in their first year and just wander about.

By August, with adults definitely on the move, the percentage rises again, as one would predict. By late August it is back up to 100%, but that particular catch was only of four birds on the 16th.

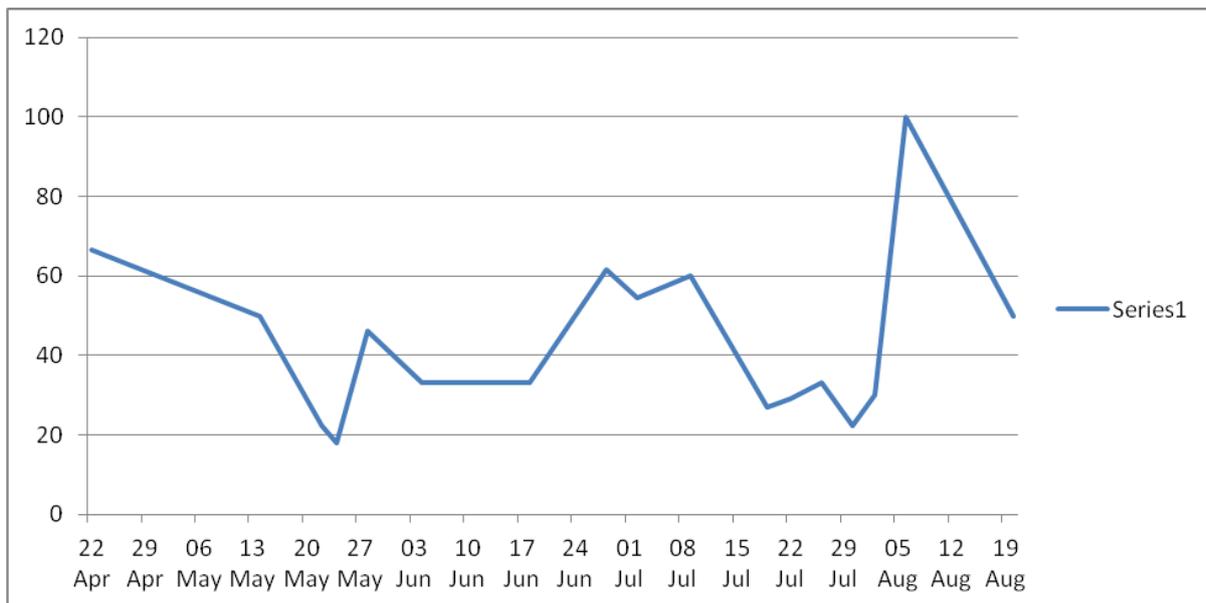
Another way of looking at this would be to separate out returning adults, that is, birds which had originally been ringed at Wicken in a previous

year either as adults or as juveniles. Whatever the time of year these birds might have been ringed, the fact that they have come back to the Fen suggests that they are breeding there or close nearby.

The second Table shows the results for the seventeen 2011 catches where more than one returning adult Reed Warbler was caught. It shows new-for-the-year returners against the total of all new-for-the-year birds. If these birds were breeding you would expect the proportion to decline steeply as the season progresses.

	Returners	Total new
22 Apr	2	3
14 May	2	4
22 May	2	9
24 May	2	11
28 May	6	13
04 Jun	5	15
18 Jun	3	9
28 Jun	8	13
02 Jul	6	11
09 Jul	3	5
19 Jul	7	26
22 Jul	9	31
26 Jul	4	12
30 Jul	4	18
02 Aug	3	10
06 Aug	2	2
20 Aug	2	4

The chart of the same data shows how, after only a brief initial decline, new-for-the-year returners continue turning up throughout the season. While the numbers new on August 6 and 20 were low (= six), after a season's catching, four were still returning Wicken birds. But maybe these were Wicken 'users' rather than 'bred/breeders'? Or simply birds breeding further away from our core catching area.



I had been planning to re-run some of the Reed Warbler survival/mortality/population size studies, based on smaller annual catches, done by Colin Bibby, John Harvey and Rhys Green in the 1970s and written up in various WFG Reports. I may still do so, but I wonder if the very contracted/intensive nature of today's catching will make comparisons problematic. In earlier days, Reedbed catching was much more widely spread – along the Lode-side (FL), on the north side of the Reedbed, and closer to Harrisons Drove along Little Drove (FR2). Such catching would have sampled birds from a much wider area, although numbers were smaller, and would have increased the chances of transients or occasional visitors being captured.

Comments welcome.

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