

2013 update

Scoring tongue-spots on adult Reed Warblers again at Wicken Fen

My results from scoring adult Reed Warbler tongue-spots in 2012 were reported in my short paper *Reed Warbler tongue-spots 2012* and the accompanying table *Reed Warbler tongue-spots table 2012*. See those documents for an explanation of methods, and for a discussion of 2012 results.

However, to recap briefly, birds were crudely scored as

- 2 – for dark spots
- 3 – for pale spots
- 4 – for no spots

Adults scored were either of *known age* or were *minimum-age* birds.

The 2013 sample

With only one year of scoring, the number of birds scored at Wicken was rather low, so it made sense to add a further year of data. The REG study had covered the two years 1976-77 and had scored 25 birds of *known-age* birds, and 226 *minimum-age* birds. The 2012-13 totals combined were 27 *known-age* and 212 *minimum-age* birds – quite remarkably similar samples.

1976-77 and 2012-13 compared

The similarity of these two year samples extends beyond sample size, as shown in the new table *Reed Warbler tongue-spots table 2013*. Both the distribution of birds across the age-cohorts *and* the distribution of scores within these cohorts are remarkably similar.

Overall, the additional year of Wicken data, shown in the top two tables confirms

- that birds with darker spots will tend to be younger, and that birds with paler or no spots will tend to be older.
- that spots fade over up to four years.
- that some one-year-old (2CY) birds have no spots
- and that no birds older than four years have shown spots.

Consistency of scoring

Some birds were caught and scored several times within each season. While I tried to score or check every bird myself, this was not possible all the time and this may account for a small number of inconsistencies. A discrepancy between the subjective scoring of 2 (dark spots) vs 3 (pale spots) is probably acceptable; and in some cases birds did clearly have spots fading 2 to 3 to 4 over the season.

The 46 birds scored more than once over the two years are shown below:

	2012	2013	Total
Always 2	4	3	7
Always 3	6	7	13
Always 4	9	5	14
223		1	1
23	3		3
2323	1		1
32	1		1
34		2	2
43	2	1	3
433		1	1

The four birds in the bottom box which show a transition from 4 (no spots) to 3 (pale spots) cannot have been correctly scored.

In addition, nine birds were scored in both years 2012 and 2013.

2012	2013
2	4
22	3
23	2
2323	333
233	33
3	4
43333	44444
44	4
44	34

These scores show a tendency to fade 2 to 3 to 4 as one would expect. The single bird in the box shows a discrepant 34 in 2013.

Wicken vs Falsterbo

The 1988 Falsterbo study, shown in red in the bottom table, included 131 *known-age* birds which demonstrated a very tidy pattern of linear fading until age 4 years. For this new table I have combined all the Wicken data to set against the Swedish numbers.

The match with the Wicken data is not so tidy. There are various reasons which might account for this.

- differences in the scaling of the score methodology (most likely)
- timing; Falsterbo end-July to end-September; Wicken birds from May
- real differences in population, subspecies, years

Finally

I think I'm now done on this.

As before it does look as if the spots do fade over time, but to a variable degree. It's starting to look as if all spots do – eventually – fade to nothing. But to reiterate: tongue-spot score cannot be used as a reliable ageing indicator at the individual level.

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