

# **BIRD RINGING AT BELVIDE**

## **The 2008 Report**

### **Overview**

The introduction to last year's report mentioned the uniqueness of every year—and 2008 was different in so many ways to any of the previous couple of years ringing at Belvide. On the plus side, we managed many more ringing sessions than ever before—even when strong winds should have made any ringing impossible. The reason for this is that the well-developed hedge along the drainage dyke provides excellent wind shelter if the wind is anything from south to west north-west. We also had several new trainees this year whose enthusiasm prompted us to more sessions. The result was that we ringed more birds than in any previous year, and more species. (These 11 new species are shown with an asterisk in the totals table.)

On the less positive front however—and this is developed more in the report, was the fact that many species appear to have had a poor breeding season—in some cases worse than that of 2007. Although nowhere near as wet as 2007, the water level in the reservoir had been kept high, and this impeded early reed growth. This appears to have had a profound and complex effect on Reed Warblers this year. The reasons behind poor the breeding season for other species is less easy to explain.

Finally in this section; it has been really rewarding for us to have had so many visitors to our ringing sessions, and so many 'hits' on our web site; it feels as though Belvide regulars have accepted the ringing effort for what it is intended, i.e. to provide supplementary data to the many hours of observations going on at the site. This has been further enhanced by the inclusion in the 2006 WMBC report of many snippets from the 2006 Belvide ringing report.

### **New birds ringed**

Table 1 shows the total of birds which were newly ringed during 2008, and compares these numbers with those from 2007 and 2006. The text which follows picks up and suggests explanations for some the issues which jump out from the numbers in the table.

**TABLE 1**

<b>Species</b>	<b>Ringed 2008</b>	<b>Ringed 2007</b>	<b>Ringed 2006</b>
<b>Sparrowhawk</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>Water Rail*</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Lapwing*</b>	<b>1</b>	<b>0</b>	<b>0</b>
<b>Common Tern*</b>	<b>(5)</b>	<b>0</b>	<b>0</b>

Swift*	2	0	0
Kingfisher	7	0	0
Great Spotted W'pecker	5	0	0
Sand Martin*	1	0	0
House Martin*	3	0	0
Woodpigeon	0	1	0
Robin	45	33	28
Redstart*	2	0	0
Blackbird	28	32	15
Song Thrush	6	6	2
Redwing	13	1	0
Fieldfare*	1	0	0
Pied Flycatcher	0	1	0
Spotted Flycatcher*	4	0	0
Dunnock	51	25	28
Wren	58	27	25
Goldcrest	22	9	7
Nuthatch*	3	0	0
Treecreeper	4	1	5
Cetti's Warbler	0	1	0
Chiffchaff	251	189	157
Willow Warbler	143	71	41
Reed Warbler	73+(2)	56	154
Sedge Warbler	23	36	53
Lesser Whitethroat	6	22	6
Whitethroat	8	14	16
Blackcap	63	48	63
Garden Warbler	23	34	25

<b>Blue Tit</b>	<b>110</b>	37	5
<b>Great Tit</b>	<b>67</b>	29	52
<b>Coal Tit*</b>	<b>3</b>	0	0
<b>Long Tailed Tit</b>	<b>26</b>	35	50
<b>Willow Tit</b>	<b>1</b>	2	8
<b>Marsh Tit</b>	<b>2</b>	1	3
<b>Bullfinch</b>	<b>8</b>	15	18
<b>Chaffinch</b>	<b>21</b>	4	4
<b>Greenfinch</b>	<b>17</b>	10	3
<b>Goldfinch</b>	<b>41</b>	4	15
<b>Redpoll*</b>	<b>4</b>	0	0
<b>Reed Bunting</b>	<b>39</b>	19	4
<b>House Sparrow*</b>	<b>1</b>	0	0
<b>Tree Sparrow</b>	<b>73</b>	37	0
<b>Starling</b>	<b>25</b>	32	0
<b>Total</b>	<b>1299 of 45 sp.</b>	833 of 32 sp.	788 of 26 sp.

Species marked :- \* are new since systematic ringing started at Belvide

() are birds ringed as nestlings

### Analysis

Reed Warblers are one of THE classic breeding birds at Belvide, their song is one of the first and last things that visitors hear when walking round the site. However, finding out just how many there are is very difficult, even with the benefit of intensive ringing effort. This year

appears to have been potentially quite unique. In overall total, 73 new birds ringed ( plus 2 nestlings) puts 2008 squarely between the very good breeding season in 2006, and the very poor 2007 season. On further analysis something else seems to have been happening. Of the total, 55 were young birds, but using this to give an estimate of the number of breeding pairs is unusually difficult for at least two reasons. First, the water was too deep for nest searching, so we have no 'back-up' indicator as previously. Second, breeding started late because of the lack of reed growth, so it is very difficult to say how many pairs managed one or two broods. It's almost certain that none managed three broods as they sometimes do in good summers.

The most intriguing aspect of 2008 was the number of new adults which were caught. We only caught 5 adults which had returned to the reserve from previous years, whereas 20 adults were ringed for the first time. This represents a very large turnover of adults, and more than we would expect based on previous years. There needs to be some exchange of breeders each year to ensure genetic mixing, but why so much this year? The only explanation we can come up with is that many 'old stagers' returned to find the reeds not well grown and decided to look elsewhere for suitable habitat. As the reeds grew, birds wandering about from other breeding colonies found 'free' nest sites so settled down to breed. There is some evidence for this. Adult bird V66955, was caught presumably breeding on 27<sup>th</sup> July 2008. It had originally been ringed in June 07 at Swithland reservoir Leicestershire. Similarly, R982040, was also caught on 23<sup>rd</sup> July, and it was originally ringed as a nestling on 5<sup>th</sup> August 2004 in Belper, Derbyshire. Further supporting the theory is V222220, ringed at Belvide as a juvenile on 5<sup>th</sup> August 2006, and recaptured on 4<sup>th</sup> July 2008 at a breeding site in Shropshire.

Whatever the case, these recoveries do demonstrate the genetic interchange between Reed warbler colonies.

Before leaving this species, it may be sad to report that P465670, a female ringed originally in 2001, didn't return this year. We can hope of course that she did, and then moved off somewhere else.....? On a much more definite note: although we only managed to find one nest this year, it did provide an interesting insight into Reed Warbler breeding success. Unusually for this species, only two eggs were laid, but the chicks hatched successfully and grew quickly as you would expect with fewer mouths to feed. We ringed the chicks at just the right time, as their flight feathers were just about showing through. However, two days after ringing there were a couple of torrential downpours, and when we subsequently checked the nest, it had been washed out. A couple of weeks later however, both chicks were re-trapped flying about in the reeds in a very healthy condition! This is all part of Reed Warbler make-up, in that the legs of chicks develop very quickly for just such occasions—the birds can easily clamber about the reeds from a very early age and seek shelter under bushes etc. providing a great happy ending.

Sedge Warblers appear to have had a very poor breeding season. Only 6 adults were caught, of which 3 were previous breeders. This suggests about 3 breeding pairs, and with only 20 young birds caught, this would seem to be a reasonable estimate. The potentially worrying issue is that this is much worse than even 2007.

Similar patterns show up for Lesser Whitethroat ( although this may at best be a sporadic local breeder); Whitethroat, where only 1 regular adult was caught and 7 young birds, and Garden Warbler where last year's increase in breeding was not sustained. Only 4 adults were caught and 19 young birds.

Blackcaps, however, appear to have been unaffected by whatever negative influences were around! Eight adults including 6 'old stagers' were caught, as were over 50 young birds, demonstrating their overall success.

Common Phylloscopus warblers appear to have had a good breeding season, both on the reserve and in populations which migrate through Belvide. From the first ringing session in early July it was apparent that there were lots of Chiffchaff about. We caught 24 new birds on 4<sup>th</sup> July, and another 28 new birds on 28<sup>th</sup> July. This pattern continued right through the season resulting in 251 new birds in total. Of course as the season rolls on, more and more of these will be birds which move in from elsewhere, but nevertheless it is clear that Belvide is an important area for this species. The last bird was caught on 11<sup>th</sup> November while we were trying to catch Redwings at roost!

The vast majority of the Chiffchaffs were juveniles, as would be expected, but only 4 adults previously ringed at Belvide were recaptured suggesting that many birds do in fact move in from surrounding areas, perhaps to feed on the insect-rich willow carr at the water's edge.

There was no evidence from singing birds of Willow Warbler breeding this year. It was all the more surprising that we caught such large numbers. The timing, mainly August, and the fact that almost no adults were caught, suggests that these were mainly migrants which, like Chiffchaffs, found good feeding in the scrubland to enable them to put on weight quickly for their onward migration. Of course, which breeding populations these birds were coming from remains a mystery since we have no controls (i.e. birds already ringed elsewhere).

In terms of the resident birds, breeding seems to have been pretty good.

Kingfishers obviously bred locally, and the high water levels meant that birds were often caught where the nets were over the edge of the water. Robin, Wren, Dunnock and Goldcrest were all caught in bigger numbers than last year, with quite a few adults from previous years continuing to produce good numbers of young. Although Blackbirds appear stable, the number caught is artificially high due to early Winter catches which didn't feature in previous years' figures—so their breeding seems to have been quite poor. On a similar note, Long Tailed Tits have not bred well this season. This is not because of low adult numbers—winters have been quite benign, and adults ringed 2, 3 even 4 years ago are still

being recaptured. It appears that their productivity of chicks for some reason was low this year. It may even be that the regular presence of Sparrowhawks around the reserve has taken its toll—although this would only be relevant if other observations showed there to have been more predators around than in recent years.

It is difficult to say much about species such as Chaffinch, Greenfinch, Goldfinch, Tree Sparrow, Reed Bunting, Starling and Redwing since the numbers caught are probably more a reflection of ringing opportunities, than they are clues about breeding success. However, Redwing numbers are indicative of the huge influx from the continent which occurred during October and November as reported all over the country. Goldfinch numbers are again showing similar patterns across the country where they are finding garden feeders in winter help to sustain large summer populations which roam around searching for suitable natural food—of which there is a lot at Belvide. One of the adult females we caught on 19<sup>th</sup> July is a classic case, since she was originally ringed as an adult on 25 January 2007 in Newport, Shropshire.

Finally, it looks as though both Blue and Great Tits have had a good breeding season, with much larger number caught this year than previously. This needs closer analysis, because more time was spent this year catching birds at the Gazebo feeding station during late winter and late summer, than previously. The most interesting analysis is of the post-breeding time of year, where we find that we caught 21 new, and 6 'old' adult Blue Tits and 64 juveniles. If we assume this represents about 14 breeding pairs, then they on average produced about 4.5 chicks each. Accounting for post breeding predation and other causes of chick mortality, this may be a reasonable success rate.

For Great Tit, a similar analysis gives 10 new adults and 4 'old' birds, and 49 juveniles. Based on 7 pairs this would mean average productivity of 7 per pair which appears very good.

For both these species we need to do more work in future to try and devise more systematic means of assessing populations and breeding success.

We hope this report has been both interesting and informative. We believe it demonstrates the benefits of a systematic ringing effort, as further insights into the birds of Belvide continue to accrue as time goes on.

We would like to thank the WMBC for continued permission to ring at the site, and all of the visitors who have attended the sessions for their enthusiasm, support and questions. The many 'hits' on our website are also encouraging. Finally we would again like to thank the Belvide management team for their interest, enthusiasm, practical help and presence at many of our ringing sessions.

Colin McShane ( on behalf of Brewood Ringers)

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