

Results of a Ringing Expedition to the Parque Ambientale, Vilamoura, Portugal

14th - 21st October 2008

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Introduction:

After a very successful trip in 2007, it was decided to repeat the exercise in 2008 with only minor changes; particularly the date of the visit. During the initial 'holiday' visit to the site in 2006 during the third week in October, CM noted many Chiffchaff and Blackcaps in the Parque. These species appeared to be arriving during our 2007 trip which was slightly earlier. Therefore we booked the period 14-21st October to investigate whether larger numbers of these species would be ringed. The results seem to support this strongly. Great support during the planning and implementation was again supplied by our contacts and friends in Portugal Nuno Grade, and Ana Luisa Quaresma.

Methodology:

All catching used Japanese/Polish mist nets, set at fixed positions for the whole week, almost entirely set in the same positions as the previous year to provide good comparison. There were some variations which are dealt with later on. On average, about 13 mist nets were erected in the catching area, varying in size from 9m to 18m in length. On some occasions, for example when Yellow Wagtails (*Motacilla flava*), and Meadow Pipits (*Anthus pratensis*) arrived, additional nets were set in appropriate areas for these species. Given the size of the reserve, the fact that most nets were set within about 200m of the base camp outside the observation hide, a very small proportion of the parque was covered. This is again important when trying to estimate the total number of birds which use the area for feeding, resting and roosting at this time of year.

Nets were opened at around 07.00 hrs each day, with sunrise around 07.30 hrs. They were manned continuously and checked every 20 minutes or so. Apart from rain late on 18th, which curtailed only the last hour of potential catching, weather conditions during the week were good, and ringing carried on continuously with nets being furled at around 19.00 hrs. On the final day, nets were taken down from about 11.00 hrs to enable the team to pack ready for the flight home. Audio lures were used occasionally, primarily for Bluethroat (*Luscinia svecica*) at first light, Corn Bunting (*Miliaria calandra*) at roost, and Chiffchaff (*Phylloscopus collybita*) in the last couple of days, and various other species periodically—with varying degrees of success. Luring definitely increased the catch for Corn Bunting and Chiffchaff significantly, but for Red-rumped Swallow (*Hirundo daurica*), Yellow wagtail (*Motacilla flava*) and Meadow pipit (*Anthus pratensis*) this was only marginal.

All birds were ringed using CEMPA rings, and all were processed to record, age, sex, weight and maximum chord wing length. Migrant species were also estimated for fat score using the 5 point Euring scale.

Results:

The overall number of newly ringed birds is shown in Table 1. This also shows the number of each species ringed each day. This has enabled some further analysis (see later)

Table 1: Totals for each species ringed on a daily and weekly basis.

Species ringed in both years	Wed 15th	Thurs 16th	Fri 17th	Sat 18th	Sun 19th	Mon 20th	Tues 21st	TOTAL 2008	TOTAL 2007
Common Waxbill	28	13	20	24	11	16	8	120	279
Weaver sp.	9	4	1	6	4	1	-	25	53
Kingfisher	12	6	3	3	1	-	-	25	31
Red Rumped Swallow	-	-	1	-	-	2	-	3	8
Yellow Wagtail	-	14	5	-	-	-	-	19	19
Robin	21	10	8	12	9	11	2	73	14
Bluethroat	3	-	-	1	5	1	2	12	33
Redstart	1	-	-	-	-	-	-	1	2
Northern Wheatear	-	1	-	-	-	-	-	1	1
Whinchat	-	-	1	-	-	2	-	3	13
Stonechat	7	-	3	1	4	3	1	19	35
Blackbird	17	13	14	7	5	7	-	63	47
Blackcap	37	22	30	60	39	56	14	258	32
Garden Warbler	6	-	1	2	-	2	-	11	8
Sardinian Warbler	7	8	1	3	1	3	-	23	28
Whitethroat	-	-	-	-	-	1	-	1	9
Subalpine Warbler	1	-	-	-	-	1	-	2	27
Sedge Warbler	3	-	-	-	-	-	-	3	13
Zitting Cisticola	12	8	4	3	3	3	-	33	62
Grasshopper Warbler	4	1	1	1	3	-	-	10	17
Cetti's Warbler	8	8	11	6	2	4	1	40	64
Reed Warbler	33	11	7	11	4	11	6	86	160
Willow Warbler	7	3	-	3	2	4	-	19	67
Chiffchaff	45	47	50	27	35	55	45	304	136
Pied Flycatcher	3	-	-	1	-	-	-	4	1
Azure Winged Magpie	-	1	4	-	-	-	-	5	8
House Sparrow	4	2	-	3	2	-	-	11	4
Spanish Sparrow	-	1	-	-	1	-	-	2	5
Greenfinch	1	4	3	-	1	-	-	9	35
Serin	-	2	-	1	7	2	-	12	6
Corn Bunting	-	17	22	-	2	35	-	76	16
Species ringed in 2008 only									
Moorhen	-	-	-	-	1	-	-	1	-
Meadow Pipit	-	5	5	-	-	1	-	11	-
Song Thrush	-	1	1	1	3	-	1	7	-

Great Tit	1	-	1	-	-	-	-	2	-
Penduline Tit	-	1	2	2	1	-	-	6	-
Linnet	1	-	2	-	-	1	-	4	-
Reed Bunting	-	-	-	-	-	1	-	1	-
Species ringed in 2007 only									
Little Bittern	-	-	-	-	-	-	-	-	1
Cattle Egret	-	-	-	-	-	-	-	-	1
Water Rail	-	-	-	-	-	-	-	-	1
Common Sandpiper	-	-	-	-	-	-	-	-	4
Green Sandpiper	-	-	-	-	-	-	-	-	2
Crested Lark	-	-	-	-	-	-	-	-	2
Grey Wagtail	-	-	-	-	-	-	-	-	1
Goldfinch	-	-	-	-	-	-	-	-	11
Daily Species Total	24	24	24	21	23	23	9	38	39
Daily Ringing Total	272	210	201	179	146	224	80	1312	1269

As well as some 'same-site' recoveries of birds ringed during the week, there were 2 notable recoveries, about which original ringing data have not yet been received:-

- 1) Blackcap originally ringed in Britain
- 2) Blackcap originally ringed in Belgium

Analysis:

Now that we have data from two years, we can comment on both the significance of the 2008 results, and the comparison with 2007. However, what is again evident is that the Parque Ambientale is an important site for both resident and migratory birds. The proportion of the overall area of the parque covered by the ringing activity is difficult to estimate, especially as birds are very mobile, but it is fairly clear that if the same number of nets had been erected in several other sites around the reserve, similar numbers of new birds would also have been captured. Evidence for this comes from the two attempts at roost netting. This took place using only 3 nets set about 0.5km from the 'main' site. Birds were captured pre-roost, and when the nets were opened for a couple of hours the following mornings; and the great majority of these were 'new—i.e. not previously ringed.

Comments made in the previous report relating to the presence of and difficulties in estimating numbers of some groups such as rails, crakes, sparrows, starlings and buntings are still relevant. Put simply, the regime of catching used currently underestimates the population of all of these groups.

Resident species:

The pattern shown by those resident species which were caught in reasonable numbers, is the same as last year in that they all showed large numbers in the catch early in the week, which tailed off as the week went on; almost certainly due to these birds becoming familiar with the net positions. However, all of the residents caught in significant numbers using similar techniques showed quite large reductions in numbers caught compared to 2007—apart from Sardinian warbler (*Sylvia melanocephala*). This suggests that Common waxbill (*Astril estrilda*) Weaver spp., Cetti's Warbler (*Cettia cetti*)

Cettia cetti), Zitting Cisticola (Cisticola juncidis) and Kingfisher (Alcedo atthis), all had a worse breeding season in 2008 than they had in 2007. Unfortunately we have no breeding season data to corroborate this hypothesis. One further interesting point here is that we recaptured none of the 30+ Kingfishers that we had ringed the previous year. This adds weight to the belief expressed by Portuguese ringers that most if not all of the Kingfishers present at this time of year may be long or short distance migrants which use the parque intermittently.

Migrants:

In 2007, Reed Warbler (Acrocephalus scirpaceus) was the commonest migrant ringed in the parque, and it was suggested that the birds caught were probably a mix of local breeders and migrants, as evidenced by the control of a Heligoland-ringed bird. The on-going nature of this work is beginning to elucidate how many birds spend the winter in Portugal and how many carry on south. There are at least two hypotheses as to why only half the number of Reed warblers were ringed this year compared to 2007. It could be that this species had a poor breeding season (see above), and/or it could be that a significant proportion of the birds had already departed for Africa and the later date of the ringing trip reflected this. Perhaps this latter possibility accounted for the much lower numbers of Subalpine, Grasshopper, Sedge and Willow warblers, and Whinchat? Observations from birders (personal conversations) suggested that at the beginning of October there were very large numbers of warblers and flycatchers in the Algarve but that these had appeared to migrate out quite quickly.

We can suggest no hypothesis for the much lower numbers of Bluethroat (Luscinia svecica) compared to 2007, unless they have had a poor breeding season further north. The received wisdom is that many (most?) Bluethroats spend the winter in the reedbeds of the Iberian peninsular, and the expectation was that the later date of this trip would have resulted in more of this species than last year—given that it appeared that these birds were arriving during our 2007 stay.

In the 2007 report we suggested that Chiffchaffs (Phylloscopus collybita) were arriving daily, and that Blackcap (Sylvia atricapilla), had barely begun to arrive. The report also suggested these species probably spend much of the winter in Portugal. These results seem to support parts of this idea. These two species were by far the most numerous on site—both captured and seen. However, the variance between the two years may have been exaggerated a little by novel catching techniques used in 2008 which were not used in 2007. This shown in the picture below, and consisted of securing a net (sometimes 2 to make double height as shown in the picture), which is then held on very long poles, as high as possible. The olive tree hedge is then walked by team members to push the birds along towards the net. The vast majority of birds flew over the net, but on occasions as many as 20 Blackcaps were caught in a single push. We estimate that overall, around 50 'extra' Blackcaps were ringed because of this technique—which still meant that more were caught than last year using standard methods. Tape luring of Chiffchaff proved very successful—but this was only used in the last two days of the visit. Notwithstanding these techniques, the fact remains that there were more birds of these species present than in 2007.



The weights and fat scores of these two species suggest that they have different migration strategies. The vast majority of Chiffchaffs had little stored fat, and were of reasonably constant weight; consistent with birds which were probably going to spend some time—if not the whole winter period in the parque. However, the weights and fat scores of Blackcaps varied widely from zero to the maximum five in fat score, and from 18gms. up to 27gms. recorded for some individuals. Clearly some birds were likely to stay in the reserve, while some were preparing to move on south.

The later date of this trip also coincided with a major arrival of Robins (*Erithacus rubecula*) and possibly Blackbirds (*Turdus merula*). Most of the latter were probably from the region rather than from northern Europe, based on plumage characteristics.

Most other species were caught in numbers which were too small, or by using novel techniques to determine reliable patterns. For example, there were larger numbers of Yellow wagtails (*Motacilla flava*) in the adjacent fields compared to 2007—as expected at a later date, but fewer were caught due to bright sun and wind on the days when attempts were made to catch the birds in 2008. Probably the same number of Corn buntings was present in the roost in both years, but the catch this year was much larger due to our being able to get the nets into a better area, and having more effective tape lures in operation.

Recommendations:

The continued success of this venture demonstrates yet again that the scope for catching and ringing birds as one aspect of monitoring on the reserve is very good. Furthermore, the addition of year-on-year data, while not yet providing conclusive answers, is beginning to elucidate some of the migration strategies and possible breeding successes of birds that use the parque. It is therefore important that we try to continue the visits, and if possible increase the ringing effort.

There is still a need for the provision of ringing poles and possibly even some more nets, since this would make baggage arrangements for visiting groups much simpler. Some unfortunate incidents may also have been averted if there was better signage and security arrangements—although on this latter point, the position of the ringing base will be reviewed for future visits.

There remains the potential to improve the habitat by virtue of a shallow ‘scrape’ with mud and open water (perhaps controlled by a simple sluice) to the north-west of the main observation hide. If this could be achieved it would provide a great attraction to wading birds which are poorly represented in the parque at present.

Last year, the team indicated a willingness to provide one or more ringing demonstrations for the public during future visits to help promote the parque. During this year’s trip, two groups of local visitors did visit, and four groups of visiting birders from northern Europe were also given demonstrations, and this has resulted in the parque and the ringing activities being promoted on the website:- www.algarvebirders.com.

Finally, we would like to thank the management of the Parque Ambientale for allowing us access to the site during our stay, and to Vitor Encarnacao for providing us with the necessary permits. We are immensely grateful also for the support during the planning stages and when on site from Nuno Grade, and Ana Luisa Quaresma, who again made us very welcome and helped in a great many ways to make our visit successful. An unexpected but very welcome extended visit from the very experienced Portuguese based ringer Mike Armelin provided us with useful ageing, sexing, ring use and catching tips.

Colin McShane,(on behalf of the ringing team)

October 2008