

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

18th October – 24th October 2010

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Introduction:

This expedition follows on from three very successful trips in 2007, 2008 and 2009 and is the latest visit to the Parque to date. One of the main reasons for visiting this late was to connect with some of the northern migrants that we knew were likely to be occurring in large numbers like Blackcap *Sylvia atricapilla*, Chiffchaff *Phylloscopus collybita* and Robin *Erithacus rubecula*. We also hoped to catch other species like Meadow Pipit *Anthus pratensis* and White Wagtail *Motacilla alba alba*. At the same time, it was hoped that we might still catch lingering, earlier migrants like Subalpine Warbler *Sylvia cantillans* and Melodious Warbler *Hippolais polyglotta*. We had expected to catch good numbers of Bluethroat *Luscinia svecica* but in this respect we were less than successful. Generally, the trip went well, with good numbers of the commoner target species being caught, but in other respects, the visit was less productive, for reasons that will be explained later.

Seven new species were added to the overall species list, with a couple of unexpected surprises finding their way in to the nets.

This trip did not expend a lot of time trying to catch rails and crakes, as recommended in previous reports, mainly because we were unable to access suitable habitat and there were few signs that they were present, particularly Water Rails *Rallus aquaticus*.

Our roost netting efforts were very disappointing, particularly as we were unable to access potentially productive areas of the marsh for species such as Corn Bunting *Miliaria calandra*.

As usual, our visit was well supported during the planning and implementation stages by our friends and contacts in Portugal; Nuno Grade, Vitor Encarnacao, Bruno Constancio, Michael Armelin and Ana Luisa Quaresma.

Methodology:

Catching used on average 13 Japanese/Polish mist nets, set at fixed positions, practically identical those set in 2009, to give good comparative data. Although the team was quite large, with nine people, we were unable to set nets deeper in to the marsh, as last year, because it was evident that there had been significant bramble growth, preventing us access in to the deeper reed beds. The majority of nets were therefore set within 400m of the observation hide and thus, only covered a very small proportion of the Parque. This is a very important limiting factor when trying to estimate the numbers of birds utilising the site.

Extra nets were set in the fields to target species like wagtails, pipits, Serin *Serinus serinus* and Linnet *Carduelis cannabina*.

Nets were erected around 0730 hrs each day, with sunrise around 0800 hrs. They were manned continuously and checked every 20 – 30 minutes. Weather conditions were generally good and ringing carried on continuously, with nets being furled around 1830 hrs. When we were roost-netting, nets were taken down/furled at around 2000 hrs. On the final day, nets were taken down about 1300 hrs to enable the team to prepare for the journey home. Audio lures were used occasionally to target species that were coming to roost, like; Corn Bunting and Azure-winged Magpie *Cyanopica cyanus*, and daytime species like; Serin, Linnet, pipits, wagtails and Blackcap.

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

Results:

Species	18/9	19/10	20/10	21/10	22/10	23/10	24/10	Total	2009	2008	2007
<i>Ixyobrychus minutus</i>	1		1		1	1		4	3		1
<i>Bulbulcus ibis</i>											1
<i>Rallus aquaticus</i>											1
<i>Actitis hypoleucos</i>											4
<i>Tringa ochropus</i>											2
<i>Gallinule chloropus</i>										1	
<i>Falco tinnunculus*</i>		1						1			
<i>Upupa epops</i>		1	1					2	1		
<i>Estrilda estrild</i>	2	1	26	10	17	3	15	74	264	120	279
<i>Plo. melanocephalus</i>		1						1	0	25	53
<i>Alcedo atthis</i>	10	4	7		1	2	1	25	18	25	31
<i>Jynx torquilla</i>									1		
<i>Hirundo rustica</i>					1			1	29		
<i>Hirundo daurica</i>									6	3	8
<i>Riparia riparia</i>									15		
<i>Motacilla flava</i>									4	19	19
<i>Motacilla alba*</i>			3	1	1	2		7			
<i>Motacilla cinerea</i>							1	1	1		1
<i>Anthus trivialis</i>									1		
<i>Anthus pratensis</i>			3	4	1	3		11		11	
<i>Galerida cristata</i>		1						1	1		2
<i>Erithacus rubecula</i>	11	9	17	22	10	8	6	83	16	73	14
<i>Luscinia svecica</i>	2	1		5		1	1	10	41	12	33
<i>L. megarhyncos</i>									1		
<i>Phoe. phoenicurus</i>			1				1	2	2	1	2
<i>Oenanthe oenanthe</i>									3	1	1
<i>Oen.oen.leucorrha*</i>							1	1			
<i>Saxicola rubetra</i>									13	3	13
<i>Saxicola torquata</i>	3	4	1	2	2	4	1	17	25	19	35
<i>Turdus merula</i>	12	5	8	1	1		1	28	48	63	47
<i>Turdus philomelos</i>			1		1	1		3		7	
<i>Turdus torquatus*</i>			1					1			
<i>Sylvia atricapilla</i>	8	19	39	28	45	33	11	183	44	258	32
<i>Sylvia borin</i>		1		3				4	10	11	8
<i>S. melanocephala</i>	1	2	6	4	4	2	1	20	35	23	28

<i>Sylvia communis</i>				1				1	30	1	9
<i>Sylvia cantillans</i>			1					1	32	2	27
<i>Hipp. polyglotta</i>									1		
<i>Acro.schoenobaenus</i>	1			1				2	7	3	13
<i>A. scirpaceus</i>	20	17	23	12	13	17	5	97	109	86	160
<i>A. arundinaceus</i>									1		
<i>Cisticola juncidis</i>	2	6	6		2	2	2	20	26	33	62
<i>Locustella naevia</i>		2		1	1			4	14	10	17
<i>Cettia cetti</i>	5	8	2	1	1	4	1	22	86	40	64
<i>Phyl. trochilus</i>	9	5	7	3	3	5		32	116	19	67
<i>P. collybita</i>	22	32	48	33	26	16	13	190	65	304	136
<i>Ficedula hypoleuca</i>									5	4	1
<i>Parus major</i>									1	2	
<i>Remiz pendulinus</i>		2				2	1	5		6	
<i>Cyanopica cyanus</i>		4	1	1				6	8	5	8
<i>Sturnus vulgaris</i>									1		
<i>Sturnus unicolor</i>									3		
<i>Passer domesticus</i>	2	1		1				4	31	11	4
<i>P. hispaniolensis</i>	1		5	1	1	5	7	20	4	2	5
<i>Passer sp.</i>		7	3	2		4	9	25			
<i>Passer montanus*</i>		1						1			
<i>Fringilla coelebs*</i>				1				1			
<i>Carduelis carduelis</i>				1				1	4		11
<i>Carduelis chloris</i>		2	2	6	10	1	1	22	14	9	35
<i>C. cannabina</i>				1	2	21	4	28	11	4	
<i>Serinus serinus</i>	1	2	5	12	8	10	5	43	7	12	6
<i>Carp. Erythrinus*</i>			1		1			2			
<i>Emb. schoeniclus</i>										1	
<i>Emberiza calandra</i>	1			2	2	1	2	8	44	76	16
<i>Geothlypis trichas*</i>	1							1			
ANNUAL Sp.								43	47	38	39
TOTALS											
ANNUAL TOTALS	115	138	220	160	155	138	90	1016	1202	1312	1269

Analysis:

This is year 4 of the project, and, as such, data trends are becoming easier to identify. There are, however, limitations to this, particularly in terms of making direct comparisons to previous years, as there is 'standardisation' within the methodology of data collection. An overall assessment however, suggest that the Parque is without doubt one of the most important bird sites in the Algarve, particularly as pressures increase outside the Parque from tourist and sports based developments.

Data from the last four visits indicate that the Parque is very important as a 'staging' post for transitional migrants, on their way to Africa and as a wintering site for other migrant species – this is evident from previous re-trap and control data. Only one control was produced in 2010; a Chiffchaff that had been ringed in Belgium. We are still awaiting the information from these recoveries.

Empirical and anecdotal information suggests that the Parque supports large numbers of a wide range of species. Our experience in 2010 supports this, with large numbers of Corn Buntings, starlings and sparrows, to name but a few, being seen. It is clear that mist netting, as a method for estimating populations is severely limited and samples only a small proportion of birds at any particular time.

Overall totals:

The total number of birds ringed in 2010 is lower than in previous years. There are several reasons for this; firstly, compared to 2009, fewer nets were set due to poor accessibility to the marsh and taking a less experience group to the Parque; secondly, weather conditions were not ideal as strong winds were prevalent on most days, making the nets more visible and driving the birds in to deeper cover. Also, with clear skies during the entire period, birds were able to move through the site very quickly.

The number of species caught is comparable with previous years and is, to a certain degree, expected, given the lateness of the visit. Seven new species were added to the overall list; Kestrel *Falco tinnunculus*, White Wagtail, Ring Ouzel *Turdus torquatus alpestris*, Tree Sparrow *Passer montanus*, Chaffinch *Fringilla coelebs*, Common Rosefinch *Carpodacus erythrinus* and Common Yellowthroat *Geothlypis trichas*. White Wagtail, Tree Sparrow and Chaffinch are to be expected, as later migrants moving southwards. Kestrel was a fortunate catch and may be a resident, over-wintering bird. We caught two Common Rosefinches and these birds were probably a legacy of the massive fall of north-eastern migrants that hit Western Europe in mid-October. Before our visit, south-west Portugal experienced some fairly heavy Atlantic fronts and the Common Yellowthroat was probably deposited here as a result.

Resident species:

Cettis Warblers *Cetti cettia* were caught in much lower numbers than in any previous visit; it is difficult to determine the reason for this and it would be unsafe to suggest an overall decline at this stage. Perhaps future visits should target this species? Certainly, being unable to set more nets in favourable habitat would have had an impact on the numbers caught.

Similarly, Common Waxbill *Estrilda astrild* was caught in much lower numbers in 2010, compared to previous years. We were instructed to ring only a sample of birds yet, despite this, we did not physically catch high numbers of this species and, if we included the birds we released un-ringed, the total would still only be comparable to 2008. My theory is that the birds forage more widely at this time of the year and possibly move in to the nearby built environment.

The Kingfisher *Alcedo atthis* population appears to be stable with the numbers matching those of 2008. Fan-tailed Warbler *Cisticola juncidis* continues to show a worrying decline and perhaps should be a species to target in future years. Corn Buntings were apparent in much larger numbers than last year with a flock of 200+ being seen on most days. Frustratingly, our attempts to catch them proved unsuccessful as they responded poorly to the lures and appeared to roost deep in the marsh, well away from our nets.

Sparrows, as a group, were caught in significantly higher numbers than in previous years. Unfortunately, we were instructed to identify only the males to species level, hence the higher

numbers of *Passer* sp in the results. It would appear that Spanish Sparrow *Passer hispaniolensis* is on the increase whilst House Sparrow *P. domesticus* continues to decline.

It was noted that there was a sizeable flock of Serins foraging on site and our attempts to lure them in to the nets proved very successful. It was evident that there was a lot of available food for them in the field to the west of the olive grove, supporting a flock of 70-80 birds. Similarly, a large flock of Linnets was present in the large, uncut field to the south of the main ditch and a net set up in this field proved very successful, even without an audio lure.

As mentioned in previous reports, information on the breeding data of resident species would be useful to increase the resolution of analysis, as well as getting information on re-trap data.

Migrants:

As expected at this time of year, certain migrants had departed from the Parque or were apparent in much lower numbers. This was certainly the case for hirundines. Barn Swallows *Hirundo rustica* appeared to be moving through the site quickly; on some days, they could be seen coming on to the site, from the north, following the river, to the coast, and presumably continuing their southward journey. Red-rumped Swallows *H. daurica* came through in much smaller numbers, associating with Barn Swallows moving south.

The number of Robins caught is consistent with 2008 and reflects a large movement of birds on to the site in late October. Blackbirds *Turdus merula* appeared to be present in much lower numbers than in previous years and may suggest a late movement for this species. Blackcap and Chiffchaff, although caught in lower numbers this year, reflected a consistent movement of incoming migrants. Weather conditions probably affected the poorer totals as many birds were seen on site every day.

Willow Warblers *Phylloscopus trochilus*, being an earlier migrant were probably at the tail-end of their southward journey through the site. Similarly, Whitethroat *Sylvia communis* and Subalpine Warbler, both of which we caught only single birds, were the last of their species to go through.

Reed Warbler *Acrocephalus scirpaceus* numbers were fairly consistent with previous visits and represent no real change in the numbers going through the Parque.

Bluethroat numbers were consistent with 2008 and probably indicate that most birds have moved through the site or have dispersed to establish winter territories.

Pipits and wagtails were present in increasing numbers as the week progressed. Yellow Wagtail *Motacilla flava* appeared to have departed with only a handful of birds being seen. White Wagtails appeared to be the commonest of the group and responded reasonably well to the audio lure.

Discussion and Recommendations:

Data collection

With a project such as this, the non-standardisation of data collection makes the analysis of patterns and trends anything more than anecdotal. However, the validity of mist-netting as a survey methodology cannot be questioned

As previously discussed (McShane 2007, 2008, 2009), the addition of year-on-year data continues to elucidate some of the migration strategies and breeding patterns/successes of a wide range of species utilising the Parque and, with this in mind, it is important to continue with the project. It is recommended to increase the number of visits, particularly in the spring period, to monitor northward movement through the site and to glean some information of breeding species. Erecting nets in a standardised configuration would provide some more robust scientific data for the future.

It is clear that some species appear to be declining, particularly Fan-Tailed Warbler, Cettis Warbler and House Sparrow; it is therefore recommended that a colour-ringing scheme be implemented to better understand the population dynamics of these species.

Habitat

The Parque has vast potential to be improved as a site for breeding and migrant birds. Olives are clearly very important for a range of species, particularly passerines laying fat for the crossover to Africa. Under-planting existing hedgerows and groves would ensure a long-term food supply.

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. It may be that this could become a reality depending upon forthcoming negotiations. The large field to the north of the access track could also be improved by creating a large shallow wetland complex to augment to vast reed bed already in existence on site.

Logistics

There is now an increasing amount of re-trap and control data which we hope will be of use in a variety of ways. If there is anything we can do to assist in the analysis and interpretation of this data, we would be only too willing to help.

Preparing the site prior to our visit would greatly help us maximise our catching efforts. Cutting and maintaining rides in the reed bed would enable us to target some of the species that are more difficult to catch elsewhere on site. Maintaining/improving the 'bridges' over the ditch would be very helpful for the future as the ditch is one of the most productive ringing areas on the site.

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 and Michael Armelin for providing us with the necessary permits, rings and some extra poles. We are immensely grateful also for the support during the planning stages and when on site from Nuno Grade, and Bruno Constancio, (who helped immensely with scribing) Ana Luisa Quaresma, who again made us very welcome and helped in a great many ways to make our visit successful.

Thanks also to Peter Dedicote and Ray Tipper for helping us out with the rarities.

Fergus Henderson,(on behalf of the ringing team); November 2010