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Marsh Harrier Migration through Malta in Autumn in Relation to Weather

M. A. Thake

Marsh Harrier Circus aeruginosus migration in autumn was observed over five seasons (1974 - 1979) in the course of systematic watches made at Buskett, Malta. The results of this study are compared with those of earlier authors, and interpreted in terms of processes thought to operate in raptor migration.

Methods
Observations were maintained by the author at Il-Wejba, Buskett, on a number of occasions, watches were made elsewhere in the islands while watches were maintained at Buskett by E. Curti.

Details of the observation methods have already been published (Thake 1977, 1980). Data recorded in the field included flock size, height and direction of flight, time of sighting, as well as details of behaviour. Local weather was recorded at hourly intervals during the watch. Other meteorological data were taken from the records of RAF Verdelli and Luqa records published in 'The Times'. The Deutscher Wetterdienst supplied regional weather maps.

Coverage was most thorough in 1976, with watches being maintained daily from the second week of August to the third week of November. Only a few watches were missed. Watches in August and September lasted from 1000 to 1800 CET. About half of the remaining watches began at 1500 and ended at 1700 to 1800 CET. Observations in other years were less extensive, covering most of the period from late August to early October.

Results
Seasonal totals and distribution
The total number of Marsh Harriers recorded in each season is given in Table 1. The totals from 1976 onwards (Table 1 and E. Curti pers. comm.) are higher than those reported by previous authors. This coincided with the use of high powered binoculars (12 X 50, 16 X 50), and it seems likely that in previous years some distant birds were overlooked or erroneously identified, in view of the consistent results obtained from Buskett watches since 1976. There seem to be sufficient grounds for considering the Marsh Harrier as 'frequent' in autumn.

The results obtained over the study period support the statements of Sultana and Gauci (1981) with regard to the distribution of sightings over the autumn migration season. This distribution showed a mean on the 27th September and a standard deviation of 6.42 days.

There was no significant difference between the mean time of appearance of males, and females and juveniles. This suggests that adults and juveniles migrate at similar times and at similar rates.

Flight style
Soaring was indulged in frequently, with birds often soaring to cloud-base. Such be-
havior was sometimes observed in strong winds, when the birds drifted rapidly downwind. Typically the birds soared in thermals or slope lift, and glided out of the area of lift after having gained sufficient height. Marsh Harriers in the company of Honey Buzzards appeared to glide more rapidly than usual in order to keep up with the flock. Flapping flight was also employed intermittently, apparently in an attempt to increase speed. Under the same conditions, Marsh Harriers appeared to use flapping flight more frequently than Honey Buzzards.

Height and direction of flight
Marsh Harriers were usually sighted lower than Honey Buzzards, even when convective cloud base was high. There was little variation with time of day. At dusk flocks appeared to fly lower and often circled over Buskett for long periods.

Fig. 1. Headings of Marsh Harriers migrating over Buskett, Malta. The headings of all birds which passed within 100 m of the watchpoint were estimated (±10°) by reference to known compass points. Each unit represents a flock of one or more birds.

The scatter of headings of Marsh Harrier sightings at Buskett is illustrated in Figure 1. This scatter diagram shows birds heading southwards, but also many heading east of south. This is not inconsistent with the known south to south-southwestward movement of Marsh Harriers across the central Mediterranean (Cramp and Simmons 1980; see also recoveries of Marsh Harriers listed in Sultana and Gauci 1982 which suggest a similar direction of migration). This feature of the scatter diagram, however, is readily interpretable in terms of a coasting movement by some of the Marsh Harriers sighted.

Variation with time of day
Figure 2 is a histogram illustrating the variation of the number of sightings with time of day. Histograms constructed for 1976, 1977, and 1978, all showed the following features: a small peak at around midday and a larger peak in the late afternoon. This histogram differs appreciably from that for the Honey Buzzard (Thake 1981). In particular, convergence on Buskett at dusk seems more prominent in the Marsh Harrier histogram. Figure 2 also shows a peak at around midday. Perhaps more Marsh Harriers are on migration at this time. Other Interpretations are possible.

Figure 2 is misleading in that the figure suggests that Marsh Harrier migration through Buskett commences at around 1000 CET. The watches on which the present study is based started at 1000 CET. Somewhat early morning watches revealed some Marsh Harrier migration at these times. This feature was noted by Beeman and Gates (1974). It is not clear whether these are birds which roosted in the north of the islands and in Gozo, or whether they crossed the Sicilian channel early in the day.

Fig. 2. Distribution of sightings of Marsh Harriers over the day. Sightings made in 1976 were grouped in hourly intervals and the mean calculated over the watches during which that hourly interval was covered. The ordinates represent the mean number of Marsh Harriers sighted during the period in question. Time is recorded on the abscissa.

Fig. 3. Variation of mean flock size of Marsh Harriers with time of day. The ordinates represent mean flock size.
Correlation of sightings with weather variables

The results of some of the correlation analyses performed on the observational data are listed in Table 2. The pattern of correlations obtained is similar to that exhibited by the Honey Buzzard in that significant negative correlations were found with wind strength in the early morning and in the late afternoon. Correlation of sightings with wind strength in the early morning was best with mean wind strength below 1500 m, just as it is the case with the Honey Buzzard.

**Table 2: Results of correlation analyses on Marsh Harrier sightings with weather.**

<table>
<thead>
<tr>
<th>Weather variable</th>
<th>Correlation coefficient</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure (1500)</td>
<td>-.359*</td>
<td>.001, .05</td>
</tr>
<tr>
<td>Visibility (2500)</td>
<td>-.140</td>
<td>.3, .1</td>
</tr>
<tr>
<td>Wind strength (surface)</td>
<td>-.503**</td>
<td>.012, .01, .01</td>
</tr>
<tr>
<td>Wind strength (mean below 1500 m)</td>
<td>.063</td>
<td>.3, .1</td>
</tr>
<tr>
<td>Easterly vector (1800 m)</td>
<td>-.262</td>
<td>.3, .1</td>
</tr>
<tr>
<td>Southerly vector (1800 m)</td>
<td>.159</td>
<td>.3, .1</td>
</tr>
</tbody>
</table>

* Marginally significantly different in the late afternoon and at all levels. The results of these correlation analyses are interrelated and discussed below.

**Discussion**

A number of theories of raptor migration through Malta exist. Indeed, practically every ornithologist who wrote about the local avifauna had something to say about the factors which might influence the migration of raptors through the Maltese Islands. Two hypotheses will be considered here: the first, that the approach of the southerly vector of wind strength at 1500 m is by means of a leading line effect, and the second, that the apparent convergence of sightings with weather variables is due to the occurrence of large numbers of birds over the islands. These two hypotheses will be examined in turn.

**The first hypothesis** is that the approach of the southerly vector of wind strength at 1500 m is by means of a leading line effect. The scatter diagram illustrating the headings of Marsh Harrier flocks (Figure 1) shows a strong correlation with southerlies at low levels. No such effect is apparent in the Honey Buzzard. There was little difference in the late afternoon rather than in the early afternoon (see Figure 2), again suggesting that a leading line effect caused by contrary sea breezes is not as important in this species as it is thought to be in Honey Buzzard. In the Honey Buzzard, leading lines are more apparent in the early afternoon, whereas in Marsh Harrier, the opposite was true. The absence of such an effect in the Honey Buzzard suggests that it may be due to the presence of contrary winds. The fact that the greatest number of sightings per hour are made in the late afternoon rather than in the early afternoon (see Figure 2), again suggests that a leading line effect caused by contrary sea breezes is not as important in this species as it is thought to be in Honey Buzzard. In the Honey Buzzard, leading lines are more apparent in the early afternoon, whereas in Marsh Harrier, the opposite was true. The absence of such an effect in the Honey Buzzard suggests that it may be due to the presence of contrary winds. The fact that the greatest number of sightings per hour are made in the late afternoon rather than in the early afternoon (see Figure 2), again suggests that a leading line effect caused by contrary sea breezes is not as important in this species as it is thought to be in Honey Buzzard.
11.3 mm. Therefore, mean weight of Maltese Swans (Northcote 1982) based on tarsometatarsus measurements in Whooper Swans would have limited their maneuverability, indeed at 17 kg they were flightless since the largest flying birds such as Kori Bustard have a wing span of 2.48 m. New estimates incorporating these are given here.

McLennan's (1975) theory of elastic similarity predicts that bone length = a constant (K) x width0.39. In Whooper Swans mean tarsometatarsus width = 21.2 mm; in Maltese Swans = 22.4 mm (Northcote 1982) so that K = 3.51. Mean width of this bone in Maltese Swans = 21.2 mm, standard deviation = 1.7 mm. In Whooper Swans mean tarsometatarsus width = 21.2 mm, standard deviation = 1.7 mm.

Acknowledgements

I wish to thank Dr. K.A. Joysey for advising on the methodological aspects of this study. Acknowledgements also go to Dick Northcote for providing the original samples.

References


The Giant Maltese Swan

E. MHRURIC NORTHCOATE

The Maltese Swan Cygnus falconeri Parker was evidently widespread in Malta in the past. Remains of this bird have been recovered from Zebbug, Ghar Dalam, Nokkara, Zebbug, and other localities. Parker (1865, 1869; Lydekker 1890, 1891; Late 1971; Northcoate 1982). They are stored in the British Museum (Natural History), London, University Museum of Zoology, Cambridge, England and the National Museum of Natural History, Malta.

Adams (1870) described the excavation of a typical deposit containing these bones. Beneath a surface layer of earth was a matrix containing remains of the Maltese Swan and other bone specimens, including the Maltese Crane Grus maltesis, one large and two very small specimens of elephant, a giant dome species and two species, one of them gigantic, of fresh water turtle (nearby, Adams found pteropus hippocrepis associated with this fauna). The caisson layer was only a few feet in depth and it appeared as Adams considered that all the bones were exposed within a short time-span. I could find no comparable deposit in the deposits that could be used for dating purposes. Pteropus hippopus bones have been found in Sicily, and Sondaar (1971) considered them to be characteristic of the last interglacial, Sicily was probably invaded by Maltese Swans during the last interglacial, which was found associated with these elephants, should also be assigned to this interglacial. Von der Hamm, W. & Zwaneg (1971) and Mangerud, S. (1974) have suggested dates c. 125,000 ago for this period.

By comparing bones of Maltese Swans with those of recent swans, I have shown, also, that they were unlike those of the Atlantic Swans Cygnus olor but resembled those of the scaled-up Whooper Swans C. cygnus or Bewick's Swans C. c. bewickii (Northcote 1982). Using this allowance, I employed carefully tested scaling formulae to estimate the weight and size of Maltese Swans based on tarsometatarsus measurements in Whooper Swans. Since this study, further Maltese Swan specimens (collected by Bate, chiefly from I. Salam) were discovered, which have become available. New estimates incorporating these are given here.

McLennan's (1975) theory of elastic similarity predicts that bone length = a constant (K) x width^0.39. In Whooper Swans mean tarsometatarsus length = 118.10 mm (Northcote 1982), which is 5.72 kg. Mean length of Maltese Swans = 116.6 ± 1.30 mm, n = 6; range, 115.3 - 114.0 mm. Therefore, mean weight of Maltese Swans could be estimated. McLennan's theory of elastic similarity also predicts that bone width = a constant (K) x weight^0.39. In Whooper Swans mean tarsometatarsus width = 22.4 mm (Northcote 1982) so that K = 3.51. Mean width of this bone in Maltese Swans = 21.2 mm, standard deviation = 1.7 mm. Therefore, mean weight of Maltese Swans = 21.2 mm, standard deviation = 1.7 mm.
EVIDENCE FOR THE EXISTENCE OF A LEADING LINE EFFECT IN HONEY BUZZARD MIGRATION THROUGH MALTA

N. A. THAKE

The effect of leading lines in raptor migration is well known, and is thought to be one reason for the large concentrations of raptors which occur at the narrows at both seasons. Recent analyses of the extensive observations carried out at Falsterbo has led to the elaboration of a model which relates the leading line effect to weather phenomena, especially winds (Alerstam 1978). Honey Buzzard (Pernis apivorus) migration through Malta in autumn is thought to be subject to similar leading line effects, albeit on a much smaller scale (Thake 1981). The effect is thought to increase in strength as the afternoon progresses. Increasing strength of the southerly (contrary) component of surface wind strength is also thought to reduce more birds to follow the coast rather than common migration over the sea immediately. Some evidence for the existence of a leading line effect in Malta is presented below.

Methods

Data obtained in 1976 provide the material on which this paper is based. The observation methods were described elsewhere (Thake 1977, 1980). The observations were made several years before the present hypothesis was conceived and could not have been in any way influenced by expectation.

Results and discussion

If Honey Buzzards choose between migrating over the sea immediately and following the coast, the scatter of headings is expected to be bimodal. Figure 1 shows some birds heading out to sea due N - S, and others following the coast by heading SW. The scatter diagram of headings of single birds shows the expected bimodality, but no satisfactory statistical test of this could be devised.

A coupling movement due SE should increase the rate at which flocks of Honey Buzzards are encountered, as the birds in question are flying obliquely to the stream of migrants, and flocking is expected to occur more frequently. Hence, larger flocks are expected to show a more pronounced tendency to fly SE. This is depicted in Figure 2.

![Fig.1: Scatter diagram of headings of single Honey Buzzards.](image)

![Fig.2: Scatter diagram of headings of flocks of four or more Honey Buzzards.](image)

These results strongly suggest that some Honey Buzzards follow the coast. Direct evidence that contrary winds increase the fraction following the coast would only be obtainable from a much larger sample of directional data than that at my disposal.
COLD FRONTS AND HONEY BUZZARD MIGRATION ACROSS LARGE BODIES OF WATER

M. A. THAKE

Some unusually large falls of Honey Buzzards Pernis apivorus have coincided with the approach of fronts. Such situations are discussed below.

Following observations in Malta by Gibb (1951), Brown and Amadon (1969) suggested that Honey Buzzards might utilise the thermals which precede fronts in order to cross the Mediterranean. In relation to this hypothesis, the use of frontal thermals by a single White Stork (Ciconia ciconia) is of interest. This bird was seen utilising thermals below convective cloud in a very weak front which crossed the London area on the 2nd September 1975.

The bird drifted downward as it proceeded along the front. The regular use of fronts by migrant hawks and falcons attempting to cross the Mediterranean is unlikely. The dangers of using an active front could be due to some effect of the southerly winds generated by the approach of the front, especially as the birds would be unable to correct for drift while using the front.

Recent observations have produced three separate instances where approach of a frontal system was associated with unusually high totals (11/10/73, 19/9/74, 11/9/76). A few other less marked cases occur. In each case, the raptors were seen well before the arrival of the front. On each of these occasions, the highest totals were logged at Buskett, as usual. A characteristic of such falls however, was the fact that sizable totals were also recorded elsewhere, principally on the higher ground of south Malta but also further north.

A synoptic chart for one of these dates is shown in Fig. 1, which illustrates the approach of a front on the 1st October 1973, when 410+ raptors (including 320 Honey Buzzards) were recorded. The wind was very strong and was blowing steadily from the north. The thermal conditions over the central Mediterranean region were replaced by Sirocco (XOaik) conditions later in the day due to the development of a low depression on the front, south of the Atlas mountains. Thus, on the 1st October the sea breezes which were prevalent in the morning were gradually supplanted by a south south easterly gradient wind which increased in strength throughout the day. The position of the front did not change appreciably in the course of the day.

The interpretation of these high totals remains unclear. Basically, the high totals could be due to some effect of the southerly winds generated by the approach of the front, or the birds' response to the approaching front. Four distinct possibilities exist. It should be noted that these possibilities are not mutually exclusive and all may occur to a certain extent.

1. Honey Buzzards respond to the increased strength of the contrary wind by following the coast to a greater extent than usual. The large totals at Buskett would thus be due to anaccentuated localised easterly force. The fact that many Honey Buzzards are also seen in the north of Malta on such occasions seems to contradict this hypothesis.

2. A contrary gradient wind over the Sicilian channel slows down the stream of migrants, which arrive in the vicinity of Malta later in the day when they are less willing to embark on a second crossing. An implicit assumption in this argument is that the distribution of intensity of migration with time of day is shifted earlier with respect to the distribution of sightings at Buskett. This assumption is reasonable but there is no evidence to support it.

3. A contrary wind over the Sicilian channel increases the proportion of Honey Buzzards which converge on the islands. Very little is known about convergence on the islands. There is some evidence that differential convergence is not responsible for the day to day variation of totals (Thake 1981). Convergence might, however, occur on a scale small enough not to be affected by day to day changes in visibility.

4. Honey Buzzards recognise approaching fronts by the presence of a cloud bank due west, accompanied by a southerly wind which is increasing in strength. It would be unex- pecedal of both time and energy for Honey Buzzards to fly from any cloud bank which appears on the horizon. Having established that a front is approaching, they may for the nearest land. This hypothesis is weakened by the fact that in some cases (see Fig. 1) the front in question was probably too distant to be seen by the birds.

Fig. 1. Synoptic chart for 0000 GMT on the 2nd October 1973, approximately 7 hours after the end of a large passage of Honey Buzzards. The dashed line shows the position of the principal front at 0000 GMT on the 30th September. Drawn from the 18higlish Weather Report kindly supplied by the Deutscher Wetterdienst.

According to a recent model of flocking (Thake 1980) a decrease in the motivation to migrate should result in an increased flock size due to increased flocking. All the above possibilities envisage a reduction in the motivation to migrate and increased flocking would be expected to occur. If the model is realistic, the anomalously high flock size observed on such occasions is difficult to explain in any other way. The explanation offered in a previous paper (Thake 1977) cannot account for the other cases under discussion.

Further observations are required in spring, when the southerly easterly approach of the front would be tail winds. In high totals are also recorded in such situations, this would represent an increased flock size due to contrary winds. Malta is perhaps unsuitable for such an investigation because of the meagre spring passage. Observation from Pantelleria covering several spring migrations are clearly required, preferably in conjunction with observations at Cap Bon, Pantelleria experiences a much more intense spring passage than Malta.

Our present knowledge might be summarised as follows: when a cold front approaches a well developed anticyclone over the central Mediterranean at around mid-day, high totals of Honey Buzzards are recorded. Although there is evidence that normal migration is being disrupted, it is not clear whether this is due to discovery of the front by the birds, or to some effect of the southerly winds which precede the front.

References

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MOULT AND BIOMETRICS OF CORN BUNTINGS IN MALTA

CHARLES RAUDI & JOE SULTANA

Introduction and Methods

Corn Buntings, although difficult to capture by mist-netting, are relatively easy to trap when they are not feeding, and when two or three mist nets are used, the catches are usually high. In Malta the best trapping time is in June, July and August when Corn Buntings congregate near water-holes to drink. At this time of year Corn Buntings, both adults and birds of the year, are in moult and 2% moult cards have been filled between 1977 and 1981. Most birds were caught at Wied il-Luq, Buskett on hot days with low humidity when dew was absent. On such occasions birds started arriving about half an hour after sunrise. Corn Buntings are always very wary and catches were always very small—usually one to four birds, occasionally six. Much fewer birds have been caught at other times of the year but in 1980, 54 Corn Buntings were caught at Gozo between mid-September and mid-October when the birds appeared to be feeding on the seeds of Salsola soda.

Most birds caught had their wing lengths measured (maximum chord) to the nearest 0.5 mm and were weighed to the nearest 0.1 g on Pesola balances. Most wing lengths have been recorded by four ringers and a few short-term retraps indicate a degree of accuracy in measurement to within 0.1 mm. Moult was recorded in the standard way (Snow, 1967).

Wing-length and Weight

Svensson (1975) has concluded that wing-length is extremely helpful in sexing Corn Buntings, giving ranges of 96.5–105 mm for males and 88–95 mm for females. Follows (1969), who measured and weighed 103 Corn Buntings, caught in a single day, suggested that birds with wing-lengths > 95 mm and weight > 46 g were males and birds with wing-lengths < 95 mm and weight < 46 g were females. However, 116 birds measured in Portugal by Moa (Svensson, 1975) did not fall into two clear categories. Fry-Jones (1970), who compared published data on Corn Buntings from a variety of sources, agreed with Follows and thought that the belief that a considerable overlap existed in wing-length between the sexes was due to wrongly sexed specimens. Boddy and Blackburn (1978) have measured and weighed nearly 300 birds over a five-year period at a Nottinghamshire roost. In winter and obtained very similar results to Follows'. They proposed that birds with wing-lengths > 97 mm or with wing-lengths between 95 and 97 mm and a weight of 54 g or more were males, and birds with wing-lengths < 95 mm or with wing-lengths between 95 and 97 mm and a weight of 44 g or less were females.

Birds measured and weighed in Malta have been divided into three categories:

a. Juveniles (April–September); b. breeding adults (March–June); and c. full-grown birds other than juveniles (mid-June–February). Wing-lengths (sexes not differentiated but sex ratios appeared uniform in the three groups) are given in Table 1.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Mean</th>
<th>Range</th>
<th>sd</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juveniles</td>
<td>85.3</td>
<td>78–94</td>
<td>4.25</td>
</tr>
<tr>
<td>adults</td>
<td>91.6</td>
<td>81–101</td>
<td>4.61</td>
</tr>
<tr>
<td>full-grown</td>
<td>92.8</td>
<td>85.5–105</td>
<td>4.69</td>
</tr>
</tbody>
</table>

Wing-lengths of breeding birds were slightly shorter than those of full-grown birds but there was no statistical difference (t=0.681, NS). The slight difference is almost certainly due to feather abrasion. Juvenile wing-lengths were significantly shorter than wing-lengths of full-grown birds (t=7.385, P<0.001).

The distribution of wing-length and weight in the three categories is shown in Figs. 1–3. In all three categories weight was positively correlated with wing-length showing...
A large amount of 'females' in the sample is probably more due to the fact that 'males' tend to free themselves more easily from mist-nets, than to polygamy, though at Ghadir, where many of the birds were trapped, a male often has up to three females breeding on its territory (Selinc & Gauth 1982). The pattern of weights (Fig. 3) shows no clear cut sexual distinction. Local birds are also substantially lighter than British birds.

Sexual Identification

Based on wing-lengths and weights of breeding adults (many of which were sexed on account of the presence of an incubation patch) it is suggested that the following criteria be used for sexing post-juvenile Corn Buntings in Malta:

- **Males**: Birds with wing-length > 94 mm and weight > 44 g.
- **Females**: Birds with wing-length < 94 mm and weight < 44 g.

This study has shown that though juvenile male Corn Buntings have longer wing-lengths and a proportionally heavier weight than juvénile females, the distinction is less clear than in adults and post-juveniles. On the date available it appears that from April to early September (i.e., up to the termination of moult) juveniles can be sexed thus:

- **Males**: Any bird with a wing-length of 88 mm and weighing over 40 g.
- **Females**: Any bird with a wing-length of 87 mm or less and weighing less than 40 g.

The small proportion of both juvenile and post-juvenile birds falling into the intermediate region should not be sexed.

Moult

Corn Buntings belong to the group of passerines in which first-year birds undergo a complete post-juvenile moult. Flight feathers are moulted in the usual passerine pattern—primaries descendently and secondaries ascendantly. Of 35 moulted birds examined 10 were adults, 33 juveniles and 10 could not be aged. Only one (a juvenile) was retrapped during the course of its moult and the time elapsed between ringing and retrap was of only seven days. When scoring primary moult, the minute outer (10th) primary was ignored, so that score 45 indicated completed primary moult.

Primary scores are plotted against date in Fig. 6. The date indicates that adults are the first to start moult, moult commencing in June, probably immediately following the termination of breeding. Onset of moult in juveniles appears to be spread over a period of about 40 days from late June to early August but moult scores are fairly compactly grouped. A regression analysis of juvenile moult scores therefore provides a reasonable measure of the mean duration of moult. This analysis estimates a mean daily increase of score of 0.57 per day and a duration of 79 days assuming that, overall, moult score increases more or less linearly with time. An analysis of the ten adult moult score gives a closely similar mean daily increase of score of 0.59 per day and a duration of 77.5 days. Most Corn Buntings have finished moult by mid-September and very few will still be in moult at the end of that month.

Acknowledgements

Thanks are due to those ringers who netted and measured Corn Buntings.
Summary

This study shows that juvenile Corn Buntings have statistically significant shorter wing-lengths than adults. Males are larger at all ages. A large number of birds can be sexed on wing-length and weight. Corn Buntings complete moult in an average of 70 days between June and September.

References


Charles Gauci = Skylark, Targa Gap Estate, Mosta, Malta.

Joe Sultana = Sclerissae Plat/s, Fleur-de-Lys Junction, P'Kare, Malta.

SHORT NOTES

OCURRENCE OF A HYBRID SWALLOW X HOUSE MARTIN

A strange looking hirundine showing some characteristics of a Swallow Hirundo rustica as well as some of a House Martin Delichon urbica was trapped while ringing hirundines at Lunzjata Valley, Gozo on 9th May 1982.

The bird had a House Martin's tail but which was more deeply forked. The forehead and throat were similar to those of a Swallow but the general shape of the head suggested a House Martin. The white belly was washed with a warm cinnamon colour while the mantle and back were metallic blue. Its white rump was half the size of a House Martin's and had some brownish-black blotches. The tarsi were covered with white feathers but not as thickly as in a normal House Martin. The wing length (maxima chord) was 117 mm and the weight 16.8 g.

C. Vantheelen who recorded a similar hybrid paired and breeding with a normal female Swallow in Brabant Wallon (Belgium) in 1980 cites 30 instances where similar hybrids had been recorded, the first in 1960. Identification d'un hybride prouvé entre l'Hirondelle de ferme et l'Hirondelle deINUE: Hirundine rustica et Hirondine de Chêne (Hirundo rustica). Le Glaneur 31: 811-815, 1981.

Besides these, two more have been recorded: one in the Federal Republic of Germany (N.J. Ungemeine Schweizerwind, Vogel 7(2): 23, 1975) and the other on 7th June 1981 at Køge, south of Copenhagen, Denmark (Fugle 2(3): 43, 1982).

Not all birds were identical but most agreed with the description of the bird ringed at Lunzjata.

Photos of the hybrid occurring on migration in Malta were shown to various ornithologists including H.C. Amsel, R. Ertel and K. Hansen as well as to the members of Il-Marrlli's Editorial board. R. Ertel and K. Hansen kindly brought to the attention of the editorial board the two last mentioned overseas records.

John Grech

HOUSE MARTIN - NEW BREEDING SPECIES FOR MALTA

The House Martin Delichon urbica is a common migrant in spring and autumn with a few birds sometimes occurring during the rest of the year, particularly in winter.

Throughout the day, on 7th June 1981, 5 House Martins were noted prospecting for nesting sites in the main square of Mosta. The prospecting continued until the 15th June when the birds disappeared. However, 4 birds returned a week later and 2 nests were built under one of the balconies of the building facing Mosta Church. In early August each nest contained 3 young. Adults and young deserted the area by the 3rd week of August. On 15th August, the day when the village feast is celebrated, the birds suffered from great disturbance when fireworks were let off even from the balcony where they were nesting.

The following year the birds did not return to Mosta but on 7th June 1982 3 House Martins were seen chasing each other in the square in front of the Cathedral of Mosta. One of the birds was also spotted frequently nesting beneath the clock on the right side of the Cathedral's façade. Later in the year 2 birds started building a nest at the same spot. Two days after the nest was nearly complete, the mud was being collected from a reservoir which was dug amongst fields ca. 300 m to the west of the Mosta Basilica. On 15th June another pair, one of which had 1 to 2 primaries missing on the right wing, was noted prospecting under the other clock, but both birds deserted the area two days later. However, the third unmated House Martin was still frequently seen about. By the end of the following month at least two young had left the nest which was used again to raise a second brood. On 19th September both adults, as well as the other two juveniles from the second brood were seen on the wing together and in the evening all four were noted going in the nest to roost. At least one pair were still using this nest on 3rd October.

Meanwhile on a visit to the islet of Filfla on 7th August 1982 a pair of House Martins were seen flying about. Surprisingly they were found brooding. The nest was in a small round hole, possibly made by a racket when Filfla was used for boating practices, in a
PINE BUNTING - AN ADDITION TO THE LIST OF THE BIRDS OF MALTA

In the span of one week, two first-year male Pine Buntings Emberiza javanica, a species which had not previously been recorded in Malta, occurred in autumn 1982, the first at Mizieb on 31st October and the other at Bahrija on 5th November. They were taken by a shooter and a trapper respectively.

The writers were requested to identify the specimens. Both birds had white crown feathers which were partly concealed by dark brown central streaks. The cheeks were white surrounded by a chestnut mask. The chin and throat feathers were chestnut-brown with white tips. The underparts were white with the breast and flanks streaked brown. The upperparts, including the wings, were chestnut streaked black and dark brown. The chestnut rump feathers were tipped white. The tail was dark brown with the outer tail feathers having a white V pattern on the inner web. Their wing-lengths were 89 mm and 95 mm respectively.

The Pine Bunting has an eastern and central Asiatic range, which in central and western Siberia overlaps with the eastern breeding range of the Yellowhammer Emberiza citrinella. Where they overlap hybridization between these two species occurs. While the Yellowhammer is mainly sedentary, the east Asia Pine Bunting is a migrant, wintering from Iran to China (Voss, K., Atlas of European Birds - 1960).

The Maltese name chosen is Durrass Pasha Bajda.

Raymond Testa, Natalino Fenech & Raymond Galea

THE PECTORAAL SANDPIPER - NEW RECORD TO MALTA

The Pectoral Sandpiper Calidris melanotos is an accidental visitor from North America to Europe and N.W. Africa. In recent years it has been recorded annually in the Azores, Ireland and Britain (Cramp, S. & Simmons, K.E.L. (eds) (1981) The Birds of the Palearctic Vol. 11). In Malta it made its first appearance on 1st May 1982 when one was sighted in the vicinity of Marsaxlokk Bay. The bird was quite tame. When it was approached closely it looked like an overgrown Dunlin. In flight it was reminiscent of a Reeve Philomachus pugnax. The bird, a male, was shot on the following morning when it was still in the same area.

On close examination the specimen had a white chin and a heavily mottled breast which terminated abruptly to leave a pure white belly. The under tail coverts were also white and it had some fine streaking on the flanks. A faint eye-stripe is noticeable on the slightly mottled greyish face. The crown was mottled blackish-brown but the almost stellar back was a little more brownish. The wings were dark with brownish coverts and the centre of the rump back with white on both sides. The sharply pointed tail had blackish-brown central feathers with the rest being dark grey.

Measurements: Wing 134 mm; bill (to feathering) 29 mm; and tarsus 33 mm. The Maltese name chosen is Barajsa Naha Bajda.

Alfred Vassallo

WIGW HARriers ROosting in Trees

While watching migrating birds of prey on the afternoon of the 27th September 1981 the wind (force 3-4) veered from south east to south west. The general prevailing conditions that day were misty with low clouds. A total of 29 Marsh Harriers was observed on the move after 1730 hrs.

At 1800 hrs an adult male, out of a flock of ten, circled down above the wood and when a few metres away flipped to an Aleppo Pine where it settled to roost. The rest of the flock moved away, probably due to disturbance from gun-shots in other parts of the Buskett area. About ten minutes later another 9 Marsh harriers appeared and another individual descended in a similar manner as the previous bird to roost in a different Aleppo Pine grove. The other birds kept circling above the grove but were not always visible due to the poor light conditions. Whether or not the rest of the flock descended to roost in the trees could not be ascertained.

Saviour Balzan & Natalino Fenech

S.R. = Villa Strickman, Sonya St., Naxxar, Malta.
N.F. = 35, Main St., Attard, Malta.

CORY'S SHEARWATER FEEDING ON DOGFISH'S LIVER.

While out at sea with some fishermen on 7th March 1981 we caught a large Great Spotted Dogfish Scyllium cyprium in a gill-nets. We decided to cook the fish and after cleaning it we threw the liver overboard. There were no shearwaters in sight at that particular moment but very shortly about a dozen Cory's Shearwaters Calonectris diomedea were spotted flying in line towards us flapping their wings continuously. The first to arrive descended the liver overboard. There were no shearwaters in poor light conditions.

The writer has seen a fairly common breeding resident, has recently declined drastically. The start of the decline coincided with the relatively severe winter of 1980/81 though this cannot be the cause of the decline as the species has shown no sign of recovering. The following table shows the number of nests located in five selected areas which were regularly under observation throughout the five-years period 1978 – 1982.

**Species Notes on Breeding Species for 1982.**

1982 turned out to be quite remarkable for breeding records of certain species as well as for the absence of others. Apart from the two pairs of House Martins Delichon urbica and the new breeding record of the Black-crested Tody Flycatcher Muscicapa atthis (both reported elsewhere in this issue) other scarce species were also recorded nesting.

Three pairs of Swift Flycatchers Muscicapa striata bred at Buskett, each raising two broods and fledging a total of 12 young. In previous years only up to two pairs had been recorded in one season. The Woodchat Shrike Lanius senator bred at 2 localities. A pair nested in a carob tree at Shaqqa and raised 4 young which fledged in the third week of July. A female with 3 fledged young was also present in early July at Humarida. Two pairs of Spring Serinus serinus bred at Buskett and at least one pair raised three young. The adults were seen feeding 3 fledged young with calcium sp. seeds on 7th May.

On the other hand Ta' Cenc Cliffs lost its pair of Peregrine Falcons Falco peregrinus. The birds were not seen there in spring and we were later informed that both birds were shot in February from a seacliff from below the cliffs. The Corn Oxl Cyprinus albus, too, has not been recorded breeding. Although a pair was noted present in late July and early August in one locality there has been no sign of breeding, in fact none were seen or heard when the locality was visited twice at night in mid-August. Another pair was shot by rabbit hunters at Forest-In-Neh during summer.

The Spectacled Warbler Oenanthe conspicillata, a fairly common breeding resident, was recorded two pairs nesting in 1981 at Birkett. A single pair was recorded in 1982 at Birkett and at Tazza Gap.

Two pairs of Marsh Harriers Circus aeruginosus were reported breeding elsewhere in this issue. The second pair was seen feeding three young in 1982. The third raised three young. In 1981 one pair was seen feeding three young, another pair three young, and there were two in 1982. The<pre>Some Notes on Breeding Species for 1982.

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Joe Sultana & Charles Gauci

S. = Sciberras Estate / J. Fleur-de-Lys Junction, Sliema, Malta.
C.G. = Skylark, Targa Gap Estate, Malta.

Fan-tailed Warbler Patrol Calls.

While bird-watching in Sicily at the Gattirla (Massain) on the 7th May, 1983, at the Simeto and on the outskirts of Catania on the 9th May, 1983, it was noted that the patrol calls of the Fan-tailed Warbler Cistothorus junctus were much more frequent and of a lower pitch than those of the Fan-tailed Warbler found in Malta, however, no difference was noted in the alarm calls of the birds. On all occasions the birds were observed quite closely.

It would be interesting if more comparative studies are made on this subject.

Alfred E. Baldacchino & Natalino Fenech

A.I.F.B. = foresti in Malta House, Rotasit Bath St., Attard, Malta.
N.F. = 35, Main St., Attard, Malta.
The two years covered by this systematic list were relatively quiet, with a few small falls occasionally during both migrations. In the spring, 1979 was better than 1980, and 1980 was better than 1979 when quite a good number of migrants were grounded.

229 species were recorded during the period under review, some of which are very rare or very local to the Maltese Islands. Most were plentiful at Ghadira in 1980 when compared to those recorded in 1979, but bird of prey migration was better covered in 1980 when quite a good number of migrants were recorded in March, April and May.

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**GREATER FLAMINGO** Phoenicopterus roseus: Fiume

1979: 3 at Qrendi in Apr and singles shot at Qrendi and at Delimara in Nov.

1980: 1 at Mqabba on 3 Mar, and singles at M'Xlokk on 5 Apr and at Plata on 6 Apr. 

**MUTE SWAN** Cygnus olor: Qrendi

1979: 1 , single at B'Malta on 12 Jan.

**GREY LAG SWAN** Anser anser: Wied Grazi

1980: 1 at Delimara on 7 Dec.

**RUDDY DUCK** Oxyura jamaica: Qrendi

1979: 4 at Mgarr on 13 Dec.

**FERRUGIOUS DUCK** Tadorna ferruginea: Mqabba

1979: Singles off M'Xlokk on 15-16 Jan., 1 Juv. in M'Xlokk Bay in mid-Jan and 10 at same place on 12 Aug. On 7 days in Nov from 8th to 24th; singles except for 20-26 Nov. 2 flocks of 20-40 each off Mqabba Bay on 19 Dec.

1980: 1 in South Cimino Channel on 27 Nov. Mar 1-4 on 8 days from 22nd to 30th. 1 on 1 Dec and up to 3 almost daily at Qrendi from 10-16 Dec, but 2 on 13 Dec.

**PHOENICOPTERUS** Phoenicopterus ruber:

1979: Recorded in Nov from 4th to 11th; 1-3 except for 70+ at Qrendi on 7 Nov. 1980: Singles at Qrendi on 23-26 Oct and on 25-30 Nov.

**TEAL** Anas crecca:

1979: 1 at Mqabba on 6 Sep, then up to 5 frequently recorded at Qrendi from 23 Nov to 14 Dec. Also 6 at B'kett on 6 Dec and 1 at Ta' Qali on 1 Dec.

1980: 1 at M'Xlokk on 6 Sep, then up to 5 frequently recorded at Qrendi from 23 Nov to 14 Dec. Also 6 at B'kett on 6 Dec and 1 at Ta' Qali on 1 Dec.

**MALLARD** Anas platyrhynchos: Qrendi

1979: Singles on 30 Apr, 6 Nov and 1 Dec.

1980: 1 on 24 Aug and 16 on 22 Nov. Daily in Dec from 11th to 19th, with up to 3 records. Most records from Qrendi.

**INDIS** Anas americana:

1979: Block of 20+ on 3 Jan and 15 'large' flocks out at sea on 11 Feb; 13 other flocks seen offshore on 9 Mar. In autumn, first 6 on 5 Sep and 11 on 14 Oct. Single seen regularly from 4-12 Nov, with low double figures, with 22+ recorded from 1st to 5th Nov. Single on 29 Nov. All autumn records from Qrendi.

1980: Single males on 22nd and 24 Feb and 1 or 11 Mar. Passage observed out at sea on 1 Mar, 16 Mar, 1 Apr, 9 Apr, 16 and 17 Apr, 18-29 Apr; usualLy 3-6 in Oct. Autumn passage almost daily in Sep.
1979: Singles at Delimara on 10 May and at Buskett on 29 Sep. Then one at Buskett was of the race P. p. milvus.

1980: Singles at Buskett on 28 Nov and at Delimara on 4 Dec.

BOoted EAGLE Hieraaetus pennatus Ajiq ta’-Keltiett

1979: 1 at Bahrija on 11 Oct. (One seen at taxiderrmiti in Oct could be same bird).

OSPREY Pandion haliaetus Arpa

1979: In spring 1-2 on 4 scattered days from 24 Mar to 23 Apr. More frequently in autumn with 10 records of up to 3 from 7 Sep to 13 Oct, most records from Buskett.

1980: Singles on 5 days in Apr from 3-17th. Late bird at Ta’Qali in 3rd week of Jun. In autumn singles on 5th and 6 Sep and 1-2 on 6 more days from 17 Sep to 1 Oct. 1 at Qadira on 6 Nov.

LESSER KESTREL Falco naumanni Gnejulettjiednem

1979: Singles in spring on 3 days from 24 Mar to 11 Apr. Up to 7 frequently at Buskett from 8 Sep to 1 Oct, most till 21 Sep.

1980: Poor year with singles on 4 Apr, 18th and 20 May in spring. In autumn 1 on 4 Sep, 2 on 18-19 Sep, and 1 on 2 Nov.

Kestrel Falco tinnunculus Spanjulettjiednem

1979: 1-2 occasionally in Jan and Feb. Spring passage almost daily from 3 Mar to 29 Apr, but never more than 3 in one locality. On 3 days in May from 6-21st, max. 8 at D’Kara on 6th. In autumn first on 17 Aug, then recorded frequently from 31 Aug to 28 Oct. Usually in single figures with occasional low double figures. Max. 8 on Tal-Virita’ on 18 Sep, 1 on 9 Dec.

1980: Singles recorded once in Jan and on 3 days in Feb. Single figures commonly from 5 Mar to 20 Apr, max. 6 at D’Kara on 18 Mar. Singles on 3 days in May from 3-20th. Singles on 5 Aug and 13 Sep. Up to 6 on 5 days from 21-30 Sep. Small break in sightings till 11 Oct, then 1-2 or 8 more days till 23 Oct. Singles on 4th and 13 Nov.

RED-FOOTED FALCON Falco vespertiusse Zbubballi

1979: 1 at Attard on 20 Apr and 3 at Marsa and 1 at Marsa Marson on 6 May.

1980: 1 at Bahrija on 14 Apr.

MERLIN Falco columbarius Sequir ta’Dambu

1979: 1 Juv. male hawfin on 1 Nov (Locality unknown).

HOBIE Falco subbuteo Sequir ta’-Menningar

1979: Up to 3 frequently from 3-19 Apr and singles on 5 days in May from 1-29th. Single to low double figures in Sep with max. of 21 at Buskett on 18 Sep. In Oct, 8 on 9th and 13th. Most autumn records from Buskett.

1980: Very poor spring migration. Small passage on 6 Apr with c.8 recorded from 3 localities and singles on 5 days in Apr from 6 to 29th. In autumn, singles on 3-4 Sep, then up to 10 at Buskett on 9 days from 14-27 Sep.

ELDER’S FALCON Falco iwmadoneu Bies ta’-Rajijn

1979: Singles in Apr on 12th and 24th, and on 4 days in Jun from 30th to 22nd, 1-2 recorded frequently, mainly at Baktar in Sep to 20th.

1980: Singles in summer on 19-20 Jul and 29 Aug. Up to 3 on 6 days at Buskett from 3-27 Sep.

SAKER FALCON Falco columbarius Bies Razu Bajal

1979: Singles at M’Scaja on 24 Sep and at Jableb on Nov.

1980: 1 over Bingla on 27 Sep.

PEREGRINE FALCON Falco peregrinus Bies

1979: Pair in Gozo seen on 3 Jun, Juv. at Dalhara Pt. on 18th and at Filfira on 23 Jun could be young of this pair dispersing. 1 at Buskett on 18 Sep.

1980: Singles at Manikata on 14 Jan, in Gozo on 30 Mar and 4 Apr, on Camino on 13 Apr, at Qadira on 12 May, at Marsaflorn on 17 Aug and at Buskett on 19 Sep.

GUILLI Consumus coromzis Sunrjijietta

1979: On 3 days from 3 Mar to 1 May. Low single figures except on 15 Apr, when 15 recorded from Gozo. 1 on 27 Oct.

1980: Very poor egreation, Singles on 24 Feb and on 1st, 15th and 31 Mar and 17 Apr. 1 on 9 Nov.

WATER RAIL Rallus aquaticus Gallozz taz-Attinna

1979: On 6 days in Aug from 10th to 24th, mainly singles but up to 4 on 17 Nov. Singles also on 29th and 25 Dec. All records from Qadira and Gnejulla.

1980: 1 of Luntija on 4-5 Jan and another at Gnejullata on 12 Jan. In autumn recorded only on 3 days in Nov from 6th to 23rd, almost singles.

SPOTTED CRANE Porzana porzana Gallozz tat-Tikkk

1979: 1 at Luntija on 29 Mar.


LITTLE CRANE Porzana parva Gallozz Zghif

1979: 1 at Marsa on 26 Apr.

OYSTERCATCHER Haematopus ostralegus Gallozz att-Takkar

1979: On 27 Jan, 1-2 on 3 Mar to 30 Apr; then 1 on 25 May. In autumn singles on 9th and 23 Aug and 2 Sep; then 1-2 on 8 days from 23 Sep to 21 Oct. In Nov. 1 on 3rd and 3 on 17th.

1980: Singles on 2nd end 10 Jan, 1-2 on 17 Feb and on 28 Mar, then up to 5 on 12 days from 13 Apr to 2 May. Only singles recorded in autumn: 8 on 29 Sep, 1 in 20 Oct, 4th and 16 Nov and in 6th, 14th and 28 Dec.

COTT: Pu\rola: Tnejpla: Ti:\kkar

1979: Singles at Balluta on 26 Oct and at Flerta on 1 Nov.

1980: On 4-8 Nov and 1-2 on 10-16 Dec at Qadira, and 1 at M’Xlokk on 17 Dec.

CRANE Grus grus Greyw

1979: 2 on 4 Jan. Singles on 6-7 Oct and 9 were shot from a flock of 22 in Gozo in the beginning of Oct. Another flock of 24 over Gozo on 23 Oct and 11 on 24 Oct from 9 different places. A flock of 5 recorded from 3 localities on 3 Nov, could be same. 3 on 2 Nov and 1 roosted at Rabat on 24 Sep and summer roost the day after.

1980: 4 over Rabat on 20th, and 2 flocks of 15 and 14 off Msida on 28 Feb.

OSTERCATCHER Haematopus ostralegus Gallozz tat-Takkar

1979: Flock of 20 at M’Xlokk Bay on 2 Apr and singles at M’Scala on 18 Aug and at Minbia Mt. on 27 Sep.


BLACK-WINGED STILT Himantopus himantopus Fas-sarjant

1979: Singles at M’Xlokk Bay on 22 Mar and 3 Apr, 4 at Siema on 24 Jun and 3 at Gdank on 9 Jul.

1980: 2 sleeping on Grand Harbour on 18 Mar, then singles at Qadira on 19 Mar, on 30 Mar, 1 at Luqa on 1 Apr, then on 6 Mar and 9 were shot from a flock over Gozo in Nov.

AVOMET Remiremontia avosetta Xifa

1979: Flock of 6-20 over Qadira on 8 Nov.

STONE CURLEW Burhinus oedicnemus Teltirjel

1979: In spring first on 28 Mar, then on 5 days in Apr from 6th to 11th and on 29 Jun. all involving single birds. Recorded on 3 days in autumn: 4 on 29 Oct and 2 each on 1st and 10 Nov.

CREST-COLOURED CURLEW Oxyrinci ooiroa Namkla


LITTLE NARINGI Lasius chrysus Mavkorttu

1979: Singles on 11th and 20th and 3 on 31 Mar; more frequent from 7th to 29 Apr, though numbers never exceeded 5 in one place. Singles on 4 days in May from 1st to 28th, 1-2 on 2nd and 15 Jun. In autumn first on 5 Jul, then quite common till 20 Oct; always in single figures except for 20 at Luqa on 18 Aug, 1 on 5 Nov.

1980: Present daily at Qadira from 5 Mar to 29 Apr, when only recorded occasionally from other localities. Seen mainly in single to low double figures, highest being 50 on 5 Apr. In May up to 3 recorded on 9 days from 1st to 24th. Less common in autumn: 1-2 daily in Jul (27th), on 5 days in Aug (up to 4), and 1-2 on scattered days from 17 Sep to 30 Oct. 1 on 6 Nov.
RINGED PLOVER
Charadrius hiaticula
1979: Recorded only in May from 23rd to 26th.

1980: Recorded on 23rd, 24th and 26th.

KENTISH PLOVER
Charadrius alexandrinus
1979: Recorded at Hal Far on 14 May and at M’Xlokk on 29 May.

1980: Recorded on 4 scattered days from 1st to 7th, in autumn on 29th.

GOLDEN PLOVER
Pluvialis apricaria
1979: Recorded at Hal Far on 11 and 24 May.

1980: Recorded on 6 scattered days from 1st to 14th.

STILT
Himantopus himantopus
1979: Recorded in autumn from 1st to 4th, with single birds on 2nd, 3rd and 4th.

1980: Recorded on 3 scattered days from 1st to 7th.

BROAD-BILLED SANDPIPER
Calidris falcinellus
1979: Recorded only in May from 1st to 7th.

1980: Recorded on 3 scattered days from 1st to 7th.

RINGED PLOVER
Charadrius hiaticula
1979: Recorded only in May from 1st to 7th, in autumn on 19th and 20th.

1980: Recorded on 24th.

YELLOW-LEGGED GULL
Larus michahellis
1979: Recorded on 3 scattered days from 1st to 7th.

1980: Recorded on 3 scattered days from 1st to 7th.

SHORT-BILLED SANDPIPER
Calidris minutilla
1979: Recorded on 4 scattered days from 23rd to 26th.

1980: Recorded on 2 scattered days from 22nd to 26th.

GLASSY-HEADED EIDER
Pintada ownelliana
1979: Recorded on 1 scattered day from 23rd to 26th.

1980: Recorded on 2 scattered days from 22nd to 26th.

C JAY
Garrulus glandarius
1979: Recorded on 4 scattered days from 23rd to 26th.

1980: Recorded on 2 scattered days from 22nd to 26th.

RED SHANK
Tringa totanus
1980: Recorded on 1 scattered day from 22nd to 26th.

GOOSE
Anser anser
1979: Recorded only in May.

1980: Recorded on 3 scattered days from 1st to 7th.

BROAD-BILLED SANDPIPER
Calidris falcinellus
1979: Recorded at Hal Far on 11 and 24 May.

1980: Recorded on 6 scattered days from 1st to 14th.

CURLEW
Numenius arquata
1979: Recorded on 4 scattered days from 23rd to 26th.

1980: Recorded on 2 scattered days from 22nd to 26th.

COCKLE-HELL
Heteroscelus incanus
1979: Recorded on 1 scattered day from 22nd to 26th.

1980: Recorded on 2 scattered days from 22nd to 26th.

MUFFLON
Ovis aries
1979: Recorded on 4 scattered days from 23rd to 26th.

1980: Recorded on 2 scattered days from 22nd to 26th.
1979: On 4 days in Apr from 3rd - 13th, max. 4 on first day, otherwise singles. In Jun, 1 on 2 days in Jul from 19th, 1-2 on 2 dates in Aug and singles on 1 day in Sep and on 3 days in Oct to 21st.

1980: Up to 4 at a time daily at Ghadira from 4-21 Apr, then 1 on 27th, 1 on 30 Jul, then 1-2 on 14 days from 10 Aug to 27 Sep. Most from end of Aug to mid-Sep.

1979: Recorded on 9 scattered days from 4 Mar to 20 Apr. In winter, then up to 5 on 6 days in Aug and singles on 29 Sep, 1 on 1 Oct and 1 on 27 Oct.

1980: Up to 3 frequently from 15-25 Mar, then again 1-2 almost daily from 24-2 Apr, 1 on 4 May. In autumn recorded on 17 days from 28 Jun to 15 Sep, all singles except for 2 on 13 Sep, 1 on 2 Nov.

WOOD SANDPIPER - Tringa glareola Pallas 1818

1979: Passage on 2 Apr (numbers not given) and up to 6 on 12 days from 9 Apr to 20 May. Singles on 2-9 Jun. Single on 20 Jun to 4 Aug and 2 on 29 Sep and singles on 27 Oct and 18 Nov.

1980: 1-2 daily from 20-24 Mar, then almost daily from 3 Apr to 13 May, recorded mainly in low double figures in Apr, followed by single figures in May. Highest so far on 3 days from 16-19 Apr. Singles on 6 days from 13 Jul to 10 Aug, then up to 4 frequently from 13 Apr to 29 Sep. 1 at Ghadira from 14 Nov to 3 Dec.

COMMON SANDPIPER - Antigone hyperphysa Regispiers 1793

1979: On 18 days from 1 Apr to 25 May, most in end of Apr; single figures, max. 9 on 28 Apr. Singles on 3 days from 7-13 Jul, then single to low double figures almost daily from 24 Jul to 30 Aug, 3 on 8th and 2 on 29 Sep.

1980: Single figures on 13 days from 9 Mar to 15 Apr. Low double figures daily from 16-21 Apr, highest being a 35 on 18-19 Apr; then again in single figures on 12 days from 22 Apr to 24 May. 1 on 30 Jun. In autumn single figures almost daily from 9 Jul to 16 Dec, but 1st on 1st day and 10 on 8th and 30 Aug.

TURNSTONE - Arenaria interpres Mongolianus Huphriji

1979: 1 in early May (locality unknown) and 2 at Salina on 6 Aug.

1980: 1 at Mlqlokk on 30 Apr and 2 at Benghisa on 18 May.

POMARINE SKUA - Stercorarius pomarinus Cléafla tigris

1979: Singles off St. L. coast on 4 May and offshore on 1 Oct.


MEDITERRANEAN GULL - Larus melanocephalus Gawija Rapha Sewa

1979: 1-2 seen sporadically in Jan-Mar to 9th, 3 at Sliema on 20 Nov.

1980: 1 on 4th, 2 on 21st and 3 on 25th, all in Dec.

LITTLE GULL - Larus minutus Gawija zihera 1979: Singles at Sliema on 23 Feb and in Conino Channel on 23 Apr.

1980: 1 off S. L. coast on 11 Mar and an 1h. at Sliema on 24 Dec.

BLACK-HEADED GULL - Larus ridibundus Gawija Rapha Kamelija

1979: Double to low treble figures daily in Jan-Feb. Low double figures in Mar to 29th, then single figures till 28th. 1 on 19 Apr. In autumn, 1 on 21 Oct, then single to double figures from 7 Nov till year end.

1980: Single to double figures daily in Jan-Feb till 1 Mar, but 600- in Grand Harbour on 13 Feb. Single figures on 12 days from 27-2 Mar. On 8 Sep and 30+ on 9th and 2 on 21 Oct. Daily in singles from 29 Nov, with occasional treble figures recorded.

SILVER-BILLED GULL - Larus argentatus Gawija Gedda Gara


1980: 1 taken offshore on 10 Jan. 2 off S. L. coast on 11 Mar and 1 at Sliema on 3 Aug.

AUDUDDIN'S GULL - Larus aududdiin Gawija Gedda Guma

1979: Two singles off Malta on 4th, and of then on 17th.

1980: 1 off S. L. coast on 13 Mar.

LESSER BLACK-BACKED GULL - Larus fuscus Gawija Dabaara lowed

1979: Singles on 21 Jan, 51 Mar and 5 Apr. Singles also on 7th, 15th and 20 Nov and 16 Dec.

1980: Singles in Jan on 7th and 29th, in Feb on 9th, 13th and 22nd and in May on 1st. 1 on 12 Dec.

HUFFING GULL - Larus argentatus Gawija Prina

1979: From 28 Apr and 2 Aug, 2 on 9 Oct and 3 on 7 Nov.

1980: 2 in South Conina Channel on 1 Apr and at Sliema on 16 Oct.

CASPIAN TERN - Sterna caspia Gawija Prina

1979: 2 at Luzzjata on 1 Sep.

1980: 1 taken offshore on 10 Jan and 2 on 5 Sep.

GULL-BILLED TERN - Gelochelidon nilotica Cirleowwa Gudhuma

1979: Recorded on 28 Apr and 2 Aug, 2 on 9 Oct and 3 on 7 Nov.

1980: 2 in South Conina Channel on 1 Apr and at Sliema on 16 Oct.

CASPIAN TERN - Sterna caspia Cirleowwa Prina

1979: 2 at Luzzjata on 1 Sep.

1980: 1 taken offshore on 10 Jan and 2 on 5 Sep.

PUFFIN - Fratercula arctica Purimell tal-Bahar

1980: Singles taken by fishermen on 5th and 10th Jan.

WOODPLOON - Fulica paludosa Tudun

1979: 2 records in Nov: 1 near Garsell and 2 at Zebbug on 3rd.

1980: 1 taken off Mliqlokk Bay on 1 Sep.

BLACK TERN - Chlidonias niger Cirleowwa Sawla

1979: 1 at a time at Ghadira and Grand Harbour on 12 May.

1980: In Aug 3 at Manoel Isle on 17th and 1 in Grand Harbour on 22nd.

1980: Recorded only in Aug: 1 at Manoel Isle on 18th and 14 over Ghadira on 29th.

TURLE DOVE - Streptopelia turtur Guma

1979: Single figures from 7-18 Apr, then double figures daily with treble figures on 3 days from 16 to 18 Apr and singles off 1 May, max. total of 530+ on last date. Low double to single figures from then on till 28 May, up to 4 frequencies in Jun and single on 3 days in Jul, most sightings from Busteed. In autumn single figures from 3-30 Aug, then mainly in double figures, treble figures reached on 2 days in Sep. Single figures again from 18 Sep to 12 Oct, but 100+ on 29 Sep. 1 on 27 Sep.

1980: 1 on 2 Mar could be an escaped bird. Single to double figures from 6 Apr to 25 May, with treble figures on 29 Apr, 4th and 9th. Up to 5 in Jun and Jul, mostly at Busteed. One was seen in flight on 2 Jul. Poor autumn migration, with single figures on 19 Aug to 24 Sep; low double figures reached on 3 dates. Highest 50+ at Busteed on 5 Sep. 1 on 12 Oct.

LAUNCHING DOME - Steptopelia squamata Guma ta-l-iwien

1979: 1 day, 10 at 17th on 8 May. 1 at Keto on 12th.

1980: Great spotted Cuckoo - Clamator glandarius Sultan il-Gamiet tal-Toppa

1979: 1 at Birgu on 30 Mar.

1980: 1 at Bahar 16-Caghaq on 19 Mar and 1 taken at Dalhara in Apr.

CUCUO - Cuculus canorus Dauqejje Kafa

1979: 1 on 31 Mar, then almost daily from 12-30 Mar. Recorded in single figures except for 11 on 10 Apr. 1 taken in Apr belonging to the race G. G. lanesta. 1-2 recorded on 8 scattered days from 1 Aug to 30 Sep.

1980: Poor migration in both seasons. In spring up to 3 seen on 8 days from 13 Apr to 19 May, 4 taken and up to 6 on 1 May. In autumn singles recorded on 4 days from 31 Jul to 6 Sep.

BARB OWL - Tyto alba Burtubaj

1979: Singles seen on 12 Apr, 7 Jul and 12 Aug and 1 at a taxidermist in Sep.

1979: Singles on 2 days each in Jan and Feb. Poor spring migration with only 2 singlings, single birds on 3rd and 4th Mar. Singles on 31 Aug, 11th and 26 Sep. 1-2 almost daily from 5 Oct to 27 Nov, mostly from mid-Oct onwards. 1 on 26 Dec.

1980: Records in Oct: 1 at Galfajra on 4th and 1 at Wadn.webta on 13th.

1979: A taken in low numbers. (Locality and date unknown).

First on 3 Mar; in single figures till 6 Apr, from then on in double to low triple figures. Highest 200+ at Ta' Cenc on 5 Mar. Bred in usual numbers. Last recorded on 23 Sep.


1980: Single figures in Jan-May, but 55+ on 26 Jan. Return passage very evident in Mar when recorded almost daily, very frequently in double figures, reaching triple figures on 1st and 15 Mar. Highest 430+ from 3 localities on 15 Mar. 1-3 on 4 days in Apr to 13th. In autumn, up to 5 or 6th and 17th, then daily in double figures to 7 Dec, highest being 80+ at Baidara on 8 Nov. Single figures from 11 Dec till year end.

1980: Single figures on 11 May, but 55+ on 26 Jan. Return passage very evident in Mar when recorded almost daily, very frequently in double figures, reaching triple figures on 1st and 15 Mar. Highest 430+ from 3 localities on 15 Mar. 1-3 on 4 days in Apr to 13th. In autumn, up to 5 or 6th and 17th, then daily in double figures to 7 Dec, highest being 80+ at Baidara on 8 Nov. Single figures from 11 Dec till year end.

1980: Single figures on 11 May, but 55+ on 26 Jan. Return passage very evident in Mar when recorded almost daily, very frequently in double figures, reaching triple figures on 1st and 15 Mar. Highest 430+ from 3 localities on 15 Mar. 1-3 on 4 days in Apr to 13th. In autumn, up to 5 or 6th and 17th, then daily in double figures to 7 Dec, highest being 80+ at Baidara on 8 Nov. Single figures from 11 Dec till year end.

1980: Single figures on 11 May, but 55+ on 26 Jan. Return passage very evident in Mar when recorded almost daily, very frequently in double figures, reaching triple figures on 1st and 15 Mar. Highest 430+ from 3 localities on 15 Mar. 1-3 on 4 days in Apr to 13th. In autumn, up to 5 or 6th and 17th, then daily in double figures to 7 Dec, highest being 80+ at Baidara on 8 Nov. Single figures from 11 Dec till year end.

1980: Single figures on 11 May, but 55+ on 26 Jan. Return passage very evident in Mar when recorded almost daily, very frequently in double figures, reaching triple figures on 1st and 15 Mar. Highest 430+ from 3 localities on 15 Mar. 1-3 on 4 days in Apr to 13th. In autumn, up to 5 or 6th and 17th, then daily in double figures to 7 Dec, highest being 80+ at Baidara on 8 Nov. Single figures from 11 Dec till year end.

1980: Single figures on 11 May, but 55+ on 26 Jan. Return passage very evident in Mar when recorded almost daily, very frequently in double figures, reaching triple figures on 1st and 15 Mar. Highest 430+ from 3 localities on 15 Mar. 1-3 on 4 days in Apr to 13th. In autumn, up to 5 or 6th and 17th, then daily in double figures to 7 Dec, highest being 80+ at Baidara on 8 Nov. Single figures from 11 Dec till year end.
1980: Single figures on 9 days from 24 Feb to 23 Mar, then double figures almost daily from 31 Mar to 24 May; treble figures on 6 Apr and on 1st and 7 May, max. for one place, 120, at Għadira on 7 May, 1 on 26 Jun. In autumn on 12 days from 27 Sep to 16 Nov, with most on 1st and 40+ in one locality.

RICHAUD'S PIPIIT Anthus richaudii Bilbūn Prim

TANNY PIPIIT Anthus campestris Bilbūn
1979: On 6 scattered days in spring from 4 Mar to 27 Apr with most in Apr. Highest 6 singles on 30 Apr and 4 May. In autumn on 19 and 23 Oct and 4 Nov, with 5 singles on 1st day till year end. Autumn migration first on 5 Sep, then singles on 4 more days till 5 Oct.

TREE PIPIIT Anthus trivialis Dż2
1979: Recorded in single figures frequently from 30 Mar to 23 Sep, and on 1st Oct. Very common from 20 Oct, usually never again on 21 Nov. Up to 4 almost daily from 18 to 26 Nov, with up to 50+ roosting at Ġnejna, Gozo on 27 Nov.

1980: Single figures on 26 Mar to 24 May, then double figures daily from 30 May to 30 Jun, and treble figures on 6 and 15 Jul, 2 on 24th, then up to 5 on 3 Aug and low double figures almost daily from 10 Oct till year end. Never more than 50+ counted in one place, except at the Victoria roost where most on 23 Sep, 40+ at Ġnejna on 25 Sep, 10+ at Buskett on 30 Sep and 1 at Mellieha on 12 Sep.

WHITE WAGTAIL Motacilla alba Zakab Ajaj
1979: Single to low double figures in Jan-Mar, larger numbers only at roosts, though no proper counts were made except for 700+ roosting at Ġnejna, Gozo on 2 Jan. 1 on 7 Apr. Singles on 8th and 15 Aug were unusual birds. Autumn passage first on 10 Sep, in single figures from 2-10 Oct, then low double figures daily from 12 Oct to 31 Dec, but 80+ at Marsa on 27 Oct.
1980: Mainly single figures in Jan-Feb, but 30+ at Manoel Island on 6 Feb. 300+ roosting at Victoria, Gozo, on 3 Feb was the only roost count. Only 100+ recorded from 3 Mar to 21 Apr, when recorded more frequently in low double figures in various places. Subsequently in single figures to 29 Apr. 1 on 1 May. In Sep, on 24th, then up to 3 on 4-5 Oct and low double figures from 11 Oct till year end.

TRINGA TRINGA Linnaeus Bilbūn
1979: 1 at Salinja on 9 Dec.
1980: Singles at Għadira on 2 Nov and at Ġnejna on 26 Dec.

DUNLOCK Prunella modularis Iżemmi
1979: Single figures wintering in various localities but low double figures at Buskett in Jan-Mar and at Milheira in Jan. Highest 30 at Buskett on many days in Jan and Feb to 17th, then never more than 20 till 24 Mar. 1-2 on 20 Oct, then single to low double figures almost daily from next day till year end. Max. 45+ from 3 localities on 3 Nov.

1980: Recorded wintering till 28 Mar, highest counts for the period Jan-Mar being 30-20+ and 5+ respectively, all at Buskett. Single figures from 21 to 30 Oct; single to low double figures from 1-27 Nov, max. 40+ at Buskett on last date, then never more than 10+, even at Buskett, till year end.

ALPINE ACCENTOR Prunella collaris Iżemmi ta' Al-Każig
1979: 3 at Nadur, Gozo on 30 Oct and 1 at Bengħis on 15 Dec.
1980: BUSH CHAT Saxicola rubicola Robinson hax-Xaghri
1979: 1 at Xemxija on 12 May.
1980: CRESTED BUNTING Emberiza cœnecus Petrrita
30+ at Buskett in Jan-Mar to 10th, with max. of 200+ there, otherwise low double figures in other places. Numbers reduced to low double figures from 15 Mar to Apr. Then singles in Apr from 4th and on 5th. In autumn, singles on 3 days in Aug and 9 singles in one place occasionally in Jul-Aug; but up to 9 at Girgenti in Aug from 8th. Single figures throughout Sep till 21st, then mainly in double figures from 22 Sep, with peaks from 2nd week of Oct till 2nd week of Nov, max. 300+ at Buskett on 23 Oct and 3 Nov. Numbers reduced to single to low double figures from them on till end of year.

1980: Very common in Jan-Mar and in prel or numbers down to scattered singles by end of Apr. 1 on 1 May. At Buskett were 150+ on 25 Jun, 196+ and 300+ respectively, all at Buskett. Single figures from 21 to 30 Oct; single to low double figures from 1-27 Nov, max. 40+ at Buskett on last date, then never more than 10+, even at Buskett, till year end.

THRUSH NIGHTINGALE Luscinia megarhynchos B'Buqia
1979: 1 ringed at Ġnejna on 29 Sep, stayed there till 7 Oct.
1980: ZWEZDA Zwerzėka Holsinjol
1979: Almost daily from 24 Mar to 30 Apr, never more than 6 in one place but 20- at Ġnejna and at Buskett on 1st and 6 Apr respectively. 1-2 in May and 13th. 1 on 6 Apr. Single figures from 2nd till 17 Jun. In autumn, single figures on 9th and 21st. Double figures daily till 30 Sep, mainly at Buskett/Girgenti area. Max. 40+ at Buskett on 23 Sep, up to 3 on 3 days in Oct to 21st.

1980: Frequently recorded in single figures from 21 Mar to 4 May; usually never more than 5 in one place, except for 15+ at Ġnejna - Gozo, on 6 Apr, 1 on 25 May and 1 at Buskett on 15th in 6 Aug, and up to 20 at Buskett in Sep to 12th. 1-2 occasioanllv from then till 21 Oct.

BLUEHOT Bluehout Zwerzėka Fidżiross Blu
1979: Singles at Dragôna on 7 Jan and 4 Mar, at Girgenti on 7 Sep, at Għadira on 18 Sep, and at Marsa on 21 Oct.
BLACK REDSTART Phoenicurus ochruros Kudirras in our

1979: Up to 10 wintering, mainly in rocky areas, till 19 Mar. Again from 1 Oct onwards, always in single figures.

1980: Present from Jan and Feb to 10th, never more than 8 in one locality. Then gap till 1 Mar when 1-3 recorded on 6 days to 15th, suggesting a small return passage. 1 Apr and 20 Apr. In April 1-2 from 1 Nov till veal and, most records in Nov.

REDSTART Phoenicurus phoenicurus Kudirras

1979: On 23 Mar, then single figures frequently from 1 Apr to 13 May, highest for one locality on 11 Apr. In autumn mainly in single figures from 1 Sep, but up to 10 at Buskett/Girgenti area from 30 Sep to 7 Oct. Again in single figures till 20 Oct in Nov.

1980: Poor migration in both seasons. In spring 2 on 6th and 1 on 19 Apr. Then up to 4 on 15 days from 26 Apr to 31 May. On autumn migration on 17 days from 8 Sep to 24 Oct; never more than 2 in one place.

WHITENOAT Saxicola rubetra Buqaq tas-Silla

1979: On 20 Feb, then up to 5 commonly from 1 Apr to 16 May, but 10- at Ta' Cenc on 6 May. In autumn 2-2 on 5 days from 16-29 Sep.

1980: Singles on 12-13 Mar and 4 Apr, then single to low double figures daily from 6 Apr to 11 May, max. 30+ at Għadira on 27 Apr. Singles on 8 Sep and 15th and 25th Oct were the only autumn records.

STONECHAT Saxicola torquata Buqaq ta'Xilwa

1979: Single figures in various localities from Jan till 17 Mar. In autumn singles on 25th and 29 Sep, followed by low double figures daily from 3 Oct onwards. Highest for one place were 50+ at Marsa on 27 Oct.

1980: Up to 10 wintering in many areas till 1 Mar, after which numbers reduced to 1-3, but return passage very evident from 16-20 Mar, when low double figures were recorded, max. 50+ at Għadira on 16-17 Mar. Last seen on 21 Mar. Singles on 27-29 Sep, then double figures daily from 10 Oct, max. 60 at Għadira on 25 Oct. Less numerous after first week of Nov, and never more than 10 in one locality in Dec.

ISABELLE WHEATEAR Oenanthe isabellina Kud Malva

1980: 1 at Għadira on 21 Mar.

WHEATEAR Oenanthe oenanthe Kuda

1979: Spring passage from 12 Mar to 5 May. Seen in single figures, low double figures recorded only from Luqa Airport where max. of 2 on 8 Apr. Most records from third week of Mar to mid-Apr. In autumn, single figures from 16 Apr to 21 Oct, highest, 50 at Għadira on 21 Sep. Max. of 6 at Luqa on 21 Sep, 1 at Luqa Airport on 2 Dec.

1980: 2 on 23rd and 1 on 26 Feb. Single figures on 10 days in Mar. Passage on 2 Apr with 6 at Mellieha, then again single figures till 19 Apr. Singles on 4 May to 28 Jun. In autumn migration, again mainly in single figures, on 18 days from 20 Aug to 16 Oct with 15+ at Luqa Airport on 26 Sep highest.

BLACK-EARED WHEATEAR Oenanthe hispanica Kuda Għummana

1979: Singles on 7th and 23rd, with 3 on 9 Sep.


ROCK THRUSH Monticola saxatilis Gambriolu

1979: In spring, singles on 4th and 15 Apr and 1 May. Singles also in autumn on 9th and 11 Sep.

1980: 1 at Mellieha in Apr.

BLUE ROCK THRUSH Monticola melanarius Merill

1979-80: Breeding resident mainly along coastal cliffs but a few pairs also inland.

RINS DUEZL Phoenicurus ochruros Malvizz tas-Sidra Bajda

1979: Singles at Buskett on 24 Mar and in Gozo on 7 Nov.

1980: Singles at Attard on 18 Oct and at St. Thomas Bay on 17 Nov.

BLACKBIRD Turdus merula Malvizz Lozio

1979: 1-2 on 5 days in Jan and singles on 11th and 23 Feb. Most records from Buskett.

In autumn 1-4 on 6 days from 2 Oct to 9 Nov, then singles on 29 Nov and 26 Dec.

1980: Up to 4 in Jan and singles at Buskett in Feb and Mar to 8th, then singles on 7 days from 29 Oct to 12 Nov, and on 13 Dec.

FIELD FAIRYWREN Tarsiger polita Malvizz tal-Uraja

1979: 1 at Għadira in Nov.

1980: 4 at Buskett on 16 Feb and 1 at Luqa on 28 Dec.
OLIVACEOUS WARBLER Hippolais pallida Bakkafik Griq 1979: 1 ringed at Buskett on 18 Jun.
ICTERINE WARBLER Hippolais icterina Bakkafik Isfar 1979: Singles on 16th, 25-29 Apr and up to 3 on 8 days in May to 25th. In autumn, 1-3 on 17 days from 24 Aug to 7 Oct.
1980: 1 on 27 Apr, then almost daily in May to 25th; usually in single figures but 20+ at Ghadira on 17th and 10+ at Wied Bufla on 18th. In summer almost daily with 19 and 23 Sep.
SPOTTED WARBLER Sylvia undata Bufla ta’ Naxxar 1979: Singles at Ghadira on 20th and 27 Jan and at Sliema on 27 Dec.
SPECIATED WARBLER Sylvia conspicillata Bufla Rygria 1979-80: Common breeding resident in most areas.
SUNLUME WARBLER Sylvia hortensis Bufla Passejra 1979: Singles on 17-18 Mar, then up to 10 almost daily from 23 Mar to 16 Apr. Singles again on 8 more days from 21 Apr to 16 May but 3+ on 5 May. In autumn, singles on 24-25 Jul, then double figures daily in suitable feeding areas from 26th to 23 Sep. Largest concentrations at Buskett with max. of 60+ on 24 Aug. Last were 1+ on 3 days from 29 Sep to 7 Oct.
1980: In spring, single figures in many localities almost daily from 16 Mar to 29 Apr, but low double figures on 3 days at Dawra-Rabat. Max. there of 40+ on 14 Apr. 1-2 on 4 days in May and 1 singing at Buskett on 15 Jun, 2 on 3 Jul and 3 on 23 Sep. Single figures frequently from 20 Jul to 5 Aug increasing to low double figures daily from 6 Aug to 12 Sep. Highest at Buskett 60+ on 11th and 12 Sep. Up to 5 on 10 more days from then till 17 Oct.
SARDINIAN WARBLER Sylvia melanocephala Bufla Smudo 1979-80: Very common breeding resident in most localities. No clear evidence of migration.
LESSER WHITETHROAT Sylvia curruca Bakkafik limitado 1979: Singles at Rabat on 3 days from 7-17 Sep and 1-2 at Ghadira on 4 days from 18 Sep to 2 Oct.
1980: 1 at Rabat on 4 Sep.
WHITE THROAT Sylvia communis Bakkafik Amwe 1979: In spring, 1-2 on 6 days from 7-11 Apr, then single figures commonly from 27 Apr to 20 May. Max. 15+ at Ghadira on 1 May. Autumn passage: singles on 6th and 26th, double figures on 2nd, 29 Sep and 4 Oct.
1980: 1-2 on 6th and 12 Apr, then almost daily from 18 Apr to 25 May; mainly single figures, occasionally from a few localities. Highest were 15+ at Ghadira on 24 Apr. Singles in Jun on 1st and 7th. 3 singles in autumn, all in Sep on 4th, 14th and 21st.
GARDEN WARBLER Sylvia borin Bakkafik 1979: 1+ almost daily from 14-22 Apr, then low double figures frequently to 16 May. Max. 20+ at Ghadira on 6t. Up to 5 from then till 20 Jul. In autumn singles on 3 days from 19-28 Aug, then daily double figures, mainly at Buskett till 30 Sep Max. 60+ at Buskett on many days in Sep. Single figures again from then on till Oct. Singles almost daily from 6-26 Apr, then also in occasional low double figures till 18 Aug with max. of 40 at Ghadira on 10 May. Single figures then till 28 May. On autumn migration, in single figures from 9 Aug to 2 Oct. Single figures in low double figures from 4-12 Sep, highest 40+ at Buskett on 9th and 12th, and then again single figures from 14 Sep on 9 days from 16 Sep to 20 Oct.
BLACKCAP Sylvia atricapilla Kapinera 1979: Flock figures at Rabat-Buskett and single to low double figures elsewhere in -first 3 months. Monthly peaks at Buskett: 200+ on 7 Jan, 500+ on 10th and 17 Feb and 500+ on 14 Apr. Single to low double figures in Apr to 10th. In Sep, singles on 20th and 23rd. Single figures frequently from 6 Oct till year end, never more than 8 in one place.
1980: Gradual increase at Buskett in Jan-Mar, from 100+ on 5 Jan to 800+ on 15 Mar. Mainly single figures in other areas except for 100+ at Rabat on 19 Mar. Numbers reduced to low double figures at Buskett by 5 Apr, followed by single figures till 1+ on 8 Oct when numbers increased and activity at Buskett to 2+ on 27 Nov and remaining stable till year end. Occasional singles in other areas, but 30+ at Shaţn Zejtuna on 26 Dec.
YELLOW-BRIONED WARBLER Phylloscopus inornatus Vjolin tal-Flax 1979: 1 trapped and ringed at Ghadira on 3 Dec.
BONELLI'S WARBLER Phylloscopus bonelli Vjolin Badjani 1979: 1 on 5 days from 28 Mar to 28 Apr, never more than 3 on one day.
1980: Singles at Ghadira on 26th and 28 Apr and on 3-4 May.
WOOD WARBLER Phylloscopus sibilatrix Vjolin Madrani 1979: In spring, single figures frequently from 31 Mar to 9 Apr, then daily low double figures in many places from 11 Apr to 15 May, max. 50+ at Sliema on 28 Apr. Then up to 3 till 19 May. 1-2 on 6 days from 14 Aug to 1 Sep and up to 5 frequently from 5-23 Sep, followed by low double figures almost daily from 29 Sep to 7 Oct, highest 40+ at Sirgentl on 29th. Single figures on two more days till 16 Oct.
1980: In spring passage from 1 Apr to 25 May, single figures from first date to 5 Apr followed by double figures daily till 18 May, with peak from 29 Apr to 1 May. Max. for one locality: 60+ at Ghadira on 24 Apr. Poor autumn migration with 2 records in 1 Jan and 2 Jan.
OLIVE WARBLER Phylloscopus olivaceus Vjolin tax-flima 1979: Low double figures in many areas from Jan to 16 Mar. Max. 50+ near Clayheads Lakes on 2nd and 10 Jan. In single figures from 17-23 Mar, then only singles on 4 days from 29 Mar to 7 Apr and on 21 Apr. A most unusual bird at Claxheads Lakes on 23 Mar was singing continuously and also seen displaying to a bewitched juv. Sardinian Warbler. In autumn single figures on 17th and 20 Oct. Daily low double figures from then on till year end, never more than 50+ in one area.
1980: Double figures again from 1st to 24 Apr and from May to mid-Jun, with numbers increasing in many localities. Highest were 100+ at Ghadira on 24 Feb. Mainly in single figures from 16-31 Mar and 1-3 on 9 days in Apr to 13th. Singles at Ghadira on 6th and 3 days from 11-18 Oct and up to 3 on 20-21 Oct, then low double figures daily from 24 Oct to 31 Dec, but 250+ at Lunzjata on 29-30 Dec. Otherwise never more than 50+ in any other place.
WILLOW WARBLER Phylloscopus trochilus Vjolin Rasta 1979: 1+ on 6 days from 18-30 Mar, then up to 5 commonly from 31 Mar to 30 Apr and 1+ in 5 more days. In May, 15 on 2nd. In single figures daily from 13 Aug to 16 Sep, low double figures frequently from 18 Sep to 3 Oct with max. of 20+ at Ghadira on 30 Sep, followed by low double figures on 10 Oct. In Autumn, singles on 3 days in May to 11th. Single figures then till 19 Oct. In single figures again from then on till 29 Oct, 1+ on 1st and 2+ on 3 Nov.
1980: Singles on 16th and 21 Mar. In low double figures from 22-31 Mar, with 30+ at Ghadira on 22 Mar highest. Single figures almost daily from 1-2 Apr increasing to low double figures again from 26 Apr to 1 May max. of 30+ again at Ghadira on 27 Apr. Singles in low double figures from 3 more days in May to 11th. Single figures daily, mainly at Ghadira, from 21 Aug to 21 Oct, double figures reached only on two days, 20 Sep and 21 Oct. Max. 50+ at Ghadira on first date.
OLDEN'S WAXWING Bombycilla garrulus Bufla tal-Tedjar 1979: 1 of Mizieb on 4 Jan were the only birds identified.
1980: In Oct, singles on 25th and 29th, then up to 5 on 3 days in Nov and 1-2 on 2 days in Dec.
FIREFLUESE Regulus ignicapillus Bufla tat-Toppu Almar 1979: 1 at Mizieb and 4 at Buskett on 10th and 13 Jan, respectively. Singles at Buskett on 4 Mar and at Dwejra-San Gwann on 8 Apr.
1980: 1-2 recorded on 1 day in Jan and on two days each in Feb and Mar to 25th, 2 on 26 Dec.
OLD LINNET Regulus neglectus Irsuqallibus 1979: Recorded frequently from confinious areas, mainly Buskett and Mizieb, during first 3 months. Monthly maxima: 50+ at Mizieb on 21 Jan, 5+ on 3 days in Feb and 15+ at Buskett on 16 Mar. This slight increase in Mar suggests a small return passage. Last recorded on 25 Mar. In autumn only 1 record at Buskett on 23 Oct.
TOOT 1979: REO-BACKED PIEE O FLYCATCHER
GOLDEN OILE O LLE COLLARED FLYCATCHER
1980: SPOTTED FLYCATCHER

1979: 1-2 on 3 days from 14-21 Apr and daily in single figures from 27 Apr to 20 May, with 10- at Rama Valley on 5 May highest. 1 at Buskett on 3 Jun. Singles on 19th and 22 May, followed by single figures almost daily from 28 Aug to 16 Sep and then occasionally reaching low double figures from 15-30 Sep, but never more than 10+ in one place. 1-2 on 7th and 17 Oct.
1980: Singles on 4 days from 6-16 Apr, then up to 6 frequently till 8 May reaching low double figures from 9-18 May. Max. 25 at Wied Bufala on last date; then only single figures again from 26 May to 13 Jun. Poor autumn passage with singles on 24 Aug, 10th and 26 Sep and 2 on 19 Oct.

RED-BREASTED FLYCATCHER
Ficedula parva: Zanzarellli Sidu Ahrar
1979: Singles on 24 Aug, on 29 Sep, on 3 days in Oct from 15-23rd and on 4 Nov.

COLARED FLYCATCHER
Ficedula albicilla: Zanzarelli Tal-Mullar
1979: 1-4 daily from 6-21 Apr and 1-2 on 20 Apr and 1 May.
1980: 1-3 on 11 days from 2 Apr to 11 May; most records in first week of Apr.

PIED FLYCATCHER
Ficedula hypoleuca: Zanzarellli Issed
1979: Single figures daily from 1 Apr to 1 May, max. 6+ at Ghadira on 28 Apr. Then 1-2 on 4 days from 6-13 May. In autumn singles on 6 days from 31 Aug to 25 Sep and 1-2 on 7th and 16 Oct.
1980: Single figures almost daily from 2-26 Apr, increasing on 27-28 Apr, when low double figures recorded from many areas. Max. 30+ at Chadwick Lakes on 27th. Single figures again from 30 Apr to 11 May. In autumn singles at Lunzjata on 19 Aug, 1 Sep and 18 Oct.

GOLDEN ORIOLE
Oriolus oriolus: Tafira Safra
1979: Up to 5 frequently from 6-21 Apr then also in occasional low double figures till 15 May. Highest count of 25 at Madliena on 2 May. In single figures again from 26-21 May, up to 2 on 30 May and on 5 Jun. Autumn migration: single figures almost daily from 18 Sep; never more than 8 in one locality. Then singles on 5 days in Sep till 30th.
1980: On 31 Mar, then single figures frequently from 12 Apr to 29 May but 20+ at Gnejna, Gzira on 29 Apr and 15+ roosting at Saint Anton Gardens in 19 Nov. In autumn 1-2 on 6 days from 21 Aug to 8 Sep,

RED-BACKED SPARROW
Passer domesticus: Kaba'immell Maara
1979: 1, mainly at Buskett; 15 days from 19 Aug to 30 Sep, and 1 on 15 Oct.
1980: 1 on 17 Aug, then 1-2 on 5 days from 4-21 Sep, and 1 on 15 Oct. Late bird at Ghadira on 24 Nov.

WOODCHAT SPARROW
Passer montanus: Kaddinemellouna Mame
1979: 1-2, mainly at Buskett; 15 days from 19 Aug to 30 Sep, and 1 on 15 Oct.
1980: 1 on 17 Aug, then 1-2 on 5 days from 4-21 Sep, and 1 on 15 Oct. Late bird at Ghadira on 24 Nov.

ROCK SPARROW
Passer montanus: Ghadira on 24 Nov.

SPANISH SPARROW
Passer hispaniolensis: Mammel tal-Bejt
1979: Abundant breeding resident.

TREE SPARROW
Passer montanus: Marsa St. Paul
1979: Single to low double figures wintering in many areas. Highest 20+ at Buskett on 4 Jun and 17 Feb. 1-2 at Buskett on 11-24 Mar and in single figures only from 1-4 days in May. Max. 8 on 6 days in Mar, 6 days in Apr and 4 days in May to 15th. Up to 5 at Buskett from 16 Jun to 30 Sep and up to 6 at Girgenti during Aug. Singles from a few other localities during the summer months. First true autumn migrants from 20 Oct. In low double figures from then on till 9 Nov, with small influxes on 21 Oct and 1 Nov, max. 45+ at Ghadira on 21 Oct. Single figures from then on till autumn with occasional low double figures from low areas till year end.

1980: Double figures daily in Jan but numbers greatly reduced in Feb and Mar. Highest monthly totals for first three months: 50+ on 26 Jan, 15+ on 23 Feb and 20+ on 2 Mar, all at Buskett. Singles in 6 days in Apr and on 3 days in May to 24th, 1 at Ghadira on 7 Jun and up to 5 at Bushkett from 9 Jun to 2 Oct. Autumn migration from 21 Oct. In low double figures till 7 Nov, highest 50+ at Girgenti on 27 Oct. Single figures from then on till low double figures only at Buskett till year end.

BRAMBLING
Fringilla montifringilla: Sannat Sella
1979: At Mellieha on 3 Dec.
1980: At Ghadira from 19 Jan to 30 Mar.

SEVEN Serious Aperall
1979: Up to 5 wintering in various places in Jan-Mar to 10th. Singles on 14th and 24-25 Mar. Up to 30+ at Bin Kalla on 16 Apr, which was a juvenile bird. Very poor autumn migration: 1-3 on days in Nov from 3-24th. Small influx in last week of Dec with 30+ at Xagha on 26 Dec.
1980: Heavy passage in Jan with double figures daily from 5 Jan to 22 Mar, though in smaller numbers after 24 Feb. Max. 50+ at Buskett on 6th and 26 Jan. Single figures from late May till 29 Apr. Up to 3 at Buskett on 4 May. On 22 May 1-6, one of which was a juvenile bird. Very poor autumn migration: 1-3 on days in Nov from 3-24th. Small influx in last week of Dec with 30+ at Xagha on 26 Dec.

1980: Up to 5, mostly at Buskett, in Jan-Mar and up to 50+ roosting at Saqinu on 31 Jan to 1 Feb. 1-2 on 4 days in Apr to 15th. Singles in May on 3rd, 6th and 10th, in Jul on 26th. In Aug on 29th and in Sep on 9th, 11th and 20th. First true migrants probably on 5 Oct. Small passage from 27 Oct to 9 Nov, never more than 6 in one place. Up to 5 on more days from 22-29 Nov and 1 on 13 Dec.

GOLDFINCH
Carduelis carduelis: Cardelli
1979: 2 on 8th and 12 Mar and singles on 16 Jun and 28 Aug. In autumn up to 3 on 8 days from 30 Sep to 29 Nov.

SISKIN
Carduelis spinus: Bin Kalla
1979: 1 on 10th and 20th. In autumn up to 3 on 8 days from 15-22 Mar.

LINNET
Carduelis cannabina: Bajjinn
1979: 1 on 10th and 20th. In autumn up to 3 on 8 days from 15-22 Mar.
Ringing Report for 1979–81

JOE SULTANA & CHARLES GAUCI

This report covers a three-year period, 1979–81, during which a total of 25,613 birds was ringed. This represents a decrease of 8,337 birds when compared to the previous three-year period (1976–78). The decrease is mainly due to the fact that several rings were actively engaged on the Qadira project from mid-1980, thus the ringing activity of some of the most active rings was greatly reduced. The relative increase in migration of autumn 1979 and, in particular, of both spring and autumn of 1980 also contributed to this decrease. By the end of 1981 the grand total of birds ringed stood at 114,706 of 143 species.

The number of birds ringed in 1979 was 9,358 of 85 species; a decrease of 2,032 from the previous year’s total. The same continued in 1980 when 7,481 birds of 88 species were ringed, in 1981 a slight increase was registered at 8,734 of 96 species figure in the totals list.

By the end of the three-year period under review the same species occupying the top places of birds ringed retained the same position except for the Sardinian Warbler, which moved into 6th place in front of the Sand Martin (this was due to the increase in ringing Sardinian Warbler pulli and the poor catches of Sand Martin in 1979 and 1980) and the Wood Warbler which moved up in front of the Yellow Wagtail. The following table shows these top species ringed since 1965, with the annual totals for the 6 years 1979–81. From this one can deduce which species have contributed towards the decrease in totals for the year 1980 as compared to the total number of 1979, which at 15,211, was the highest for any one year since ringing started in 1965.

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<th>Spanish Sparrow</th>
<th>Sardinian Warbler</th>
<th>Sand Martin</th>
<th>Garden Warbler</th>
<th>Blackcap</th>
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Although the totals ringed in the year 1979–81 are much less than the previous corresponding three years, the period under review also produced some annual records. Those for 1979 were Cetti’s Warbler (601), Fantailed Warbler (233), Reed Warbler (223) and Sedge Warbler (15). The record for 1980 was Little Stint (103), Ruff (18), Mosquito Pipit (209), Cetti’s Warbler (322) and Tree Sparrow (25). The records for Cetti’s Warbler, Fantailed Warbler, Sedge Warbler and Sardinian Warbler reflect the increased interest in ringling pulli. The total records for waders result from the habitat management at Qadira where since 1978, water has been present, also in summer and early autumn. The record catch of Mosquito Pipit in 1981 was achieved due to larger numbers present during winter, producing good catches, mainly at Luntzjata.

Eleven new species have been added to the ringing list during the period under review. These were Little Grebe and Yellow-rumped Warbler in 1979; Coot, Spotted Redshank, Redshank, Marsh Sandpiper and Greenshank in 1980; and Night Heron, Stone Curlew, Shore-eared Owl and Little Stintling in 1981. These have brought the number of species ringed since autumn 1965 to 143 and 1 hybrid.

Following this preamble the report consists of a list of ringing and recovery totals to 31.12.81, a ringing-recoveries section which deals with 62 recoveries of 26 species oc-
curing during 1979-81, and another section dealing with locally-recovered foreign ringed birds (52 recoveries of 28 species). As usual this last section includes birds which were recovered in earlier years but which came to our notice during the current period.

The 62 recoveries of Maltese-ringed birds included in this report are those which occurred at least 5 km away from the ringing site. 32 of these were recovered abroad. As in previous years the Hirundininae and the Motacillas produced the highest number of foreign recoveries, 16 Swallows, 3 Sand Martins and 1 House Martin were found in various European countries, while 5 hirundines were reported from Sweden, Italy, and Turkey (2). A Whinchat ringed on spring migration at Lumjats and recovered on its southern journey the following autumn was the scheme's first recovery of this species. The 2nd recovery of a Nightingale turned out in Czechoslovakia. A 2nd Swift in Italy (recovered after only 4 days in autumn) is amongst other species figuring in the list. The local movements of 6 Griff's Warblers and 8 Fan-tailed Warblers controlled during this period are most interesting.

The recoveries of foreign ringed birds hail from Czechoslovakia (11), U.S.S.R. (9), Sweden (5), Finland (4), France (3), Great Britain (3), Hungary (3), Austria (2), Italy (2), Holland (2), Poland (2), Denmark (1), Belgium (1), West Germany (1), East Germany (1), Greece (1), Eire (1) and S.W. Africa (1). The species which have been recovered for the first time are an Avocet from Ukraine (USSR) and a Little Stint from England. There are several other interesting recoveries including a Turnstone from S.W. Africa, a Swedish Temminck's Stint controlled a fortnight after being ringed, the first Nightjar from Sweden and the first Swift from Finland, the first Chaffinch from U.S.S.R. (Kiev), and the first Sedge Warbler from Holland. Three Ospreys, two from Finland and one from Sweden, brought the total of recoveries of this species to 12 and 12 from these countries respectively. The first Marsh Harrier from Latvia SGR and the first Honey Buzzard from Hungary are two other rarities which figure in this section. The 5th Great Skua to be recovered also hailed from the Shetlands, as did the previous four birds. The Hirundininae, with 7 Sand Martins and 4 Swallows, top the list of recoveries.

At the beginning of the three-year period under review the ringing permit holders were J. Afford Nonisalo, J. Azzopardi, D. Cachia, R. Cachia Zammit, V. Cilia, C. Corri, V. Corri, G. Gauci, M.V. Gauci, J. Gauci, B.K. German, J. Grech, M. Grima, R.H. Hamman, V. Sammut, J. Sultana and K. Testa. D. Cachia and R. Galea obtained the ringing permit at the beginning of 1979. R.M. Molina left the Islands in March 1979. However, at the same time J.N. Perry qualified as a ringer. During 1980 the number of ringers remained the same as in the previous year with, however, C. Corri, M.V. Gauci and J.W. Perry being away from the Islands for most of the year. During 1981 the permits of J. Azzopardi and J.W. Perry were withdrawn due to their emigration from the Islands, while E. Corri was again away for most of the year. M.V. Gauci returned from his studies abroad in July while 2 new ringers, S. Galzan and J. Borg, joined the group on attaining the required standard after a period of training.

In January 1979 the Government accorded official recognition to the M.O.S bird ringing scheme. An agreement between Mrs. A. Barbosa, then Minister responsible for Culture, and the M.O.S was signed. The scheme was called the Valletta Bird Ringing Scheme and is to be run by a Committee appointed by the M.O.S and two Government representatives.

The Committee for the three-year period was composed of J. Sultana (Ringing Officer), C. Gauci (Ringing Secretary), B.K. German (Treasurer), J. Azzopardi (Committee's Secretary) and A.E. Baldacchino (Honorary). The representatives of the Ministry of Culture were E. Scemper and J. Vella Gaffiero, in 1981 R. Galea replaced J. Azzopardi as Committee's Secretary.

C. Gauci, Ringing Secretary, was responsible for recording and filing all the ringing and recovery data.

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</table>

**Ringing recoveries**

This section deals with 62 recoveries of 20 species occurring during 1979-81. Only those recovered at least 5 km away from the ringing site are included. For local recoveries the approximate distance covered and direction are given. The co-ordinates of localities are given once when these are first mentioned.

Key to symbols and terms used in the recovery list:

- **Arrangement of entry**: recoveries are arranged by species, and within the species usually by date of recovery. Missing details are given on the first line and recovery date on the second.
- **Ring number**: where this is followed by an asterisk (*) the ring has been returned.
- **Age code**: 1 = pullus; young bird ringed in the nest. 1J = footed; but flying so weakly that it is obviously incapable of having travelled far from the nest. 2 = fully grown; year of hatching quite unknown. 3 = definitely hatched during current calendar year but still partly or completely in juvenile plumage. 4 = hatched before current calendar year; exact year unknown. 5 = definitely hatched during last calendar year. 6 = hatched before last calendar year; exact year unknown.
- **Sex**: where number in brackets beside the age code 1 indicates the size of the brood.
- **M** = male, **F** = female.
Manner of recovery: 
- caught or trapped, and released with ring.
- shot or killed by man.
- found dead or dying.
- caught or trapped alive and not released, or released but with ring removed.

Date of recovery: 
where this is unknown the date of the reporting letter is given instead and is shown in brackets. An "O" in the data indicates that the exact day or month is unknown.

Cory's Shearwater Calonectris diomedea

v* 28.04.79
Filaha: 35.41 N, 14.29 E, St. Lucia, ITALY.

Swallow Hirundo rustica

v 29.04.78
Ghajn Rihana: 35.08 N, 14.22 E.

House Martin Delichon urbica

v 11.05.77
Luntzjata Valley, Istres: 43.31 N, 04.59 E, Bouches-du-Rhone, FRANCE.

Rook Corvus frugilegus subspecies

v 09.07.78
Marsa: 35.53 N, 14.30 E.

Luntzjata Valley: 36.03 N, 14.14 E (Gozo), Calabria.

Swallow Hirundo rustica

v 29.04.78
San Martin Riparia riparia

v 09.05.79
Buskett: 35.51 N, 14.25 E, (Gozo).

Luntzjata Valley: 36.03 N, 14.14 E (Gozo).
This section deals with 32 foreign ringed birds of 26 species recovered in Malta. Some of these were recovered previous to the three-year period (1979-81) covered by this report but they only came to our notice lately. The symbols and terms used are the same as those which appeared in the Ringing Recoveries.

Brent goose Branta bernicla

London 1 01,07,80 Great Saltlake: 52.07 N, 06,38 W, (Wexford), IRE.

1,151,066 = 10,12,81 off south coast : ca. 35,47 N, 14,30 E.

Common Black-backed gull Larus marinus

Donnet Sala Jomyna

Coppenhaagen 1 06,06,81 Kramneggårds Sø, Fyn : 55,08 N, 10,24 E, DENMARK.

5,607 = 16,10,81 Marsaultokk : 55,49 N, 16,33 E.

Purple Heron Ardea purpurea

Moskva 1 15,06,73 Kremnjanui Position : 45,03 N, 36,09 E, nr, Primorsko-

4,102,774 = 27,03,78 Amur : 53,94 N, 14,26 E.

Budapest 1 29,05,79 Pámonosfura : 46,37 N, 19,26 E, HUNGARY.

501,444 = 06,10,79 Gozo : ca. 36,02 N, 14,16 E.

Horned Grebe Penicillius apivorus

Budapest 1 10,07,81 Römsmayer : 46,53 N, 21,13 E, HUNGARY.

504,079 = 19,09,81 Öregkő : 35,51 N, 14,50 E.

(reported as trapped and released).

20702 2F 16,11,80 Xemxija : 35,57 N, 14,23 E.

v 11,03,81 Rabat (7 km SSE).

v 20,09,81 Xemxija.

19,715 2F 11,06,81 Ghadiru.

v 01,06,81 Wied i-Luq (Buskett) (13 km SE).

15,135 14/2 06,05,81 Xemxija.

v 20,09,81 Wied i-Luq (Buskett) (9 km SSE).

14,002 3F 23,06,81 Wied i-Luq (Buskett).

v 11,11,81 Lungjata Valley (20 km NW).

Fan-tailed Warbler Cisticola juncidis

592,121 2 04,08,76 Ghajn Rihana.

v 21,08,76 Ghandira (8 km NW).

v breeding? 19,07,79 Ghajn Rihana.

v 21,07,79 Ghandira.

A3,057 4F 08,07,79 Wied il-Luq (Buskett).

v 31,07,79 Ghadiru.

1AB,164 11/2 17,06,77 Ghajn Rihana.

v 22,08,77 Marsa (1 km SE).

v 10,09,77 Marsa.

x 15,09,77 Marsa.

962,494 4F 02,07,79 Chadwick Lakes : 35,54 N, 14,25 E.

v 12,09,79 Lungjata Valley (21 km NW).

1AB,786 3 30,09,78 Girgenti Valley : 35,51 N, 16,26 E.

v 25,06,80 Ghadiru (14 km NW).

A1,078 3 27,07,78 Chadwick Lakes.

v 24,09,80 Marsa (10 km ESE).

A4,906 11/2 25,06,80 Ghandira.

v 50,09,80 Birżebbuġa (21 km SE).

A5,922 11/2 09,06,81 Ghajn Rihana.

v 02,11,81 Ghadiru (8 km NW).

Sardinian Warbler Sylvia melanocephala

A055,870 11/2 31,05,79 Ta' Qali : 35,53 N, 14,26 E.

v 19,01,80 Ghandira (11 km NW).

06,700 31J 04,07,79 Ta' Qali.

v+4F 05,07,81 Wied il-Luq (Buskett) (15 km SW).

14,051 3J M 19,06,81 Wied il-Luq (Buskett).

v 05,11,81 Ghandira (13 km NW).

White throated sparrow Phylloscopus collybita

16,623 4 01,05,81 Lungjata Valley.

v 10,09,81 Marsa Matruh : 31,19 N, 27,15 E, EGYPT.

Garden Warbler Sylvia borin

K027,491 4 10,04,76 Wied Nuower : 35,49 N, 14,31 E.

v 28,07,79 Lido, Jano : 47,59 N, 19,02 E, (Nogradi), HUNGARY.

06,639* 4 20,05,89 Ghandira.

v 20,09,89 Monzambano : 45,09 N, 10,51 E, (Marche), ITALY.

07,799* 3 13,09,89 Wied il-Luq (Buskett).

v 01,09,89 Supersano : 40,21 N, 18,10 E, (Lecce), ITALY.
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<td>Suzelie: 50.04 N, 15.52 E, (Pardubice), CZECHOSLOVAKIA.</td>
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<td>06.09.79</td>
<td>Engure Lake: 57.15 N, 25.07 E, Tokums, (Latvia), U.S.S.R.</td>
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<td>04.08.99</td>
<td>Alagoa: 38.85 S, 25.07 E.</td>
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<td>06.06.40</td>
<td>Luna Valley: 36.03 N, 14.14 E.</td>
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<td>Moscow</td>
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<td>Ryazan Region: 54.33 N, 40.44 E, (nr. Izhevskoe), U.S.S.R.</td>
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<td>00.12.76</td>
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<td>Orlov Isles: 45.17 N, 31.45 E, (Ukraine), U.S.S.R.</td>
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<td>Wood Sandpiper</td>
<td>23.08.76</td>
<td>Sweb: 35.59 N, 14.27 E.</td>
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<tr>
<td>Turnstone Auranca</td>
<td>23.08.76</td>
<td>Sweb: 35.50 N, 14.33 E.</td>
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<td>Nagoa</td>
<td>23.08.76</td>
<td>Sweb: 35.50 N, 14.33 E.</td>
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<td>Great Skua</td>
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<td>Sweb: 35.50 N, 14.33 E.</td>
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<td>Mediterranean Gull</td>
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<td>Sweb: 35.50 N, 14.33 E.</td>
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<td>Moscow</td>
<td>07.05.75</td>
<td>Sr. Rymbach: 55.11 N, 20.49 E, (Kaltenbrand), U.S.S.R.</td>
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<td>Nightjar</td>
<td>21.04.79</td>
<td>St. Andre's: 35.55 N, 14.37 E.</td>
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<td>Ottenby: 56.12 N, 16.04 E, (Olarden), SWEDEN.</td>
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<td>Swift Apus</td>
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<td>Lommi: 61.12 N, 23.07 E, (Hirvens, (Leningrad), FINLAND.</td>
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<td>Sand Martin</td>
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<td>Tal-Kandag: 35.25 N, 14.28 E.</td>
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<td>Brittfin: 52.25 N, 12.10 E, (Kemthien), GERMANY.</td>
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<td>Lake Koronia: 40.40 N, 25.13 E, (Malekohoria), GREECE.</td>
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<td>Skadarese</td>
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<td>Luca: 35.52 N, 14.29 E.</td>
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<td>05.04.80</td>
<td>Pruszcz Gladzki: 54.14 N, 18.58 E, (Kiezk), POLAND.</td>
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<td>Marseilmen: 36.02 N, 14.16 E, (Gozo).</td>
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<td>Suedl: 48.47 N, 16.42 E, (Beestok), CZECHOSLOVAKIA.</td>
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<td>Hiroshima</td>
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<td>Murst Green, Whalley: 50.50 N, 02.28 W, (Lancashire), MERSY.</td>
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<td>Alexandria</td>
<td>22.04.81</td>
<td>Lunaja Valley: 56.04 N, 14.14 E.</td>
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