

Raptor migration in Lesbos, Autumn 2004

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A previous paper (Bowers, 2002) presented preliminary evidence of diurnal bird of prey migration in Lesbos and attempted to assess the status of the Island as a route for both spring and autumn migration. It identified the points of arrival and departure as north-east of Faneromeni in the north of Lesbos and Agios Fokas in the south. Agios Fokas is the nearest point on Lesbos to the island of Chios and it was surmised that the birds crossed the water between the two islands. Where they went after leaving Faneromeni in spring was unknown but an observation in autumn 1983 suggested that birds were making the crossing from the Chalkadiki in mainland Greece. The present paper provides supplementary evidence from observations in Autumn 2004.

It was decided to concentrate on the southerly departure point of Agios Fokas. I was present and available to make observations over the period September 16th to October 14th. As was expected no movement took place when there were northerly winds but some movement was observed on every day that the winds were southerly. The winds during the period were predominantly from the north but there were two periods of southerlies, September 22-29, except 28th when the wind was due west and no movement occurred and October 9-11. Observations were not made at Agios Fokas itself which was too low for easy identification but, depending on the exact trajectory that birds were taking, at the hill of Profitias Ilias about 700 metres to the north or a lower unnamed crest 300 metres closer to Agios Fokas. Weather conditions – cloud cover and visibility, wind speed and direction - were recorded at the observation point at the start of each watch. The details, together with the number of birds observed are in Table 1

Table 1

Date	Conditions	Wind direction	Wind strength	No. of birds
22/9	3/8; clear	South	0-1	3
23/9	1/8; poor	South-east	0-2	10
24/9	0/8; poor	SSE	2-4	106
25/9	6/8; mod.	South by east	3-4	92
26/9	7/8; clear	South-east	2-3	30
27/9	0/8; poor	South	0-1	33
29/9	5/8; v. poor	SSE	0-1	80
9/10	0/8; poor	South-SW	1-3	6
10/10	0/8; poor	South by east	2-3	12
11/10	5/8; v. poor	South-east	1-3	5

Wind direction was determined by compass readings on the release of fragments of dead vegetation and checked against wave movement of the sea. Southerly winds were between south and south-east except for one day in October when they varied between south and south-west. Wind speed was determined

judgementally on the Beaufort scale and checked by wave conditions. Winds were light to very light except for two days in September when they were at times moderate. The principal factor in judging visibility was whether the island of Chios, the presumed next staging post of migrants, was visible. The scale used was as follows:

Clear – Chios clearly visible;

Moderate – Chios visible as a shadow on the horizon. Details of the coastline to the east, beyond Stavros beach and Mount Olympos clearly visible;

Poor – Chios not visible at all. Other chosen features visible but not clearly;

Very poor – Other chosen features not visible.

Within the observed range there is no relationship between volume of migration and either wind speed or direction, provided that the wind is southerly. The observations reported in Bowers 2002 reinforce this conclusion extending the range of both variables. On two of the three days when migration was observed, at Faneromeni (23/9/02) and at Agios Fokas (24/9/02) the wind was south-west and strong (5-7). At Fokas however birds appeared to be 'backing up' in the hills by the afternoon, perhaps finding the wind too strong for a crossing.

More surprisingly perhaps there appears to be no relationship between volume of movement and visibility. On most days Chios was not visible. On 29/9/04 there was a strong movement when visibility from Profitias Ilias was at most a couple of kilometres. A similar scale of movement occurred on 25/9/04 with a visibility of about 20 kilometres. The birds observed in 1983 could not have seen any land in the direction that they were heading.

Apart from a few falcons and in October, 2 sparrow-hawks, no movement occurred before 11.00 hours local time and peak movement was typically between noon and 2.30 pm. But on all days with strong movement some birds passed in late afternoon. On 25/9/02 heavy movement started at 3.00 p.m. following a thunderstorm and was still continuing at 5.00 p.m.

Details of the 2004 observations are in Table 2. October movement was small and consisted almost entirely of sparrow-hawks. Against expectations no common buzzards were observed on the move.

In September there were three days of heavy movement and 2 of moderate movement. Low numbers at the beginning of the period, on 22-23rd might suggest that the birds were originating at some distance from Lesbos. Heavy movement on 29th after a day's delay from adverse winds would imply that by then there were plenty of birds 'in the pipeline' including perhaps birds already on

the Island. In all some 354 birds of 11 species were involved, 10 on the 24th when the heaviest movement took place. Half of the birds were broad-winged hawks, predominantly honey buzzards and a third were falcons with Eleanora's falcons dominating. Only 17% were harriers and all but one were marsh harriers. This contrasts sharply with the data for 2002 when marsh harriers comprised over two-thirds of the total and broad-winged hawks only 5%. In composition the movement of autumn 2002 was very much like the spring movement. Except that falcon numbers were bolstered by Eleanora's falcons, autumn 2004 on the other hand was similar to what might be expected at the more celebrated raptor watching points in Turkey and Spain.

Non-raptor migration

There was some movement of swallows on 22nd of September and a very heavy movement of hirundines, predominantly swallows but with a few house and sand martins and red-rumped swallows on 23rd. There was no hirundine movement on the 24th when raptor movement was at its peak and very little on the succeeding days. Hirundines were presumably of more local origin and moved through first when weather conditions were suitable. Apart from hirundines there were 2 or 3 common swifts, about 100 alpine swifts mainly in two parties, two bee-eaters and odd flava wagtails and tree pipits. In October the only other migrants observed were about a dozen woodlarks.

The bare top of Profitias Ilias provided opportunities to observe passerines moving through the olive trees. Chiffchaffs, spotted flycatchers, red-backed shrikes and lesser whitethroats were frequently observed crossing the summit moving through the vegetation. On September 27th the direction of movement was recorded over a 2 hour period. The results confirmed suspicion. 85 migratory birds (i.e. excluding tits, woodpeckers, cirl buntings and other presumed residents) were observed. 76 moved south, 4 north and in 5 cases the direction was either west or east. The southerly bias is highly significant on a χ^2 test. The suspicion is that these species were also engaging in visible migration. Unfortunately, since the direction of non-migratory species was not also recorded, the alternative hypothesis that they had a preference to fly into the wind in the process of feeding cannot be ruled out.