VII.—*Field-Notes on a Collection of Birds from the Mediterranean.* By Commander H. Lynes, R.N. *With Systematic Notes by* H. F. Witherby.

The collection of birds upon which the following paper is based was made by Lynes whilst serving in H.M.S. 'Venus' on the Mediterranean Station between September, 1905, and December, 1907, and has been worked out by Witherby. The former is responsible for the Field-Notes, the latter for the diagnosis of the specimens, the nomenclature, and the initialled notes. As may be expected of a collection made over so wide a field, a number of geographical and local forms of the same species are represented, in the identification of which Witherby wishes to express his grateful thanks to Dr. Ernst Hartert, who has given him much help, both at the Tring Museum, where much of the collection was worked out, and through his most valuable book, 'Die Vögel der paläarktischen Fauna.' In the nomenclature the rules of the "International Commission on Zoological Nomenclature" have been followed, and this has also been made possible by Dr. Hartert's work.

The collection being chiefly the result of short and disconnected visits to different places, in no cases can the specimens or the field-notes be considered in the slightest degree comprehensive of the bird-life at any particular place; the "notes" are therefore arranged in order according to the species and not the places, and only such notes are given as are thought to possess the character of novelty or interest.

In the Field-Notes it is not intended to imply or suggest that a species does *not* exist at any of the places visited unless it is so stated. The specimens were all obtained either at, or quite close to the sea-coast, and all references to localities are intended to imply this.

Places visited by H.M.S. 'Venus.'

Egypt	Port Said ..	23rd Aug. 1906–15th Jan. 1907 (except as below).
	Alexandria ..	14th–17th Sept. 1906; 14th–17th Oct. 1906; 15th–19th Dec. 1906; 10th–15th Jan. 1907.
	Damietta....	22nd Nov. 1906.
Cyprus	Famagusta ..	10th–12th Oct. 1907.
Crete.....	Suda Bay, Candia (North coast).	3rd Feb. 1906–28th April, 1906 (except 13th–23rd April).
Asia Minor	Smyrna	1st 9th Aug. 1907 and 4th Oct. 1905.
	Marmarice ..	24th–28th July, 1907.
Grecian Archipelago.	Mitylene	12th–15th Aug. 1907.
	Lemnos	24th Sept. 1905 and 20th Aug.–6th Sept. 1907.
	Thaso	18th Aug. 1907.
Greece	Athens	13th–23rd April, 1906.
	Navarino....	20th July, 1907.
	Platea	3rd–17th Dec. 1905 and July 10th–18th, 1907.
	Laverda	20th Dec. 1905.
Corfu	.....	Dec. 23rd–29th, 1905.
Albania ..	.....	Dec. 30th, 1905.
Sicily (on leave from ship all this time).	Lago di Lentini	22nd–23rd May, 1907.
	"District of the Cavas," 15 miles from Syracuse.	25th May–4th June, 1907
	Pantana di Lentini	6th–8th June, 1907, and 12th Jan. 1908.
Malta	On and off during all months.	
Sardinia ..	Palmas Bay..	3rd–5th May, 1907. (South coast.)
	Aranci Bay	6th–10th May, 1907 / 15th–20th Dec. 1907 (North-east coast.)
Italy	Genoa	1st Nov. 1905 and 21st–28th Dec. 1907.
	Spezzia	29th–31st Dec. 1907.
	Naples.....	1st–10th Jan. 1908.
Spain	Alicante	10th June, 1906.
	Cartagena ..	9th April, 1907.
	Gibraltar....	14th–25th June, 1906 and 5th–29th July, 1906; 23rd–25th Feb. 1907; 16th–24th Feb. 1908.

Garrulus glandarius glandarius (L.).

The typical Jay was abundant at Platea in mid-winter and two specimens were obtained.

Garrulus glandarius krynicki Kalenicz.

This Jay was found at Marmarice at the end of July, frequenting the woods. One specimen was obtained.

Sturnus vulgaris.

Starlings were met with in Egypt, first appearing at Port Said on the 28th of October. From this date up to the end of November plenty of small parties were to be seen and were much sought after by the local sportsmen. Unlike all the other migrants which, when moving, invariably went southward, the Starlings almost from the date of their arrival seemed to wander about. For instance, at sunrise on 3rd November at Port Said, more birds were seen flying to the northward than to the southward, and the same sort of thing went on during the whole of the month. These movements were not due to a regular passage in any particular direction, but most likely had as their object visits to certain feeding-grounds, and from this it would appear as though the birds had come to stay for the winter. After the 2nd of December, however, no more Starlings were observed at Port Said, though it is evident from the observations of Mr. Nicoll and Mr. Loat ('Ibis,' July, 1908; January, 1906), that small flocks of Starlings are to be found near Damietta in winter time. It would seem probable therefore that Starlings are winter visitors to Egypt in small numbers, shifting their quarters according to the food supply.

At Platea in mid-winter large flocks of Starlings frequented the Missolonghi Plains, but no specimens were obtained.

[The only specimen procured (Port Said, October 28th, 1906) was an example of *Sturnus vulgaris poltaratskyi* Finsch.—*H. F. W.*]

Oriolus oriolus (L.).

On the west coasts of Greece and Albania well-preserved nests of Golden Orioles were found in mid-winter; otherwise

no breeding-records to the eastward of Spain were obtained.

Egypt.—Migrant in moderate numbers. The passage started with September, and the last Orioles were observed on the 26th of the same month. For the first few days nearly all were dull-plumaged birds (juveniles or females), then came a fair sprinkling of full-plumaged adult males.

Crete and Athens.—Not noted. 3rd February–28th April.

Malta.—From 1st May onwards a plentiful migrant. It is possible that occasionally a pair stops to breed in some of the more retired "onieds" and orchards on the southern side of the island, where an adult male was seen and heard in feeble song on 23rd June, but this bird did not behave as if it had a nest or young. The chances of a brood being reared in this thickly populated and "ornithophagous" country are very small.

Sicily.—The walnuts and poplar trees in the "Cavas" seemed admirably suited to the breeding-requirements of Orioles, but not a bird was seen between 22nd May and 4th June.

Coccothraustes coccothraustes * (L.).

The Hawfinch was met with as a breeding-species and probably resident in Spain, but elsewhere only as a winter-visitor.

Egypt.—Hawfinches, though never seen more than two or three at a time, had a distinct migration-passage, starting at the beginning of November (or possibly a week earlier) and continuing to arrive until the beginning of December, but like most of the finches, their migrations are probably much influenced by local weather conditions.

Near Damanhour in December several Hawfinches were observed among the larger trees, and a female was shot as she rose from a dry dyke-bank with not a tree near. Her stomach contained seeds and kernels.

* The Editors of the 'Ibis' are responsible for the omission of the third repetition of *coccothraustes* for the typical form, an omission which is contrary to the International Rules followed by the author.—[We do not profess to follow the "International Rules."—Edd.]

Platea.—In winter the species was found plentiful; a female was obtained.

Gibraltar.—Abundant, breeding in the cork woods. Last young out of the nest on 23rd June. The Hawfinch appears to winter in the Coto Doñana but does not breed there, and was observed in small parties near Gibraltar as early as 9th March. It would seem that the Spanish birds are probably resident, but collect and wander about during winter-time.

[Specimens of the typical form were collected in Greece (Dec. 2), Spain (June 17), and Egypt (Dec. 15).—*H. F. W.*]

Chloris chloris aurantiiventris Cab.

Crete.—First noted 25th February, when three were shot out of a small party of both sexes. Small flocks were noted thereafter up to 25th April. This race of Greenfinch therefore at any rate spends the winter in Crete. Whether it also breeds there was not noted.

Corfu.—Fairly plentiful in mid-winter. One specimen obtained.

Greenfinches were also met with in Egypt as winter visitors, arriving about 21st October, as migrants in Sardinia, in Malta probably also as migrants, and in winter at Platea. Near Gibraltar a number of Greenfinches were met with at the end of July, but no specimens were obtained at any of these places to indicate to which race they belonged.

Carduelis carduelis.

Egypt.—Not met with from August to January, but as Mr. Nicoll observed the species at Damietta ('Ibis,' July 1908) and it figured in the bird-catchers' lures in November and December, the Goldfinch is presumably a winter visitor in small numbers.

Crete.—Winters and breeds, presumably individuals are resident, although there seemed to be a slight increase at the end of March, and then a decrease to breeding numbers as if there was some migratory movement, but this was not at all certain. Nests with fresh eggs, 27th April.

Platea.—Plentiful in winter and summer.

Not noted in Smyrna and the Grecian Archipelago between 24th July and 6th September.

Cyprus.—In flocks 10th October.

Corfu.—Plentiful in winter.

Malta.—Winter visitor only. All appeared to have left early in March.

[Only one specimen was obtained (♀ Corfu, Dec. 26, 1905), and this puzzled me, being most like typical *C. carduelis*, but it may have been a migrant.—*H. F. W.*]

Carduelis spinus (L.).

The only Siskin met with was a single male near Athens on 21st April. This bird was probably on migration, though the testes were large. The stomach was nearly empty, and contained a few small seeds, small insects, and grit.

Carduelis cannabina mediterranea (Tschusi).

This race of Linnet was met with in Egypt, where it was a winter visitor, arriving about the 25th of October, and in Crete also in winter. As in the case of the Chaffinch many individuals, perhaps all, left for the north in March, but unlike that species, the numbers were augmented by fresh arrivals from the south in April. These were still coming through when the ship left on 28th April. It was not ascertained whether any Linnets breed in Crete.

Linnets were winter visitors to Malta, but specimens were not obtained.

[One from Crete (Feb. 27, 1906) and one from Port Said (Nov. 10, 1906) were of this form—*H. F. W.*]

Serinus canarius serinus (L.).

Malta.—The Serin does *not* breed, though fairly plentiful in winter, the birds collecting in flocks during the early part of March and leaving the island before the end of that month.

Crete.—The Serin was found on the 7th of March, and probably winters. No further notice was taken of the species.

FRINGILLA CŒLEBS CŒLEBS L.

Egypt.—Winter visitor in small numbers. First observed on the 18th of October, when a male came on board ship at sea off the Damietta mouth of the Nile. Fresh arrivals continued up to the end of November, when the numbers reached a maximum and then decreased to winter proportions.

Crete.—Plentiful in winter, and appeared to collect in flocks about mid February, preparatory to a move northwards. Courting and song were observed, but no direct evidence of breeding was obtained, although it is probable that the species does breed, but not in anything like the winter numbers.

Platea.—Plentiful winter and summer. Presumably resident.

Thaso. Chaffinches plentiful 18th August. Probably breed.

Sicily.—Fair numbers breeding. Five incubated eggs 27th May, three fresh eggs 29th May.

Malta.—Winter visitor only, last date seen 17th March.

PETRONIA PETRONIA * (L.).

The typical form of the Rock-Sparrow was found breeding abundantly in the limestone cliffs of the "Cavas" in Sicily. Great caution was necessary in taking eggs, as in many cases the nests were close to those of *Passer hispaniolensis maltæ*, although the Rock-Sparrow seemed to prefer a small colony of its own, or at any rate to colonize locally about the cliffs.

The nests found were less bulky than those of "*Passer*," and more neatly "stowed away" in their hole or crevice, with less material protruding. The majority of nests contained small young about 1st June, but fresh clutches of seven, six, six, four eggs respectively were obtained between 26th May and 2nd June. Taken as a whole, they differ considerably from the Sparrows' eggs in being larger and having bolder, warm-umber coloured, markings, in which respect they seem to approach eggs of *Passer domesticus* rather than those of *P. hispaniolensis*.

* For the reason of the omission of the third name in this case see footnote under *Coccothraustes*, p. 124.

It was frequently noted that there are some habits of the Rock-Sparrow that remind one of the Larks. One is raising its body rather high on the legs and then squatting close, a common habit with the Crested Lark. The flight and an occasional querulous note, too, sometimes recall the Crested Lark.

It is almost impossible to see the yellow throat-patch except at very close range, but the chequered appearance of the mantle, larger size, and above all the terminal white spots on the tail-feathers when in flight, are sufficiently distinctive for the field-observer.

Passer domesticus domesticus (L.).

Passer domesticus ? subsp.

Passer hispaniolensis hispaniolensis (Temm.).

Passer hispaniolensis maltæ Hart.

Passer italiæ (Vieill.)

The distribution of Sparrows in the Mediterranean is remarkable. On the Grecian mainland, in the Ionian Islands and Grecian Archipelago, Smyrna and Cyprus, the Sparrow was *P. domesticus*, and no other form of Sparrow was found. In Greece, out in the wildest country *P. domesticus* would be found in plenty around the herdsmen's huts, where one of the chestnut-headed Sparrows might have been expected to occur.

Around Gibraltar and in Sardinia, in the towns and villages *Passer domesticus* was found, and in the country *P. hispaniolensis*; on the Italian mainland and in Crete *Passer italiæ*, and in Sicily and Malta a form intermediate between *P. hispaniolensis* and *P. italiæ* (*P. hispaniolensis maltæ*), but inclining to the former, since the flank-streaks are never entirely lacking.

In Egypt, around the coast typical *P. domesticus* was found resident, while in the Nile Delta and its vicinity, in addition to typical *P. hispaniolensis* as a winter visitor, a Sparrow approaching *P. domesticus indicus*, and quite noticeably distinct in the field from typical *P. domesticus* by reason of the brighter contrasts of light chestnut and lavender-grey on the dorsal side, was found in winter, apparently as a resident.

Note.—*P. hispaniolensis hispaniolensis* was first seen at Port Said on the 20th of October, a large flock. On 27th October another large party of Sparrows, probably *P. hispaniolensis,* flew overhead, going south, and specimens were obtained near Damanhour in January

[The House-Sparrows obtained at Damanhour (Egypt) in January and referred to above, appear to be somewhat intermediate between *P. d. indicus* and *P. d. niloticus* recently described by Messrs. Nicoll and Bonhote (Bull. B.O.C. xxiii. p. 101). The nape has more grey and not so much chestnut as in *P. d. indicus,* and is more like that of *P. d. niloticus*; the cheeks and under parts are greyish, not so pure white as in *P. d. indicus* and *P. d. niloticus.* No specimens of House-Sparrows from the coast (which Lynes states were like typical *P. domesticus*) were obtained.

A male specimen of *Passer italiæ* from Suda Bay, Crete (June 22, 1906), is indistinguishable from typical examples, and this seems to indicate a considerable eastward extension of the range of this species.—*H. F. W.*]

Emberiza calandra calandra L.

Emberiza calandra Linnæus, Syst. Nat. ed. x. p. 176.

Egypt.—The Corn-Bunting is evidently a winter visitor in small numbers (*vide* 'Ibis,' July 1908). At Port Said it was seen on 10th November, after which small parties were observed now and again, until 9th December, but this is not a suitable place for wintering.

Crete.—The species was met with wintering, but no evidence was seen of its breeding, the winter visitors apparently leaving in flocks between 8th March and 4th April.

Athens.—Between the 13th and 23rd April numbers were apparently migrating, but may have been breeding also.

Malta.—The Corn-Bunting was found resident and breeding. In mid-winter its "chartte" was frequently heard.

[The two specimens from Port Said (Dec. 9, 1906) are very grey on the upper parts.—*H. F. W.*]

Emberiza cirlus L.

The Cirl Bunting was not met with in Egypt and not for certain in Crete. At Platea in mid-winter it was found plentiful. In Sicily it was breeding commonly, four nests of eggs partially incubated having been found between 25th May and 2nd June. In Sardinia the species occurred in winter, and was about to breed on 3rd May. In Malta it was never met with.

Emberiza hortulana L.

Egypt.—Ortolans passed through on migration in small numbers during September. On 8th September they were rather plentiful in parties from four to nine strong. On the 12th, when the ship was at sea a few miles north of Port Said, a single Ortolan was seen.

Crete.—The species was found to be a summer visitor in moderate numbers, arriving in flocks from 8th April. Some probably passed on further north, while many were paired, courting and singing on the 25th, while breeding flocks were still to be seen about. By the 28th these migrants seemed to have departed.

Malta and Sardinia.—On migration, 25th April and 3rd May respectively.

The stomachs of specimens collected in Crete contained small beetles, snails, and a few seeds.

Emberiza cæsia Cretzschm.

Cretzschmar's Bunting was found as a summer visitor to Crete and Athens and probably also to Smyrna, where it was plentiful on 7th August. In Egypt an adult female was shot on 25th August, and one or two at a time were seen in September.

Crete.—The species arrived on 8th April in small parties of both sexes. Some individuals seemed to pair at once and start breeding, others passed on.

Athens.—Between April 13th and 22nd Cretzschmar's Bunting was plentiful, frequenting the lower slopes of the rocky and sparsely scrub-clad hills. On the 16th, a pair (the female having one soft-shelled egg in the uterus and two ripe

ones in the ovary) were shot as they sat together on a pile of stones. During the breeding-time the birds were found quite easy of approach, and decidedly less obtrusive than the Cirl Bunting. The call, or alarm-note is decidedly sharp for a Bunting, and rather reminded me of that of a Wagtail.

[One specimen was obtained in Crete (April 8th) and this was sexed as a doubtful female, but I think it is a male. It is, however, very pale all over, the rufous parts being especially so; on the back and rump it is sandy rather than rufous. The wing measures only 80 mm., which is small for a male.—*H. F. W.*]

Emberiza schœniclus canneti (Brehm).

This race of the Reed-Bunting was found and obtained in winter in Egypt and at Platea. In Egypt it is apparently a scarce winter visitor, and seemed to arrive about mid-November, but the birds were very shy indeed, and easily overlooked. This is equally true of those found at Platea.

Melanocorypha calandra calandra (L.).

The Calandra Lark was not observed in Egypt or Crete. At Platea in mid-winter there were occasional flocks on the Missolonghi Plains. In Sicily they were very abundant and seemed to be nesting on 23rd May, but no nests were actually found, though on 6th June a young one able to fly was observed.

Calandrella brachydactyla (Leisler).

The typical race of the Short-toed Lark was found as a summer visitor at Athens, Malta, Sicily, Sardinia, Alicante, and Algeciras. In Crete Short-toed Larks, presumably of the same race as that found at Athens, passed through on migration between 21st March and mid-April, but apparently did not stop to breed there.

Athens.—Between April 13th and 23rd there seemed to be two distinct races of Short-toed Larks: one (represented by specimens Nos. 168, 169, 176, 178, 179) light rufous in colour, by 22nd April was mostly paired and courting, and the males were singing; the other (represented by specimens Nos. 173, 180, 186) sandy-grey in colour, was in flocks all the

time, not singing, and all extremely fat, whereas specimens of the former race were all quite thin. The former were most plentiful on the flat country near the sea, the latter on the rocky sloping ground at the foot of the Hymettos Hills.

Malta.—The species arrived about 14th April and commenced to lay about 1st May. On 23rd June a nest contained one young and two chipping eggs.

Sicily.—Very abundant, breeding in the plains along with the Calandra Larks at the end of May.

The stomachs of specimens examined contained a mixture of seeds and insects.

[Specimens of *C. b. brachydactyla* vary individually, especially in the amount of rufous on the head and nape, and all the birds collected in Greece and Crete appear to me to be of the typical form.—*H. F. W.*]

Calandrella minor heinei (Hom.).

Short-toed Larks passed through Port Said on migration from the end of August to the third week of October.

Some Short-toed Larks were seen but not obtained at Damietta on 22nd November. These would possibly have been *C. minor nicolli* Hartert (Bull. B. O. C. xxv. p. 9).

[The only specimen obtained was a female at Port Said on October 21st, 1906. This is undoubtedly an example of *C. m. heinei*, which is much greyer on the upper parts than either *C. m. nicolli* or *C. m. minor*. Dr. Hartert has been kind enough to confirm the identification of this specimen. This bird has not previously been recorded from so far to the westward as Egypt.—*H. F. W.*]

Galerida cristata (Linn.).

All Crested Larks met with were apparently quite sedentary; no migratory or even seasonal movement was ever noticed. Even in autumn they never seem to have any fat on them to speak of. Although the species figures in the list of Malta birds there do not seem to be any in the island now, and it is suggested that the specimens were perhaps procured at Malta market, in which case it is most probable that they were brought over from Sicily or Tunis,

from which places the market receives pretty regularly a supply of Ducks, Barbary Partridges, Senegal Turtle-Doves, and other species.

Galerida theklæ theklæ Brehm.

Plentiful at Vagos Bay, Portugal, very noticeably small and Wood-Lark-like in appearance, and frequently perching in medium-sized ilex trees.

Galerida cristata nigricans Brehm.

These Crested Larks, the dark coloration of which at once draws the attention of the observer, were met with at Damanhour, where the rich-soiled cotton-fields and paddies owe their existence to abundant irrigation with the waters of the Nile. Very plentiful and confiding, the birds were constantly met with on roads along which passed all day a stream of camels, carts, and human traffic.

Damanhour is evidently well inside the area of their distribution. No other form of Crested Lark was seen there, but at Esbet Kourched, about twenty-five miles further away from the Nile, *G. c. nigricans* seemed to be entirely, or at any rate almost, replaced by *G. c. altirostris*, while between the two places both forms were seen alongside one another, but this, it must be noted, was in autumn and winter.

Galerida cristata altirostris Brehm.

Crested Larks of this race were found at or near the Mediterranean Sea of Egypt, but nowhere plentifully. In the field it is indistinguishable from the typical Crested Lark.

[Two specimens collected,—Damietta, November 22nd; Esbet Kourched, December 19th.—*H. F. W.*]

Galerida cristata caroli Hartert.

These birds were plentiful in the sandy and poorly cultivated country in the vicinity of the fresh-water canal that joins Cairo and Ismaïlia about fifteen miles from the latter place. The peculiar bleached appearance of the lower back, rump, and upper tail-coverts in mid-winter was very noticeable.

From a consideration of the localities in which these three latter forms of Crested Larks were found, it would seem that *G. c. nigricans* inhabits only the rich-soiled delta and its vicinity, while *G. c. altirostris*, whatever may be its distribution to the southward, frequents the sandy, uncultivated strip of country which borders the Mediterranean practically the whole way from Port Said to Alexandria. More specimens are required, however, to define completely the limits of *G. c. altirostris* and also those of *G. c. caroli*.

[Three specimens were collected at Mahsameh, near Ismaïlia, and by the kindness of Dr. Hartert and Mr. Nicoll I have been able to compare these very carefully with a series of *G. c. caroli* from the typical locality—the Wadi Natron. They agree exactly in coloration, and although they appear to be slightly smaller in size I think a larger series might show that they came well within the measurements of typical *G. c. caroli*.

			mm.		mm.
♂. Dec. 5, 1907.	Near Ismaïlia.	Wing	104	Bill from nostril to tip.	13
♂. Dec. 6, 1907.	do.	do.	104	do.	13½
? sex. Dec. 6, 1907.	do.	do.	107	do.	13
♂. Mar. 19, 1910.	Wadi Natron.	do.	106	do.	14
♂. do.	do.	do.	109	do.	14
♀. Mar. 18, 1910.	do.	do.	101	do.	broken
♀. Mar. 23, 1910.	do.	do.	100	do.	13

H. F. W.]

Galerida cristata meridionalis Brehm.

Only met with in Crete, where it was plentiful. In winter the birds were mostly in scattered parties of 4–8 strong, pairing about the first week of April and commencing to lay not earlier than mid-April. On 26th April one of these birds was flushed from four fresh eggs. Six specimens obtained.

Galerida cristata cristata (L.).

In Cyprus, on 11th October, Crested Larks were found plentiful in parties. One male, curiously enough, was giving at noon a full spring-song from a clod of earth. This was, of course, exceptional. On dissection, this bird's testes were found to be quite small.

[The Cypriote bird has been named *G. c. cypriaca* by Dr. Bianchi, but the specimens collected by Lynes do not appear to me to be distinguishable from the typical form.—*H. F. W.*]

Galerida cristata subsp. inc.

Crested Larks were found very abundant at Lemnos between 22nd August and 6th September, in more or less scattered parties consisting apparently of one or more families.

[The specimens obtained from Lemnos are in fresh autumn-plumage, and are paler, more greyish, and less reddish than specimens of *G. c. meridionalis*, and do not match exactly any race of Crested Lark which I have been able to examine.—*H. F. W.*]

Lullula arborea arborea (L.).

In Egypt the Wood-Lark appeared to be a scarce winter visitor, making its appearance about 18th November, on which date a young female was shot from a small party of Wood-Larks in company with some Sky-Larks. On 21st November, at 2 p.m., when the ship was at sea, ten miles north of Port Said, a Wood-Lark passed with laborious flight close to the water's surface southward bound.

In Crete this species was plentiful and resident, their numbers not apparently increased by migration. During winter, and up to 1st March, the birds were mostly in parties of from three to eight. Some pairs were observed on 7th March, and song, not heard hitherto, commenced soon afterwards. On 28th April a female was found sitting very close on a nest of four nearly fresh eggs in young corn, but this was a late date, as parents carrying food had been seen from 1st April onwards.

At Athens a young bird quite a week out of the nest was obtained on 21st April.

Near Platea, in mid-December, large flocks were found on the flat fallow lands of the Missolonghi plains, while small family (?) parties were also observed among the scrub-clad hills.

At Smyrna, on 4th October, Wood-Larks were plentiful on rising ground near the pine-clad hills. One male was singing very sweetly from a stone.

Sicily.—Young, not long out of the nest, were observed on 2nd June in the Cava district.

Gibraltar.—In the cork-woods Wood-Larks were in full song on 20th February, and were also in pairs on the tops of the scrub-clad hills above. There is an authentic record of a nest with eggs in the low ground of the cork-woods in March, and the species is a fairly plentiful breeder in the Coto Doñana, where a nest of young about five days old was found on 9th May. (Irby did not record breeding in Gibraltar.)

At Malta the species was never observed, neither was it met with between 22nd February and 6th August in Lemnos, Mitylene, Thaso, or Marmarice.

The stomachs of specimens examined contained seeds, snails, caterpillars, and grasshoppers.

[Specimens were obtained in Egypt, Crete, Greece and Smyrna, all of the typical form.—*H. F. W.*]

Alauda arvensis cantarella Bp.

This race of the Sky-Lark was met with at Platea in winter, in flocks up to 100 strong on the dry plains, and in Egypt as a winter visitor in moderate numbers. At Port Said the first bird was seen on 20th October. The numbers then increased, and by the end of the month Sky-Larks had become plentiful, and were almost abundant throughout November, after which the passage subsided and the numbers gradually assumed winter proportions, small in the Port Said districts, but considerable near the Nile Delta and Ismaïlia.

Sky-Larks seemed to follow the general rule in arriving at Port Said about daybreak. On 3rd November, at this hour, a Sky-Lark was found suspended in mid-air by one wing from an accumulated string of spider's web connecting two clumps of reeds. The bird had managed to get a complete turn of the web round the "wrist," and was thus

firmly held a prisoner. It would certainly have succumbed to exhaustion had it not been rescued.

A Sky-Lark, no specimen of which was obtained, was found wintering plentifully in Sardinia and Sicily, also at Crete, where all seemed to depart by the end of February. At Malta also a Sky-Lark is a winter visitor in moderate numbers. Some were seen as late as the 30th March, but these individuals may have been migrants which had spent the winter further south.

[Specimens from Port Said were obtained from the 20th October to 15th December, and are all of this form, as is one from Greece in December.—*H. F. W.*]

Anthus campestris (L.).

Egypt.—The Tawny Pipit was not observed until 16th September, but may very likely have been overlooked earlier. There were two very pale-coloured birds, one of which was obtained. The species was last seen on 26th October, never more than a few at a time.

Crete.—Apparently a migrant only. First seen 1st April, then constantly in small parties not exceeding six. Still on passage on 28th April, up to which date no indications of breeding were observed.

Athens.—13th to 23rd April; plentiful on passage. Some, however, were paired, and there were indications by nuptial flights that these would breed there.

Lemnos.—Plentiful at the end of August and beginning of September, the majority apparently on migration, but a few of a generally lighter colour may have been in juvenile plumage and bred there.

Sicily.—Not seen 20th May–8th June.

Sardinia.—On migration in parties, 3rd–5th May.

[Three young birds obtained in Egypt (September 16th and 25th, and October 21st) are partly in juvenile and partly in first winter plumage, but there is no appearance of growing feathers upon them, and the moult may have been arrested at the time of migration.—*H. F. W.*]

Anthus trivialis (L.).

The Tree-Pipit was met with on migration only.

Egypt.—The passage was only a small one, starting as early as the last week of August or even earlier; small parties of three and four were met with off and on up to the third week of October. The Tree-Pipit's passage was then concluded.

Crete.—The first occurrence in spring was that of an emaciated specimen caught at sea off the north coast on 28th March. Flocks were noted on 11th April, and small flocks and parties were still passing through on 27th and 28th April. On 29th April a Tree-Pipit came on board ship at sea, forty miles west of Crete.

Anthus pratensis (L.).

The Meadow-Pipit seemed to be the predominant winter visitor all over the Mediterranean basin; even at Malta and in "birdless" Italy the species was plentifully met with, frequenting not only open fields and plains, but also orchards and cultivated lands.

Egypt.—First noted on 23rd October, and soon becoming plentiful, the numbers varying from day to day, being greatest in the second and third weeks of October, after which they decreased, assuming winter-proportions by the second week of December. During their period of passage, Meadow-Pipits were often found in company with Red-throated and Water-Pipits in moist places, but when settled down in winter quarters they more often frequented drier spots than either of those species.

Crete.—Plentiful in scattered parties in winter. Between the 8th and 22nd March these winter Meadow-Pipits were noticeably forming into larger and more compact parties, perching high in the tops of plane trees, flying about up in the air in a restless manner, finch-like, in compact flocks. Their flight was swifter, and it even seemed with more "chirp" in their note than usual—in fact, under vernal influences behaving altogether in a singular manner. By 22nd March all seem to have departed, and there were no indications of any migrants passing through.

Malta.—The last of the winter Meadow-Pipits was noted 14th March, and no migrants appeared to pass through.

The stomachs of the specimens collected contained seeds and vegetable matter, small snails, beetles, flies, and other insects.

Anthus cervinus (Pall.).

The Red-throated Pipit was met with in Egypt (only) as an abundant winter visitor.

In dates of arrival, passage, and wintering, the Red-throated Pipit agreed exactly with the Meadow-Pipit. As Mr. Nicoll remarks ('Ibis,' July 1908), the note of this species is very different from that of the Meadow-Pipit, and was found to be a sure guide for recognizing the species. It may be described as a musical "chig" as against the squeaky "peet" of the Meadow-Pipit.

Anthus spinoletta spinoletta (L.).

The typical race of the Water-Pipit was found plentiful among the vegetation growing in the wetter places of the Mesolonghi marshes near Platea, mostly in scattered parties of from six to twenty in number.

Anthus spinoletta coutellei Savi.

Anthus spinoletta blakistoni Swinhoe.

These two races of the Water-Pipit were both found at Port Said in the autumn on migration. *A. s. coutellei* certainly stops to winter in moderate numbers, specimens having been shot on December 23rd and 30th, but the difference between the two races, in spite of the warmer coloration of *A. s. blakistoni* being often noticeable in the field, is not sufficient to permit of definite statements being made without obtaining specimens. Water-Pipits were first seen on 21st October, after which date some were usually found in the moister spots at the edge of Lake Menzaleh, though until the first week in December, when the winter visitors seemed to have come to remain, the numbers fluctuated considerably.

It was observed that these Water-Pipits had the habit of

perching on bushes, noticeably on the tops of the tamarisks, whose bases stood in shallow water, that in appearance they were very like Rock-Pipits, and that their note was a little louder and deeper than that of the Meadow-Pipit.

[Two specimens of *A. s. blakistoni* were obtained (Port Said, October 21st and November 10th), and these are interesting as being from further west than this race has been previously recorded. Specimens of *A. s. coutellei* were obtained from October 25th to December 20th.—*H. F. W.*]

Motacilla flava flava L.

The Blue-headed Wagtail was observed from east to west of the Mediterranean as a migrant, in Spain also as a breeding-species, and probably in Sicily, where a Yellow Wagtail seen on 6th June was judged to be of this species.

Egypt.—The passage commenced at the end of August. On 8th September the species was plentiful, a fair proportion being adult males with fine blue heads. The numbers continued to increase, until at the end of September the maximum intensity of the passage was reached, the birds being often in large parties up to fifty strong, and in varied plumages from the bright yellow breast with clear blue head and light eye-streak of the adult male, to the almost white breast and dull greyish mantle and head of the young bird of the year. With the advent of October the migration seemed to be nearly concluded, and no certain record of the species later than 14th October was obtained.

Crete.—First seen 3rd April, a male in full plumage. On 27th April flocks were seen, and on 29th April, forty miles west of Crete, numbers came on board ship, several bedraggled with rain, and all more or less exhausted.

Athens.—13th–23rd April, plentiful in parties on migration, feeding among sheep and sometimes in company with *M. f. melanocephala*.

Lemnos.—Observed in large parties on migration, 20th August–6th September.

Malta.—Plentiful in April, and a few still passing as late as 7th May. All on migration.

Motacilla flava pygmæa (Brehm).

This resident Egyptian race of the Yellow Wagtail was met with plentifully in December and January towards the Nile Delta (not at Port Said), frequenting the rich swamps and cotton-fields.

Remarkably brilliant in coloration, these birds were conspicuous objects, perching on the tops of the plants, the bases of which were generally growing in a few inches of water.

[The specimens, which are males, measure in the wing 77, 74, and 74 mm. They have white chins, and are heavily washed with dark olive on the flanks. One has no eye-stripe, another a small white stripe behind the eye, and another a white fleck behind the eye.—*H. F. W.*]

Motacilla flava melanocephala Licht.

Egypt.—I have no certain note of the Black-headed Wagtail between August and January, but it is known to winter ('Ibis,' July 1908).

Crete.—Spring-migrant, no evidence of breeding. First observed 19th March, male in full plumage, testes enlarging. On 27th March *flocks* were seen, and on 9th April the last, a single male, was noted.

[Two males collected March 19 and 27.—*H. F. W.*]

Athens.—Several small parties, evidently on migration, were observed on 13th April. They were sometimes in company with *M. flava flava*, feeding among sheep.

Motacilla boarula boarula L.

Egypt.—The Grey Wagtail was a sparing winter visitor, and, unlike the other Wagtails, was never seen in parties. The first was observed on 15th October, from which date onwards one or two might be found about pools of fresh or salt water.

Crete.—Winter visitor. Last one seen on 10th March. On 26th February an example in moult, with the black throat-patch half grown, was observed at close quarters.

Greece.—Found here and there in mid-winter.

Malta.—Fair numbers passed through on migration during October and early November. Some individuals stopped to

winter and moved north, apparently very early, the following spring.

Sicily.—In summer plentiful on all the streams in the Cava district. Fresh eggs were found from 15th May onwards.

Motacilla alba alba L.

The White Wagtail was met with from east to west of the Mediterranean as a plentiful winter visitor.

Egypt.—The first two, in full winter-plumage, were seen on 26th September. Numbers increased quickly, and by mid-October the species had become plentiful, perhaps in places exceeding winter proportions, which seemed to be reached about the first week of December. No examples were ever seen in the summer-plumage, *i. e.* with more than a black crescent on the chest.

In some places it was found that the White Wagtails, which during the day had been scattered over a large area, were in the habit of selecting certain suitable spots in which to roost at night in company. One such roosting-place near Damanhour was a two-acre patch of sugar-canes divided into halves by the main road, along which a stream of traffic passed all day long, and well into the evening. At this season (December) the canes were nine or ten feet high with a luxuriant outgrowth of broad green leaves, and formed a dense jungle. As the sun dipped below the horizon, the air became alive with White Wagtails whisking into the canes from all points of the compass, settling at once on the leaves and staying there, not lifting and flying about as Starlings do. There must have been thousands of White Wagtails roosting in that patch. No other species seemed to be present. A similar phenomenon, but on a smaller scale, was also observed in January at Port Said.

Crete.—First observed 18th February, two birds moulting into summer-plumage. On 26th February birds in all stages of plumage from full winter to full summer were noticed. These were all judged to be winter visitors. On 27th March all seen were in full summer-plumage, and

all appeared to have departed by mid-April. Migrants from further south did not seem to stop in Crete.

Malta.—As early as 9th March a migratory movement took place, all the birds being in, or nearly in, summer-plumage. Whether these birds were winter visitors or migrants from further south (it being observed that the migration *viâ* Malta apparently starts a fortnight or so earlier than that *viâ* Crete) was not clear. Last record 10th March.

[A female (Crete, March 1st) is moulting on the head, neck, breast, secondaries, and tail, while another of the same date has completed its moult.—*H. F. W.*]

Certhia brachydactyla ultramontana Hart.

Very plentiful at Corfu in mid-winter, frequenting the olive-groves. It is presumably resident there.

Observed at Platea in December and in family-parties in July, frequenting the oak trees chiefly.

[Only one specimen was preserved, and that from Corfu. Through the kindness of Herr Reiser, I have examined two others from Corfu and eight from Greece, and I can detect no difference in them, and think that they should all be referred to this race.—*H. F. W.*]

Sitta neumayer neumayer Michah.

The Rock-Nuthatch, a species the individuals of which are apparently everywhere quite sedentary, was found locally plentiful in Greece (Platea and Athens), Smyrna, the island of Mitylene, and Albania. It was not met with in Crete, where much suitable ground near the coast exists, but may perhaps be found among the unexplored mountains inland. Neither was it met with at Lemnos, where the formation and vegetation seemed identical with that of Mitylene, only forty miles away.

Both in winter and in the breeding-season the Rock-Nuthatch is a very noisy bird, and its rattling trills and varied cries may frequently be heard half a mile away. Among the Hymettos Hills, near Athens, numbers were breeding in April. On the 13th a nest with the female sitting on eight half-incubated eggs was found. This nest was situated in a

much overhung cliff-face, in which the birds had selected a slight indentation and over it worked a roughly hemispherical crust of hard mud with an entrance hole in its centre. This, the nest-container, in outward appearance resembled the upper part of a "Cantaro" (Spanish porous water-pot) that had been broken off and placed against the face of the rock with the narrow mouth to the front.

The nest proper, inside the crust, was a snug and ample affair of grey hare's fur with a neat countersunk cup for the eggs, like that of a Great Tit. The whole was a most elaborate structure, and must have taken a long time to complete.

The eggs differed much from those of *S. europæa* in being larger, more glossy, rounder, and with large bold blotches and practically no spots or freckle-marks.

Three days later a pair was watched building a nest in a similar overhung place, but the birds seemed idle and not to do much. It was only the beginning of a nest, and in the lower part there was already some soft material, although the crust was not a quarter completed.

The stomachs of the birds collected were noted as containing spiders, beetles, grasshoppers, ants, and small black flies.

Parus major.

The Great Tit was met with as a resident in Crete, Corfu, Sicily, Sardinia, Thaso, and Gibraltar. Neither at Athens nor Platea was the Great Tit seen. The Sombre Tit (*P. lugubris*) was noted there as the representative "Tom-Tit," whereas at Crete the Sombre Tit was not observed.

There are no Tits in Malta.

[The specimens from Crete are, I think, referable to the form *Parus major aphrodite* Mad., but they are perhaps slightly smaller. I agree with Dr. Hartert in considering the Cypriote and Grecian Great Tits to be the same.

A single specimen from Corfu seems to be of the typical form (*P. m. major*); a single specimen from Sardinia is, I think, of the Corsican form (*P. m. corsus*), as it has a

large bill, a short wing, and is dull in coloration ; the white on the outer tail-feathers is, however, as extended as in typical specimens, but this in my experience is not at any time a constant character.—*H. F. W.*]

Parus cœruleus ogliastræ Hart.

This Blue Tit was found an abundant resident in Crete.

[Only a single specimen was collected, and this seems to agree best with the form from Sardinia and Corsica.—*H. F. W.*]

Ægithalus caudatus macedonicus (Dress.).

This race of Long-tailed Tit was found to be plentiful at Platea, and two (both juvenile) were shot from a family-party on 14th July.

At Marmarice, a small family-party of Long-tailed Tits met with in the pine-woods on 25th July was probably also of the same race.

[The two specimens are in juvenile plumage ; the bellies are dark and the backs rust-coloured, otherwise they are much like *Æ. c. roseus* in the same plumage. An interesting point is observable in the dark streak over the eye, which in these specimens is black and extends to the base of the bill, but it so happens that the birds have moulted in this part, and these feathers are those of the first winter-plumage. In *Æ. c. roseus* this streak extends to the bill in the juvenile plumage, but it is brown, while in the adult it is black, but does not reach the bill. The ring round the eye is noted as orange-red ; Herr Reiser describes it as sulphur in the adult.—*H. F. W.*]

Lanius minor Gm.

The Lesser Grey Shrike was met with as a plentiful autumn migrant in Egypt and the Grecian Archipelago.

Egypt.—The passage was well under way on 25th August, and although subsequently, on some days, the species was quite abundant, the numbers never reached anything like those of the Red-backed Shrike, and the passage was concluded much earlier. After mid-September the Lesser Grey Shrike had ceased to be plentiful, and the last record for

Port Said is of a solitary example on 26th September. The following December, near Ismaïlia, a Grey Shrike was observed which looked like *L. minor*, but it was not obtained. None were seen elsewhere.

Smyrna and Mitylene.—Plentiful on migration between 7th and 13th August. No records for Crete and Athens in spring.

Lanius senator.

The only place eastward of Malta where the Woodchat was observed was at Athens, and there the species commenced to arrive in some numbers on 22nd April. At Crete the species was not observed, but was probably overlooked during the week spent there at the end of April, as it is known to breed there.

Malta.—The Woodchat was an abundant summer visitor. First arrival noted 18th April, plentiful on 27th April. Many nests were found, the first eggs being laid during the second week of May.

Sicily, Sardinia, and Spain.—The Woodchat was a plentiful summer visitor, and breeding.

[No specimens were obtained.—*H. F. W.*]

Lanius nubicus Licht.

Only a few met with in autumn at Thaso, 18th August, where a young female was obtained, and at Smyrna on 7th August; some, all immature, were almost certainly observed, but none secured.

Not observed in Egypt from August to January, or in Crete in February, March, and April.

Lanius collurio L.

The Red-backed Shrike was met with in the Grecian Archipelago, Asia Minor, and Egypt, as an autumn migrant only.

Egypt.—The passage of this and *L. minor* was very conspicuous, owing to the birds' size and to the fact that when looking out for food they take up a position of vantage on top of a post or bush.

On 25th August the species was already abundant, quite

half being males in full plumage. By the 1st September dull-plumaged birds had become predominant, and the last male in full plumage was seen on 30th September—evidently a solitary specimen, as none had been noticed for a fortnight previously. The numbers slowly decreased from mid-September to the last week of October, when the passage had practically ceased, for only two single birds were observed later (8th and 13th November).

In the early evenings a few were seen arriving, coming from high in a slanting-down direction.

Smyrna, Mitylene, and Lemnos.—7th August–6th September. Plentiful on migration.

Muscicapa striata striata. (*Muscicapa grisola*, auct.)

The Spotted Flycatcher was met with breeding near Algeciras, but everywhere else as a migrant only.

Egypt.—Very abundant migrant from the last week of August to about 7th October, the numbers fluctuating daily. The passage then decreased gradually until the end of October, when it might be said to have ceased, the only later record being of a solitary bird on 8th November. No examples in juvenile plumage were observed.

Athens and Crete.—Not observed 3rd February–28th April.

Thaso and Lemnos.—17th August–7th September, some migrating. Plentiful on latter date.

Malta.—Passage started during the last week of April. On 5th May the birds were abundant.

Sicily.—On one occasion two, perhaps three individuals, were seen in a certain spot so late in the year as 28th May, but as these could not be found again two days afterwards, they were thought to be late migrants.

Muscicapa hypoleuca hypoleuca (Pall.). (*Muscicapa atricapilla*, auct.)

The Pied Flycatcher was met with as a migrant in moderate numbers from Crete to the westward.

Crete and Athens.—Single males seen 22nd and 25th April respectively, the latter in very brown plumage ; testes small.

At sea 40′ *west of Crete.*—29th April, several individuals of both sexes on migration came on board. It is of interest to note that the stomach of one of these birds contained some insect food which could not have been obtained on board ship; the stomach of the other was empty.

Malta.—18th April, some seen (and perhaps one on 12th April). 25th April, both sexes plentiful on migration.

Muscicapa hypoleuca semitorquata Hom.

Egypt.—A single juvenile only, obtained on 11th September.

[This is a young bird in brown plumage, sexed as a male. The white spot on the primaries shews to the extent of 3 mm., and the tail-feathers have more white than in *M. h. hypoleuca*, the two outer pairs having white outer webs and a yellowish-white line halfway up the centre of the feather; the next pair is the same, but the white on the outer web does not extend quite to the tip; the next pair has part of the outer web yellowish white. Dr. Hartert agrees with me in considering it a specimen of this form.—*H. F. W.*]

Muscicapa collaris Bechst.

Observed as a migrant, but only on very few occasions.

Malta.—A single male in full plumage was seen 22nd April, and a similar bird was obtained on 27th April at the same spot. This might have been the same bird, but as five days had elapsed, and the species is only a migrant, it seems unlikely.

Sardinia.—About 1st May, 1907, an adult male was observed.

Muscicapa parva Bechst.

At midday on 10th October, 1906, when the ship was 25′ north of Alexandria, a Red-breasted Flycatcher, either a young one or a female, settled in the rigging, and after half an hour's rest, flew landwards. The bird was tired and could be approached within a few feet. This species owes its introduction into the list of the birds of Egypt to Mr. Nicoll's observation of a single female at Cairo, 11th November, 1906.

Phylloscopus collybita collybita (Vieill.).

The Chiffchaff was met with all over the Mediterranean in fair numbers as a winter visitor only.

Egypt.—No Chiffchaffs seemed to have arrived by the end of September, and it was not until October was well advanced and Willow-Wrens had, at last, begun to decrease, that the passage of the former began to be pronounced. On 25th October a note was made that of the *Phylloscopi* present about two-thirds were Chiffchaffs and one-third Willow-Wrens, and on 28th October that all observed were, so far as could be seen, Chiffchaffs. The passage proceeded steadily through November, the numbers never approaching those of the Willow-Wren, and the species did not appear to have settled down to winter proportions until mid-December. Even so late as 20th December, at 10 A.M., when we were carrying out target-practice fifteen miles off Rosetta, a Chiffchaff, apparently a belated migrant, came on board. Early on 4th December several Chiffchaffs were singing "chiff-chaff," the only occasion on which the song was ever heard. Curiously enough, the morning was not sunny.

Crete.—Last example noted 29th March.

Greece, Sicily, Italy, Sardinia, Gibraltar.—This species occurred in winter in fair numbers. *Malta.*—The same may be said in this case, the last having been noted on 17th March.

In its winter-haunts the Chiffchaff is shy and unobtrusive, quietly playing about the foliage, and now and then uttering its low call-note "swee-eet."

[All the Chiffchaffs obtained belong to the typical form. They are as follows:—*Port Said,* Dec. 23; *Crete,* Feb. 10; *Greece,* Dec. 3, 7, and 17; *Malta,* Nov. 19.—*H. F. W.*]

Phylloscopus trochilus trochilus (L.).

The Willow-Wren was met with from east to west of the Mediterranean as a migrant only, but nowhere in winter.

Egypt.—The number that passed through Port Said on migration was astonishing. On 23rd August the passage was in full progress, and the trees and bushes were full of Willow-Wrens. This continued almost without fluctuation

up to the last week of October, when, having, so to speak, been gradually relieved by the Chiffchaff, the passage of the Willow-Wren came almost to an end, the last record being 18th November, when a single bird was noticed among the Chiffchaffs, and shot for identification. Some, but not many, were in unmoulted greyish plumage. Like all the other Warblers, the Willow-Wrens would sit about in the trees and bushes sleepily during the day, become lively and feed towards evening, then gradually filter away to the south about sunset.

Crete and Athens.—Not observed between 3rd February and 28th April.

Mitylene and Lemnos. — 13th August–6th September, numbers on migration.

Cyprus.—11th October, a small party on migration.

Malta.—First observed 3rd April (male obtained). Others seen later, but never plentiful.

[One obtained on October 20th at Port Said is in worn summer-plumage and has not yet moulted. All the specimens obtained were of the typical form.—*H. F. W.*]

Phylloscopus bonelli bonelli (Vieill.).

Bonelli's Warbler was met with on migration in Egypt and was breeding near Algeciras.

In *Egypt* the passage was an early one, and was concluded by mid-September. Numbers were seen at the end of August, and were conspicuous when resting in the trees by reason of their grey appearance among the quantities of Willow-Wrens in their newly acquired primrose-yellow dress.

Algeciras.—Plentiful and breeding. On 23rd June an adult male and female were obtained. The male was singing. The female had one egg still in the ovary, apparently the last one to be laid.

[No specimens were obtained in Egypt.—*H. F. W.*]

Phylloscopus sibilatrix erlangeri Hart.

This race of the Wood-Wren is represented in the collection by one specimen obtained on board ship at sea, 40 miles

to the westward off Crete on the 29th April. The stomach was empty. Two Wood-Warblers, evidently on migration, seen at Crete and Athens a few days previously, were possibly of the same race.

[Although I can find no trace of a sheath on any of the feathers, the plumage of the bird is so perfect that it would seem to have just undergone a complete moult.—*H. F. W.*]

Cettia cetti cetti (Marm.).

Egypt, Malta.—Cetti's Warbler was not met with.

Crete.—Plentiful resident, frequenting the watered gullies at low elevations near the sea-coast. A specimen shot on 28th April was just about to lay eggs.

Platea.—Plentiful resident winter and summer.

Sicily.—Plentiful in the Cavas and Lentini marshes, always near water. 26th May, young flew from a nest; 28th May, four fresh eggs; 2nd June, three fresh eggs.

There seem to be three distinct sounds which Cetti's Warbler makes:

(1) *The stridulous cry,* emitted both in winter and in the breeding-time, most frequently in the latter. This cry does not necessarily imply that the bird has been disturbed, though it is often uttered on the approach of an intruder. It may be syllabled wheech-a-wheech-a-wheech-a-wheech, and was constantly heard throughout February as well as in the breeding-season.

(2) *The song,* uttered only in the breeding-season, like a Nightingale's song cut short.

(3) *The alarm note,* uttered at *all* seasons when alarmed. A succession of single "tchuk's" very like the alarm-note of Savi's Warbler in the breeding-season.

Although as a rule very shy and skulking, but withal inquisitive and excitable, when agitated over its nest or young, Cetti's Warbler becomes, like Savi's Warbler, quite fearless, and will approach within a few feet of the intruder.

No migratory movement was ever detected, which, considering the feeble flight and rounded wings of the bird, is not surprising.

[Four specimens from Crete are typical. The stomachs

are noted as containing snails, insects, and a few grass-seeds.—*H. F. W.*]

Lusciniola melanopogon melanopogon (Temm.).

The Moustached Warbler was met with in Sicily in winter and summer, being evidently resident. It was not observed in Egypt, but this was no doubt, as the late Captain Shelley has pointed out, due to the fact that it is very local. In Sicily, at the Pantana di Lentini on 6th and 8th June these birds were abundant and breeding. Many full-fledged young were about, while old birds were in full song. Fourteen nests were found, from three of which young had flown. Six contained respectively four, three, three, three, three eggs, all fresh, and the remainder were nearly ready for eggs. These observations made it evident that second broods were being reared.

Besides the greater contrast of dark and light colour, the pronounced eye-streak and slimmer appearance, and the habit of raising the tail up to the vertical served to distinguish this species from the Sedge-Warbler, in addition to which the song, uttered from the tops of the water-plants, seemed sweeter, more refined, and frequently opened with a succession of about four musical, high-pitched notes, after the manner of the Nightingale. The alarm-note was a jarring rattle. The nests were all over water from one to two feet above it, some in the forks of small "salix" saplings, surrounded by sword-grass growing in about six inches of water, others in the broken-down bases of reed-clumps at the edges of clearings in the swamp, in water from three to four feet deep, but not apparently in the dense reed-beds.

Some nests were built mainly of rotting vegetation, picked up from the refuse floating on the water, and this having been put on wet had become stiff in drying, and made a wiry framework; others were of dry soft material with tamarisk "fluff" ornamentation externally; some were hardly lined at all; one was beautifully lined with a profusion of large soft feathers of the Water-Rail and Little Bittern, placed loosely around the interior, as in a Swallow's nest.

The eggs were all a little larger, a little more green in colour, and a trifle more spotted, than the average Sedge-Warbler's eggs.

In the following January one or two Moustached Warblers were observed when we were shooting from canoes on the Pantana di Lentini. They were extremely shy, and were creeping about the dense vegetation far out in the swamp.

Acrocephalus arundinaceus arundinaceus (L.).

Egypt.—The Great Reed-Warbler was probably overlooked, as the first specimen was not seen until 31st October. None were observed after 25th November, and the species was thought to be a migrant only, not remaining to winter.

Platea.—Observed in the Missolonghi marshes in mid-July.

Sicily.—Plentiful and breeding in June, both at the Pantana and on the Lago di Lentini.

In the stomachs of specimens obtained at Port Said were large spiders and beetles.

Acrocephalus stentoreus stentoreus (H. & E.).

The Clamorous Reed-Warbler, met with in Egypt only, was not observed until 30th September, but as the species is resident it must have been overlooked, very likely during the moult, for until the end of October the birds were quite silent, and afterwards often obtrusively noisy, uttering a series of single loud sharp chacks at one or two seconds' interval.

In appearance the bill is so long and slender that the Clamorous Reed-Warbler can at once be recognised from the Great Reed-Warbler.

[Many of the specimens obtained in September and November are in full moult. The stomachs are noted as containing mantides, caterpillars, and spiders.—*H. F. W.*]

Acrocephalus streperus (Vieill.).

Acrocephalus palustris (Bechst.).

The Marsh- and Reed-Warblers are so impossible to distinguish in the field except during the breeding-season, that without obtaining specimens very little definite information

concerning the two species could be acquired. The Reed-Warbler was breeding abundantly in Sicily (fresh eggs from 30th May onwards) and migrated in fair numbers through Egypt, a few stopping to winter; the Marsh-Warbler also migrated through Egypt, two specimens having been obtained at Port Said on 6th September and 27th October.

Acrocephalus schœnobænus (L.).

Egypt.—The Sedge-Warbler was an abundant migrant. The passage commenced in the last week of August, and increased steadily from week to week until its maximum was reached at the end of September, when Sedge-Warblers might be flushed from almost every other bush. The passage then decreased, and by November had become merely the chance arrival of a stray bird now and again, a state of things that lasted until 9th December, after which the species was not seen. On the 17th September, at 5 p.m., a young male Sedge-Warbler with a large caked lump of mud on its leg, possibly the cause of its exhaustion, came on board the ship at sea between Damietta and Port Said, and was captured. The late date of the close of the migration suggests that some individuals winter in Egypt.

Crete.—Migrant only. First seen 27th March, when the birds were plentiful.

Lemnos.—Abundant on migration, 22nd August.

Malta.—Migrant only. Still a few on passage, 5th and 6th May.

Hypolais polyglotta (Vieill.).

The Melodious Warbler was met with breeding plentifully near Algeciras between 23rd June and 5th July. Fresh eggs and young lately out of the nest were found. Although it likes to breed near water, this is by no means a necessity.

Hypolais pallida pallida (H. & E.).

At Port Said the first Pallid Warbler was seen on 20th September, after which one or two occurred now and again until 20th October, which is the last record. All were in moult, the last specimen having only one tail-feather. These

birds were evidently migrants, as Port Said has no suitable breeding-place for them.

At Platea in mid-July family-parties were about, and specimens were obtained.

Note.—In Malta, Sicily, and Sardinia at no season was any species of *Hypolais* observed.

Sylvia hortensis crassirostris Cretzschm. (*S. jerdoni* auct.)

A male Eastern Orphean Warbler singing among ilex trees, and very likely about to breed (testes large), was shot near Athens on the 22nd April.

No Orphean Warbler was observed in Crete in spring or in Egypt in autumn. At Lemnos an Orphean Warbler (? race) on migration was seen on 23rd August.

Sylvia atricapilla (L.).

Egypt.—Scarce migrant. Several seen on 7th October, last noted 20th October (a single male with black head).

Crete and Athens.—Not observed between 3rd February and 28th April.

Platea.—A few in winter. A male shot 10th December.

Corfu.—A few seen in mid-winter.

Malta and Sardinia.—Not observed in winter or even on migration.

Sicily.—Breeding abundantly in the "Cavas." Four nests of nearly fresh eggs, 25th May to 3rd June.

Gibraltar.—Plentiful on the Rock in winter. Very abundant in flocks in the cork-wood on 9th March, when the males and females all, or nearly all, seemed to be in separate flocks, according to sex. (This was also observed in Jerez province up to last week of March in 1910.)

Sylvia communis communis Lath.

For the most part the Whitethroat was only met with as a plentiful migrant from east to west of the Mediterranean, but its presence in Sicily on 22nd May, and at Platea in mid-July, seemed to indicate breeding at those places. On migration the Whitethroat is very skulking.

Egypt.—Many pass through. Dates much as for the Lesser Whitethroat, but the bird was not quite so plentiful or so tame as that species.

Crete and Athens.—First arrivals 29th March. Abundant by 7th April, after which the species decreased, though still passing 28th April.

Thaso.—Very abundant on migration, 17th August.

Lemnos.—Plentiful on migration, 20th August–6th September.

Malta.—Plentiful on migration.

Sylvia curruca curruca (L.).

The Lesser Whitethroat was met with as a migrant only.

Egypt.—Already migrating abundantly on 23rd August, it continued to do so till 20th October, after which none were observed. Numbers fluctuated more, day by day, in October, than in the earlier part of the passage. These birds were very tame, and even fatter than most others.

Crete.—Only a few seen, first on 29th March, last observed on 25th April.

Cyprus.—A small party on migration seen 11th October.

Malta.—The only record was an adult female obtained on 5th August, with minute ovaries. This was thought to be a stray or lost bird, perhaps disabled during the previous spring migration, as no other migrants were passing so early.

The stomach contained seeds, and the whole intestine was choked with half-digested hard seeds.

Sylvia rueppelli Temm.

Except for two migrating adult males (one obtained) seen at Port Said on 10th September, Rueppell's Warbler was only met with at Crete and Athens during the spring. It was not found at Platea at the end of July, but may have been overlooked. At Crete it was an abundant summer visitor. The first to arrive were the males, starting on the 24th March and increasing daily until the first females came ten days later, when the birds at once paired. The males sang directly they arrived (before the females came) and also seemed to separate each into its own selected breeding-site

Nest-building started about 25th April. The ship left on 28th April, too early for eggs. In all its habits and in general appearance Rueppell's Warbler at once reminded me of a large, comparatively short and stiff-tailed Sardinian Warbler. The song is like that of the Sardinian Warbler but fuller and more musical; it is less wheezy, and, as in that species and many of the other Sylviinæ, is frequently uttered on the wing in conjunction with the butterfly-like movement of the wings during the nuptial season. The alarm-note is also similar to the continuous "clock-winding rattle" of the Sardinian Warbler, but is considerably harsher and louder, more chirpy and less wheezy, reminding one of two rather large pebbles being knocked together rapidly, and is occasionally terminated by a musical "pit-pit."

The birds frequented the scrub on the dry ground, and did not seem partial to the moist places with which the scrub on the hillside was interspersed.

Sylvia melanocephala melanocephala (Gm.).

From Egyptian records it appears that there is undoubtedly some migratory movement among the individuals of this species, but unquestionably the majority are resident, and observations in Crete, Greece, Malta, Sardinia, and Spain, where the species is quite plentiful, did not indicate perceptible alteration of numbers by migration. In structure the bird is ill-adapted for long flights.

The stomach of one bird (Malta, January 13th) contained grass-seeds and green "weed."

Egypt.—Winter visitor only. First observed 3rd November, though subsequently single birds were seen now and again. A male Sardinian Warbler was met with at sea ten miles north of Port Said on 21st November.

Crete.—Resident, breeds. First nest commenced 7th March, first egg 20th March.

Sicily.—Curiously not one individual was seen in the Cavas between 20th April and 6th May, although seemingly in every respect a suitable locality. Possibly the abundance of Subalpine and Blackcap Warblers there may afford an explanation.

In the breeding-time both the Sardinian and Spectacled Warblers are much addicted to the singing, butterfly-like flight indulged in by most of the Sylviinæ. All observations appeared to shew that neither of these species rear more than one brood in the season.

Sylvia cantillans. (*S. subalpina* auct.)

Subalpine Warblers to the west of Greece would probably be of the typical race. None were obtained, however.

In Sicily in summer Subalpine Warblers were extremely abundant in the "Cavas" (deep-set gorges between limestone cliffs, in which a luxuriant growth is maintained by perennial streams and moisture). On 23rd May nests mostly had young from about six days old to when just ready to fly, but in spite of this twelve nests with fresh eggs were found, evidently second layings to replace unsuccessful first attempts.

From an examination of about fifteen clutches of eggs from each district, it seems that in Sicily the type of egg differs remarkably from that of the Guadiana River (Spain) district: those from Sicily are all plain looking, dull greenish white, freckled and spotted without much variety with sepia and umber streaks, like miniature Rufous Warbler's eggs; while those from the Guadiana, with the exception of one set (which are very boldly blotched with olive-brown), are pinkish white with bold brick-red, or brick-red and purple, blotches and spots, and are very handsome.

Out of about forty-five nests examined with eggs and young, only one has been found with five eggs in it, in eighty per cent. of cases there have been four.

In the cork woods near Gibraltar a male in full plumage was observed at close quarters as early as February 14th, and several males with one female were seen *on migration* at the Coto Doñana on 12th March (1910).

Sylvia cantillans albistriata (Brehm).

Subalpine Warblers of this race were found and obtained in Crete, where the first arrival (a single male) was noted on 25th March and a pair on 11th April (male with large testes):

also at Athens from 13th to 23rd April, where some of the males were singing and making nuptial flights.

Probably it is a breeding-species at both places, but the occurrence of a single male (presumably of this race) on board ship 40′ west of Crete on 29th April shewed that the migration was still going on at that date. None were met with in Egypt in the autumn.

Sylvia conspicillata conspicillata Temm.

The Spectacled Warbler was not observed to the eastward of Malta and Sicily. Where found the species is quite sedentary and very local.

Malta.—Breeding plentifully. Earliest nest with four fresh eggs 23rd March; latest nest with five fresh eggs 28th April. One nest, found nearly built on 23rd March, was unaltered and rain-sodden on 1st April, but contained the unusual number of six eggs (a week incubated) on 25th April, thirty-three days after it was first found.

Sicily.—30th May, a fully fledged brood seen.

Sylvia undata undata (Bodd.).

The Dartford Warbler was not met with to the eastward of Sardinia, where, as in Spain, it was found resident and specimens were obtained breeding.

Sylvia sarda Temm.

Marmora's Warbler was found in Sardinia (only) both in May and December, evidently resident. In May none were met with until the short scrub-clothed undulations among the foot-hills, a mile or two from the coast, were reached, whereas in winter one bird was seen in a thick lentiscus bush close to the seashore. Perhaps, as in the case of the Dartford Warbler, there is a seasonal movement. In habits Marmora's Warbler resembles the Dartford Warbler, skulking and unobtrusive, except in the breeding-season, when, in spite of its small size and dark plumage, the habit of repeating its alarm-note (a single sharp sparrow-like "twip" uttered by both sexes) from the top of a bush, on the approach of the intruder, is apt to render the bird rather conspicuous.

In Sardinia in May, where both this and the Dartford Warbler were breeding alongside one another, a quarrel between a male Dartford and a female Marmora shewed how readily recognisable the latter is, if only seen in silhouette, by its much shorter and stiffer tail.

On 3rd and 5th May a number of Marmora's Warblers were seen, some paired, one carrying a caterpillar (presumably to young); and a nest with three slightly incubated eggs was found, from which the female was flushed and shot, attention having been first drawn to the locality by the excited alarm-note of the male. This nest was like that of a Sardinian Warbler, but with a deeper and rather smaller cup; it was a fairly compact structure of dry grasses, bent pieces of dry thistle, and plant "fluff," lined with finer pieces of the last-named material, the cup neat, the rim and outside rather straggling. It was placed, about fifteen inches from the ground, in a purple-flowering wild vinegar ("Canqueso," Spanish) entwined with a dead cistus plant, and was visible to anyone walking about without moving any part of the bush. The nature of the vegetation was loose, not dense, cistus—Spanish gorse and aromatic plants such as are found all over the Mediterranean, from two to three feet high only.

The eggs were of the same type as those of the average Sardinian Warbler's, but a little smaller and more ruddy umber-coloured than those of that species.

Prinia gracilis deltæ Rchw.

Met with in Egypt only, where it is an abundant resident, nesting in the tamarisks and reeds in the marshes. Eggs are laid at least as early as April, and on 25th August a nest with three slightly incubated eggs was found. There did not appear to be the least seasonal movement. The late breeding doubtless accounts for the irregularity of the moult of this species, an adult female, obtained on December 23rd, having three of the tail-feathers old, and the remainder just sprouting. Another, shot on November 4th, has both the tail and wings moulting; while other moulting individuals were observed in that month and at the end of September.

Cisticola cisticola * (Temm.).

The typical form of the Fantail Warbler was obtained in winter in Egypt and Greece, and was found breeding in Sicily and Spain in summer, but was not seen in Crete. No evidence of any migratory movement was observed.

Turdus pilaris L.

The Fieldfare was only met with on two occasions, the 18th and 27th November, at Port Said, four birds altogether being seen, and those evidently on migration southwards. The stomach of one shot was practically empty, containing only a little sand and a few pieces of shell.

Turdus philomelus philomelus Brehm. (*T. musicus* auct.)

The Song-Thrush was met with all over the Mediterranean in winter only. It seems probable that, just as in the British Islands in winter, severe weather on the Continent causes a migratory movement among the Thrushes, Larks, etc., so there occur across the Mediterranean, even in mid-winter, migratory movements of a number of species, which get frozen out during specially cold spells in the south-east of Europe and Asia Minor. As an example, on the 8th January at daybreak when the ship was in Aboukir Bay, five miles from the low-lying coast, a single Song-Thrush came from the northward, and flew several times round the ship, then mounted higher and higher till lost to sight—probably continuing its journey landwards. The local weather had been fine and settled for days past. Everywhere in the Mediterranean the Song-Thrushes were very wild, hiding in the thickest cover on the least alarm—never singing—and when flushed escaping hurriedly to the nearest cover with a stifled "tehik."

Egypt.—A fairly plentiful winter visitor. First seen 8 A.M. 30th October, a single tired bird. Winter numbers reached at the end of November.

Crete.—Plentiful winter visitor. Last noted 11th March,

* For the reason for the omission of the third name in this case see under *Coccothraustes*, p. 124.

Malta.—A plentiful winter visitor. Nearly all gone 30th March, after apparent increase by migrants from the south earlier in the month. A dead Thrush picked up in May on Filfola, a small rocky islet three miles to the southward of Malta, also lends support to this theory of increase by migrants from Africa.

Sardinia.—An abundant winter visitor.

An evidently belated straggler was seen as late as 3rd May, but the majority of winter visitors and migrants had probably gone a month earlier.

Turdus merula syriacus (H. & E.).

The one specimen obtained was from near Damietta, on the 22nd of November, but it seems probable that the Blackbirds noted as scarce winter visitors at Port Said and near Damanhour (*infra*) belonged to the same race.

Turdus merula (? subsp.).

Egypt.—Scarce winter visitor. First seen 8th November, Port Said. A few occurred in December in the cotton-fields near Damanhour.

Crete.—Apparently resident. A nest with four very small bright-coloured fresh eggs from which the hen bird flew, was found on 11th April.

Platea.—Apparently resident. Seen in mid-December and mid-July.

Malta.—A winter visitor only. Still present March 28th, but probably left soon afterwards.

Sicily.—Young in nest, 25th May; four eggs a week incubated, 3rd June.

Sardinia.—Seen in mid-winter and also breeds. Probably resident.

Monticola saxatilis (L.).

All the Rock-Thrushes seen or obtained were certainly on migration and gave no indication of breeding; but the higher mountains being all away from the sea-coast were not visited, and seeing that the species breeds in Greece and Asia Minor, it seems quite likely that it may be found to do so in the Cretan mountains.

Egypt.—Only noted 28th August and 20th September. Single birds on migration.

Crete.—Only noted 28th April. Single male on migration Testes small.

Athens.—Seen 21st April. Single male on migration.

Lemnos.—7th September. Two dull-plumaged birds on migration.

Malta.—16th April. Female with small ovaries, on migration.

Sardinia.—Seen 3rd May. Single male, evidently on migration.

All three males seen in spring were single: these birds have the habit of frequently vibrating the tail from side to side, just like the Redstart.

The stomachs of those collected contained beetles and in one case grasshoppers as well.

Monticola solitarius solitarius (L.). (*M. cyanus* auct.)

The Blue Rock-Thrush was met with all over the Mediterranean wherever suitable rocky localities existed, often in quite low sea-cliffs as well as inland.

No trace of any migratory movement was ever observed.

In the breeding-season the males have the habit of singing with a butterfly-like flight that characterises most Warblers of the genus *Sylvia* under similar influences.

In Malta, where the young are much in request as cage-birds, the nests seem to be more than usually well concealed, and are very difficult to find. One nest was in almost complete darkness on a ledge inside a cave with a small entrance.

Œnanthe œnanthe * (L.).

The Common Wheatear was met with, on migration only, from east to west of the Mediterranean. The species was one of the first to start on the autumn migration, and was constantly seen at sea in August. Numbers were migrating at Mitylene on 3rd August.

* For the reason for the omission of the third name in this case, see under *Coccothraustes*, p. 124.

Egypt.—The period of passage was rather prolonged, but there was no evidence that any of the individuals belonged to different geographical races. Already plentiful on 23rd August, the numbers steadily increased until the equinox, when the passage had attained its maximum height. This was sustained for a month, during which time the Wheatear was one of the most abundant species. Directly after the 21st October the passage subsided rapidly; from 25th October onwards belated birds of the year only were seen, and the last of the species noted was on 27th October.

Crete.—Excepting one stray dull-plumaged bird looking like a female, on 21st March, the first Wheatears, all fresh-plumaged males, arrived on 22nd March, the females following regularly five days later.

Malta.—A dull-plumaged pioneer migrant was seen on the 9th of March, but the regular passage commenced at the equinox, decreasing after mid-April and closing with the end of that month.

Sardinia.—Quite a large scattered party, mostly of adult males, was seen on 3rd May, but none were obtained.

[All the Common Wheatears obtained in Egypt, Crete, Lemnos, and Malta are of the typical form.—*H. F. W.*]

Œnanthe hispanica xanthomelæna H. & E.

Saxicola hispanica xanthomelæna Hempr. & Ehr.: Hartert, Vög. pal. Fauna, vol. i. p. 687.

The Black-eared and Black-throated Wheatears were only met with to the eastward of Malta and Sicily, those to the westward, *i. e.* in Sardinia and Spain, being presumably of the western form, although no specimens of the latter were obtained.

In Sicily there seemed to be no Wheatears breeding; at Malta there certainly were none, neither could any certain records of Black-eared or Black-throated Wheatears, even on migration, be obtained; while in the first week of May in Sardinia the few seen were all dull-plumaged birds apparently on migration, or at all events not breeding, although at this date nests with eggs are plentiful further westward. Such a

natural gap in the continuity of the breeding-areas of these Wheatears appears to lend some strength to the separation of the eastern and western forms.

Wherever met with in the breeding-time, both Black-throated and Black-eared Wheatears have been occupying the same ground, but no cases of antagonism were observed. Each pair seemed to keep to its own patch, and although it is a difficult point to make sure of, owing to the similarity of the females, nothing was apparent to suggest interbreeding of the two species.

The stomachs of the birds collected contained beetles, flies, larvæ, small snails, one a large millipede, and another a large yellow and black smooth caterpillar.

Egypt.—Except that the Black-eared was comparatively scarce, both species coincided in migration, which started with September (rather later than *Œ. œnanthe* and far less numerically) and finished with the first week of October.

Crete.—The first birds arrived 24th March, adult males in full plumage (very pure black and white). These increased gradually, and the females came about 1st April. Breeding birds of both forms then paired and spread for nesting in some numbers, but many passed on northwards. A nest of the Black-throated Wheatear with two fresh eggs was found in a hole in a wild fig-tree on 28th April.

Athens.—13th–22nd April. The same remarks apply.

Mitylene, 13th August, and *Lemnos,* 20th August, a number of Black-throated and a few Black-eared Wheatears were apparently migrating.

Platea and *Marmarice.*—15th–31st July. Birds which had apparently bred were in full moult. No males seen were in summer black-and-white plumage. These Wheatears seem invariably to moult before starting their autumn migration, all the adult males being then in the roseate-buff winter plumage.

[As I agree with Dr. Hartert in regarding the Black-eared and Black-throated Wheatears as dimorphic forms of one species, I have placed Lynes's notes under one heading, and I think they strengthen the view that these two birds should

be regarded as dimorphic forms of the same species. All the individuals obtained in Egypt, Greece, Crete, and Asia Minor are of the eastern form.—*H. F. W.*]

Œnanthe pleshanka cypriaca Homeyer.

The Cypriote race of the Pied Wheatear was met with in October near Famagusta, where it was fairly plentiful, frequenting both the plains and the scrub-clad slopes of the foot-hills.

Old birds and young of the year were both obtained, and the species had every appearance of being resident. The facts that no other species of Wheatear was present, and that the Pied Wheatear was not met with in Egypt during the previous autumn, seem to lend support to this view.

Their stomachs contained insects, seeds and insects, and a grasshopper.

[The specimens collected (in October) are all in freshly moulted plumage and are very dark coloured on the upper parts. The cream-colour of the head and nape is almost entirely concealed by the long brownish-black fringes of the feathers. The small size of this form is perhaps a better character than its dark coloration. The following are wing-measurements of males :—

Œ. p. cypriaca: 83 to 90 mm. (seventeen specimens, of which only one measured so much as 90 mm.).

Œ. p. pleshanka: 90 to 100 mm. (twenty specimens, of which only one measured so little as 90 mm.).

—*H. F. W.*]

Saxicola torquata rubicola (L.).

In Egypt and Malta the Stonechat was observed as a winter visitor only, but in Crete, Sicily, and Sardinia it occurred both in winter and summer. In Crete the bird seemed to be a resident, and also, as in Andalusia, where many of the first broods are out of the nest so early as the last week of March, an early breeder. But in Sardinia and Sicily the nests were made a month or more later, so it is

possible that the individuals wintering at those places may not be the breeding-stock.

The stomachs contained flies, beetles, seeds, caterpillars, and small snails.

Saxicola rubetra rubetra (L.).

Egypt.—Migrant only. The passage of Whinchats commenced about 28th August, after which date the numbers increased almost daily. From 15th September to 7th October the species abounded everywhere; the numbers then suddenly dropped to merely a few stray birds, and on 20th October, the very day that the last Whinchat was noted, the first Stonechat was seen.

Between September 16th and 26th some adult males apparently in summer plumage were seen. All observed subsequently were in the plain streaked dress.

Crete.—The first migrant, a male in full summer plumage, was observed on 1st April. Numbers of both sexes were met with at Athens between April 13th and 23rd, and several of both sexes at sea forty miles west of Crete on 29th April. All these birds were evidently passing further northward.

Malta.—On 3rd May only females were observed on migration; the males had gone by, and the passage of Whinchats was nearly concluded.

[The specimens collected (♂ April 7, Crete; ♂ April 13, Greece; ♂ April 30, at sea; ♀ September 16, Alexandria) vary somewhat in coloration and size, but these differences are, I consider, either seasonal or individual. In addition to the large series I have been able to compare at Tring and in my own collection, Herr Reiser has very kindly lent me five specimens from Greece.—*H. F. W.*]

Phœnicurus phœnicurus * (L.).

The typical Redstart was met with as a migrant all over the Mediterranean.

Egypt.—The migration started about 23rd August, but it

* For the reason for the omission of the third name in this case see under *Coccothraustes*, p. 124

was not till six weeks later that the press came. From October 3rd to 28th Redstarts were exceedingly numerous. The passage then steadily decreased and November 8th furnished the last record. Up to 11th September the few seen were all dull-plumaged birds, probably all or nearly all young of the year. Then came a sprinkling of adult males in full winter dress, these gradually increasing until 20th October, when they seemed to form about 60 per cent. of the Redstarts resting in every tree or bush. The passage of the adult males then abruptly ceased, for all subsequently seen were dull-plumaged birds, either females or young of the year.

With a pair of scissors one of these adult males could be put into full summer plumage by snipping off the light buff tips of the feathers, illustrating the method of passing into next summer plumage during the winter absence.

Lemnos.—Dull-plumaged Redstarts on migration were observed between 20th August and 6th September.

Crete.—First seen (adult male) 25th March. First female seen 6th April. Redstarts still on migration 28th April.

Malta.—First noted (two separate males) 18th April. Female on 23rd April.

Sardinia.—3rd May, migrating plentifully.

Phœnicurus ochrurus gibraltariensis (Gm.). (*Ruticilla titys* auct.)

The Black Redstart was met with as a winter visitor only. No elevations suitable to its breeding were visited.

Egypt.—First seen, 8th November. Never more than two or three together, generally singly. A winter visitor in small numbers.

Crete.—Plentiful winter visitor. All males had departed by 11th March, all females by 19th March. No migratory birds from further south were judged to have passed through.

Platea.—Seen in mid-winter, not in summer.

Malta.—Winter visitor in moderate numbers. Left in March. Pairs were frequently observed during mid-winter.

Luscinia megarhyncha megarhyncha Brehm. (*L. luscinia* auct.)

The Nightingale was met with breeding in Sicily and Spain, but only as a migrant elsewhere.

Egypt.—The migration had started by 2nd August, and was over about the equinox, but the numbers were few compared to the "Sprossers."

Crete.—First noted 29th March. Numbers quite small. No evidence of breeding up to 28th April.

Lemnos.—Noted on migration from 20th August to 6th September. One shot 22nd August, male adult.

Malta.—Plentiful migrant, first seen 29th March.

The stomachs of two obtained in Greece and Egypt contained small beetles and flies.

Luscinia luscinia (L.). (*L. philomela* auct.)

"Sprossers" were observed on migration in Egypt only. Their passage was well under way on 23rd August, when they were quite plentiful in the day-time, resting principally in the trees, but also in small bushes, drains, and indeed any sort of cover. On being flushed one of them (though quite able to fly) ran like a rat across the sand for some yards to the next bush. On one occasion only (26th August), when I was watching some, one of them uttered a few notes of song, but otherwise they always expressed their disapproval of an intrusion by croaks, and jerks of the tail.

Luscinia suecica suecica (L.).

Luscinia suecica volgæ (Kleinschm.).

In *Egypt* the Bluethroat (not met with elsewhere) was an abundant winter visitor. It arrived at Port Said in mid-October and reached winter proportions by the end of November.

Bluethroats appeared to go to roost earlier than other birds, but they were also the earliest risers, and their fussy little chirps and squeaks might be heard before it was light enough to see them even at close range. The early morning was the best time for observation, for it was only then that they would leave their haunts in the boggy undergrowth

and take to the open, sometimes uttering a few sweet but disjointed strophes of song. In habits they were just like Robins, and equally quarrelsome but more shy.

Out of many specimens obtained at Port Said only two (October 28th and January 3rd) were of the "white-spotted" form, and these were the only two males of that race noted. Near Damanhour also the "red-spotted" form was equally predominant, and only one male of *L. s. volgæ* was obtained (January 13th).

The stomachs of the birds obtained were found to contain flies, larvæ, small snails, and water-insects.

Dandalus rubecula rubecula (L.).

The Robin was met with as a winter visitor only.

Egypt.—The first individuals arrived at Port Said about 30th October, and their numbers never seemed to exceed what, about the beginning of December, became winter proportions. Considerably less plentiful than its near ally the Bluethroat, the Robin frequented much the same ground, but was also to be found in the gardens. Sometimes it was heard singing quite merrily, but not nearly so often as in England. This remark applies all over the Mediterranean to the winter Robins.

Crete.—Winter only. Plentiful and shy. All the birds seemed to have departed by 6th March.

Malta.—Winter only. A few examples were seen as late as 30th March, but these may have been migrants. On 8th April a very tired Robin came on board at sea off Cape Palos (south-east Spain).

No Robins in juvenile plumage were ever observed.

[The specimens collected, viz.: Crete, Feb. 19 and March 6, and Port Said, Nov. 15, were of the typical form.—*H. F. W.*]

Prunella modularis modularis (L.).

Malta was the only place at which the Hedge-Sparrow was observed. A single female was shot there on January 28th, and notes attributed to the species were occasionally heard

in the winter time. The Hedge-Sparrow would therefore appear to be a scarce winter visitor to Malta, for it certainly does not breed there.

Troglodytes troglodytes * (L.).

Crete.—Plentiful. First heard to sing, 11th March. A pair feeding their young were watched to the nest in a precipitous crag on 25th April.

Sicily.—Plentiful, breeding among the rocky cliffs and boulders of the Cavas. In about twelve nests found the eggs and young without exception numbered four. Young birds flew from a nest on 26th May, while nests with fresh eggs were found on the same date and later, and as no other fledged young were seen the latter were not likely to be second broods.

[No specimens were procured in Crete, but three from Sicily did not appear to be separable from the typical form. —*H. F. W.*]

Chelidon rustica rustica (L.).

Egypt.—Migrant only. Swallows were first seen on 8th September, arriving in the forenoon in small parties and flying low across the sandy strip that separates Lake Menzaleh from the Mediterranean. The species soon became plentiful at Port Said, flying all over the harbour among the ships and frequently perching on the rigging. When the last week of September came and the Swallows were still plentiful, it looked as if some of them were likely to stop for the winter, but at the end of October they diminished as quickly as their ranks had swelled, leaving only a few stragglers (the last seen on 15th November) to follow in the wake of the main body.

Crete.—First arrived 25th March, subsequently increased till plentiful on 3rd April. Still migrating 29th April, when many came on board ship at sea, 40′ west of Crete. No notes made as to its breeding.

* For the reason for the omission of the third name in this case see under *Coccothraustes*, p. 124.

Athens.—Plentiful 13th–23rd April. No notes made as to its breeding.

Malta.—On passage only.

Sicily.—Met with breeding in the grottoes on the rivers in the Cavas; one small colony of about five pairs had small young on 31st May, and one single nest had five fresh eggs on 4th June. Some of these nests were only a few inches above the surface of the water.

Chelidon rustica savignii (Steph.).

This resident Egyptian Swallow was but seldom seen at Port Said, probably because that locality is unlike its true home, viz., the Nile Delta and its vicinity, where in mid-winter it was found plentiful, frequenting the pools in the water-lying marshes.

At Port Said none were seen until 30th September, after which single birds or parties of three or four were observed from time to time, sometimes in company with migrating *C. rustica*.

A few were also seen near Damietta at the end of November.

Hirundo urbica urbica (L.).

Egypt.—No record of a House-Martin between August and January.

Crete.—First individual seen 11th April, after which the numbers steadily increased. No note was made as to whether the species breeds or is migrant only.

Sicily.—At end of May the bird was breeding very abundantly in caves among the precipitous limestone cliffs of the Cavas district.

Spain, near Gibraltar.—On 24th February, at sunset, a small colony were flying in and out of what seemed to be their last year's nests, in the roof of a cave in a limestone cliff where a Griffon Vulture was sitting on one egg.

Riparia riparia.

The Sand-Martin was met with as a migrant (only) from east to west of the Mediterranean.

Egypt.—On 25th August the species was abundant and

continued so until the end of September, when birds became few, the last being noted on 21st October.

When we were navigating the Suez Canal numbers of holes in the banks looking like Sand-Martins' burrows were observed in August.

Crete.—First seen 27th March, plentiful 11th April. No note later.

Athens.—13th April, plentiful on migration.

Lemnos.—On migration, 23rd August–6th September.

Malta.—First seen on migration 29th March.

[No specimens were preserved.—*H. F. W.*]

Riparia rupestris (Scop.).

The Crag-Martin was found locally plentiful near Platea in mid-December, and in Crete it apparently winters and has a remarkably early migration.

In Crete on 11th February a single Crag-Martin flew by, evidently travelling. On 20th February the species had become plentiful about Suda village, and the last two individuals were seen there on 23rd February. This apparently completed the passage of the Crag-Martins, all, it was considered, being birds which had wintered in the mountainous interior of Crete, and not in Africa, which suggests that they do not breed in Crete, but no visit was made to the interior.

Caprimulgus europæus europæus L.

Caprimulgus europæus meridionalis Hart.

Egypt.—The following remarks necessarily include both races, as they were not recognised apart in the field.

The Nightjar was distinguished from all other migrants by having the greatest duration of passage, and considering that except when disturbed the birds are only to be seen in the twilight, it was remarkable how much in evidence they were. The passage started at the end of August. In September Nightjars were plentiful, in October even more so; in November their numbers decreased and 23rd November is the last record. The crepuscular feeding-habit of the Nightjar rather lends itself to the suggestion that its times of flight might differ somewhat from those of the Passeres,

and this may perhaps account for the long period of passage, since they seemed to arrive about the same time as the other birds, and frequently flew on board about 9 A.M., but were probably feeding when the latter were continuing their journey.

A specimen of *C. e. meridionalis* was caught alive in the town of Port Said on 10th November, while an example of the typical form was shot near Port Said on 19th September.

Upupa epops epops L.

The Hoopoe was met with as a migrant from east to west of the Mediterranean, and in most places as a breeding species.

Egypt.—It was one of the earliest migrants, its passage being well under way by 23rd August and concluded by the end of September.

Crete.—The first Hoopoe was seen on 1st April. On 7th April a male was shot out of a party of five, an unusually large number to meet with, as when seen on passage the birds were generally alone or in twos. The spring call of the Hoopoe was not heard in Crete, but its breeding there was very likely overlooked.

Athens.—13th April, several were seen and looked like breeding.

Lemnos.—Between 21st August and 8th September, especially at the end of that period, many were observed on migration, and made a special "gibier" for the Eleonora Falcons, whose breeding-islet was full of fresh remains.

Malta.—Hoopoes passed on migration in March and April, but none stopped to breed.

Sicily, Sardinia, and Spain.—The species was found breeding.

Hoopoes were very frequent visitors on board ship at sea during migration-time, but seldom more than one occurred at a time.

[Only one specimen (Crete, April 7th) was preserved.—*H. F. W.*]

Coracias garrulus garrulus L.

In Egypt the migration of the Roller coincided almost exactly as to date with that of the Hoopoe, *i. e.* was well started by 23rd August, and concluded by the end of September. Individuals were occasionally seen coming in from the sea, descending from a height with an easy "folding" flight.

At Athens Rollers were first seen on 23rd April, being then evidently on migration. They were not noted at Crete. At Marmarice several—evidently bred thereabouts—were seen at the end of July, and at Lemnos between 21st August and 6th September others were observed apparently migrating. At Malta this species was an abundant migrant, arriving about 18th April, but did not breed in the island, though in Sicily a few nested in the Cavas, fresh eggs being found on 2nd June.

The Roller seems to prefer to migrate in company with two or three more of its kind, travelling in a widely scattered formation.

Alcedo ispida bengalensis Gm.

In Egypt Kingfishers were frequently seen about the harbour and edge of Lake Menzaleh from 23rd August onwards, but their abundance from the first week of September to the end of October and subsequent scarcity in the winter seemed to shew that the majority seen were on passage. Perhaps all did not belong to this race.

An *Alcedo ispida* (no specimen obtained) was plentiful in the marshes at Platea and Sicily in winter. Near Gibraltar the bird was observed on 8th March, which looks as if it is resident, for it is known to breed there.

[The only specimen obtained (Port Said, October 31st, 1906) belongs to this race.—*H. F. W.*]

Dendrocopus medius medius (L.).

At Platea and Laverda, a little way south of the Gulf of Arta, this Woodpecker was plentiful, frequenting the oak-woods. One specimen was obtained.

Dendrocopus medius sancti-johannis (Blanf.).

At Smyrna a family-party was met with at the foot of the pine-clad hills on 4th October, and one specimen was secured.

Iynx torquilla torquilla L.

The Wryneck was met with on migration from east to west of the Mediterranean, and in Egypt apparently a few stop to winter (*vide* Mr. Nicoll's observations, 'Ibis,' July, 1908, and Mr. Loat, 'Ibis,' January, 1906).

Crete.—The Wryneck was first seen on 29th March, again on 7th April and 11th April. On each occasion single birds were met with, evidently on migration.

Lemnos.—The species was plentiful on migration between 21st August and 6th September, and was a favourite prey of the Eleonora Falcon.

Malta—The Wryneck's passage commenced during the last week of March. Nowhere was its call heard.

Falco peregrinus punicus Levaill.

The Mediterranean Peregrine was plentiful at Lemnos between August 22nd and September 8th. All seen were near the sea-coast. Very small birds they looked, smaller in compass even than the Eleonora Falcon, but much more thickset. A Peregrine of some sort was observed several times at Crete.

[A female specimen, obtained at Lemnos on August 21st, is in full moult. On the under parts the old feathers are of a pale cream-colour, while the new are reddish buff, and similarly the old feathers on the upper parts are dark brown with grey bands while the new are black with grey bands.—*H. F. W.*]

Falco eleonoræ Gené.

The Eleonora Falcon was found breeding plentifully at the end of August in Lemnos. This is the same place that Rear-Admiral A. M. Farquhar wrote about in the 'Ibis' (1902, p. 166), so it is thought unnecessary to give here more than a few additional notes.

The rocky islet on which the Falcons breed is 1½ acres in extent, about half its edge is precipitous, and the brittle limestone of which it is composed is honeycombed everywhere with large and small holes, providing suitable nesting-sites for Cormorants (*Phalacrocorax graculus*?) and Gulls (*Larus cachinnans* and possibly also *L. audouini*, an example of which was seenclose by), but their nests had of course been tenantless for some months.

The Falcons' nests were not confined to the precipitous parts—indeed only two out of the ten found needed a rope to get at them. Five nests were quite on the top of a detached peninsula with perpendicular sides, the eggs being placed in "pot-holes" among the limestone facets. One clutch of three eggs was placed in a Cormorant's old nest.

There seemed to be at least twelve pairs breeding in the islet, which abounded with the remains of freshly-killed birds, chiefly Wrynecks and Hoopoes, the autumn migration being in full progress and small birds abundant in consequence.

Only one of the nests contained young birds (three in number), the remainder had eggs (3, 3, 3, 3, 3, 2, 2, in number), averaging ten days of incubation. Two clutches on the flat top had been broken recently, possibly by fishermen who sometimes go there. In two of those with three eggs, one of the eggs was separated about eight inches from the others, as though it had been deliberately put aside so as not to hatch. Certainly in one case, and probably in the other, the embryo was dead.

To lay three eggs would seem to be the rule, but not to rear more than two young, for in all nests with three eggs one was addled (in one nest two). The parent bird sat very close on the nest of two young (each about two days old). The broken shells of the eggs were just thrown out of the nest and were lying two feet away. Two of them pieced together almost perfectly. In the nest were three castings, two of small birds and one of beetle-remains.

All other nests (with the eggs) were void of food except one, close to which were the remains of a Roller, the leg of

a Chukar Partridge, and four castings, one of beetle-elytra, two of small mammal's fur, and one of Roller's feathers. A Chukar seems a remarkably large bird for an Eleonora Falcon to tackle, but there must have been a number of wounded birds about just then from the shooting.

It is never easy to count birds which are in constant motion, and thirteen was the most seen at one time on the islet, only one being in the dark phase of plumage, so it seems that there must have been present breeding males in the Hobby-like plumage. Furthermore, out of about twelve Eleonora Falcons seen about the main island on various occasions between these dates, only two were in the all-dark plumage, which would seem to be quite the exception.

The female specimen obtained contained the remains of an Ortolan Bunting and a Red-backed Shrike.

On 27th April this species was observed frequenting a precipitous island off the west of Crete.

Falco tinnunculus.

At Port Said the Kestrel, first noted on 23rd October, was subsequently seen off and on in the country, and was presumably a winter visitor. At Damanhour in December and January a number of Kestrels frequented the town, much as one sees Kestrels in summer in Andalusia. It seems not unlikely that these were resident Kestrels (Mr. Nicoll points out, 'Ibis,' July 1908, that there is an Egyptian race), and that those observed at Port Said were migrants.

Crete.—The species was plentiful and apparently resident, breeding in the cliffs and old fortresses. Judging by the actions of the birds they seemed to be preparing to nest on 25th March.

Cyprus.—On 10th October Kestrels were plentiful, some about the plains catching grasshoppers, others about the old fortress, looking like residents, as they frequented holes at the mouths of which could be seen the "whitewash" of ages.

Lemnos.—At the end of August the species was abundant, and judging by the date must have bred there. It was also seen at Mitylene on 13th August.

Navarino.—Kestrels were frequenting, in company with Alpine Swifts, a rocky islet about 20th July.

Malta.—A few seem to be resident, as the species was observed during winter and summer in the same haunts. Others pass through on migration.

Sicily.—Breeding plentifully in the Cavas. A nest of four half incubated eggs was found on 1st June.

N.B.—The Lesser Kestrel (*Falco naumanni*) was not identified to the eastward of Malta.

Falco vespertinus L.

In Egypt the only specimen identified for certain (obtained) was a female resting in a tree at Port Said on 28th October.

In Malta, on 23rd April, at sunset a number of Falcons coming from the southward stopped to form a gathering, wheeling around about 600 feet above the ground. When the last of the party had come up, the whole concourse, numbering about 200, descended and passing close overhead were seen to be nearly all *Falco vespertinus* (many fine dark males) with a few Kestrels. The Red-footed Falcons were readily distinguishable from the Kestrels by being more thick-set, like miniature Peregrines, short and broad. It was not possible in the dusk to follow these birds far, but their actions gave the impression that they were breaking their journey, and intended to spend the night at Malta.

Accipiter nisus (L.).

In Egypt Sparrow-Hawks appeared at the end of October, and for a month were often seen near Port Said, sometimes several together. These were evidently only passing by, but one example seen near Damanhour in mid-December shewed that some Sparrow-Hawks remained during the winter.

In Crete the species was observed on 3rd March, but not identified for certain later.

At Platea Sparrow-Hawks were very plentiful in winter, but were not observed during a short visit in July. The following incident took place near Platea. On 17th December, shortly before sunrise, a small hawk rose from some thick bushes and gave an easy shot against the eastern sky. It

dropped apparently dead. On reaching the spot two Sparrow-Hawks were found, a female flapping hard and trying to rise with her claws fixed into the breast of the male, which was lying on his back motionless and almost dead, obviously the bird that had been shot.

The female allowed herself to be taken by hand across the shoulders, and was detached from the now dead male without offering any resistance. When I was satisfied by an inspection that she was uninjured, she was thrown into the air and flew strongly away. It was apparently a case of the hen bird endeavouring to rescue her mate; had it been merely one of cannibalism, she would surely not have allowed herself to be caught.

Ardetta minuta (L.).

At Port Said on 30th October a Little Bittern flew on board the ship and was captured. The same day another was met with in a marshy place. The species did not seem to winter there.

In Sicily on 23rd May Little Bitterns were very plentiful in the fringe of sedges round the edge of the Lago di Lentini. They were continually flushed, and looked as if they had not long arrived. They breed very late, making nests like small Moorhen's nests among the dead stuff at the bases of the big "carizos" of the reed-forests. On 6th June two nests contained two and three fresh eggs respectively.

Hydrobates pelagica L.

It seems remarkable that the Storm-Petrel was never observed in the Mediterranean to the eastward of Malta. Between Gibraltar and Malta, but not from Malta to the eastward, in August, numbers of these birds would follow the ship's wake, flying to and fro and dipping their beaks into the water for food now and then. In the Red Sea and Gulf of Aden many Storm-Petrels appeared again. The species was found nesting plentifully on Filfola Island, three miles to the southward of Malta. On 6th May (1906) one pair, and on 14th May (1907) many pairs, were sitting together in crannies which presumably would shortly have contained the egg. Eggs seem to be laid mostly about the

last week in May, and then only one bird is found sitting. They are the latest of the three Tubinares that breed at Filfola Island.

[The stomach of one specimen is noted as containing thick orange-coloured oily matter ; that of another a small fish's eye and what appeared to be green seaweed.—*H. F. W.*]

Puffinus puffinus yelkouan (Acerbi).

From Sardinia eastward and especially at Crete the Levantine Shearwater was met with abundantly, never far from rocky and precipitous coasts, and apparently all the year round in the vicinity of its breeding-haunts. On Pondiko Nisi, an island precipitous on its western face, a Levantine Shearwater was found sitting on a fresh egg at 500 feet above sea-level on 27th April.

At Filfola Island (Malta) on 6th May, 1906, three small young, and on 14th May a few backward chicks about half grown, were the only tenants of the numerous breeding-crannies, which shewed every evidence of having contained young earlier that year.

The fact of not finding at least *some* chicks nearly ready to fly might be accounted for by their having left their nests before being able to fly, or they may have been taken for food by the Maltese fishermen, who constantly visit the island, but the former suggestion is not supported by any direct evidence, and could hardly apply in the case of the Pondiko Nisi nest on a precipitous ledge 500 feet above the water.

This is the earliest of the three Tubinares to breed at Filfola Island.

Puffinus kuhli kuhli (Boie).

The Mediterranean Shearwater was met with all over the Mediterranean, often in company with the last species.

At Filfola Island on 6th May (1906) and again on 14th May (1907) some *pairs* were found squatting together in nesting-holes, but no eggs had been laid. Laying seems to commence about the third week in May, a little earlier than that of the Storm-Petrel.

Both these species of Shearwater are extremely inert when taken from their breeding holes, not making the slightest effort to escape, though they bite badly and gloves are essential, as their beaks are powerful. A sitting Mediterranean Shearwater taken to the top of the cliff, about 60 feet high, and dropped over its edge, seemed to spread out its wings only just in time to save itself from striking the boulders below.

Podiceps nigricollis Brehm.

A few Black-necked Grebes were first noticed (but may have been there before) on Lake Menzaleh on 22nd November, while on 7th December they were abundant. As none were seen on a previous visit on September 8th the species was considered to be merely a winter visitor.

Columba livia Gm.

Met with from Crete to Gibraltar; apparently a resident everywhere.

Machetes pugnax (L.).

On 19th March in Crete, when the spring-migration had just commenced, a compact flock of about twenty Ruffs swept along the edge of the sea-shore after sunset.

Tringa minuta Leisl.

One was obtained in Crete on March 27th.

Totanus ochropus (L.).

In Egypt on 26th August numbers of Green Sandpipers, in rather scattered parties up to forty strong, were observed from the ship when going through the Canal from north to south. These birds, rising from the muddy banks at the edge of the Canal, would keep just ahead of the ship and from time to time fly across her bows, each individual uttering a single or double musical pipe, while the general result was a twittering song rather like that of a Swallow singing. Elsewhere, on migration, the species was only met with singly or quite a few at a time.

In Crete on 19th March two specimens were shot from a party of four migrants feeding in a ditch.

Gallinago gallinula (L.).

Gallinago gallinago (L.).

The Common and Jack Snipe are abundant during winter in suitable places all over the Mediterranean. At Port Said both species were first observed on 13th November. They were then on passage, as there is no ground sufficiently suitable to be permanently occupied by Snipe within a few miles of Port Said.

Near Damanhour in December and January the Jack and Full Snipe were abundant, and in about equal proportions. The average weight of a number was poor; Full Snipe under $3\frac{1}{2}$ ounces, largest $3\frac{3}{4}$ ounces, smallest $2\frac{3}{4}$ ounces; Jack Snipe $1\frac{3}{4}$ ounces, largest 2, smallest $1\frac{1}{2}$ ounces.

In Crete in spring a small influx of Full Snipe due to migration was observed from the equinox until mid-April.

Scolopax rusticola L.

The Woodcock, when frozen out of its winter quarters in the north occasionally, as is known, crosses the eastern Mediterranean in some numbers, but it seems that such migrations are the outcome of exceptional years, and that usually the numbers are few.

Egypt.—A Woodcock was shot when out Snipe-shooting in January, about 25 miles from Alexandria.

Crete.—It is known that small bags of Woodcocks may be obtained in suitable localities.

Malta.—In some years severe weather to the northward brings a sudden migration of Woodcocks through the Malta islands, birds being found in all sorts of odd places in the towns.

Greece and Albania.—In suitable cover near the sea-coast, very large bags of Woodcocks, depending on the severity of the weather inland, are obtained. January is the best month.

Rostratula capensis (L.).

In Egypt the Painted Snipe, which is resident and breeds, was found here and there. A family of five birds was flushed on one occasion. They were followed up, as with

their Rail-like flight they only flew a very short distance, and the whole party shot in about ten minutes.

Crex crex (L.).

The Corn-Crake was only observed in Egypt, where in its modes of migration, passage-dates, time of arrival, &c., it almost exactly resembled the Quail; but the number of Corn-Crakes was perhaps only one twentieth of that of the Quails, and more seemed to stay for the winter.

In appearance, when coming to land after its over-sea passage, the Corn-Crake looks just like a rather dark-coloured big Quail with a long thick neck, the legs not being visible, and the speed being apparently the same.

Like the Quail, Corn-Crakes on migration frequently alight in very odd places, about buildings and on board ship, and one was seen perched at the top of a tall Aleppo pine-tree.

About sunset the Corn-Crakes seemed to get lively and were to be seen running about in the open, as if preparatory to a meal and continuation of the migration-flight.

Porzana porzana (L.).

The Spotted Crake was first observed in Egypt on 20th September; throughout October, November, and December examples were flushed now and again, shewing it to be a winter visitor.

At the end of March the Malta market had numbers of Spotted Crakes, which probably had been procured in the island.

Rallus aquaticus L.

In Egypt the Water-Rail was found to be a winter visitor in moderate numbers, arriving about 20th September. After this date, although never plentiful, they were frequently flushed, chiefly at sunrise or sunset, but their presence was more often revealed by their extraordinary squeaks and grunts issuing from the marshy undergrowth.

On two occasions Water-Rails were almost certainly

observed arriving at Port Said in the early morning; if this was correct, then in mode of flight, speed, and general appearance they much resemble the Corn-Crake. On 8th November, just after sunset, a Water-Rail flew into the officers' smoking-room, through the open scuttle.

In Crete a Water-Rail was flushed from a marsh on 4th February, but was not observed later.

In Sicily at the Pantana di Lentini, the species was found plentiful both in winter and summer. On 8th June two nests containing three and nine fresh eggs respectively were found, a curiously late date if the birds are resident, unless two broods are reared in the season.

Coturnix coturnix (L.).

The Quail was found as a migrant from east to west of the Mediterranean, and was especially abundant from Malta eastwards. In many places a few were found in mid-winter, and also breeding in summer, probably the same individuals.

In Egypt the species was very abundant on migration and a few were also found in mid-winter. Quails were already "in" on 23rd August, rather earlier than most years, but did not appear in full force until September. The passage was at its maximum height during the first fortnight of September, and birds were still plentiful up to the end of that month, but it was not until after September that the passage positively ceased. They always seemed to arrive singly, and made the land flying low at a speed which I timed carefully to be about fifty miles an hour, but they were never seen like this when the ship was more than fifteen miles to the north of the coast, shewing presumably that the birds only come down to the surface of the water when near the land. The Quail-catching industry (a very flourishing one) has often been described, it is therefore unnecessary to say more than that the three principal methods in autumn are: first and principally, the flight-net; secondly, the snares; thirdly, the casting-net; and thousands of live Quails thus caught are shipped away to Europe in wicker cages of six to ten stories, literally packed till the birds can hardly turn

round. Quail frequently came on board ship and allowed themselves to be picked up, or struck the rigging in their flight when coming in; it may be for the same reason that driven Partridges often strike telegraph-wires, or perhaps these are unusually exhausted birds.

In Crete a male (with a female) with large testes was shot on 3rd March, evidently a wintering pair. On 7th April a Quail was calling in young corn. A few pairs evidently breed, but the species was not plentiful at any period.

In Malta the autumn passage commenced about 5th September. A few Quail breed in the Maltese islands.

Caccabis chukar.

The Chukar Partridge was met with in the Grecian Archipelago and Asia Minor.

Crete.—Comparatively few were seen, and no specimens were obtained, but the cage-birds, sure to have been locally procured, were "Chukar."

Marmarice.—The species was fairly plentiful.

Lemnos and Mitylene.—The Chukar was abundant and gave capital sport (20th August–8th September). The weather is of course hot at this season, but otherwise very pleasant, and the more a sportsman walks and knows the birds' habits, the bigger will be his bag. For about an hour and a half at sunrise and sunset, the birds are generally to be found feeding in the stubbles and thistle-grown lands on the limestone-soils. In the morning when they leave the feeding grounds, which mostly lie on the slopes and towards the tops of the undulating hills, they go down, flying or running, into the gullies, where they lie hidden until evening feeding-time among the thick boulders and scrub. They seem to prefer to roost among collections of boulders and rocks at or near the crest of the scrub-clad hills, repairing thither when almost dark.

If they see anyone coming in time the birds nearly always run away, and it seems almost the invariable rule that when disturbed they run up hill, and when flushed fly *down*, so that the sportsman should always work right up the hillside to its

crest. Here the birds will lie, generally choosing one of those groups of boulders already mentioned, and, especially if they have been flushed previously, may often be put up one or two at a time at very short range, but it is necessary to shoot quickly, as they are extremely clever at putting a boulder between themselves and the gun. When much pressed near the sea-coast, the birds will often take refuge among rocks and stones at the very water's edge.

The food at this time consists of the seeds of thistle-like and other dry matured plants that grow on the fallows and stubbles, gleanings of corn, big black ants, green trefoil leaves, grubbed up bulbs and roots, and other seeds. They seem much troubled with ticks about the head. Five big and a number of little ticks were found in one ear-cavity.

The natives had a big shoot just before the Fleet arrived at Lemnos, many guns taking part, and they were said to have shot about three hundred birds, most, if not all, running. There are plenty of birds, and a small party of guns may easily average ten or more birds per head in a day's shooting, if they know how and where to go.

VIII.—*Notices of recent Ornithological Publications.*

1. '*The Auk.*'

[The Auk. A Quarterly Journal of Ornithology. Vol. xxviii. Nos. 3, 4 (July, October, 1911).]

In both of these numbers are to be found articles on the Passenger Pigeon, supplementary to that of October, 1910 (p. 428). "Other early records" of the bird are given by Mr. A. H. Wright for Canada, New England, New York, Pennsylvania, New Jersey, Delaware, Virginia, and Maryland, as well as the Gulf States, those east of the Mississippi, and those west of the same river. These two papers are not only of great interest to all Ornithologists, but must be as nearly as possible exhaustive with