The Journal
OF THE
EAST AFRICA AND UGANDA NATURAL HISTORY SOCIETY

October, 1931. SPECIAL SUPPLEMENT No. 4.

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KENYA and UGANDA,

with

BRIEF OUTLINE OF THE SUBJECT

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MIGRATION

OF

BIRDS

V. G. L. van SOMEREN, M.B.O.U., C.M.Z.S.

Issued in conjunction with special exhibit of Migratory Birds,
CORYNDON MEMORIAL MUSEUM
October to March, 1931—1932.

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MIGRATION OF BIRDS.

A Brief Introduction to the Subject.

The subject of the Migration of Birds is an extremely wide one, of absorbing interest, and one about which we know very little.

Ornithologists have been trying to solve its mysteries for many years past, but without much success; the reason for this being due to the fact that there was no co-operation between the workers.

It was not until 1880, when a special Committee was appointed by the British Association, that the matter received proper attention. This Committee gathered together an immense amount of data, but of such a character as to render their report useless to the ordinary field worker. This report has been since carefully worked out by Eagle Clarke of Edinburgh and is now of extreme value.

Much has been done within recent years to increase our knowledge with regard to the migrations of birds within the British Isles, but practically nothing has been placed on record regarding the movements of birds in other parts of the British Empire.

By bringing before you some of the more interesting facts and suggestions that have been put forward regarding migration, I shall hope to interest some of you in the matter, so that within no distant date we shall be able to place on record the accurate observations of bird movements throughout this country.

Early History.

Reference to the movements of birds may be found in the ancient writings of Homer, and many other of the early philosophers, and also in the Bible; but beyond the fact that birds appeared and disappeared, after a short stay, nothing was known.

We read in Professor Newton's " Dictionary of Birds " that the Indians of the fur-countries, in forming their crude calender, name the recurring moons after the birds of passage whose arrival is coincident with the changes.

That certain movements took place at fixed periods was apparently well recognised, but the manner of arrival and departure were matters of conjecture. Thus Professor Newton informs us that the Tartars and Egyptians noted the arrival of large and small birds at the same time; they could understand the larger ones undertaking and accomplishing a long journey, but what of the small species? How did they travel? The conclusion arrived at was that when the birds flocked together for the journey, each large bird took one or more of its smaller brethren on its back, and so conveyed them to their winter quarters. The story is very pretty, but hardly correct. We now know that even the smallest of migrants depends on its own powers of flight to carry it from one country to another.

The Egyptian peasant still believes that the cranes and storks carry a living load.

It is not many years ago that the annual disappearance of certain species of birds from England was put down to the fact that they hibernated during the winter months, as do certain rodents. Specimens were produced, even, of birds such as swallows—in more or less a torpid state, as evidence in support of the supposition; but it was recognised that all were birds in poor condition, which through injury or weakness had not been in a fit state to travel with their fellows when the time of migration arrived, and, being unable to procure a sufficiency of food, suffered accordingly.

The supposition, of course, is false; but even nowadays one sees notices in the papers that birds have been found hibernating!

The autumnal migration of birds is well recognised by a certain class of people in the north of France, Belgium, and Germany. These folk are professional trappers and netters, and, knowing the favourite routes by which hundreds of birds pass, set their nets where the birds are known to feed, and so destroy hundreds—nay, thousands!—of migrants to supply the markets with food which is totally unnecessary.

Classes of Migrants.

Migrants may be divided for convenience into three classes: local, partial, and passage.

The first may be taken to represent birds which are resident in a country, but which migrate to various parts of that country for one reason or another, such, for example, as search for food, or for nesting purposes. These, strictly speaking, should not be classed as true migrants. An example of this group is the Curlew, which during the winter is found on the coast, but in early spring wanders to the hills and moorlands, particularly of Scotland. Another example is the Snow Bunting, which breeds in the north of Scotland, and comes south in winter. In this country we have even better examples of local migrants—such as the various species of Starlings, Pigeons, and other fruit-eating species, which wander to localities where a fresh supply of food is to be found; and, on a much larger scale, the Black-breasted Kavirondo Quail. This group merges into the next, the Partial Migrants. These are species which are represented in a country throughout the year, but whose numbers decrease, to be later on increased by the influx of birds of the same species from other countries. The Ducks of this country may be taken to represent this group. At certain times of the year (the period of which needs further study), duck abound on Lakes Nakuru and Naivasha in thousands, but the majority disappear to reappear in a few months in similar numbers.

Passage migrants are those species which migrate from one hemisphere to another, passing through various countries *en route*.

In the case of long-distance or Passage Migrants it might be suggested that those species which migrate farthest south are those which come from the most southerly portion of their northern range, but in reality the converse appears to hold good; thus we find that birds which come farthest south travel to the most northern limits of their range to breed. Examples will be given later, but one may be given here to illustrate the point. The Curlew Sandpiper, whose northern range is the Arctic seaboard of Norway and Sweden, Russia and Siberia, nests most commonly in Spitzbergen, Nova Zembla, and around the mouth of the Yenesei; yet migrates to East Africa as far south as Cape Town. This is all the more interesting when we take into consideration the fact that the areas where these birds nest is free from snow and ice for two or three months in the year only (N.B. times of arrival and departure of this bird).

That long-distance migration does take place has been proved by the fact that birds marked in their northern range have been recovered far south, even as far south as Cape Colony; for example, a young Stork marked as a nestling in the north of Holland, was shot just outside Cape Town. Again, amongst the specimens illustrating this paper will be found birds which breed only in the far north, yet are commonly found in this country in winter.

Causes of Migration.

As nothing definite is known, so we can only put forward suggestions.

Take first of all the autumnal or southward movement. In some cases the increasing scarcity of food may be all-powerful and prove a sufficient reason; for it is well known that birds will travel to great distances in order to obtain food. Thus we find it recorded by a recent observer in Northern Siberia that certain waders disappeared when food, particularly insect food, became scarce as a result of a fall in temperature.

The limited amount of food in a certain area may account for the fact that in certain species of birds which are double-brooded, the young of the first brood are driven away by their parents, thus assuring nourishment for the second brood; and in the case of Partial Migrants some birds may move south in the autumn, knowing that if they remained there would not be sufficient food for them and for the large number of immigrants from other countries.

That climatic conditions—such as fall of temperature, increasing rains and wind—play an important part is well demonstrated when we consider the movement of birds in the Arctic zone; yet, on the other hand, we have instances where certain sea-birds, such as

Puffins, return to their breeding-grounds on exactly the same date in each year, no matter what the weather conditions are like.

These two causative agents may appear to be sufficient when applied to the southward movement, but what governs the return in spring? Here we fail almost entirely and have to fall back on that much abused term instinct, which, in other words, may be taken to mean " love of the country of their birth!" This cannot be proved or disproved.

What is this instinct, and how did it evolve? There is not the slightest doubt but that the migratory instinct is a very ancient one. It has been suggested that the impetus to migrate was generated as the direct result of the encroachment of the great ice sheet which descended over the northern portion of the palaearctic region in the Pleistocene age, with its attendant cold, giving rise to alteration in the vegetation and a diminution of the food supply, to be followed by a return, when the ice-cap gradually receded.

This is pure conjecture, and there is no chance of proof or otherwise.

Rowan, an American scientist, has recently put forward certain theories, based on a series of experiments with species which are seasonal migrants within the " North Temperate Zone."

Thus to quote from a recent criticism by Moreau*:—

" He (Rowan) has demonstrated the following facts:

" 1. That the state of the birds' gonads can be controlled by " progressively increasing or decreasing the period of light (not " physiologically equivalent to daylight) to which a bird is sub- " jected daily. By this means testes attained the condition of " spring in the exceedingly low temperatures of a Canadian " winter at a date when they would, under normal conditions, " have reached their limit of retrogression.

" 2. That the effect of the light was only secondary, since the " same result could be attained by keeping the birds awake for " progressively longer periods each day, without light.

" 3. That experimentals liberated with partly activated gonads in " mid-winter, i.e. when under natural conditions they would " have been stationary, with retrogressed gonads, in winter " quarters some hundred miles further south, at once left the " neighbourhood, while the controls, whose gonads had never " been artificially stimulated, showed no disposition to depart.

" The inferences are: (a) that birds' gonads are annually " re-activated by the increasing length of daylight in spring; " (b) that in migrant species the state of the gonads is inti- " mately connected with the birds' disposition to set out on " their journey; and (c) that the annual periodicity of these

* *Ibis*, July, 1931, p. 553 et seq.

" journeys is ultimately determined by the seasonal variation " in daylight duration.

" There can be no question that these inferences carry " conviction so far as the species experimented on are con- " cerned; and I see no reason why they should not be applic- " able to other species, both resident and migratory, whose " lives are passed wholly within the Northern Hemisphere.

" Thus, although their southward movement coincides " with the shortening of the northern day, their return in spring " takes place in the southern autumn, when, under the laws " ascertained for wholly northern birds, the diminishing length " of the day is the condition exactly contrary to that activating " the gonads, and with them the migration impulse. Rowan " meets this difficulty by assuming an internal rhythm in the " southern winterers which overrules the contrary external " stimulus of the changing daylight period, already demon- " strated to be so effective with the northern winterers.

" No positive evidence of the existence of such a rhythm " can, however, be brought forward.

" The hypothetical course of the development of the rhythm " postulated by Rowan could . . . . be outlined as follows:—

" All migratory species originally performed comparatively " short journeys which were, as a matter of fact, confined to " a temperate zone. The birds were thus constantly subject " to photo-periodism. . . . . The cumulative repetition of the " appropriate photo-stimuli in spring and autumn resulted in " the rhythms becoming stereotyped in the individual bird's " organism by some means unknown. When this was accom- " plished, if the migration lengthened so that the bird entered " the tropics, and even crossed the equator, the rhythm would " be secure from external disturbance. The original autumn " photo-stimulus still recurs, however, at regular intervals; it " might suffice to reinforce the rhythm or it might not. At " some period before the extension of the species' migration " beyond the Temperate Zone, the internal rhythm must " necessarily have become a heritable character, because the " individual bird is no longer exposed for even a single year, " to the appropriate double photo-stimulus that could alone " provoke *de novo* the hypothetical internal rhythm."

Moreau states further: " If an internal rhythm is the timing- " agent in the trans-equatorial migrants, it is, of course not " beyond the bounds of possibility that it may be confirmed " each autumn by the coincidence of the diminishing daylight " with retrogression of the birds' gonads. But if this is so, " how comes it that the reproductive and migratory activities

" recrudesce six months later, when, in the wintering hemi-
" sphere the shortening days are proving the wrong photo-
" stimulus."

Enough has been quoted, to indicate the direction in which the problem is now being investigated.

When considering the return movement of migrants from this country (Kenya), it is interesting to note that when this movement takes place, many of our local birds are starting to breed and all conditions appear favourable. Why don't the migrants remain here to breed? That some individuals, belonging to species well recognised as migrants, do breed in this country is now recognised, but whether these individuals, or their young, ever do take part in the migratory movement at any time, cannot be proved.

It is quite possible that when our knowledge of the nesting-habits of the birds of this country is increased, it will be found that quite a number of European birds remain to breed in some part of Africa. Thus, who can say whether the Great Spotted Cuckoo which is found breeding in South and East Africa was at one time purely a winter visitor to these countries and not a resident breeding species? Has the bird extended its breeding range, and will the African reared birds in time become a distinct form?

Manner of Migrating.

The manner of migrating is of interest. Some species migrate in flocks of their own species; others in mixed flocks; others again travel alone. These three methods are of importance when considering the governing factors regarding routes.

How do the birds know the correct route? What guides them? According to some observers, each species has its definite route or routes; but the routes of certain species may coincide for part of the way or for the whole distance. Our knowledge on these points is extremely small.

Manner of Travelling.

It seems to be established that all the birds of a given species and from a given locality, do not migrate together and at the one time; thus we find the movement to be wave-like; one batch of birds starting the movement, to be followed at varying intervals of days by fresh batches.

In certain species, the young are the first to arrive; in others, again, the adults; then when we consider the return or spring movement, we find that with certain species, the males travel alone and arrive at their destination long before the females. Not only do we find this to be the case with some European birds, but we see it also with certain of the Weaver-birds in this country. The males arrive at a suitable nesting site and begin to build; the females turn up later.

Directive Agents.

Many suggestions have been put forward to explain the fact that there are definite routes on which birds travel and that they are able to keep to them. Keenness of vision and recognition of landmarks; nigh development of sense of direction and locality, and knowledge of the position of the magnetic poles. All may be contributary factors, but any single one is not sufficient; thus, taking the point of recognition of landmarks and previous knowledge of the route, we find that in many cases, the birds are known to travel at night time, as evidenced by the fact that astronomers have reported the passage of birds across the face of the moon, and that these are travelling at great heights; again, we know that flocks are attracted to lighthouses at night, in immense numbers. Frequently also one can hear large numbers of birds flighting at night time. It is a noticeable fact that when one does hear birds flighting, it is usually on a still dark night, often when there is a mist or when rain is falling. These facts, then, rather put the suggestion of landmarks out of count to a large extent. A further fact which goes contrary to the suggestion of landmarks is that already alluded to in connection with food supply—namely, that in some species the young or immature are known to migrate first unaccompanied by any adults, over routes which they cannot possibly know anything about; and in addition we know that the converse is the case with regard to the Cuckoo; here the adults leave first, the young follow later.

What Guides Them?

There is one point which must not be overlooked when considering landmarks as a possible guide, and that is, that one frequently sees certain birds which have flocked preparatory to migrating, ascending in large numbers toward evening and after taking short circular flights at a considerable height, returning to the place from which they started. Are these birds merely exercising or are they getting the direction in which to move off later?

Col. Meinertzhagen has reported that he came across such a flock one afternoon during the war when he was up in an aeroplane scouting. He also records the interesting fact that this flock was a mixed one, consisting of Rollers, Kestrels, and Bee-eaters.

In support of the statement that birds travel by night, I should like to mention that in a certain locality not far from Nairobi, where I took continuous and careful observations, during the autumn and spring movements of 1916-1917, I was interested to find that on two occasions certain species appeared in the very early morning, just before dawn, which species had not been in the neighbourhood the evening before.

Other evidence against landmarks being of great importance is that birds are known to travel over large tracts of ocean.

Some individuals do get blown out of their proper course and turn up at unexpected places—such, for example, as American species occurring on the east coast of Britain!

Sense of direction is certainly of importance, and to this faculty one must ascribe some of the wonderful performances put up by Homing Pigeons, but at the same time recognition of landmarks is indisputable.

Routes.

Practically all migration routes are along horizontal lines, but as will be shown later, owing to the altitude at which the majority of birds fly when on migration, the configuration of the land influences the routes to a large extent; thus birds will follow the course of a river or skirt mountain ranges.

Owing to the lack of established observation posts throughout eastern Africa to the Cape, one is only able to give the probable main routes by which migrants come and go.

The bulk of the European migrants from central and south Europe cross the eastern Mediterranean or pass through Palestine to the Valley of the Nile, and thence following the course of this river, eventually find their way to Kenya, and by way of the central African lakes to the Cape.

Such as come from the central Asian area cross Arabia and reach Kenya via Abyssinia and Somaliland. The Juba River area and the Northern Frontier Province of Kenya are favoured haunts of both passage and visiting migrants.

The majority of waders which are found inland, appear to follow the Nile route while those of the maritime regions follow the coastal route.

Height at which Migrants Travel.

Until the introduction of the aeroplane, estimates of the height at which birds travelled were largely guess work and therefore unreliable. The records made by Col. Meinertzhagen and published in the *Ibis*, 1920, have been worked out with care and are here given. These refer to migrants in East Africa.

Pipits	210 feet
Wagtails	160-250 ,,
Swallows	210-240 ,,
Rollers	700-850 ,,
Kestrels	150-340 ,,
Plovers	480-830 ,,
Bee-eaters	3,000 ,,

Observations made by pilots of the Royal Air Force have been collected by Col. Meinertzhagen and Capt. Ingram. These go to show that it is exceptional to find birds travelling at over 5,000 feet; further, that the majority travel at below 3,000.

There are of course records of birds seen at 10,000-20,000 feet, but working on averages, the 5,000 feet level is exceptional.

During rain and stormy weather, birds travel very low.

Rate at which Birds Travel.

Various estimates of speed at which birds travel have been put forward by competent observers; one German ornithologist gives 200 m.p.h. as the highest speed! Experiment has shown that birds are capable of a speed of 38 m.p.h., but under favourable conditions the speed is greater.

Meinertzhagen has made an analysis of the reliable data available at the time and these records, along with those made personally, incline him to the belief that the rate is not excessively high; thus he gives the following:—

Crows	31-35 m.p.h.
Small passeres	20-37 ,,
Geese	42-55 ,,
Starlings	38-49 ,,
Falcons	40-48 ,,
Duck	44-59 ,,
Sand-Grouse	43-47 ,,
Waders	34-51 ,,

The foregoing remarks touch but briefly on the many and varied aspects of bird migration. The problem is an immense and complex one, and it is in the hope of stimulating interest in the subject that a special exhibit of migratory birds has been arranged in the Museum.

Uganda and Kenya are extremely well placed with regard to migrants, for to and through these countries come birds from Europe, Asia, and to a lesser degree from Madagascar, and India.

Besides this migratory movement between the Palaearctic regions and Eastern Africa, there is an exceedingly interesting and as yet little appreciated migration of birds from South Africa to Kenya and beyond, and from west to east.

There is a further aspect connected with the northward movement, which has only been mentioned in passing and that is, in regard to those northern migrants which do not migrate north with the bulk of their kind, when the normal time arrives, but elect to remain here throughout the year. What is the retarding influence? Is it a lack of the stimulating rhythm? Many of the " stay-behinds " are immature, but others again are not so; indeed some of them have

assumed spring breeding dress. What relationship does the assumption of breeding dress bear to the rhythm responsible for the development of the gonads? These and many other problems await the investigation of the ornithologists on the spot.

It is only by a combined effort on the part of those interested that we can hope to contribute anything of value to this amazing problem.

It is to be hoped that the special exhibition of migrants will help to stimulate the efforts of those already interested and will induce others to take up the study of this fascinating phenomenon.

The display will remain on exhibition for at least four months.

The list of migrants appended hereto is not in any systematic order, but coincides with the arrangement of the specimens in the cases.

If any reader of these notes can supply records of northern migrants not mentioned herein, and can substantiate the records with actual specimens, he or she is asked to communicate with the Editor of the Journal, or the Curator of the Museum, giving full details of such record.

LIST OF THE EUROPEAN AND ASIATIC MIGRANTS RECORDED FROM UGANDA AND KENYA. Those which are numbered are exhibited in the cases.

1. EUROPEAN ROCK THRUSH (*Monticola saxatilis* (Linn.))
   Summer range: Central Europe east through the Alps to Mongolia and N. China, also N. Africa; breeding in these areas.
   Winter range: Persia and Arabia to the eastern half of Africa to Kenya and Tanganyika Territory.

DATE OF ARRIVAL IN KENYA: Early arrivals make their appearance in mid-September, mostly immature birds, to be followed in October by quite large flocks. Numbers increased up to December. Quite one of the commonest migrants to these parts and much in evidence, as they frequent the more open type of country.

DATE OF DEPARTURE: An apparent flocking takes place in March at the end of which month quite the majority have moved north; some few remain until well on in April, after which all go north.

2. COMMON WHEATEAR (*Oenanthe oenanthe oenanthe* (Linn.))
   Summer range: British Isles, North and Central Europe, extending from Spain to Turkestan; breeding throughout.
   Winter range: India and Africa, through Uganda and Kenya to Tanganyika Territory.

Date of Arrival in Kenya: Considerable numbers arrive in mid-September, and their numbers are augmented throughout October and November. A common species throughout the open country and thorn-bush zones. A large proportion are immature birds; adults arrive much worn but are in full plumage in March.

Date of Departure: A northward movement takes place in March, and by the end of April all adults have gone north. A few immature birds may linger until May.

The GREENLAND and LONG-BILLED WHEATEARS have been recorded from Kenya, but racial differences difficult to detect in winter birds.

3. ISABELLINE WHEATEAR (*Oenanthe isabellina* (Temm.))

Summer range: A stray to British Isles. Breeds in S. Russia, east to Turkestan, central Asia, Persia, and Tibet.

Winter range: Arabia, and the eastern half of Africa to Kenya and Zanzibar.

Date of Arrival in Kenya: A few birds make their appearance in September and their numbers are added to until December. They are partial to the sparsely covered open country and the thorn-bush; fond of rocky areas.

Date of Departure: Most birds move north in March, the remainder in April.

4. THE PIED WHEATEAR (*Oenanthe leucomela leucomela* (Pall.))

Summer range: Once recorded from Scotland. Breeds in S. Russia east through Turkestan, S.E. Siberia and N. China, and N. India.

Winter range: S. Arabia and the eastern parts of Africa from Sudan to Kenya and central Tanganyika Territory.

Date of Arrival in Kenya: I have no earlier records of arrival than the end of September; the species is much in evidence in October to March. Most of the birds seen are immature, but the old males are much worn on arrival and are very conspicuously black and white, many having pure white crowns. The spring plumage is deceptive, as the white head-dress is covered by the greyish tips of the feathers and the back mantle is also thus hidden. Frequents the type of country loved by other Wheatears and Chats.

Date of Departure: The end of March sees the bulk on the northward trek, but a few late birds linger until April.

5. THE EUROPEAN REDSTART (*Phoenicurus phoenicurus phoenicurus*, Linn.)

Summer range: Breeds in British Isles, Europe, from Spain east to Lake Baikal.

Winter range: Wintering in the northern portion of Africa, Sudan, Abyssinia, S.W. Arabia; a rare migrant to Uganda and Kenya.

Date of Arrival in Kenya: So far as I know there are only two records for Kenya and Uganda: Turkwell R., Juba R., Jan.-December. No accurate dates are available as records are few. A single male was observed at Jinja in January.

Date of Departure: The Juba River bird was obtained in April.

6. WHITE-THROATED PIED WHEATEAR (*Oenanthe leucomela* var. *vittata*).

This bird is included in the exhibit as it is a mutation of the typical form.

7. EUROPEAN WHINCHAT (*Saxicola rubetra rubetra* (Linn.))

Summer range: Breeding in the British Islands and the greater part of Europe.

Winter range: The greater part of Africa, but not South.

Date of Arrival in Kenya: Immature birds arrive in September to be followed by adults and immature during October.

Date of Departure: The Whinchat starts to go north at the end of March, but mature males have been taken here in mid-April. Frequents cultivations, scrub country, especially on rocky hillsides, and the thorn-bush zones. A very common species during winter months.

Saxicola rubetra spatzi, Erl.

Saxicola rubetra noskae, Tsch.

These two races have been described from Tunisia-Dalmatia and Caucasus respectively. Meinertzhagen suggests that some of the migrant Whinchats which visit Kenya belong to the first of these two. It is however very difficult to differentiate winter birds into geographical races.

8. THE NIGHTINGALE (*Luscinia megarhyncha megarhyncha*, Brehm.)

Summer range: England and Wales; western, central and south Europe, Morocco, Tunisia.

Winter range: Africa; Bahr-el-Ghazal, Uganda, and Kenya.

Date of Arrival in Kenya: October is the earliest record I have, and Admiral Lynes reports these birds as passing through Darfur in numbers between September 7th and October 27th. Though never numerous in Kenya, the month in which greatest numbers are recorded is December. The Nightingale is found in the thorn-bush, more particularly where dense patches are found; along the river courses where vegetation is luxurious, and occasionally thick bush along the edges of forest.

Date of Departure: My latest date is March 29th.

9. TURKESTAN NIGHTINGALE (*Luscinia megarhyncha golzii*, Cab.)

Summer range: Transcaspia, Turkestan to Tian-Shan.

Winter range: S.W. Arabia, Somaliland to coast of Kenya.

Date of Arrival in Kenya: This is unrecorded. My earliest specimens were obtained in November. Haunts the thick thorn-bush and the dense scrub along the coast. Specimens were obtained at Marsabit and on the Juba River.

Date of Departure: Uncertain; March is the latest record.

Luscinia megarhyncha africana, Fisch. Reichw.

The Persian Nightingale, originally described from Kilimanjaro and since found to be the breeding race of Transcaucasia and Persia to Iraq, winters in Kenya.

Meinertzhagen records a specimen taken in December, but no observations on arrivals or departures have been recorded.

10. THRUSH NIGHTINGALE or SPROSSER (*Luscinia luscinia* (Linn.))

Summer range: Breeding in Sweden and eastern Germany to western Siberia.

Winter range: Migrates south to Africa: Sudan, Abyssinia, Somaliland, Uganda, and Kenya, south to Nyassaland.

Date of Arrival in Kenya: First noted in third week of September; numbers increase during October; some remain for the winter, others go further south, to come north again in March. Habitat as for other Nightingales.

Date of Departure: Adult birds go north at the end of March, but both adult and immature entirely disappear by third week of April.

11. WHITE-THROATED ROBIN (*Irania gutturalis* (Guer.))

Summer range: Breeds in Asia Minor, Palestine, Persia to W. Turkestan.

Winter range: S. Arabia, Abyssinia, Somaliland south to Kenya.

Date of Arrival in Kenya: Uncertain; first records at end of October, majority in evidence during November, plentiful in thorn-bush country from Simba south to the coast. Behaviour rather like the Nightingale, skulking among the denser scrub and bushes. Majority are immature. Both varieties of adult occur, orange breasted and buff breasted.

Date of Departure: Numerous examples noted in the Tsavo area during second week of April; none seen after 27th.

12. SYRIAN RUFOUS WARBLER (*Agrobates galactotes syriacus* H. & E.))

Summer range: Breeds in the Balkans, Greece, Asia Minor, and Syria.

Winter range: Southern Abyssinia, Jubaland, and Kenya.

DATE OF ARRIVAL IN KENYA: First noted at the beginning of November, but doubtless arrival earlier in October. Greatest numbers noted in January. Frequents the thorn-bush country; was particularly numerous on west Rudolf and the Voi-Tsavo area; also Juba River.

DATE OF DEPARTURE: Early departures in March, remainder moving north in April.

13. CAUCASUS RUFOUS-TAILED WARBLER (*Agrobates galactotes familiaris*, Menetr.)

Summer range: Transcaucasia, Iraq, Persia and Turkestan.

Winter range: Southern Arabia, Somaliland to Kenya.

DATE OF ARRIVAL IN KENYA: End of September, but most in October; much in evidence during November to January and February. Found in the scrub and thorn-bush country, not forest. Behaves like a Bush Chat, and indeed, belongs to the same group.

DATE OF DEPARTURE: Towards the middle of April, sometimes later.

14. BARRED WARBLER (*Sylvia nisoria*, Bechst.)

Summer range: Breeds in central and northern Europe east to Tian-Shan.

Winter range: Red Sea Province, Eritrea, Somaliland, S. Arabia, Jubaland south to Kenya, and eastern Uganda.

DATE OF ARRIVAL IN KENYA: Not definitely known; earliest date recorded by me, October. Mostly in evidence, though never common, during spring, in March. Frequents the thorn-bush.

DATE OF DEPARTURE: Early April; some immature birds still noted at end of this month.

15. WILLOW WARBLER (*Phylloscopus trochilus trochilus* (Linn.))

Summer range: British Isles, Europe from Spain to central Russia.

Winter range: The greater part of Africa.

DATE OF ARRIVAL IN KENYA: Early arrivals, mostly immature, make their appearance in September; the bulk arrive in October. This is the smallest of the northern migrants and one of the commonest. They are found in forest, scrub and thorn-bush; very numerous up to time of leaving.

DATE OF DEPARTURE: April appears to be the time for the northward move, though some few go north earlier. Non-breeding adults and some immature are still here as late as June, and I have actually shot a specimen in July.

16. NORTHERN WILLOW WARBLER (*Phylloscopus trochilus eversmanni*, Bp.)

Summer range: Breeds in north-east Russia and Siberia.

Winter range: Uganda and Kenya and eastern Tanganyika T.

Date of Arrival in Kenya: Towards the end of September. Found in the thorn-bush country rather than in forest land. Seen also in cultivations where there are copses. They remain here until the spring.

Date of Departure: The end of March or early April.

17. THE CHIFFCHAFF (*Phylloscopus collybita collybita* (Viell.))
THE SCANDINAVIAN CHIFFCHAFF (*P.c. abietina*).

Summer range: (a) Western Europe to west Germany.
(b) Scandinavia, east Germany, Russia.

Winter range: (a) West Africa, Egypt, and Somaliland, occasionally Kenya.
(b) Abyssinia, Sudan, Somaliland, Kenya.

The two races of the Chiffchaff are only occasionally recorded from Kenya, and as winter birds are not easy to differentiate. Dates, October, January.

18. THE WOOD WREN (*Phylloscopus sibilitrix* (Bechts.))

Summer range: British Isles, and greater part of Europe.

Winter range: West coast Africa, Congo, Egypt, Sudan, Uganda and Kenya.

Insufficient data are available to ascertain migration dates. The species has been taken in Kenya in November, and in Uganda in January.

19. EUROPEAN BLACKCAP (*Sylvia atricapilla* (Linn.))

Summer range: British Isles, Europe east to Persia; also North Africa.

Winter range: Abyssinia, Arabia, Somaliland, Uganda and Kenya, north Tanganyika Territory, and Gambia.

Date of Arrival in Kenya: The first arrivals come in at the end of September, but the majority make their appearance during October. By November the numbers appear not to increase. They are to be found in cultivations, forest land, thorn-bush, and scrub. They are one of the commonest migrants seen in gardens where trees are plentiful. Though subject to a certain amount of wandering in this country, in search of food, they do not leave it until ready for the northward move.

Date of Departure: Flocks visited my garden in February (third week) and passed on; a further lot appeared during the last week of March, stayed two days, and moved north. Odd birds seen in April, but not usual.

20. EUROPEAN GARDEN WARBLER (*Sylvia borin* (Bodd.))

Summer range: British Isles, Europe, Persia, and the Yenesei.

Winter range: West and east Africa to the Cape.

Date of Arrival in Kenya: An early arrival, many putting in an appearance at the end of September. Numbers increased up to November; fairly numerous up to January; further influx in March. Forest, gardens, and thorn-bush.

Date of Departure: Flocking taking place in March; most gone north in second week of April. Stragglers obtained in first week of May.

21. EUROPEAN WHITETHROAT (*Sylvia communis communis*, Lath.)

Summer range: Breeds in the British Isles, Europe east to the Ural Mountains. Also N.W. Africa.

Winter range: West Africa, Sudan, Somaliland, S. Arabia, Uganda and Kenya, T.T.

Date of Arrival in Kenya: First noted in first week of October; more numerous in November to January. Not so much in evidence in February, but companies observed in March. Usually seen in the more open thorn-bush, scrub, edges of forest land, and sometimes in papyrus swamps.

Date of Departure: Flocking in March; further increase during April. Last record observed April 20th.

Sylvia cantillans albistriata (Brehm.). Easter Subalpine Warbler.

Has been taken in Tanganyika Territory, but no records so far for Kenya. Breeds in the Balkan Peninsular, Asia Minor, and Palestine, Cyprus.

22. EUROPEAN SEDGE WARBLER (*Acrocephalus schoenobaenus* (Linn.))

Summer range: British Isles, Europe to the Yenesei; also Algeria.

Winter range: Africa from Lake Chad to Abyssinia, south to Uganda, Kenya, onward to Transvaal.

Date of Arrival in Kenya: Late September, October to December, numerous. Sedentary where found; reedbeds along rivers, lakes and swamps. Common on Lakes Nakuru and Naivasha, where they remain until they move north.

Date of Departure: Much in evidence at end of March; some move north; flocking observed in April; last noted in May.

23. EUROPEAN MARSH WARBLER (*Acrocephalus palustris* (Bechst.))

Summer range: Breeds in East and Southern Europe, Persia, Transcaspia.

Winter range: Migrates south through Egypt and Sudan, reaching Uganda and Kenya, where it spends the winter, some going on to the Zambesi.

Date of Arrival in Kenya: Not recorded before end of October. Plentiful in November to January, some slight diminution thereafter, but in evidence again in March.

Date of Departure: Majority appear to leave beginning of April, but some still seen up to May 25th.

24. GREAT REED WARBLER (*Acrocephalus arundinaceus arundinaceus* (Linn.))

Summer range: Breeds in the southern parts of Europe east to the Ural Mountains, Asia Minor, and also Palestine.

Winter range: Nigeria and the Congo; Sudan and Abyssinia, S.W. Arabia, Uganda, Kenya, and Jubaland.

Date of Arrival in Kenya: Earliest date recorded by me is early November, but arrival probably earlier. Numbers noted in December to March in suitable localities. Not always near water; thus birds obtained in thorn-bush near Voi and Bura and Tsavo. Others seen in reed beds and papyrus swamps, Nairobi swamp and Naivasha.

Date of Departure: Flocking in reeds, Nairobi river on March 26th. All departed April 5th.

25. EASTERN GREAT REED WARBLER (*Acrocephalus a. zarudnyi*, Hartert.))

Summer range: Transcaspia and Turkestan, where breeding.

Winter range: Somaliland, Kenya, and Tanganyika Territory to Nyassaland and Transvaal.

Date of Arrival in Kenya: Uncertain. Specimens shot in November and March.

Date of Departure: Uncertain, owing to great likeness to other form, field identification difficult.

26. OLIVE or BASRA REED WARBLER (*Acrocephalus griseldis* (Hartl.))

Summer range: Now known to breed in Iraq, Basra and Bagdad.

Winter range: Kenya and Tanganyika Territory. A rather rare migrant and full range uncertain.

Date of Arrival in Kenya: Very few specimens taken in Africa. My earliest date October; others January and March.

Date of Departure: Uncertain owing insufficient records.

27. LESSER REED WARBLER (*Acrocephalus scirpaceus scirpaceus* (Herm.))

Summer range: As a breeding bird is found in Western Europe to Central Germany.

Winter range: Cameroons to Uganda, Kenya and Tanganyika Territory; also N. Rhodesia.

Date of Arrival in Kenya: Early records end of September, remaining in suitable localities up to March.

Date of Departure: Numbers recorded in bush and reed beds preparatory to northward move at end of March. Nairobi and Naivasha.

28. EASTERN LESSER REED WARBLER (*Acrocephalus s. crassirostris* (Bhm.))

Summer range: South-east Europe, Turkestan, Persia.

Winter range: Sudan, Uganda and Kenya to Tanganyika Territory.

Date of Arrival in Kenya: Recorded in September; remain here through October to March.

Date of Departure: Last date noted April 7th.

29. EUROPEAN RIVER WARBLER (*Locustella fluviatilis* (Wolf.))

Summer range: Breeds in central Germany east to the Urals and Transcaspia.

Winter range: Kenya south to Zambesi and Transvaal.

Date of Arrival in Kenya: Insufficient records are available on which to form definite opinion. The species is a rare visitor, but doubtless, owing to its habit of skulking in dense reed beds, it has escaped observation. The recorded examples were obtained in December.

Date of Departure: Unrecorded.

30. BALKAN OLIVE-GREY WARBLER (*Hippolais pallida elaeica* (Lind.))

Summer range: Breeding in the Balkan Peninsular, Asia Minor, and Cyprus, also Palestine, Persia, Turkestan.

Winter range: Sudan, Abyssinia, Somaliland, to Kenya.

Date of Arrival in Kenya: Earliest record October. Haunts the thorn-bush country from eastern Uganda to the coast of Kenya. Very plentiful in the Tsavo-Voi area, also south Kisumu, and along the Juba River. Was particularly numerous in the Tsavo area in March.

Date of Departure: They flock together in March (end) prior to moving north; all had left this country in second week of April.

31. UPCHERS' PALE WARBLER (*Hippolais languida* (H. & E.))

Summer range: Breeding in Palestine to Persia, Arabia, Transcaspia, and Afganistan.

Winter range: Somaliland, Jubaland, Kenya, east Uganda.

Date of Arrival in Kenya: Specimens have been obtained in July and August; position of these doubtful, possibly non-breeders which had overstayed. Influx first noted in first week October; common in December. Scrub and thorn.

Date of Departure: Large numbers were seen in the Tsavo-Taveta areas, the thorn-bush being literally alive with these birds; probably a flocking preliminary to moving north. Still numerous in mid-April; absent at first week May. Odd birds July and August (vide ante).

32. OLIVE-TREE WARBLER (*Hippolais olivetorum* (Strichl.))

Summer range: As a breeding bird is found in Balkans, Grecian Islands, east to Syria.

Winter range: Somaliland, Jubaland and Kenya.

Date of Arrival in Kenya: A somewhat rare migrant first noted in October. Scrub and thorn-bush Ukambani and Teita areas. Insufficient records available for accurate dates. Specimens obtained October, December, January.

Hippolais icterina (Viell). ICTERINE WARBLER.

Breeding in the greater part of Europe (except extreme west) to south Russia. Has been recorded in both Uganda and Kenya. No data available; no personal records.

33. EUROPEAN ROLLER (*Coracias garrulus garrulus*, Linn.).

Summer range: Vagrant to British Isles. Breeds in Europe to western Siberia, Syria.

Winter range: Africa to the Cape.

Date of Arrival in Kenya: End of October and beginning of November; mostly immature birds. Usually not in forest country. Thorn-bush and acacia country most frequented. Fairly numerous throughout winter months.

Date of Departure: Most congregate end of March and go north in April. Latest date 12th April.

Inyx torquilla, Linn. EUROPEAN WRYNECK.

Recorded from eastern Uganda in February. No personal records.

34. EUROPEAN BEE-EATER (*Merops apiaster*, Linn.)

Summer range: Breeds in Southern Europe to West Siberia, North India (Kashmir), also N. Africa.

Winter range: Africa to the Cape.

Date of Arrival in Kenya: First migrants noted in mid-September. Influx in October, rather given to local movement when in Kenya; remains in flocks; large percentage immature.

Date of Departure: End of April, early May.

35. CASPIAN BEE-EATER (*Merops persicus persicus*, Pall.)

Summer range: Transcaspia, to N.W. India, Iraq.

Winter range: Africa south to the Cape.

Date of Arrival in Kenya: October to December; more numerous in Uganda. Plentiful in Kisumu area in January.

Date of Departure: Unsatisfactory; recorded here in May.

36. EUROPEAN SPOTTED FLYCATCHER (*Muscicapa striata striata* (Pall.))

Summer range: Breeding in the British Isles, Europe, and N. Africa.

Winter range: Most of Africa to Cape.

Date of Arrival in Kenya: Earliest record third week of September; plentiful October; stationary up to March. More numerous in thorn-bush and acacia country; some along edges of forest land. Numerous in my garden in March.

Date of Departure: Apparently collect together at mid-April and go north. None recorded after 25th.

37. EASTERN SPOTTED FLYCATCHER (*Muscicapa s. neumanni*, Poche.)

Summer range: Western Asia, Turkestan and Persia.

Winter range: Somaliland, Jubaland, and Kenya.

Date of Arrival in Kenya: End of September and early October. Frequents similar type of country to previous race. Owing to similarity to the western race, field records unreliable.

Date of Departure: None recorded after mid-April.

Emberiza hortulana, Linn. ORTOLAN BUNTING.

This Bunting, which breeds in Europe west to Mongolia and Afganistan, migrates to the east side of Africa from Abyssinia, Darfur, Somaliland and has been taken at Baringo. I have no personal record of the species.

38. EUROPEAN LESSER GREY SHRIKE (*Lanius minor minor*, Gmel.)

Summer range: Breeds in mid and south Europe, east to Turkestan.

Winter range: The eastern portion of Africa from Sudan to the Cape.

Date of Arrival in Kenya: October. These birds do not all remain here but move further south. Small numbers can usually be found in the scrub and thorn-bush from October to March. Flocks appear in April, from the south.

Date of Departure: First batches move off during April; the latest date on which specimens were obtained from a small flock of about twenty, May 1st.

39. EUROPEAN RED-BACKED SHRIKE (*Lanius collurio*, Linn.)

Summer range: British Isles and greater part of Europe, western Asia, Persia, and Turkestan.

Winter range: Eastern half of Africa, Abyssinia, Kenya to the Cape.

Date of Arrival in Kenya: Third week of September; then on to December. Numbers remain here through the winter; augmented during the northward move by immigrants from further south.

Date of Departure: Large flocks were seen in the Tsavo Taru area in April and their numbers were increased up to the 20th, after which they departed. Stragglers seen in my garden first week of May.

Lanius collurio kolybini, Buturlin. CAUCASUS RED-BACKED SHRIKE.

I mention this race here, as there appears to be some little doubt as to its validity. It is upheld by Dr. Stressman, but Sclater is doubtful. It is the breeding bird of the Caucasus and north Persia.

I have two Red-backed Shrikes, taken in Tanganyika Territory, which cannot possibly be placed as the typical race. I suggest that as they agree with the description, they should be considered as *kolybini*. 24th and 27th January.

40. RUFOUS RED-TAILED SHRIKE (*Lanius cristatus phoenicuroides* (Schal.))

Summer range: Breeds in Transcaspia, east to Persia, Turkestan.

Winter range: Somaliland, Jubaland, and Kenya.

Date of Arrival in Kenya: Earliest records November; but probably arrival earlier. Examples obtained in all months up to April. Most numerous in March. Found in the scrub and thorn-bush country, and acacia steppe.

Date of Departure: Second week of April.

41. PALE RED-TAILED SHRIKE (*Lanius cristatus isabellinus*, H. & E.)

Summer range: Area round Lake Baikal and Mongolia.

Winter range: Sudan and Abyssinia to Kenya.

DATE OF ARRIVAL IN KENYA: October is the first month in which these birds have been recorded; mostly young birds. Fairly numerous in December, but more in evidence in the early spring.

DATE OF DEPARTURE: End of March and second week of April.

42. EASTERN WOODCHAT SHRIKE (*Lanius senator niloticus* (Bp.))

Summer range: As a breeding bird found in Persia and Transcaucasia.

Winter range: Abyssinia, Somaliland, to Uganda and Northern Frontier, Kenya.

DATE OF ARRIVAL IN KENYA: Too few examples have been taken to base any accurate dates. First record in December, others in February.

DATE OF DEPARTURE: Uncertain, but last recorded 10th April.

43. EUROPEAN HOOPOE (*Upupa epops epops*, Linn.)

Summer range: Straggler to England. Breeds Europe and Western Asia.

Winter range: India and Africa more on eastern side, to Kenya.

DATE OF ARRIVAL IN KENYA: First record September. A few recorded in following months.

DATE OF DEPARTURE: April. Stragglers July, August, non-breeding. (These should not be confused with the race *somaliensis*, which is resident.)

44. EUROPEAN SCOPS OWL (*Otus scops scops* (Linn.))

Summer range: Breeds in south Europe and N. Africa.

Winter range: Sudan, Kenya on east; Senegambia, west.

DATES: Unsatisfactory. Authentic examples rare; two recorded, January and March. Easy to confuse with *scops ugandae* and *graueri*, which are resident.

45. NORTH EUROPEAN NIGHTJAR (*Caprimulgus europaeus europaeus*, Linn.)

Summer range: Middle and north Europe, including the British Isles, to west Siberia.

Winter range: Sudan and Egypt to Kenya and the Cape.

DATE OF ARRIVAL IN KENYA: October, but insufficient numbers have been taken. Odd birds are recorded to April.

DATE OF DEPARTURE: Flocks noted during last week of March in the Nairobi area; also first week April. Flocks either all male or all female.

46. SOUTHERN EUROPEAN NIGHTJAR (*Caprimulgus e. meridionalis*, Hartert.)

Summer range: South Europe and N. Africa.

Winter range: West Africa (Cameroons) and East Africa, Uganda and Kenya.

Date of Arrival in Kenya: Not sufficient data.

Date of Departure: As this is rather a rare migrant, few observations have been made. Birds secured are all spring ones, shot in March and April.

47. CENTRAL ASIAN NIGHTJAR (*Capimulgus c. unwini*, Hume.)

Summer range: Breeds in Central Asia.

Winter range: Eastern Africa from Sudan to the Cape.

Date of Arrival in Kenya: Unknown for certain; recorded in October.

Date of Departure: Small flocks recorded in March; last records are for mid-April.

48. EUROPEAN SWIFT (*Micropus apus apus* (Linn.))

Summer range: British Isles, Europe and Tunis.

Winter range: Africa, more on west. Kenya south to Cape.

Date of Arrival in Kenya: September; remaining in Kenya but locally subject to considerable movement.

Date of Departure: Flocking and northward movement in March.

49. EASTERN SWIFT (*Micropus apus pekinensis* (Swinhoe.))

Summer range: Asia and Persia east to China.

Winter range: India and Africa.

Dates of arrival and departure as for previous race, but much more evidence required.

Micropus melba melba, Linn. ALPINE SWIFT.

Summer resident in South Europe, east to Turkestan and India. Migrates to Africa, dates insufficient. March. Liable to be confused with local forms of *melba* unless handled.

50. EUROPEAN SWALLOW (*Hirundo rustica rustica*, Linn.)

Summer range: British Isles and Europe generally; east to China; N. India.

Winter range: India and Africa.

Date of Arrival in Kenya: Earliest date on which obtained, August 15th; many during the latter part of that month, also September. Numerous throughout the winter to early spring.

Date of Departure: Usually bulk migrate north in April, but some few individuals are recorded June and July. It is more than probable that some non-breeding birds do not migrate north during the first spring.

51. PALESTINE SWALLOW (*Hirundo rustica transitiva*, Hartert.)
Summer range: Breeds in Palestine; partial migrant.
Winter range: Egypt and Uganda to Kenya.

Dates as for previous race. A rather rare migrant which probably associates with the Common Swallow and travels south with it.

52. EUROPEAN HOUSE MARTIN (*Delichon urbica* (Linn.))
Summer range: British Isles; Europe generally to Turkestan and Yenesei and N. India.
Winter range: India and Africa to Transvaal.

Date of Arrival in Kenya: Beginning of October; more plentiful at the coast than inland through greater part of winter, but flocks appear in increasing numbers later in October; vast numbers seen and specimens secured at Lakes Nakuru and Naivasha.

Date of Departure: March and April (mid).

53. EASTERN SAND MARTIN (*Riparia riparia fuscocollaris*, Tschusi.)
Summer range: Dalmatia and Turkestan.
Winter range: Africa, Kenya, and Jubaland.

Date of Arrival in Kenya: October, but possibly earlier. Found along the shores of lakes, rivers, and near swamps. Remain in Kenya throughout winter and early spring.

Date of Departure: End of March and beginning of April.

54. EUROPEAN SAND MARTIN (*Riparia riparia riparia* (Linn.))
Summer range: Breeding British Isles, Europe to Siberia and N. Africa.
Winter range: Africa to Transvaal.

Date of Arrival in Kenya: October (early), remaining in suitable localities through winter months up to early spring.

Date of Departure: End of March and beginning April.

55. GREAT SPOTTED CUCKOO (*Clamator glandarius* (Linn.))
Summer range: Breeds in Spain and South Europe to Persia.
Winter range: Africa.

Date of Arrival in Kenya: Somewhat obscured by presence of local birds. Winter migrants usually much covered in fat; local birds not so. Birds seen after April are probably local; thus young obtained in May are certainly local.

56. EUROPEAN CUCKOO (*Cuculus canorus canorus*, Linn.)
Summer range: Most of Europe including British Isles, but not Spain; east to western Asia.
Winter range: Africa, except north

Date of Arrival in Kenya: October, rather scarce, but more in evidence just before spring migration.

Date of Departure: March and April. Specimens shot in May and June are non-breeding, excessively fat.

57. EASTERN CUCKOO (*Cuculus canorus telephonus*, Heine.)
Summer range: Asia, from the northern parts of India to Japan.
Winter range: India and Burma and Malay Peninsular. Occasionally to Africa, Kenya and Uganda.

DATES: Unsatisfactory; definitely in November and December, and also February. Apt to be confused with western race.

58. LITTLE CUCKOO (*Cuculus poliocephalus.*)
The status of this bird is unsatisfactory. A race has been described from Madagascar, under the name *rochii*. This is said to be migratory. Specimens from the mainland of Africa, Lamu, Mombasa and Durban have been recorded as the insular form and not that of India.

Much more material is necessary before satisfactory conclusions can be arrived at.

59. EUROPEAN GOLDEN ORIOLE (*Oriolus oriolus oriolus* (Linn.))
Summer range: The greater part of Europe, occasionally British Isles; east to Persia and Turkestan.
Winter range: Africa, mostly on eastern side from Sudan to Cape.

DATE OF ARRIVAL IN KENYA: First week of September, augmented by great numbers in October, most of which pass south. Found in forest and thorn-bush country in November to April.

DATE OF DEPARTURE: Flocks congregating at end of March; last noted first week of May, all young birds of previous summer. Adults had moved off at end of April.

60. EUROPEAN RED-THROATED PIPIT (*Anthus cervinus* (Pallas.))
Summer range: Breeds in the north of Sweden, Siberia, and Alaska.
Winter range: California, India, and Malaya; Africa from Sudan to Kenya, also Somaliland and on the West Coast.

DATE OF ARRIVAL IN KENYA: October, in considerable numbers. Found plentifully in the region of Municipal dumps, cattle bomas, and on the plain country in association with various species of Wagtails. Also fond of the vicinity of water, more particularly mud flats and swampy land where grass not too long. Numbers maintained throughout the winter and early spring.

DATE OF DEPARTURE: Some flocks go north at end of March, but numbers remain until third week of April. A specimen obtained 28th August, male adult. Did this bird go north or remain over from previous autumn?

61. EUROPEAN TREE PIPIT (*Anthus trivialis trivialis* (Linn.))
Summer range: England and most of Europe from Spain to Central Asia.
Winter range: India and Africa generally, but apparently not to the Cape.

Date of Arrival in Kenya: Earliest recorded date September 27th, but most arrive October. Found in thorn-bush country, margins of forests and cultivated lands.

Date of Departure: April, towards the end. This species can be readily distinguished from the former by the plain rump, and less strongly spotted plumage.

62. LONG-CLAW PIPIT (*Anthus richardi richardi*, Vieill.)
Specimens indistinguishable from the typical bird have been obtained in Kenya. Rare. Captured March and April. Kisumu, Kobua, River Rudolf, Kyambu, near Nairobi.

63. EUROPEAN TAWNY PIPIT (*Anthus campestris campestris* (Linn.))
Summer range: Europe, from Sweden to N. Africa, also Asia Minor.
Winter range: Arabia, Abyssinia, and Somaliland, south to Jubaland and Kenya.

Date of Arrival in Kenya: Insufficient material to reckon from. Personal records January, on the Juba; Tsavo, two from a small flock of nine, obtained end of March.

Date of Departure: Insufficient data.

64. EUROPEAN WHITE WAGTAIL (*Motacilla alba alba*, Linn.)
Summer range: Breeds in Europe including England; also Iceland.
Winter range: Nigeria, Sudan, Congo (Uele), Uganda, and Kenya; also S. Arabia, Jubaland.

Date of Arrival in Kenya: October; seen during succeeding months in small parties up to twenty individuals, usually in the vicinity of water. Not very common.

Date of Departure: End of March.

Motacilla alba duhunensis (Sykes).
Breeding Siberia, Turkestan. Recorded from Kenya at same time as other race, but winter birds extremely difficult to differentiate.

65. EUROPEAN GREY WAGTAIL (*Motacilla cinerea cinerea*, Tunst.)
Summer range: Breeds in Western Europe, including Britain, east to Ural Mountains.
Winter range: Africa, Gambia, East Congo, Uganda, and Kenya.

Date of Arrival in Kenya: The earliest date recorded by me is September (end), but most seen in October. Found mostly near water, particularly highland streams.

Date of Departure: April. A specimen shot in June is non-mature and might possibly not have migrated at all.

66. WESTERN YELLOW WAGTAIL (*Budytes flavus rayi*, Bp.)

Summer range: Breeds in the British Isles and France to Portugal.

Winter range: Africa, chiefly west; Senegal and Gambia; Congo; also to Kenya.

Date of Arrival in Kenya: September 17th, mostly seen in following months January and February. Apt to be confused with next race.

Date of Departure: April. Adult birds in full spring are now quite conspicuous and can be told at a glance from the eastern race.

67. EASTERN YELLOW WAGTAIL (*Budytes flavus campestris* (Pall.))

Summer range: South Russia to Transcaspia.

Winter range: Africa, east mostly, Kenya to Transvaal.

Date of Arrival in Kenya: Third week of September; and for the next month. Hundreds in suitable localities; preferably near water and associated with cattle. Equally plentiful at the coast.

Date of Departure: As a considerable proportion of these migrants are immature, there is some evidence of delayed departure of such. Adults move north at end of April; some, along with immature still here in May. Non-breeders.

68. SIBERIAN BLUE-HEADED WAGTAIL (*Budytes flavus baema*, Sykes.)

Summer range: Siberia to Yenesei, Turkestan.

Winter range: India and East Africa, Kenya.

Date of Arrival in Kenya: Uncertain owing to similarity with other forms of Blue-headed Wagtail, unless in full spring dress. Probable arrival in end of September.

Date of Departure: Undoubted examples still here in March 29th; all left first week in April.

69. BLUE-HEADED WAGTAIL (*Budytes flavus flavus* (Linn.))

Summer range: Breeding in S. Sweden and Pyrenees east to Danube and Russia.

Winter range: Greater part of Africa south to the Transvaal.

Date of Arrival in Kenya: September. Numbers uncertain owing to likeness to other form unless in full dress. Mixing with other races in suitable localities as given ante.

Date of Departure: April 12th for last adult seen, but immatures possibly later.

70. ASHY-HEADED WAGTAIL (*Budytes flavus cinereocapilla* (Sav.))

Summer range: Italy, Dalmatia.

Winter range: Uganda and Kenya.

DATES: Unsatisfactory owing to confusion with others of very similar appearance. Earliest record October. Last recorded April 10th.

71. BLACK - HEADED WAGTAIL (*Budytes flavus feldegg* (Michah.))

Summer range: Asia Minor to Dalmatia and Caucasus.

Winter range: India, Africa, Sudan to Kenya, Somaliland.

DATE OF ARRIVAL IN KENYA: First records October, but most likely earlier. More common Lake Victoria region. Found in following months up to April.

DATE OF DEPARTURE: Last record 21st April.

72. GREY - HEADED WAGTAIL (*Budytes flavus thunbergi* (Billberg.))

Summer range: Breeds in Italy, Russia, Siberia, North Sweden. Lapland.

Winter range: India, Africa mostly east, Somaliland, Kenya.

DATE OF ARRIVAL IN KENYA: End of September, October. This race difficult to tell in the field, more particularly as they associate with other races of Yellow-wagtails throughout their stay. Flocking is most noticeable in the early spring, towards end of March.

DATE OF DEPARTURE: End of March and up to mid-April.

73. WHITE-HEADED WAGTAIL (*Budytes flavus leucocephala* (Prev.))

Summer range: Breeds in Mongolia.

Winter range: Uncertain, but specimens with white heads obtained eastern Uganda and Kenya.

DATES: White-headed birds obtained in November and 21st April.

74. EUROPEAN KESTREL (*Falco tinnunculus tinnunculus*, Linn.)

Summer range: Europe and Asia (north).

Winter range: India, Arabia and Africa to Tanganyika.

DATE OF ARRIVAL IN KENYA: September, October. Individuals or twos and threes always in evidence, more particularly in the open plain areas and bush country. Much more seen during periods of grass fires than any other. Flocking takes place before the spring move, often several hundred together.

DATE OF DEPARTURE: Evidence of collecting seen at end of March and beginning of April. A few seen as late as May 10th. Late birds should not be confused with local resident races.

75. WESTERN LESSER KESTREL (*Falco naumanni naumanni*, Fleisch.)

Summer range: Breeds in southern Europe, Russia and Turkestan.

Winter range: Africa, Egypt to the Cape.

DATE OF ARRIVAL IN KENYA: End of September and to mid-October. Flocks disperse and scattered individuals are seen from time to time. Flocking again takes place in March and April.

DATE OF DEPARTURE: End of March and beginning of April.

76. EASTERN LESSER KESTREL (*Falco naumanni pekinensis*, Swinhoe.)

Summer range: Northern China.

Winter range: India, Somaliland, and Kenya.

DATES: Owing to likeness to previous race, field observations may be difficult. Earliest record end of September; latest record April 15th. Migrate in flocks.

77. EUROPEAN HOBBY (*Falco subbuteo subbuteo*, Linn.)

Summer range: Europe generally; Asia, and Japan.

Winter range: India; Africa, from Egypt to Cape.

DATE OF ARRIVAL IN KENYA: October 4th is my earliest record, but possibly earlier. Dispersal considerable; not much seen until the northward move is about to take place. Most frequently seen in the bush country and cultivated lands, seldom in forest areas.

DATE OF DEPARTURE: Migrating flocks last recorded in Nairobi area in first week of April.

Falco amaurensis, Radde. EASTERN RED-LEGGED FALCON.

This species has been collected and observed in Kenya on occasion, but no records as to time of arrival. Percival records northward movement in flocks, Nairobi, on April 5th.

78. EUROPEAN HONEY BUZZARD (*Pernis apivorus apivorus* (Linn.))

Summer range: Europe, west Asia.

Winter range: Africa, south to Natal.

DATE OF ARRIVAL IN KENYA: My earliest record is October; fairly numerous, but not in flocks, usually in single numbers.

DATE OF DEPARTURE: First week of April.

79. BLACK KITE (*Milvus migrans migrans*, Bodd.))

Summer range: Europe to Central Asia, also North Africa.

Winter range: Lado and Kenya.

DATES: Not satisfactory, as apt to be confused with African and Egyptian races. Authentic records for Kenya December and April.

80. STEPPE BUZZARD (*Buteo buteo vulpinus* (Gloger.))
Summer range: Western Asia and south-east Europe.
Winter range: Greater part of Africa.
DATES: Unsatisfactory. Obtained by me in October and January, also March.

81. EUROPEAN MARSH HARRIER (*Circus aeruginosus aeruginosus* (Linn.))
Summer range: Breeds in Europe, Asia, and east Siberia.
Winter range: India, Africa in suitable localities to Tanganyika Territory.
DATE OF ARRIVAL IN KENYA: September (end), also October. Frequents the margins of lakes and swamps.
DATE OF DEPARTURE: April mostly; some immature here until third week May.

82. MONTAGU'S HARRIER (*Circus pygargus* (Linn.))
Summer range: England and Europe generally, Mongolia.
Winter range: Africa, east particularly; Sudan to Cape.
DATE OF ARRIVAL IN KENYA: October; usually seen hawking over the open grass plains. Often in vicinity of grass fires. Never very numerous.
DATE OF DEPARTURE: Last records are mid-April.

83. EUROPEAN PALLID HARRIER (*Circus macrourus* (Gmel.))
Summer range: Breeds Roumania and South Russia.
Winter range: India, Africa, Sudan to Cape.
DATE OF ARRIVAL IN KENYA: End September, October. Common, mostly seen hawking over grass land, even at 11,000 feet.
DATE OF DEPARTURE: End of April; some immature seen in May.

Pandion haliaetus haliaetus (Linn.) Osprey.
Although this species is an European one, observation is required as to whether there is any increase in numbers during the winter months. The species is now resident on Lakes Victoria and Naivasha.

84. DOUBLE or SOLITARY SNIPE (*Capella media* (Lath.))
Summer range: Europe to Asia (Yenesei).
Winter range: Africa on the east from Lado, Uganda, Kenya to Cape.
DATE OF ARRIVAL IN KENYA: Mid-October, some earlier; more usually found in flat land temporarily inundated than at edge of deep water. Swamps preferred, particularly those which have bush cover nearby. Swampy ground near rivers and streams.
DATE OF DEPARTURE: The 28th of May or thereabouts is the usual time for northward move; but some years very much later. Some actually shot at end of June. Single bird obtained July.? previously injured.

85. EUROPEAN COMMON SNIPE (*Capella gallinago gallinago* (Linn.))

Summer range: British Isles, where breeds; Europe and N. Asia.
Winter range: Asia, south; Africa, Senegambia to Somaliland south through Kenya to T.T.

Date of Arrival in Kenya: Last week in September but usually well on into October. This species is found in the region of swamps and lakes, and on the larger stretches of temporary water.

Date of Departure: In comparison with the "Solitary," this species does not appear common. I have had no experience with large whisps, my maximum being about a dozen, even at such times as one would expect them to flock before migration. The latest date on which specimens were seen and procured was May 15th.

86. INDIAN PINTAIL SNIPE (*Capella stenura*, Bp.)

Summer range: India.
Winter range: Malaya; straggler to Kenya.
Dates: Only one record for Kenya: a bird shot on the Juba River.

87. EUROPEAN JACK SNIPE (*Limnocryptes minima* (Brünn.))

Summer range: Breeding in Northern Europe, Arctic regions, and Asia.
Winter range: Burma, Ceylon; Africa, Sudan to Kenya.

Date of Arrival in Kenya: October. Lake side where vegetation not too rank and tall; also swamps and rivers.

Date of Departure: Not a common migrant and dates rather uncertain. March.

88. EUROPEAN LANDRAIL or CORN CRAKE (*Crex crex* (Linn.))

Summer range: Britian and most Europe to Siberia and Central Asia.
Winter range: Africa, Sudan to Cape.

Date of Arrival in Kenya: Uncertain; earliest personal record November. Doubtful whether many stay in Kenya; most passage migrants. Grass lands.

Date of Departure: Latest date 14th April.

89. EUROPEAN SPOTTED CRAKE (*Porzana porzana* (Linn.))

Summer range: Europe, including Britain; to Asia, Yarkland, and Kashmir.
Winter range: India; Africa, east, Sudan to Damaraland.

Date of Arrival in Kenya: Uncertain, insufficient records. Earliest date December, probably much earlier.

Date of Departure: Uncertain: last date recorded by me, April 15th.

90. EUROPEAN CURLEW SANDPIPER (*Erolia testacea* (Pallas.))

Summer range: Breeds in arctic region north Asia. (Vagrant winter Britain.)

Winter range: India; Australia; Africa, along the coast and also inland waters, on eastern side.

Date of Arrival in Kenya: First record August 30th, but probably majority arrive September (end). Quite numerous on larger lakes from Rudolf to Naivasha; also on the coast.

Date of Departure: Rather late; adults in full summer dress still in flocks May 19th. It is probable that immature birds of the previous summer do not all migrate.

91. EUROPEAN LITTLE STINT (*Erolia minuta* (Leisl.))

Summer range: Breeds extreme north Europe, Nova Zembla, northern Siberia. Passage migrant to Britain.

Winter range: Africa, along the coast and inland.

Date of Arrival in Kenya: August 18th is the earliest date on which I have taken specimens, thence through each month up to May 18th.

Date of Departure: There is little doubt that the majority of birds which move north to breed do so in April or beginning of May. Any individuals found in these latitudes after this time are probably birds of the previous summer or non-breeders. This species offers a very excellent line of investigation into the problem of "overstays."

Erolia alpina alpina (Linn.). EUROPEAN DUNLIN.

This species was taken by us in Uganda on the lakes in the Toro area. I have not recorded it from Kenya, either inland or on the coast.

Calidris canutus canutus (Linn.). THE KNOT.

The Knot was taken by us in the Toro district in 1906, but no records have been obtained recently. It is of interest to note that Sclater states that the species was recorded formally from the Blue Nile valley but not of recent years.

92. THE EUROPPEAN SANDERLING (*Crocethia alba* (Pallas.))

Summer range: Breeds in the Arctic zone Europe and Asia. Greenland.

Winter range: India; Africa along the coast and on inland waters of Kenya.

Date of Arrival in Kenya: October; equally common on lacestrine and maritime shores; not so common as other waders but still numerous.

Date of Departure: Difficult to ascertain with any degree of accuracy, owing to the fact that many individuals do not assume full plumage and leave in time to go to breeding grounds. Latest record July, but April birds are in full breeding dress.

93. TEREK SANDPIPER (*Terekia cinerea cinerea* (Guld.))
Summer range: North-east Europe and northern Siberia.
Winter range: Australia; India; Eastern Africa, along the coast, not inland.

DATES: Uncertain. Recorded December. Full plumaged birds obtained in March and April.

94. EUROPEAN GREEN SANDPIPER (*Tringa ochropus*, Linn.)
Summer range: Northern parts of Europe and Asia.
Winter range: Africa; Senegal and Angola on west, Sudan to Kenya on east.

DATE OF ARRIVAL IN KENYA: September, but some birds stay throughout the summer. Lake sides, rivers and dams.

DATE OF DEPARTURE: Difficult to ascertain as numbers are seen in May and June; probably non-breeders. A marked diminution however in April and May.

95. WOOD SANDPIPER (*Tringa glareola*, Linn.)
Summer range: Europe and North Asia.
Winter range: Australia; India; Africa.

DATE OF ARRIVAL IN KENYA: September 18th.

DATE OF DEPARTURE: Here again, one is met with the fact that all individuals of the species do not go north in the spring, but most leave in April. Non-starters are probably young of the previous summer. Open inland waters and also coast.

96. EUROPEAN MARSH SANDPIPER. (*Tringa stagnatalis* (Bechst.))
Summer range: South-easterly Europe, Siberia and Turkestan.
Winter range: Australia; India; Africa, west and east to Cape.

DATE OF ARRIVAL IN KENYA: End September and October. Fairly plentiful throughout lakes of Uganda and Kenya, up to April.

DATE OF DEPARTURE: Most go north in end of April and May. A few birds recorded July and August; almost certainly birds of previous summer which have carried over.

Tringa totanus totanus, Linn. REDSHANK.
Recorded along the coast but not inland. Dates too indefinite.

97. EUROPEAN COMMON SANDPIPER. (*Actitis hypoleucos* (Linn.))
Summer range: Breeds Britain and Europe to Asia.
Winter range: Australia; India; Africa throughout to Cape.

DATE OF ARRIVAL IN KENYA: Migrants from north in September and October. Many individuals remain over the whole summer and known to breed in Uganda and possibly Kenya. More plentiful on inland waters than coast, occurring on streams as well as lakes, dams, etc.

DATE OF DEPARTURE: April, May.

Limosa limosa limosa (Linn.). Black-tailed Godwit.

Found in Europe and western Asia in the summer, this species migrates to the coast of Africa, on the east (Tana). Records insufficient, but authentic.

98. EUROPEAN WHIMBREL. (*Numenius phaeopus phaeopus* (Linn.))

Summer range: Europe and western Siberia.

Winter range: Africa generally.

DATE OF ARRIVAL IN KENYA: August 28th; September. These birds are found on the inland waters of Kenya and Uganda. Those on the coast apt to be confused with resident local race, unless seen in the hand.

DATE OF DEPARTURE: End of April.

99. EUROPEAN CURLEW. (*Numenius arquata arquata* (Linn.))

Summer range: Britain, and Europe generally to Asia.

Winter range: Coast of Africa.

DATE OF ARRIVAL IN KENYA: Not noted on inland waters but very plentiful at the coast. Apt to be confused with Eastern race. Very numerous in April. Other dates unsatisfactory.

Numenius arquata lineatus, Cuv. EASTERN CURLEW.

Breeds in central and west Asia, and migrates to Africa, India, and Malaya. Records insufficient.

100. GREENSHANK. (*Tringa nebularia* (Gunn.))

Summer range: North Europe, Norway; also Asia.

Winter range: Australia; India; Malaya; Africa, along the coast and inland.

DATE OF ARRIVAL IN KENYA: September; mostly on inland waters.

DATE OF DEPARTURE: April; latest date May 4th.

101. EUROPEAN RUFF & REEVE (*Philomachus pugnax* (Linn.))

Summer range: Europe and Asia.

Winter range: India; Africa, on inland waters mostly, but coast also.

DATE OF ARRIVAL IN KENYA: August, September.

DATE OF DEPARTURE: April. Some few seen in May. An August male still had many of the ruff feathers.

102. BLACK-WINGED STILT. (*Himantopus himantopus* (Linn.))

Summer range: Southern Europe, France to Central Asia; also resident in parts of Africa.

Winter range: Birds which breed in the north move south to Africa for winter.

DATES: Rather uncertain owing to presence of local birds.

103. AVOCET. (*Recurvirostra avosetta*, Linn.)
Summer range: Europe and Asia to Mongolia; Africa (part).
Winter range: Africa.

Dates: Northern birds are migratory and spend the winter in Africa; on the other hand there are numbers of local birds which make observation *re* dates rather difficult. Lakes Rudolf, Nakuru, Naivasha, Magadi.

104. EUROPEAN RINGED PLOVER. (*Charadrius hiaticula hiaticula*, Linn.)
Summer range: British Isles, Europe, Iceland, Greenland.
Winter range: Africa along coast and inland waters.
Date of Arrival in Kenya: Beginning of October.
Date of Departure: End of April.

105. SIBERIAN RINGED PLOVER. (*Charadrius h. tundrae* (Lowe.))
Summer range: Siberia.
Winter range: Africa, coast and inland, on east side.
Dates as for previous race; difficult to distinguish.

106. LITTLE RINGED PLOVER. (*Charadrius dubius curonicus*, Gmel.)
Summer range: Europe and Asia.
Winter range: India; Malaya; Africa, eastern side from Sudan to Kenya.

Date of Arrival in Kenya: October; found along the coast, also on inland waters.
Date of Departure: Beginning of April.

107. KENTISH PLOVER. (*Charadrius alexandrinus alexandrinus*, Linn.)
Summer range: Europe and north Africa; Asia.
Winter range: India; Malaya; Africa to Cape.
Dates: Insufficient observations made to ascertain dates.

108. WESTERN MONGOLIAN PLOVER. (*Charadrius mongolus atrifrons*, Wgl.)
Summer range: Breeds in Central Asia and Tibet.
Winter range: India; Malaya; Africa, east coast to Zanzibar.
Date of Arrival in Kenya: October; a coastal bird.
Date of Departure: Toward end of April.

109. GREAT SAND PLOVER. (*Charadrius leschenaulti*, Less.)
Summer range: Eastern Asia.
Winter range: India; Australia; Africa on the east to Cape.
Date of Arrival in Kenya: End of September and first week October. Large flocks along the coast.
Date of Departure: End of April.

110. GREY PLOVER. (*Squatarola squatarola* (Linn.))
Summer range: Northern Europe, Asia, and America.
Winter range: Southern hemisphere.
Date of Arrival in Kenya: October. Fairly common along the Kenya coast from Juba to Dar es Salaam.
Date of Departure: End of April.

111. EUROPEAN TURNSTONE. (*Arenaria intrepes intrepes* Linn.))
Summer range: Greenland and northern Europe, where breeds. Migrates Scotland as winter visitor.
Winter range: Coastal regions Europe, Asia, Australia; Africa.
Date of Arrival in Kenya: Large flocks appear end of September; numerous October.
Date of Departure: Towards end of April.

112. CASPIAN DOTTEREL. (*Charadrius asiaticus*, Pallas.)
Summer range: South-east Russia.
Winter range: India; Africa, Sudan to Cape.
Date of Arrival in Kenya: Last week of September. Most plentiful inland, well away from water, mostly on open plains; fond of burnt areas.
Date of Departure: Usually second week April, but have later shot specimens, immature.

113. EUROPEAN OYSTERCATCHER. (*Haematopus ostralegus ostralegus*, Linn.)
Summer range: Europe (Britain) and central Asia.
Winter range: India; Africa, coast and inland.
Date of Arrival in Kenya: End of September, October.
Date of Departure: April.

114. EUROPEAN STONE CURLEW or NORFOLK PLOVER. (*Burhinus oedicnemus oedicnemus* (Linn.))
Summer range: Europe including Britain, Asia on the west.
Winter range: Africa; on the eastern side, Sudan to Kenya.
Date of Arrival in Kenya: First week October. A somewhat scarce though regular visitor, found in the more open thorn-bush country and the plains where grass is not too thick and stony outcrops plentiful.
Date of Departure: Last record, third week April.

115. EUROPEAN QUAIL. (*Coturnix coturnix coturnix* (Linn.))
Summer range: Greater part of Europe, and north Africa.
Winter range: India; Africa, from Egypt to Kenya.

Date of Arrival in Kenya: Earliest record October. This bird is not by any means a common migrant and it is quite possible that it has been confused with the local southern race.

Date of Departure: Data unsatisfactory.

116. EUROPEAN LITTLE BITTERN (*Ixobrychus minutus minutus* (Linn.))
Summer range: Central and South Europe and North Africa, Asia, central.
Winter range: Africa, on the east side, Kenya about limit.

Date of Arrival in Kenya: Unsatisfactory, owing to presence of local race with which it is easily confused.

117. NIGHT HERON (*Nycticorax nycticorax*, Linn.)
Summer range: A wide range from Japan to central and south Europe. Also breeding in Africa. Northern birds migrate to Africa for winter, but influx not observed satisfactorily.

118. LESSER BLACK-BACKED GULL. (*Larus fuscus fuscus*, Linn.)
Summer range: Europe, including British Isles.
Winter range: Red Sea and coast Africa to Mombasa, and inland waters, Lakes Victoria, Nakuru, and Naivasha.

Dates: Unsatisfactory, no close observation made. Many examples on Victoria and Naivasha throughout year.

119. CASPIAN TERN. (*Hydroprogne caspia* (Pallas.))
Position unsatisfactory as species found over greater part of the world. Certainly more numerous on Kenya coast during winter than at other times.

120. WHITE-WINGED BLACK TERN (*Chlidonias leucoptera* (Temm.))
Summer range: South-east Europe, Hungary, to South Russia and Asia (China).
Winter range: Africa, Australia.

Date of Arrival in Kenya: Obscured by presence of many birds, amounting to dozens which spend the whole winter on lakes such as Rudolf and Naivasha.

Although only two species of terns are exhibited, there are several other migratory species which are found either inland or on the coast or in both localities. The following have been definitely recorded:

WHISKERED TERN (*Childonias leucopareia* (Temm.).
Loc. Naivasha, Nov.

GULL-BILLED TERN (*Gelochelidon nilotica* (Gmel.)
Lakes in Uganda and Kenya. April, November.

WHITE-CHEEKED TERN (*Sterna repressa*, Hartert.)
Coast, Kenya.

SOOTY TERN (*Sterna fuscata*, Linn.)
Coast.

BLACK TERN (*Childonias nigra*, Linn.)

Other species not reliable, as no specimens in support or records.

121. EUROPEAN GLOSSY IBIS. (*Plegadis falcinellus falcinellus* (Linn.))

Summer range: Vagrant to British Isles; breeds Spain and south Europe.

Winter range: Africa.

Date of Arrival in Kenya: October, Lakes Nakuru, Naivasha, Solai; probably other waters also.

Date of Departure: End of April and up to May 5th.

122. EUROPEAN SPOONBILL (*Platalea leucorodia leucorodia*, Linn.)

Summer range: Europe, south and central. Also India.

Winter range: Africa, Sudan to Kenya.

Date of Arrival in Kenya: October, to such lakes as Rudolf, Nakuru, and Naivasha. Should not be confused with local species.

123. GREATER FLAMINGO (*Phoenicopterus ruber antiquorum*, Temm.)

Summer range: Asia, and South Europe.

Winter range: Plentiful on Lake Rudolf; seen on Lake Nakuru and obtained on Naivasha.

Dates uncertain, owing to fact that bird probably breeds on Lake Rudolf.

124. EUROPEAN WHITE STORK. (*Ciconia ciconia ciconia* (Linn.))

Summer range: Breeding in Europe and West Asia.

Winter range: Africa to Cape.

Date of Arrival in Kenya: September, mid. Immense flocks stay during the winter months travelling over large areas; following areas which are burning, and during locust invasion always in attendance.

Date of Departure: Majority leave in April-May. Few stragglers remain the whole summer, but do not breed.

Ciconia nigra (Linn). EUROPEAN BLACK STORK.

Flocks visit this country, but not a regular migrant to these parts, though extending as far as the Cape on winter migration.

125. EUROPEAN WIGEON. (*Anas penelope*, Linn.)

Summer range: Europe and Asia.

Winter range: Africa, to Sudan, now recorded from Kenya, Lake Naivasha and Nakuru.

Date of Arrival in Kenya: Uncertain, but obtained here December, January.

126. EUROPEAN PINTAIL (*Dafila acuta* (Linn.))

Summer range: Practically the whole of the Northern Hemisphere.

Winter range: Africa, larger lakes on east side; to Tanganyika.

Date of Arrival in Kenya: End October. A common migrant, frequenting most of the larger lakes; most numerous Lake Naivasha.

Date of Departure: End of March, April.

127. EUROPEAN TEAL. (*Anas crecca*, Linn.)

Summer range: Europe and Asia.

Winter range: Africa; Sudan to Kenya; also Tanganyika.

Date of Arrival in Kenya: October.

Date of Departure: April. Has only been noted in recent years and is now known to be a regular migrant.

128. EUROPEAN GARGANEY (*Anas querquedula*, Linn.)

Summer range: Most of Europe; Asia.

Winter range: Africa, mostly east to as far as Tanganyika.

Date of Arrival in Kenya: October, but many more end Nov.

Date of Departure: April. Though some move north March. Quite one of the commonest migrants among duck.

129. EUROPEAN TUFTED DUCK. (*Nyroca fuligula* (Linn.))

Summer range: Europe and most Palaearctic region.

Winter range: Africa, mostly east, but not far south, Kenya being about limit.

Date of Arrival in Kenya: October, November.

Date of Departure: April. This species is variable in its visitation to Kenya and Uganda. Some years numbers are seen, at other times only a few.

130. EUROPEAN WHITE-EYED POCHARD. (*Nyroca nyroca nyroca* (Guld.))

Summer range: Europe and Asia.

Winter range: Abyssinia, Sudan, Uganda and Kenya.

DATES: Insufficient material recorded on which to base dates. November, January, and February.

131. EUROPEAN SHOVELER (*Spatula clypeata* (Linn.))

Summer range: Europe, Asia.

Winter range: Africa, mostly eastern side.

DATE OF ARRIVAL IN KENYA: October-November.

DATE OF DEPARTURE: April. A common migrant, found on most of the waters of Kenya and Uganda.

European Mallard, *Anas platyrhynchos*, Linn.

Recorded from Lake Marsabit, unsupported by specimens, though birds actually shot. (H. B. Sharpe in MSS.)