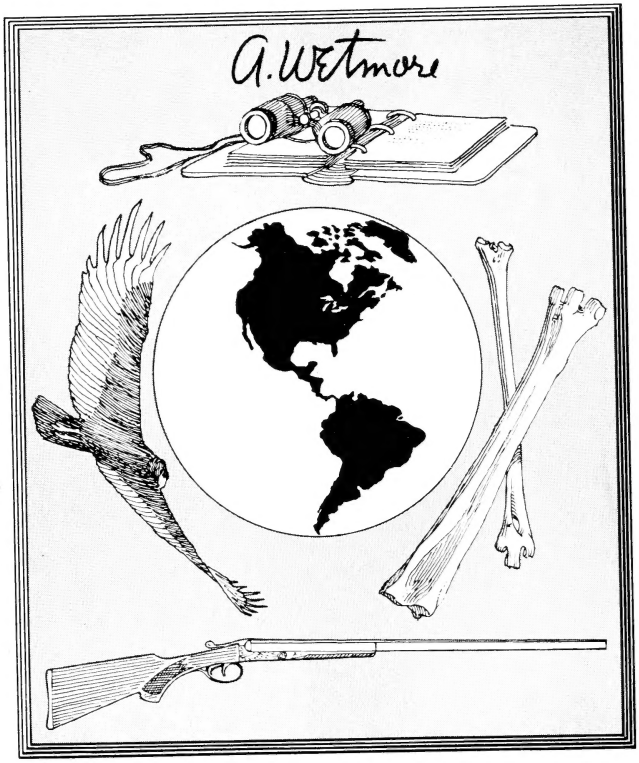

Alexander Wetmore

1946 *Sixth Secretary* 1953

A. Wetmore

D=5

TWO MONTHS

ON THE

GUADALQUIVER.

BY

HARRY F. WITHERBY, F.Z.S., M.B.O.U.

Reprinted from "KNOWLEDGE," January, March, August, October and December, 1899.

CONTENTS.

TWO MONTHS ON THE GUADALQUIVER.

I. THE RIVER.

TO the ornithologist, the Guadalquiver, at all events from Seville to its mouth near Cadiz, is one of the most interesting rivers in Europe. In times gone by, most of the country on each side of the river for about twenty miles from its present mouth, was covered by the sea. But the land has been reclaimed, not by the Spaniards, but by the river itself. For countless years the river deposited at its mouth, layer upon layer, the innumerable particles which its waters brought down to the sea, and thus, gradually, the sea-bottom was raised, until at length the sea was ousted and level plains appeared. Then the sea began to fight for the land, but it fought against itself, for it threw up sandbanks round the margin of this newly formed land. The wind blew the sand, and the sandbanks increased in length and breadth until they completely shut out the ocean. Thus, the river, the sea, and the wind combined to form a great flat expanse of many square miles in extent. The plains so formed are known in Spain as the *marismas*. A small part of them is wooded with pine and cork-oak, or covered with a dense

undergrowth of tamarisk, gorse, cistus, and other shrubs, but by far the greater portion consists of mud and marsh, flooded by the river in winter and burnt up by the sun in summer. The human population of these plains consists only of a few herdsmen—wild, picturesque-looking men, armed with long sticks, and wearing rough sheepskin coats and long apron-like leather gaiters. These men live during the summer in rude huts built of reeds, and they, with the help of their dogs, watch over great droves of horses, bulls and sheep.

An ornithologist visiting this country recognises at once that it is an ideal place for many kinds of birds. Food and nesting sites are plentiful and varied, and the country is very little disturbed. Moreover, this corner of Europe lies in the track of a vast number of birds of many kinds, migrating from Africa to the north of Europe in spring, and from the north to their winter quarters in Africa in the autumn. Many of these migrants are induced, by prospects of food and seclusion, to break their journey for a few days in this congenial wilderness.

Towards the end of March, 1898, my friend, G. Chenevix Trench, and myself left England to follow in the footsteps of such noted ornithologists as the late Lord Lilford, Messrs. Abel Chapman, H. E. Dresser, and Howard Saunders, who have all explored this wonderful country. Our principal object was to collect *Limicolæ*, or wading birds, for a special purpose. We also hoped to get many other birds, and we knew that we should see many sights in the way of bird-life, which possibly might have been seen many years ago in England, but will never be seen again, owing to the great marshes of the East Coast having been drained and cultivated.

Once arrived in Spain, delays innumerable and unlooked

for occurred, and we soon learnt to know the meaning of that much abused word *mañana*, which signifies any day but to-morrow. It was not therefore until April 4th that, with all preparations made, we boarded our boat at the little village of C—— and sailed off down the river. The boat, or "sheep," as the owner called it, which was our home for six or seven weeks, was a half-decked barge-like lugger, by no means extravagantly fitted, but roomy and well suited for our purpose. The Guadalquiver is noted, amongst other things, for its thick and muddy water, its strong tides, and for the wind which is nearly always blowing on it. Never once did we see more than three or four inches below its surface, never once was the tide favourable, and as to the wind it was either not blowing at all, or, when it was blowing, it was, owing to the winding nature of the river, of little use. As a consequence, instead of four hours we took ten to arrive at our first camping place. But when one is in Spain one must do as the Spaniard does. If one cannot be moving, then, surely, it is much more pleasant to sit still and smoke the delicious *cigarillo*. What true Spaniard ever loses an opportunity of employing himself in this way? But there were many things to attract our attention on this slow voyage, and consequently it was not always possible to adopt the Spaniard's methods. We were passing through the wonderful *marismas* for the first time in our lives, and although there was very little of the country to be seen from the river, our field glasses were constantly in use. Parts of the river bank were thickly grown with reeds, from which proceeded the hoarse and incessant song of the great reed warbler.* We were very anxious to see the birds, but they clung to

* *Acrocephalus arundinaceus.*

their reeds, and we did not catch sight of one until some time afterwards under more favourable circumstances. There were many ducks on the river, and waders on its banks, to be carefully looked at, while now and again we passed a reed-hut or a stack, the top of which was occupied by a stork* sitting upon her nest. Once, on turning a sharp corner, as we were drifting down close to the river bank, we came face to face with a great bustard† in all his glory. We were so struck by the suddenness of the meeting, and by the imposing size of the turkey-like bird standing on the bank above us, that we had scarcely time to realise what we saw before the bird had turned and fled from our sight. I hope to say more of the great bustard, for we both saw and shot them afterwards. We saw many kites soaring in the distance, and once we were treated to a very fine sight in bird-life. Some two hundred or three hundred yards from the river there was evidently a carcase, which we could not trace from the boat, but the kites and vultures, those excellent scavengers, had found it. We counted two hundred black kites‡ and four Egyptian vultures§ in the air, and there must have been many more on the ground. They were evidently gathering from far and near. Many appeared as mere specks floating up aloft, but as one's eye passed down the "column" of birds, it could be seen that each individual with wings outstretched was sweeping round and round in gigantic circles, ever coming nearer and nearer to the earth, while its place above was taken by another speck intent upon the feast. So they succeeded one another, and what was but a dot in the sky grew gradually larger and larger until one could see the real size of the bird, and then its

* *Ciconia alba.* † *Otis tarda.* ‡ *Milvus migrans.*
§ *Neophron percnopterus.*

markings and feathers. We saw many such sights during our stay in Spain, but never again on so grand a scale.

It was dark before we had tied up our boat alongside an island in shallow water. Our ever cautious commander remarked that the steamers plying up and down this river were very careless as to whom they ran down, but, said he, if a steamer tries to come where we are she will run aground before she can get near us. So we felt safe as we turned in to our little cabin and dozed off to the accompaniment of many strange cries from birds flying over our boat.

The next day (April 5th) we explored the island to which our boat was anchored. This island was almost entirely covered with reeds, not ordinary reeds such as one sees in England, but reeds as thick as one's wrist, and from twelve to fifteen feet high. Moreover, they grew so thickly together that it was exceedingly hard work to force a way through them. Here and there we came to a comparatively open spot, covered with broken reeds to the depth of two or three feet. In three of these open spaces we found nests in the shape of large heaps of broken reeds, on the top of which were hollows lined with finer stuff. Two of these nests contained round dirty white eggs, which we were able to identify with certainty by shooting two female marsh harriers* as they rose from them. We often caught sight of a purple heron† flying above us, and seeing some rise up a little distance off we forced our way through the reeds to the spot. Our labours were rewarded by the discovery of several nests, built high up amongst the reeds. We soon cut them down, and possessed ourselves of the bluish-green eggs which they contained.

* *Circus æruginosus.* † *Ardea purpurea.*

Perhaps our most interesting find on this island was a nest of the black kite. The nest, which contained two eggs, was placed like a heron's, in the reeds. The black kite usually breeds in trees, and sometimes in cliffs and towers. There could be no doubt about this nest in the reeds, for we shot the bird as it flew from it, and the eggs were typical kites' eggs. Our men said it was a common habit of the black kites to build in these tall reeds. Kites were numerous in the neighbourhood, and trees were very scarce, but the reeds seemed to form an efficient substitute.

As we were nearing the boat, after a four hours' "fight" with the reeds, we saw three harriers in the air: a pair of Montagu's* (the male slate-grey, and the female dark brown), and a marsh harrier, a much larger bird, with grey wings and tail, and dark body. The smaller birds were stooping at their larger cousin, while he kept tumbling in the air in his endeavours to evade his tormentors. What was the cause of the disagreement I do not know, but the effect formed a very pretty sight.

We visited this extraordinary island again on May 13th, and found a nest of Montagu's harrier, containing five eggs. Here, again, we were lucky enough to shoot the female bird, and thus identify the eggs without a doubt. This nest was nothing more than a few pieces of old broken reeds placed on the ground, and well hidden in the midst of a patch of young reeds. We also found on this day a beautiful nest of the marbled duck,† containing thirteen rich cream-coloured eggs.

Arrived at the boat, we sailed some way down the river, and eventually anchored at the mouth of a small creek, which was to be our camping place for a week or so

* *Circus cineraceus.* † *Anas angustirostris.*

while we explored the *marismas*. I shall reserve for my next article the description of what we saw and obtained in this wilderness of water and mud, scantily covered with coarse vegetation. There was little to be seen from our boat. A great expanse—flat and unbroken, save for a few cattle, a reed hut or two, and a distant clump of trees—stretching away to the horizon in front, while the river,

FIG. 1.—Stalking in the *Marismas*.

with its muddy waters and calm surface, flowed evenly behind us.

There is a very general idea that in a wild and uncultivated country where few human beings are to be found the birds are much tamer than in a populous country such as England. We did not find this to be the case in Andalucia; indeed, many birds which we had always considered tame and confiding in England were quite the reverse in the *marismas*. Those who have

collected in other wild countries will bear me out in this, the reason for which I think must be that in a country where man is rarely seen the birds never have a chance of becoming accustomed to him, and consequently shun him in the same way that a horse will shy at a strange object by the roadside. There was no cover above a foot high in this part of the *marismas*, and it may well be

Fig. 2.—The Stalker from the Bird's Point of View.

asked how we managed to get near enough the birds to shoot them.

The wild-fowler in England uses a punt to approach his birds, or he stalks them through some short cover, or he hides himself and waits for the birds to come to him. The *patero*, the wild-fowler of the *marismas* of Andalucia, uses a specially trained horse, from behind which he steals unawares upon the flamingo, goose, or

duck. We were accompanied by two *pateros*, each with his stalking horse, or *cabestro*, and I may safely say that we should have collected very few birds in these open plains without the help of our *cabestro*. They were small and poor looking animals, but they never seemed to tire, and were exceedingly well trained to their work.

If the reader will turn to the accompanying illustrations

FIG. 3.—About to turn the Horse.

he will get a general idea as to how these horses are used. Suppose you wish to approach a flock of birds feeding far out in a shallow lake. You go as near as you dare, walking upright behind the horse, but you must be careful. The birds take no notice of anything under the horse's belly, but if they catch sight of your head or hat above his back they are alarmed directly. They are already looking suspicious, although you are still a long way off. You stop, and the horse is so well trained that he imme-

diately stops also, and puts his head down as though he were feeding. There is nothing for him to eat except dry caked mud, but the birds do not know that, and seeing him quietly feeding, they take no more notice of him than of the thousands of half-wild horses and bulls which inhabit the *marismas*. Your *patero* arranges the halter, studies the wind and the situation of the birds, and then the stalk begins in earnest.

Fig. 4.—Turning the Horse.

The *patero* has the halter in one hand and his gun in the other. With his body bent, so that nothing appears above the horse's back, he walks slowly and carefully along, keeping close to its shoulders. He guides his beast by means of the halter and his elbow, the latter being kept pressed into the horse's ribs (Fig. 1). Now and again he takes a look at the birds from under the neck of his *cabestro*. You follow exactly in his footsteps,

keeping close to the horse, with one hand on his hip, so that when he takes a long or quick stride you may not be left behind, and thus be seen by the birds. Meanwhile, the horse itself is acting with great intelligence. He goes along slowly, lifting his legs carefully, and putting them down with great deliberation, and all the while his head is kept low, as though he were browsing or drinking. You have been approaching the birds at an angle, and it

FIG 5.—Tying Head to Tail

soon becomes necessary to turn and make another tack. The *patero* stops, and, going a step away from the horse, motions you to step aside too, and crouch behind him. He then gives the halter a sharp pull, and the horse turns round so quickly that the birds scarcely notice the action (Figs. 3 and 4).

On you go again, and are soon trudging through the water. There are many things to try you. The horse

stirs up the mud, and you cannot see where you are putting your feet. As a consequence you are continually plunging and slipping into some deep hoof-mark in the mud. You suddenly feel a wet stinging slap, and you find your face has formed a barrier between the horse's wet tail and a villainous fly on his flank. The perspiration is streaming off you, and your back is aching unbearably. Just as you are beginning to think that you must give it up

Fig. 6.—The Shot.

to stretch your back at any cost, the *patero* suddenly stops. The relief is great as you squat down, and your surprise is greater when you take the field glasses, and looking under the horse's belly discover that the birds are quite close. Before proceeding further a rope is fastened to the halter, passed between the horse's legs and tied to its tail. (Fig. 5.) This is a necessary precaution to ensure the horse keeping his head down. Were he to raise it

when so near the birds they would probably become alarmed. At last you get within shooting distance, the signal is given, the horse stops, and, cocking your gun, you stand up. The relief to your cramped and aching back is so great that for a moment you stay stock still and survey the birds to which the *cabestro* and his master have brought you so cleverly and so successfully. Now the unsuspected danger suddenly dawns upon the flock—there is a straining of necks and a flutter of wings. Raising your gun you fire over the horse's back, or, if there is time, rush out from behind him and fire in the open. The well-trained *cabestro* never moves while you shoot. Drooping his head, he remains like a block of wood until the spoil is collected and you return to him.

These beloved *cabestros* were our constant companions during our stay in the *marismas* and many were the birds we watched, photographed and shot from behind them.

II. The Marismas.

THE small creek in which we were anchored proved a pleasant spot, at all events from our point of view. Birds were plentiful all around us, not only during the hot and glaring day, but also at night, when their notes —some well-known to us, some unknown, wild and weird—formed pleasing variations to the metallic buzz of the persistent mosquito.

This part of the *marismas* consists of dry caked mud, covered with short grass and dwarf bog plants. At intervals, even this scanty vegetation ceases altogether and mud and water reign supreme. These patches of water, some of which are very large, are called *lucias*. They are quite shallow, being seldom more than two feet in depth, and they are encircled by a belt of dry mud, the surface of which is pitted with hoof marks, and cracked in every conceivable direction. Being a luxurious feeding place for ducks, geese, and all wading birds, a *lucia* forms a perfect Eden for that eccentric being, the ornithologist.

To deal first with the dry land. Within a few yards of our camp were the nests of two different species of larks

very common in this district. One, the calandra lark,* is a veritable giant amongst larks, being almost the size of a song thrush. We nearly walked upon this bird before she rose from her nest, and flew up with a tremendous flutter, tumbling in her flight, and running along the ground in front of us with trailing wings. The calandra has a bold, bright song, uttered when the bird is on the wing, and, like our skylark, it is given to imitating the notes of other birds. A few steps away from the calandra's nest we flushed a very small lark, which, unlike the calandra, rose quietly from her nest and disappeared. This was the Andalusian short-toed lark,† discovered by Lord Lilford in 1872, and first described by Mr. H. E. Dresser in his "Birds of Europe." These little larks, which are very numerous in the *marismas*, seem to be peculiar to this part of the world. They do not soar like the calandra and the skylark, but take short, upward flights, singing as they go, and, returning to the ground or a low bush, finish twittering there. We heard them imitate the notes of many birds—such as stilts and redshanks. By the 8th of April their nests were numerous. Those we found were invariably built of dry grass and fine roots, lined with a few feathers, and placed in a slight hollow in the ground, often hidden by a tuft of grass or a small bush. The only other diminutive bird that was at all common in this scorched-up wilderness was a beautiful blue and yellow wagtail—the blue headed wagtail.‡

Many peewits§ had their eggs or young amongst the grass, and the efforts of the parents to drive off the birds of prey afforded us constant amusement. They devoted their energies chiefly to the kites. A kite comes swooping majes-

* *Melanocorypha calandra.* † *Calandrella bœtica.*
‡ *Motacilla flava* § *Vanellus vulgaris.*

tically along as though he were altogether too fine a bird to notice anything smaller than an eagle. Suddenly two peewits rise from the ground and dash straight at that kite. He swoops on as though he had noticed nothing. But the screeching peewits whirl round again and attack him hotly from above and below. Watch him carefully and you will see him flinch and swerve, as time after time the brave little birds dash into his face. When one pair of peewits

Fig. 7.—Our Camp.

has seen him safely off their preserves, another pair flies up and attacks him, and thus he is "escorted" across the *marismas*. A pair of peewits is quite a match for a kite. I have seen one forced to drop his meal—a piece of offal—and fly away hungry because he happened to be too near some peewits and their family. Strange to say, the peewits do not attack the harriers so vigorously and persistently, although they are even more numerous than

the kites, and perhaps as great egg and chick eaters. In fact, I feel sure that a harrier has a far more profitable journey across the *marismas* than a kite; but he goes about his business in a quiet, unostentatious way, flying low and quartering the ground in a systematic manner, as though he were more of an entomologist than an ornithologist.

We had often wished to become intimately acquainted with the stone curlew,* sometimes called the thicknee or Norfolk plover, a bird which is to be seen in England only in certain localities. Our wish was gratified on these dry plains, where the bird was common. To a great extent it is a bird of the night, and it was at night, when their stirring notes broke the stillness round the camp, that we began our acquaintance with them.

The usual note of the stone curlew is a loud harsh cur-er-ree. One night, when sitting round our lamp skinning and writing, in the midst of an angry crowd of mosquitoes which one of our men was vainly endeavouring to keep moving with a towel, a stone curlew gave us an extraordinary solo. He appeared to be composing a song. Beginning by rapidly repeating his usual note very softly and in a very low key, he suddenly went up to a very high key, then down again, and so on for quite ten minutes. It was like a human singer going from bass to falsetto, but the bird accomplished it perfectly, without a break, and apparently without an effort.

In the day these birds are usually silent and in hiding, but they are not to be caught napping. They always seemed to see us before we saw them, which was not to be wondered at, since with their sandy brown plumage they

* *Œdicnemus scolopax.*

were very inconspicuous, while we were plainly visible at quite three miles distance. Consequently we found it difficult to cultivate the acquaintance of the stone curlew. For the first few days, when one rose, as they generally do, about one hundred yards off, we rushed towards the spot knowing that its mate, having run from the eggs in alarm, would soon take to flight. But we were always outmanœuvred; the bird ran as fast as we did, rose suddenly at an impossible distance, and soon joined the other bird a mile or two away. We had more success by waiting quietly behind our stalking horses when the birds rose. Not being so alarmed they did not fly far, and several times we marked them down and stalked them successfully. Often, however, they were suspicious even of the *cabestro* and ran away from it like greyhounds. Only twice did we surprise these birds. On each occasion the bird immediately lay at full length, with head extended flat upon the ground, and when we had approached to within about twenty yards, it leapt suddenly into the air and was off and away before we recovered from our surprise. We found several pairs of their beautifully-marked eggs lying side by side in the merest scoop on the hard ground. In the more fertile country we came across the eggs among the sand, closed in on all sides by high tamarisk bushes—a curious place to be chosen by a bird which is a lover of the open country.

We were riding home one evening, tired and fly-bitten, across a sun-burnt plain, when we saw an Egyptian vulture give chase to a stone curlew, which we had frightened into flight. The curlew was evidently not at ease. It began by flying low and straight, then it dodged and turned and flew round and up, calling plaintively all the while. The ungainly vulture flew doggedly and

silently after it, keeping well up in the straight flying, but getting sadly behind whenever it tried to follow the curlew's sudden twists and turns. We watched this curious chase until the birds were mere specks many miles away, and we wondered much if the vulture had a private spite against that stone curlew, or if it merely needed exercise after some unwholesome gorge.

Never shall we forget our first day in a *lucia*. From afar we had seen the water—a great glistening expanse, unbroken save for a group of cattle away on the left, and straight before us a straggling bed of tall greyish reeds. As we got nearer, the reeds gradually took the shape of birds, until at length a long line of flamingoes* was revealed standing in knee-deep water. They looked a dazzling white in the brilliant sunshine. Round them were hundreds of dark dots, ducks of various kinds, and a little way off a small group of white clumsy-looking birds, which we made out with glasses to be spoonbills.† Nearer to us, in shallower water, black and white avocets‡ and long-legged stilts§ were feeding, while round the margins of the water, dabbling in the soft mud, were hundreds of small wading birds of various kinds.

We determined to devote ourselves first to the flamingoes, and try to stalk these wary birds. Our men put their *cabestros* in stalking trim, and we started to crouch behind them when about two miles away from the birds. Before we reached the water we came across a group of fifty or sixty mounds of mud some eight or ten inches high. These were old nests of the flamingoes, and our men told us that the birds had laid there the year before, when water was plentiful, but that in this dry season the nests were half a

* *Phœnicopterus roseus.*
† *Platalea leucorodia.*
‡ *Recurvirostra avocetta.*
§ *Himantopus candidus.*

mile away from the edge of the *lucia*. When we visited this place again at the end of May, the *lucia* had almost completely dried up, and it is extremely unlikely that the flamingoes nested that year in Spain. Even in the wettest seasons, although the flamingoes build nests and lay eggs, they never seem to hatch out young in Spain. We left the nests with some regrets that we had happened upon a dry season, and soon arrived at the edge of the *lucia*. Now we found that our stalk would not be an easy one, as there were many birds of different kinds between us and the flamingoes. If we went straight on we should disturb these birds, and they would disturb the flamingoes, so we had to make a big detour. With infinite trouble we worked to within one hundred yards of the birds in about an hour, but we had frightened several flocks of smaller birds on our way, and when we peeped at the flamingoes from under the horses, we saw that their suspicions had been aroused, and that they were walking rapidly away from us. However, we persevered, and followed them, but they would not allow us to come nearer, and away "like a blood-red flag the bright flamingoes flew."

We had not finished with these flamingoes. Our backs were aching dreadfully, owing to want of practice in walking, bent double, behind small horses. So when our men pointed out that the flamingoes had settled in another *lucia*, and were admirably placed for a drive, it was not for us to deny it. Accordingly, we kept behind the horses until we reached the dry land, and then we crawled some distance to a spot of land which divided the water we had left from the water in which the flamingoes now were. Here we lay down, scarcely concealed by the scanty herbage. About a quarter of a mile in front of us were the birds. We calculated the flock at about

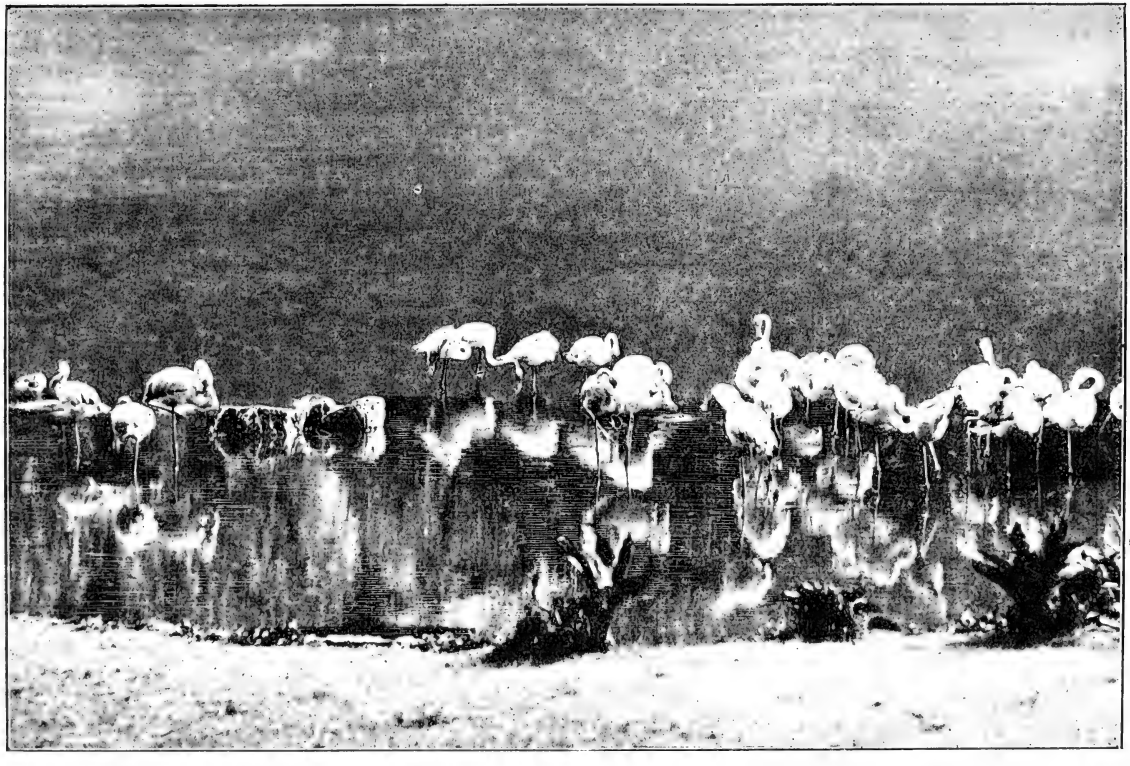

FIG. 8.—Flamingoes.

(From a photograph by Mr. D. Le Souëf. By kind permission.)

five hundred strong—a small flock compared to others we saw afterwards. Our "beaters" had to go a long way to get round the flock, so we had plenty of time to watch the birds with our glasses. Some were standing on one long pink leg—dozing with head and neck tucked away in the feathers of the back; others were striding about slowly and majestically; while others with necks bent and heads inverted, were "sifting" the water with their bills in search of food. They looked a happy party, but were soon to be disturbed by the ruthless arts of man. Suddenly the long necks went up in alarm, and then the bright white phalanx began to show pink here and there as a bird raised its brilliant wings; then followed a great blaze of pink, and with a deep-toned "gonk" from every throat the whole flock slowly rose. As the birds spread out, the rich crimson of their wings eclipsed everything, and a brilliant sunset seemed to flash across the sky. We gazed at them for a moment and then ducked our heads and lay pressed to the ground like a couple of stone curlews. So well had our men driven, that the whole gaggling crowd headed straight for us, with necks and legs outstretched as they flew. Not until they were right over our heads did we jump up. Above us was a bewildering mass of flapping wings—pink and black, and white necks and pink legs—stiff and straight. Four bangs in quick succession, and four flamingoes dropped their heads and legs, crumpled up, and fell spread-eagled on the mud. The Spaniards galloping up laughed loudly at two mad Englishmen leaping wildly round some dead flamingoes.

We were much fascinated by the flamingoes, and had many other opportunities of interviewing them. One day we spent several hours in photographing a small flock.

The results were unfortunately not successful, although we had the good fortune, by reason of every condition being in our favour, to approach within forty yards of the birds.

Our encampment was in the direct line of the evening flight of many birds from one stretch of water to another. Every evening, just at sunset, we sallied forth to sit and wait, in danger of being eaten alive by mosquitoes, for the flight. For ten minutes or so no bird was to be seen or heard. Then in the far distance a great flock of birds appeared silhouetted against the glow of the setting sun. For a quarter of an hour these shadows flew up and down, tailing out and bunching up, performing all sorts of

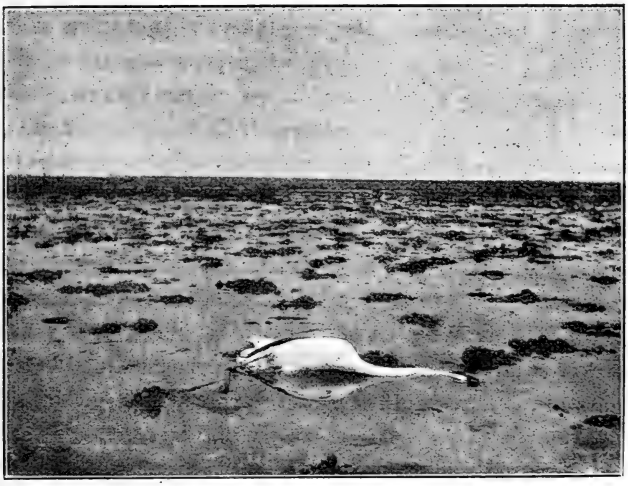

Fig. 9.—The Dead Flamingo.

evolutions, and forming all manner of shapes and patterns like a flock of knot or dunlin in an English harbour. At last they steadied down and flew towards us, looking larger

and larger until we were astonished to find that these practised performers were flamingoes, which we knew to be accomplished runners and walkers, but had hitherto regarded as clumsy flyers.

No better way could be devised for observing shy birds than from behind the stalking horse, and many were the hours we spent thus with our field-glasses to our eyes.

We often approached to within a few yards of avocets and watched their curious method of feeding. The bills of these birds are flat like a piece of whalebone, and are curved upwards. The birds stand in shallow water, and instead of probing the mud as other waders, they sway their heads to and fro, and with their upturned bills scoop from the mud or water the insects and worms upon which they feed.

Many waders which are common on our English coasts in autumn were here in thousands. Most of them had, no doubt, wintered still further south, and were now but breaking the journey to their breeding places—the moors and tundras of the far north. Grey plover,* with white foreheads and black breasts—their beautiful summer dress—were everywhere in small flocks and in big flocks, from April 27th until we left on May 19th. Wild as the grey plover is in England, we found him wilder here, and, next only to the flamingo, he proved the most difficult bird to stalk.

The smaller waders we had no difficulty in approaching, and we often guided our horses right into the midst of a flock before the birds realised that dreaded man was behind the horse. These flocks were composed of many

* *Squatarola helvetica.*

species of birds. To describe one such flock, let me take a page from my notebook written on the spot.

A dunlin,* so near me that I could have touched it with my gun, was tugging vigorously at a monstrous worm which refused to be "drawn," and by his brother's side was another dunlin, looking on with interest and anxiety. Just near them were a number of their miniature cousins the little stints,† while a little further off were curlew sandpipers,‡ with the rich red breasts of their summer plumage, and to and fro, and in and out amongst them, ran those active little birds the ringed plover§ and the Kentish plover.‖ We moved on slightly to examine the rest of the birds, when with a sudden gasp a dunlin spied us and the whole flock flew off. Just at that moment we heard a swish of wings, and a peregrine¶ swept past us. In another moment he had caught up our little friends, and singling one out dashed straight at it, and seized it in his powerful grip. The falcon appeared to take no notice of us, but sailed round and settled upon the dry mud half a mile away. While one of us went off to stalk, the other waited and watched. It was a fine sight to see the noble bird standing on his prey and tearing at it, but presently he left his quarry and rose into the air, only to fall back upon the mud dead. We gazed upon them—slayer and slain—the one a perfect male peregrine, with his barred breast, glorious blue-grey back, and the other a poor little Kentish plover, already torn and headless.

* *Tringa alpina.*
† *Tringa minuta.*
‡ *Tringa subarquarta.*
§ *Aegialitis hiaticula.*
‖ *Aegialitis cantiana.*
¶ *Falco peregrinus.*

III. Reeds and Rushes.

OUR second encampment in the *marismas* was surrounded by somewhat different country from that described in Knowledge, for March, 1899. Instead of scanty verdure, dry mud and shallow *lucias*, we had stretches of marshy land covered with fairly luxuriant grass, and great lakes, shallow but deeper than *lucias*, and thickly overgrown with rushes. This country, separated from the other only by the river, was inhabited by quite a different set of birds —a fact made more apparent when we re-visited the place later on after the birds had commenced to breed.

Instead of the larks and stone curlews of the dry plains, and the flamingoes and migrant waders of the *lucias*, on the borders of these rush-grown lakes were hundreds of stilts and redshanks,* while the lakes themselves were inhabited by many colonies of whiskered terns† and black terns.‡ Many other interesting birds had also located themselves here and there in reedy dykes and on patches of raised and dry ground.

The first of these lakes we visited extended over several

* *Totanus calidris.* † *Hydrochelidon hybrida.* ‡ *H. nigra.*

square miles, and was completely overgrown with rushes; at a distance it looked like a great field of deep waving green, over which flitted and hovered in little companies thousands of graceful marsh terns, appearing sometimes dark and sometimes bright as they twisted and turned in the sunlight.

We hastened through the marshy ground, disturbing as we did so stilts and redshanks, which flew round us uttering

FIG. 10. – Floating Nest of Whiskered Tern.

loud alarm notes. Soon we were brushing aside the rushes, which were shoulder high, and wading up to our knees, and often to our waists, through the tepid water.

We came upon a colony of terns; some rose from their nests and flew round us much agitated; others, their nests not yet completed, flitted past with mouths full of grass; while, again, some, their beaks at right angles, hovered

over the water searching for prey, which they dashed down upon with a graceful plunge, captured, and had eaten almost before the water had run off their sharp wings and elegant body in a glittering spray.

Terns may be counted as among the most graceful of birds, and to watch the varied motions of a colony of whiskered or black terns is indeed a delight. Both these terns build, floating upon the water, nests of grass and rushes, but the black tern, judging from the many nests which we examined, although making a smaller nest, builds it much more compactly and raises it higher from the water than the whiskered tern. In the middle of May we found the nests in all stages. Many contained eggs, many were half finished, and several were merely foundations of a few pieces of rush placed across each other on the water.

Frogs abounded in this marsh, and many storks were wading often breast-high in the water in search of the savoury reptiles, or were flying high overhead clapping their beaks with a cŭp-cŭp-cŭp-cŭp, that resembled the sound of frogs croaking.

We waded on some two or three miles, passing many a colony of terns, and once more reached the shallow water, where noisy stilts and redshanks began again to assert themselves.

Redshanks are so abundant on our home marshes that it is not necessary for me to say anything about them. Stilts are much like redshanks in many of their habits. They are exceedingly noisy, especially when their nests are approached, and although we admired them much and watched them often we hated them on occasions when we were seeking better game and our presence was made known to everything within many yards by the "querep-querep" of the stilts overhead.

When feeding, stilts have also much the same action as redshanks, especially in the way in which they continually jerk their heads backwards and forwards. We found a great many of their nests, and noticed that those placed in swampy ground were built substantially, whereas those on dryer ground were much less so, while several found on quite dry ground were composed of nothing but a few pieces of grass placed in a "scoop." The birds became very much agitated when their nests were approached. They flew over us calling loudly, and repeatedly settled within a few yards of us, seeking to attract our attention by running about and jumping into the air as if they were dancing, then rapidly quivering their wings and with gaping beaks chattering softly and continually. While watching these birds we witnessed a curious little neighbours' quarrel. A long-legged stilt was making little rushes and dabs at a couple of redshanks, which looked so short and quaint compared with their tormentor, and all the time the three were uttering soft, but imprecatory noises (swear words we imagined) at each other.

The marsh was full of life. There were numerous tortoises, difficult to find amongst the weeds, and the whole place was infested with myriads of dragon flies, every rush being covered with its share of them. Once I gave one of our men, who seemed to have nothing to do but smoke the delicious *cigarillo*, a net, and showing him a dragon fly told him to go and catch as many as he could, as I wanted some for a friend. He went off delighted, and stayed away three hours and came back with one butterfly! Cigarettes and the sun were too much for him when he had once sat down out of sight.

On one occasion as we were watching some stilts and ducks a peregrine falcon suddenly appeared circling over

their heads. The birds gradually became more and more frightened, until at last they rose from the water and took a short flight. Down came the falcon like a stone and knocked a duck on to the water, and there he left it floating keel uppermost. The ducks and stilts settled again, but the falcon still circled overhead until the now terrified birds rose again. This time he singled out a stilt, struck

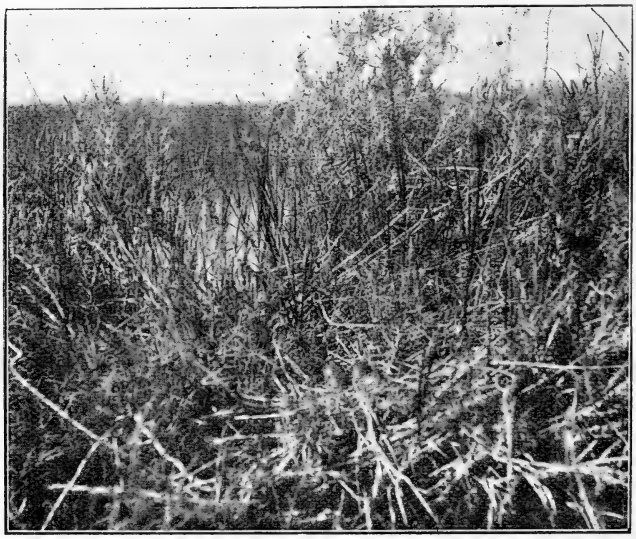

Fig. 11.—Stilt's Nest strongly built in Wet Ground.

it in a flash, and left it like the duck floating on the water. Apparently he was only practising or having some sport, for he swept right away and left his victims limp and dead. But a dead body is not left for long in this country where hungry kites and birds of prey abound. One afternoon we shot and lost a duck and a slender-billed gull ;* the next

* *Larus gelastes.*

morning we visited the spot again, and on the edge of the marsh were two little heaps of feathers—one brown, the other a delicate pink—all that was left of the duck and the beautiful gull.

On the dry ground some distance from the marsh, or perhaps raised above it, many interesting birds were nesting, and all betrayed their anxiety as we approached. This they did in different ways, the pratincoles* with their strong swallow-like flight whirled round our heads and made as much noise and fuss as the stilts. They often settled very near us, but instead of dancing like the stilts they crouched, and spreading their long wings to the full extent rested them upon the ground. When they wish to rise from this position and fly they invariably close their wings, possibly because their legs are too short to raise the wings sufficiently, but they run fast with their wings closed. The eggs of this bird, two or three in number, are laid side by side in a little scoop in the dry mud. They are handsomely marked and mottled, but as their shape and colour are similar to a stone or a piece of mud at a short distance they are not easily discovered. There were other birds nesting in this dry mud near the water. Black and white avocets laid their four brown eggs in a hollow in the mud, usually adorned by a feather or two—often a bright pink one from a flamingo. In one spot we could stand still and touch five separate nests with a gun, and our horses sometimes trod on the eggs, so plentiful were they. Avocets do not annoy one like stilts and pratincoles; when their eggs are approached they fly round complaining for a few minutes, and then go away to stand and await developments at a distance; and so do the lesser terns† and Kentish plovers, the eggs of which we also found on this mud.

* *Glareola pratincola.* † *Sterna minuta.*

Besides many patches of tall reeds here and there in the marsh, there were several long dykes very thickly grown with reeds as high as small trees. These dykes resounded with the hoarse and incessant croaking of great reed warblers —small brown birds with loud harsh voices. As mentioned in my first article these birds are difficult to see. Although bold enough when in cover—for they will cackle into one's ear at a yard's distance—they leave their retreats only to flit out and in again, and it is impossible to do more than catch a passing glimpse of them when amongst the waving reeds. We managed to beat some of them out and so get specimens, and we also found their beautiful nests, made of the flower of the reed and woven round four or five stems. Fastened in this way on the reeds they sway with every gust of wind, but the cup of the nest is so deep that the eggs are safe from falling out.

Whilst exploring one of these dykes in search of the great reed warbler, we saw a little bittern,* a black and creamy-white bird rather larger than a waterhen, run into a thick mass of reeds. We surrounded the spot, and eventually managed to drive the bird from its hiding place, but it ran past us like a rat and was up the bank of the dyke before we could move. We rushed to the top just in time to see it flying across to a reedy swamp, and thither we quietly followed it. Just as we reached the reeds another little bittern flew out. We shot at it but only succeeded in wounding it. The bird flew a short distance and then perched on a reed, gripping it firmly with one foot above the other. As we approached, the bittern pointed its bill straight up into the air, and stretched up its neck and body until it was long and attenuated and resembled a

* *Ardetta minuta.*

reed. This attitude is commonly employed by the bitterns for purposes of concealment when hard pressed. A brown-coloured bittern is exceedingly difficult to find in a reed bed when in this position, and so is a little bittern where the reeds are thick and the light broken up, but in the present case the pied plumage of the bird was very conspicuous in the more or less open space which it had chosen. The bird, however, seemed to consider itself quite invisible, for it remained stiff and motionless although we went within a few yards of it. By wading quietly through this reed bed we put up several more of these birds, and we had also the good fortune to find one of their nests made of dry pieces of reed, and carefully concealed. The nest contained five eggs of the purest dull white.

As mentioned in my first article, a small portion of the *marismas* is dotted over with pines and cork oaks, and overgrown with a very dense and tall undergrowth, composed of tamarisk, gorse, cistus and other shrubs, sometimes growing almost to the size of trees. This part of the *marismas* is near the sea, from which it is protected by miles of sand dunes. These are increasing so rapidly in height and breadth that many trees, and even whole woods, have been covered and eventually stifled to death by the shifting sand. In riding across these sand hills one actually passes over the tops of many a tall dead tree hidden under the sand, or guides one's horse amongst the topmost branches of some big pine, which is still living and fighting the irresistible sand that will eventually smother it, The sight of a grove of these trees buried up to their "necks" in sand and yet still living, is not to be forgotten.

We approached this country from the river, and as our boat neared the shore we noticed that the mud of the river

bank was thickly studded with what looked like small stones, but no sooner had our boat grounded than all these "stones" disappeared as if by magic. We landed and

Fig 12.—Stilt's Nest slightly built on Dry Ground.

found that the mud was bored in every direction with holes, and on going a little distance off and remaining

quiet, the "stones" appeared again in thousands, and we soon discovered that they were really small brown crabs. The crabs seldom stray far from their holes, so that it was by no means easy to catch any of them. If surprised suddenly, and not being able to reach his own home, a crab would dart into a neighbour's hole, but only to be chased out by the owner, and thus he could be captured before going to ground again. Some curlew* and whimbrel† were running about on the edge of the river at a little distance away from us, and with our glasses we could see that every now and again one of the birds would make a rush, and catching a crab by a leg would drag it from its retreat. The bird would then walk off with its captive to the hard ground, and after breaking the crab's shell against the stones, as a thrush does a snail, make short work of its soft inside.

Of the many interesting birds such as eagles and kites to be found in the wooded part of this country I hope to write in a subsequent article. Occasionally amongst the tamarisks there is a small lake often with an island, sometimes covered with reeds or rushes, sometimes with tamarisk. Many kinds of herons breed on these islands in colonies. Owing to the dry spring of 1898, water, and hence food for the birds, was scarce, and consequently they began to breed much later than usual. Up to the 7th of May, no herons, excepting the purple heron, were to be found at their breeding places. However, we had ample opportunities of watching these beautiful birds, which were always to be seen feeding in the marshes bordering on the wooded land. A most striking and beautiful sight is that of a flock of buff-backed herons,‡ looking a dazzling white in

* *Numenius arquata.* † *Numenius phoeopus.*

‡ *Ardea bubulcus.*

the sunlight, attending on a herd of black bulls or a group of horses. Some walking by the side of the cattle are constantly stretching out their beaks to the horses' head or jumping up to its belly, in order to snap off a fly or tick which they have spied; others perched on the backs of the beasts relieve them of many an enemy. All the while the cattle never flinch, but seem to know perfectly well that the birds with their graceful movement and delicate peck are doing them a service.

Squacco herons,* with reddish-brown backs, were also in these marshes, as well as many flocks of that most beautiful of all the heron tribe—the little egret.† The entire plumage of this lovely bird is of a pure snowy white, its beak and legs are black, and its eyes yellow. Like all the herons it has long plumes on the head and breast, and growing from the middle of its back, and drooping over its wings, are those filamentous wavy feathers so exquisitely beautiful on the bird—so artificial and unsightly on a woman's bonnet.

* *Ardea ralloides.* † *Ardea garzetta.*

IV. Scrub and Wood.

A WOODED portion of the *marismas* was briefly referred to in my last article (Knowledge, August 1899), and as this part of the country is interesting from several points of view, a more detailed description of it and of its wild inhabitants may prove acceptable.

Our first day's work in this scrub and wood was as novel to us as had been our first day's stalking behind the *cabestro*. We were fortunate in having as headquarters a large rambling old house, from which we set out accompanied by two keepers and a boy, all on horseback—an imposing cavalcade, surely, for a bird-nesting expedition. But to have a smaller escort in Spain would be considered *infra dig*, while to walk when there are horses to ride would be altogether out of the question. We were loth to depart from the customs of the country, and, therefore, consented to this arrangement. As we rode in single file along narrow pathways, through a growth of tamarisk, gorse and other plants, as high as our horses' heads, and, in many places, quite impenetrable, or as we spread out in different directions to search for birds' nests, we began to understand the advantage of the Spanish system of bird-nesting. From horseback we could see over the high cover, and so guide our way to the most likely looking spots.

On a horse, too, one can cover more ground in a day than on foot, which is a great advantage in a big country with a burning sun ; and, again, one feels more comfortable on a horse when suddenly confronted by a fierce-looking wild sow with her litter—at all events, such was our experience. Dotted about here and there in the midst of the tamarisk were small groups of cork oak trees, and to the exploration of these we devoted our first day. Every tree contained a bird or a nest, and in many cases several birds were breeding in the same tree. We discovered many nests of both the red and black kites, and found another use for our horses in climbing up to them. The lower part of a tree is generally branchless, and so the most difficult to climb. By standing up on your saddle a bough is generally within reach, and thus the difficulty is overcome, provided the horse does not move away at the critical moment. Most of the red kites at this date (April 22nd) had young ones, clothed in dull white down, and with beaks and legs apparently many sizes too big for their strength and age. The few eggs of the red kite which we found were much incubated, whereas those of the black kite were all fresh.

The first red kite's nest found was near the top of a cork oak tree. It was about the size of a rook's nest, but much flatter, and was built of sticks and lined with dung. It was swarming with ants which had climbed the tree, and contained three young birds, one of them covered with a half-eaten rat, while the others were nestling against the remains of a couple of small rabbits. The nest was decorated with bits of newspaper and dirty rags and strips of old linen, some of which, hanging down from projecting sticks, fluttered like pennants in the breeze.

Other nests contained by way of larder the remains of

snakes and coots. All were not lined with dung, but every one was adorned, even in places far from any human habitation, with the "lesser linen," which Shakespeare bids us look to when the kite breeds. The black kite's nest differs little from that of its relation, except that it is less ornamental, and sometimes contains no rags at all.

Green woodpeckers,* of a species very nearly allied to that found in England, were abundant amongst the cork oaks, as were jackdaws,† while now and again a brilliant blue roller‡ would glide up into a thick tree, or a golden oriole,§ always shy, would give us a glimpse of his glorious black and gold as he dipped away into another tree to resume his mellow piping. An occasional view of these brilliantly coloured birds amongst the trees, and the bee-eaters,‖ with their gorgeous rainbow hues, flying round like swallows in the open, gave the whole place quite a tropical aspect. But without the brilliant sun the metallic blues and greens of the bee-eater are dull and brown, and it is only when the sun is shining full upon it that one sees all the gorgeous colouring of the bird as it hovers and floats and turns in the air. It seems a sin that a bird should be destroyed simply because of its beauty; but so it is—fashion demands it—and thousands of bee-eaters are annually snared and roughly skinned by the Spanish natives, who sell them to the milliners in Paris. We saw a bee-eater going through the most extraordinary antics in the air, and then perch on a tree to gasp for breath. We shot the bird, and found round its neck a horsehair noose attached to a small peg. Bee-eaters lay their eggs in a tunnel which they are at some pains to bore into a

* *Gecinus sharpii.* † *Corvus monedula.* ‡ *Coracias garrulus.*
§ *Oriolus galbula.* ‖ *Merops apiaster.*

bank or into flat ground. The natives place nooses, fastened to a peg driven into the ground, over these nesting holes, so that when the bird emerges it is caught and strangled. The bird which we shot had evidently loosened the peg and flown away with a burden from which nothing but death could release it.

But notwithstanding this wealth of colour, melody was not wanting, for everywhere nightingales* poured forth their songs, although certainly not such full-toned ones as we have in England. Now and again we heard a soft "hoo-hoo," and an occasional hiss, and found the performer a hoopoe,† strutting about, proudly raising its beautiful crest.

Amongst others of the many birds we saw were several little owls.‡ One of these comical little birds allowed us to ride right up to it, as it sat in a small tree. We stared hard at it, and it stared hard at us, with its yellow eyes. I almost touched the bird with the muzzle of my gun, whereat it flew off to another tree, and proceeded to hurl screeches and whoo-whoos at us.

We did not always ride about this country; indeed, we found a long lonely walk often a great relief, and a great advantage, for one cannot observe small birds from horseback, besides which, our horses, although hobbled at night, would sometimes be driven by flies and mosquitoes to a worse torment—a leech-infested marsh—and, as a consequence, would appear in the morning only fit (as the keepers remarked) for the bull ring.

One of these lonely walks may be worth recording. I had been forcing my way through the thickest cover for some miles without seeing anything but a stag or two

* *Daulias luscinia.* † *Upupa epops.* ‡ *Athene noctua.*

(where wild boars are common, the crash of a stag, as it jumps up within a yard of one, is rather disconcerting), when I came upon a clump of cork trees. I crept cautiously up to them. The first tree contained nothing, but near the top of the second there sat a great griffon vulture. I coveted his skin, although I had no wish to skin him myself, as those who know what a griffon vulture is will understand. However, I fired, and down fell a very mountain of flesh and feathers. He was not dead, so I put a charge of small shot into his head, at which he sank down, and apparently died. But it is even easier to kill a cat than a big vulture. I was sitting down with my back to the vulture, eating lunch, and considering how I could carry him home, when I heard a great rustling, and there was my "dead" bird hobbling off, drooping its broken wing. I leisurely picked up my things and was proceeding to follow the vulture, when it disappeared into the thickest part of the scrub. It seems incredible that one could lose a badly wounded bird as large as a turkey in scrub however thick. Nevertheless I did lose that bird, and was never able to find it again, notwithstanding many hours of diligent searching. My search, it is true, was somewhat distracted, firstly, by a large eyed lizard,* about two feet long, which was sunning itself on a little patch of bare sand, from which it made off on my approach with an ungainly gallop, like a young crocodile. Then I heard a harsh noise going on behind me. I turned and saw a serpent-eagle†—a smallish light-coloured eagle—hovering over a tree from which sounded a shrill "tic-tic-tic." Suddenly it closed its wings and went down into the tree like a stone. Presently

* *Lacerta ocellata.* † *Circaetus gallicus.*

it rose again and flew away, while the "tic-tic-tic" again sounded from the tree. I crept forward and out flew another eagle from a nest in the tree. The nest was compactly made of stout twigs, and had for a lining a number of acorn cups and a long clean backbone of a snake, but there were no eggs. On visiting this nest again some days afterwards it was still empty, and the snake's skeleton had disappeared.

The griffon vulture was not the only bird that came to life again, so full of surprises to us was this strange country. We were sitting one evening "picking oakum," not from inclination but from necessity, having run short of tow wherewith to fill up our bird skins, when a kite, which had been shot some hours before, and was just about to be skinned, suddenly got up from the floor, and flew round the room. Verily the ornithologist requires strong nerves.

We made several expeditions amongst the sandhills bordering on the sea. The markings on the surface of these sandhills are well worth studying. Everywhere the tracks of cows, horses, deer, and rabbits are to be seen. Look a little closer at the sand, and you will find that its whole surface is covered with smaller tracks, crossing and re-crossing each other. You can decipher those of birds of different kinds, lizards, large and small, as well as tortoises, but there still remain to be accounted for a vast number of intricate dots, lines, marks, and trails, which may have been made by mammals, birds, reptiles, or even insects. Here and there amongst the sandhills is a pine wood, which still holds out against the all-embracing sand. In these stunted pine trees we found kites' nests, as well as those of ravens,* not more than twenty feet

* *Corvus corax.*

from the ground. The raven is well known as a very early breeder in England, often having eggs in the beginning of March, but in Spain, although so many miles further south, we found fresh eggs on April 26th, and slightly incubated ones as late as May 11th. It is possible, of course, that the bird has two broods in Spain, but I think it unlikely, as we never saw any young ravens about.

As we were riding one day across these sandhills, a great black eagle—the Spanish Imperial eagle*—rose in front of us and flew away with a big straggling mass of white in its claws. We followed it, anxious to discover what was its prize; and we were not the only beings who watched the great bird with interest. No sooner had it settled again than four kites and two ravens flew down and stood near at hand, whilst several more kites swooped round and round in the air. The eagle, rending and devouring his prey, took no notice, but the kites and ravens watched his every movement, afraid to attack, but still expecting a share of the booty. At last we fired a shot from our hiding place. The eagle was so surprised that he dropped his quarry and soared away on high in giant circles, while the kites and ravens disappeared as if by magic. The straggling white mass was a half-eaten spoonbill, a bird nearly as big as the eagle itself.

There are two kinds of magpies in Spain, our common magpie† and the Spanish or azure-winged magpie.‡ We found many nests of the common magpie. They were all built in low bushes, and none of them had the dome, which is the chief characteristic of the magpie's nest in England, as well as, I believe, in every other country it inhabits. Why the magpie should build a roofless,

* *Aquila adalberti.* † *Pica rustica.* ‡ *Cyanopica cooki.*

unprotected nest in a country swarming with egg-eating and chick-stealing birds is a puzzle towards the solution of which I have no suggestions to offer.

The Spanish magpie occurs only in the Iberian Peninsula, and is even there very locally distributed. We met with it in considerable numbers amongst pines and wild olives some long way from the riverside. Of a most delicate blue in general colouring, with a velvety jet-black head and a long elegant tail, it is one of the most beautiful birds. In habits it reminds one much of the jay, especially in the way in which the birds go about in small parties chattering loudly, always keeping just ahead of one, and out of sight in the tree tops. We had many opportunities, however, of surprising the magpies when feeding on the ground. Like the fieldfare and other birds they are very sociable, and if one nest is found several others will be discovered in neighbouring trees. All the nests we saw were built in small pine trees, and were made of a silvery flower interwoven with twigs of pine, the inside being lined with red cows' hair—a beautiful nest for a beautiful bird.

It would weary the reader to be told of all the charming and interesting birds that we saw in this wonderful country, but I cannot refrain from telling of an eagle and its nest.

We were riding home after a hard day's work, when we spied a large black bird sitting near the top of a cork tree some distance off. The keepers proclaimed it a *cuerbo* or raven, but a glance through our binoculars told us it was something better. Accordingly, we made a wide circuit until we had placed the tree between ourselves and the bird. Then we dismounted and crept as quietly as possible through the cover until we were under the tree. Here an unforeseen difficulty presented itself. The tree was so thick that we could not at first see the bird. At length

we caught sight of it sitting all unconscious above our heads. We fired, and down it dropped, not to ground but into a great nest which we had not seen just below it.

It did not take us many seconds to reach that nest. It was just a flat platform, some six feet across, and was made of green boughs. In it was the great bird we had shot lying stone dead—a Spanish Imperial eagle—while near the old bird were two young ones clad in soft white down, and a little distance from them a great round dirty-white egg. There was room in the nest for a couple of sheep, but the eagle's larder contained nothing more than a few rabbits and the legs of a coot.

A good idea of the wild character of the country may be gathered from the fact that this nest was within a mile of the house in which we were staying, and yet the keepers had no suspicion that one of the most deadly game destroyers had taken up its quarters there.

V. Flowery Plains and Bustards.

MUCH has been written concerning the great bustard, but I cannot conclude these articles without a brief reference to this noble bird, once so common on our own downs and plains. In the south of Spain the great bustard is still abundant, and is always likely to remain so. We made two or three short expeditions in search of these birds and were always fortunate in seeing them, but only on one occasion were we lucky enough to bring one to bag.

The country by the river, just below Seville, is admirably suited to the habits of the bustard. The land here is a level plain, like the true *marismas* which lie further down the river, but unlike the barren *marismas*, the soil of this land is fertile and produces luxuriant crops of grass and corn. The grass and corn, besides providing them with ample food, form admirable cover for the great bustards when they most need it—in the breeding season.

To this country, then, we devoted a day in the hope of seeing this, the noblest of game birds, at close quarters; but to get to close quarters was no easy task. The stalking horse, our deadliest weapon in the *marismas*, was of no avail, and other methods had to be used. Our men rode the horses, while we walked behind them. We passed through enormous expanses—one cannot call them fields—

of pasturage, with great patches of white and yellow flowers blazing and dazzling in the brilliant sun. Just as we were nearing a vast stretch of corn, one of our men stopped his horse, and shading his keen eyes from the glare, exclaimed, *abutarda*—bustard. He pointed, and we stared, but it was some time before we could make out a group of bustards. When we had once made them out, they appeared so big and brown in the grass, that we wondered why we had not seen them before. A careful scrutiny through the binoculars revealed a band of eight—some squatting and only visible when they raised their heads, some standing sleepily, and some pecking at the ground here and there in a desultory fashion. We watched the birds some time, and then, after a careful study of the surrounding land and a brief council of war, we all turned off to the right. The bustard pays little attention to a man on horseback, and will often allow him to approach within two or three hundred yards, but a man on foot is no sooner seen than avoided. We accordingly kept well hidden behind the horses until we had put some high corn between us and the birds. Here our men left us, and while we lay hidden behind the corn, some hundred yards apart, they galloped round in a wide circuit with the object of getting behind the bustards and driving them over us. Crouched behind the corn we waited, but waited in vain, no bustards appeared. At last one of the men rode up saying that the birds had made off to our right before they could get round them. Luckily they did not fly far, and we soon found them again. The same tactics were resorted to, but were again a failure, and worse still the birds flew so far that we failed to mark them down. Indeed it is no easy matter to drive such wary birds and powerful flyers to a definite point on an immense plain.

We went on again, and at length found four other bustards in a more advantageous position for a drive. We hid in a deep ditch, and had the advantage of being able to keep the birds in view the whole time. Our men took a wide circuit, and getting well behind the bustards, closed up quickly. The birds seemed to be very drowsy as they squatted or walked about, but suddenly their heads went up, and as they saw the horsemen advancing they ran a few yards, and then quickly got on the wing. They had looked brown before, but directly they opened their wings, a whitish patch caught the eye, and as they came on with heads outstretched, they looked more like heavy storks than anything we had ever seen. The four birds flew seemingly slowly, but in reality at a great pace, and steered straight for my friend, who fired at the largest as it passed over his head. Down came the great bird an awful crash behind him. We ran up to it and found that it was a young male, perhaps a year old, weighing about fifteen pounds (old males sometimes scale over thirty pounds), and wanting the beautiful "whiskers" which adorn the full-grown male. It was only winged, but made no attempt to run away, and when we approached, it pecked at us, and uttered a hissing sort of bark.

We spent another day after bustard, far from the river, in a country studded with small round-topped hills, covered at the time of our visit with clover and stubble. Bustards seemed plentiful here, and we soon found a party of thirteen and another of four. We lay flat in the stubble on the slopes of the hills, while the men rode round to drive the birds. But the drive was not successful, and owing to the long flight taken by the bustards, and the nature of the ground, it was impossible to mark them down.

Our last experience with bustards was late in May.

We left our boat and the river and proceeded to ride across a vast plain, covered with short, brown, sunburnt grass. We had gone some distance when a great sheet of water suddenly appeared in front of us. The sun was behind us and covered with clouds, and the distance was remarkably clear. Miles beyond the water we could see trees and houses, and further off still a low range of hills, all of which were clearly reflected, while a large herd of cattle, about a mile away, seemed to be standing knee-deep in the water—so perfect was the reflection.

We pointed it out to our men, but they laughed and said there was no water for miles. "Nonsense," said we, "there it is; can't you see it?" They laughed again. We took our binoculars, and still saw water clearly, but the glasses showed it further away instead of nearer. We rode towards our lake, but it receded and receded until it disappeared altogether, and the burnt-up plain appeared as dry and parched as before.

On this plain were a number of sandgrouse. They were very wild and difficult to get near. Their sandy colour harmonised so perfectly with the brown grass that it was impossible to see them until they flew up and away like rockets, and so we could not use the stalking horse to approach them. However, several flocks allowed us to come near enough for us to identify them—the black bellied sandgrouse* by its black belly, which is very conspicuous when the bird is flying, and the pin-tailed sandgrouse† by the long pointed feathers in its tail.

At length we reached a great field, strongly fenced, and overgrown with rank grass and weeds as high as our horses' withers. Here we hoped to find the little bustard,‡

* *Pterocles arenarius.* † *Pterocles alchata.* ‡ *Otis tetrax.*

but careful search was difficult owing to the swarms of horse flies, as large and as yellow as hornets, and with a bite that was villainous even through our clothes. Moreover, the field contained a number of magnificent black bulls of famous fighting breed, which were enraged by the flies and required constant discouragement with stones or clods of earth. After half-an-hour's search we found a little bustard, which ran swiftly through the long grass and then flew up about a hundred yards away. In general colouring it reminded us of the willow grouse in autumn, by reason of its brown back and conspicuously white wings, but the flight was altogether peculiar. The bird never seemed to raise its wings above its body, but keeping them arched downwards, beat them rapidly, and so flew in an even slope until high up in the air.

After further search we surprised a great bustard, which also ran from us, and so effectually hid itself in the thick tangle of vegetation that we failed to induce it to fly or to find it again. This bird may have been a female with eggs somewhere in the field, or it may have been a male incapable of flight. Towards the end of May the great bustard loses its quill feathers for a time, and has then to seek safety in running and hiding. This fact may have given rise to the notion that the bird always runs and can be hunted with dogs. Except just at the time of the moulting of the old quills and the growing of the new, the great bustard could scarcely be coursed with dogs since it takes to its wings on the slightest alarm, and is capable of powerful and sustained flight.

On our return route to the river we passed through field after field of rich pasturage containing bulls of every age, all jet-black, of the finest fighting breed in Spain—that of the Marques del Sartillo.

List of Birds

GUADALQUIVER, APRIL AND MAY, 1899.

In concluding these papers on our trip to the Guadalquiver, I have thought that a list of the birds which we found would be interesting, and perhaps of some value, to the systematist or to the future traveller in the district. Only those birds which we identified beyond all doubt have been inserted, and dates considered as interesting have been added. In noting these dates it must be borne in mind that April 2 was the first date we began collecting, April 4 was the first date in the *marismas*, and May 19 the last.

The district includes the country within a few miles of the Guadalquiver from Seville to its mouth at San Lucar.

Note.—*In the following list an asterisk signifies that the bird was obtained, and a dagger that the eggs were found.*

---

* *Turdus musicus*, Song Thrush.—A few seen. Latest date (bird), April 11.

Turdus merula, Blackbird.—Not common.

* *Saxicola albicollis*, Black-eared Wheatear.—Local.

* *Pratincola rubetra*, Whinchat.—One pair only April 14.

* † *Pratincola rubicola*, Stonechat.—Abundant. Fresh eggs and fledged young, April 2.

* *Ruticilla phoenicurus*, Redstart.—Very few. Latest date (bird), April 30.

Ruticilla titys, Black Redstart.—A few.

* *Daulias luscinia*, Nightingale.—Very common. Earliest date (bird), April 2.

* *Sylvia cinerea*, Whitethroat.—Common. Earliest date (bird), April 2.

* *Sylvia atricapilla*, Blackcap.—Common.

* *Sylvia hortensis*, Garden Warbler.—A few. Earliest date (bird), April 11.

* *Phylloscopus sibilatrix*, Wood Warbler.—One only April 29.

* *Phylloscopus trochylus*, Willow Warbler.—Fairly common.

* *Sylvia subalpina*, Subalpine Warbler.—Fairly common.

* *Aëdon galactodes*, Rufous Warbler.—Fairly common. Earliest date (bird), May 5.

Acrocephalus streperus, Reed Warbler.—One only seen and two nests found, May 21.

* † *Acrocephalus turdoides*, Great Reed Warbler. — Abundant. Earliest dates—(bird), April 4 ; (eggs), May 18.

* *Acrocephalus aquaticus*, Aquatic Warbler.—One only April 13.

Cisticola cursitans, Fantail Warbler.—A few seen.

Parus major, Great Tit.—A few seen.

Parus cristatus, Crested Tit.—Two seen, April 16.

* *Motacilla flava*, Blue-headed Wagtail.—Abundant.

* *Anthus campestris*, Tawny Pipit.—Small flocks, April 30 and May 1.

* *Oriolus galbula*, Golden Oriole.—Not common. Earliest date (bird), April 16.

* † *Lanius meridionalis*, Southern Grey Shrike.—Local. Nestlings and fresh eggs, April 2.

* † *Lanius pomeranus*, Woodchat. — Abundant. Earliest dates—(bird), April 2 ; (eggs), May 11.

Muscicapa grisola, Spotted Flycatcher.—Abundant. Earliest date (bird), May 2.

* *Muscicapa atricapilla*, Pied Flycatcher.—Abundant. Earliest date (bird), April 11, latest date (bird), May 5.

Hirundo rustica, Swallow.—Abundant.

Chelidon urbica, House Martin.—Abundant.

Cotile riparia, Sand Martin.—A few.

Ligurinus chloris, Greenfinch.—A few.

Carduelis elegans, Goldfinch. – Abundant.

Passer domesticus, House Sparrow.—Abundant in villages.

Fringilla cœlebs, Chaffinch.—A few.

* *Emberiza miliaria*, Corn Bunting. — Abundant in cultivated districts.

* *Emberiza hortulana*, Ortolan Bunting.—One only April 30.

* † *Sturnus unicolor*, Sardinian Starling.—Fairly common. Fresh eggs, April 28.

* † *Pica rustica*, Magpie.—Common locally. Earliest date (eggs), April 26.

* † *Cyanopica cooki*, Spanish Magpie.—Abundant locally. Earliest date (eggs), May 11.

* † *Corvus monedula*, Jackdaw.—Common locally. Earliest date (eggs), April 22.

† *Corvus corax*, Raven.—Fairly common. New and empty nest, April 11; fresh eggs, April 26; incubated eggs, May 11.

* *Galerita cristata*, Crested Lark.—Abundant in cultivated districts.

* *Alauda arvensis*, Sky Lark.—One only April 8.

* *Alauda arborea*, Wood Lark.—Two only April 16.

* *Calandrella brachydactyla*, Short-toed Lark.—A few.

* † *Calandrella bœtica*, Andalucian Short-toed Lark.—Abundant in *marismas*. Earliest date (eggs), April 4.

* † *Melanocorypha calandra*, Calandra Lark.—Abundant. Earliest date (eggs), April 4.

Cypselus apus, Swift.—Abundant. Large migration. May 6.

Cypselus melba, Alpine Swift.—Many seen April 2.

* *Caprimulgus ruficollis*, Red-necked Nightjar. — Common. Earliest date (bird), May 3.

* *Jynx torquilla*, Wryneck.—One only April 15.

* *Gecinus sharpii*, Spanish Green Woodpecker.—Common locally.

* *Coracias garrulus*, Roller.—Common.

* *Merops apiaster*, Bee-eater.—Abundant. Earliest date (bird), April 5.

* *Upupa epops*, Hoopoe.—Common.

* *Cuculus canorus*, Cuckoo.—Fairly common.

Coccystes glandarius, Great Spotted Cuckoo.—Local.

* *Strix flammea*, Barn Owl.—One only.

* *Athene noctua*, Little Owl.—Common.

Gyps fulvus, Griffon Vulture.—Common.

Vultur monachus, Black Vulture.—Rare.

* *Neophron percnopterus*, Egyptian Vulture.—Common.

* † *Circus aeruginosus*, Marsh Harrier.—Fairly Common. Earliest date (eggs), April 5.

* † *Circus cineraceus*, Montagu's Harrier.—Abundant. Earliest dates—(bird), April 5; (eggs), May 13.

* † *Aquila adalberti*, Spanish Imperial Eagle.—A few.

* *Circaëtus gallicus*, Serpent Eagle.—Fairly common.

* † *Milvus ictinus*, Kite.—Very common. Young in down, April 16.

* † *Milvus migrans*, Black Kite.—Abundant. Earliest date (eggs), April 22.

* *Falco peregrinus*, Peregrine.—Two only, April 9 and 23.

* † *Falco tinnunculus*, Kestrel.—Common.

* † *Falco cenchris*, Lesser Kestrel.—Common. Fresh eggs, May 21.

* *Ardea cinerea*, Common Heron.—A few. Latest date (bird), April 13.

* † *Ardea purpurea*, Purple Heron.—Abundant. Fresh eggs, April 5 and 23.

* *Ardea garzetta*, Little Egret.—Common locally.

* *Ardea bubulcus*, Buff-backed Heron.—Very common.

* *Ardea ralloides*, Squacco Heron.—A few.

* † *Ardetta minuta*, Little Bittern.—A few. Earliest date (eggs), May 21.

† *Ciconia alba*, White Stork.—Abundant.

* *Plegadis falcinellus*, Glossy Ibis.—Common locally.

* *Platalea leucorodia*, Spoonbill.—Fairly Common.

* *Phœnicopterus roseus*, Flamingo.—Abundant.

* † *Anas boscas*, Mallard.—Common.

* *Anas strepera*, Gadwall.—A few. One shot April 30.

* *Nettion crecca*, Teal.—A few. One shot April 6.

* *Mareca penelope*, Wigeon.—A few.

* † *Anas angustirostris*, Marbled Duck.—Very common. Earliest date (eggs), May 18.

* *Columba palumbus*, Ring-dove.—Common.

* *Turtur communis*, Turtle-dove.—Very abundant. Earliest date (bird), April 23.

Caccabis rufa, Red-legged Partridge.—Common.

Pterocles alchata, Pin-tailed Sandgrouse.—Local.

Pterocles arenarius, Black-bellied Sandgrouse.—Local.

* *Rallus aquaticus*, Water-rail.—A few.

* *Gallinula chloropus*, Water-hen.—A few.

* † *Fulica atra*, Coot.—Abundant.

* *Otis tarda*, Great Bustard.—Common.

Otis tetrax, Little Bustard.—A few.

* † *Oedicnemus scolopax*, Stone-curlew.—Common.

* † *Glareola pratincola*, Pratincole. — Very abundant. Earliest dates—(bird), April 7; (eggs), May 17.

* *Aegialitis hiaticula*, Ringed Plover.—Very common. Seen on last day in *marismas* (May 19).

* *Aegialitis curonica*, Lesser Ringed Plover.—One only.

* † *Aegialitis cantiana*, Kentish Plover.—Abundant.

* *Squatarola helvetica*, Grey Plover.—Abundant. Earliest date (bird), April 27. Seen on last day in *marismas* (May 19).

* † *Vanellus vulgaris*, Lapwing.—Abundant.

* † *Recurvirostra avocetta*, Avocet.—Common.

* † *Himantopus candidus*, Stilt.—Abundant.

* *Tringa alpina*, Dunlin.—Common. Latest date (bird), May 14.

* *Tringa minuta*, Little Stint.—Common.

* *Tringa subarquata*, Curlew Sandpiper.—Common. Seen on last day in *marismas* (May 19).

* *Calidris arenaria*, Sanderling.—Fairly common. Latest date (bird), May 15.

* *Machetes pugnax*, Ruff.—Fairly common. Latest date (bird), May 3.

* *Totanus hypoleucus*, Common Sandpiper.—Common. Seen on last day on river (May 23).

* *Totanus glareola*, Wood Sandpiper.—A few. Earliest date (bird), April 12. Latest, April 25.

* † *Totanus calidris*, Redshank.—Very abundant.

* *Limosa belgica*, Black-tailed Godwit.—Several flocks. Large flock seen on last day in *marismas* (May 19).

* *Numenius arquata*, Curlew.—Fairly common.

* *Numenius phœopus*, Whimbrel.—Fairly common. Latest date (bird), May 5.

* † *Hydrochelidon nigra*, Black Tern.—Very common. Earliest dates—(bird), April 9; (eggs), May 17.

* † *Hydrochelidon hybrida*, Whiskered Tern.—Abundant. Earliest dates—(bird), April 9; (eggs), May 17.

* *Sterna anglica*, Gull-billed Tern.—Fairly common.

* † *Sterna minuta*, Lesser Tern.—Common. Earliest dates—(bird), April 13; (eggs), May 18.

* *Larus ridibundus*, Black-headed Gull.—One only May 17.

Larus fuscus, Lesser Black-backed Gull.—Fairly common on sea coast.

Larus marinus, Great Black-backed Gull.—Fairly common on sea coast.

* *Larus gelastes*, Slender-billed Gull.—Not common.