THIS BOOK MUST NOT
BE REMOVED
FROM THE LIBRARY

D. GIFFARD

Edward Schons

1951

GIFFARD (N.D.) Digil Libr. 1951.

Swin Gha

Bindet

Bindet

and state if quarto or foolscap

B.E.L.L. Barking & Landon

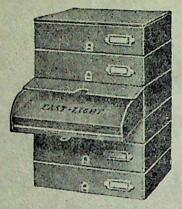
Partent Nos. 139790, 139805, 223735, 293334,

Regd. Trade Mark 43328.

Reference

Name:

\*\*



### FLAT FILE BUILD-UP CABINET

A system built up section by section on Patent Metal Studs.

Being sectional it has no limits. It can be continually added to.

When removing sheets from centre hold the right hand section of spiral firmly in right hand unscrew left hand section. To rejoin screw back lightly.

Do Not Use Force.

THIS BOOK

WAS PRESENTED TO

UNIVERSITY COLLEGE, LONDON,

BY

The University of London Library. 17 ay, 1947.

### A BIBLIOGRAPHY

OF THE PUBLISHED WRITINGS OF

EDMUND SELOUS, ORNITHOLOGIST.

Compiled by N. Diana Ciffard, M.A., and submitted to the School of Librarianship and Archives, University College London, for Part III of the Diploma in Librarianship,

May, 1951.



### CONTENTS.

Introduction.	٠	•	•	•	•	•	•	•	. i.
Abbreviations	•	•	•	•	•	•	•	•	viii.
Bibliography.	•	•	•	•	•	•	•	•	2.
Index	•	•					•		44

#### INTRODUCTION.

Edmund Selous was born in 1857. He was the son of Frederick

Lokes Selous, Chairman of the London Stock Exchange Committee, and

Ann Sherborne, and brother of the famous big-game hunter and explorer,

Captain Frederick Courtenay Selous. The Selous family were originally

French Huguenots who fled from France after the Revocation of the

Edict of Nantes and settled in Jersey. Through his mother's family

Selous could trace his descent back to Robert the Bruce.

Selous was educated at first privately, and afterwards at Fembroke College, Cambridge. He was called to the Bar, but only practised for a few years before relinquishing the profession to devote the rest of his life to bird watching. He travelled a great deal in pursuit of this interest, and made many observations in France, Iceland, Sweden and Holland, besides spending much time in the Shetlands. Sweden and Holland he made his important studies of the breeding habits of the Blackcock and Ruff respectively. It was a matter for great regret to Selous that he was unable to accept the invitation of President Theodore Roosevelt, himself a keen ornithologist, to pay a visit to the United States, with the opportunity of watching birds in the Yellowstone National Park. In 1885 or 1886 he married Fanny Margaret Maxwell, daughter of John Maxwell, the publisher, and of his second wife, Miss M.E. Braddon, the novelist. Selous was a good linguist, and a great lover of literature, particularly Shakespeare He died in March, 1934, at the age of 77.

The importance of Selous' contribution to the science of field ornithology can be estimated only when it is realised how much in its infancy the subject was at the time and how low its status was rated. Much was known of the anatomy of the dead bird, but practically nothing of its habits when alive. The bird books of the time, as a glance at such a book as Newton's <u>Dictionary of birds</u> will show, devoted most of their space to a minute description of the anatomy of each species,

while remaining content with a few rather vague generalisations about its habits. Between the scientist in the laboratory and the amateur in the field a sharp distinction was made. The observations of the latter were considered to be, and indeed often were, unscientific and inaccurate. There was as yet little support for the idea that observations on wild life in its natural surroundings could contribute anything of value to science. The immediate reaction of the average ornithologist to a rare bird was to shoot it.

W.H. Hudson was the great pioneer of the revolt against this attitude. He possessed several qualities not infrequently found together in writers on natural history - a great feeling for the beauties of the natural world, combined with a scientific interest in its workings, together with literary gifts which enabled him to communicate his experiences to others. His status as a writer caused his many works on natural history to be widely read, with the result that his influence, both on his contemporaries and on later generations, was considerable.

Edmund Selous was one of the first and most distinguished of Hudson's disciples. The following passage, taken from his introduction to Evolution of habit in birds, gives some idea of his attitude to natural history:

"General statements soon ceased to interest me because I found that it was extremely difficult to make any that did not depend, for their generality, upon the leaving out of various particulars that interfered with or even, to some extent, contradicted it, yet were as much a part of truth as the rest...I came at last to the conclusion that what was really wanted from the standpoint of truth and advance was a much more copious and minute recordation of carefully observed facts."

He therefore set himself to observe and describe in detail - often under conditions of acute personal discomfort - the smallest actions, not of birds in general, but of one particular bird or group of birds. It is safe to say that Selous came to know more about the intimate habits of birds than any other ornithologist of his generation. His observations are wonderfully unbiassed. Even when what he observed appeared to conflict with his own theories he never failed to record it for that reason.

Through this method of continuous observation of individual birds over a considerable period, Selous made important discoveries, the most notable being the light which he threw on the breeding activities of the Ruff and the Blackcock. It had been believed, until then, that in both species the males met together in order to fight for the females, and that their matrimonial success was in proportion to their fighting prowess. Selous proved, however, that the contrary is true: that it is the female who is all-powerful in the assembly, that it is she who makes the choice of mate, and that the fighting qualities of a male do not affect her choice.

Solous, however, was not only an accurate recorder of facts, he tried at the same time to interpret their meaning and search for their causes. "For myself I shall always strive to see the causes of things with the things", he said. He was one of the first to make a serious scientific study of bird behaviour, endeavouring to understand the workings of a bird's mind without projecting into it human thoughts and emotions. He was profoundly interested in the problems of evolution, and a great believer in the theories of natural and sexual selection. of the Blackcock and the Ruff were undertaken largely with a view to vindicating the latter theory, which, briefly, maintains that the evolution of male nuptial adornment is due to continued selection by the female of the handsomest male. Selous believed that this theory could be applied to all birds, but it has since been found to be applicable, to a limited extent, only to a few polygamous species, such as the two above-mentioned, where there is competition among males for mates, while the evolution of display characters in general cannot be explained in such a way, since in most species display follows and does not precede pair-formation. while Selous' conclusions in this respect were not altogether correct, he was right in his assumption that the purpose of display was to induce the female to accept the male, and that its elaborate ritual has been built up from originally aimless and uncoordinated movements.

The origin of the nest-building instinct in birds was another problem

to which Selous paid much attention. He was able to produce a formidable array of facts to support his thesis that the habit has evolved out of frenzied movements performed by birds while in a state of sexual excitement, and this theory, with only slight modifications, is accepted by modern ornithologists. Although he did not appreciate its full significance, Selous was also acute enough to anticipate - some years before it was formulated - one of the theories on which the whole structure of modern field ornithology is based, namely, the "Territory theory" of Elict Howard, another amateur ornithologist, when he pointed out that most of the fighting among Blackcock and Ruffs takes place in defence of territory. Another of Selous' theories, that of thought-transference, formulated to account for the simultaneity with which large numbers of birds manoeuvre in the air has not been proved to be correct, and a simpler explanation is preferred today.

To Selous, the taking of life for any purpose was always abhorrent. All his books for children have as their aim to convince the readers that the enjoyment to be obtained from watching the habits of wild creatures is far greater than any pleasure that can come from a collection of inanimate objects. This conviction runs through all his writings.

"Had we as often stalked animals in order to observe them as we have in order to kill them, how much greater might be our knowledge", he exclaims in <u>Bird Watching</u>. During his visit to Iceland in 1912, Selous wrote two articles to the papers on the subject of bird protection which appear to have had a great deal of influence on the subsequent introduction of legislation for the purpose in the island.

As a writer, Selous has been criticised for the general clumsiness of his style and its frequent bewildering intricacy. This is certainly true of many passages, particularly those in which he is arguing a point or expounding a theory. At these times his reasoning is often extremely difficult to follow: phrases are piled one on top of the other as they tumble from the author's mind until the whole accumulation of detail is

almost impossible to disentangle. But at other times this same eager haste to get down onto the paper what he thinks or sees gives a dramatic vividness to his writing which a more considered style would lack. Like Hudson, Selous was very sensitive to the beauties of nature and has the power to convey his impressions to the reader. Passages such as the graphic account in the Saturday Review of Starlings roosting (18,19), or - in contrast to this - the description in the same periodical of the tranquil beauty of the scene at Abbotsbury (15), demonstrate the high quality of his writing and can compare with any passages from the classic writers on natural history.

Selous' works, however, not withstanding their merits, received little recognition during his life-time. None of his books went into a second edition, and the facts contained in his articles were often Selous felt this deeply, and there is often a note of ignored. In fact, his tirades bitterness in his complaints of this neglect. against the professional scientists of his day, whom he held responsible for what he considered to be a wilful suppression of facts which conflicted with their own theories, become somewhat wearisome through being too often repeated, and allowed to intrude in places from which they would have been better omitted, such as his articles in the Eritish This fierce criticism of the worker in the laboratory may bird book. have been partly the cause of his being ignored. But by nature Selous hated compromise, and his refusal to see any good in work of this kind was natural in one who set such a high value on life in all its forms, and although the rigidness of his attitude may have in part defeated its own purpose, by arousing the opposition of those he was trying to convert, it reveals at the same time the burning sincerity of his aims. influence which his attitude had on one eminent professional scientist is revealed by J.S. Huxley in his introduction to Realities of bird life. "Field natural history is as scientific as astronomy or any laboratory work", Selous wrote in 1909, and the fact that these words are accepted

today as a matter of course is evidence of his influence. That field ornithology is now recognised as a serious scientific discipline is due in large measure to the work of Selous. His refusal to be content with vague generalisations has led those who followed him to keep to the same high standards, and has raised the status of field ornithology to the high place which it holds today.

\* \* \* \* \*

This bibliography endeavours to record all the published works of Solous, with a few exceptions. It is known, for instance, that Tonny Swith's animals was translated in to four other languages, but this fact was discovered too late for it to be possible to obtain any further information about them. It has not proved feasible either to search for the articles written by Selous to an Icelandic newspaper during his visit there in 1912, and mentioned in his observations on the bird life of that island published in the Zoologist (87). Apart from these omissions, it is hoped that the record is complete. Selous' manuscript note-books are now in the library of the Edward Grey Institute of Field Crnithology at Oxford, being deposited there by his literary executor, J.S. Muxley. These have not been listed, but it is believed that all their contents were published in one form or another, much of the material appearing more than once. Many observations, for instance, published in full in the Zoologist and the Naturalist appeared in shortened form in books such as Realities of bird life and Thought transference (or what?) The articles in the Saturday Review, which also sometimes in birds. embody material first published elsewhere, are for the most part less detailed, and designed to interest a wider public than those in the scientific journals. A list of Selous' works to the end of the year 1912 is given in Mullens and Swann: A bibliography of British ornithology (1917), but this is not complete even for the limited period covered and is not always accurate. For the rest of the period there is no other guide, so that the main sources have been the British Museum Catalogue

for books, and the periodicals to which Selous was known to have contributed, which have been systematically searched. Other possible sources of information have also been checked.

The annalistic method has been followed in this bibliography, not only because it is the clearest, but also because it will very probably be the most useful form of arrangement for the two purposes for which it is most likely to be consulted, namely, a study of Selous' own development, or a historical survey of the progress of field ornithology. In the case of articles, the position of each entry is determined by the date on which it first began to appear; in many cases publication extended over several months and, in some cases, years. It has not always been possible, in the case of books, to discover the exact date of publication or the number of reprints made. Entries of which the exact day or month of publication are not known are placed in alphabetical order after those for which fuller information has been obtained. have been personally examined, except that with an asterisk against it. Since it is thought that this bibliography will be useful more from a subject than from a bibliographical point of view, it has not been considered necessary to make full bibliographical entries for the books, especially as none of them ran into more than one edition. them have therefore been made according to the Anglo-American code. There is only one index: author, subject, and title references have been combined into a single sequence.

Finally, I should like to acknowledge my gratitude to all who have helped me with this work: to all the publishers who have kindly answered my enquiries about dates of publication and the number of editions, to hiss J.E. Norton, who helped me to obtain access to material not readily available elsewhere, to the Librarian of Weymouth Public Library, and above all, to Mr. G.H. Selous, who has kindly supplied me with so much information about his father's life and work.

\* \* \* \*

## ABBREVIATIONS.

diagr.	•	•	•	٠	•	•	•	•	•	•	diagram
front.	•	•	•	•	•	•	•	•	•	•	frontispiece
illus.	•	•	•	•	•	•	•	•	•	•	illustration(s)
in	•	•	•	•	•	•	•	•	•	•	inches
incl.	•	•	•	•	•	•	•	•	•	•	including
n .											page(s)
p.1	•	•	•	•	•	•	**	•	•	•	preliminary leaf
pl	•	•	•	•	•	•	•	•	•	•	plate(s)
vol	•	•	•	•	•	•		•			volume

# BIBLIOGRAPHY.

September.

An observational diary of the habits of Nightjars (Caprimulgus europaeus), mostly of a sitting pair. Notes taken at time and on spot.

Zoologist, (4th series), vol. 3, (1899), pp.388-402, 486-505.

Observations made during June and July, 1898. A change—over on the nest in the evening is seen, but the female is considered to perform the larger part of incubation, the male only remaining on the nest for a short time. A curious vibration in the throat of the sitting bird is noticed. It is established that the young are fed by regurgitation. A list of the different call—notes distinguished is given. These observations were summarised in an article in Wild Life in 1916 (105).

14 October.

2. TOMY SHITH'S ANIMALS.

Tommy Smith's animals, by Edmund Selous. With eight illustrations by G.W. Ord. London, Methuen & co., 1899.

(viii),207,(1)p. front., 7pl 6 1/2 in.

Reprinted 22 times.

A book for children. The animals are made to describe their own habits, and the study of these is urged. April.

3. An observational diary of the habits of the Great Plover (Oedicnemus crepitans) during September and October.

Zoologist, (4th series), vol. 4, (1900), pp.173-185, 270-277, 458-476.

Observations made from September to November, 1899. The birds congregate in Autumn at dawn in regular places of assembly where they spend the day. At twilight the flock becomes a prey to intense excitement, and display of a pronounced social character is indulged in by all the birds before they fly off to their night feeding-grounds. The birds begin to migrate at the beginning of October. The Great Plover is considered to be an eminently social bird.

May.

4. An observational diary of the habits - mostly domestic - of the Great Crested Grebe (Podicipes cristatus).

Zoologist, (4th series), vol. 5, (1901), pp.161-183.

Observations made during April and May, 1900. The nest of the pair watched had been completed and one egg laid, but both birds were seen to add material to the nest. Coition was still taking place on the nest, and the pairing attitudes of both sexes When their first nest was destroyed the birds are described. started a second, and later a third. The theory is put forward that "bowers" might have evolved, in the case of species which pair on the nest, from abandoned nests still used for pairing and becoming gradually differentiated in structure from the final one in which the eggs are laid. The birds were also seen to contemplate pairing with roles reversed. This urge is considered to be due to retention of feelings connected with hermaphroditism.

2 July.

5. BIRD WATCHING.

Bird watching, by Edmund Selous. London, J.M. Dent & co., 1901.

xi,(1),347,(1)p. front., 6 pl. 8 in. (<u>Half title</u>: The Haddon Hall Library, edited by the Marquess of Granby and George A.B. Dewar).

Title in red and black. Title vignette and illustrated endpapers. The plates are reproductions of drawings by J. Smit. A limited edition of 150 copies was issued at the same time, printed on hand-made paper and bound in vellum with gilt lettering.

Many different species are described in this book, which seeks primarily to communicate to others the pleasure the author derives from watching wild birds in their natural surroundings as opposed to the study of dead specimens in the laboratory. In a review in the Zoologist in 1901 the book was described as "a book with a motive...the sanctity of bird-life".

September.

6. An observational diary of the habits - mostly domestic - of the Great Crested Grebe (Podicipes cristatus) and of the Peewit (Vanellus vulgaris), with some general remarks.

Zoologist, (4th series), vol. 5, (1901), pp.339-350, 454-462, vol. 6, (1902), pp.133-144.

The first part of this paper published in 1901 records observations made in April and May of the same year on Great

Crested Grebes. The pair watched, (believed to be the same as that studied the year before), had built only a pairing platform, Crested Grebes. on which coition was taking place. Attempts at pairing with Displays of "head-shaking" and roles reversed were observed. the "penguin dance" are described. The origin of nest-building is discussed, and the theory advanced that it evolved, through natural selection, from blind unintelligent movements arising from sexual frenzy during copulation. The second part of the paper, which appeared in 1902, is confined to observations on The so-called "rolling" of Peewits, both male and Peewits. The depressions in the ground formed by female, is described. these sexual movements strengthen the previously enunciated theory It is pointed out that the highly of the origin of nest-building. nervous and exciteable organisation possessed by birds gives rise to extravagant motions, at first useless, but on which natural and sexual selection are continually working.

16 November.

7. Rabbits and hares. I.

Saturday Review of Politics, Literature, Art and Science, vol. 92, (1901) pp.618-619.

30 November.

8. Rabbits and hares. II.

Saturday Review, vol. 92, (1901), pp.677-679.

- 2 December.
- 9. BEAUTIFUL BIRDS.

Beautiful birds, by Edmund Selous...With many illustrations by Mubert D. Astley. London, J.M. Dent & co., 1901.

ix, (1), 224, (2) p. incl. front., illus.  $7\frac{1}{2}$ in.

A book for children describing the habits of many birds which are killed for the sake of their plumage, and deploring the fashion among women of wearing feathers which makes this necessary.

13 March.

10. A bird study at dawn.

Saturday Review, vol. 93, (1902), pp.331-332.

A description of the arrival of gulls, and of Redshanks feeding, on the Severn estuary.

22 March.

11. The Gull and the Redshank.

Saturday Review, vol. 93, (1902), pp.360\_361.

The Black-headed Gull, an increasingly inland bird, is described feeding behind the plough, followed by observations on the manner of feeding of Redshanks on the estuary.

12 April.

12. The Peewit's suzerain.

Saturday Review, vol. 93, (1902), pp. 459-460.

Black-headed Gulls are observed preying on Peewits in a manner similar to that in which skuas prey on gulls. The Peewits are pursued and forced to drop the food they are carrying. There is no hostility between the two species except during the chase.

17 May.

13. Sea-birds' courtship.

Saturday Review, vol. 93, (1902), pp.631-632.

A description of the Fulmar's courtship in which, in common with other sea-birds such as the Shag, Razorbill, Kittiwake and Black Guillemot, the attractively coloured buccal cavity is displayed. This characteristic is considered to have evolved through sexual selection.

May.

14. Note on the pairing of Moorhens.

Zoologist, (4th series), vol. 6, (1902), pp.196-197.

Moorhens are observed pairing at first in the normal way, and then with roles reversed.

14 June.

15. Swans in a swannery.

Saturday Review, vol. 93, (1902), pp.765-766.

A description of the swans at Abbotsbury.

5 July.

16. "Swan and shadow".

Saturday Review, vol. 94, (1902), pp.8-9.

Swans mate for life, and the two birds are seldom seen apart.

26 July.

17. The Starling and the Woodpecker.

Saturday Review, vol. 94, (1902), pp.106-107.

The Starling's habit of appropriating the nesting-holes of Green Woodpeckers is discussed.

23 August.

18. Starlings in congregation.

Saturday Review, vol. 94, (1902), pp.230-231.

A description of the gathering of Starlings before they go to roost.

4 October.

19. Watching the Starlings.

Saturday Review, vol. 94, (1902), pp.420-421.

A more detailed description of the aerial manoeuvres of Starlings before roosting.

October.

20. Variations in colouring of Stercorarius crepidatus.

Zoologist, (4th series), vol. 6, (1902), pp.368-373.

A detailed description of the plumage of 15 Arctic Skuas as seen in the field. A gradation in colouring is noted between

what is considered to be a plainer, dark form and a more beautiful pale one. The theory is advanced that the species is gradually evolving, through sexual selection, from a plain into a beautiful one.

7 February.

21. The Jackdaw - not of Rheims.

Saturday Review, vol. 95, (1903), pp.165-167.

A description of Jackdaws searching for insects on the backs of sheep.

4 April.

22. Love and war among the Swans.

Saturday Review, vol. 95, (1903), pp.419-420.

The frequent battles of male Swans during nesting are probably due to the close proximity of the nests at Abbotsbury.

6 June.

23. Terns on a sea-bank.

Saturday Review, vol. 95, (1903), pp.710-712.

Observations made in a ternery. Descriptions of the birds fishing and of courtship display between paired birds.

11 July.

24. Terns in the nursery.

Saturday Review, vol. 96, (1903), pp.43-45.

A description of the nesting habits of terns. It is doubtful whether the young are fed solely by their own parents.

1 August.

25. The sea-birds' metropolis.

Saturday Review, vol. 96, (1903), pp.137-139.

A description of the sudden silences and simultaneous flights of all the birds which take place at intervals in a ternery.

August.

26. Field notes (being a naturalist's diary of observation and reflection).

Zoologist, (4th series), vol. 7, (1903), pp.281-292, 371-381.

Observations made from September to November, 1899, on many different species. The feeding methods of Starlings and Blackbirds are compared, and descriptions follow of the call-notes of Moorhens and Dabchicks, the fighting of Pheasants, Rooks eating acorns, the manner of feeding of Snipe and the bathing habits of Moorhens.

5 September.

· 27. Sholdrakes in Paradise.

Saturday Review, vol. 96, (1903), pp.295-296.

The habits of Sheldrakes on the Severn are described. The species appears to be becoming an inland breeding one, and in this region nests in trees.

3 October.

28. Birds by the Severn.

Saturday Review, vol. 96, (1903), pp.421-423.

A description of Sheldrakes and Curlews feeding on the estuary.

1904

2 January.

29. The sea-birds' solitude.

Saturday Review, vol. 97, (1904), pp.13-15.

A description of bird life on a northern island.

16 April.

30. The brigand Skua.

Saturday Review, vol. 97, (1904), pp.489-490.

Arctic Skuas are watched preying on terns.

2 July.

31. Terms and dreams.

Saturday Review, vol. 98, (1904), pp.13-14.

A description of the agitation aroused in a ternery when a young bird is interfered with. It is considered that in this species the collective responsibility of the community for the young may be taking the place of individual parental care.

16 July.

32. The Eider-duck.

Saturday Review, vol. 98, (1904), pp.76-77.

An Eider-duck with her ducklings.

20 August.

33. The duels of Thrushes.

Saturday Review, vol. 98, (1904), pp.233-234.

Thrushes appear to be more bellicose than Blackbirds.

22 October.

34. The Thrush and the Blackbird.

Saturday Review, vol. 98, (1904), pp.513-514.

The battles of Thrushes are described and their feeding habits compared with those of Blackbirds.

10 December.

35. The Blackbird's spade.

Saturday Review, vol. 28, (1904), pp.728-729.

A description of the Blackbird's method of digging for food.

21 January.

36. Blackbirds - the hates of the hens.

Saturday Review, vol. 99, (1905), p.78.

Hen Blackbirds are often seen fighting among themselves - apparently for cocks.

1 April

37. The Blackcock's ecstasies.

Saturday Review, vol. 99, (1905), pp.415-416.

A description of the Blackcock's display and challenge to rival males. The courtship display of this species is considered to be less striking than that of the Capercaillie.

8 July.

38. Bird life on the Polders: the assembling of the Ruffs.

Saturday Review, vol. 100, (1905), pp.49-50.

A description of the excitement caused among Ruffs assembled at the "hill" before the Reeves have appeared by the arrival of other Ruffs. There is, however, little serious fighting among them.

22 July.

39. Bird life on the Polders. II. The Ruffs' duels.

Saturday Review, vol. 100, (1905), pp.113-114.

The excitement of the Ruffs reaches its climax on the arrival of a Reeve, and fighting is fiercer at this moment. But as she advances towards them they prostrate themselves before her, and remain motionless.

12 August.

40. Spoonbills.

Saturday Review, vol. 100, (1905), pp.207-208.

Spoonbills in Holland. A description of the birds and their manner of feeding.

- 2 September.
- 41. Bird life on the Polders: Avocets and Spoonbills.

Saturday Review, vol. 100, (1905), pp.304-305.

Quarrels, in which the Spoonbills are often put to flight by the Avocets, occur frequently between the two species.

- 23 September.
- 42. Birds on the Polders.

Saturday Review, vol. 100, (1905), pp.398-399.

The Avocet's method of fighting.

- 1 November.
- 43. BIRD WATCHER IN THE SHETLANDS.

The bird watcher in the Shetlands, with some notes on seals — and digressions: by Edmund Selous. With 10 illustrations by J. Smit. London, J.M. Dent & co; New York, E.P. Dutton & co., 1905.

x,(2),388p. front., 9 pl. 9 in.

Observations made during a visit to the Shetlands in the late summer of 1902.

- 11 November.
- 44. Oystercatchers at home.

Saturday Review, vol. 100, (1905), pp.621-622.

A general description of the birds' habits.

- 25 November.
- 45. Pied pipers.

Saturday Review, vol. 100, (1905), pp.680-681.

The piping of Oystercatchers in courtship and rivalry.

1905.

### 46. BIRD LIFE GLIMPSES.

Bird life glimpses, by Edmund Selous. With 12 headings and 6 full-page illustrations by G.E. Lodge. London, George Allen, 1905.

viii,335,(1) p. illus., 6 pl. 8 in.

A day-to-day journal of field observation and reflection kept while living at Flint House, Icklingham, Suffolk, from the Autumn of 1899 for three years.

1905.

### 47. ROMANCE OF THE ANIMAL WORLD.

The romance of the animal world: interesting descriptions of the strange and curious in natural history, by Edmund Selous... With sixteen illustrations by Lancelot Speed and S.T. Dadd. London, Seeley and co., ltd., 1905.

329,(7),p. front., 15 pl. 72in.

A book of a popular character describing the habits of interesting animals of the world.

20 January.

48. The Kentish Plover on the Polders.

Saturday Review, vol. 101, (1906), p.76.

A description of the bird's appearance and habits.

17 February.

49. Bird life on the Polders: duets and trios.

Saturday Review, vol. 101, (1906), pp.201-202.

A description of Oystercatchers piping in pairs and in threes. A comparison of the latter habit with the display of the Spur-winged Lapwing of La Plata is made. In the American species the habit of driving away a third bird appears to have become formalised.

10 March.

50. Bird life on the Polders: Sea-pie puzzles.

Saturday Review, vol. 101, (1906), pp.298-299.

Speculations as to why the male Oystercatcher does not join the flock of birds which have finished breeding when he has ceased to participate in the latter stages of incubation, but instead remains in attendance on the female until the chicks have become independent.

June.

Observations tending to throw light on the question of sexual selection in birds, including a day-to-day diary on the breeding habits of the Ruff (Machetes pugnax).

Zoologist, (4th series). vol. 10, (1906), pp.201-219, 285-294, 419-428, vol. 11, (1907), pp.60-65, 161-182, 367-381.

Observations made in Holland in April and May, 1906, on Redshank, Kentish Plover and Mallard indicate that the female is not indifferent to the fighting of rival males and will often intervene to make an active choice between them, and show that coition is impossible without her consent. These observations are followed by a description of the activities of Ruffs and Reeves at the "hill". It is shown that the Reeve exercises complete freedom of choice in selection of a mate, and that the Ruffs are helpless without her co-operation, remaining prostrate while she chooses a mate. It is the finest looking Ruffs who are most frequently selected, but not on account of their fighting prowess. The species appears to be promiscuous.

Fighting among Ruffs is without direction or guiding principle, but is seen to be often caused by one bird entering another's territory. It is concluded that through sexual selection fighting among Ruffs is becoming subsidiary to the will of the female. These observations are considered to vindicate Darwin's theory of sexual selection. This paper was also published in Wild Life in 1916 (103), but owing to the fact that this periodical ceased publication in March, 1918, the last part never appeared.

20 September.

52. TOMEY SMITH'S OTHER ANIMALS.

Tommy Smith's other animals, by Edmund Selous... With twelve illustrations by Augusta Guest. London, Methuen & co., (1906).

vii,(1),214,(2) p. front., 11 pl.  $6\frac{1}{2}$  in.

Reprinted 14 times.

A sequel to Tommy Smith's animals (2).

1906.

53. ROMANCE OF INSECT LIFE.

The romance of insect life: interesting descriptions of the strange and curious in the insect world, by Edmund Selous... With twenty-one illustrations by Lancelot Speed and Carton Moore Park. London, Seeley and co., limited, 1906.

351,(1) p. front., 15 pl. 7½ in.

Chapters 1-14 of this book were re-issued in 1911 with the title Wonders of the insect world (78).

A book of a popular character describing the habits of interesting insects of the world.

1907

1 June.

54. The Redshanks and the Ruff.

Saturday Review, vol. 103, (1907), pp.683-684.

The tendency for Redshanks to assemble at certain spots, from which corporate flights are then made, is noted. It is thought possible that the courtship assemblies of Ruffs and Blackcocks may have originated in a similar predilection for a particular place.

15 June.

55. A little duck: Clangula glaucion.

Saturday Review, vol. 103, (1907), pp.747-748.

A description of Goldeneye in Sweden.

22 June.

56. A little duck: Clangula glaucion. II.

Seturday Review, vol. 103, (1907), pp.776-777.

Observations on the early breeding activities of Goldeneye.

June.

57. Sexual selection.

Zoologist, (4th series), vol. II. (1907), pp.237-238.

A short note on the gaping display of the King Bird of Paradise advancing the theory that bright colouring of the buccal cavity in birds can only be explained by principles of sexual selection.

23 November,

58. Birds of the field. I.

Saturday Review, vol. 104, (1907), pp.632-633.

The first of a series of six articles (58-63) giving instances to support the theory that the female bird is by no means indifferent to the battles of rival males, and will often intervene to show where her preference lies. These observations formed the first part of the paper on Ruffs published in 1906 (51). The first example given is that of a Mallard duck driving off a third drake and showing a preference for one of the two remaining.

30 November.

59. Birds of the field. II.

Saturday Review, vol. 104, (1907), pp.667-668.

A hen Kentish Plover is shown to be interested in the fighting of two rival males.

7 December.

60. Birds of the field. III.

Saturday Review, vol. 104, (1907), p.697.

A hen Kentish Plover drives off a second hen approaching two fighting males, and later drives off one of the males.

14 December.

61. Birás of the field. IV.

Saturday Review, vol. 104, (1907), pp.726-727.

A Redshank, assumed to be a hen, is seen to drive off one of two fighting males.

21 December.

62. Birds of the field. V.

Saturday Review, vol. 104, (1907), pp.761-762.

Another hen Redshank shows a preference for one of two fighting males.

28 December.

63. Birds of the field. VI. The Ruffs and the Resve.

Saturday Review, vol. 104, (1907), pp.794-795.

A description of the prostration of the Ruffs on the arrival of a Reeve, and of the manner in which she unmistakeably makes her choice among them.

March.

64. Some notes on a habit of the Great Spotted Woodpecker (<u>Dendrocopus</u>
<u>major</u>) in relation to a similar but more developed habit in the
<u>Californian Woodpecker (<u>Melanerpes formicivorus</u>).</u>

Zoologist, (4th series), vol. 12, (1908), pp.81-91.

Observations made in April and May, 1907, in Britain, and during the following winter in Germany, show that the Great Spotted Woodpecker has developed a habit similar to that of the Californian Woodpecker of wedging acorns into trees. Although the birds were not seen at work in this country, spruce cones were found embedded by them in the trunks of Scotch firs, and in Germany the birds were watched placing cones in clefts high in the branches. The cones are evidently inserted for convenience in eating. The origin of the habit is discussed.

9 May.

65. The loves of the Euffs. I.

Saturday Review, vol. 105, (1908), pp.593-594.

The dominant Ruffs in an assembly are not necessarily the most pugnacious but are often those with the best developed adornments. The preference of the Reeve, when expressed, is seen to give additional vigour to the chosen male.

16 May.

66. The loves of the Ruffs. II.

Saturday Review, vol. 105, (1908), pp.627-628.

More instances are given of selection of a mate on the part of a Reeve. The other Ruffs do not interfere with her choice.

23 May.

67. The loves of the Ruffs. III.

Saturday Review, vol. 105, (1908), pp.653\_660.

The purpose served by fighting among Ruffs is discussed. It is considered that the Ruff could not maintain his place in the assembly without fighting, but that a stage of transition has been reached where combat is gradually becoming formalised and is passing into display.

May.

68. Sexual selection in birds.

Zoologist, (4th series), vol. 12, (1908), p.191.

A note in reply to the editorial comment on his note on sexual selection published in the same journal in 1907 (57).

September.

69. Some observations on butterflies and hornets. (Made in France).

Zoologist, (4th series), vol. 12, (1908), pp.333-341.

Observations made in July, 1908, on butterflies and hornets feeding on sap exuding from oaks, and on the relations between the two species.

November.

70. An observational diary on the nuptial habits of the Blackcock (Tetrao tetrix) in Scandinavia and England. (Part I. Scandinavia).

Zoologist, (4th series), vol. 13, (1909), pp.401-413, vol. 14, (1910), pp.23-29, 51-56.

Observations made in Warmland, Sweden, in 1907, on Black Game at the "lek". It is noted that, as with the Ruff, the females are won by the attractions of the males and not by their fighting provess. Two forms of display by the cock are described: the courtship display before the female, and the aggressive display, or "war-dance", performed in challenge to rival males. This latter may be a substitute for battle, since fighting without gain would be detrimental to the species. It is concluded that Darwin's theory of sexual selection is upheld by these observations. This paper, part 2 of which appeared in 1910 (72), was summarised in the Naturalist in 1913 (86).

24 May.

71. The finches.

In KIRKMAN, Frederick Bernuf Bever.

The British bird book: an account of all the birds, nests and eggs found in the British Isles. London, and Edinburgh, T.C. & E.C. Jack, 1911-13. vol. I, section 1, pp.83-156.

eventually into 4 volumes, section 1 appearing in May, 1910, and section 2 in October of the same year. Although in the outline scheme of the work at the beginning of section 1, Melous' name appears in the list of chapters and writers as the author of articles on the Nightjar, the auks, skuas, rails, Heron, Bittern and petrels to form part of subsequent sections, his contributions apparently ceased after the chapter on the pipits in section 2, the chapters on the above birds being written by others. His name, however, remains among the list of contributors on the cover of every section. This article, and the others which followed in section 2 (75), give a general account of the family as a whole, and of the various species which compose it, following the "Treliminary classified notes" which give more precise information under headings for each species, and which are usually the joint work of the editor and several other contributors.

Lio.y .

72. An observational diary on the nuptial habits of the Blackcock (Totrao tetrix) in Coundinavia and England. (Part II. England).

Zoologist, (4th series), vol. 14, (1910), pp.176-182, 248-265.

Observations made in May, 1908. It is established that the Greyhens come to the "lek" to be courted by the cocks. The hen advances through the assembly, courted by first one and then another cock, and finally crouches before the male of her choice, when pairing is accomplished. There is seen to be some fighting among cocks, due to one bird coming too close to another during courtship, but this is of short duration. There is also some fighting among hens for the same reason. Fart 1 of this paper appeared in 1909 (70).

25 August.

73. JACK'S INSECTS.

Jack's insects, by Edmund Selous...With forty-four illustrations by J.A. Shepherd. London, Methuen & co., 1td., (1910).

1 p.1.xiii, (1), 379, (5) p. incl. front., illus. 7 in.

The contents of this book were re-issued in 1920 in two parts, chapters 1-10 appearing as <u>Jack's insects</u>. Popular edition (113), and chapters 11-20 under the title of <u>Jack's other insects</u> (114).

A book for children. The evils of collecting are emphasised, and the study of the living insects is urged.

September.

74. Humble-bees and foxgloves.

Zoologist, (4th series), vol, 14, (1910), pp.327-336.

Observations made in the Black Forest in the summer of 1907, on the different manner of feeding on foxgloves of various species of humble-bee with speculations on how these differences in habit have arisen and how far they are beneficial to the species.

14 October.

75. The buntings. The wagtails. The pipits.

In KIRKWAM, Frederick Bernuf Bever.

The British bird book: an account of all the birds, nests and eggs found in the British Isles. London, and Edinburgh, F.C. & E.C. Jack, 1911-13. vol. I, section 2, pp.169-198, 239-259, 260-277.

These articles, like the one on the finches which appeared in section 1, give a general description of the characteristics of the family as a whole and the habits of the various species included in it. The extent of Selous' contribution to this work has been more fully described under the earlier entry (71).

February.

76. An observational diary on the domestic habits of the Sparrow-hawk (Accipiter nisus).

Zeologist, (4th series), vol. 15, (1911), pp. 46-68, 104-110, 176-103.

Observations made in Brittany on a nesting pair during May, June and July, 1910. It is noted that the female alone incubates and feeds the young on the nest, food being brought by the male both for herself and the young. The male either passes food to the female in the air, or leaves it for her near the nest. The food is probably brought ready plucked.

29 Centember.

77. ZOO CONVERSATION BOOK.

The Zoo conversation book, by Edmund Selous... Illustrated by J.A. Shepherd. London, Mills & Boon, limited, (1911).

viii,344p. 12 pl. 7%in.

School editions of this book were printed and issued in 1912 and 1914.

A book for children. The animals at the Zoo are made to talk, and to describe their own habits.

1911.

78. WONDERS OF THE INSECT WORLD.

The wonders of the insect world, by Edmund Selous... With eight illustrations by Lancelot Speed and Carton Moors Park. London, Seeley & co., limited, 1911.

171,(5) p. front., 7 pl. 8 in.

A re-issue of chapters 1-14 of the larger work, The romance of insect life, published by the same firm in 1906 (53).

- 15 March.
- 79. An observational diary on the domestic habits of the Red-throated Diver (<u>Solymbus septentrionalis</u>).

Zoologist, (4th series), vol. 16, (1912), pp.81-96, 171-180, 210-219.

Observations made during July and August, 1910, on a pair with young. The young are fed at very long intervals with fish, presumably from the sea. The "penguin" attitude assumed by male and female is compared with the similar attitude seen in the Great Crested Grebe.

- 15 Lay.
- 80. Origin of the social antics and courting displays of birds.

Zoologist, (4th series), vol. 16, (1912), pp.197-199.

A comment on views expressed in section 7 of Kirkman's Dritish bird book, supporting Selous' own theory that the social antics and courting displays of birds have their origin in frenzied movements springing from sexual excitement. Selous refers here to his own observations on Peewits published in the Ecologist in 1902 (6), which give support to his theory that nest-building has the same origin.

- 15 September.
- 81. An observational diary on the domestic habits of the Carrion-crow (Corvus corone).

Zoologist, (4th series), vol. 16, (1912), pp.321-337.

Observations made during April and May, 1910, in France. It is seen that during incubation the sitting bird is not relieved at the nest, and although there is no proof that it is always the same bird which returns to the nest after it has been left empty, neither is there any evidence that a change takes place at this time. The assumption is thus strong that only the female incubates.

- 15 Cctober.
- 82. Additional notes on the domestic habits of Corvus corone.

Zoologist, (4th series), vol. 16, (1912), pp.393-396.

Observations on a third pair accidently omitted from the previous paper.

30 October.

83. ZOO CONVERSATION BOOM: HUGHIE'S SECOND VISIT.

The Zoo conversation book: Hughie's second visit, by Edmund Selous... Illustrated by J.A. Shepherd. London, Mills & Boon, limited, (1912).

vii,(1), 375,(1) p. 12pl.  $7\frac{1}{2}$ in.

A seguel to the Zoo conversation book (77).

11 January.

84. The Blackcock.

Saturday Review, vol. 115, (1913), pp.47-48, 580.

The courting display of the Blackcook is described. This is distinct from the "war-dance" which is not part of the courtship but a martial demonstration before other males.

18 January.

85. The Blackcock's courtship.

<u>Caturday Review</u>, vol. 115, (1913), pp.79-80.

The Greyhen is seen to be not indifferent to the cock's courtship, and will drive other hens from the "lek".

1 February.

86. The nuptial habits of the Blackcock.

Naturalist, (1913), pp.96-98.

Selous points out that certain facts observed and recorded by him in his paper on this subject in the Zoologist of 1909 and 1910 (70, 72), have not been included in section 10 of the British bird book.

15 February.

A diary of ornithological observation made in Iceland during 87. June and July, 1912.

> Zoologist, (4th series), vol. 17, (1913), pp.57-66, 92-104, 129-136, 294-313, 409-422, vol. 18, (1914), pp.63-74, 213-225, vol. 19, (1915), pp.58\_66, 169\_174, 303\_307, vol. 20, (1916), pp. 54-68, 139-152, 267-272.

This long paper begins in 1913 with observations on a pair of Sea-eagles with a nest, on Whooper Swans and their cygnets, and on Merlins and Great Northern Divers at the nest. Slavonian Crebe is the subject of the part published in 1914, the similarity of its habits - coition on the nest and the "Penguin" attitude - to those of the other members of the Crebe family During 1915 appeared observations made on Merlins being noted. feeding young and on the early breeding habits of the Red-necked Phalarope, the latter being continued throughout 1916. publication of the paper was never completed, as the Zoologist was merged with British birds in January, 1917.

8 March.

88. The swans of Iceland.

Saturday Neview, vol. 115, (1913), pp.299-300, 487-483.

A general description of Whooper Swans and their nests, with an account of a brood of cygnets taking to the water for the first time. The second article describes how a female, if deprived of her eggs, will try to join a pair with young.

2 August.

89. The Great Northern Diver. I.

Caturday Review, vol. 116, (1913), pp.139-140.

The change-over on the nest during incubation is described. It is noted that this species often abandons the nest as soon as the first egg is hatched, even though the second egg is not addled.

9 August.

90. The Great Northern Diver. II.

Saturday Review, vol. 116, (1913), pp.169-170.

A description of a pair with one chick.

15 August.

91. Courting actions of the Shag.

Zoologist, (4th series), vol. 17, (1913), p.314.

A note pointing out that his observations on this subject quoted in section 11 of the British bird book were founded on notes made in the latter part of the breeding season, and that a more continuous series of observations made earlier in the year to be published shortly reveal peculiarities hitherto unsuspected in the habits of this species. The article referred to appeared in 1915 (98).

20 September.

92. An Iceland mountain.

Saturday Review, vol. 116, (1913), pp.360-361.

A description of mountain scenery, and of some of the birds to be seen in such a region.

February.

93.

The nuptial habits of the Ruff. (A letter).

Wild Life, vol. 3, (1914), pp.ziii\_xv.

A letter in answer to a comment by Kirkman in Mild Life, November, 1913, on Selous' observations on the Ruff in the Zoologist (51), and on his theory of sexual selection in this species. Kirkman had asked why it is, if the Ruff's nuptial adornments are due to sexual selection, that there is such striking individual variety in the colour of these, whereas in most other species there is uniformity in such adornments. Selous replies that although sexual selection may have fixed the form of these there is no imperative reason why it should have fixed their colour.

March.

94. The earlier breeding habits of the Red-throated Diver.

Wild Life, vol. 3, (1914), pp. 138-144, 206-213.

Observations made in April, 1912. No true courtship display is seen in this species, and it is assumed that courtship and mating must take place at sea. It is noted that the attitudes assumed towards each other by male and female — notably the "penguin" stance — are also employed by rival males. Courtship attitudes are seen to be similar in many ways to those of the Great Crested Grebe, and as in this species, pairing takes place on the nest.

1 November.

95. Ornithological observations and reflections in Shetland.

<u>Maturalist</u>, (1914), pp.355-357, 365-379, (1916), pp.324-326, 363-366, 384-388, (1917), pp.89-92, 260-269, (1918), pp.131-135, 158-160, 294-296, 317-320, 347-350, 381-383, (1919), pp.167-168, 259-262, 357-360, 381-385.

October, 1911. The species described include Shags and Cormorants, gulls, Mergansers, Eiders, Skuas, Turnstones, Whimbrels crows and Rock-doves. In that part of the paper which appeared during 1917 and 1918, considerable space is devoted to descriptions of sudden corporate flights by flocks of Kittiwakes and other birds, and to discussion of the nature of the impulse which gives rise to them. The theory that they are due to some form of thought transference through extra-sensory perceptions is advanced. This idea is developed more fully in the book Thought transference (or what?) in birds (121)

### 15 December.

96. Courtship habits of the Great Crested Grebe (Podicipes cristatus).

Zoologist, (4th series), vol. 18, (1914), pp.462-465.

Selous discusses references made by J.S. Huxley in a paper, "The courtship habits of the Great Crested Crebe", \*Froc. Zool. Soc. Lond. (1914) pp.491-562), to his own previously published observations on this species, with regard to "head-shaking", the "penguin" attitude, and other courtship actions.

1 April.

97. A diary of ornithological observations in Brittany.

Naturalist, (1915), pp.139-141, 160-163, 193-197.

Observations made in Brittany during May to July, 1909, on a species of varbler not identified with certainty, but believed to be a Helodious Warbler. A female is watched feeding fledged young, and later the feeding of young in the nest is observed. They appear to be fed mostly by the female at first, though the male feeds the female while she is brooding, and later on takes more part in feeding the young. Both parents play a part in nest-sanitation.

May.

98. The early breeding habits of the Shag.

Lild Life, vol. 6, (1915), pp.151-155, 177-181.

Observations made on a visit to Shetland in 1913. It is seen that courtship has been in many cases almost entirely assumed by the female Shag, who attracts the male to her by this means, the yellow buccal cavity playing a large part in the display. The species is considered to be promiscuous. The fact that the nest is built on the site where pairing has already taken and continues to take place, supports the theory of the sexual origin of nest-building previously promulgated which is here recapitalated.

1 July.

99. Observations on the Grey Seal.

<u>Maturalist</u>, (1915), pp.217-221, 253-257, 281-284, 358-362.

Observations made in the Scilly Isles on adults and young during October, 1914. Visits of cows to an island to suckle their calves are watched.

July.

100. An observational diary of the domestic habits of the Little Grebe or Dabchick,

<u>Wild Life</u>, vol. 7, (1915), pp. 29-35, 38-42, 98-99, 137-141, 175-178, 219-230.

Observations made in the spring of 1914 in Suffolk, with a view to comparing the habits of this species with those of the Great Crested Grebe. Coition, both normal and reversed, is seen to take place on the nest. Both birds bring weed to the nest, and both incubate and feed the young. The origin of the habit of reversed coition is discussed. It is considered to be due to the birds' retention of feelings connected with hermaphroditism, and not to the male's desire to overcome the female's unwillingness to pair as Huxley suggests.

February.

101. The spring habits of the Stone Curlew.

<u>Wild Life</u>, vol. <u>8</u>, (1916), pp.51-54, 76-81, 112-115, 152-158.

The birds arrive at the end of March, many already paired. The bowing greeting ceremony between paired birds is described; it is seen to be discontinued after the eggs are laid. The meaning of this performance is discussed. It is considered to be symbolic of coition, and not a true courtship, although display may have evolved from this type of behaviour. The actions of a pair in face of intrusion by a third bird are described: fighting is often seen to pass into threat display. There is little vocal utterance during courtship, probably because calling in this species is a social phenomenon. Later in the season courtship and threat poses are seen to be combined. Both birds incubate, broad and feed the young.

June.

102. Concerning the snipe. (A letter).

Wild Life, vol. 8, (1916), p.194.

A letter supporting the theory that the drumming of snipe is produced by means of the modified feathers of the tail. It is pointed out that the evolution of this characteristic must be in some way connected with the sexual relations of the species.

June

103. Sexual selection in birds: observations tending to throw light on the question of sexual selection in birds, including a day-to-day diary on the breeding habits of the Ruff (Machetes pugnax).

Vild Life, vol. 8, (1916). pp.187-190, 216-221, 248-254, 280-285, 326-332, 359, vol. 9, (1917), pp.18-25, 130-134, 160-163, 205-211, 293-294.

This paper was published in full in the <u>Moologist</u>, in 1906 and 1907 (51), but its publication in <u>Wild Life</u> was never completed as that journal caused in March, 1918. The last entry of the diary on the Ruff to appear in the latter was that for 28 April, 1906, whereas in the complete article the record continues until 3 May.

21 October.

104. Life in Shetland.

Saturday Review, vol. 122, (1916), pp.387-388.

A description of Shetland in Autumn.

October.

105. Some recorded, buried facts about the Hightjar.

"ild Life, vol. 8, (1916), pp.316-319.

An article pointing out that certain facts observed by A.W. Nicoll and published in <u>Vild Life</u>, vol. 3, (1916), pp.286-289, with the title, "Some new facts about the Nightjar," had already been recorded by Selous in a paper in the <u>Zoologist</u> of 1899 (1). A summary of the contents of the latter is given.

15 November.

105.

On the sexual origin of the midificatory, incubatory, and counting display instincts in birds: an answer to criticism.

Zoologist, (4th series), vol. 20, (1916), pp.401-412.

A reply to an article by Miss M.D. Faviland in the Zoologist, vol. 19, (1915), pp.217-225, on the Lapwing, in which Selous' theory of the origin of nest-building is criticised. Selous maintains the correctness of his conclusion that the instinct has a sexual origin in common with the incubatory and courting display instincts, supporting it with many references, against Miss Haviland's theory that the habit has arisen through the desire of the hen bird to protect her eggs from the damp.

10 November.

107. TOWNY SMITH AT THE ZOC.

Tommy Smith at the Zoc, by Edmund Selous... With eight illustrations. London, Nethuen & co., 1td., (1917).

vii, (1), 183, (1) p. front., 7 pl.  $6\frac{1}{2}$  in.

Reprinted 7 times. The illustrations are from photographs by Henry Irving, W.F. Bando, and from the "Discovery" Antarctic Report.

A book for children.

1917.

108\*. WOMDERS OF ANIMAL LIFE.

The wonders of animal life: interesting descriptions of the strange and curious in natural history, by Edmund Selous. London, Seeley & co., ltd., 1917

It has not been possible to see a copy of this book. It is recorded in the <u>English Catalogue</u> of that year, and also in Sonnenschein: <u>The best books</u> (1910-35).

#### 9 January.

109. TOWNS SUITH AGAIN AT THE ZOO.

Tommy Swith again at the Zoo, by Edmund Selcus... With seven illustrations. London, Methuen & co., 1td., (1919).

viii,180 p. front., 6 pl. 63 in.

Reprinted 4 times. The illustrations are from photographs by W.P. Dando, Henry Irving, Ernest Thompson Seton and D. Ceth-Smith.

A sequel to Tommy Smith at the Zoo (107).

1919.

110. (An account of the character of his parents and uncles).

In MILHAIS, John Guille.

Life of Frederick Courtenay Selous, D.S.O., Capt. 25th Royal Fusiliers. With 14 full-page illustrations by the author and 2 portraits. London, etc., Longmans, Green and co., 1919. pp.3-5.

A description of the character of his parents and of the family as a whole showing the influences which moulded his brother's nature, and which for Edmund Selous prove "that the force of heredity is stronger, in the individual, than that of education and surroundings."

1 May.

111. Sex\_habits of the Great Crested Orece.

Naturalist, (1920), pp.97-102, 195-198, 325-328, (1921), pp.173-176, 197-200, 301-305.

Observations made during February and early March, 1915, at Tring. This paper criticises some of the conclusions drawn by J.S. Huxley in a paper on the same species in Proc. Zool. Soc. Lond. (1914), pp.491-562. The Grebes are seen to be already mated shortly after their arrival at the reservoirs, and it is concluded that they arrive paired, either pairing at sea or remaining paired throughout the winter. Displays of "head-shaking" and the "penguin dance" between paired birds are described: the former is considered to have had a nervous origin which later developed into major part of display through sexual selection, which also produced the head-lappets. The theory is advanced that in those species which pair for life, sexual selection may operate between the sexes.

1 May.

112. Magpies, etc: useful or harmful? (Letters).

Naturalist, (1920), pp.173-174, 194.

Two letters denying that the destruction of Magpies by game-keepers has been of benefit to small birds, and citing the writer's experience in Brittany where Magpies, Jays, etc., are not destroyed and where small birds are particularly abundant.

3 June.

113. JACK'S INSECTS. (Popular edition).

Jack's insects, by Edmind Selous...Popular edition. With twenty-three illustrations by J.A. Shepherd. London, Methuen & co., ltd., (1920).

viii,183,(1) p. illus. 7½ in.

This is a reprint of chapters 1-10 of the text of the 1910 edition (73).

2 September.

114. JACK'S OTHER INSECTS.

Jack's other insects, by Edmund Selous...Popular edition. With twenty illustrations by J.A. Shepherd. London, Methuen & co., 1td., (1920).

xi,(1),195,(1) p. illus.  $7\frac{1}{2}$  in.

A reprint of chapters 11-20 of <u>Jack's insects</u>, 1910 edition (73).

1922

## 3 August.

#### 115. TOMMY SMITH'S BIRDS.

Tommy Smith's birds, by Edmund Selous...With four illustrations. London, Methuen & co., ltd., (1922).

2 p.1.,x,173,(1) p. front., 3 pl. 63 in.

The illustrations are from photographs by Riley Fortune and Henry Irving.

A book for children on the same lines as Tommy Smith's animals.

## 1 February.

116. Instances of inverted sexuality. (A letter).

Naturalist, (1924), p.62.

A letter giving examples of inverted sexuality recorded and published previously. Instances given are for the Great Crested Grebe, the Ruff, the Moorhen and the Little Grebe. 1 June.

117. The courting habits of the Heron.

Naturalist, (1925), pp.179-182.

Extracts from a diary kept during February, 1916, while watching at a heronry. The cries and actions of the birds on the nests are described. It is assumed that, as with the Shag, it is the female who plays the dominant part in courtship, and attracts the male to her on the nest.

23 October.

118. (Introduction to) WANDERINGS IN SOUTH AMERICA.

Wanderings in South America, by Charles Waterton. (With an introduction by Edmund Selous). London, Toronto, J.M. Dent & sons, ltd; New York, E.P. Dutton & co., (1925).

xxv,(1),261,(1) p. 7 in. (Everyman's Library, No. 772).

The introduction, dated 1 May, 1925, from Wyke Regis Castle, near Weymouth, gives a short account of Waterton's life and work.

1 November.

119. Further observations on the nuptial habits of the Heron.

Naturalist, (1925), pp.335-336.

Extracts from a diary kept during March and April, 1916. Display and notes are seen to be common to both sexes. It is concluded that seasonal activity of the generative system in birds produces violent actions which predominate in the male. Through sexual and natural selection these have evolved into courtship actions and nest-building.

## 13 October.

120. REALITIES OF BIRD LIFE.

Realities of bird life, being extracts from the diaries of a life-loving naturalist, by Edmund Selous. With an introduction by Julian S. Huxley.

xvi,350,(2) p. diagr. 9 in.

A selection of extracts from diaries dealing with many different species, notably Herons, Rooks, Avocets, Oyster-catchers, Redshanks, Ruffs, Blackcock and Red-throated Divers. Some of this material had already appeared in <u>Vild Life</u>, the Zoologist, and the <u>Saturday Review</u>.

16 July.

121. THOUGHT TRANSFERENCE (OR WHAT?) IN BIRDS.

Thought transference (or what?) in birds, by Edmund Selous...
London, Constable & company, 1td., 1931.

xi,(1),255,(1) p.  $6\frac{1}{2}$  in.

A book seeking to show, with examples, that many corporate movements by large flocks of birds can only be explained by assuming the existence of some form of extra-sensory perception in birds.

20 July.

122. EVOLUTION OF HABIT IN BIRDS.

Evolution of habit in birds, by Edmund Selous. With an introduction by H.J. Massingham. London, Constable & co., ltd., 1933.

xvi,17-296 p. 8 in.

This book aims to show how habits, originally purposive, tend to become formalised and are at length performed as an end in themselves. The theory is put forward that it is possible, by means of prolonged observation of the habits of birds, to discover the evolutionary sources from which they have developed. This was Selous' last published book, as he died in the following year.

## INDEX.

Arabic Numerals refer to entry numbers. Numerals refer to the page numbers of the introduction.

Animals, habits of, 2, 47, 52, 77, 83, 107, 108, 109. Astley, Hubert D., 9. Avocet, fighting of, 41, 42.

Beautiful birds, 9.

Bibliography of British ornithology, vi.

Bird life glimpses, 46.

Bird of Paradise, King, gaping display of, 57.

Bird watcher in the Shetlands, 43.

Bird watching, 5.

Blackbird, feeding habits of, 26, 34, 35.

- fighting of hens, 36.

Blackcock, aggressive display of, 70, 72, 84.

- courtship assemblies of, in England, 72, 86.
- in Scandinavia, 70, 86.
- theory of origin of, 54.
- courtship display of, 37, 70, 72, 84, 85.
   fighting of, 70, 72.
   fighting of Greyhens, 72, 85.

- selection of, as mate by Greyhen, 70, 72.

British bird book, 71, 75.

Brittany, observations made in, 97.

Buntings, 75.

Butterflies, 69.

Capercaillie, display of, 37. Children's books, 2, 9, 52, 73, 77, 83, 107, 109, 113, 114, 115. Clangula glaucion, 55, 56.
Coition, nest used for, by Great Crested Grebe, 4, 6.

- by Little Grebe, 100.
- by Red-throated Diver, 94.
- by Shag, 98.
- by Slavonian Grebe, 87.
- reversed, in Great Crested Grebe, 6, 116.
- in Little Grebe, 100, 116.
- in Moorhen, 14, 116.
- \_ in Ruff, 116.

Corvus corone, 82.

Crow, Carrion, nesting of, 81, 82.

Curlew, Common, 28.

Curlew, Stone, fighting of, 101.

- nesting of, 101.
- \_ social display of, 3.
- \_ spring display of, 101.

Dabohick, see Grebe, Little. Dadd, S.T., 47. Dando, W.P., 107, 109.

Darwin, Charles, 51, 70.

Dewar, George A.B., 5.

"Discovery" Report, 107.

Display, see also Gaping display.

- aggressive, in Blackcock, 70, 72, 84.

- in Ruff, 67.

- courtship, theory of origin of, 80, 101, 106, 119.

- social, in Stone Curlew, 3.

Diver, Great Northern, nesting of, 87, 89, 90. Diver, Red-throated, coition on nest of, 94.

- courtship attitudes of, 94.

- feeding of young by, 79.

Eagle, Sea, nesting of, 87. Edward Grey Institute, vi. Eider, 32. Evolution of habit in birds, 122.

Finches, 71. Fortune, Riley, 115. Foxgloves, Humble-bees feeding on, 74.

Caping display, in Fulmar, 13.

- in King Bird of Paradise, 57.

🗕 in Shag, 98.

Goldeneye, 55, 56.

Granby, Marquess of, 5.

Grebe, Great Crested, coition on nest of, 4, 6.

- courtship display of, 6, 96, 111.

- nest-building of, 4.

- reversed coition of, 6, 116.

Grebe, Little, call-notes of, 26.
- feeding of young by, 100.
- reversed coition of, 100.

Grebe, Slavonian, breeding habits of, 87.

Greyhen, see Blackcock.

Guest, Augusta, 52.

Gull, Black-headed, feeding inland, 11.

preying on Lapwings, 12.

Gulls, 10, 95.

Haddon Hall Library, 5.

Hares, 7,8.

Hawk, Sparrow, nesting of, 76.

Heron, courtship display of, 117, 119.

Hornets, 69.

Howard, Eliot, iv.

Hudson, W.H., ii. Humble-bees, 74.

Huxley, J.S., v, 96, 111, 120.

Iceland, observations made in, 87. Insects, 53, 69, 73, 74, 78, 113, 114. Irving, Henry, 107, 109, 115.

Jackdaw, feeding on sheeps' backs, 21. Jack's insects, 73, 113. Jack's other insects, 114.

Kirkman, F.B.B., 71, 75. Kittiwake, corporate flights of, 95.

Lapwing, Black-headed Gull preying on, 12. - scrape-making by, 6. Lapwing, Spur-winged, display of, compared with Oyster-catcher's, 49. Life of Frederick Courtenay Selous, 110. Lodge, G.E., 46. Magpie, 112. Mallard, pair-formation of, part played by female in, 51, 58. Massingham, H.J., 122. Maxwell, Fanny Margaret, i. Merlin, breeding habits of, 87. Millais, J.G., 110. Moorhen, bathing of, 26. - call-notes of, 26. - reversed coition of, 14. Mullens and Swann, vi. Naturalist, 86, 95, 97, 99, 111, 112, 116, 117, 119.
Nest-building, theory of origin of, iii-iv, 6, 80, 98, 106, 119. Nightjar, call-notes of, 1. - nesting-habits of, 1, 105. - young of, fed by regurgitation, 1. Ord, G.W., 2. Oyster-catcher, 44. - breeding habits, 50. - display of, 45. - compared with Spur-winged Lapwing's, 49. Park, Carton Moore, 53, 78. Peewit, see Lapwing. Petrel, Fulmar, gaping display of, 13. Phalarope, Red-necked, breeding habits, 87. Pheasant, fighting of, 26. Pipits, 75. Plover, Great, see Curlew, Stone. Plover, Green, see Lapwing. Plover, Kentish, 48. - pair-formation of, part played by female in, 51, 59, 60. Rabbits, 7, 8. Realities of bird life, 120. Redshank, 10. - assemblies of, 54. - feeding habits of, 11. - pair-formation of, part played by female in, 51, 61, 62. Reeve, see Ruff. Romance of insect life, 53. Romance of the animal world, 47. Roosevelt, Theodore, i. Ruff, characteristics of dominant birds, 65. - courtship assemblies of, 51. - theory of origin of, 54. \_ fighting of, 51. - formalisation of, 67. - purpose served by, 67. \_ selection of, as mate by Reeve, 51, 63, 65, 66. \_ sexual selection in, 51, 93, 103. \_ subservience to Reeve of, 51, 63, 66.

```
Saturday Review, 7, 8, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 21,
   22, 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 48, 49, 50, 54, 55, 56, 58, 59, 60, 61, 62, 63, 65, 66, 67, 84, 85, 88, 89, 90, 92, 104.
Sea-birds, courtship of, 13.
Seal, Grey, 99.
Seals, 43.
Selection, natural, evolution of nest-building through. 6.
Selection, sexual, iii, 57, 68.

- colouration of buccal cavity evolved through, 13, 57, 68.
  - evolution of display through, 111, 119.

    in Great Crested Grebe, 111.

  in Ruff, 51, 93, 103.
  _ variation in plumage of Arctic Skua due to, 20.
Selous, Edmund, life, i.
Selous, Frederick Courtenay, i, 110.
Selous, Frederick Lokes, i.
Seth-Smith, David, 109.
Seton, Ernest Thompson, 109.
Sexual selection, see selection, sexual.
Shag, coition on nest of, 98.
  - courtship display of, 91, 98.
      - dominance of female in, 98.
Sheldrake, 27, 28.
  - nesting of, 27.
Shepherd, J.A., 73, 77, 83, 113, 114.
Sherborne, Ann, i.
Shetlands, observations made in, 43, 95, 104.
Skua, Arctic, preying on terns, 30.
  - variation in plumage due to sexual selection, 20.
Smit, J., 5, 43,
Smith, David Seth-, 109.
Snipe, drumming of, 102.
  - feeding habits of, 26.
Speed, Lancelot, 47, 53, 78.
Spoonbill, feeding habits of, 40.
  - relations with Avocet, 41.
Starling, appropriating Green Woodpeckers' nesting-holes, 17.
  - feeding habits of, 26.
  - roosting of, 18, 19.
Stercorarius crepidatus, 20.
Swan, Mute, 15, 16.
  - fighting of, 22.
Swan, Whooper, breeding habits of, 87, 88.
Terns, corporate flights of, 25.
  _ courtship of, 23.
  - feeding of young by, 24.
  - nesting habits of, 24.
  _ preyed on by Arctic Skuas, 30.
  _ reactions of, to interference with young, 31.
"Territory" theory, iv.
Thought transference (or what?) in birds. 121
Thought transference, theory of, iii-iv, 95, 121.
Thrush, Song, feeding habits of, 34.
  _ fighting of, 33, 34.
Tommy Smith again at the Zoo, 109.
Tommy Smith at the Zoo, 107.
Tommy Smith's animals, 2.
Tommy Smith's birds, 115.
Tommy Smith's other animals, 52.
```

Wagtails, 75.

Wanderings in South America, 118.

Warbler, Melodious, feeding of young by, 97.

Waterton, Charles, 118.

Wild Life, 93, 94, 98, 100, 101, 102, 103, 105.

Wonders of animal life, 108.

Wonders of the insect world, 78.

Woodpecker, Californian, habit of wedging accrns into trees, 64.

Woodpecker, Green, habit of wedging pine-cones into trees, 64.

- nesting-holes of, occupied by Starlings, 17.

Zoo conversation book, 77.

Zoo conversation book: Hughie's second visit, 83.

Zoologist, 1, 3, 4, 6, 14, 20, 26, 51, 57, 64, 68, 69, 70, 72, 74, 76, 79, 80, 81, 82, 87, 91, 96, 106.

# THIS BOOK MUST NOT BE REMOVED FROM THE LIBRARY

LF24

Date:	mc		Reference
	From-	to_	Re
	C.V. 7		
1			
			9
Address.			
PP			
4			
		3.6	
		V 5/4	-
	4,146		
			90.0
Vame			
Nan			
	100		
	7		
File No.			
ile			
ji.	-	100	

The printing this side need only be used if the so-called "Reverse". Fruing is practised (this method is to file the letters face downwards so that the earliest date so that the carliest date.