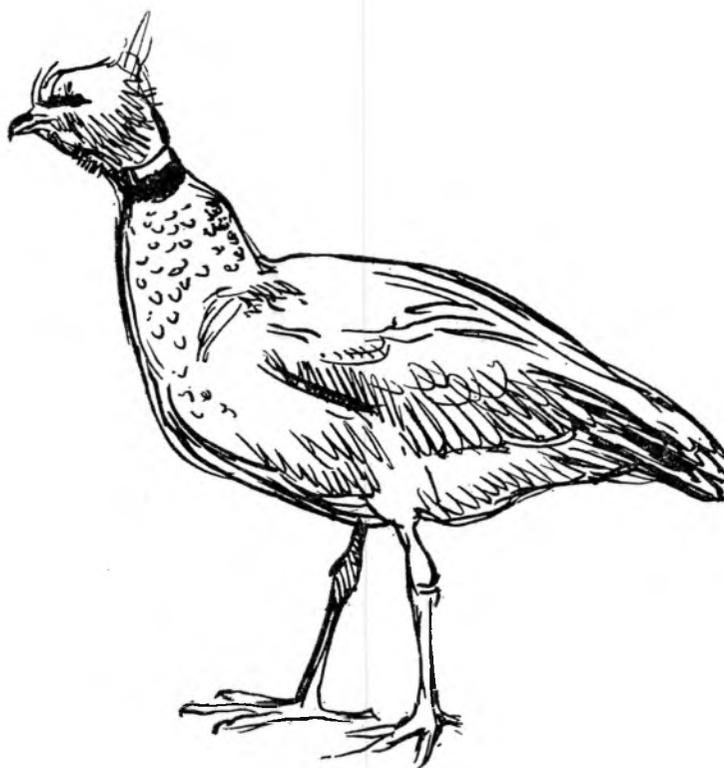


THE
THIRTEENTH ANNUAL REPORT OF
**THE WILDFOWL
TRUST**
1960-61



HUGH BOYD AND PETER SCOTT

Price Seventeen Shillings and Sixpence Net

Printed for the Wildfowl Trust by
F. BAILEY & SON, LTD.,
Dursley, Glos.
1962

THE WILDFOWL TRUST

Patron: HER MAJESTY THE QUEEN

<i>President</i>	H.R.H. Prince Philip, Duke of Edinburgh, K.G., K.T.
<i>Vice-Presidents</i>	Captain R. G. W. Berkeley The Rt. Hon. the Lord Howick of Glendale, G.C.M.G., K.C.V.O. General Sir Gerald Lathbury, G.C.B., D.S.O., M.B.E. Sir Percy Lister
<i>Trustees</i>	His Grace the Duke of Beaufort, K.G., P.C., G.C.V.O. The Rt. Hon. the Earl of Mansfield
<i>Hon. Treasurer</i>	Guy Benson
<i>Hon. Director</i>	Peter Scott, C.B.E., D.S.C.

Council

R. J. Berkeley	J. Jamieson (F)
Dr. Bruce Campbell (S)	K. Miller Jones
Michael Crichton (F)	Dr. James Robertson Justice
H. H. Davis	Dr. G. W. Storey
J. O. Death (F)	R. E. M. Pilcher (S)
Harley C. Drayton (F)	Miss P. Talbot-Ponsonby (F)
James Fisher (F) (S)	Sir Landsborough Thomson, C.B., O.B.E.
A. G. Hurrell	(<i>Chairman of S.A.C.</i>)
(<i>Ministry of Education Assessor</i>)	Major General C. B. Wainwright, C.B. (S)

(F) *Member of Finance Committee;*

(S) *Member of Scientific Advisory Committee*

Scientific Advisory Committee

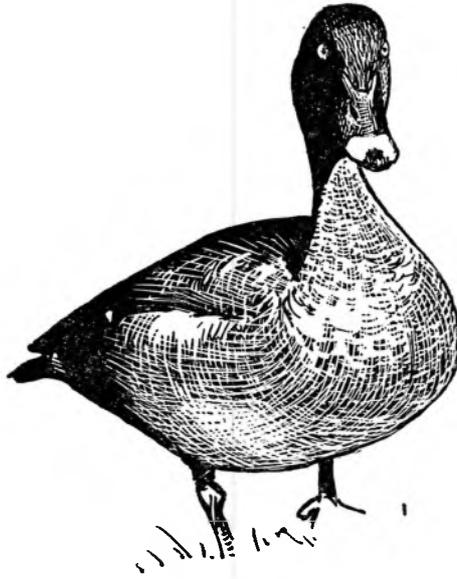
Those members of Council marked (S) above, together with :

Dr. F. Fraser Darling, F.R.S.E.	R. C. Homes
Professor J. E. Harris, F.R.S.	Sir Julian Huxley, F.R.S.
Dr. J. G. Harrison	A. R. Jennings
Professor H. R. Hewer	Dr. L. Harrison Matthews, F.R.S.
Dr. Edward Hindle, F.R.S.	Dr. W. H. Thorpe, F.R.S.

The collections of the Trust are at :

The New Grounds,
Slimbridge,
Gloucestershire.

The Waterfowl Gardens,
Peakirk,
Northamptonshire.



CONTENTS

SECTION I Annual Report, 1960-61	<i>Page</i>
General	5
The Collections	7
The Research Unit	12
Administration	16
SECTION II Year-book for 1961	
Symposium on Wildfowl Research and Conservation in Europe: contributions by <i>Finnur Gudmundsson, Pekka Grenquist, Kai Curry-Lindhal, Holger Holgersen, Knud Paludan, Erik Kumari, M. F. Mörzer Bruijns, J. A. Eygenraam, Count L. Lippens, J. V. Bateman, F. Roux, A. Schifferli, Geoffrey M. Tait, A. Keve</i>	19
Migration and Orientation	
Tests of the possible social significance of "nonsense" orientation. <i>G. V. T. Matthews</i>	47
Ringing of Barnacle Geese in East Greenland in 1961. <i>R. Marris and M. A. Ogilvie</i>	53
Movements of Shoveler ringed in Britain. <i>M. A. Ogilvie</i>	65
First-autumn dispersal of hand-reared Mallard. <i>Hugh Boyd & Jeffery Harrison</i>	70
The migrations of wild geese in France. <i>Francis Roux</i>	74
Distribution and populations	
The Goosander and Red-breasted Merganser in Scotland. <i>Derek Mills</i>	79
Brent Goose population studies, 1960-61. <i>P. J. K. Burton</i>	93
Wildfowl research on the White Sea Coast. <i>V. N. Karpovitch & N. N. Skokova</i>	99

continuation of CONTENTS

	<i>Page</i>
Refuges and management	
A gravel-pit wildfowl reserve. <i>James Harrison, Jeffery Harrison and Peter Olney</i>	101
The waterfowl in the Matsalu National Park. <i>Erik Kumari</i>	109
Food and feeding-habits	
The food-supplies of Essex Brent in the winter of 1960-61. <i>P. J. K. Burton</i>	117
Food-habits of a hand-reared Mallard population. <i>P. J. S. Olney</i>	119
Feeding habits of the Harlequin Duck. <i>W. Pool</i>	126
Evolution and systematics	
Evolutionary trends in the behaviour and morphology of the Anatidae. <i>Paul A. Johnsgard</i>	130
Pathology	
<i>Salmonella</i> sp. and <i>Clostridium botulinum</i> in waterfowl and sea-birds. <i>F. Steiniger</i>	149
Traveller's Tales	
The wanderings of a sailor. <i>Admiral Sir William Tennant</i>	153
In search of ducks in South America. <i>Christopher Sellick</i>	155
Review: The New Wildfowler. <i>R. E. M. Pilcher</i>	166
Short notes	
A yellow-legged Bewick's Swan. <i>H. Shorrocks</i>	168
German-ringed geese caught at Deeping Lake. <i>D. Dandridge</i>	168
Brood-sizes of ducks in north Iceland, July 1961. <i>J. Arnold Benington</i>	169
Gadwall diving and submerging. <i>Bernard King</i>	170
Courtship-feeding in the Red-crested Pochard. <i>E. J. M. Buxton</i>	170
Copulation and display of the Red-breasted Merganser. <i>Bryan L. Sage</i>	171
Raw meat as a food for Mute Swans. <i>Bernard King</i>	171
Mallard taking fish. <i>James & Jeffery Harrison</i>	171
Red-crested Pochard taking food from a Carp. <i>James & Jeffery Harrison</i>	172
Goosanders and other waterfowl "parasitised" by Black-headed Gulls. <i>James & Jeffery Harrison</i>	172
The pre-nuptial display of the Shoveler. <i>John Hori</i>	173
14th Annual General Meeting	175
Balance Sheet, 31st December, 1960	178
Accounts for the year ended 31st December, 1960	180
SECTION III Photographs	182
SECTION IV List of Trust Members	183

