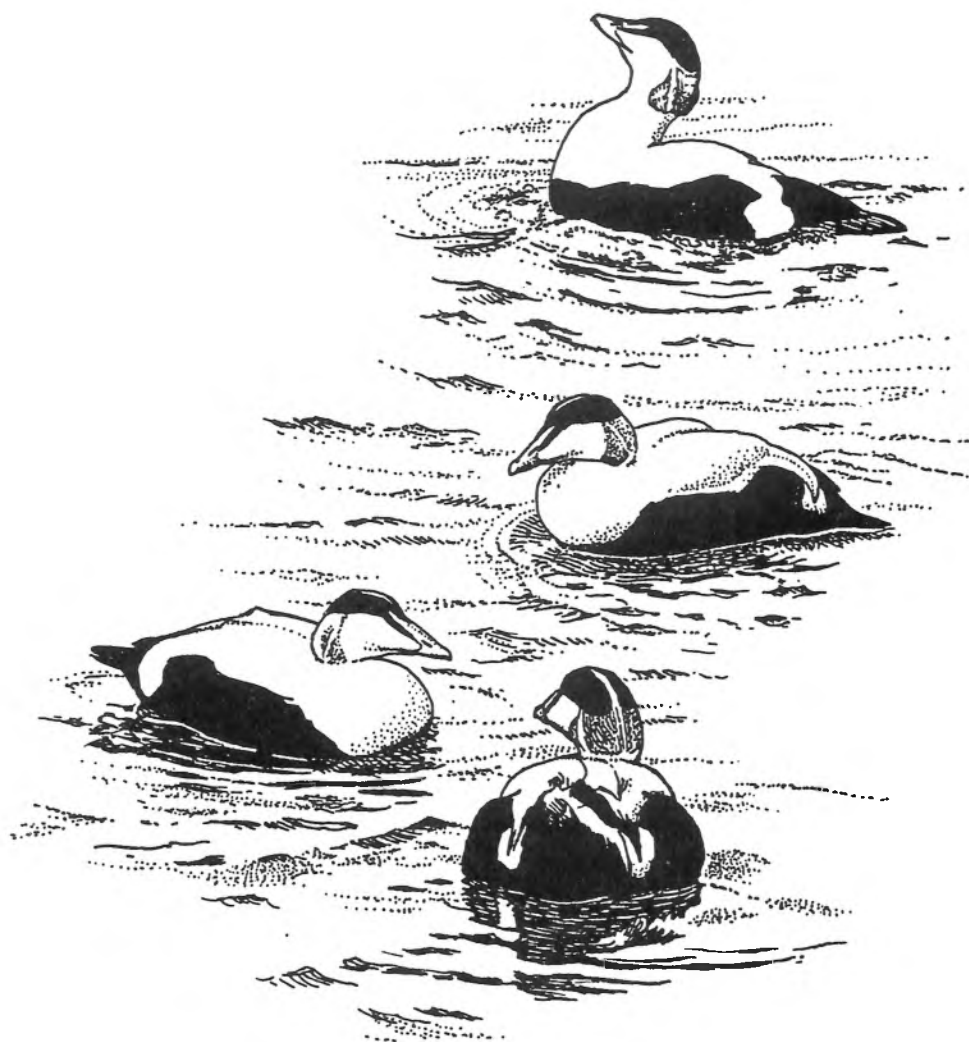




Editorial address: The Wildfowl Trust,  
Slimbridge, Gloucester, GL2 7BT, England.

Cover painting of Gadwall by Sir Peter Scott

Price £7.00 (\$15.00), including postage and packing

Enquiries concerning purchase, exchange or back numbers to:  
The Administrative Officer at the above address.

Text set in 9/10 Times Roman, printed and bound  
in Great Britain at Nimsfeilde Press Ltd., Nympsfield, Glos.

## Contents

|                                                                                                                                                                                                  |     |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|
| Population size and breeding success of Bewick's Swans wintering in Europe in 1983-4. <i>Jan H. Beekman, Sjoerd Dirksen and Teus H. Slagboom</i>                                                 | 5   |
| A review of Soviet research on the Lesser Snow Goose on Wrangel Island, U.S.S.R. <i>M. A. Bousfield and Ye. V. Syroechkovskiy</i>                                                                | 13  |
| Spring activity patterns of migrating Greenland White-fronted Geese in West Greenland. <i>A. D. Fox and S. C. Ridgill</i>                                                                        | 21  |
| A case of bigamy in the Canada Goose. <i>Eric Fabricius and Hugh Boyd</i>                                                                                                                        | 29  |
| Visual signalling in Canada Geese for the coordination of family units. <i>Jeffrey M. Black and James H. Barrow, Jr.</i>                                                                         | 35  |
| Moult-skipping by the Lesser Magellan Goose in Argentina. <i>Ronald W. Summers and Susana I. Martin</i>                                                                                          | 42  |
| Studies on the population ecology and migrations of wild geese in the German Democratic Republic. <i>E. Rutschke</i>                                                                             | 45  |
| Population dynamics of North American Light-bellied Brent Geese as determined by productivity and harvest surveys. <i>Ronald E. Kirby, Thomas W. Barry, Richard H. Kerbes and H. Obrecht III</i> | 49  |
| Time budgets of Northern Pintails wintering in the Sacramento Valley, California. <i>Michael R. Miller</i>                                                                                       | 53  |
| Foods of male Mallard, before and during moult, as determined by faecal analysis. <i>Göran Hartman</i>                                                                                           | 65  |
| Diving by wintering Black Ducks: an assessment of atypical foraging. <i>Lynn M. Brodsky and Patrick J. Weatherhead</i>                                                                           | 72  |
| Gizzard grit in some Australian waterfowl. <i>F. I. Norman and R. S. Brown</i>                                                                                                                   | 77  |
| Duck shooting in the United Kingdom. <i>John Harradine</i>                                                                                                                                       | 81  |
| Hunting as a key environmental parameter for the Western Palearctic duck populations. <i>Alain Tamisier</i>                                                                                      | 95  |
| Some thoughts on the social requirements of ducks in winter. <i>Alain Tamisier</i>                                                                                                               | 104 |
| Display inventory of the Blue Duck. <i>Jan L. Eldridge</i>                                                                                                                                       | 109 |
| Protein acquisition: a possible proximate factor limiting clutch size in Wood Ducks. <i>Ronald D. Drobney and Leigh H. Fredrickson</i>                                                           | 122 |
| Diet and size of the digestive organs of Spur-winged Geese. <i>S. A. Halse</i>                                                                                                                   | 129 |
| Specially induced suppression of breeding plumage in the Maccoa Duck. <i>W. R. Siegfried</i>                                                                                                     | 135 |
| Current research on Arctic Geese: a symposium. Preface, abstracts, and Summary and Conclusions                                                                                                   | 138 |
| Numbers of swans and ducks in Britain, 1983-84. <i>D. G. Salmon</i>                                                                                                                              | 151 |
| Numbers of geese in Britain and Ireland, 1984-85. <i>M. A. Ogilvie</i>                                                                                                                           | 152 |
| Ringling by the Wildfowl Trust, 1984. <i>M. A. Ogilvie</i>                                                                                                                                       | 153 |
| Wildfowl Trust avicultural report, 1984                                                                                                                                                          | 154 |
| Publications, 1984                                                                                                                                                                               | 156 |

## The Wildfowl Trust

*Patron* HER MAJESTY THE QUEEN

*President* HIS ROYAL HIGHNESS THE PRINCE OF WALES, T.G., K.T., P.C.,  
G.C.B.

*Vice-Presidents* Sir Isaac Wolfson, Bt., F.R.S., F.R.C.P., F.R.C.S., LL.D., D.C.L.  
Dr. John Berry, C.B.E., LL.D., F.R.S.E.  
Dr. Jean Delacour  
\*Mrs E. G. Kleinwort, M.B.E., J.P., D.L.  
\*The Lord Brassey of Apethorpe, J.P., D.L.  
Dr. Luc Hoffmann  
E. M. Nicholson, C.B., C.V.O.  
Sir James Steel, C.B.E., D.C.L., D.L., J.P.  
Ravi Tikkoo  
The Duke of Norfolk, C.B., C.B.E., M.C.  
Gen. Sir John Hackett, G.C.B., C.B.E., D.S.O., M.C.

*Trustees* Lady Herries  
The Earl of Mansfield, J.P., D.L.  
R. J. Berkeley, J.P., D.L.  
The Lord Buxton of Alsa, M.C., D.L.  
R. E. M. Pilcher, F.R.C.S.  
\*Keith Shackleton  
The Lord Dulverton, C.B.E., T.D., D.L.

*Hon. Director* \*Sir Peter Scott, C.B.E., D.S.C., LL.D.

*Deputy Directors* \*Prof. G. V. T. Matthews  
\*S. E. M. Goodall, O.B.E., M.C.

*Hon. Treasurer* \*Sir Kenneth Kleinwort, Bt.

|                        |                                                        |                       |
|------------------------|--------------------------------------------------------|-----------------------|
| <i>Council</i>         | Sir Ralph Carr-Ellison, T.D.                           | P. P. Mackie          |
| <i>Elected Members</i> | Prof. B. P. Follett, F.R.S.                            | W. E. Oddie           |
|                        | *R. K. H. Gaskell                                      | *R. O'D. Poulten      |
|                        | Mrs. J. G. Glyn                                        | *Lady Scott           |
|                        | Gen. Sir John Hackett, G.C.B., C.B.E.,<br>D.S.O., M.C. | Jeffrey R. Short, Jr. |
|                        | Jack Hayward, O.B.E.                                   | Mrs. A. J. M. Teacher |
|                        | R. M. Ivey, O.C.                                       | C. G. Tracey          |
|                        | Prof. A. Kennaway                                      | The Hon. Vincent Weir |
|                        | Sir Kenneth Kleinwort, Bt.                             | *Sir Max Williams     |

|                         |                  |                                        |
|-------------------------|------------------|----------------------------------------|
| <i>Co-opted Members</i> | Prof. D. Bellamy | Sir William Shapland                   |
|                         | W. A. Makins     | Julian Taylor                          |
|                         | B. L. Rathbone   | Prof. J. J. Thompson                   |
|                         | *D. Russell      | S. E. Scrope (for Berkeley<br>Estates) |

|                   |                                        |                                        |
|-------------------|----------------------------------------|----------------------------------------|
| <i>Scientific</i> | Prof. B. P. Follett, F.R.S. (Chairman) | Dr. I. R. Inglis                       |
| <i>Advisory</i>   | Dr. P. J. Butler                       | Dr. I. Newton                          |
| <i>Committee</i>  | J. E. Cooper                           | Dr. D. Parkin                          |
|                   | Dr. R. J. Cowie                        | Dr. G. Thomas                          |
|                   | Dr. D. Houston                         | Dr. M. W. Pienkowski (NCC<br>Assessor) |

\*Members of the Executive Committee



## Wildfowl 36

EDITED BY G. V. T. MATTHEWS  
AND M. A. OGILVIE

Published by the Wildfowl Trust, Slimbridge  
1985