

The Sussex Bird Report

No. 43 1990



Published by

The Sussex Ornithological Society

**SUSSEX ORNITHOLOGICAL SOCIETY
OFFICERS AND MEMBERS OF COUNCIL AT 30th JUNE, 1991**

- President:** B. A. E. Marr, 17 Roundhouse Drive, West Perry, Huntingdon, Cambs PE18 0DJ
- Vice-President:** S. W. M. Hughes, 6 West Way, Slinfold, Horsham, RH13 7SB
- Secretary:** Mrs V. Bentley, 4 The Poplars, Church Road, Yapton, Arundel BN18 0EQ
- Assistant Secretary:** Mrs B. Branscombe, Two Decks, Outram Road, Felpham, Bognor Regis PO22 7AL
- Treasurer:** D. Hervett, Flat 1, 56 Shakespear Road, Worthing BN11 4AT
- Recorder:** P. James, 23 Islingwood Place, Brighton BN2 2XG
- Assistant Recorder:** C. R. Janman, 4 Brookside, Runcton, Chichester, PO20 6PX
- Editor of Bird Report:** G. Roberts, 3 Carmarthen Avenue, Drayton, Portsmouth, Hants PO6 2AG
- Press & Public Relations Officer:** M. J. Mason, 21 Park Close, Burgess Hill RH15 8HL
- Surveys & Projects Officer:** J. Halls, Nursery Cottage, 45 Hill Lane, Barnham PO22 0BL
- Conservation Information Officer:** Dr J. K. Irons, 9 Babylon Way, Rattou, Eastbourne BN20 9DL
- Conservation Field Officer:** R. Page, Stantons Bungalow, East Chilington, Lewes BN7 3BB
- Membership Secretary:** J. E. Trowell, Lorrimer, Main Road, Icklesham, Winchelsea TN36 4BS
- Newsletter Editor:** Mrs I. M. Simpson, Hardanger, Littleworth, Partridge Green, Horsham RH13 8JF
- Members of Council:** Ms A. de Potier, 6 Brook Gardens, Emsworth, Hants PO10 7JY
T. W. Parmenter, 22 The Kiln, Burgess Hill RH15 0LU
D. Sneller, 31 Littlecote, Petworth
Dr B. J. Yates, 2 Watch Cottages, Nook Beach, Winchelsea TN36 4LU
- Archivist:** Dr J. A. Newnham, Walton House, 61 Grand Avenue, Worthing BN11 5BA

- Committees:**
- Scientific:** J. Cooper, R. D. M. Edgar, J. Halls, Dr J. K. Irons, P. James, T. W. Parmenter, G. Roberts, Dr A. B. Watson, Dr B. J. Yates
- Records:** A. S. Cook, R. J. Fairbank, C. R. Janman, M. Kenefick, T. W. Parmenter, Dr B. J. Yates
- Programme:** B. F. Forbes, P. J. Luffingham, Mrs G. D. Marriott, R. Page, P. J. Whitcomb

**THE SUSSEX BIRD REPORT
NUMBER FORTY-THREE, 1990**

*Recorder: P. James
Editor: P. F. Bonham*

CONTENTS

	<i>Page</i>
Contributors and Acknowledgements.....	2
Review of 1990.....	5
Classified Records	11
The Sussex List.....	48
Escapes and feral birds.....	67
Ringling in Sussex in 1990.....	69
Rye Bay Ringing Group, 1986-1990	74
The Little Grebe in Sussex. Part II — Non-breeding distribution and status, 1966-1989	78
<i>Note:</i> Great Spotted Cuckoo at Shoreham Airfield, April-May 1990	89
The 1990 Mute Swan census in Sussex	91

*Cover drawing of Great Spotted Cuckoo
and text illustrations by John Reaney*

Published October 1991
by
THE SUSSEX ORNITHOLOGICAL SOCIETY

CONTRIBUTORS AND ACKNOWLEDGEMENTS, 1990

We are grateful to the following observers for records for the 1990 Sussex Bird Report.

S. Abbott (SAB)
Mrs S. Ackroyd (SA)
D. L. Allen
M. Allen
S. R. Allen
Dr E. Archer
R. N. Argent
J. Ashbee
J. Bacon
C. F. Ball
P. C. Bance
M. I. Banks
G. Barker
M. H. Barnard
C. Barwood (CBa)
R. J. Bayne
Beachy Head Ringing Group
A. J. Beasley
J. S. S. Beesley
J. F. W. Beeson
Mrs L. E. C. Belchamber
P. R. Belchamber
Mrs V. Bentley
P. J. Biggs
G. Binns
Mrs G. R. Bird
R. F. Bird
J. Bodle
Mrs M. R. Bonham
P. F. Bonham
G. F. Boniface
A. P. Bowley
P. S. Bowley
P. M. Brayshaw
Dr C. Brooks (CB)
R. S. K. Buissou
K. F. Burn
A. F. Burtenshaw
Mrs S. J. Burtenshaw
R. Butler
D. P. Butterfield

Mrs D. R. Cooper (DRC)
J. E. S. Cooper
J. F. Cooper
T. E. Cooper
D. E. G. Copeland
C. Corigan
A. F. J. Cox
D. R. Crago (DRCr)
D. E. Crawley
J. K. Cross
Cuckmere Ringing Group
P. R. Cullen
A. Dare
P. I. Davison
A. Dawney
C. H. Dean
Ms A. de Potier (AdP)
G. des Forges
D. Dey
F. W. Dougharty
G. R. Down
Mrs Down
K. Downer
N. A. Driver
S. P. Dudley
Miss D. Duncan
Dungeness Bird Observatory
D. P. Dunk
R. J. Dunning
S. Dunsmore-Rouse
M. J. Eales
Mrs J. Edde
R. D. M. Edgar
Mrs J. H. M. Edom
G. Edwards
T. J. Edwards
M. Emberson
R. D. Evans
Mrs A. E. Everett
R. J. Fairbank
A. W. Ferguson
B. H. Flack
M. R. Fletcher
B. F. Forbes
A. Ford
C. J. Fox
J. Franks
P. Friston
R. Fry
D. J. Funnell

J. A. B. Gale
R. Gardner
N. A. Gearty
B. R. Gilmore
J. Glover
D. J. Golds
Mrs M. A. Goodare
H. Gordon
L. Gover
J. S. Gowers
G. Gowllett
A. S. Grace
M. R. Grace
A. Grant
S. Grant
Mrs M. Grech
R. R. Greenhalf
R. M. Greenshields
K. Greenwood
R. F. Grimmett
A. J. Guest
J. M. Halls
Mrs C. H. Hamilton
S. G. Hamilton
R. Harman (RHa)
R. G. Harris
S. P. Hartill
W. G. Harvey
Hastings & E. Sussex
Nat. Hist. Soc.
J. R. Havers
K. G. B. Heinzman
M. J. Helps
Mrs D. H. Herring
J. L. Herring
D. C. Heryett
Mrs J. Hewitt-Taylor
R. N. Hobbs
A. J. Holcombe
Mrs B. J. Holcombe
D. Hollow (DHw)
Mrs P. A. Hollow
R. Holman (RHo)
M. Holmes (MHm)
J. C. Holt
C. A. Holt
K. Hook
Mrs M. Hook (MH)
R. Hook (RH)
C. E. Hope
A. C. Howard
D. Howey (DH)
M. Howesgo (MHw)
S. W. M. Hughes
M. Hunter (MHu)
J. Hunter
R. Huxford (RHu)
W. D. Hyde
C. Hyde-Wear
R. Ingram
A. Isted
R. A. Ives

B. S. Jackson
Mrs B. James
Mrs B. D. James
C. M. James
P. James
C. R. Janman
Mrs C. Jarman
R. W. Jenkins
M. Jones
T. Callaway
B. J. Carter
R. Carver
P. Catlett
H. A. R. Cawkell
G. L. Champion
N. J. Champion
R. H. Charlwood
Lady Chelwood
H. A. Clapham
Miss C. M. Clarkson-Webb
G. Cockburn
Mrs S. Cocker
D. W. Codd
Mrs L. J. Colley
C. B. Collins
M. Collins
Mrs M. A. Collins
A. S. Cook
S. Cook
D. Cooper

G. Osborne
L. W. Osborne
D. J. Pankhurst
Ms F. Papazoglou
Mrs E. Parkin
Mrs G. M. Parkinson
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. K. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Dr M. Kalarah (MKa)
L. R. Keen
Mrs D. J. Kelly
R. S. Kelly
R. J. L. Kemp
M. Kenefick (MK)
D. Kennard
E. Kennard
D. King
J. King
A. R. Kitson
S. Kinapp
Rex Knight (RK)
Ron Knight (RoK)
Robert Knight (RbK)
L. Lacey-Johnson
Miss R. Lamb
P. D. Lanaway
C. Lang
O. Langhorne
Mrs P. Laugharne
C. Leach
H. J. A. Lee
J. Lee
S. Linnington
A. H. Lloyd
M. Love
M. R. Lovell
C. D. Lowmass
G. H. Luck
P. J. Luffingham
Ms P. G. Marchant
C. H. D. Marcuse
Mrs G. Marriott
W. B. Marrison
D. J. Martin
M. C. Martin
M. J. Mason
K. W. Maycock
K. W. Mayhead
L. Mayhead
Ms S. E. McKenzie
C. W. Melgar
S. Message
C. E. Messer
O. Mitchell
R. Morris
Mrs B. M. Mortlock
D. C. Mortlock
E. R. Musselle
A. E. Nealon
M. A. Newell
Dr J. A. Newnham
J. Nobbs
K. Noble
A. L. Norman
D. B. Nye
Ms J. Nye

Text illustrations:
Thanks are due to John Reaney for his drawings of Fulmars (p.14), Herons (p.16), Wryneck (p.49), Tree Pipit (p.51), Little Grebes (p.78) and Mute Swans (p.96), as well as for the cover illustration.

National Surveys:

New Atlas of Breeding Birds in Britain and Ireland: Work continued on this survey by the BTO/IWC/SOC, organised in West Sussex by Mrs V. Bentley, 4 The Poplars, Yapton, Arundel and in East Sussex by M. J. Scott-Ham, 45 Great Brooms Road, Tunbridge Wells, Kent. Data are being collected on a tetrad (2-km square) basis for use also in compiling a Sussex tetrad breeding atlas. All contributors, who will be acknowledged in full on completion of the survey, are again thanked for their participation in this important fieldwork.

Mute Swan Survey: Fieldwork for this WWT census, organised in Sussex by S. W. M. Hughes, 6 West Way, Slimfold, Horsham, West Sussex, was carried out in 1990. The 75 observers who assisted with the survey work are thanked for their participation in this census.

Heronry Census: This long-standing census is organised in Sussex by Dr A. B. Watson, 83 Buckingham Road, Shoreham-by-Sea, West Sussex. Counts of known heronries are given in the systematic list and observers are again thanked for their participation in this survey.

Wildfowl Counts: The counts in Sussex are organised for the Wildfowl and Wetlands Trust by D. W. Codd, 12 Broome Close, Horsham, West Sussex, who has made them available to the Society for this Report. Counters were:

P. C. Bance, G. Backer, G. Binns, G. F. Boniface, Dr C. Brooks, T. Callaway, D. W. Codd, D. E. G. Copeland, A. Dawney, Mrs A. E. Everett, J. M. Halls, S. G. Hamilton, R. G. Harris, J. L. & Mrs D. H. Herring, D. C. Heryett, Mrs P. A. Hollow, M. Holmes, S. W. M. Hughes, W. D. Hyde, Dr M. Kaláner, E. Kennard, D. C. Lang, P. J. Ludingham, R. Morris, Mrs B. M. Mortlock, D. J. Pankhurst, B. Puttock, C. J. Raymond, A. & Mrs I. M. Simpson, D. Sneller, Miss C. A. Taylor, P. C. Turner, Mrs O. Westwood, A. Wheeler and Dr B. J. Yates.

Estuary Counts: The BTO/RSPB/NCC 'Birds of Estuaries Enquiry' was carried out between September 1990 and March 1991 and organised by C. D. Lowmass, 33 Barn Close, Seaford, East Sussex. The counters were:

P. F. Bonham, K. F. Burn, P. Cautlet, C. B. Collins, Ms A. de Potier, R. D. M. Edgar, Mrs J. H. M. Edomi, D. J. Funnell, J. Glover, R. R. Greenhalf, J. M. Halls, R. Holman, M. Holmes, E. Kennard, S. Knaapp, Bob Knight, Rex Knight, L. Lacey-Johnson, O. & Mrs P. Laugharne, H. J. A. Lee, C. D. Lowmass, Mrs G. Marriott, K. Noble, D. A. & T. W. Parmenter, J. Reaney, B. Savage, D. I. Smith, G. Smith, H. M. J. Tariffs, Miss C. A. Taylor, J. E. Trowell, E. D. Urquhart, J. D. Weston, R. Williamson, P. J. Wilson and Dr B. J. Yates.

Thanks are due to all the above observers and organisers who have contributed to these national surveys in the county.

We are grateful for summaries of detailed observations at Beachy Head from R. D. M. Edgar and M. Kenefick, Bewl Water from P. C. Bance, Icklesham from S. J. R. Rumsey, Pett Level from J. A. B. Gale, Rye Harbour from Dr B. J. Yates, Seaford Head from A. Wheeler, Selsey Bill from O. Mitchell, Thorney and Pilsey Islands from C. B. and Mrs M. A. Collins, Woods Mill from M. Russell and Worthing from Dr J. A. Newnham.

Thanks are also due to D. E. Crawley for again continuing to maintain the detailed records of ringing in the county and to all those ringers who contributed.

Lastly, the Recorder is especially grateful to Dr J. A. Newnham, the Society's Archivist, and the following team of helpers for again coding and inputting a large proportion of the records onto the computer:

J. E. S. Cooper, D. E. Crawley, J. K. Cross, Ms A. de Potier, Miss C. J. Evans, J. M. Halls, D. P. Harvey, M. R. Lovell, Mrs M. Mason, Ms S. E. McKenzie and Mrs I. M. Simpson.

The generous financial support of East Sussex County Council in the purchase of the computer is acknowledged while thanks must also go to West Sussex County Council for substantial grants towards the cost of computer software and also the production of this Report.

The systematic list was compiled by P. James with much help from the following to whom grateful thanks are due: A. S. Cook (scarce waders); J. E. S. Cooper (tits and Treecreeper); R. D. M. Edgar (marshland birds, sawbills, warblers and Goldcrest); R. J. Fairbank (scarce migrants, rarities); S. W. M. Hughes (inland wildfowl, woodpeckers, Grey Wagtail); M. Kenefick (scarce raptors); Dr J. A. Newnham (gulls, Nightingale); T. W. Parmenter (divers, scarce grebes, sea-duck), M. J. Scott-Ham (heathland birds, breeding raptors) and Dr A. B. Watson (Heron).

REVIEW OF 1990

by *Chris Janman and Roy Sanderson*

January was a very mild month, generally fine and sunny for the first half but deteriorating to wetter and windier conditions thereafter. Storm-force SW winds crossed the country on 25th, reaching 80 m.p.h. on the south coast, but because the trees were without leaves damage in the south was much lighter than in the October 1987 'hurricane'.

The wintering flock of **Golden Plover** increased to 960 at Pagham Harbour on 1st and 1250 on 9th, where a **pale-bellied Brent Goose** was also present. A high count of 101 **Red-breasted Mergansers** came from Chichester Harbour, with 74 in Thorney Channel alone. The herd of **Bewick's Swans** at Coldwaltham numbered 75 birds, but due to the mild weather grey geese were generally scarce, including 2 **Bean Geese** on Pulborough Brooks from 7th January to 18th February and 21 **White-fronts** on Amberley Wild Brooks on 11th January. A male **Red-crested Pochard** stayed on Pagham Lagoon from 3rd January to 2nd April, and 3 red-head **Smew** were at Rye on 4th January. Wintering waders included 15 **Ruff** at West Wittering and 2 **Whimbrel** in Pagham Harbour on 4th, and 101 **Knot** at the latter locality by 17th. Records of unusual passerines were few but included 50 **Tree Sparrows** and a **Brambling** near Sidlesham Ferry on 2nd and a **Dartford Warbler** at Littlehampton GC on 10th. A male **Peregrine** was seen at Pett Pools on 21st. Single **Red-necked Grebes** were reported from Thorney Island and Worthing on 20th and Selsey Bill on 24th. The only reported consequence of the gale on 25th was perhaps the **Shag** found at Weir Wood Reservoir on 26th, staying until 6th February.

Mild and windy weather continued throughout February as a succession of depressions crossed the country, bringing mainly SW winds and heavy rainfall.

A number of records were associated with high winds in the Channel, e.g. a **Great Skua** and 64 **Kittiwakes** past Worthing on 3rd and **Little Gulls** becoming widespread along the coast, with maxima of 5 at Selsey on 9th, 12 at Hastings on 10th and 4 at Sidlesham Ferry on 25th. More surprising were 2 **Sandwich Terns** passing Selsey on 10th. The continuing mild weather produced few other unusual records, but of note were another **Dartford Warbler** on Littlehampton GC on 11th, 2 **Avocets** in Pagham Harbour on 15th and a **Peregrine** at Cliff End on 20th. Single **Red-necked Grebes** were reported from Rye Harbour on 11th and Chichester Harbour on 17th. A first-winter **Glaucous Gull** appeared at Worthing on 23rd, and another **Kittiwake** movement was recorded, this time at Selsey Bill where 160 flew E in one hour on 24th.

March weather was generally mild, sunnier and much less windy than in the previous month, with a particularly warm spell over 17th-18th. Northerly winds brought a cooler end to the month, but a change from light NNE to ESE on 31st produced some exciting sea-watching.

Single **Great Northern Divers** were noted off Selsey Bill on 3rd and Church Norton on 11th, and both **Black-necked** and **Red-necked Grebes** were seen in Chichester Harbour on 4th, another Red-necked appearing at Bramber on 12th. The first summer migrants also arrived then: a **Wheatear** at Seaford on 3rd and another with a **White Wagtail** at Worthing on 4th, and by 10th there were no fewer than 14 **Chiffchaffs** at Seaford Head. The first-winter **Glaucous Gull** was noted at various western coastal localities between 14th and 29th. Spring migrants continued to appear with a **Black Redstart** at Church Norton on 14th and 5 **Sandwich Terns** past Selsey on 16th. The following day 4 **Sand Martins** were at Sidlesham Ferry together with a long-staying **Short-eared Owl**, and the first **Willow Warbler** was at Seaford Head. Sea-watching on 17th produced the first notable up-Channel movements and included an **Avocet** at Selsey, 15 **Velvet Scoters** and a **Whimbrel** at Worthing, 500 **Brents**, 70 **Eiders**, 50 **Teal** and 6 **Garganey** at Birling Gap, and 997 **Brents** at Seaford. The movement continued on 18th, the highest numbers again from Birling Gap, including 370 **Brents**, 350 **Common Scoters**, 140 **Teal** and 12 **Garganey**. Also on this date a **Water Pipit** was inland at Waltham Brooks. The county's earliest ever **Wryneck** was observed at Battle on 22nd and a **House Martin** at Littlehampton on 23rd with 5 at Seaford Head on 24th: more migrants arriving on 25th included a **Ring Ouzel** at Broadwater and 2 **Tree Pipits** at Beachy Head, culminating in spectacular form with an **Alpine Swift** over the Crumbles.

One of the greatest attractions of sea-watching is its unpredictability — literally anything can occur. One of the surprises of the year was an unprecedented up-Channel movement of **Shoveler** recorded along the coast on 31st with maxima of 485 past Selsey Bill and 819 past Seaford Head. In addition to **Shoveler**, **Worthing** also recorded 235 **Common Scoters**, 539 **Teal**, 257 **Pintail** and a **Bonxie**. A flock of 6 **Avocets** flew past Selsey, increased to 7 at Worthing, and this flock plus another of 9 was also observed passing Seaford and Birling Gap. Rarer still in sea-watching terms on 31st were a ringtail **Hen Harrier** off Newhaven and a **Caspian Tern** seen flying E from Hastings Pier.

April was the fourth successive month with average temperatures higher than normal. Southerly winds on 1st raised temperatures in the south to 21°C, but by 3rd winds veered to the NW and night frosts severely damaged crops, particularly fruit blossom brought on early by the mild conditions. The second week began sunny with light easterlies but mid-month the weather changed to rain, hail and blustery W/SW winds. Pressure rose from 20th associated with a continental high, bringing warm sunny conditions and light easterlies to the end of the month.

Migration watchers recorded a good movement at sea on 1st, with 4600 **Common Scoter**, 87 **Teal**, 63 **Shoveler**, 11 **Bean Geese** and a **Garganey** E at Birling Gap, 1605 **Brents** at Seaford, and 1446 **Brents** and 155 **Sandwich Terns** E at Worthing. The same day the first of 4 **Red Kites** seen during the year appeared over **Balsdean**. **Little Gulls** seem to be increasing off the south coast during spring, and 222 off Seaford on 2nd were significant. A couple of days later came the real surprise: the only county record of **Great Spotted Cuckoo** had been of one picked up dead near **Bognor Regis** in August 1967, so the arrival of a very healthy immature near **Shoreham Airport** on 4th was perhaps the highlight of the year. The bird fed eagerly on nests of the brown-tailed moth caterpillar and was observed closely by many, albeit often from the other side of the busy A27 dual carriageway, and stayed until 1st May.

An **Osprey** appeared at **Normans Bay** on 14th and an adult **Night Heron** at **Littlehampton Marina** on 15th and 16th, then came further raptor records including a **Goshawk** at **Church Norton**, a **Red Kite** at **Sidlesham**, and **Marsh**

Harrriers at **Shoreham Airport** and **Selsey West Fields**. An adult **Woodchat Shrike** hunted prey at **Littlehampton GC** from 22nd to 24th and another **Night Heron** turned up, at **Rye Harbour** on 27th, staying until 2nd May. The month closed with a **Hoopoe** at **Seaford Head**, a **Red-rumped Swallow** briefly at **Selsey Bill**, and a flock of 47 **Pomarine Skuas** off **Worthing** with 12 off **Newhaven**.

May was mainly hot and sunny with above-average temperatures and mainly light NE winds. The month began with record high temperatures, and by 7th winds were light NW, temperatures falling from the heights of 25-27°C to a more normal 19°C. A shallow low brought heavy rain to most districts and after nearly a week a ridge of high pressure spread south across central England. The 15th saw a return to warm S winds, the weather remaining dry and bright with light winds. It was the driest spring since 1893.

Good numbers of **Pomarine Skuas** rewarded observers at most sea-watching sites early in the month. **Normans Bay** pool held a selection of migrants on 3rd, including 5 **Wood Sandpipers**, 2 **Spotted Redshanks** and a **Garganey**. An **Osprey** in the **Lower Cuckmere** on 5th was the first of 11 sightings of this species during the month, from coastal and inland waters, the maximum being 2 at **Weir Wood Reservoir** from 10th to 12th. Also on 5th, on **Pilsey Island**, was the first of 5 **Kentish Plovers**. Again in the far west, an adult female **Woodchat Shrike** was on **Thorney** on 11th. As well as various sightings of a single bird in the **Pagham/Chichester** area during the spring, **Little Egrets** were also seen at **Cuckmere Haven** on 11th (2), at **Pett** on 12th, **E past Worthing** and at **Brighton Marina** on 14th, and at **Rye Harbour** on 23rd (2).

Apart from **Ospreys**, the only other exciting raptors seen were a female **Red-footed Falcon** on **Balsdean** and an immature **Marsh Harrier** at **Steyning Round Hill**, both on 20th. Unusual waders included a **Dotterel** at **Broomhill Level** on 17th and a **Stone Curlew** at **Beachy Head** on 28th. A **Marsh Warbler** was also present at **Beachy Head** on the same day, and an adult male **Scarlet Rosefinch** at **Icklesham** on 29th must have been a fine sight. Overshooting splendid male **Golden Orioles** were found at **Beachy Head** on 12th and at **Slaugham** on 31st.

June was rather changeable weatherwise with cooler periods and rain interspersed with still warm days and overcast spells. The month began with cool NW-SW winds round a low in the **North Sea**. Rain fell on several days until by 8th winds became more northerly with high pressure until 15th. South-westerly winds were particularly strong on 21st with further fronts tracking eastwards across all districts. Warm humid weather spread in on moderate SW winds on 24th and unsettled showery weather moved across the country, with strong cyclonic winds in time for the weekend of 30th.

Records of unusual visitors to the county were few but included a **Honey Buzzard** in **Ashdown Forest** on 3rd and another **Scarlet Rosefinch**, this time a first-summer individual at **Beachy Head** on 10th where the previous day a second male **Golden Oriole** had been found. Probably 4 different **Curlew Sandpipers** in summer plumage were at **Rye** during 14th-20th. Worth mentioning here is the claimed **Least Tern** which again returned to the **Little Tern** colony at **Rye Harbour** from the end of May into July. This **North American** equivalent of our own **Little Tern** is considered by some to be a separate species, but the record has still to be ratified by the **BOU Records Committee**.

The occurrence on 13th of parties of 8, 15 and 20 **Crossbills** at **Ashdown Forest**, **Chithurst** and **Stedham Common** respectively heralded a large invasion into the county, involving at least 587 birds, the most since 1966. An adult **Night Heron** was seen at **Rye Harbour** on 23rd, and the month ended with a wandering **Manx Shearwater** off **Selsey Bill** and a fine adult summer-plumage **Marsh Sandpiper** at

Sidlesham Ferry on 30th, the latter being sporadically sighted until 9th July.

Strong SW winds occurred in early July, bringing a succession of fronts across the country. High pressure built to the SW and humid conditions on 7th heralded the start of many days of hot dry weather. Winds in Sussex were mainly from the east, temperatures reaching 30°C until on 22nd stronger east winds brought temperatures back to normal. Pressure fell on 26th, bringing light rainfall on 28th with light SE winds.

Twenty **Brent Geese** were found summering in Chichester Harbour, a female **Golden Oriole** was observed briefly at Fishbourne on 6th and a male at Icklesham on 18th, but generally the month was quiet birdwise. Another adult male **Marsh Warbler** was found, this time at Icklesham on 16th. An immature **Osprey** was at Pagham Harbour on 19th, and by 20th there were at least 100 **Crossbills** in the Midhurst area. The Rye Bay Ringing Group found an adult male **Icterine Warbler** on 21st. Between 15th and 27th up to 14 **Avocets** were seen at Pett and Rye, a female **Garganey** was identified at Waltham Brooks on 28th, and a **Balearic Shearwater** passed Splash Point, Seaford, on 29th.

August weather continued where July ended, exceptionally hot and sunny and well into the 90s, resulting in the third hottest August of the century. Herstonceux was the warmest place on 4th with 95°F, but the next day a weak cold front brought a change to fresher NW winds. High pressure to the SW continued to dominate the weather, but by 10th a westerly airstream brought stronger winds with some rain on 19th. Hot humid weather returned for a week from 21st to 27th when low pressure formed to the west.

The month began with 2 **White Storks** drifting over Lancing and 1 over Worthing on 1st; 2 others or perhaps the same were seen later in the month, being recorded over Durrington, Shoreham, Southwick Hill and Withdean (Brighton) on 24th. A **Wood Warbler** was seen at Beachy Head on 4th, when there were 6 **Wood Sandpipers** at Waltham Brooks. An adult **Aquatic Warbler** was found at Church Norton in the evening of 4th and the assembled hordes on 5th were fortunate in also observing a **Great White Egret** in Pagham Harbour. A good selection of unusual raptors was noted during the month, commencing with an **Osprey** at Bewl Water on 7th and continuing with a **Honey Buzzard** at Weir Wood on 9th, an immature **Marsh Steyning** on 17th, a juvenile **Peregrine** at Pagham on 23rd, an immature **Marsh Harrier** at Seaford on 25th, and further single **Honey Buzzards** at Church Norton and Beachy Head on 26th and 27th respectively. A juvenile **Spotted Crane** was trapped at Icklesham on 13th, an adult **Spoonbill** appeared at Weir Wood on 26th, and **Little Egrets** continued to turn up at various places at both ends of the county. Single **Manx Shearwaters** were logged off Selsey Bill on 15th and Worthing on 18th. The following day brought a **Caspian Tern** to Weir Wood Reserve, and a **Whiterumped Sandpiper** at Sidlesham Ferry stayed from 20th until 26th. Notable passerines in a busy month were a juvenile **Icterine Warbler** at Beachy Head on 27th and an **Ortolan** at Church Norton on 26th-27th, a **Hoopoe** at Denton on 29th, and a total of 5 **Aquatic Warblers** trapped at Icklesham between 29th August and 17th September. A juvenile **Red-necked Phalarope** at Rye Harbour stayed into September, and the last day of the month saw 500 'Commie' Terns and 10 **Black Terns** fishing off Selsey Bill.

September began with high pressure to the south, a cold front moving across all parts on 3rd bringing some rain, at last, to Sussex. Pressure built from 5th introducing dry calm conditions from 8th, with temperatures generally above average but with more cloud. Winds moved NE for a time on 15th, turning back from the west on 17th. Tropical storm 'Isadore' brought back gale-force winds to the north of the country on 18th, with associated weather fronts crossing the south

of England for the next few days. Winds moved NW and then N on 25th with pressure recovering. High pressure moved away SE on 28th and a low moving up from Biscay caught the forecasters unawares and heavy rain moved NE across Sussex on 29th/30th. An excellent year for beechmast with heavily laden trees prominent all over the countryside.

Single **Marsh Harriers** were reported during the month from Rye Harbour, Beachy Head, Denton and Pett Level, but the only **Montagu's Harrier** seen was an immature at Lychpole Hill on 2nd, whilst **Honey Buzzards** were noted at Weir Wood and Selsey West Fields. **Ospreys** were reported from the Lower Cuckmere on 7th, Newhaven on 8th, and Beachy Head and Darwell Reservoir on 9th. Few **Short-eared Owls** arrived but included singles at Beachy Head on 2nd and 4th, and Selsey on 12th. There were few interesting waders apart from a juvenile **Red-necked Phalarope** at Sidlesham Ferry on 12th, a high count of 34 **Little Stints** at Thorney Island on 19th, and a **Grey Phalarope** at the Crumbles on 27th. Warblers fared rather better with two records of **Cetti's** and single **Marsh, Icterine, Melodious, Dartford** and **Yellow-browed Tawny Pipits** were noted at Littlehampton GC on 4th and Beachy Head on 16th, where there was an **Ortolan** on 8th; and **Wrynecks** were at Pett on 7th, Thorney on 9th and Rottingdean on 14th. An adult male **Woodchat Shrike** was seen at Rackham Mount on 14th, and a **Corncrake** met an untimely death at the jaws of a fox at Littlehampton West Beach on 22nd. An adult and a juvenile **Peregrine** were in Pagham Harbour on 25th, and a male **Goshawk** was in the Cuckmere Valley on 30th.

October began with a ridge over southern districts and low pressure to the north. Winds gradually strengthened until on 6th leaves were flashing past the window at 30 m.p.h. Winds veered northerly on 7th and slowly moderated; there were ground frosts on 8th/9th. Warm humid southerlies were associated with a low moving up from Biscay, and by 16th a shallow low covered the country with winds in the south becoming easterly. South-east winds strengthened on 21st, unsettled weather over Iberia moved north, and the easterly flow in the south gave way to a westerly flow as a strong Atlantic jetstream brought a succession of depressions across the country. Herstonceux reported a gust of wind at 85 knots on 28th with torrential overnight rain.

A juvenile **Sabine's Gull** passed Worthing on 3rd. Dispersing **Dartford Warblers** were noted at four coastal localities and returning **Great Grey Shrikes** were seen at Beachy Head (2), Weir Wood Reservoir and Climping. Raptor records included a **Buzzard** and a **Short-eared Owl** at Beachy Head and a **Marsh Harrier** at Fairlight on 7th and a **Peregrine** at Worthing Beach on 22nd. A **Great Northern Diver** was observed off Selsey on 10th and 29th and a **Red-necked Grebe** appeared in Chichester Harbour on 14th. Also on 14th at Selsey Bill were a **Merlin**, a **Mediterranean Gull** and 4 **Black Redstarts**, increasing to 8 on 18th. A **Lapland Bunting** was at Seaford Head on 13th and 21st. An immature **Scarlet Rosefinch** was observed at Belle Tout on 14th, a **Dartford Warbler** was trapped at Icklesham on 18th and a **Bluethroat** on 20th, and **Yellow-browed Warblers** were at Seaford Head on 20th and Church Norton from 25th to 27th. At sea were a **Bewick's Swan** off Worthing on 21st and a **Pomarine Skua** off St Leonards on 22nd. A juvenile **Whooper Swan** was present at Rye on 27th and 28th; on the former date a **Corncrake** was trapped at Icklesham. Large numbers of **Goldcrests** were a feature of the late autumn; 350 were counted in Whitbread Hollow on 25th. The first **Water Pipit** of the autumn was at Weir Wood Reservoir on 31st.

The low-pressure area moved slowly into the Low Countries, being replaced by high pressure that moved eastwards, winds becoming northerly on 3rd November, and NE by 5th. The high maintained dry settled weather with below-average

CLASSIFIED RECORDS FOR 1990

by P. James

temperatures and some night frosts until 9th, when slow-moving fronts advanced from the SW. A westerly airstream developed by 13th with a succession of fronts and strong winds. Northerly winds brought colder weather from 17th to 21st. On 25th the main low-pressure area was centred over southern districts with light easterly winds, which slackened introducing fog and frosts.

A **Yellow-browed Warbler** and a **Water Pipit** were recorded at Littlehampton West Beach on 2nd when a long-staying **Dartford Warbler** appeared at Rye Harbour. A **Stone Curlew** was also at Rye on 3rd, and the 4th saw a scattering of **Little Auks** in the county, including 6 at Hastings and 5 at Climping. A **Waxwing** was at Beachy Head also on 4th. A **Red Kite** flew over Balsedean on 5th and the regular adult male **Goshawk** was at Church Norton on 6th. A single **Long-tailed Duck** was off Selsey on 9th and a **Long-eared Owl** roosted at Rye sporadically from 11th to 25th. Another **Lapland Bunting** was found, this time at Pett Level on 13th-14th, and on the latter date an immature **Goshawk** was seen in the Arun Valley. A **Peregrine** visited Toot Rock (Pett Level) on 25th and a first-winter **Iceland Gull** was at Littlehampton on 28th.

As the high pressure moved away on 7th December, a plunge of Arctic air behind an occlusion, on which a low formed, brought severe snowstorms to the Midlands and North, the South escaping with very light snow but with a daytime maximum of 3°C on 9th and strong east winds. There were very strong northerly winds down the East Coast on 12th, but the Arctic air was replaced by a quieter spell of weather with widespread fog on 13th. Apart from a brief spell of easterly winds around 17th, the remainder of the month was dominated by unsettled conditions with strong winds, a succession of depressions and rain right over Christmas and into the New Year.

Nine **Velvet Scoters** flew W at Selsey Bill on 2nd and a **Red-throated Diver** remained at Weir Wood from 3rd to 14th. Few winter passerines were present but a **Water Pipit** was present at Fishbourne SF for most of the month and another was reported from Pett Pools, where a **Cetti's Warbler** was also reported on 30th. Up to 2 **Turtle Doves** were surprisingly late stayers at Rye until 18th and **Fieldfares** were numerous by the third week. A small party of **White-fronted Geese** was observed at various coastal localities from 6th to 14th, with a maximum of 19 at Worthing on 10th. An adult **Peregrine** was at Pagham Harbour on 6th, up to 3 **Long-tailed Ducks** and 8 **Bewick's Swans** frequented Chichester GPs, **Jack Snipe** peaked at 14 at Rye on 8th, and 2 **Great Northern Divers** appeared at Climping and 2 adult **Whooper Swans** at Goring, both on 15th. The very strong northerly winds in the North Sea on 12th precipitated a record number of **Little Auks** along the Sussex coastline, culminating in a maximum of 26 past Selsey Bill on 28th. An immature **Shag** appeared at Weir Wood from 16th to 17th. Interesting sea-watch records were of a **Manx Shearwater** off Worthing on 28th, and 87 **Red-throated Divers** and 94 **auks** past Langney Point on 29th, with 259 auks there and 340 off Newhaven on 30th. The year ended with a first-winter **Glaucous Gull** at Shoreham and a **Pomarine Skua** off Selsey also on 30th.

Stop Press: The following records were accepted by *British Birds* too late for inclusion in the Classified Records: **Bee-eater** at Pett Level on 20 May, female **Sardinian Warbler** trapped at Icklesham on 3 July (second county record); **Black Kite** at Pett and Icklesham on 7 July; adult male **Pied Wheatear** at Newhaven on 7-9 July (first record for Sussex); **Pallas's Warbler** at Balsedean on 12 November; and finally **Franklin's Gull** at Brighton Marina on 29 December (second county record). Details will be published in the 1991 Report.

This list covers all species in Categories A and C of the British Ornithologists' Union check-list. Records of national rarities have only been included if the Society has been notified of their acceptance by *British Birds*, at the time of going to press. The only exceptions, included for the sake of completeness, are some of the East Sussex Little Egrets (page 15); any rejections would be published in the 1991 Report. Observers are reminded that all records of unusual species (see list on inside back cover) are considered by the Records Committee and only those fully authenticated will be published.

The following abbreviations are used in the Systematic List as standard practice: E, W, N, S, etc., cardinal points of the compass; GP, gravel pit(s); GC, golf course; Hbr, Harbour; MP, Mill Pond; SF, sewage farm or works; LNR, Local Nature Reserve; NR, Nature Reserve; NNR, National Nature Reserve; Res., Reservoir; SSSI, a declared Site of Special Scientific Interest; WWT, Wildfowl and Wetlands Trust; NC, no count; ha, hectares; km, kilometres. (Note that 1 sq. km = 100 ha = 247 acres.) The reference to the latest standard account of Sussex birds is abbreviated: Shrubbs 1979 (Shrubbs, M., 1979, *The Birds of Sussex, their present status*, Phillimore, Chichester).

Although House Sparrow (*Passer domesticus*) occurred commonly in Sussex in 1990, details have not been incorporated into the List. Records of this species are, however, still required.

SWANS, GEESE, DUCKS and WADERS. Readers are reminded that the tables presented for all the main species have been compiled from the monthly 'Wildfowl Counts' for the Wildfowl and Wetlands Trust and the 'Birds of Estuaries Enquiry' for the BTO, RSPB and NCC. The counts were made once per month and therefore the tables do not show the peak monthly figure but present a more meaningful coordinated count. The 'Birds of Estuaries Enquiry' counts were made on 13 Jan., 10 Feb., 10 Mar., 22 Sept., 20 Oct., 17 Nov. and 15 Dec. 1990, and 19 Jan., 16 Feb. and 16 Mar. 1991. The 'Wildfowl Counts' were made on 14 Jan., 18 Feb., 18 Mar., 23 Sept., 21 Oct., 18 Nov. and 16 Dec. 1990, and 20 Jan., 17 Feb. and 17 Mar. 1991.

ESCAPES AND FERAL BIRDS. As in the 1988 and 1989 Reports, a separate list of escaped and/or feral birds other than those species in the British Ornithologists' Union's Category C which appear in the main list, is appended to this report on pages 67-68.

1. **RED-THROATED DIVER** (*Gavia stellata*).—Another unexceptional year apart from good numbers observed in Dec. The approximate monthly totals (but see also Diver sp.) were as follows:

Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
11	3	53	40	12	1	2	33	362

Apart from 6 off Pett on 7 Jan. and 1 at the Crumbles GP on 22 Feb., all records for the first half of the year referred to birds seen passing up-channel.

The first returning bird was 1 W at Selsey Bill on 20 Sept. There were no noteworthy numbers until Dec. when numerous birds were seen on passage, with 33 off Newhaven on 14th and 87 off Langney Point on 29th the maxima reported.

The only inland record was of 1 at Weir Wood Res. from 3-14 Dec. (CFB, NAD *et al.*).

2. **BLACK-THROATED DIVER** (*G. arctica*).—Another unexceptional year. The approximate monthly totals (but see also Diver sp.) were as follows:

Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
2	—	15	26	44	1	—	4	11

All the spring records refer to passage birds with peaks of 7 E at Beachy Head on both 28 Apr. and 1 May and 8 E at Seaford on 12 May.

In the latter part of the year the first record was of 1 offshore at Selsey Bill on 29 Sept. In Chichester Hbr there was a single on 7 Nov., 2 on 10 dates from 1-31 Dec. and 3 on 15th. The only fully authenticated inland record was of a juv. at Barcombe Res. from 19-25 Nov. (RDME).

3. **GREAT NORTHERN DIVER** (*G. immer*):—One in Chichester Hbr on 2 Jan. may have been the Dec. 1989 individual. Other records for early in the year were of singles at Selsey Bill on 3 Mar. (RJLK) and 13 Apr. (OM) and Church Norton on 11 Mar. (AFB, SJB). A gain it is possible that these records refer to the same bird.

In the latter part of the year, singles were recorded at Selsey Bill on 10 Oct. (OM), 29 Oct. (BJ, OM) and 14 Nov. (OM). There were 2 W there on 11 Dec. and further singles W on 29 and 31 Dec. (OM). Elsewhere there was 1 at Church Norton on 1 Dec. (PSB) and 2 at Climping on 15 Dec. (ASC *et al.*). It is likely that only 2-3 individuals were involved.

Observers are reminded of the need to supply a description for this species.

DIVER SPECIES (*Gavia sp.*):—Totals of birds noted during the year were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
Jan.	22	9	86	254	140	1	5	41	443

Note the main passage in Dec. as with Red-throated Diver.

6. **LITTLE GREBE** (*Tachybaptus ruficollis*):—Monthly maxima at the principal wintering sites were:

	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr.....	41	24	21	7	27	21	43
Pagham Hbr.....	8	5	9	15	9	20	28
Lower Cuckmere.....	28	7	2	7	27	21	43
Rye Hbr.....	26	4	6	18	15	13	11

Elsewhere in Jan. and Feb. there were 13 at inland sites, including 2 on flood waters at Pulborough and one on the R. Adur at Henfield. On 29 Jan. one was reported in a flooded car park by Chichester Channel.

No spring records were received from the coast. In the breeding season 42 pairs were reported from 26 sites (numbers of young in brackets): 6 pairs at Icklesham; 4 pairs at Gravetye Manor (3); 3 pairs at Rye Hbr (0) and Thorney Deep (6); 2 pairs at Inholmes Copse, West Lavington, Chichester GP (2) and Glynde Levels (3); and single pairs at Harting Hurst MP, Redford Pond, Ebernoe Common, Chidmere Pond, Dunfold GP, Nyewood, Aldingbourne Rife, Streel Lake, Durrington, White Vane Lake, Boyles Pond, Copthorne, Burwash, Beech Hill Battle, Bellhurst, Filsham, Broomhill Level and Money Penny GP. It was the first time no young were reared at Rye Hbr LNR.

At the end of the year there were 25 at Thorney Deep on 7 Oct. and at Pagham Lagoon numbers rose steadily from 15 on 29 Sept. to 28 on 4 Dec. In December, 21 birds were reported from 8 inland sites.

A paper reviewing the non-breeding distribution and status of this species in Sussex appears on pages 78-89.

7. **GREAT CRESTED GREBE** (*Podiceps cristatus*):—Monthly maxima at the principal wintering sites were:

	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
Weir Wood Res.....	51	51	59	11	5	31	51
Bewl Water.....	27	40	43	60	64	30	23
Arlington Res.....	20	5	15	40	50	31	60
Chichester Hbr.....	47	28	25	1	3	5	28
Darwell Res.....	22	15	12	19	27	29	38
Pagham Hbr.....	16	0	5	13	38	8	4
Chichester GP.....	22	29	28	28	22	34	14
Ardingly Res.....	27	25	21	26	26	15	33

An unscheduled breeding season census, performed at the end of May, produced a total of 225 adults at 27 sites plus a solitary bird in Chichester Hbr. The total included 48 at Bewl

Water, 33 at Weir Wood Res., 30 at Darwell Res., 16 at Arlington Res. and 12 at Rye Hbr. At the reservoirs breeding success was poor with only 6 young reared at Weir Wood, one at Powdermill and Ardingly and none at Darwell and Bewl Water. At traditional sites success was about average. Breeding was recorded for the first time at Shillinglee North Pond and St Juliens, Coolham. At Chichester GP it seems that early broods failed; however, on 16 Sept. 3 pairs were present with 9 well-grown young (including one brood of 4), and at Rye Hbr 6 pairs managed to rear only 4 young.

Single birds were reported from Worthing Beach on 5 May, Selsey on 12 June and Pagham Hbr on 19 June. Post-breeding dispersal was evident by 24 July when 5 were off Pilsley Island. On 2 Aug. 7 were at sea off Church Norton and numbers there had risen to 12 by 8 Aug. At the end of the year numbers in the harbours were relatively low, whilst numbers inland and particularly at the reservoirs remained high. The only large gathering at the coast was of c.200 off Pett on 1 Dec.

8. **RED-NECKED GREBE** (*P. grisegega*):—The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
3	2-3	2	1	1	1	1-2	—	1

Fewer records were received than in 1989. In Jan. there were singles in Thorney Channel on 20th, offshore with 12 Slavonian Grebes at Worthing on the same date and at Selsey Bill from 24-27th. The only Feb. records were 1 at Castle Water, Rye Hbr LNR on 11th and 1-2 in Chichester Hbr on 17th while in March there were singles at the latter locality on 4th and on the R. Adur at Bramber on 12th (DCH). Further singles passed Seaford on 1 Apr. and Worthing on 1 May.

In autumn the first was 1 at Selsey Bill on 22 Sept. followed by 1-2 in Chichester Hbr on 14 Oct. There were no Nov. records but in Dec. there was 1 offshore at Selsey Bill from 14th-31st and into 1991 and 1 in Chichester Hbr from 17th-31st.

9. **SLAVONIAN GREBE** (*P. auritus*):—Another good year with the largest numbers recorded in the west of the county. The approximate minimum monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	Aug.	Sept.	Oct.	Nov.	Dec.
31	18	21	13	1	—	4	21	45

In Jan. 13 were at Pagham Hbr on 1st, 6 off Pilsley Island on 7th and 12 offshore at Worthing on 20th while in Feb. up to 11 were at the former locality, 5 at Pilsley and singles at Worthing and Rye Hbr. Numbers fluctuated in March with maxima of 16 at Pagham on 13th and 3 early in the month at Selsey Bill. On 1 Apr., 3 were observed offshore at Seaford and Birling Gap, perhaps the same birds. Other records for the month were of 2 at Pagham Hbr on 11th, singles at Selsey Bill and Seaford on 14th and 25th respectively and a further 2 at Pilsley on 27th.

The first of the autumn was an early bird at the Crumbles GP on 27 Aug. (JSG). None were then recorded until 4 at Pagham Hbr on 19 and 26 Oct. Numbers at this locality rose to 20 offshore on 11 Nov. but the only other record for Nov. was of a single off Worthing on 27th. The Pagham flock reached a maximum of 32 on 19 Dec. Elsewhere in Dec. there was an unusual inland record of 1 at Weir Wood Res. on 2nd-3rd (CFB, NAD), 1 off Worthing on 8th, 6 off Climping on 15th, 1 off Lancing on 24th and 4 off Selsey Bill on 28th, one remaining on 29th.

10. **BLACK-NECKED GREBE** (*P. nigricollis*):—1989:—In addition to the published records there was 1 at Scotney Court GP on 3 Sept. (NAD *et al.*).

1990:—A very poor year with only 2 recorded: singles at Chichester Hbr on 4 Mar. (AFB, SJB) and in summer plumage at the Ternery Pool, Rye Hbr on 16-17 May.

12. **FULMAR** (*Fulmarus glacialis*):—1989:—The record of 200 between Peacehaven and Newhaven on 11 June (SxBR 1989) should be amended to read 20.



1990:—The usual movements of uncertain significance were recorded at the main seawatching localities as follows:

Direction of movement	Jan-Feb.		Mar-May		Aug-Oct	
	E	W	E	W	E	W
Selsey Bill	—	—	139	331	2	33
Worthing	31	49	126	363	—	30

The peak movement was on 20-21 Apr. when there were 79 W at Worthing. The only breeding records received were of 9 occupied sites at Newhaven on 28 May, 6 there on 17 June and 3 pairs at Hastings on 28 July, each with a single chick.

18. **MANX SHEARWATER** (*Puffinus puffinus*):—1989:—At Seaford there were 2 E on 21 May (SL, AW *et al.*) and 9 E on 23rd (AW).

1990:—Another poor year with only 5 authenticated records, all singles, at Seaford on 9 May (AW), Selsey Bill on 30 June (CH-W) and 15 Aug. (SJB) and Worthing on 18 Aug. and 28 Dec. (RJS). All but the Seaford bird were flying W.

A Balearic Shearwater (*P.p. mauretanicus*) was observed feeding at the sewage outfall at Splash Point, Seaford on 29 July (AW). It later departed E.

25. **GANNET** (*Sula bassana*):—Observations at the main sea-watching localities were as follows:

Direction of movement	Jan-Feb.		Mar-May		June-July		Aug-Oct.		Nov-Dec.	
	E	W	E	W	E	W	E	W	E	W
Selsey Bill	—	—	341	75	127	45	132	1003	—	67
Worthing	—	—	260	128	16	33	74	720	11	41
Seaford	—	—	354	62	84	—	—	—	—	—
Beachy Head	—	—	—	232	—	—	—	—	—	—

The peak spring movements were 130 E at Worthing on 20 Apr. and 79 E at Seaford on 15 May.

In autumn there were 60 W at Selsey Bill on 15 Aug. and 55 W at Worthing on 19 Aug. A number of large movements were recorded off Selsey Bill in late Sept. including 131 W on 18th, 52 W on 20th and 339 W in 9.5 hrs on 29th.

26. **CORMORANT** (*Phalacrocorax carbo*):—Monthly maxima at the known nocturnal roosting sites were as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Ivy Lake	—	90	79	125	—	—	—	—	—	12	—	207
Mansey Levels	—	—	10	—	—	—	—	—	—	—	—	18
South Stoke	—	—	—	—	—	—	—	—	—	—	117	112
Wyckham Farm	75	—	—	55	51	—	21	25	79	136	170	121

In addition to the above counts, there were 44 resting on power lines at Bramber on 1 Sept. and 60 N at Lancing on 28 Nov., probably bound for the Wyckham Farm roost in the Adur Valley.

The maximum monthly counts at inland waters were as follows:

	1990		1991	
	Jan.	Feb.	Jan.	Feb.
Adur Levels	17	23	11	24
Amberley Wild Brooks	12	23	19	22
Angmering Decoy	37	38	1	10
Ardingly Res.	6	—	2	3
Arlington Res.	16	6	1	14
Arundel WFT	25	28	2	10
Barcombe Res.	25	17	30	38
Bewl Water	35	25	1	12
Burton Ponds	9	6	13	17
Chichester GP	—	3	1	6
Darwell Res.	—	1	—	—
Glynde Levels	—	1	—	—
Knepp	25	23	13	14
Lewes Brooks	—	4	—	2
Nyewood	2	4	—	—
Petworth Park	27	8	2	1
Pevensey Levels	1	—	—	—
Powdermill Res.	3	3	—	—
Shillinglee	2	3	—	—
Streele Lake	3	3	—	—
Warnham Mill Pond	51	57	38	10
Weir Wood Res.	—	—	—	—

Counts at coastal localities included maxima of 102 in Chichester Hbr, 117 in Pagham Hbr and 57 at Rye Hbr. At Worthing there were 63 W in 1.5 hrs on 8 Dec.

27. **SHAG** (*P. aristotelis*):—1989:—8 at Brighton Marina on 25 Feb. 1990:—A poor year except for an influx in Dec. probably associated with that of other seabirds into the county at this time. The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	3	11	9	9	1	—	4	1	2	4	19

The highest numbers seen were in Newhaven Hbr, max. 7 on 22 Dec. Inland records were of singles at Weir Wood Res. from 26 Jan. to 6 Feb. (CFB, NAD) and on 16-17 Dec. (NAD).

33. **NIGHT HERON** (*Nycticorax nycticorax*):—An adult found at Littlehampton on 15 Apr. flew off E late on 16th (RB, ASC, RJLK *et al.*) while adults were seen at Rye Hbr from 27 Apr.-1 May and on 23 June (DJF, BJY *et al.*), with 2 on 2 May (AFB, SJB *et al.*). These records have been accepted by *British Birds* and, assuming three birds were involved, bring the county total to 20. The Littlehampton individual is the earliest to be recorded in the county, previous spring records falling between 21 Apr. and 7 June.

37. **LITTLE EGRET** (*Egretta garzetta*):—1989:—The single at West Wittering from 18-22 Sept. remained to 23rd. One at Knepp MP on 26 Oct. (MHu, CWM, SR) brings the year's total to 11.

1990:—Recorded in every month of the year with an absolute minimum of 9 individuals involved (but see caveat in next paragraph). At least 1 was present in Chichester Hbr from 1989 (SxBR 42:15) to at least 9 Apr., being seen most frequently at Snowhill, West Wittering and Cobnor Farm (HAC, CBC, MAC, JHME *et al.*): Either it or another was present at Pagham Hbr on 28 Apr. (RJF, CRJ *et al.*) and Thorney Deepes on 30 Apr. and 3 May (CBC, MAC). Two at Cuckmere Haven* on 11 May (MK), 1 at Pett on 12th (CHD, JABG), and 1 flew E past Worthing on 14th (PMB, JAN), being seen at Brighton Marina* later that day (JPS). Two were recorded at Rye Hbr* on 23 May and 1 from 18 June-18 July and 16-24 Aug. (BJY *et al.*). One was seen at Fishbourne Channel, Chichester Hbr on 16 and 25 July (HAC, SGH) with it or another visiting Pagham Hbr on 22 July and 12-22 Aug. (SAB, TJE, BJ, CMJ *et al.*) and reappearing at Bosham, Chichester Hbr on 26 and 28 Aug. (AdP *et al.*). At least 1

was present in Chichester Hbr from 5 Sept. to the end of the year, being seen most regularly at Pilsley/Thorney but occasionally visiting other sites (CBC, MAC, BI, CMJ *et al.*), with 2 at Pilsley on 11 and 23 Sept., 5 Oct., 4-5 Nov. and 4-5 Dec. (CBC, MAC *et al.*) and at Ellanore on 15 Dec. (BSa). One again visited Pagham Hbr on 10 Nov. (BJ, CMJ, OM) and 22, 25 and 27 Nov. (AFB, SJB, TJE).

All the West Sussex records have been accepted by *British Birds*, although 1990 is the last year that this species will be considered by them; some of the East Sussex records (asterisked) were not yet accepted at the time of going to press. Full details of all future records will still be required by the SOS.

38. **GREAT WHITE EGRET** (*E. alba*):—One at Pagham Hbr on 5 Aug. (NAD, SPD *et al.*) has been accepted by *British Birds* and is the second county record, the first having been at Thorney Deepes in June 1985.

39. **HERON** (*Ardea cinerea*):—All known heronries were counted and nests certainly and probably occupied totalled 212 (210 in 1989). The counts were as follows: Fishbourne 24 (JKC), Pagham 6 (SK), Yapton 8 (RK), Parham 19 (AD), Henfield 19 (ABW), Firle 48 (ABW), Knepp 13 (AS, IMS), Erridge 16 (MJS-H), Glynleigh 7 (LG), Priestthawes 0 (LG), Westham 0 (LG), Warrling 15 (LG), Pett Level 0 (CHD), Leasam 36 (JA), Rye Harbour 0 (BJY). A single nest was at Winchelsea (CHD) and one possibly occupied at Lyminster (RK). This year Glynleigh was the only occupied heronry on the western edge of Pevensy Levels.



Out of the breeding season the species was recorded throughout the county in suitable habitat, with maxima of 23 at Thorney Deepes and 27 at Weir Wood Res. in Sept. and 29 at Rye Hbr in Nov. Ten flew out to sea from Selsey Bill on 22 Oct.

42. **WHITE STORK** (*Ciconia ciconia*):—On 1 Aug. 2 flew S over Lancing at 14.40 (DS), 1 being seen over, and on, Worthing Hospital at 15.00 hrs before departing SW (JAN, MJP). On 24 Aug. presumably the same 2 individuals flew E over Durrington at 14.00 hrs (EA). Shoreham at 14.10 hrs (KN), Southwick Hill at 14.33 hrs (CJW) and Withdean at 15.00 hrs (BSJ). One was seen at Pagham Hbr on 3-4 Nov. (mo), Lewes, Rye and Camber on 18 Nov. (KH, MH, RH) and Bexhill on 10-12 Dec. (NAD *et al.*). It is most likely that all of the above relate to free-flying, and unringed, individuals wandering to and from Whipsnade Zoo. They ranged widely during the autumn, 2 being also recorded in Norfolk on 7 Aug., Dorset on 22

Aug. and Cornwall on 9-10 Sept. before returning to Whipsnade, temporarily, on 29 Sept. (*Birding World* 3:260, 296, 331). One wandered again in Nov., after leaving Sussex on 4th being seen in Dorset on 6-10th and Kent from 18th into Dec. (*Birding World* 3:365, 405). Only 2 have ever been recorded in the county after Oct.

44. **SPOONBILL** (*Platalea leucorodia*):—1989:—An adult at Thorney Island on 3-4 Mar. (CBC).

1990:—The colour-ringed immature first noted at Rye Hbr on 5 Oct. 1989 (SxBR 1989) remained at Northpoint GP until 3 Jan. The only other authenticated record was of an adult at Weir Wood Res. on 26 Aug. (DBN).

Observers are reminded of the need to supply a description for this species to eliminate the possibility of confusion with the hybrid Spoonbill × African Spoonbill still at large in the county in the first half of 1990 (see Escapes and Ferals on page 67).

46. **MUTE SWAN** (*Cygnus olor*):—During Jan-Mar. the highest counts reported from the principal localities were: Pulborough-Arundel 99, Lewes Brooks 94, Pevensy Levels 76, Upper Adur Levels 35, Chichester Hbr 35 and Glynde Reach 34.

A countywide census in Apr-May found 227 territorial pairs and 657 non-breeding birds. A detailed report appears on pages 91-96. Counts in Sept-Oct. included 78 in Chichester Hbr, 73 on Pevensy Levels and 56 at Rye Hbr. At the end of the year Nov-Dec. counts at the principal localities were: East Guldeford Level 200, Winchelsea 110, Pulborough Brooks 104, Upper Adur Levels 80, Lewes Brooks 70, Pevensy Levels 66 and Chichester Hbr 61.

47. **BEWICK'S SWAN** (*C. columbianus*):—In Jan. and Feb. the maximum counts at the principal localities were: Arun Valley 83, Adur Levels 23 and Lewes Brooks 9. The last birds recorded in the spring were 6 at Arundel WWT on 18 Mar.

In the autumn the first seen were 5 at Waltham Brooks on 20 Oct., 1 E at Worthing on 21 Oct. and 8 at Icklesham and W over Guestling on 22 Oct. Numbers in the Arun Valley had increased to 41 by 24 Oct. and then built up gradually to a maximum of 79 (including 11 young) by 9 Dec. Elsewhere, 8 arrived at Chichester GP on 22 Nov. and were still in the area on 19 Dec. On 27 Dec. the resident herds at Henfield and Lewes Brooks totalled 46 (including 16 young) and 18 (including 8 young) respectively.

48. **WHOOPER SWAN** (*C. cygnus*):—A juvenile at Rye Hbr on 27-28 Oct. (DJF, HMJT) and 2 adults on the sea off Goring on 15 Dec. (DIS) were the only authenticated records.

49. **BEAN GOOSE** (*Anser fabalis*):—Two at Pulborough Brooks from 7 Jan. to 18 Feb. (mo) and 11 in from the sea at Birling Gap on 1 Apr. (DC, JFC) were the only records.

51. **WHITE-FRONTED GOOSE** (*A. albifrons*):—1989:—3 SW over Hooe Level on 2 Jan. 1990:—In Jan. there were 2 at Pulborough Brooks on 2nd, 7 and 12 at Scotney Court GP on 3rd and 5th respectively, parties of 6 and 14 at Amberley Wild Brooks on 8th and 21 there on 11th. The only other record for the first half of the year was of a single at Bewl Water on 15 Apr.

In the latter part of the year the first recorded were 9 at Climping and 6 W with Brent Geese at Worthing on 21 Oct. A small influx occurred in Dec. commencing with 7 at Rye Hbr on 6th and 19 E at Worthing on 10th. The remaining records were for the Pagham Hbr area where there were 15 on 12th, 9 on 13th, 5 on 27-28th and 4 on 29th. A party of 22 grey geese E at Worthing on 27th were considered to be this species.

53. **GREYLAG GOOSE** (*A. anser*):—1989:—Two broods of 7 and 4 were recorded at Waltham Brooks.

1990:—Monthly maxima of feral birds at the principal localities were as follows:

	Jan.	Feb.	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.
Arun Valley/Petworth Park	30	32	22	36	14	56	18	47
Weir Wood/Ardingly Res...	—	12	4	28	36	53	—	—
Glynde Levels	29	21	25	—	24	—	2	—

At the beginning of the year there were 137 birds, presumably from the Dungeness flock, at Scotney Court GP on 8 Jan. Elsewhere, in addition to those at the principal localities, the 3 in the western harbours at the end of 1989 remained there throughout Jan. and Feb., 2 were in the Lower Cuckmere Valley and 1 was present at Bewl Water. Spring records were of 2 at St Leonards-on-Sea on 16 Mar. and 1-5 past Seaford on several occasions in Apr. and May.

Breeding pairs (young in brackets) increased markedly: 2 pairs at Amberley Wild Brooks (11), Parham Park (2,0), Piddinghoe (9,2), Rye Hbr (4,3) and Scotney Court GP (5,4) and single pair at Ardingly Res. (1), Cophorne (6), Buckhurst Park (4), Eridge Park and Withyham. Single birds were also reported from Bewl Water, Stedham sandpit and Warnham LNR and flocks of non-breeders at Amberley (9), Ardingly Res. (11) and Weir Wood Res. (18). Post breeding flocks included 36 at Rackham on 27 July, 19 at Darwell Res. on 28 Aug., 24 flying up the R. Ouse at Newhaven on 25 Sept. (probably to Glynde Levels) and 160 at Scotney Court GP on 1 Oct. The flock at Broadbridge Heath was estimated at 75 in July and was undoubtedly the source of parties of 63 and 67 which visited Warnham MP on 25 Aug. and 11 Sept. respectively.

55. **CANADA GOOSE** (*Branta canadensis*):—Monthly maxima at the principal autumn and winter sites were:

	Jan.	Feb.	Mar.	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester GP	51	66	22	—	81	90	54	40
Arundel WWT	317	245	121	—	502	446	345	430
Amberley Wild Brooks	200	300	—	—	34	320	146	57
Pulborough Brooks	118	54	10	—	—	—	124	221
Petworth Park	106	43	123	500	450	70	150	250
Ardingly Res.	11	10	10	47	342	349	288	189
Cuckmere Haven	156	49	26	—	52	6	43	41
Warnham LNR	78	42	30	—	—	—	—	—
Weir Wood Res.	78	50	90	268	17	120	230	200
Bewl Water	207	150	71	1100	200	214	362	400
Darwell Res.	8	18	18	280	20	39	1	—
Rye Hbr	85	95	23	—	1	68	124	105

No really large flocks were reported at either end of the year; however, c.1110 were at Bewl Water on 19 Aug. and c.500 at Arlington Res. on 27 Aug. In addition to the counts listed above there were 60 at Maynards Green and 50 at Hassocks on 20 Oct. and 200 at Barcombe Res. on 10 Nov.

During the breeding season 153 pairs were reported from 79 sites in April and May; the progress of 93 pairs was followed, 6 failed completely and the remainder reared 341 young (i.e. an average of 3.7 per pair) including 57 at Rye Hbr, 21 at Aldsworth Ponds and 19 at Arundel WWT.

56. **BARNACLE GOOSE** (*B. leucopsis*):—3 S over Rye Hbr on 7 Jan. were probably the same as those noted at Scotney Court GP from 3-5 Jan. and again on 8th. Other records for the first winter period perhaps relating to wild birds were of singles feeding with Brent Geese in the Pagham Hbr area from 11-17 Feb. and off Seaford on 18th.

In the latter part of the year there were 5 in off the sea at Rye Hbr on 3 Nov. which then moved to Pett Level where they remained until 10th. See also Escapes and Ferals on page 68.

57. **BRENT GOOSE** (*B. bernicla*):—The estuary counts were as follows:

	1990		1991	
	Jan.	Feb.	Mar.	Apr.
Country totals	12615	5012	1865	3072
Chichester Hbr	9849	4536	1449	2966
Climping	—	—	—	—
Pagham Hbr	2755	476	412	82
Pett Level	—	—	—	—
Rye Hbr	—	—	—	—

Reports for other localities in the first winter period included up to 6 at Cuckmere Haven in Jan., 4 at Pulborough Brooks on 4 Feb., and singles at Amberley Wild Brooks and Weir Wood Res. on 11 Feb. and 1 Mar. respectively.

Observations of easterly return passage at the main seawatching localities were as follows:

	No. of hrs watched		Total	
	1990	1991	1990	1991
Selsey Bill	420.5	—	1770	2960
Worthing	335	—	1457	3494
Seaford	483	—	3031	7160
Beachy Head	110.5	—	1453	2644

The peak movements recorded were at Seaford where there were 997 in 8.75 hrs on 17 Mar. and 1605 in 11.75 hrs on 1 Apr.

Twenty summered in Chichester Hbr. The first returning birds were 17 at Pagham Hbr on 11 Sept. and 9 in Chichester Hbr and 15 off Selsey Bill on 12th. Autumn passage at coastal localities was poor with totals for Oct-Nov. of just 955 at Worthing and 758 at Selsey Bill. A number of records again indicated overland migration through the county in Oct., these being 120 at Bewl Water on 8th, 72 over there on 14th, 80 over Lewes on 18th, 44 over Old Lodge on 21st and 28 over Hurst Green on 22nd.

Singles showing the characteristics of the pale-bellied race *hrota* were noted at Pagham Hbr on 1 Jan., 7 Nov. and 15 Dec., in Chichester Hbr on 3 and 10 Jan. and 7 and 10 Nov. and in the Lower Cuckmere Valley on 23 Mar.

The adult Black Brant (*B.b. nigricans*) recorded at Thorney Island in Nov-Dec. 1989 (*Sx:BR* 1989) remained until 12 Mar. and was again recorded from 12 Oct. into 1991 (*CBC et al.*). These records have been accepted by *British Birds*.

61. **SHELDUCK** (*Tadorna tadorna*):—The estuary counts were as follows:—

	1990		1991	
	Jan.	Feb.	Mar.	Apr.
Country totals	3073	1572	1614	2827
Chichester Hbr	2772	1389	1346	2311
Cuckmere	—	—	—	—
Newhaven	184	136	217	3
Pagham Hbr	—	—	—	—
Pett Level	—	—	—	—
Rye Hbr	84	35	39	8

Other maxima for the first winter period included 4 at Weir Wood Res., 11 in the Adur Valley, 21 at Amberley Wild Brooks and 52 at Arundel WWT, all in Feb., and 23 at the Crumbles GP on 29 Mar. and 5 Apr.

As usual, small numbers were seen on spring passage in Mar-May with counts for this period of 82 E 55 W at Selsey Bill, 155 E 69 W at Worthing, 144 E 46 W at Seaford and 45 E at Beachy Head.

Reports for the breeding season totalled 54 pairs as follows: Aldsworth Pond 2, Arundel WWT 4, Boxgrove Common 1, Cuckmere 1, East Guldeford Level 3, Elms Farm, Icklesham 6, Fishbourne 1, Lurgashall MP 2, Newhaven Fort 1, Nyewood 1, Peter Pond, Emsworth 2, Pilsey Island 1, Rye Hbr 20, Sidlesham Ferry 1, Thorney Deep 1, Waltham Brooks 6 and Weir Wood Res. 1. At Arundel WWT broods of 8,8,7 and 2 were noted but at Rye Hbr, where breeding success was very poor, only 14 young were counted. The remaining pairs hatched at least 66 chicks but little information on survival was received.

At Worthing there were 117 W in 74 hrs of watching in Oct-Dec.

Maxima for the latter part of the year away from the sites listed in the table were 23 at Climping on 4 Nov., 8 at the Crumbles GP on 14 Dec. and 52 at Moneypenny GP on 30 Dec.

63. **MANDARIN** (*Aix galericulata*):—In the early months (Jan-Mar.) up to 14 were present at Swanbourne Lake and there were 9 at Maynards Green on 19 Jan. On 29 Apr. 1 E off Worthing and Brighton Marina and 1 W and 1 E off Splash Point, Seaford on 30 Apr. and 3 May respectively. During the breeding season 25 pairs were reported from 23 sites in West Sussex, mainly concentrated in the north-west, and 12 pairs at 11 sites in East Sussex. Successful breeding (young seen in brackets) was reported as follows: 2 pairs at Pulborough Brooks (3), single pairs at Swanbourne Lake (11), Ebernoe Common (2), Chelwood Vachery, Possingworth Park, Balcombe Lake (9) and Weir Wood Res. (4). At Maynards Green 2 of 3 pairs breeding in nest boxes were successful and at Burton Pond a duck was seen being pursued up a ditch by a fox on 16 May. During Oct-Dec. large numbers reported included 10 at Lurgashall on 16 Sept. and 59 at Chithurst on 1 Oct.

64. **WIGEON** (*Anas penelope*):—The monthly wildfowl counts at the principal localities were:

County totals	1990		1990		1991	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	1617	1452	578	695	1784	2808
Pagham Hbr	299	216	248	496	954	893
Pulborough/Amberley	8	850	17	48	390	1398
Cuckmere Haven	473	213	48	4	234	341
Bewl Water	237	27	243	67	114	232

The Jan. 1990 total was well below the average for recent years and certainly the lowest for more than 10 years. Other counts included 837 at Cuckmere Haven on 1 Jan., 350 at Bewl Water on 4 Jan., 100 at Pagham Hbr on 9 Feb. and 1000 on extensive floods at Amberley on 18 Feb. At Burton Pond 17 present on 1 Jan. was rather unusual. Most birds had left inland sites by the first week of April but a few were still seen at the coast during May, including 5 on Thorney Deep on 15 May. In Fishbourne Channel 2-3 were seen frequently throughout June and were last reported there on 1 July.

Return movement was first noted at Bewl Water and Icklesham on 13 Aug. when 2 and 8 were present respectively. On 24 Aug., 25 were present at Thorney Island and smaller numbers appeared at Darwell and Weir Wood Res. on 26 Aug. Records from unusual inland sites included 6 at Streele Farm, Billingshurst on 14 Sept. and 28 at Pond Lye on 9 Dec.

67. **GADWALL** (*A. strepera*):—The monthly wildfowl counts at the principal localities were:

County totals	1990		1990		1991	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	145	81	50	72	110	130
Arundel WWT	27	11	2	36	6	32
Bewl Water	49	31	26	4	71	32
Burton Ponds	30	9	3	4	—	21
Amberley/Pulborough	25	—	—	14	14	5

The Jan. 1990 total was considerably higher than that for Jan. 1989 but nevertheless remained well below the average for recent years. Other counts included 14 at Icklesham on 1 Jan., 11 at the Crumbles GP on 3 Jan. and 50 at Amberley on 11 Feb. During the breeding season small numbers were reported from 11 sites, many of which were in or near the Arun Valley but with others in Chichester Hbr, in the Pett/Rye area and at Weir Wood. There was no evidence of breeding at any site. At the end of the year counts included 24 at Bewl Water on 11 Nov., 45 at Icklesham on 25 Nov., 29 and 44 at the Crumbles GP on 22 Nov. and 8 Dec. respectively, and 28 at Burton Pond on 9 Dec.

69. **TEAL** (*A. crecca*):—The monthly wildfowl counts at the principal localities were:

County totals	1990		1990		1991	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	2685	2980	851	1341	1130	2825
Pagham Hbr	1502	366	341	508	247	693
Amberley/Pulborough	207	73	42	38	156	1014
Rye Hbr	400	1500	100	70	52	250
Arundel WWT	120	13	73	92	90	251

The Jan. 1990 total was about average for recent years. Other counts included 281 in the Cuckmere Valley and 250 at Icklesham on 1 Jan. and 151 at Darwell on 11 Feb. Easterly passage was recorded at the coast through March-May into early June. In the breeding season breeding was proved at one site in West Sussex and one in East Sussex; in addition 7 pairs were present in May-June at 6 other potential breeding sites but no young were reported. By 24 Aug. 200 had returned to Thorney and by the year end there were 52 at Chingford Pond on 9 Dec., 123 at Darwell Res. and 360 at Knepp Lake on 16 Dec. and 450 at Icklesham on 30 Dec.

70. **MALLARD** (*A. platyrhynchos*):—The monthly wildfowl counts at the principal localities were:

County totals	1990		1990		1991	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	3679	2599	1907	3706	3587	3737
Pagham Hbr	384	219	269	286	581	408
Arundel WWT	141	95	106	229	168	103
Amberley/Pulborough	559	360	468	762	455	480
Darwell Res.	274	151	44	36	75	57
Alexandra Park	153	92	93	191	105	130
Rye Hbr	210	182	77	235	243	232
Bewl Water	324	176	160	200	260	273
Icklesham	NC	NC	NC	400	85	190
Glynde Reach	22	30	44	215	82	125

The Jan. 1990 total was near to the average for recent years. Other counts included 200 at Icklesham on 1 Jan. and at Arlington Res. on 7 Jan., 100 at Warnham LNR on 11 Jan., and 140 at Parham House Lake and 102 at Barcombe Res. on 21 Jan.

In the breeding season c.40 pairs present at Icklesham, c.60 pairs at Bewl Water and c.80 pairs at Rye Hbr. Post-breeding counts included 120 at Warnham LNR on 30 July and 310 at Bewl Water on 16 Aug. Later in the year 300 and 400 were at Icklesham on 25 Nov. and 16 Dec. respectively, 136 at Warnham on 14 Dec., 179 at Weir Wood Res. on 16 Dec. and 137 at Brooklands on 24 Dec.

72. **PINTAIL** (*A. acuta*):—The monthly wildfowl counts at the principal localities were:

County totals	1990		1990		1991	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	190	305	18	18	123	945
Pagham Hbr	149	4	18	7	22	103
Amberley/Pulborough	36	—	—	3	9	3

The Jan. 1990 total was well below the average in recent years and the lowest recorded for 6 years. Other records included 86 at Pagham Hbr. on 9 Jan., 135 at Pulborough on 3 Feb. and 38 in Newhaven Hbr on 31 Mar. Coastal passage was well documented at Selsey, Worthing, Brighton, Seaford and Beachy Head from March to May. Summer records included singles at Thorney Island on 20 June, Waltham Brooks on 22 June, Pett Pools on 25 July, Rye Hbr on 26 and 30 Aug. and Icklesham on 6 Sept. On 11 Sept. there were 10 at Pagham Hbr and 15 were at Pilsley Island on 21 Sept. Other records for the end of the year included 126 at Thorney Island on 11 Nov., 105 at Pagham on 23 Nov. and 20 at Pulborough on 26 Nov., though these were insignificant compared with the 839 at Pagham on 18 Nov. which was quite exceptional.

73. **GARGANEY** (*A. querquedula*):—The first records were of a pair at Binsted on 16 Mar. followed by 1 at East Head and 6 E. seen at Newhaven, Seaford and Birling Gap, on 17 Mar. A further 12 flew E on 18 Mar. when there was also 1 at Piddinghoe; thereafter a gap in records until 24 Mar. Several records were received of birds moving E up-Channel in April and early May and others were reported from Thorney Deep, Chichester GP, Sharpsbridge, Pevensey Levels and Pett Level.

During the breeding season 3 pairs were present at 2 suitable sites in East Sussex but there were no reports of successful breeding. Later in the year 1 was at Pett Pools on 22 July, 1 at Waltham Brooks on 28 July and up to 19 at Icklesham on 27 Aug. The last seen in the east were 4 at Icklesham on 3 Sept. and 1 at Rye on 6 Sept. In the west singles were reported from Burton Pond on 9 Sept. and 20 Oct.

75. **SHOVELER** (*A. chrypeata*):—The monthly wildfowl counts at the principal localities were:

County totals	1990		1990		1991	
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.
Chichester Hbr	292	326	63	55	54	198
Pagham Hbr	7	10	2	3	4	20
Arundel WWT	1	3	5	2	0	6
Amberley/Pulborough	15	33	6	24	2	24
Arlington Res.	118	150	4	7	10	16
Pett Level	58	80	8	—	0	1
Rye Hbr	54	34	8	11	7	35

The Jan. 1990 total was very similar to that in Jan. 1989, being above the average in recent years but still well below the numbers recorded in the early 1980s. Other counts included 75 and 74 on 1 Jan. at Scotney Court GP and Icklesham respectively. Coastal movements E were noted from March to May with a peak on 31 Mar. when 819 and 497 in 11.5 hrs at Seaford/Splash Point and Selsey Bill, respectively, and 330 in 11.1 hrs at Worthing.

In the breeding season 11 pairs bred at Icklesham but most of the young were predated. Elsewhere, 2 pairs were in the Pagham Hbr area and 1 pair plus 3 drakes at Rye in May and June, and 1 pair at Pulborough on 14 May, but at none of these sites was there any evidence of breeding.

By 17 July, 14 had returned to Thorney Deep, but numbers did not increase elsewhere until August. At Rye Hbr the 22 present on 6 Aug. reduced slowly to 4 on 31 Aug., 15 were at Icklesham on 23 Aug. and 2 at Darwell on 27 Aug. Later 24 were at Sidlesham on 5 Oct., and at Icklesham numbers built up from 45 on 6 Oct. to 90 on 25 Nov. and 120 on 2 Dec. Other counts included 42 at Arlington Res. on 4 Nov. and 44 at the Crumbles on 18 Dec.

76. **RED-CRESTED POCHARD** (*Nettion rufina*):—A male at Pagham Hbr from 3 Jan. to 2 Apr. (BJ, CMJ, SK *et al.*) was possibly that seen at Chichester GP on 27 May (ARK). See also Escapes and Ferals on page 68.

77. **POCHARD** (*Aythya ferina*):—The monthly wildfowl counts at the principal localities were:

County totals	1990											
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	1991	Jan.	Feb.	Mar.	
Arundel WWT	806	741	282	97	306	646	742	972	1032	502		
Chichester GP	433	364	138	47	95	162	135	333	582	224		
Rye Hbr	91	31	7	33	68	152	128	76	25	33		
Warnham LNR	80	76	72	1	25	96	239	219	32	162		
Barcombe Res.	33	23						17	4	12		
Darwell Res.	20	17			3		51	39	42	16		
Weir Wood Res.	27	33	12		16	30	28	65	77	16		
Bewl Water	24	19	7		9	18	18	46	49	14		
Arlington Res.	28	4	9	1	10	11	11	22	62			
	6	1			24	140	54	57	10			

The Jan. 1990 total was just below the average for recent years. Other counts included 115 at the Crumbles GP on 3 Jan., 80 at Warnham LNR on 21 Jan., 50 at Ardingly Res. on 10 Jan. and 42 at Weir Wood on 18 Feb; 112 were present on floods at Pulborough on 18 Feb.

During the breeding season 2 drakes and a duck were present at Rye Hbr, up to 3 birds were reported from Weir Wood and Pagham Hbr and 2 at Chichester GP but there was no evidence of breeding.

At the end of the year other counts received included 172 at Chichester GP on 30 Oct., 34 at Warnham on 14 Nov., 60 at Knepp Lake on 21 Nov., 117 at Arlington Res. on 1 Dec. and 40 at Weir Wood on 30 Dec. Counts at the Crumbles GP were 51 on 9 Sept., 126 on 26 Oct., 246 on 22 Nov. and 276 on 7 Dec.

80. **TUFTED DUCK** (*A. fuligula*):—The monthly wildfowl counts at the principal localities were:

County totals	1990											
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	1991	Jan.	Feb.	Mar.	
Arundel WWT	863	780	715	466	425	708	771	923	1076	899		
Chichester GP	233	215	183	102	112	153	260	311	421	186		
Rye Hbr	217	150	156	155	121	246	165	159	111	191		
Burton Ponds	98	66	40	57	24	94	122	123	89	140		
Barcombe Res.	57	40	56	45	59	73	57	19	8	48		
Bewl Water	52	2	2	4	7	12	30	22	67	3		
	23	15	16	5	6	3	38	11	29	16		

The Jan. 1990 total was near to the average for recent years. Other counts included 31 at Weir Wood Res. on 14 Jan., 41 at Darwell on 2 Feb., 166 at Chichester GP on 9 Feb. and 40 at Swanbourne on 3 Mar. Counts at the Crumbles GP included 97 on 22 Jan. and 85 on 18 Feb.; 28 were present on extensive floods at Pulborough and Amberley on 18 Feb.

During the breeding season pairs were reported as follows (young seen in brackets): Thorney Island 2, Dunford GP, Midhurst 1 (1), Petworth Park 4, Chingford Pond 3,

Shillingee 1, Warnham LNR 1-2, Knepp 1, Boyles Farm, East Grinstead 2, Gravetye 2 (13), Cophorne 2 (7), The Chantry, Storrington 1, Birch Grove 1 and Darwell Res. 1. At Rye Hbr 16 pairs raised 30-40 young. In addition 9 were at Ardingly Res. on 31 May, 12 at the Crumbles GP on 28 June and 30 at Chichester GP on 23 July.

At the end of the year counts from the Crumbles GP included 71 on 24 Sept., 247 on 18 Nov. and 219 on 18 Dec.; there were 50 at Chingford Pond on 18 Sept.

81. **SCAUP** (*A. marila*):—1989:—The single bird at Swanbourne Lake on 23 Apr. is now thought to have escaped from captivity. See Escapes and Ferals on page 68.

1990:—At the beginning of the year there was 1 in the Lower Cuckmere Valley on 1 Jan., 2 at Rye Hbr on 12 Jan. and a drake there from 11 Feb. until 22 Apr. and 1 at the Crumbles GP on 18 Feb. At Newhaven there were 8 E on both 1 Apr. and 12 May.

In the second half of the year 1 appeared briefly at Warnham MP on 23 Sept. Oct. records were of singles at Pilsley Island on 6th, Rye Hbr from 13th-21st and Chichester GP on 27th and 2-4 at the Crumbles GP from 14th to 18 Nov. One was reported at the latter site on 12 Dec. At Widewater, Lancing 1-2 were present from 24 Nov. to 31 Dec. and what were probably the same birds were at Brooklands on 23-24 and 31 Dec.

Other records were of a single at Hope Gap on 2 Dec., up to 9 and 13 regularly at Rye Hbr in Nov. and Dec. respectively and up to 11 at Scotney Court GP in Dec.

82. **EIDER** (*Somateria mollissima*):—The approximate monthly totals and peak counts at the main localities were as follows:

County totals*	1990											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	4	10	17	9	1	5	—	—	7	39	12	35
Pagham Hbr	3	10	17	8	—	5	—	—	7	3	10	7

*these exclude birds seen migrating along the coast.

Spring passage during Mar-May at the main seawatching localities totalled 158 in Mar., 116 in Apr. and 31 in May. Some duplication is certainly involved in these totals.

There were no inland records.

86. **LONG-TAILED DUCK** (*Clangula hyemalis*):—A poor showing compared with that of 1989. The approximate monthly totals were as follows:

County totals	1990											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	1	—	—	1	1	—	—	—	—	3	13	—

The only records for the first half of the year were of singles at Pagham Hbr on 2 and 21 Jan. and flying E at Selsey Bill on 10 Mar. and 2 May and Lancing on 29 Apr.

The first recorded in the second winter period was 1 at Hove on 29 Oct. which remained until 2 Nov. On 9 Nov. there was 1 at Selsey Bill while 1 at Rye Hbr the following day was possibly that noted there on 22-23 Nov. December records included 1 at Chichester GP on 9th, 3 there on 12th, 2 on 17th and 1 on 24th. Two remained at Selsey from 11-14th with 1 there on 29th. Single females were seen at Chichester Hbr and Rye Hbr on 15th, the latter again present from 22nd-27th. Two off Worthing on 16th and 1 W at Newhaven on 30th completed the records for the year.

87. **COMMON SCOTER** (*Melanitta nigra*):—Observations at the main seawatching localities were as follows:

County totals	1990											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Selsey Bill	—	—	—	—	2173	—	73	—	—	75	—	281
Worthing	—	—	—	—	2937	—	—	—	—	34	—	91
Seaford	—	—	10	—	11263	—	58	—	—	—	—	—
Beachy Head	—	—	—	—	7080	—	—	—	—	—	—	—

The main passage occurred on 1 Apr. with 4802 recorded at Seaford, 4580 at Beachy Head, 2396 at Newhaven, 1052 at Brighton Marina, 1021 at Worthing and 493 at Selsey Bill. Obviously many of the same birds were counted at each locality but it is interesting to note that the largest numbers were recorded in the east of the county. At Rye Bay 30 remained during May and up to 4 June with 1 there on 10 July.

There were no inland records.

89. **VELVET SCOTER** (*M. fusca*):—The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	—	29	138	69	—	7	—	—	6	7	24

In Jan. there were 7 off Worthing on 20th and 2 there on 27th. Spring passage was lighter than in 1989, the first notable movement being 15 E at Worthing on 17 Mar. Peak counts for Apr-May were 36 E at Seaford on 24 Apr. and 39 E at Worthing on 14 May.

In July 7 were noted flying E in Rye Bay on 12th (SBR). There were no further records until 11 Oct. when 5 were off Selsey Bill followed by 1 off Church Norton on 14th. In Nov. there was a single at Climping on 4th, 2 at Brighton Marina on 6th and 4 at Newhaven Hbr on 10th. December records were received for 5 localities as follows: Selsey Bill, 9 on 2nd and 2 on 12th and 24th; Climping, 2 on 3rd, 1 on 11th and 15th, 2 on 16th and 3 on 17th; Worthing, 2 E on 14th, 1 E on 16th and 1 W on 31st; Langney Point, 1 on 16th; and Pett, 4 on 24th.

91. **GOLDENEYE** (*Bucephala clangula*):—The approximate monthly totals and peak counts at the main localities were as follows:

County totals*	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Bowl Water	53	54	24	2	1	1	—	—	—	9	42	80
Chichester Hbr	2	3	2	—	—	—	—	—	—	5	—	—
Pagham Hbr	37	36	15	—	1	1	—	—	—	—	22	66
Rye Hbr	5	4	—	—	—	—	—	—	—	3	3	4
Weir Wood Res.	4	7	6	2	—	—	—	—	—	—	1	3
	4	4	1	—	—	—	—	—	—	—	?	5

*these exclude birds seen migrating along the coast.

A single remained at Fishbourne from 5 May to 6 July.

93. **SMEW** (*Mergus albellus*):—The only records were 3 at Rye Hbr on 4 Jan. and 2 on 6th, 1 at Pagham Hbr on 7 Nov. and 2 at Chichester GP on 1 Dec. All were redheads.

94. **RED-BREASTED Merganser** (*M. serrator*):—In the early part of the year the Chichester Hbr estuary counts were 101 in Jan. and 49 in Feb.; Thorney Channel held up to 74 in Jan. Elsewhere the largest flocks were of 30 off Pagham Hbr on 10 Jan. and 64 off Worthing on 16 Feb. Figures for the main seawatching localities were:

	Mar.	Apr.	May	Total
Selsey Bill	97	170	6	273
Worthing	62	75	4	141
Seaford	31	138	34	203
Beachy Head	39	98	29	166

The largest movement was on 1 Apr. with 84 E off Seaford and 72 E off Beachy Head. One was seen in Chichester Hbr on 19 June and 3 July. The earliest returning birds were 1 at Pagham Hbr on 23 July and 2 in Chichester Hbr on 27 July. On 22 Oct. there were 32 redheads at the latter locality and in that month there were 52 W at Selsey Bill (including 35 in 3 hrs on 22nd). The Nov. total for this site was 68 W and at Worthing 25 W. The Chichester Hbr flock was 30 on 18 Nov. but increased to 88 on 9 Dec. while off Pagham Hbr there were 70 on 21 Nov. In Dec. 87 flew E at Worthing and 102 W.

As in 1989 there were no inland records.

95. **GOOSANDER** (*M. merganser*):—The only records for the first winter period were for Ardingly Res. where there was 1 on 10 Jan. and 4 on 14th. In Apr. there were 5 W (2 males, 3 redheads) at Worthing on 6th and 4 (2 males, 2 redheads) at Selsey Bill the following day.

Two were recorded at Pagham Hbr on 2 Nov. and 2 redheads at Barcombe Res. on 19th. The latter increased to 4 on 24th but only 1 was present the following day. Three were at Pond Lye on 28 Nov. There were rather more reported for Dec. with 5 redheads at Chichester GP from 2nd to 6th and a single at Arlington Res. on 9th. A scatter of records on 15th comprised singles at Arlington, Greatham Bridge, Pulborough Brooks, Littlehampton West Beach and flying E at Worthing, although some duplication is likely. On 16th 1 was at Darwell Res. and on 29th 1 flew E at Worthing.

Cat. C. RUDDY DUCK (*Oxyura jamaicensis*):—During Jan-Mar. recorded at 3 sites (max. in brackets): Thorney Island (7), Chichester GP (4) and Arundel (3). In the breeding season a

pair with 11 young was seen at Swanbourne Lake and another pair, with 9 young, was seen at Thorney Island on 27 June. The latter brood had been reduced to 2 by 24 July. There was no evidence of breeding at Chichester GP. During Sept-Dec. recorded at 7 sites (max. in brackets): Arundel WWT (21), Swanbourne Lake (2), Chichester GP (4), R. Arun, Pulborough (1), Crumbles GP (2), Darwell (5) and Rye Hbr (1).

97. **HONEY BUZZARD** (*Pernis apivorus*):—With 6 fully authenticated sightings, an excellent year for the species, this being the highest total for at least 16 years. Following a chance encounter with a perched bird in first-summer plumage in Ashdown Forest on 3 June (PJB), all other records were of autumn migrants. Singles were recorded at Weir Wood Res. on 9 Aug. (BMM *et al.*) and 2 Sept. (BMM, DCM *et al.*), Pagham Hbr on 26 Aug. (BJC), Beachy Head on 27 Aug. (DC, JFC, RDME) and finally Selsey West Fields on 12 Sept. (OM).

99. **RED KITE** (*Milvus milvus*):—Single birds were recorded at Balsdean on 1 Apr. and 5 Nov. (GAS), Sidlesham Ferry on 21 Apr. (RJS) and Steyning Round Hill on 17 Aug. (ARK).

103. **MARSH HARRIER** (*Circus aeruginosus*):—A good year for the species with a minimum of 23 passage migrants reported as follows:

	Apr.	May	Aug.	Sept.	Oct.
	6	2	4	8	3

The first for the year, a female, was seen on 1 Apr. at Sidlesham. This was followed by further females at Shoreham and Thorney Deepes on 22 Apr., Seaford on 23rd and Selsey West Fields on 24th. An immature male arrived from the sea at Rye Hbr on 29th while in May there were just 2 records: singles at Beachy Head on 13th and Steyning Round Hill on 20th.

During the autumn a minimum of 12 birds passed through widely spread coastal localities in the period 22 Aug-18 Sept. The last recorded were single females at Fairlight on 7 Oct. and Rye Hbr on 25 Oct., on which date there were 2 at Icklesham, 1 remaining until 27th.

104. **HEN HARRIER** (*C. cyaneus*):—During the year, an approximate total of 40 birds were recorded in the county. Allowing for likely duplication of records, the monthly maxima were as follows:

Adult males	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
Others	5	8	3	2	1	2	—	8	7

A number of traditional wintering areas were again frequented and the majority of records can be grouped and summarised as follows:

Chichester Hbr. A late spring migrant was recorded at Bosham on 13 May. At the end of the year, single ringtails were recorded on 3 Nov., 1-4 Dec. and 26-30 Dec.

Selsey Peninsula. The only report during the early months was of a ringtail at Pagham Hbr on 22 Mar. Single ringtails were recorded at Sidlesham Ferry on 4 Nov., Church Norton on 29 Nov. and 11 Dec., Selsey West Fields on 15 Dec. and at Sidlesham the following day.

Arun Valley. During Jan-Feb. up to 4 ringtails roosted on Pulborough Brooks and were joined by a male on 13 Jan. Records for Amberley and Rackham for this period are likely to refer to these birds.

Seaford, Cuckmere Valley and Beachy Head. The only sightings in the first winter period were of a single bird that passed Newhaven Hbr on 31 Mar. and a ringtail that arrived from the sea at Seaford on 26 Apr. During the autumn, ringtails were observed at Beachy Head on 27 Sept. and Newhaven on 8 Nov.

Pevensey Levels. An adult male was seen hunting over Pevensey Bridge Level on 22 Mar. and a ringtail on 1 Apr. During the latter part of the year, a ringtail was seen on 25 Nov. and probably 2 different birds hunting over a large area on 23 Dec.

Pett Level and Rye Hbr. Single ringtails were recorded on 3 dates in Jan., 5 in Feb. and finally on 27 Mar., at Rye Hbr. During Nov. single ringtails were noted on 6 dates from 6th and again on 9 Dec. Adult males were also recorded on 22 Nov. and 19 Dec.

At Amberisham Common, there was a ringtail on 1 Nov. and then 2 from 8 Nov. until the end of the year. Other records were of ringtails at Balsdean on 2 Sept. and 6 Nov. and passing Worthing on 4 Nov.

105. **MONTAGU'S HARRIER** (*C. pygargus*):—Just 3 birds seen as follows: 2 ringtails at Icklesham on 23 Aug. (DEC, IH *et al.*) and an immature over Lychpole Hill on 2 Sept. (CEH).

107. **GOSHAWK** (*Accipiter gentilis*):—Two were seen together in suitable breeding habitat on 9 Mar. Records of an adult perched on bushes at the Severals, Church Norton on 16 Apr. (TJW), 6 Nov. (TJE, BJ, CMJ) and 25 Nov. (ASC) probably relate to the same individual which was again present at this locality in early 1991. The only other authenticated records were of a male in the Cuckmere Valley on 30 Sept. (DC, JFC) and of an immature in the Arun Valley on 14 Nov. (SWMH).

108. **SPARROWHAWK** (*A. nisus*):—Widely reported throughout the year with over 350 records. Of note was 1 seen flying E. on a sea-watch at Hastings on 5 May. At least 28 pairs were located, 10 of which reared 21 young. In the autumn, 1 was watched chasing a Kingfisher along the Cuckmere Valley. Seven birds were ringed by the Rye Bay Ringing Group.

109. **BUZZARD** (*Buteo buteo*):—1989:—One at Crowhurst on 24 June.

1990:—There continues to be a feral population centred upon Ashdown Forest. Elsewhere birds were recorded in all months except Jan. During Feb.-Apr. there were 8 records from widely spread inland localities including 2 reports, on different dates, for Singleton Forest. In May, migrants passed over Worthing on 2nd, Woods Mill on 6th and both Chalvington and Thorney Deepes on 27th.

During the period 10 July-3 Nov. a total of 8 were recorded from the coast with a further 12 sightings from inland localities. These latter birds, allowing for wandering between adjacent areas, may refer to only 6 different individuals.

At the end of the year there were singles at 7 widely spread inland localities including reports for Rackham Woods on 3 different dates.

113. **OSPREY** (*Pandion haliaetus*):—1989:—One in from the sea at Brighton Marina on 7 May (DPD).

1990:—A record year for the species with at least 14 recorded in spring and 12 in autumn. The first reported were singles over Normans Bay on 14 Apr. (ASG, RH) and passing Splash Point, Seaford on 20 Apr. (AW). May produced an exceptional series of records as follows: Seaford Head, 1 on 5th (WJMS); Weir Wood Res., 2 from 10-12th, 1 remaining to 13th, and probably a different bird there from 23rd-26th (CFB, NAD *et al.*); Thorney Island, 1 on 11th (CBC, JHME, CJT); Arlington Res., singles on 18th (JFWB) and 28th (JPS); Pagham Hbr, 1 on 19th (RP); Lullington Heath, 1 on 19th (SBR); Hurst Green, 1 on 20th (RGH); Bewl Water, probably the Hurst Green bird on 22nd-23rd (PCB); and Splash Point, Seaford, 1 on 27th (SL, AW).

As in previous years, most autumn birds were recorded at the inland reservoirs as follows: Bewl Water, singles from 15-23 July (PCB) and on 7 Aug. (MHW) and 2 there on 14-16 Sept. (PCB); Powdermill Res., singles on 31 July and 26 Sept. (MHB); Arlington Res., 1 on 1 Sept. (MHB); and Darwell Res., 1 on 9 Sept. (RGH). Other records were of single migrants over Pagham Hbr on 19 July (TJE), the Lower Cuckmere Valley on 7 Sept. (WJMS), Newhaven on 8 Sept. (EDU) and Beachy Head on 9 Sept. (PJW).

115. **KESTREL** (*Falco tinnunculus*):—Many recorded throughout the year with 6 singles seen to fly in off the sea during sea-watches. About 38 pairs were reported, 12 of which reared a total of 29 young. The maximum number seen was 12 at Castle Hill on 13 Oct. 11 birds were ringed by the Rye Bay Ringing Group.

An interesting record was provided by a melanistic bird seen at Weir Wood Res. on 25 May and again on 18 June—this apparently caused a few identification problems.

117. **RED-FOOTED FALCON** (*F. vesperinus*):—1979:—The male at Church Norton on 11 Aug. (SxBR 32:25) is no longer considered acceptable by *British Birds* and should be deleted.

1990:—A female seen at Balsdean on 20 May (GAS *et al.*) has been accepted by *British Birds*. Although only the 22nd to be recorded in the county it is the 5th in the last 4 years, four

having graced the downs immediately E of Brighton. Of the 11 recorded since 1961, 10 have been seen between 10 May-3 July and 1 in Sept.

118. **MERLIN** (*F. columbarius*):—Recorded until 6 May and from 7 Sept. The approximate monthly totals, allowing for likely duplication between adjacent sites, were as follows:

Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
4	7	4	6	1	10	25	18	12

In the early months, 2 birds frequented the Thorney area. Elsewhere most records were of single birds on the coast at Chichester and Pagham Hbrs, Seaford, Pevensey Levels and the Pett Level/Rye Hbr area. The last recorded was 1 at Icklesham on 6 May.

During the autumn and early winter, there were numerous reports of single birds hunting over coastal, downland and inland wetland localities. At Selsey Bill, 2 females were observed on 1-3 Nov. while the only other record of more than one bird was of 2 at Thorney Deepes on 1 Dec.

A bird found injured in a Donnington garden on 5 Dec. was taken to the bird hospital at Brent Lodge where it died on 7th.

119. **HOBBY** (*F. subbuteo*):—First recorded in the spring on 26 April at Littlehampton. A further 22 were noted on spring passage, 6 of which were seen to arrive from the sea during sea-watches. At least 11 pairs were found during the breeding season but only 3 were reported as being successful, rearing a total of 7 young. A total of 52 birds were seen during the autumn, the last of which was at Pett Level on 26 Oct.

123. **PEREGRINE** (*F. peregrinus*):—An exceptional total of 106 reports were received although much duplication is likely, especially with hunting birds at coastal localities. The majority of records can be grouped and summarised as follows:

Chichester and Pagham Hbrs. Recorded from Thorney and Pilsey Islands in all months except Jan. and July with reports received of single birds on 28 dates. Favoured hunting areas included Thorney Deepes and airfield and the Pilsey wader roost where attacks were observed on 4 dates, prey including Dunlin and Redshank. At Pagham Hbr 1 recorded on 8 Feb. was possibly that seen at Selsey West Fields on 4 Mar. Another reported intermittently in the Pagham Hbr area between 22 Aug. and 6 Dec., with 2 present on 25 Sept., was again likely to be the same bird as that noted at Selsey on 15 Dec.

Newhaven to Beachy Head. A single, first recorded on 31 Mar. from Newhaven West Pier, was seen on a further 15 dates in the Seaford Bay area up to 18 Oct. Elsewhere there was 1 at Cuckmere Haven on 18 Mar. and probably the same bird at Hope Gap on 1 Apr. At Birling Gap an adult and 2 immatures arrived from the sea on 5 May while in autumn, single birds were recorded in this area on 5 dates between 6 Sept. and 23 Oct. with 2 present on 24 Oct. **Pett Level and Rye Hbr.** Single birds were observed at Pett on 21 Jan. and 20 Feb. and on 5 dates during the period 11 Aug. to 23 Dec. Probably related to these sightings were reports of single birds at Brede Levels on 20 Feb. and at Rye Hbr on 10 dates during the year, including 1 chasing a Cuckatiel on 3 May. A pair was present at the latter locality on 17 Dec.

Arun Valley. During the early months single birds were observed on 21 Jan. and 4 Mar. One at Pulborough on 4 Sept. was possibly a migrant. In Nov.-Dec. 4 sightings of singles between 19 Nov. and 25 Dec. included 1 being mobbed by a Merlin over Rackham Woods on the latter date.

Osse Valley and adjacent downs. An immature at Balsdean from 31 Oct. to 29 Nov. was joined by a second on 7 Nov. Other sightings were of singles at Mount Caburn on 14 Nov. and Lewes Brooks on 16 Dec.

Away from the main areas, further singles were noted at Shoreham on 18 Jan., 24 Apr. and 8 Sept., Steyning Round Hill on 23 Mar., Worthing on 22 Oct. and over Pevensey Levels on 3 Nov.

129. **RED-LEGGED PARTRIDGE** (*Alectoris rufa*):—The status of this species in the county remains uncertain due to the dilution of the pure stock by the introduction of Chukars (*A. chukar*) and Chukar × Red-legged hybrids, given the trade name of 'Ogridge', for

shooting purposes. The largest coveys reported were 18 at Pulborough Brooks and 33 at Lower Standean but in view of the likelihood that the introduced birds now outnumber pure Red-legs, these records should be treated with caution.

130. **GREY PARTRIDGE** (*Perdix perdix*):—A total of 5 coveys of 20 or more were reported from 5 widely scattered localities. At Rye Hbr LNR, where 7 pairs were located, breeding success was considered poor with only 2-3 broods noted.

131. **QUAIL** (*Coturnix coturnix*):—A return to normal with a total of at least 12 seen or heard at 8 mainly downland localities, well down on the 46 recorded in 1989. Whilst some of these were probable migrants judged by their short stays, the presence of birds at 2 sites throughout the summer is suggestive of breeding, although this was not proved.

133. **PHEASANT** (*Phasianus colchicus*):—1989:—Counts for defined areas were of 4 territories in 12.1 ha at West Dean Woods and 10 territories in 117.9 ha at Kingley Vale. 1990:—In the breeding season there were 2 pairs in 16.1 ha at Barns Copse, Binsted and 1 pair in 240 ha at Moulsecocomb Wild Park.

A large concentration of 250 at Patching on 16 Dec. included an albino individual, a similar bird having been noted at Goodwood Arboretum on 16 Oct.

Cat. C. **GOLDEN PHEASANT** (*Chrysolophus pictus*):—1989:—During the breeding season there was 1 territory in 12.1 ha at West Dean Woods and 12 territories in 117.9 ha at Kingley Vale.

1990:—During the breeding season there were 13 territories at Kingley Vale. At West Dean Woods a male was seen on 25 Mar., while a male at Goodwood Arboretum on 9 May suggests the presence of a further feral population in the west of the county.

Cat. C. **LADY AMHERST'S PHEASANT** (*C. amherstiae*):—Single males of unknown origin were recorded on the Angmering Park Estate, near Poling on 7 Oct. (ACH) and 25 Nov. (JAN).

136. **WATER RAIL** (*Rallus aquaticus*):—The approximate monthly totals of non-breeding birds (excluding a total of 37 ringed at Icklesham during the year) were as follows:

	Jan.	Feb.	Mar.	Apr.	July	Aug.	Sept.	Oct.	Nov.	Dec.
Number of sites	11	2	3	2	3	4	3	3	9	15
Number of birds	17	2	32	2	4	5	4	6	13	61

The lack of records for Jan-Feb. was probably due to the absence of cold weather at the time, conditions during which the species tends to be more conspicuous. Numbers were again small at most sites except at Icklesham where 30 were estimated in Mar. and 40 in Dec.

In the breeding season 10 pairs were present at one locality and many young were seen. Single birds were noted at 2 other sites in May but there was no indication of nesting.

137. **SPOTTED CRAKE** (*Porzana porzana*):—A juvenile was trapped at Icklesham on 13 Aug. (DPB, DEC, JW *et al.*).

141. **CORNCRAKE** (*Crex crex*):—Two records, the first for the county since 1987. At Littlehampton West Beach 1 was observed being carried by a fox on 22 Sept. (RJLK) while at Icklesham 1 was trapped on 27 Oct. (RBRG).

142. **MOORHEN** (*Gallinula chloropus*):—In the early part of the year the largest numbers recorded were 65 at Rye Hbr, 50 at Apuldram and 43 at Ifield MP, all in Jan.

A total of 49 pairs were reported for the breeding season, of which 30 were at Rye Hbr and 12 at Darwell Res. At the former site few young were seen and breeding success was considered very poor.

The largest concentrations noted in the latter part of the year were 63 at Rye Hbr in Oct., 45 at Weir Wood Res., 40 at Ifield MP and 37 at Falmer Pond in Nov. and 83 at Rye and 28 at Brooklands, Worthing in Dec.

145. **COOT** (*Fulica atra*):—The monthly wildfowl counts at the principal localities were:

County totals	1990			1991		
	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.
Chichester GP	1757	1284	891	1058	1594	1942
Rye Hbr	932	458	213	592	1099	1086
Bewl Water	253	195	140	84	19	272
Pagham Hbr	128	162	100	28	17	64
Arundel WWT	56	73	49	55	53	67
Ardingly Res.	38	66	38	11	13	12
Icklesham	NC	NC	NC	30	79	80

The Jan. 1990 total was low, being less than half the average for recent years. Other counts included 38 at Darwell Res. on 14 Jan., 47 at Barcombe Res. on 21 Jan., 65 at the Crumbles GP on 22 Jan. and 50 at Apuldram Manor Farm on 31 Jan.

In the breeding season estimated populations (pairs) were: Icklesham 25, Rye Hbr 30, Darwell Res. 19, Pannel Sewer 20, Bewl Water 11, Moneyenny GP 6, Crumbles GP 7, Brooklands 9, Petworth Park 8, Burton Pond 5, Warnham Pond 5, and Aldingbourne Rife 12. After the breeding season there were 64 at the Crumbles GP on 9 Aug. and numbers continued to rise to 161 on 14 Oct. and 206 on 18 Nov. before falling back to 145 on 18 Dec. Elsewhere there were 32 at Chingford Pond on 10 Dec. and 57 at Brooklands on 24 Dec.

151. **OYSTERCATCHER** (*Haematopus ostralegus*):—The estuary counts were as follows:

County totals	1990			1991		
	Jan.	Feb.	Mar.	Jan.	Feb.	Mar.
Chichester Hbr	1602	1345	939	2036	1967	2188
Climping	901	615	396	1095	1085	1331
Pagham Hbr	250	151	23	96	149	135
Pett Level	105	167	347	280	185	274
Rye Hbr	8	52	168	20	20	8
	338	358	168	525	510	416

As usual small numbers were recorded on spring passage with totals for Apr-May of 212 E in 253 hrs at Worthing and 181 E in 378.5 hrs at Seaford.

In the breeding season there were 23 pairs at Rye Hbr, 2 pairs at East Guldeford Level and single pairs at Bosham, Cobnor and Iden, a very incomplete coverage. Nest losses at the former locality were high due to predation and only 2 chicks were known to have fledged successfully.

The partial albino at Pilsey Island in 1989 was again present in July and on 18 Dec. Inland records were of singles at Weir Wood Res. on 7 Jan., 1 May and 20-21 July and at Lewes Brooks on 11 Nov.

153. **AVOCET** (*Recurvirostra avosetta*):—A good year, the approximate monthly totals being as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	2	4	23	19	39	2	27	—	2	3	9	5

During the first 2 months, there were 2 at both Thorney Island and Pagham Hbr, the latter in Feb. only. The bulk of the Mar. total was noted on 31st, including 17 E at Seaford, 7 E at Worthing and 6 E at Selsey Bill. Early May counts included 9 E past Brighton Marina on 1st, 4 E at Climping and Worthing on 2nd and 15 E at Worthing, Brighton Marina and Seaford on 4th, with an additional bird past Worthing later in the day.

Singles were noted at Rye Hbr and Sidlesham Ferry in late June, the latter remaining until 3 July, with 5 there later in the month on 27th. Up to 7 were at Rye Hbr by 19th, and of 14 seen at Pett Level on 21st, up to 6 remained until 27th. In Sept. there were singles at Rye Hbr, Pett Level and Pilsey Sands, and in Oct. 1 and 2 were recorded at Pett Level and Pilsey Sands respectively. There was still a single at Pilsey on 1-3 Nov. Other records for the month were of 2 W at Selsey Bill on 3rd, 1 W at Worthing on 17th and a single at Pagham Hbr on 18th, increasing to 5 by 29th. Four were still present at this locality on 1 Dec. and 2 later in the month.

154. **STONE CURLEW** (*Barinthus oedicnemus*):—Singles at Beachy Head on 28 May (PDL) and Rye Hbr on 3 Nov. (DJF, HMJT, MW).

158. **LITTLE RINGED PLOVER** (*Charadrius dubius*):—The approximate monthly totals away from known breeding sites were as follows:

Mar.	Apr.	May	June	July	Aug.	Sept.
10	18	12	4	21	15	5

The first of the year was a single at Fishbourne on 6 Mar., followed by 2 in the Lower Cuckmere Valley on 10th.

In the breeding season, only 4 pairs were reported, 2 of which were proved successful.

Autumn passage was noted from 3 July when 1 was at Chichester GP, followed by further singles at Midhurst on 6th and Weir Wood Res. on 8th. Of several post-breeding groups noted, the largest was 5 at Rye Hbr from 9 July. Maxima for the remainder of the autumn were 4 at Sidlesham Ferry on 20 July and Pett Level on 4 Sept. The last recorded was a single at Bewl Water on 23 Sept.

159. **RINGED PLOVER** (*C. hiaticula*):—The estuary counts were as follows:

County totals	1990												1991							
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Chichester Hbr	2449	891	274	1952	843	789	836	853	389	106	57	130	57	130	57	130	57	130	57	130
Climping	2083	647	123	1149	565	442	519	372	27	8	24	42	48	3	8	24	42	48	3	8
R. Adur	232	28	11	330	136	23	70	53	27	8	24	42	48	3	8	24	42	48	3	8
Cuckmere Haven	19	13	2	29	26	31	23	12	21	2	2	21	2	2	21	2	2	21	2	2
Goring	NC	NC	NC	146	34	74	66	120	71	7	7	71	7	7	71	7	7	71	7	7
Newhaven	41	3	4	176	29	23	12	28	34	7	7	34	7	7	34	7	7	34	7	7
Pagham Hbr	66	158	92	176	18	176	102	198	16	16	16	16	16	16	16	16	16	16	16	16
Rye Hbr	—	40	42	82	4	5	17	18	6	14	14	6	14	14	6	14	14	6	14	14

Information for the breeding season was again far from complete with, for example, no records received for Pagham Hbr, a locality that held 18 pairs in 1987. At Pilsley Island, where 11 pairs bred, 21 nests were found, of which 6 hatched 20 chicks. Of the remaining nests, 13 were predated. Breeding success at Rye Hbr was considered moderate, 40 pairs raising an estimated 15-30 young to the flying stage. Elsewhere there were 5 pairs at Widewater, Lancing and single pairs at Brighton Marina, Cobnor, Crumbles, Galley Hill and Newhaven Tidemills, a total of 61 pairs for the county.

At Pilsley Island, where there were 559 on 12 May, 381 on 21 May and 162 on 2 June, numbers built up rapidly from 203 on 30 July to 1640 on 18 Aug. and then remained relatively static with 1251 still present on 4 Sept. Further evidence of a heavy autumn passage was provided by counts of 200 and 350 at Shoreham on 24 Aug. and 29 Sept. respectively and 160 at Goring on 26 Aug.

161. **KENTISH PLOVER** (*C. alexandrinus*):—1976:—A late submission relates to a single at Chichester GP on 4 Aug. (ASC, BS).

1990:—All 5 were seen at Pilsley. A male on 5 May was joined by a female the following day. A different female was noted on 14 May and another male was there on 13 June. Finally, a juvenile was seen on 18-22 Sept. (CBC, MAC).

163. **DOTTEREL** (*Eudromias morinellus*):—In Apr. there were 3 at Balsdean on 3rd (GAS) and then a single at Broomhill Level on 17 May (PFB).

All autumn sightings were at Balsdean, with 3 adults and a juvenile on 23 Aug. and then 2 others on 26th. A single on 14-15 Sept. was joined by another on 16-17 Sept. (GAS).

165. **GOLDEN PLOVER** (*Pluvialis apricaria*):—The estuary counts were as follows:

County totals	1990												1991							
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Chichester Hbr	2303	286	20	76	978	421	666	26	84	26	84	26	84	26	84	26	84	26	84	26
Pagham Hbr	610	26	161	36	64	486	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Rye Hbr	—	—	—	—	—	—	—	1100	—	—	—	—	—	—	—	—	—	—	—	—

At Pagham 960 were counted on 1 Jan. and 1250 on 9th. The largest concentrations for the first winter period away from the above sites were 170 at Pevensley Bridge Level on 24 Jan., 100 at Manxey Level on 1 Mar. and 73 at Marley Common on 18 Mar. A flock of 250 was still present at Thorney Island on 13 Apr., decreasing to 100 by 22nd.

In autumn the first recorded was a single at Pilsley Island on 2 July, an early date, followed by 3 in Pagham Hbr on 23 Aug. and 6 at Sidlesham Ferry on 25th. Thereafter, numbers built up slowly with, for example, 137 at Thorney Island on 19 Sept. and 281 there on 14 Oct. Maxima for the remainder of the year away from the listed sites included 400 at Pett Level on 1 Nov., 460 at Barnham on 18 Nov., 68 at Seafood from 11-22 Dec. and a combined count of 1100 on Manxey and Whelpley Levels on 24 Dec. The latter concentration included a leucistic individual.

166. **GREY PLOVER** (*P. squatarola*):—The estuary counts were as follows:

County totals	1990												1991							
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
Chichester Hbr	2093	1129	1557	2329	2576	1630	2533	1681	1610	1720	1681	1610	1720	1681	1610	1720	1681	1610	1720	1681
Climping	1472	508	937	1940	2009	1622	851	1681	1610	1720	1681	1610	1720	1681	1610	1720	1681	1610	1720	1681
Goring	NC	NC	NC	21	11	52	51	20	76	—	—	—	—	—	—	—	—	—	—	—
Pagham Hbr	613	554	613	361	504	372	565	773	363	NC	—	—	—	—	—	—	—	—	—	—
Pett Level	—	32	6	1	—	12	26	51	4	—	—	—	—	—	—	—	—	—	—	—
R. Adur	—	—	—	1	17	3	13	1	18	—	—	—	—	—	—	—	—	—	—	—
Rye Hbr	8	35	—	4	26	—	—	—	6	—	—	—	—	—	—	—	—	—	—	—

Easterly spring passage was again heavy with totals for the main seawatching localities as follows:

Selsley Bill	Worthing	Seafood	Beachy Head	Mar.	Apr.	May	Total
.....	2	12	61	75
.....	6	102	309	433
.....	2	68	359	433
.....	2	1	45	48

Analysis of the data for Seafood reveals that passage was heaviest in late Apr. and early May with 360 recorded in favourable winds over the period 30 Apr. to 5 May, 83% of the total for this locality for the whole spring. The peak movement was 179 on 1st.

At Pilsley Island, up to 500 were recorded in Apr., 249 in May but only 23 in June and 16 in July, well down compared with the maxima of 235 and 750 for the corresponding months in 1989.

Inland records were of singles at Ardingly Res. on 7 May, Bewl Water on 22 May and Arlington Res. on 15 Aug. Six were present at the latter locality on 22 Sept. and up to 4 there from 6 Oct. to 9 Nov.

169. **LAPWING** (*Vanellus vanellus*):—The monthly maxima at the main localities were as follows:

Chichester Hbr	Pagham Hbr	Shoreham	Newhaven	Lewes Brooks	Lower Cuckmere	Pevensley Levels	Pett Level	Rye Hbr	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.
.....	3437	2154	17	117	949	1560	1126
.....	3250	460	21	36	36	1800	137
.....	1000	2200	—	—	500	600	1000
.....	598	953	—	120	230	670	1500
.....	400	600	12	110	318	1200	1021
.....	850	—	—	—	—	—	—
.....	300	400	—	60	500	500	800
.....	200	1200	150	185	87	2000	3300
.....	2000	305	51	404	75	831	183
.....	4000	2217	80	891	635	562	814

A flock of 2000 at Union Channel on 11 Feb. contained 2 leucistic/albinistic individuals.

Breeding season records were received for 18 localities totalling 92 pairs. At Thorney Island, where 19 pairs were present, heavy predation by foxes and crows resulted in only 17 young being raised. An identical number of pairs nested at Rye Hbr where breeding success was poor except in one area of the reserve where 3 pairs raised 10 young. All 11 pairs at Pulborough Brooks RSPB reserve failed, probably due to trampling.

The first returning birds were 40 at Thorney Deepes on 4 June and 21 at Bewl Water on 7th. Numbers thereafter were low, the peak count for July-Aug. being only 400 at Waltham Brooks on 7 July.

Once again there were no reports of cold weather movements.

170. **KNOT** (*Calidris canutus*):—The importance of Chichester Hbr for this species is again illustrated by the estuary counts which were as follows:

Records for the remainder of the year were of single birds at Pilsey on 1 Nov. and 6 Dec., 6 at West Wittering on 17 Nov., 3 of which were still present on 15 Dec. and 2 on 22nd, and further singles at the Crumbles GP and Pett Level on 28 and 30 Dec. respectively.

176. **TEMMINCK'S STINT** (*C. temminckii*):—1989:—Singles at Rye Hbr on 19-21 May (PJ, HMJT, BJY *et al.*) and 25-29 Sept. (AFB, SJB, BJY *et al.*) bring the total for the year to 6. 1990:—The only authenticated record was of a single at Pevensey Bridge Level on 3 May (RJF, MK *et al.*).

177. **WHITE-RUMPED SANDPIPER** (*C. fuscollois*):—An adult present at Sidlesham Ferry from 20-26 Aug. (ASC, DIS *et al.*) has been accepted by *British Birds*. It is the 9th to be recorded in the county, the 4th in August and the 4th at Sidlesham.

182. **CURLEW SANDPIPER** (*C. ferruginea*):—The approximate monthly totals were as follows:

	May	June	July	Aug.	Sept.	Oct.
	6	7	16	50	77	5

Spring passage commenced in May with singles at Pilsey Sands on 8th and Pagham Hbr on 17th and 4 at Pilsey on 22nd. Two of the latter remained until 2 June, followed by probably 4 different birds at Rye Hbr up to 20th and a single at Sidlesham Ferry on 30th.

There was a small influx from 16 July with 6 at Pett Level followed by up to 4 at Pagham Hbr and Rye Hbr and 2 at Pilsey during the month. Numbers swelled in Aug. with up to 20 at Sidlesham Ferry by 24th, 14 at Pett Level by 28th and small numbers elsewhere, including 9 at Rye Hbr, 5 W at Worthing on 19th and 5 at Pilsey Sands on 25th. A good total for Sept. was comprised of widespread sightings which included 10 at Pett Level on 3rd, 8 at Cuckmere Haven on 7th, 15 at Pagham Hbr on 12th and 8 at Pilsey on 20th and Rye Hbr on 22nd. Up to 2 were at Weir Wood Res. during the month with 3 there by 2 Oct. The other Oct. sightings were of singles at Pilsey on 4th and Widewater, Lancing on 22nd.

183. **PURPLE SANDPIPER** (*C. maritima*):—The peak monthly counts were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Sept.	Oct.	Nov.	Dec.
County totals	43	48	43	33	16	1	2	24	26
Brighton Marina	9	2	—	—	—	—	—	13	10
Glyne Gap*	21	26	19	13	2	1	2	—	1
Langney Point	—	—	—	1	—	—	—	—	2
Littlehampton	—	—	2	—	—	—	—	—	2
Newhaven	12	20	20	19	14	—	—	5	7
Pilsey Island	1	1	—	—	—	—	—	—	2
Saltdan	—	—	—	—	—	—	—	—	1
Shoreham Hbr	—	—	—	—	—	—	—	—	3

*includes birds seen at St Leonards-on-Sea.

The last recorded in spring was a single at Newhaven on 20 May, the same date and locality as in 1989.

184. **DUNLIN** (*C. alpina*):—The estuary counts were as follows:

	1990		1991	
	Jan.	Feb.	Mar.	Apr.
County totals	3193	1754	4826	2737
Chichester Hbr	28268	14116	3990	1834
Pagham Hbr	2220	1671	578	647
Goring	—	—	—	9
Adur	1367	1370	209	37
Pett Level	—	—	—	45
Rye Hbr	61	262	38	143

	1990		1991	
	Jan.	Feb.	Mar.	Apr.
County totals	17359	17359	17359	27385
Chichester Hbr	15026	15026	15026	24235
Pagham Hbr	17666	15026	15026	19568
Goring	—	—	—	30
Adur	86	610	215	37
Pett Level	618	444	541	15
Rye Hbr	25	6	200	1
	17	48	60	218

Unlike other species of waders, spring passage was light with a minimum of 248 recorded, well down on the 1989 figure of 876. Totals for the main seawatching localities were as follows:

	Mar.	Apr.	May	Total
Selsey Bill	—	6	107	113
Worthing	24	47	172	243
Seaford	7	19	153	179
Beachy Head	—	—	48	48

County totals	1990		1991	
	Jan.	Feb.	Mar.	Apr.
Chichester Hbr	525	478	354	1120
Pagham Hbr	525	478	284	1380
	—	—	70	1380
	—	—	—	9
	—	—	—	1
	—	—	—	9
	—	—	—	NC

Easterly spring passage was considerably heavier than in recent years with totals for the main seawatching sites as follows:

	Mar.	Apr.	May	Total
Selsey Bill	—	65	534	599
Worthing	7	10	500	517
Seaford	—	20	2187	2207
Beachy Head	—	—	428	428

Analysis of the data for Seaford reveals that passage was concentrated in a 4-day period in early May with 2170 recorded between 2nd-5th, 98% of the total for this locality for the whole spring. The peak movements were an extraordinary 1173 on 4th and 519 on 5th. In June there were 4 at Pilsey Island on 7th, 1 there on 18th, 5 at Pagham Hbr on 14th and 1 at Sidlesham Ferry on 28th. The first returning birds noted were singles at Rye Hbr and Pilsey on 14 and 27 July respectively, after which numbers at the latter locality built up slowly to 22 on 23 Aug. and 60 on 6 Sept.

The only inland record was of a single at Pulborough Brooks on 20 Dec.

171. **SANDERLING** (*C. alba*):—1989:—The peak movement of 109 E at Seaford was on 21 May, not on 4 May as stated.

1990:—The estuary counts were as follows:

	1990		1991	
	Jan.	Feb.	Mar.	Apr.
County totals	219	262	492	307
Chichester Hbr	187	92	432	459
Climping	NC	NC	NC	7
Goring	—	—	—	59
Pagham Hbr	4	18	60	18
Rye Hbr	28	170	60	—

The number of birds recorded on spring passage was similar to that in 1989 with totals for the main seawatching sites as follows:

	Mar.	Apr.	May	Total
Selsey Bill	—	48	277	325
Worthing	70	65	312	447
Seaford	6	66	426	498
Beachy Head	—	1	108	109

The peak movements were 71 at Seaford on 1 May and 61 at Selsey Bill the following day. At Pilsey Island, where 360 were present on 21 Apr., counts decreased to 309 on 1 May, 115 on 21 May, 79 on 14 June and 4 on 26 June. Numbers were then swelled by the arrival of the first autumn migrants with, for example, 12 recorded on 5 July, 43 on 12th, 148 on 20th and 306 on 26th, followed by a peak count for Aug. of 387 on 22nd. The colour-ringed bird of Icelandic origin seen at this locality in 1989 was again present from 3-29 Sept.

The only inland records were of singles at Lewes Brooks and Arlington Res. on 16 and 26 Sept. respectively.

175. **LITTLE STINT** (*C. minuta*):—The approximate monthly totals were as follows:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	2	1	3	2	4	—	—	7	16	108	28	7

Reports of 2 in Chichester Hbr on 13 Jan. and 1 Mar. and 1 there on 11 Mar. almost certainly relate to the 3 present at this locality in Dec. 1989 (SxBR 1989). Thereafter, singles were recorded at Pagham Hbr and Pilsey Island on 11 Apr., Worthing on 3 May, Pevensey Bridge Level on 7 May, Rye Hbr on 25-27 May and Pilsey on the latter date.

Return passage commenced in mid-July with 1 at Pett Level on 19th, 2 at Sidlesham Ferry on 20th-21st and up to 2 at Rye Hbr from 20-24th. Numbers increased markedly during Sept., the highest counts being 16 at Sidlesham Ferry on 12th, 21 at Pett Level on 16th and 34 at Pilsey on 19th. Up to 9 were recorded at Weir Wood Res. during the month. In Oct. there were 6 at Rye Hbr on 1st and 12 at Pilsey on 2nd, followed by widespread singles and 2 at both Pett Level and Rye Hbr late in the month.

At Pilsley Island, where 2000 were present on 10 May, numbers decreased thereafter to 700 on 15 May, 213 on 9 June, 72 on 14 June and 30 by the end of the month. A rapid build-up occurred in July following the arrival of the first returning autumn migrants with 56 present on 2nd, 1000 on 17th and 2300 on 27th. Further evidence of a heavy autumn passage was provided by counts in Aug. of 220 at Pett Pools on 7th, 80 at Rye Hbr on 15th and 120 W at Worthing on 19th.

188. RUFF (*Philomachus pugnax*):—The approximate monthly totals were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	40	34	74	20	66	3	15	35	59	43	57	30
Pagham Hbr	37	27	18	7	13	—	—	2	1	16	38	20
Arun Valley	—	—	1	18	—	—	9	13	26	21	—	—
Pevensy Levels	2	6	6	1	—	—	—	6	—	—	18	8
Rye Hbr	—	—	7	2	8	—	—	—	—	—	1	2

Other significant counts included 17 at the Crumblies GP on 5 May, up to 7 at Pett Pools in July, 5 in Aug. and 8 in Sept. and 20 at Selsey West Fields on 15 Dec. The latter birds are not included in the county totals as they were possibly the same as 20 at West Wittering on 22 Dec. At Worthing there were 2 E on 5 May, a day of heavy wader passage at coastal sites.

189. JACK SNIFE (*Lymnocyrtus minimus*):—The minimum monthly totals were:

Number of sites	Jan.	Feb.	Mar.	Apr.	Sept.	Oct.	Nov.	Dec.
Number of birds	1	1	5	2	2	45	13	26

Once again numbers were significantly down in the first winter period, probably due to the almost complete absence of cold weather. The slight increase in records in Mar. and early Apr. is indicative of a small spring passage, the last reported being 2 at Pevensy Bridge Level on 11 Apr. and 1 at Pilsley Island the following day.

The first returning bird was a single at Icklesham on 24 Sept. Up to 30 were present at this locality in Oct. (of which 17 were ringed) and 5 in Dec. Large numbers also occurred at Rye Hbr with up to 12 noted in Oct-Nov. and 14 in Dec. All other records were of singles except for 2 at Pilsley Island on 2 Dec. and 3 at Pulborough Brooks on 15 Dec.

No reports were received for Combe Haven or for the Pells at Lewes, both traditional sites for the species.

190. SNIPE (*Gallinago gallinago*):—**1989:**—One drumming at Waterlot Level on 14 May. **1990:**—Numbers recorded in Jan-Mar. were again low probably due to the absence of cold weather in these months. Apart from 500 at Pulborough Brooks on 11 Mar., the only significant concentrations reported for this period were 90 at Icklesham, 100 on the Upper Adur Levels and at Rye Hbr and 150 at Steyning.

Records for the breeding season were of a pair in Ashdown Forest on 3 Apr. and drumming birds at Byworth, Icklesham and Waltham Brooks, a slight recovery in the species compared with 1989.

Numbers in the latter part of the year were even lower than in Jan-Mar. with 150 at Pulborough Brooks, 60 at Icklesham and 50 on both Manxey Level and Pevensy Bridge Level the largest concentrations reported.

194. WOODCOCK (*Scolopax rusticicola*):—Another very mild winter produced sightings of only 1 in Jan., 3 in Feb. and 4 in Mar. More were reported during the breeding season with about 77 roding birds noted (48 in 1989). Few were recorded in the autumn with only 1 in Sept., 3 in Oct., 4 in Nov. and 6 in Dec.

195. BLACK-TAILED GODWIT (*Limosa limosa*):—The estuary counts were as follows:

County totals	1990			1991						
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	750	141	85	197	153	369	80	352	208	367
Pagham Hbr	—	—	—	70	152	351	48	352	176	36
Pagham Hbr	—	—	—	127	1	18	32	—	32	NC

Spring passage was heavier than in recent years with, unusually, a number of birds recorded passing up-Channel including 11 at Seaford on 31 Mar., 4 at Newhaven on 30 Apr. and a further 11 at the former locality on 4 May. Other significant counts included 600 at Dell Quay on 19 Apr., 150 at Thorney Deepes on 2 May and an estimated 50 with Bar-tailed Godwits in the Lower Cuckmere Valley on 4 May.

The regular summering flock was again present at Sidlesham Ferry, peak counts being 66 on 31 May and 64 on 25 June. At Thorney Deepes, where 21 were recorded on 7 June, numbers built up with the arrival of autumn migrants from 20 on 26 June to 32 on 1 July, 67 on 4th, 175 on 22nd and 510 on 9 Aug.

Inland records included up to 4 at Waltham Brooks from 30 June-13 July, 3 at Steyning on 12 Aug. and, unusually, 140 at Chichester GP on 9 Dec. and 23 on 11th.

196. BAR-TAILED GODWIT (*L. lapponica*):—The estuary counts were as follows:

County totals	1990			1991						
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Hbr	175	471	320	579	1317	457	687	568	1060	35
Pagham Hbr	—	128	—	559	1317	454	673	540	1056	35
Pagham Hbr	—	—	—	16	—	3	14	28	—	NC

As with other wader species, spring passage was heavy due to the incidence of NE winds in this period. An absolute minimum of 5787 birds were recorded, of which 21 were in Mar., 3722 in Apr. and 2044 in May. Totals at the main seawatching localities were as follows:

Selsey Bill	1990			1991		
	Mar.	Apr.	May	Apr.	May	Total
Worthing	21	402	515	1991	1647	3641
Seaford	3	1991	1647	3090	1422	4519
Beachy Head	7	371	270	—	—	641

The peak movements were typically in late Apr. and early May including 1087 and 802 at Worthing on 21 Apr. and 4 May respectively and 1164 at Seaford on 24 Apr.

June records were of 5-6 at Rye Hbr up to 7th, 1-2 remaining until 20th, 6 in Pagham Hbr on 14th and 39 at Pilsley Sands on 23rd. At the latter site numbers built up gradually through July with 102 counted on 17th, 122 on 27th and 168 on 27 Aug.

198. WHIMBREL (*Numenius phaeopus*):—The 2 overwintering in Pagham Hbr (SvBR 1989) were still present on 4 Jan., 1 remaining until 11 Mar. A single at Fishbourne on 1 Mar. was more likely a wintering bird than an early migrant. Passage commenced in mid-Mar. with 1 recorded at Worthing on 17th and 2 at Seaford the following day. Totals for the main seawatching localities for the spring period were as follows:

Selsey Bill	1990			1991		
	Mar.	Apr.	May	Apr.	May	Total
Worthing	2	84	81	187	330	518
Seaford	1	187	228	180	418	418
Beachy Head	10	37	200	—	—	237

Analysis of the available information indicates a minimum of 723 birds, well down on the 1989 figure of 1680. Of these 11 were in Mar., 339 in Apr. and 373 in May. The peak movements occurred in early May with 103 E at Worthing on 2nd and 258 E at Brighton Marina on 4-5th. The lighter spring passage was reflected at Rye Hbr where the regular roost held a maximum of only 88 on 28 Apr. (155 in 1989). Evidence of a significant overland movement through the county was provided by counts for the Arun Valley of 8 at Bury on 15 Apr., 85 and 60 at North Stoke on 29 Apr. and 1 May respectively, 7 at Pulborough Brooks on 5 May, 50 at Bury on 6 May and 4 at Waltham Brooks on 12 May. Other notable counts for the spring included 40 on East Guldeford Level on 5 May and a total of 60 on Down and Horse Eye Levels the following day. Two were noted at Rye Hbr on 5 June.

The first returning birds were 6 at Pilsley Island on 17 June increasing to 9 on 23rd, 28 on 8 July and 35 on 21 July. Numbers elsewhere were small with peak counts of only 16 at Pagham Hbr and 20-30 at Rye Hbr, both on 31 July. A number of inland records for the autumn included 13 at Waltham Brooks on 11 Aug. and 4 at Weir Wood Res. on 14th. There were no reports for Oct. except for a single at Pagham Hbr that remained until at least 15 Dec.

199. **CURLEW** (*N. arquata*):—The estuary counts were as follows:

County totals	1990											
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	1991	Jan.	Feb.	Mar.	Total
Chichester Hbr	1812	770	1294	2321	995	1543	973	1727	1113	816		51
Pagham Hbr	1112	420	891	1803	704	965	501	1075	739	773		35
Pett Level	219	128	18	341	312	103	198	307	324	315	NC	47
Rye Hbr	110	21	1	205	157	230	141	268	12	18		135
Rye Hbr (night)*	350	601	125	200	200	NC	200	47	13	24		69

*nocturnal roost excluded from county totals.

Spring passage was heavier than in 1989 with totals at the main seawatching localities as follows:

	Feb.	Mar.	Apr.	May	Total
Selsey Bill	—	10	37	4	51
Worthing	—	13	18	4	35
Newhaven	—	42	5	—	47
Seaford	32	44	48	11	135
Beachy Head	—	46	9	14	69

A pair, present in one area of the county throughout the breeding season, were seen noisily mobbing a fox on 17 June suggesting the presence of eggs or young nearby. A lone bird recorded in possible breeding habitat at another locality on 1 Apr. was not seen subsequently.

The first returning migrants were 63 at Pilesey Island on 7 June, increasing to 146 by 20th. At nearby Stakes Island 550 were counted on 21 July while at Rye Hbr there were 50 on 26 June and 70 on 29th. The peak count for Aug. was 255 at Pagham Hbr on 22nd.

A number of additional inland records include 4 at Arlington Res. on 7 Jan., 32 at Nyewood on 4 May, 3 at Horse Eye Level on 8 May and 18 at Amberley Wild Brooks on 15 Sept.

201. **SPOTTED REDSHANK** (*Tringa erythropus*):—The approximate monthly totals were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	5	1	3	14	45	6	8	19	18	8	8	4
Pagham Hbr	4	1	2	8	14	3	2	1	2	3	3	2
Pett Level	1	—	—	—	15	1	2	2	1	—	—	—
Rye Hbr	—	—	1	2	3	1	1	6	4	1	1	1

During the first 3 months, up to 3 were recorded at Thorney Deepes and singles at Fishbourne and Pett Level. In Apr., sightings away from the listed localities were of singles at Waltham Brooks on 12-16th and 30th, Icklesham on 28th and Cuckmere Haven on 30th. Peak counts during a heavy passage in early May included 10 at Thorney Deepes on 2nd and 14 at Sidlesham Ferry on 3rd.

In June, the first returning birds were singles at Rye Hbr on 11th, Thorney Deepes on 13th and Cuckmere Haven on 16th. In July, a single at Charleston Reedbed was the only bird recorded away from the listed sites. During Aug-Sept. ones and twos were widely noted while in Oct. there were up to 3 at both Rye Hbr and Thorney Deepes and singles at Icklesham and Newhaven Tide Mills. During Nov. singles were recorded at 4 localities and 3 at Thorney Deepes where 2 remained into Dec. The only other records for Dec. were of singles at Icklesham and Rye Hbr.

202. **REDSHANK** (*T. totanus*):—The estuary counts were as follows:

County totals	1990											
	Jan.	Feb.	Mar.	Sept.	Oct.	Nov.	Dec.	1991	Jan.	Feb.	Mar.	
Chichester Hbr	1653	2119	1885	1443	1530	1809	2087	1370	1786	940		
Pagham Hbr	238	1404	1203	931	1150	1159	1718	885	868	805		
Adur	110	75	28	258	53	337	181	164	125	NC		
Rye Hbr	48	62	97	80	157	132	87	112	90	56		

Maxima for sites other than those listed above in the first winter period included 59 at Cuckmere Haven, 56 at Waltham Brooks, 39 at Lewes Brooks and 33 at Newhaven Tide Mills. An unusual record was that of 6 on the exposed margins of Burton MP on 22 Mar.

Coverage for the breeding season was again incomplete with just 37 pairs reported. At Rye Hbr, where 14 pairs were located, success was poor except in one area of the reserve where 5 pairs raised 12 young. A total of 10 pairs bred at Pulborough Brooks RSPB reserve but these all failed, mainly due to trampling.

A high tide roost at Thorney Deepes held 474 on 27 June and 1381 on 25 July but numbers elsewhere in autumn were small with no other significant concentrations reported. Maxima for the second winter period away from the listed sites were 36 at Pett Pools in Sept. and 64 at Newhaven Tide Mills in Dec.

The creamy individual noted at Shoreham annually since 1985 was again present in Jan. and from 18 Nov.

203. **MARSH SANDPIPER** (*T. stagnatilis*):—An adult was present at Sidlesham Ferry from 30 June-9 July (DH, CRJ et al.). It has been accepted by *British Birds*, is the 7th county record and the first for June.

204. **GREENSHANK** (*T. nebularia*):—The approximate monthly totals were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	2	3	3	25	150	18	167	209	172	115	16	3
Pagham Hbr	—	—	—	9	25	10	92	133	106	105	13	—
Rye Hbr	—	—	—	—	4	4	3	9	12	6	4	1

After typically small wintering numbers, spring passage was especially heavy during early May, with peak counts of 16 at Thorney Deepes and 11 at Brighton Marina on 1st, 32 past Birling Gap (including a flock of 25) on 2nd and 10 at Sidlesham Ferry on 10th.

Returning birds were noted from mid-June with numbers peaking after mid-July including counts at Thorney Island of 80 on 20 July, 124 on 9 Aug., 108 on 22 Sept. and 99 still there on 16 Oct.

As usual, all Nov-Dec. records came from the western harbours with the exception of a single at Rye Hbr on 7 Nov.

208. **GREEN SANDPIPER** (*T. ochropus*):—The approximate monthly totals were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	8	10	9	10	4	24	89	87	26	12	8	9

The totals for Jan-Feb. include 2 at both Lewes Brooks and Pett Level, and 3 at Bury and Rye Hbr. During Mar. there were up to 4 at Chichester GP and 5 singles elsewhere. Spring passage was again unexceptional, comprising a wide scattering of single birds. The first returning birds were at Thorney Deepes on 13 June, Sidlesham Ferry on 14th and 2 at Waltham Brooks on 19th. Autumn peaks included 17 at the latter locality on 28 July and 19 at Rye Hbr on 18 Aug. In Nov-Dec. several singles were reported, also 2 at both Fishbourne and Rye Hbr and 3 at East Guldeford Level.

209. **WOOD SANDPIPER** (*T. glareola*):—Yet another good year for the species, the monthly totals being as follows:

County totals	Apr.	May	June	July	Aug.	Sept.
Chichester Hbr	1	14	8	11	24	3

The first recorded was on 30 Apr. at Rye Hbr. In early May up to 3 were present at this locality and 5 at Pevensey Bridge Level. The June total for Icklesham was 3 and there were 3 at Sidlesham Ferry on 28-30th. In July, 4 were noted at Fishbourne, 2 at Rye Hbr and up to 5 at Icklesham while in Aug. totals of 5 were recorded at the latter 2 localities. Other peak counts for Aug. included 6 at Waltham Brooks on 4th, 2 at Weir Wood Res. on 16th and 3 at Pett Level on 26th. Single birds were also noted at Bewl Water, Darwell Res. and Pagham Hbr. The only Sept. records were of 2 in the Lower Cuckmere Valley on 7th and 1 at Bewl Water on 17th, this being the last recorded.

211. **COMMON SANDPIPER** (*Actitis hypoleucos*):—The approximate monthly totals were as follows:

County totals	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Chichester Hbr	2	1	3	28	106	8	113	80	35	8	2	3

In Jan-Mar. single wintering birds were noted at Ashurst, Cuckmere Haven and Thorney Deeps.

The first spring migrant was recorded on 28 Mar. at Camber followed by a light passage in Apr. including 3 past Selsey Bill on 1st and 3 at Thorney Deeps on 28th. Peak counts in early May included 7 at Barcombe Res. on 2nd, 9 at Worthing on both 2nd and 4th and 6 at Ardingly Res. on 3rd.

In June singles were recorded at Ardingly Res., Icklesham and Storrington in the first 3 days of the month. The first returning bird was at Weir Wood Res. on 20-24th, closely followed by 2 at Sidlesham Ferry and singles at Rye Hbr and Thorney Deeps. Numbers built up quickly from 6 July with peaks of 9 W at Selsey Bill on 9th, 9 at Shoreham on 10th, 11 at Dell Quay on 17th, 15 at Thorney Deeps on 24th and 8 at Pagham Hbr on 29th. A relatively poor Aug. total included maxima of 8 at Ardingly Res. on 16th and 10 at Steyning on 24th. Numbers in Sept. were much reduced compared with Aug. while in Oct. up to 3 were noted at Rye Hbr and singles at 5 other widely spread localities. The only Nov. records were of singles at Arlington Res. and Thorney Deeps. The latter remained into Dec. and was seen with 2 others on 16th.

213. **TURNSTONE** (*Arenaria interpres*):—The estuary counts were as follows:

County totals	1990			1991		
	Jan.	Feb.	Mar.	Oct.	Nov.	Dec.
Chichester Hbr.	708	807	956	853	928	825
Pagham Hbr.	140	144	204	279	266	105
Normans Bay	334	429	530	241	263	73
Glyne Gap	30	58	3	44	26	224
Pett Level	170	172	202	134	219	131
	32	7	7	138	121	28
				158	150	229
				158	193	

Easterly spring passage was slightly lighter than in 1989 with a minimum of 320 birds recorded. Totals for the main seawatching localities were as follows:

Selsey Bill	Mar.			Total
	Apr.	May	June	
Worthing	11	11	67	78
Seaford	11	102	207	320
Beachy Head	3	11	110	124
	—	7	53	60

The peak movements were in early May with, for example, 188 noted at Worthing in the period 1st-4th. Maxima elsewhere in Apr-May included 150 at Glyne Gap on 17 Apr., 230 at Pett Level on 22 Apr. and 300 at Stakes Island on 9 and 13 May.

In June up to 14 were recorded at Rye Hbr in the first half of the month and 20-30 thereafter. Numbers at this locality continued to build up in July with 25 counted on 8th, 40 on 16th, 80 on 21st and 102 on 24th. At Pilsey Island, where 28 were present on 18 June but only 1 on 29th, numbers increased from 33 on 26 July to 71 on 22 Aug. and 121 on 5 Sept.

215. **RED-NECKED PHALAROPE** (*Phalaropus lobatus*):—Single juveniles were at Rye Hbr on 29 Aug-4 Sept. (DJF, NJT, BJY) and Sidlesham Ferry on 12 Sept. (SPH).

216. **GREY PHALAROPE** (*P. fulicarius*):—One at the Crumbles GP on 27 Sept. (KGBH) was the only record.

217. **POMARINE SKUA** (*Stercorarius pomarinus*):—Following an early single off Worthing on 13 Apr., a minimum total of 167 birds were recorded on spring passage, well below the 390 reported in 1989 but still above average for recent years. Of these, 152 (91%) were recorded in the period 26 Apr-4 May including a flock of 47 at Worthing on 29 Apr. Analysis of the available information indicates a bias towards the more western seawatching localities with totals of 77 recorded at Selsey Bill and 115 at Worthing but only 67 at Seaford and 32 at Beachy Head. The last reported for the spring were 2 off Rye Hbr on 10 June. In the latter part of the year, there were singles off St Leonards on 22 Oct. (IH) and Selsey Bill on 30 Dec. (OM).

218. **ARCTIC SKUA** (*S. parasiticus*):—Singles were recorded at Church Norton on 24 Feb. and Littlehampton West Beach on 8 Mar. Easterly spring passage was noted from 31 Mar. with totals for the main seawatching localities as follows:

Selsey Bill	No. of hrs watched			Total
	Jan.	Feb.	Mar.	
Worthing	334	334	31	69
Seaford	264	1	41	27
Beachy Head	410	—	76	53
	97	—	33	39

Analysis of the above data indicates a minimum total for the county of 106 in Apr. and 88 in May, slightly below the 213 recorded in the same period in 1989. Passage was recorded on 35 days in these months with peaks of 21 at Seaford and 16 at Selsey Bill on 26 Apr. and 15 at Beachy Head on 1 May.

A total of 4 singles off Selsey Bill in the period 22-30 June and a further sighting on 14 July perhaps indicates the presence of non-breeding birds of this species summering in the English Channel.

Return passage was noted from 29 July with approximately 92 birds recorded up to 6 Nov. The peak movements were 16 W at Selsey Bill on 18 Aug. and 17 W off Church Norton on 22 Sept.

220. **GREAT SKUA** (*S. skua*):—The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
2	5	1	32	12	1	1	2	8	3	—	1

The severe gales in late Jan. resulted in a small influx with singles observed at Worthing on 29 Jan. and 3 Feb., Selsey Bill on 2 Feb., Cuckmere Haven on 8 Feb. and Seaford on 18 Feb. A bird reported to be in a very weak condition was seen in Chichester Hbr on 31 Jan. and one was found freshly dead at Soutney Court GP on 23 Feb.

Easterly spring passage was noted from 31 Mar. with an absolute minimum of 45 birds reported from the coast up to 29 May. The peak movements occurred on 6 Apr. when there were 8 at Worthing and on 13 Apr. when a further 8 passed Beachy Head.

Singles off Selsey Bill on 30 June and Hope Gap the following day were again perhaps non-breeding birds summering in the Channel.

Return passage was recorded in the period 15 Aug-11 Oct. with a peak movement of 4 W at Selsey Bill on 30 Sept. A single at this locality on 28 Dec. was probably associated with the influx of other seabirds into the county at the time.

222. **MEDITERRANEAN GULL** (*Larus melanocephalus*):—Another good year although fewer birds were seen than in 1989. The 141 records suggest there may have been about 150 birds in the county. The following table shows the approximate numbers of each age seen monthly and includes records of 13 unaged individuals.

Adults	No. of birds											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
2nd year	—	4	3	19	16	2	6	2	2	5	3	3
1st year	—	3	2	7	14	3	4	2	1	1	1	—
TOTAL	—	7	5	26	30	5	10	4	3	6	4	3

The pattern of a marked peak in the spring was sustained and like Little Gull the spring movement may have started early in Feb. The largest numbers were 6 in Chichester Hbr on 30 Mar., 5 at Worthing on 24 Apr. with 4 different birds there on 28 Apr. and 1 May.

Most of the records were from coastal sites but singles were seen at Ardingly Res. on 24 July, at Weir Wood Res. on 4 Aug. and on downland between Worthing and Steyning on 1 July and 2-3 Nov.

225. **LITTLE GULL** (*L. minutus*):—For the third successive year the number of records increased, with 3268 sightings involving a minimum of 1483 birds. This increase was partly due to the growing number of Little Gulls breeding in the Baltic region but also to weather conditions bringing more to the Sussex coast during their migrations. The large number recorded and the increase in recent years is evident in the following table which shows an estimate of the minimum number seen in each month compared with the total for each month recorded in the 28 years between 1948 and 1975 (Shrubbs 1979):

Estimate 1990	Minimum number seen											
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
7	78	27	617	516	5	6	26	171	25	2	3	
16	20	18	267	572	59	38	102	380	206	124	52	

Although 1 was recorded at Selsey on 1 Jan. the majority of the winter birds were recorded between late Jan. and late Feb. from 22 well spread coastal sites with a maximum of 12 W at Hastings on 10 Feb. Up to 4 adults at Pulborough Brooks between 10 and 14 Feb. and 1 at Chichester GP were the only inland records during this period.

Inland records during the later spring were from Arlington Res., Darwell Res., Chichester GP and Bewl Water where 10 were feeding on 8 May. Most, however, were seen on the coast and the following table shows the peak movements. It is interesting how on some days the numbers passing sites in West and East Sussex were similar yet on other days many more were seen from East Sussex shores.

Totals of Little Gulls moving E at 6 coastal stations on 11 dates in 1990 (hours watched)

	1 Apr.	2 Apr.	28 Apr.	29 Apr.	30 Apr.	1 May	2 May	3 May	4 May	5 May	6 May
Selsey Bill	5 (9)	—	2 (8)	0 (12)	35 (12)	122 (13)	38 (14)	14 (14)	2 (10)	13 (14)	2 (10)
Worthing	1 (8)	—	1 (3)	69 (10)	45 (12)	24 (11)	79 (9)	23 (14)	15 (10)	1 (9)	—
Brighton	0 (3)	0 (1)	0 (1)	14 (3)	0 (2)	127 (8)	10 (5)	20 (2)	7 (5)	10 (3)	—
Newhaven	0 (6)	—	—	—	44 (7)	—	49 (3)	—	59 (13)	12 (5)	—
Seaford Head	34 (12)	222 (7)	77 (12)	48 (10)	113 (11)	129 (12)	113 (14)	82 (13)	69 (14)	31 (12)	9 (7)
Beachy Head	—	—	25 (6)	5 (4)	32 (5)	92 (9)	105 (7)	41 (5)	41 (8)	21 (6)	17 (8)

The only June records were of up to 5 immatures at Rye. Autumn passage extended from early July to early Nov. but the main period was in Sept. when there were 28 W at Lancing on 28th and at Selsey the peaks were 12 on 1st, 25 on 19th and 20 on 29th. As usual there were a few records from reservoirs, the most interesting from Bewl Water where a tired immature was noted to climb 1000 feet before departing SW on 15 Sept.

The only records at the end of the year were 2 at Worthing on 25 Dec. and 1 at Newhaven on 30 Dec.

226. **SABINE'S GULL** (*L. sabini*):—1989:—The record of a juvenile at Church Norton on 17 Dec. (Sx:BR 1989) should be deleted.

1990:—A juvenile seen at Worthing on 3 Oct. (RJSa) was the only record.

228. **BLACK-HEADED GULL** (*L. ridibundus*):—There were no coordinated coastal roost counts of this numerous and widespread wintering species. The only regular counts were at Bewl Water where the roost held 10000 on 26 Jan., 15000 on 6 Feb. and 20000 on 2 Mar. The seawatching log at Worthing recorded an eastward movement during the spring with a total of 437 seen in Mar., 3495 in Apr. and 3856 in May, the peak movements of 1185 and 1180 occurring on 28 Apr. and 3 May respectively.

Breeding at Stakes Island in Chichester Hbr was successful with an estimate of 1200 chicks reared from 1731 nests, but at Rye Hbr fledging was again very poor as 103 pairs only raised 30-40 young after several raids by foxes.

The only noteworthy counts in the autumn and winter were 1200 near Cissbury Ring on 1 Sept. and 800 at Warnham MP on 19 Dec. An albino with black wing tips noted at Coldwaltham Brooks on 27 Oct. was probably the same bird seen at Worthing on several occasions in the autumn and winter.

233. **COMMON GULL** (*L. canus*):—The largest winter counts were from the roost at Bewl Water where there were 1000 on 26 Jan., 4000 on 6 Feb. and 2000 on 2 Mar. Other winter counts included 1300 in Chichester Hbr on 16 Feb., 510 at Steyning on 6 Jan., 500 at Southwick on 13 Jan. and 400 at Darwell Res. on 14 Jan.

Larger numbers have often been recorded in spring; although 10000 were at Rye Hbr at dusk on 27 Mar, the counts from other coastal sites were small.

The first large count of the autumn was 265 at Pilsley Island on 18 July and there were 650 there on 8 Nov. The only other large gatherings were 2000, of which 90% were adults, near Steyning on 3 Nov. and 300 at Heathfield on 24 Dec.

234. **LESSER BLACK-BACKED GULL** (*L. fuscus*):—1989:—216 at Weir Wood Res. on 20 Jan.

1990:—As usual the largest numbers in the winter were recorded inland with 25 at Warnham MP on 10 Jan., 250 at Faygate refuse tip on 28 Jan. and 80 there on 3 Mar. Coastal counts were small and the only notable spring record was a total of 120 seen passing eastward at Worthing between March and May; the peak of 20 occurred on 30 Apr.

A pair made several scrapes without breeding at Rye Hbr and at least 2 pairs were present in Hastings until the early summer.

Like last year the numbers seen in autumn were considerably greater and were mainly recorded near the coast. At Rye the maximum count was 150 in both July and Oct., 200 were seen at Chichester GP on 6 July, 60 on the Crumbles GP on 15 Sept. and 80 at Beachy Head on 13 Oct. More unusual were records of 75 at Bignor Hill on 11 Oct. and 35 at Madehurst on 12 Oct.

235. **HERRING GULL** (*L. argentatus*):—The largest counts in the winter and spring were 150 at Faygate refuse tip on 28 Jan., 300 passing Newhaven during a seawatch on 30 Apr., and 266, mainly immatures, on Worthing Beach on 25 May.

There were 17-20 pairs nesting at Rye Hbr and 2 pairs at the Cuilfail Cliffs in Lewes. Breeding was noted on rooftops in several coastal towns; 43 chicks were removed by pest control officers from the Post Office building in Eastbourne on 1 June.

An albino individual flew E at Worthing on 6 May.

The records of the yellow-legged race *L. a. michahellis* showed the established pattern of summer and autumn gatherings mainly in the Chichester area and the Adur Valley; the largest counts were 17 at Portfield GP on 30 July and 20 at Shoreham on 14 Oct. There were few records from other locations with 6 at Littlehampton West Beach on 14 Aug. and 1 at Weir Wood Res. on 11 Nov. being the most noteworthy. The following table shows the monthly minimum totals:

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	2	1	1	1	—	1	26	26	19	25	5	1

236. **ICELAND GULL** (*L. glaucoides*):—The only authenticated record was of a first winter at Littlehampton on 28 Nov. (RJLK).

237. **GLAUCOUS GULL** (*L. hyperboreus*):—An adult which has been recorded in the Selsey area for several winters was seen at various local sites between Jan. and 13 Mar. (mo). A bird in first-year plumage was first seen at Brighton Marina on 2 Jan. and on several occasions until 11 Feb. (JCH *et al.*). Possibly this individual was seen at Worthing on 23 Feb. (CEH, JAN) and 29 Mar. (RJSa), at Pagham on 24 Feb. (RJF, TJW) and 25-26 Mar. (CRJ) and at Littlehampton between 14 and 23 Mar. (RJLK).

The Selsey bird returned on 2 Sept. (OM) and was noted in both Pagham and Chichester Hbrs and at Chichester GP until the end of the year. The only other record was a first-year at Shoreham Hbr from 30 Dec. (BFF) which remained into 1991.

238. **GREAT BLACK-BACKED GULL** (*L. marinus*):—There were few records of large gatherings; whether this represents a reduction in numbers or under-recording is unclear. The largest counts were 198 at Cuckmere Haven on 1 Jan., 360 at Rye Hbr on 16 Sept., 526 in Chichester Hbr on 8 Nov., 327 at Hope Gap on 2 Dec. and 228 in Pagham Hbr on 6 Dec.

240. **KITTIWAKE** (*Rissa tridactyla*):—1989:—The number of pairs recorded at Newhaven should be amended to read 1078.

1990:—There were several notable coastal movements recorded in moderate or fresh onshore winds during the winter months. At Worthing the Jan. totals in 18 hours' watching were 433 W and 79 E (peak 198 W on 27th) and in 30 hours in Feb. the totals were 286 W and 278 E (peak 230 E on 22nd). The largest winter movement recorded at Selsey Bill was 160 in 1 hour on 24 Feb. In spring the largest movements were seen at Newhaven where 225 passed E in 5 hours on 17 Mar. with 189 noted on 18 Mar., 300 seen in 3 hours on 7 Apr. and 340 on 8 Apr.; many of these, however, may have come from the nearby colony.

The breeding colony between Newhaven and Peacehaven held 1260 occupied nests on 28 May but 3 weeks later only 1177 nests were still occupied. At Splash Point, Seaford there were 69 nest sites in late May.

Autumn numbers were low but as in the early months of the year fresh onshore winds in Dec. were associated with coastal movements at both Selsey and Worthing. The peak

movements were 117 and 185 W at Selsey on 26 and 28 Dec. respectively and 190 and 125 W at Worthing on 29 and 30 Dec.

Inland records were scarce and included singles at Weir Wood Res. on 28-29 Jan., an immature at Bewl Water on 4 Feb., an adult at Arlington Res. on 7 Apr. and another immature at Bewl Water on 31 Dec.

243. CASPIAN TERN (*Sterna caspia*):—One flew E past Hastings Pier on 31 Mar. (ASG, MRG), an exceptionally early date, and 1 was seen at Weir Wood Res. on 19 Aug. (SBR). These are the first since 1984 and have been accepted by *British Birds*, bringing the county total to 15. The previous earliest county record was at Worthing on 30 Apr. 1969 and, with 3 others in May, 1 in June, 6 in July and 2 in September, the species has now been recorded in every month from March to September.

245. SANDWICH TERN (*S. sandvicensis*):—A single at Selsey Bill on 10 Feb. (RP) was the 8th county record for the month.

Easterly spring passage was noted from 16 Mar., with totals for the main seawatching localities as follows:

	No. of hrs watched					Total
	Mar.	Apr.	May	June	June	Total
Selsey Bill.....	420.5	970	1299	—	—	2376
Worthing.....	317	90	1456	54	—	3292
Seaford.....	485	80	2560	213	—	5041
Beachy Head.....	110.5	5	637	—	—	1409

Analysis of the site data reveals few obvious peaks, the largest movements being at Seaford in Apr. where there were 372 on 1st, 375 on 25th and 460 on 28th.

At Rye Hbr, where the first recorded were 2 on 17 Mar., an estimated 25 pairs bred but later deserted due to disturbance by a fox.

Autumn passage was light with totals for the period Aug-Oct. of 580 W in 195 hrs of watching at Selsey Bill and 494 W in 109 hrs at Worthing. The last recorded was a single at the former locality on 29 Oct.

A total of 16 were noted at inland localities including 6 at Chichester GP on 25 Aug. and 3 at Bewl Water on 14 Oct.

246. ROSEATE TERN (*S. dougallii*):—1989.—A ringed adult at Pett Pools on 21-22 July (PJ, JET, TJW *et al.*).

1990.—At Rye Hbr singles were recorded on 13 May and 15 and 20 June and a pair on 18 May (BIY *et al.*). The only other acceptable record was of 1 in Chichester Hbr on 11 May (CBC, CJT).

247. COMMON TERN (*S. hirundo*):—At Rye Hbr a total of 90 pairs nested but only 2 young were raised due to predation by foxes. A visit to the Society's rafts at Chichester GP on 20 June revealed 20 pairs present (4-5 in 1989) with 58 eggs counted. A total of 38 chicks were ringed on this date.

In late summer, numbers at Pilsey Sands built up from 84 on 27 July to 126 on 17 Aug. and 258 on 23 Aug. while at Rye Hbr there were 250 on 15 Aug., 140 on 22 Aug. but only 3 by 2 Sept.

As usual, small numbers were reported from a number of inland waters including 18 at Bewl Water and 41 at Weir Wood Res. on 2 May (a day of heavy Common/Arctic Tern passage on the coast) and up to 46 at the latter locality in Aug.

248. ARCTIC TERN (*S. paradisaea*):—The status of this species in the county remains uncertain due to the difficulty in separating it from Common Tern in the field, particularly at sea. Only 6 records were received despite increased observer awareness of the relevant identification criteria.

Spring records were of 4 at Newhaven on 20 Apr., 11 at Brighton Marina on 1 May and 2 at Widewater, Lancing on 12 May. A poor autumn followed with singles recorded at Pagham Hbr on 2 Sept. and Newhaven on 29 Sept. and 6 Oct.

247/248. COMMON/ARCTIC TERN:—First recorded on 31 Mar. at Worthing, slightly later than in 1989. Easterly spring passage totals for the main seawatching localities were as follows:

	No. of hrs watched					Total
	Mar.	Apr.	May	June	June	Total
Selsey Bill.....	—	356	2596	—	—	2952
Worthing.....	334	633	4384	41	—	5061
Seaford.....	264	1881	10502	431	—	12814
Beachy Head.....	410	469	4407	—	—	4876

Analysis of the data for Seaford reveals that passage was heaviest in early May with 6780 recorded over the period 1-5 May, 53% of the total for this locality for the whole spring. A further 1895 were noted there on 13-15 May.

Autumn passage was unusually heavy, particularly at Selsey Bill, where a total of 3115 W was recorded over the period 31 Aug. to 3 Sept., including 1550 in 10 hrs on 1st. The last reported was 1 at Worthing on 24 Oct.

251. LITTLE TERN (*S. albigifrons*):—First recorded at Worthing on 12 Apr. and at Pilsey Sands the following day. Easterly spring passage totals for the main seawatching localities were as follows:

	No. of hrs watched					Total
	Apr.	May	June	June	Total	
Selsey Bill.....	31	400	—	—	431	
Worthing.....	68	921	—	—	989	
Seaford.....	27	538	5	—	570	
Beachy Head.....	9	161	—	—	170	

Analysis of the available site data indicates that, as with Common/Arctic Tern, passage was heaviest in early May. This was particularly apparent at Worthing where 749 were recorded between 1st and 6th, 81% of the total for this locality for the whole spring.

Information for the breeding season was regrettably incomplete with no data received for Pagham Hbr. At Rye Hbr 40 pairs bred but nest losses were again high. A good food supply enabled a number of attempts at re-nesting to take place, 12 chicks eventually reaching the fledging stage. Five scrapes were constructed on Pilsey Island but these were washed out by high tides on 21 June.

Autumn passage was very light with just 20 W recorded in 134 hrs of observations at Selsey Bill in Aug-Sept. and 5 W in 68 hrs at Worthing. The last recorded were 2 at Pilsey Island on 3 Oct.

The only inland record was of a single at Bewl Water on 2 Aug.

253. BLACK TERN (*Chlidonias niger*):—1989.—The first recorded was at Rye Hbr on 12-13 Apr. not on 15th at Seaford as stated. Other additional records were of 2 at the former locality on 7-8 June and a single there on 11 July.

1990.—The first recorded were singles at Worthing on 20 and 21 Apr. Easterly spring passage totals for the main seawatching localities were as follows:

	No. of hrs watched					Total
	Apr.	May	June	June	Total	
Selsey Bill.....	1	194	—	—	195	
Worthing.....	14	202	—	—	216	
Seaford.....	—	725	4	—	729	
Beachy Head.....	—	193	—	—	193	

Analysis of the available site data for May indicates a minimum total for the month of 775, of which 722 (96%) were noted between the 1st and 6th. The peak movements were 111 at Seaford on 4th, 229 there the following day and 130 at Beachy Head on 6th. Not surprisingly there were numerous reports of birds at inland sites during this period, the maxima being 12 at Arlington Res. and 10 at Chichester GP on 4th and 39 at the former site and 51 at Ardingly Res. on 6th.

In autumn a total of 101 were recorded in the period 15 July to 16 Sept. Of these, 3 were in July, 41 in Aug. and the remaining 57 in Sept. All but 2 at Bewl Water on 2 Aug. were at coastal localities. The peak movements noted were 11 W at Langney Point on 19 Aug., 10 W at Selsey Bill on 31 Aug. and 15 W at the latter locality on 2 Sept.

255. **GUILLEMOT** (*Uria aalge*):—The status of this species and the next in the county remains uncertain due to the difficulty in identifying auks in flight. The following approximate monthly totals (which include sea passage) suggest, once again, that it is more numerous than Razorbill in our area:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19	12	2	2	17	1	1	—	—	2	4	175

These figures include 23 oiled birds, 20 of which were found in Jan-Feb, in the Brighton area. The influx in Dec. included totals of 70 W at Langney Point and 34 W in 4 hrs at Selsey Bill, both on 29th. See also Auk sp.

257. **RAZORBILL** (*Alca torda*):—The approximate monthly totals (which include sea passage) were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
3	6	1	3	20	—	—	—	5	7	8	10

These figures include an oiled bird found dead and an exhausted individual which later died. See also Auk sp.

260. **LITTLE AUK** (*Alte alle*):—An exceptional year with an absolute minimum of 59 birds reported between 3 Nov. and 30 Dec., well above the previous highest annual total for the county of 22 in 1989. Records were received from 11 coastal localities as follows:

Rye Hbr: 1 W on 22 Dec. (HMIJT).
 Hastings: 6 W on 4 Nov. (ASG, RH).
 Langney Point: 1 E on 16 Dec. (AJG, AJS *et al.*) and 5 W on 29th (JFC, MK, TJW *et al.*).
 Newhaven: 4 E on 14 Dec. (EDU).
 Worthing: 1 E on 13 Dec. (JAN), 2 E on 16th (mo) and 8 W on 29th (RJB, MGP, DIS *et al.*).
 Ferring: 1 on 4 Nov. (HS).
 Climping: 5 W on 4 Nov. and 1 E on 14 Dec. (ASC).
 Bognor Regis: One picked up exhausted on 4 Nov. (DEGC).
 Pagham Beach: One picked up exhausted on 3 Nov. (DEGC).
 Church Norton: 2 on 4 Nov. (mo), one of which was later picked up exhausted, and 1 W on 28 Dec. (RJB, MAN, MGP).
 Selsey Bill: Singles on 4 Nov. (BJC) and picked up exhausted on 27 Nov. (DEGC). In late Dec., 1 W on 27th (TJE), 26 W on 28th (RJB, MAN, MGP), 13 W on 29th (mo) and 1 W on 30th.

Analysis of the above records indicates that 3 main influxes occurred with minimum totals of 8 on 3-4 Nov., 7 between 13-16 Dec., and 42 between 27-30 Dec. Of those found exhausted, 3 were taken into care at Brent Lodge but none survived more than 2 days.

261. **PUFFIN** (*Fratercula arctica*):—The only record was of a single at sea 13 km off Brighton on 28 Apr. (NJT).

AUK SPECIES:—1989:—The monthly totals for Splash Point (Seaford) should be amended to read Jan-Feb: 61 and Mar-May: 170.

1990:—Observations at the main seawatching localities were as follows:

	Jan-Feb.		Mar-May		June-July		Aug-Oct.		Nov-Dec.	
	E	W	E	W	E	W	E	W	E	W
Selsey Bill.....	—	—	67	16	—	—	—	3	—	88
Worthing.....	—	83	7	2	—	—	19	11	202	212
Seaford.....	26	—	151	—	3	—	—	—	—	—

Additional counts included a total of 518 recorded off Newhaven in Dec. with a peak of 340 on 30th, on which date there were also 259 off Langney Point. The latter birds were considered to be probably all Guillemots.

Cat. C. RING-NECKED PARAKEET (*Psittacula krameri*):—At Hollingbury Woods, where 7 were present on 28 Jan., one pair bred but with unknown success. Reports of 6 sightings of single birds at Hove from 4 Aug. probably relate to this population. Elsewhere, there were 7 at

Orltons Copse, Rusper on 17 June and singles at Church Norton on 8 Mar., Pett Level on 17 Mar., Beachy Head on 14 Apr., Hurspierpoint on 3 and 5 May, Ditchling and Arlington Res. on 13 May, Littlehampton on 7 Oct. and Bewl Water on 9 Oct.

264. **STOCK DOVE** (*Columba oenas*):—During the first quarter the largest flocks reported were 90 at Newmarket Hill on 8 Jan., 65 at Stoughton Down on 10 Jan. and 40 at Icklesham in Mar. Up to 60 were present in Apr. at Rye Hbr while 250 were recorded at nearby East Guldeford Level on 22nd.

In the breeding season there were 4 pairs in 60 ha at West Chiltington and 7 pairs in 240 ha at Moulsecroomb Wild Park.

Few flocks were noted in the latter part of the year, the largest reported being up to 107 at Thorney Deepes, 70 at Down Level, 60 at Climping and 40 at Icklesham.

265. **WOODPIGEON** (*C. palumbus*):—The only significant concentrations reported for the first quarter were up to 400 at Maynards Green in Jan-Feb. and 300 at Warnham MP on 6 Feb.

In the breeding season 17 pairs were present in a 16.1 ha CBC plot at Barns Copse, Binsted.

The usual autumn movements were recorded, notably 1027 S in 17 flocks at Sompting on 10 Oct. and 2000 W at Weir Wood Res. in 2 hrs on 8 Nov. Other large numbers in the latter part of the year included 1200 at Seaford Head on 3 Nov., 5000 at Weir Wood Res. on 9 Nov., 1500 at West Dean Woods on 5 Dec. and 2000 feeding on beech mast at Barlavington Down on 8 Dec.

266. **COLLARED DOVE** (*Streptopelia decaocto*):—The largest concentrations reported were 130 at West Wittering on 5 Jan., 79 at West Chiltington on 8 Feb., 121 at Yapton on 17 Sept., 86 at Barnham on 30 Nov. and 80 at Lower Standean on 22 Dec. At Rye Hbr, where up to 200 were recorded during the year, the 2 white individuals first noted in 1988 were again present.

267. **TURTLE DOVE** (*S. turtur*):—First recorded on 16 Apr. at Ifold, the same date as in 1989. Spring passage was once again very light, the largest numbers reported being 6 at Runcton and 4 at Littlehampton West Beach on 22 May, suggesting a late arrival.

Counts for the breeding season were of 11 pairs at Elms Farm, Icklesham, 6 pairs at Thorney Deepes (4 in 1989) and 3 pairs at Pulborough Brooks RSPB reserve.

Autumn passage was heavier than in 1989 with peak counts of 14 at Sompting on 12 Sept., 11 at Seaford Head on 22 Sept. and 10 at Mount Caburn and Mountfield on 21 Aug. and 16 Sept. respectively.

At Rye Hbr a single bird undergoing wing moult was recorded on 2 Dec. and a full-winged bird the following day. Both were seen on 4-5th, the latter remaining until 18th (BJY). The only previous county record for the month was in 1980 at Shoreham.

270. **GREAT SPOTTED CUCKOO** (*Clamator glandarius*):—Probably the highlight of the year was a first-summer individual at Shoreham Airport from at least 4 Apr-1 May (RJF, RAI, DIS *et al.*). Its long stay was greatly appreciated by many, resulting in an acute sense of loss when it finally departed. It has been accepted by *British Birds* and is the second county record, the first being found dead at Shripney in Aug. 1967. See pages 89-91.

271. **CUCKOO** (*Cuculus canorus*):—First recorded on 6-7 Apr. at Shoreham, slightly earlier than the average arrival date for the 1980s of 8 Apr. The next reported were singles at South Stoke on 13th and in Ashdown Forest on 15th with a more general arrival noted from 16th onwards. A migrant arrived from the sea at Worthing on 13 May.

Although widespread in the breeding season, the only significant counts for defined areas were of 6 pairs at Thorney Island and 5 pairs at Bewl Water.

The last recorded were singles at Climping and Rye Hbr on 26 and 29 Aug. respectively, indicating an earlier autumn departure.

274. **BARN OWL** (*Tyto alba*):—Although 108 records were received compared with 99 in 1989, the number of probable pairs reported fell significantly from 24 to 17. Of these, only 5 were known to have bred successfully. Single birds were recorded at a further 10 localities, making a total of 22 sites for the breeding season, well down on the 1989 figure of 47. This unfortunate decline was coupled with an increase in the number of road casualties, a total of 11 being reported for the year, 10 of which were fatalities.

Two birds, previously in care at a bird hospital, were released at Sompting on 1 Jan.

279. **LITTLE OWL** (*Athene noctua*):—A total of 142 records were received for 78 localities, 57 of which were in the breeding season. At least 34 probable pairs were reported, a similar figure to the 37 located in 1989. Little information was received on breeding success with just 3 pairs known to have nested successfully, raising 5 young. The presence of 7 pairs in 300 ha of farmland at one locality and 3 pairs in 60 ha at another suggests that the species is under-recorded and that most records relate to casual sightings.

280. **TAWNY OWL** (*Strix aluco*):—A total of 88 records were received for 58 localities, 40 of which were in the breeding season. Of 22 probable pairs reported, 7 were known to have bred successfully, 5 raising 14 young.

The absence of records from many areas of woodland in the county suggests that this largely nocturnal species is under-recorded and that the figures above do not represent its true status in our area.

281. **LONG-EARED OWL** (*Asio otus*):—The approximate monthly totals were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Oct.	Nov.	Dec.
Number of sites.....	4	3	5	3	1	1	4	2
Number of birds.....	10	9	11	5	1	2	4	3

The largest numbers recorded were at Rye Hbr where up to 4 were present in Jan., 6 in Feb., 5 in Mar., 2 in Apr., 1 remaining until at least 25th, and 1 in Nov.

Single migrants were noted at Combe Haven on 10 May and at Beachy Head on 14 and 28 Oct. The above totals also include birds found dead at Upper Beeding on 28 Feb. and Lancing on 31 Mar.

All birdwatchers, especially outing leaders, are reminded of the need to avoid disturbance of this scarce species at its winter roosts.

282. **SHORT-EARED OWL** (*A. flammeus*):—The approximate monthly totals were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Aug.	Sept.	Oct.	Nov.	Dec.
Number of sites.....	15	17	12	10	9	1	10	7	6	2

A number of traditional wintering areas were again frequented and many of the records can be grouped and summarised as follows:

Chichester Hbr. Up to 6 were recorded at a roost at one locality in Jan., 8 in Feb. and 3 in Mar. Two were still present on 2 Apr. and 1 on 14th and 27th. In the latter part of the year 5 singles were noted in the period 6 Sept. to 26 Dec.

Selsey Peninsula. One at Pagham Hbr from 3 Mar. to 28 Apr. In the second winter period the first recorded was an early migrant at Selsey Bill on 4 Sept., followed by further singles at nearby West Fields on 12 Sept. and 28 Nov. and at Pagham Hbr on 26 Sept. and 1 Nov.

Arun Valley. Up to 4 were recorded at Pulborough Brooks in Jan. but only 1 there and 1 at Amberley in Feb. Two at Waltham Brooks on 11 Mar. and singles there on 2 Mar. and 13 Apr. had probably dispersed from Pulborough where 1 was present on 15 Oct., the only record for the area in the latter part of the year.

Adur Valley. Two were noted at Beeding Brooks on 3 Feb. Other sightings were of singles at Shoreham on 11 and 15 Feb. and on the Upper Adur Levels on 4 Apr.

Onse Valley. Singles on 16 and 24 Feb. and 5 Oct.

Lower Cuckmere Valley. One on 18 Feb.

Pevensley Levels. Two were present on Pevensley Bridge Level in Jan., 1 remaining until 3 Mar.

One at Manxey Level on 24 Feb. was perhaps the same as that recorded on Horse Eye Level on 16 Mar. and 21 Apr.

Pett Level/Rye Hbr/Rother Levels. Two were noted at Camber GC on 7 Jan., 1 at Rye Hbr in Mar. and migrants there on 7 and 19 May. In autumn singles were recorded at Pett Level on 5 Sept. and 3 and 31 Oct. and at Rye Hbr on 29 Sept.

Faygate. One, first recorded at Holmbush Tip in Dec. 1989, stayed until at least 28 Jan.

The remaining records all probably relate to migrants including 2 at Beachy Head and 3 at Worthing in May, 1 at Sompting on 27 Aug. and 1 at Bewl Water on 1 Nov.

284. **NIGHTJAR** (*Caprimulgus europaeus*):—First recorded on 5 May at Iping Common. No birds were reported from coastal sites during the spring. During the breeding season 53 churring males were recorded, rather down on the 70 in 1989. Of this year's total, 34 were in the West of the county but only 19 in the East. None were reported on autumn passage and the last for the year were in Ashdown Forest on 26 Aug.

289. **SWIFT** (*Apus apus*):—First recorded on 13 Apr. at Seaford Head, just 3 days later than the earliest date ever for the county recorded in 1989. The next reported were singles at Climping, Rye Hbr and Seaynes Hill on 26 Apr. and at Selsey Bill the following day. A more general arrival was noted in early May with, for example, 23 at Littlehampton West Beach on 2nd, 110 N at Newhaven on 7th and 150 N at Selsey Bill on 10th, on which date there were also 300 at Chichester GP and 100 at Rye Hbr. An estimated 500 were present at Bewl Water on 13th but thereafter numbers were small with no more than 50 reported from any one locality up to the end of the month. An albino was noted at Piddinghoe on 19-20th.

A number of large concentrations of uncertain significance were noted in June including 600 at Rye Hbr on 2nd, 800 at Sidlesham Ferry on 12th, 400 at Chichester GP on 21st and 2000 at the former locality on 23rd. In July there were 300 at Barcombe Res. on 5th and 350 at Worthing on 28th but only 6 there the following day. Many thousands were noted departing S at Selsey Bill on 3 Aug. after which date few were reported except for 120 at Climping on 8th. A total of 25 were reported in Sept. and 6 in Oct., the last being singles at Earmley and Midhurst on 24th and at Pett Pools on 27th.

291. **ALPINE SWIFT** (*A. melba*):—One at the Crumbles GP on 25 Mar. (DC, DRC, JFC) is the earliest county record by just over 2 weeks. It has been accepted by *British Birds* and brings the county total to 25.

293. **KINGFISHER** (*Alcedo atthis*):—Observations during winter were as follows:

	Jan.	Feb.	Nov.	Dec.
No. of birds.....	24	11	19	23
No. of inland sites.....	9	5	11	8
No. of coastal sites.....	8	3	5	8

Nine pairs are known to have attempted to breed (one certainly failed) and 7 young fledged at Woods Mill. Birds were reported from 11 other sites, 1 of which was Bewl Water where there were 4 pairs. This was the best breeding season since 1984. Observers are to be congratulated on the diligence with which they are reporting this species and the Society welcomes all records.

297. **HOOPOE** (*Upupa epops*):—1989.—One was reported from a Fairlight garden on 10 May (RFB) while 1 seen in Stanmer Park on 30 Oct-1 Nov. (CB, DPD *et al.*) is the latest county record since 1 lingered at Climping from 21 Nov-6 Dec. 1970. These bring the year's total to 5, about average for the 1980s.

1990.—Two were recorded in spring, at Seaford Head on 29 Apr. (WJMS) and Possingworth Park on 8 May (Lady Chelwood per RS), and 2 in autumn, at Denton on 29 Aug. (NJT) and Eastbourne on 30 Aug. (GRD).

274. **BARN OWL** (*Tyto alba*):—Although 108 records were received compared with 99 in 1989, the number of probable pairs reported fell significantly from 24 to 17. Of these, only 5 were known to have bred successfully. Single birds were recorded at a further 10 localities, making a total of 22 sites for the breeding season, well down on the 1989 figure of 47. This unfortunate decline was coupled with an increase in the number of road casualties, a total of 11 being reported for the year, 10 of which were fatalities.

Two birds, previously in care at a bird hospital, were released at Sompting on 1 Jan.

279. **LITTLE OWL** (*Athene noctua*):—A total of 142 records were received for 78 localities, 57 of which were in the breeding season. At least 34 probable pairs were reported, a similar figure to the 37 located in 1989. Little information was received on breeding success with just 3 pairs known to have nested successfully, raising 5 young. The presence of 7 pairs in 300 ha of farmland at one locality and 3 pairs in 60 ha at another suggests that the species is under-recorded and that most records relate to casual sightings.

280. **TAWNY OWL** (*Strix aluco*):—A total of 88 records were received for 58 localities, 40 of which were in the breeding season. Of 22 probable pairs reported, 7 were known to have bred successfully, 5 raising 14 young.

The absence of records from many areas of woodland in the county suggests that this largely nocturnal species is under-recorded and that the figures above do not represent its true status in our area.

281. **LONG-EARED OWL** (*Asio otus*):—The approximate monthly totals were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Oct.	Nov.	Dec.
Number of sites.....	4	3	5	3	1	1	4	2
Number of birds.....	10	9	11	5	1	2	4	3

The largest numbers recorded were at Rye Hbr where up to 4 were present in Jan., 6 in Feb., 5 in Mar., 2 in Apr., 1 remaining until at least 25th, and 1 in Nov.

Single migrants were noted at Combe Haven on 10 May and at Beachy Head on 14 and 28 Oct. The above totals also include birds found dead at Upper Beeding on 28 Feb. and Lancing on 31 Mar.

All birdwatchers, especially outing leaders, are reminded of the need to avoid disturbance of this scarce species at its winter roosts.

282. **SHORT-EARED OWL** (*A. flammeus*):—The approximate monthly totals were as follows:

	Jan.	Feb.	Mar.	Apr.	May	Aug.	Sept.	Oct.	Nov.	Dec.
Number of sites.....	15	17	12	10	9	1	10	7	6	2

A number of traditional wintering areas were again frequented and many of the records can be grouped and summarised as follows:

Chichester Hbr. Up to 6 were recorded at a roost at one locality in Jan., 8 in Feb. and 3 in Mar. Two were still present on 2 Apr. and 1 on 14th and 27th. In the latter part of the year 5 singles were noted in the period 6 Sept. to 26 Dec.

Selsey Peninsula. One at Pagham Hbr from 3 Mar. to 28 Apr. In the second winter period the first recorded was an early migrant at Selsey Bill on 4 Sept., followed by further singles at nearby West Fields on 12 Sept. and 28 Nov. and at Pagham Hbr on 26 Sept. and 1 Nov.

Arun Valley. Up to 4 were recorded at Pulborough Brooks in Jan. but only 1 there and 1 at Amberley in Feb. Two at Waltham Brooks on 11 Mar. and singles there on 2 Mar. and 13 Apr. had probably dispersed from Pulborough where 1 was present on 15 Oct., the only record for the area in the latter part of the year.

Adur Valley. Two were noted at Beeding Brooks on 3 Feb. Other sightings were of singles at Shoreham on 11 and 15 Feb. and on the Upper Adur Levels on 4 Apr.

Onse Valley. Singles on 16 and 24 Feb. and 5 Oct.

Lower Cuckmere Valley. One on 18 Feb.

Pevensley Levels. Two were present on Pevensley Bridge Level in Jan., 1 remaining until 3 Mar.

The Sussex List (at 31 December 1989)

Published with the *Sussex Bird Report*, No. 43 for 1990, in which see page 48 for explanation, examples and references. Compiled by Richard Fairbank.

Key

- * First British record in Sussex
- ** Described to Science from Sussex specimen
- 21 21 individuals recorded up to the end of 1989
- 1985 Last recorded in 1985
- 5y Recorded in 5 years during 1980s
- R Regular breeding resident
- B Regular breeding summer visitor
- F Resident breeding feral population
- P Regular passage migrant
- PA Regular autumn passage migrant
- PS Regular spring passage migrant
- W Regular winter visitor
- r Scarce/rare non-breeding resident
- s Scarce/rare summer visitor (non-breeding)
- b Breeds most years
- [b] Has bred or breeds very irregularly
- p Scarce/rare passage migrant
- pa Scarce/rare autumn passage migrant
- ps Scarce/rare spring passage migrant
- w Scarce/rare winter visitor
- i Introduced into Britain
- (A) Awaiting acceptance by BBRC/BOU
- (D) Doubtful historical records
- (E) All records presumed to relate to escapes
- (T) Of uncertain taxonomic status
- (U) Unestablished introduced species

.....Cattle Egret	W/P	6:1986:ps
.....Little Egret	P/W	40:9y:ps/s/s/pa/w
.....Great White Egret	W/P	1:1985:ps
.....Grey Heron	W/B	R
.....Purple Heron	W/B	41:8y:ps/s/pa
.....Black Stork	W	2:1989:p
.....White Stork	W/P	5y:p/s
.....Glossy Ibis	W/P	42:3y:p
.....Spoonbill	W/P	8y:p/s/w
.....Mute Swan	B/P/R	i/R
.....Bewick's Swan	W	W
.....Whooper Swan	7y:w	7y:w
.....Bean Goose	7y:w	7y:w
.....Pink-footed Goose	5y:w	5y:w
.....White-fronted Goose	W	W
.....Greylag Goose	F/w/p	F/w/p
.....Canada Goose	i/R	i/R
.....Barnacle Goose	3y:w	3y:w
.....Brent Goose	W/PS	W/PS
.....Red-breasted Goose	3:2y:w	3:2y:w
.....Egyptian Goose	15:8y:i/r	15:8y:i/r
.....Ruddy Shelduck	20:1940:pa	20:1940:pa
.....Shelduck	R/W	R/W
.....Mandarin	i/R	i/R

(i)

THE SUSSEX LIST

by Richard Fairbank

The Sussex List catalogues all species that have been recorded in the county up to the end of 1989, either in a wild state or as fully established introductions. This gives an official Sussex List of 371 at the end of 1989, all having been accepted, where necessary, by either the British Ornithologists' Union (firsts for Britain), the *British Birds* Rarities Committee (national rarities since 1958), the SOS Records Committee (county scarcities since 1962), or des Forges and Harber (1963) (others before those years).

Additional species which may deserve a place on the Sussex List are shown in the Appendix. These have been excluded from the main list for one or more of the following reasons: (a) all records are currently thought to have related to escapes from captivity, (b) the species is not regarded as being fully established in Sussex, (c) all the records are old records, excluded by des Forges and Harber (1963), for which the identity is not believed to be proven beyond doubt, (d) the records are awaiting acceptance by national committees, or (e) there are taxonomic uncertainties about current subspecies which may deserve full species recognition but have yet to receive it.

After each species, coded information is given relating to its status in the county. This is based on published information in *Sussex Bird Reports* and the county avifaunas (see References below) and comprises:

- (1) total number of individuals recorded, if fewer than 50, up to the end of 1989;
- (2) the number of years during the 1980s in which the species has been recorded. This is left blank if of annual occurrence or shows the year of the most recent record (up to 1989) if it has occurred in only one year, or not at all, during the 1980s;
- (3) a crude indication of the species' status in the county, commonest status being shown first (see key for details). If this is all that is shown it implies that more than 50 individuals of the species have occurred in the county and the species was annual during the 1980s.

Examples of the coding are:

Mandarin	i/R	Annual; introduced regular breeding resident.
Great Bustard	1891:w/[b]	Last recorded 1891; rare winter visitor/has bred.
Little Auk	9y:pa/w	Recorded 9 years in 1980s; scarce autumn migrant/scarcely winter visitor.
Wryneck	PA/ps/[b]	Annual; regular autumn migrant/scarcely spring migrant/has bred.
Desert Wheatear	3:1989:p	3 records; 1989 only year recorded in 1980s; rare migrant.
Wallcreeper	3:1977:ps	3 records; last recorded 1977; rare spring migrant.
Treecreeper	R	Annual; regular breeding resident.
Penduline Tit	9:3y:pa	9 records; recorded in 3 years during 1980s; rare autumn migrant.

REFERENCES

- des Forges, G. and Harber, D. D. 1963. *A Guide to the Birds of Sussex*. Oliver & Boyd, Edinburgh.
- Shrubbs, M. 1979. *The Birds of Sussex: their present status*. Phillimore, Chichester.
- Sussex Bird Reports 1960-1989*. Sussex Ornithological Society.
- Walpole-Bond, J. 1938. *A History of Sussex Birds*. Witherby, London.

Richard Fairbank, 19 Crown Road, Shoreham-by-Sea, West Sussex.

Note. The List is separately numbered so that if required it may be removed from the staples and filed with members' records. Status assessments are derived from the personal research of the author who would welcome any comments. *Ed.*

Wigeon	W/P					Turnstone	W/P					Tawny Owl	R	
Gadwall	W/P/[b]					Wilson's Phalarope	7.3y:pa/ps					Long-eared Owl	W/P/[b]	
Baikal Teal	1:1927:pa					Red-necked Phalarope	2y:p					Short-eared Owl	W/P/[b]	
Teal	W/P/B					Grey Phalarope	PA/w					Nightjar	B	
Mallard	R/W					Pomarine Skua	PS/pa					Swift	B/P	
Pintail	W/P/[b]					Arctic Skua	P					Alpine Swift	24.7y:ps/pa	
Garganey	P/b					Long-tailed Skua	20:4y:p					Kingfisher	R/W	
Blue-winged Teal	2:1970:ps/w					Great Skua	P/w					Be-eater	41:7y:ps/pa/[b]	
Shoveler	W/P/B					Great Black-headed Gull	2:1932:w/s					Roller	17:1978:s/p	
Red-crested Pochard	8y:w/p					Mediterranean Gull	W/P/s					Hoopoe	PS/pa/[b]	
Pochard	W/P/B					Laughing Gull*	1:1923:s					Wryneck	PA/ps/[b]	
Ring-necked Duck	1:1982:w					Franklin's Gull	1:1970:s					Green Woodpecker	R	
Ferruginous Duck	19:4y:w/p					Little Gull	P/w/s					Lesser Spotted Woodpecker	R	
Tufted Duck	W/R					Sabine's Gull	46:6y:pa					Lesser Spotted Woodpecker	R	
Scup	W/p					Bonaparte's Gull	4:1961:s/w					White-winged Lark*	5:1933:pa	
Eider	W/P/s					Black-headed Gull	R/W/P					Short-toed Lark	9:1972:pa/ps	
Long-tailed Duck	W/p					Slender-billed Gull*	2:1963:s					Crested Lark*	4:1897:p	
Common Scoter	PS/W					Ring-billed Gull	6:4y:w/ps					Woodlark	w/p/b	
Surf Scoter	2:1977:w					Common Gull	W/P/s/[b]					Skylark	R/W/P	
Velvet Scoter	PS/W					Lesser Black-backed Gull	P/B/w					Shore Lark	4y:w	
Goldeneye	W/P					Herring Gull	R/W					Sand Martin	P/B	
Smew	W					Iceland Gull	7y:ps/w					Crag Martin	1:1988:s	
Red-breasted Merganser	W/P					Glaucous Gull	W/P					Swallow	B/P	
Goosander	W					Great Black-backed Gull	R/P					Red-rumped Swallow	8:3y:ps	
Ruddy Duck	i/W/B					Kittiwake	P/W/B					House Martin	B/P	
Honey Buzzard	9y:p/s/[b]					Ivory Gull	11:1961:w					Richard's Pipit	6y:pa/w	
Black Kite	13:7y:ps					Gull-billed Tern**	4y:p/s					Blyth's Pipit*	1:1882:pa	
Red Kite	9y:p/w/[b]					Caspian Tern	13:2y:s/p					Osprey	1:1987:pa	
White-tailed Eagle	1961:p/w					Lesser Crested Tern	2:2y:ps					Tree Pipit	P/B	
Marsh Harrier	P/w					Sandwich Tern	P/b					Meadow Pipit	R/W/P	
Hen Harrier	W/p					Roseate Tern	P/s					Red-throated Pipit	4:1984:pa	
Montagu's Harrier	9y:p/[b]					Common Tern	P/B					Rock Pipit	R/W/P	
Goshawk	4y:p/w/s/[b]					Arctic Tern	P					Water Pipit*	W/PS	
Sparrowhawk	R/p					Sooty Tern	2:1984:ps/s					Yellow Wagtail	P/B	
Buzzard	W/p/s/[b]					Little Tern	P/B					Grey Wagtail	R/W/P	
Rough-legged Buzzard	3y:w/pa					Whiskered Tern	8:3y:p					Pied Wagtail	R/P/W	
Osprey	P					Black Tern	P					Waxwing	6y:w	
Lesser Kestrel	1:1973:pa					White-winged Black Tern	39:7y:p					Dipper	7:1962:w/pa	
Kestrel	R					Guillemot	W/P/[b]					Wren	R/P/W	
Red-footed Falcon	21:2y:p/s					Razorbill	W/P/[b]					Duncock	R/P	
Merlin	W/P					Little Auk	11:2y:pa/w					Alpine Accentor	5:1955:ps/w	
Hobby	B/P					Puffin	9y:pa/w					Rufous Scrub-Robin*	2:1951:pa	
Gyr Falcon*	3:1972:w					Pallas's Sandprouse	1889:ps/w					Robin	R/P/W	
Peregrine	W/P/[b]					Stock Dove	R					Thrush Nightingale	1:1984:pa	
Black Grouse	1937:[b]					Woodpigeon	R/P/W					Nightingale	B/P	
Red-legged Partridge	i/R					Collared Dove	R					Bluethroat	4y:p	
Grey Partridge	R					Turtle Dove	B/P					Black Redstart	W/P/b	
Quail	s/p/[b]					Ring-necked Parakeet	i/R					Redstart	P/B	
Pheasant	i/R					Great Spotted Cuckoo	1:1967:p					Whinchat	P/[b]	
Golden Pheasant	8y:i/R					Cuckoo	B/P					Stonechat	P/B/W	
Water Rail	W/p/b					Yellow-billed Cuckoo	2:1960:pa					Wheatear	P/B	
Spotted Crane	7y:p/s/w					Barn Owl	R					Black-eared Wheatear	2:2y:ps	
Sora Rail	1:1985:pa					Eagle Owl	1:1782:w					Desert Wheatear	3:1989:p	
Little Crane	14:1985:ps					Snowy Owl	1:1968:w					White's Thrush	1:1898:pa	
Bailion's Crane	5:1941:p/w					Little Owl	i/R/[p]					Ring Ouzel	P	
Cornerake	5y:pa/[b]											Blackbird	R/P/W	
Moorhen	R													

(ii)

(iii)

.....Black-throated Thrush*	1:1868:w	.....Nuthacker	9:1969:pa/w
.....Fieldfare	W/P	.....Chough	1830:[b]
.....Song Thrush	R/W/P	.....Jackdaw	R
.....Redwing	W/P	.....Rook	R
.....Mistle Thrush	R/P/W	.....Carrion Crow	R
.....Cetti's Warbler	w/p/s/[b]	.....Raven	1987:p/w/[b]
.....Grasshopper Warbler	B/P	.....Starling	R/W/P
.....Savi's Warbler	7-3y:p	.....Rose-coloured Starling	21:2y:s/p
.....Moustached Warbler	1:1979:pa	.....House Sparrow	R
.....Aquatic Warbler	8y:pa	.....Tree Sparrow	W/P/B
.....Sedge Warbler	B/P	.....Chaffinch	R/W/P
.....Marsh Warbler	7y:s/ps/[b]	.....Brambling	W/P
.....Reed Warbler	B/P	.....Serin	9y:ps/s/ps/[b]
.....Great Reed Warbler	13:4y:ps/ps	.....Greenfinch	R/P/W
.....Icterine Warbler	24:6y:pa/ps	.....Goldfinch	B/P/W
.....Melodious Warbler	35:9y:pa/ps	.....Siskin	W/P/s/[b]
.....Dartford Warbler	w/p/b	.....Linnet	R/P/W
.....Subalpine Warbler	3-2y:ps	.....Twite	W/p
.....Sardinian Warbler	1:1976:pa	.....Redpoll	W/P/B
.....Barred Warbler	32:5y:pa	.....Common Crossbill	W/P/s/[b]
.....Lesser Whitethroat	B/P	.....Parrot Crossbill	1:1870:w
.....Whitethroat	B/P	.....Trumpeter Finch	1:1984:ps
.....Garden Warbler	B/P	.....Scarlet Rosefinch*	9-6y:p
.....Blackcap	B/P/w	.....Bullfinch	R/W
.....Greenish Warbler	1:1981:ps	.....Hawfinch	R/p
.....Pallas's Leaf Warbler	21:5y:pa	.....White-throated Sparrow	1:1968:pa
.....Yellow-browed Warbler	8y:pa/w	.....Lapland Bunting	w/p
.....Raddé's Warbler	1:1974:pa	.....Snow Bunting	W/p
.....Dusky Warbler	1:1974:pa	.....Yellowhammer	R
.....Bonelli's Warbler	7:1986:p	.....Cirl Bunting	6y:p/[b]
.....Wood Warbler	B/P	.....Rock Bunting*	2:1902:pa
.....Chiffchaff	B/P/w	.....Ortolan Bunting	8y:pa/ps
.....Willow Warbler	B/P	.....Rustic Bunting*	2:1985:pa
.....Goldcrest	R/P	.....Little Bunting*	4:1987:pa
.....Firecrest	P/W/[b]	.....Reed Bunting	R/P/W
.....Spotted Flycatcher	B/P	.....Black-headed Bunting*	2:1971:pa
.....Red-breasted Flycatcher	P/[b]	.....Corn Bunting	R
.....Pied Flycatcher	19:5y:pa	.....Northern Oriole	1:1962:pa
.....Bearded Tit	W/P/s/[b]		
.....Long-tailed Tit	R		
.....Marsh Tit	R		
.....Willow Tit	R		
.....Coal Tit	R/p		
.....Blue Tit	R/w/p		
.....Great Tit	R/w/p		
.....Nuthatch	R		
.....Wallcreeper	3:1977:ps		
.....Treetreeper	R		
.....Penduline Tit	9:3y:pa		
.....Golden Oriole	8y:ps/s/[b/?]		
.....Isabelline Shrike	1:1975:ps		
.....Red-backed Shrike	PA/ps/[b]		
.....Lesser Grey Shrike	5:1982:p		
.....Great Grey Shrike	9y:w/ps		
.....Woodchat Shrike	32:7y:p		
.....Jay	R/p/w		
.....Magpie	R		

Appendix

.....Balearic Shearwater (T)	5y:p/s
.....Greater Flamingo (E)	1:1916:s
.....Snow Goose (E)	21:3y:w/p
.....Carolina Wood Duck (U)	i/R
.....Golden Eagle (D)	1752:[b/?]
.....Lady Amherst's Pheasant (U)	2:2y:r
.....Yellow-legged Gull (T)	S/PA/PS/W
.....Least Tern (A/T)*	1:7y:s
.....pure Rock Dove (E)	1850:[b/?]
.....Blue Rock Thrush (E)	1:1977:pa
.....Hume's Yellow-browed Warbler (T)	1:1966:pa
.....Red-headed Bunting (E)	?:1979:pa

(iv)



298. **WRYNECK (*Jynx torquilla*):**—1989:—One found exhausted in Peacehaven on 12 Sept. was taken into care and kept overnight before being released at Woodingdean the following day (PJ, ERM). A single at Hollingbury GC on 12 Sept. (CB) and a second individual at Paghams Hbr on 23 Sept. (BDJ, PJ) bring the total for the county in 1989 to 15, of which 14 were in autumn.
- 1990:—Recorded in spring at Battle on 22 Mar. (LECB, PRB), Sidlesham Ferry on 3 May (BJ, CMJ *et al.*) and Beachy Head on 7 May (mo). Three in spring has only been bettered prior to 1960 and the Battle individual is the first in Mar. for at least as long. Eight were recorded in a quiet autumn, at Hollingbury Camp on 15 Aug. (PJWh), Church Norton on 26 Aug. (CWM), different individuals trapped at Icklesham on 28 Aug., 1 and 3 Sept. (RBRG), at Pett on 7 Sept. (CHD), Thorney on 9th (CBC) and Rottingdean on 14 Sept. (SA).
300. **GREEN WOODPECKER (*Picus viridis*):**—As usual widely distributed throughout the county. Breeding season counts (pairs) from well-defined areas were: Petworth Park 6, Hesworth Common 1, Binsted (16 ha) 1, Cattlestone Farm, West Chiltonton (60 ha) 2, Pippingford Park (200 ha) 3, Moat Farm (Iden) 1, and Darwell Reservoir 3.
301. **GREAT SPOTTED WOODPECKER (*Dendrocopos major*):**—Continues to be widespread throughout the county. Breeding season counts (pairs) from well-defined areas were: Old Park Wood, Bosham 2, Binsted (16 ha) 1, Hesworth Common 3, Cattlestone Farm, West Chiltonton (60 ha) 2, Ashdown Forest, Old Lodge reserve 2, and Pippingford Park (200 ha) 10. At Runcton one split open a Blue Tit nest box on 17 May.
- Birds reported some distance from typical habitat included singles at West Beach, Littlehampton on 14 and 26 Aug. and a juvenile at Cow Gap, Beachy Head on 31 Aug. Singles at Seaford Head and Moneypenny GP on 20 Oct. may have been immigrants.
302. **LESSER SPOTTED WOODPECKER (*D. minor*):**—A welcome increase in records which were received from a total of 56 localities. Although seen in 34 localities during the breeding season, successful breeding was proved in only one. One seen in Littlehampton Marina on 9 Sept. was unusual. All records of the species are required.
310. **WOODLARK (*Lullula arborea*):**—A total of 4 pairs bred, one raising 2 young. At a fifth site a pair was recorded on 8 July only.
- In the latter part of the year, a flock of 10 was recorded in the west of the county on 31 Oct. and 7 nearby on 7 Nov. Birds were also noted at 3 other sites with 5 at one on 7 Oct., a singing male at the second on 16 Oct. and 5 + at the third on 25 Oct. A migrant was recorded at Church Norton on 4 Nov. (TJT).

311. **SKYLARK** (*Alauda arvensis*):—The largest concentrations in the first quarter were all in Feb., notably 100 at Cuckmere Haven on 8th, 77 feeding on the tideline at Pagham Hbr on 9th, 200 at Portslade on 12th and 100 at Lewes Brooks on 24th.

In the breeding season there were 49 singing males at Pulborough Brooks RSPB reserve, 39 pairs at Rye Hbr and 4 pairs in 60 ha at West Chilmington.

Some visible migration was noted in autumn including 212 W at Seaford Head on 23 Sept., 170 W at this locality on 20 Oct. and 50 E at Worthing the following day. A total of 15 flocks were reported for Nov-Dec., the largest being 150 at Climping and Olifham Hill, 100 at Rye Hbr and Thorney Island and 91 at Seaford Head.

313. **SAND MARTIN** (*Riparia riparia*):—The first recorded were singles at Icklesham on 10-11 Mar. and 5 at Lewes, 4 at Sidlesham Ferry and 2 at Rye Hbr on 17th. A further 32 were noted up to the end of the month including 16 at Chichester GP on 25th. Thereafter numbers were generally low, the maxima for the remainder of the spring being 100 at Arlington Res. on 13 Apr., 80 at Chichester GP on 17th and 150 at Weir Wood Res. on 20th.

Counts for the breeding season were conflicting, some suggesting a slight increase in numbers but others indicating that the recent recovery in the species has not been maintained. Selected figures are given as follows:

Site	No of pairs	
	1989	1990
Heathend.....	90	93
Pendean.....	70	100
Stedham.....	150	30
West Heath.....	100	40

Other counts of occupied holes were of 10 at Nyewood, 20 at Coldwaltham and 40 at Dunford GP.

Autumn passage was again heavy with maxima for Aug. of 14000 at Rye Hbr on 22nd, 5000 there on 23rd and 2000 at Chichester GP on 15th and 30th. In Sept. 800 were present in a reedbed roost at Thorney Deeps on 10th while on 12th there were 2000 SE at Selsey Bill. An estimated 1000 were still present at Rye Hbr on 13th but thereafter numbers were small except for 2200 at Bewl Water on 16th and 750 at Sompington on 17th. Only 6-7 were noted in Oct., the last recorded being 4-5 at Rye Hbr and 1 at Pagham Hbr on 13th followed by 2 at Thorney Island on 6 Nov.

A total of 24200 were ringed at Icklesham during the year.

314. **SWALLOW** (*Hirundo rustica*):—First recorded on 11 Mar. at Icklesham and on 17th at Chalvington and Seaford, a slightly earlier arrival than in 1989. A further 7 were noted up to the end of the month. Passage continued throughout Apr. but numbers were very low with no large concentrations reported. At Worthing, where a total of 210 were recorded during the month, the peak arrival was 118 on 29th. A further influx occurred in May with 262 N recorded at Selsey Bill on 10-11th and 125 N at Worthing on 12th.

Autumn roosts at Fishbourne and Pulborough Brooks held 4000 and 1000 on 9 and 25 Aug. respectively. Other maxima for the month included 1000 at Pond Lye on 18th and 4000 at Waltham Brooks on 23rd. As with House Martin, passage was heaviest in Sept., particularly at Beachy Head, where there were 5000 on 9th, 14th and 27th and 7500 on 15th, and at Hollingbury Camp where the maxima were 5025 on 4th and 8600 on 15th. Counts for other localities included 5000 at Cuckmere Haven on 9th, 1000 roosting at Thorney Deeps on 10th and 4000 at Waltham Brooks on 11th. At Seaford there were 9000 E in 1 hr on 24th and 3200 E in 40 mins on 29th. An estimated 2000 were still present at Beachy Head on 11 Oct. but thereafter numbers decreased rapidly with 16 at Climping on 14th the largest count for the remainder of the month. A total of approximately 103 were noted in Nov. including 67 W at Seaford Head on 3rd. The last recorded was a single at Pett Level on 1 Dec.

315. **RED-RUMPED SWALLOW** (*H. daurica*):—One at Selsey Bill on 29 Apr. (CRJ, OL) has been accepted by *British Birds* and is the 9th county record.

316. **HOUSE MARTIN** (*Delichon urbica*):—One at Littlehampton West Beach on 23 Mar. was the first arrival followed by 5 at Seaford Head the next day and 3 at Chichester GP on 25th. Numbers were again very low in Apr-May with a total for this period of just 125 N recorded at Selsey Bill. The peak count for the whole spring was only 75 at Barcombe Res. on 9 May.

The few records received for the breeding season were conflicting with a slight increase from 23 to 25 pairs noted at Maynards Green but a decrease from 12 to 6 pairs at Broad Oak. Further evidence of a decline in this species is provided by figures published in the annual report of the Hastings and East Sussex Natural History Society. Counts for 6 colonies in the east of the county with figures for 1988 in brackets were as follows: Beckley 1 (3), Northiam 3 (7), Playden 4 (2), Rye 40 (57), Rye Hbr 9 (15) and Winchelsea 24 (28).

Return passage was heaviest in Sept., particularly at Beachy Head, where the peak counts were 4500 on 13th, 2500 on 15th, 3000 on 19th, 10000 on 27th and 2000 on 29th. Other maxima for the month included 4010 and 11700 at Hollingbury Camp on 4th and 15th respectively, 5000 at Cuckmere Haven on 9th, 3900 E in 1 hr at Seaford on 24th and 8000 E there in 40 mins on 29th. A number of large concentrations were noted in the first half of Oct., notably 900 at Hollingbury on 2nd and 1000 at Bewl Water on 3rd and at Beachy Head on 11th and 13th. Thereafter numbers decreased rapidly with 18 at Selsey Bill on 21st the largest gathering reported for the latter part of the month. A total of 18 were noted in Nov., the last being 8 E at Seaford Head on 18th and a single at Woods Mill on 20th.

318. **TAWNY PIPIT** (*Anthus campestris*):—A very poor year with only 2 records, both in Sept. One was found at Littlehampton GC on 4th (ASC) while another was seen at Beachy Head on 16th (PDL). It is as long ago as 1978 that fewer were recorded in the county. 51 of the 69 recorded since 1980 have been in Sept.

320. **TREE PIPIT** (*A. trivialis*):—1989:—The bird at Buchan Park was seen on 27 Mar., not 17th as stated.

1990:—The first for the year were 2 singles at Beachy Head on 25 Mar. A further 29 were recorded on spring passage with a max. of 10 at Arlington Res. on 16 Apr.

A total of 94 singing males were reported during the breeding season, 47 of which were in Ashdown Forest. A bird apparently holding territory in woodland scrub on 28 May was of interest.

Autumn passage commenced with an early bird at Climping on 8 Aug. A further 205 were recorded until 14 Oct. when the last singles were seen at Hollingbury Camp and Littlehampton GC.



322. **MEADOW PIPIT** (*A. pratensis*):—Few flocks were reported for the first quarter, the largest being 25 at Faygate on 20 Jan., 50 at Cuckmere Haven on 8 Feb. and 100 at Lewes Brooks on 24 Feb.

Spring passage was generally light except at Selsey Bill where there were 2500 N in 3.5 hrs on 13 Apr. At Beachy Head 115 N were noted on 15 Mar. while at Worthing the peak arrival was 197 on 17 Mar.

In the breeding season 25 pairs were located at Rye Hbr (18 in 1989) and 18 singing males at Pulborough Brooks.

A lighter autumn passage than in 1989 was noted from mid-Sept. onwards, the peak movements being at Seaford Head where there were 345 W on 22 Sept., 260 W on 6 Oct. and 537 W on 20 Oct. Other notable concentrations included 490 and 500 at Beachy Head on 16 and 20 Sept. respectively, 400 at Castle Hill on 27 Sept., 300 at Cissbury Ring on 3 Oct. and a further 200 at Beachy Head on 7 Oct. A total of 7 flocks were reported in Nov-Dec., the largest being 50 at Ambersham Common on 3 Nov., 100 at Chantry Hill on 17 Dec. and 55 at Steyning on 24 Dec.

324a. **ROCK PIPIT** (*A. petrosus*):—The largest concentrations were 20 at Worthing Beach on 20 Jan. and 10 on 27 Jan., 14 at both Pagham Lagoon on 1 Jan. and Climping on 15 Feb. and 13 in the Lower Cuckmere Valley on 1 Jan. with 12 there on 12 Oct.

Breeding was confirmed at Cuckmere Haven and Newhaven Fort with birds also present in the breeding season at Beachy Head.

An unusual inland record was of 1 at Weir Wood Res. on 12 Mar. (NAD).

324b. **WATER PIPIT** (*A. spinoletta*):—A similar number of records received to last year. One was recorded on 13 dates at Widewater, Lancing between 5 Jan. and 8 Apr. with 2 on 31 Mar. Singles were noted at Dell Quay on 4 Feb., Rye Hbr on 3 and 6 Mar. and 5 Apr., Waltham Brooks on 18 Mar. and the Crumbles on 31 Mar. One was recorded at Pevensey Bridge Level on 3 Apr. and 2 there on 15th.

In the latter part of the year, singles were at Weir Wood Res. on 31 Oct., Littlehampton West Beach on 2 Nov., Fishbourne on 6 and 22 Dec. and Pett Pools on 30 Dec. The last bird was probably one of 2 seen at Icklesham on 22 Dec.

325. **YELLOW WAGTAIL** (*Motacilla flava*):—1982:—The record of a male at Pett Pools on 7 and 20 May published in *SvBR* 1982 as showing the characteristics of one of the races *cineocephala* or *thunbergi* (CHD) has now been reassessed and accepted as the former race. At the time there had been only one previous record of Ashy-headed Wagtail in Sussex but there have been 2 since, bringing the county total to 4.

1989:—An additional male showing the characteristics of the Blue-headed race (*M.f. flava*) was recorded at Hooe Level on 23 Apr. A pair of this race, present at Pevensey Bridge Level from 14 June, were observed carrying food to young in the nest on 30 June and 2 July. Although both adults were still present on 4 July, the nest was empty and there was no sign of any young birds nearby. The pair were last seen together on 17th and the female on 19th (RJT *et al.*).

1990:—A total of 7-8 were noted in Mar., the first being singles at Sidlesham Ferry on 12th (DBN) and at Rye Hbr on 18th, the earliest county records for the month. A generally poor spring passage followed with maxima for Apr. of only 13 at Selsey Bill on 21st and 20 at Rye Hbr on 30th. The peak arrival at coastal sites was on 1 May with 21 N at Selsey Bill and 5 N at Worthing.

In the breeding season there were 66 pairs at Rye Hbr (59 in 1989), 20 pairs at Elms Farm, Icklesham, 12 pairs at Pulborough Brooks RSPB reserve, 4 pairs at Horse Eye Level and a single pair at Pagham Hbr.

The first autumn migrants noted were 2 at Widewater, Lancing on 22 July. Few were recorded thereafter until the latter part of Aug. when the largest numbers reported included 190 at West Wittering on 21st, 55 going to roost at Thorney Deepes on 23rd, 40 at Horse Eye Level on 24th, 31 at Camber GC on 27th and 35 at Selsey Bill on 31st. Significant concentrations in Sept. included 376 at the Thorney Deepes roost on 3rd, 82 at Beachy Head on 9th, 60 at Durrington on 10th, 100 at Selsey Bill on 11th and 48 at Sidlesham Ferry on 23rd. A

total of 29 were noted in Oct. including 20 at West Wittering on 1st, but just 1 in Nov., at Selsey Bill on 3rd.

A single male showing the characteristics of the race *flava* was recorded at Pevensey Bridge Level from 18 Apr. to 19 May. A second bird was present on the latter date and on 28 Apr. At Rye Hbr a number of sightings included a male apparently paired with a female *flavissima* and singing at the Narrow Pits on 22-23 May and probably a different male collecting food at the Ternery Pool from 12-25 July.

327. **GREY WAGTAIL** (*M. cinerea*):—In Jan. and Feb. reported from 6 and 21 inland and coastal localities respectively. Little evidence of spring migration but at Hastings 1 arrived from the sea on 4 Mar. and 1 departed SW on 2 Apr. Elsewhere singles in from the sea at Brighton Marina on 20 Apr. and at Splash Point, Seaford on 23 Apr.

A marked increase in breeding season records (due to the attention given to inland waters during the Mute Swan census) resulted in the identification of at least 81 pairs, including 6 pairs at Pippingford Park. Post-breeding dispersal was first noted at the coast with singles at Dell Quay on 17 July and at the Crumbles on 9 Aug.

Autumn passage was noted at Beachy Head from 20 Aug. to 10 Oct. with a max. of 6 on 15 Sept.; at Seaford Head from 22 Sept. to 20 Oct.; at West Beach, Littlehampton from 26 Aug. to 29 Oct., with a max. of 6 on 8 Sept., and at Pagham Hbr from 25 Aug. to 27 Oct. with a max. of 7 on 18 Sept. At the end of the year in Nov. and Dec. reported from 9 and 18 coastal and inland localities.

328. **PIED WAGTAIL** (*M. alba*):—In Jan-Feb. the largest concentrations noted were 45 at Sidlesham Ferry on 4 Jan., 54 going to roost at Hove on 13 Jan., 26 at Rye Hbr on 18 Jan. and 42 at Crowborough on 10 Feb. Spring passage was indicated by the presence of 50 at Brooklands, Worthing on 3 Mar. and 40 at Chichester GP on 8th.

Autumn movements were poor compared with the previous year with just 141 E recorded at Worthing (1146 in 1989), the peak being 45 on 21 Oct. Other probable migrants included 40 at Beachy Head on 7 Oct., 30 at this locality and 33 at Climping on 14th and 18 at Hollingbury Camp on 19th. There were no reports of large gatherings in Nov-Dec.

As usual a number of birds showing the characteristics of the White Wagtail (*M.a. alba*) were recorded in spring, the first being a single at Worthing on 4 Mar. followed by 2 at Beachy Head on 8th. A further 9 were noted in Mar., at least 15 in Apr. and 2 in May, the last at Birling Gap on 7th. In autumn a total of 11 were reported for the period 31 Aug. to 5 Nov. including 4 at Sompting on 13 Oct.

329. **WAXWING** (*Bombycilla garrulus*):—One was seen at Beachy Head on 4 Nov. (RoK, SL). An early date, although 3 of the 14 seen during the 1980s were in Nov.

331. **WREN** (*Troglodytes troglodytes*):—In the breeding season there were 112 territories in 240 ha at Moulsecoomb Wild Park, 24 territories in 16.1 ha at Barns Copse, Binsted and 28 singing males at Darwell Res.

Outside this period, the largest concentrations reported were 71 at Old Lodge on 18 Feb., 25 on a 5 km walk at Friars Gate, Ashdown Forest on 18 Mar., and up to 56 at Brighton Cemetery and 32 at Withdean in Nov-Dec.

332. **DUNNOCK** (*Prunella modularis*):—Breeding surveys at Barns Copse, Binsted (16.1 ha) and Moulsecoomb Wild Park (240 ha) located 4 and 59 territories respectively.

336. **ROBIN** (*Erithacus rubecula*):—Counts of breeding birds in defined areas were of 125 territories in 240 ha at Moulsecoomb Wild Park and 16 pairs in a 16.1 ha CBC plot at Barns Copse, Binsted.

In autumn the peak counts at Beachy Head were 50 on 20 Aug., 100 on 11 Oct. and 80 on 20 Oct. Other concentrations in the latter part of the year included 26 at Sompting on 2 Sept., up to 55 at Brighton Cemetery and 33 at Withdean in Nov-Dec. and 25 at Darwell Res. on 16 Dec.

338. **NIGHTINGALE** (*Luscinia megarhynchos*):—The first, recorded at Climping on 14 Apr., was followed by singles at Seaford Head on 15th and in a Hastings garden on 19th. A more widespread arrival was noted during the following few days with 15 individuals, from mainly coastal sites, noted on 24 Apr. and a total of 40 recorded by 30 Apr. As usual most were involved in May with a total of 73 singing males noted from 49 different sites. Most records involved only 1 or 2 birds and the highest concentrations were of 5 near Chiddingfold and 6 at Lullington Heath.

In autumn this is an inconspicuous species and as in most years most of the records came from Beachy Head. However, the total of 9 in Whitbread Hollow between 15 July and 20 Aug. was one of the lowest numbers recorded at this site. Other autumn records were singles at Lewes on 8 Aug., at Weir Wood Res. on 28 Aug. and 3 Sept., and at Sompting on 3 and 9 Sept.

340. **BLUETHROAT** (*L. svecica*):—One was trapped at Icklesham on 20 Oct. (RBRG), and retrapped on 22nd, the latest to be recorded in the county since 1969. This species is currently averaging 1 record in every 2 years, this being the 7th since 1977.

342. **BLACK REDSTART** (*Phoenicurus ochruros*):—Very few were seen in spring and below average numbers in autumn, the approximate monthly totals, excluding breeding birds, being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	1	16	11	5	—	1	4	2	69	11	2

With only 1 recorded in Dec. 1989 (5xBR 42:52) few could have been expected in early 1990. In the event only 2 were seen, at Goring Gap on 20 Jan. and Balsean on 5 Feb. First migrants were noted from mid Mar. with singles at Church Norton from 14th, Beachy Head from 15th and Littlehampton on 17th. Spring passage consisted of a few scattered individuals, mainly along the coast, the only exceptions being 3 at Rye Hbr on 20 Mar., 2 at both Newhaven Tide Mills and Cuckmere Haven on 24 Mar. and 3 at Beachy Head on 29 Apr. May records included 3 males in song, but only one remained any length of time and all were unpaired. Sadly none were found at the successful 1989 breeding site. The last migrant was, as in 1989, at Beachy Head on 30 May.

Early returning birds were recorded at Winchelsea on 24 July, Willingdon on 7 Aug. and Beachy Head on 12th and 25th, with 2 present on 27 Aug. None were then seen until late Sept. with singles at Selsey Bill on 27th and Beachy Head on 30th. Few were seen in early Oct., the majority being recorded between 13-27th. Records of note were 2 in a Lewes garden on 13 Oct., 8 at Selsey Bill on 18th, 6 at Seaford Head/Splash Point and 4 at Hollingbury Camp on 20th, and 3 at Balsean on 27th. The few seen in Nov. included lingering individuals at Climping and Selsey Bill and 1 in the same Lewes garden on 13th. Last of the year were singles at Cuckmere Haven and Widewater on 25 Nov., a male at Goring Gap on 1 Dec. and, presumably again, at Ferring on 15-16th and 1 at Seaford Head from 11 Dec. into 1991.

343. **REDSTART** (*P. phoenicurus*):—The first for the year was again recorded at the Cuckmere Valley, this time on 1 Apr. An additional 98 were reported on spring passage.

Breeding season reports totalled 49 pairs/singing males of which no fewer than 46 were in Ashdown Forest. There were no breeding reports from W. Sussex.

The first autumn record was an early bird at Worthing on 1 July. Further records totalling around 200 were received for the autumn with maxima of 14 at Cissbury Ring on 25 Aug. and up to 15 daily at Beachy Head between 1-6 Sept. The last report for the year was 3 at Cophorne on 25 Oct.

344. **WHINCHAT** (*Saxicola rubetra*):—Good numbers were seen in spring and autumn, the approximate monthly totals being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—	—	2	18	68	—	13	390	360	26	1	—

First recorded at Seaford Head with 2 early individuals on 31 Mar. and 5 on 14 Apr. None were then reported before 25th when 1 was at Selsey Bill, with 2 at Barns Green on 27th and 1 at Cophorne on 28th. A more widespread arrival was evident from 29 Apr. when individuals were reported from 5 localities including Hollingbury Camp (3), Faygate and

Barnham. Good numbers were seen in the first half of May with 13 reported on 3rd including 6 at Selsey Bill, and 18 on 7th including 8 at Durrington and 3 at Birling Gap. On 9 May 6 were recorded at Pagham Hbr and 3 at Littlehampton GC but all subsequent records were of singles, the last of the spring being at Runcton on 22 May.

Returning birds were recorded from 1 July, at Seaford Head, with 2 at Pease Pottage on 11th, and 2 at Castle Hill on 13 July. Records were thinly scattered during the first part of Aug. with peaks of 3 at Littlehampton GC on 13th and 3 at Wiggonholt Brooks on 18th. A significant arrival was noted during 22-24 Aug. with at least 120 including 41 at Beachy Head on 22nd and 40 at Horse Eye Level on 24th. The species was much in evidence well into Sept., more notable records being 24 at Thorney on 29 Aug., 22 at Beachy Head on 30th, 19 at Sompting on 9 Sept., 20 at Littlehampton GC on 5th, 40 at Beachy Head on 9th, 20 at Horse Eye Level on 15th and 16 at Seaford Head on 22nd. Numbers dropped considerably during the latter part of Sept. with late counts of 5 at Castle Hill on 27th, 9 at Seaford Head on 6 Oct. and 4 at Littlehampton GC on 12 Oct. Only 3 were seen after mid Oct., singles at Thorney on 16th, Ambersham Common on 20th and Seaford Head on 3 Nov.

345. **STONECHAT** (*S. torquata*):—An excellent year for the species with the largest number recorded in the county for many years. Evidence of a mild winter was provided by records of 34 in Jan., 33 in Feb. and 36 in Mar. Several records throughout the winter were from inland breeding sites.

The total number of breeding pairs leapt from 44 in 1989 to 63 this year, 44 of which were in Ashdown Forest.

The first autumn coastal migrant was at Icklesham on 1 Aug.; a further 26 were ringed at the same site through the autumn. Elsewhere, a total of 176 were recorded with maxima of 33 at Beachy Head on 27 Sept. and 23 there on 25 Oct. At the end of the year 64 were noted in Nov. and still 44 in Dec.

346. **WHEATEAR** (*Oenanthe oenanthe*):—The first arrivals, singles at Seaford Head on 3 Mar., Worthing Beach on 4th and Bewl Water on 7th were early, that at Seaford not being bettered by a migrant since 1977. One was seen at Findon on 9th and 3 were recorded along the coast on 10th. A major arrival was noted on 11-12th with 42 seen at 11 localities including, on 12th, 12 at Littlehampton GC and 7 at Worthing. Apart from 10 around Pagham Hbr on 19th, few were reported before 27th when 14 were seen at Littlehampton GC, rising to 37 on 28th when there were 16 at Selsey Bill and 17 on Goring Beach, while 1 in Hove Park on 27th was unusual. April was generally quiet with few reports and peaks of 33 at Worthing Beach on 14th and 14 at Selsey Bill on 22nd. Few birds lingered and only 29 were seen on passage in May, including 5 at Littlehampton GC on 2nd and males believed to be of the Greenland race *O.o. leucorhoa* at Seaford Head on 7 and 13 May. The last migrant was recorded at Littlehampton GC on the very early date of 16 May.

At Rye Hbr 10-12 pairs bred, mainly in ground boxes, the first fledged young being noted on 20 May. No other breeding season reports were received.

Three were recorded away from Rye Hbr in July, 2 at Seaford Head on 7th and 1 at Selsey Bill on 26th, while on 4 Aug. 10 were seen at Beachy Head and 8 at Climping. It was not until mid Aug. that numbers started to build up with most of the peak counts being during the two weeks from 21 Aug. These included 30 at Hollingbury Camp on 21 Aug., 20 at Beachy Head, 26 at Climping and 39 around Pagham Hbr on 22nd, 20 at Horse Eye Level on 24th, 35 at Balsean on 27th, 24 at Cissbury Ring on 28th, 27 at Sompting on 2 Sept. and 29 at Hollingbury Camp and 108 at Littlehampton GC/Climping on 4th. Few concentrations were noted subsequently, more interesting records during Sept. being 22 at Beachy Head and singles at Weir Wood Res. and Heatfield on 9th, 25 at Newhaven Tide Mills on 15th, 6 loitering around the hangars at Gatwick Airport on 18th, 17 at Seaford Head on 23rd and 17 at Sompting on 27th. Small numbers were widespread in Oct., mainly along the coast, with about 100 individuals reported. These included 7 (1 of which was believed to be of the Greenland race *O.o. leucorhoa*) at Beachy Head and 7 at Pagham Hbr on 7th, 21 at Sompting on 10th, 7 at Balsean on 20th and 3 at Climping on 31st. Seventeen were recorded in Nov., but only 5 after 5th, being 1 at Earmley on 8th, 1 at Littlehampton GC and 2 at Thorney on 10th and 1 at Ferring on 13th, a typical last date.

359. **RING OUZEL** (*Turdus torquatus*):—Recorded in slightly above average numbers in both spring and autumn. The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
		1	17	8				11	100	3	1

First recorded at Broadwater on 25 Mar. followed by singles at Balsdean on 1 Apr. and Newmarket Hill on 3rd. None were then recorded until mid Apr. when singles were seen at Crowlink on 15th and Littlehampton GC on 18th followed by 1-2 at Selsey West Fields from 23rd-28th. Five were seen at Balsdean and singles at Sussex University and Beachy Head on this last date with further singles at Church Norton, West Hove GC, Beachy Head and Ashdown Forest on 29th. One was present at Hollingbury Camp on 1-2 May, while 1 at Crawley on 3rd was more unusual. Other May records were 3 at Seaford Head on 5th and singles at Beachy Head on 9th, Balsdean on 11th and Seaford GC on 12th.

First of the autumn were singles at Beachy Head and Balsdean on 8 Sept. with 1 at Selsey West Fields on 20th and 5 at Seaford Head on 22nd. One was seen at Beachy Head on 26 Sept. with 1-2 at Church Norton from 26 Sept-1 Oct. Apart from 14 at Seaford Head on 6 Oct. only 6 were recorded before 17th when there were 2 at Newmarket Hill. Most Oct. records were during 20-28th, with 21 reported on 20 Oct. including 1 at Thorney and flocks totalling 15 moving E over Hastings, 3 at Hollingbury Camp and 3 at Goring Gap on 22nd, 5 at Willingdon on 23rd, up to 20 at Beachy Head on 25th with 10 still present on 28th and 3 on 30th. In Nov. singles were seen at Coates Common on 1st, Beachy Head on 3rd and Littlehampton GC on 19th. The last of the year was a male present at Seaford Head from 15-22 Dec. (WJMS). This is the 5th county record for Dec. only one of which was later, at Horsham on 24 Dec. 1926.

360. **BLACKBIRD** (*T. merula*):—Counts of breeding birds in defined areas were of 10 territories in 16.1 ha at Barns Copse, Binsted and 122 territories in 240 ha at Moulseccomb Wild Park.

In autumn there were 95 at Seaford Head and 50 at Beachy Head on 20 Oct. Other counts for the latter site included 50 on 3 Nov. and 75 on 9 Nov. while at Brighton Cemetery and Hollingbury Camp the peak counts for Nov. were 74 on 15th and 40 on 25th respectively. A further influx was apparent in mid Dec. with counts of 54 at Withdean, 74 at Brighton Cemetery and 111 at Seaford Head, all on 15th.

364. **FIELDFARE** (*T. pilaris*):—In the first quarter the largest gatherings noted were 1000 at Amberley Wild Brooks and 550 at Pulborough Brooks in Jan., 500 at Down Level in Feb. and 570 at Lewes Brooks and 300 at Chilgrove in Mar. An estimated 500 were present at a roost at Pulborough Brooks on 1 Apr. while other significant concentrations during this month included 200 on the Upper Adur Levels on 2nd and still 400 on Glynde Levels on 14th. The last records for the spring were of 2 at Sidlesham Ferry on 25 Apr. and a single at Beachy Head the following day.

In Sept. a total of 24 were noted, the first being 7 at Cuckfield on 9th and 2 at Seaford Head on 15th. A number of flocks were recorded in Oct. the largest of which were 179 at Seaford Head on 20th, 340 at Old Lodge on 21st and 200 at Woolbeding Common on 29th. The only visible migrants reported for the month were 257 NW at Sompting on 18th. The species was more numerous in Nov-Dec. than in recent years with many flocks of 100 or more recorded including 400 at Pulborough Brooks on 1 Nov., 500 at Lewes Brooks on 11 Nov., 600 at Down Level on 18 Nov., 700 at Waltham Brooks on 19 Nov., 400 at Manxey Level and 600 on Horse Eye Level on 29 Nov. and 500 at both Stoughton and Beeding Brooks on 6 and 7 Dec. respectively.

365. **SONG THRUSH** (*T. philomelos*):—In the breeding season there were 2 territories in 16.1 ha at Barns Copse, Binsted and 14 territories in 240 ha at Moulseccomb Wild Park.

The largest numbers noted in autumn were in Oct. including 25 at Beachy Head on 14th, 98 at Seaford Head on 20th, down to 46 next day, and 23 at Hollingbury Camp on 22nd.

366. **REDWING** (*T. iliacus*):—In Jan-Feb. a total of 12 flocks of 100 or more were recorded, the largest of which were 350 at West Chiltington on 8 Feb. and 300 at Maynards

Green and East Hoathly on 13 and 16 Jan. respectively. A nocturnal arrival of many thousands of birds was noted at St Leonards on 10 Feb. but this was not reflected in a subsequent build-up in numbers elsewhere in the county. The paucity of records for Mar. indicates an early departure, the only significant flocks reported being 100 at Darwell Res. on 11th and 80 at Maynards Green on 13th. A total of 18 were noted in Apr., the last of which were 2 at Hartfield on 16th.

In autumn the first recorded were 4 at Church Norton on 25 Sept. followed by 10 at Ifield and a single at Woods Mill on 27th. A moderate passage was indicated by the presence of 80 at Newmarket Hill on 8 Oct., 100 at Bewl Water the following day, 400 at Seaford Head on 20th and 120 at Liphook on 22nd. Numbers were again low in Nov-Dec. with just 7 flocks of 100 or more reported, the largest being only 300 at Upper Beeding on 15 Dec.

367. **MISTLE THRUSH** (*T. viscivorus*):—In the breeding season there were 14 territories in 240 ha at Moulseccomb Wild Park.

Outside this period the largest gatherings reported were 20 at Wakehurst Place on 10 Aug., 21 at Friars Gate, Ashdown Forest on 26 Aug. and 30 at Hampden Park, Eastbourne on 1 Sept. The only visible migrants noted were 2 N at Selsey Bill on 9 Oct. and 5 E at Hastings on 20 Oct.

369. **CETTI'S WARBLER** (*Cettia cetti*):—At each of 2 regular wintering sites, singles were present on only one date in Jan. with 2 at 1 site and 1 at the other in Mar. Early in May 2 were singing at one site on 5th but only 1 remained on 10th and was last seen on 12th. At the other site a pair raised 2 young and another male held territory. This was the same site at which breeding took place in 1989.

The autumn was most interesting for the species. One of the regular wintering sites held a single bird on 5 Sept. but no more were recorded there up to the end of the year. At the other wintering site a single was present from 10 Sept. until 20 Oct. Elsewhere a total of 6 were trapped in Oct., a female at Whitbread Hollow on 9th, singles at the Severals, Church Norton on 13th and 14th and 3 females at Icklesham. The latter birds remained until Dec. while at the Severals 1 was heard singing on 4 Nov. and seen on 2 Dec. The only other record for the latter part of the year was of 1 at Pett on 30 Dec.

The Oct. arrival of at least 7 birds recalls and perhaps even surpasses the period in the late 1970s when the species was rapidly increasing.

373. **GRASSHOPPER WARBLER** (*Locustella naevia*):—First recorded on 16 Apr. at Climping and at a further 3 localities the following day. Approximately a dozen were encountered on spring passage.

During the breeding season only 10 territories were located (less than a third of the total for 1989). There were 3 at Thorney Deepes (5 in 1989), 1 at Lullington Heath (4 in 1989) and 2 on Pulborough Brooks.

The first autumn migrant was 1 at Rottingdean on 22 July. Only 17 were recorded on passage away from Icklesham where an astonishing 251 were ringed. The last of the year was on 20 Sept. at Whitbread Hollow.

377. **AQUATIC WARBLER** (*Acrocephalus paludicola*):—A total of 6 were recorded in the autumn, 5 of which were trapped at Icklesham on 29, 30 and 31 Aug. and 1 on 17 Sept. (RBGG). The remaining bird, an adult found at Church Norton on 4 Aug. (RFG, HT), was appreciated by many on 5th. The latter is the earliest record for the county since 1975 and the first in West Sussex since 1 was found at Climping in 1983 by the same, first initiated, observer.

378. **SEDGE WARBLER** (*A. schoenobaenus*):—The first for the year was on 3 Apr. at Chichester Hbr. Few concentrations were noted in spring with 10 at Arundel WWT on 22 Apr. the largest reported.

The number of pairs breeding at Thorney Deepes declined to 55 (60 in 1989, 71-73 in 1988) and also at Rye Hbr where 53 held territory (76 in 1989). The only other breeding counts received were of 15 at Aidingbourne Rife and 3 at Pulborough Brooks.

The first autumn migrant was on 21 July at Whitbread Hollow. Numbers reported were extremely low with the only significant concentrations being 25 and 20 at Whitbread Hollow on 20 and 21 Aug. respectively. At Icklesham, however, the enormous total of 7670 were ringed (compared with 3983 in 1989) so perhaps all the Sussex birds go there now!

381. **MARSH WARBLER** (*A. palustris*):—1989:—The singing bird at one site from 29 May until at least 3 June was still present on 2 July.

1990:—A singing male was again present at the above locality from 28 to at least 31 May. Singles at Belle Tout on 28 May (RHC, RDME), trapped at Icklesham on 16 July (DPB, JW, MW *et al.*) and photographed at Weir Wood Res. on 11 Sept. (RAP) were the first migrants to be recorded away from likely breeding areas in the county since 1984.

382. **REED WARBLER** (*A. scirpaceus*):—First recorded on the rather late date of 23 Apr. at Littlehampton GC with no more until 27th when they were at 3 sites including inland at Warnham MP.

In the breeding season there were 76 pairs at Thorney Deepes and 56 pairs at Aldingbourne Rife. At Woods Mill a pair bred for the first time in 7 years.

An early autumn migrant was recorded at High-and-Over on 7 July. Thereafter few concentrations were noted, the largest being 20 at Pagham Hbr on 14 Aug. and 25 at Whitbread Hollow on both 20 and 31 Aug. At Icklesham, however, an extremely high total of 4737 were trapped (3576 in 1989). The last was on 18 Oct. at Thorney Deepes although an unstreaked 'Acro' of uncertain identity was at Whitbread Hollow on 23 Oct.

387. **ICTERINE WARBLER** (*Hippolais icterina*):—An adult male was trapped at Icklesham on 21 July (DEC, SJRR), the first county record for that month. Singles at Beachy Head on 27 Aug. (DC, JFC) and Church Norton on 11 Sept. (LJC, TJE) were more typical. Three is the most to have been seen in a single year, matching 1977 and 1983. The county total moves to 27.

388. **MELODIUS WARBLER** (*H. polyglotta*):—A well-watched individual was present at Weir Wood Res. on 9 Sept. (CFB, NAD *et al.*). Thirty-six have now been recorded in the county but this is the first to be recorded away from the coast or its immediate vicinity.

389. **DARTFORD WARBLER** (*Sylvia undata*):—1989:—A second bird was present at Thorney Island on 26 Nov. and 26 Dec. (CBC).

1990:—The 2 wintering at Thorney Island were last seen together on 9 Feb., 1 remaining to 16th (CBC). Other records for the first quarter (away from sites occupied in the breeding season) were of singles at an inland locality on 1 Jan. and 27 Mar., different birds at Littlehampton GC on 10 Jan. (OM) and 11 Feb. (RJLK) and at Sidlesham Ferry on 11 Mar. (AFB).

A total of 3 pairs bred, 2 of which were known to have raised young. In addition, at least 4 unpaired males were located, 2 at a site where breeding was confirmed in 1989. One of these was still present in late Nov.

In autumn an early migrant was recorded at Hollingbury Camp on 1 Sept. and again on 22-23 Oct. (PJWh). Single birds at Beachy Head on 7, 13 and 20 Oct. (mo) were probably all different. One at Pagham Hbr on 7 Oct. (AFB, SJB) was possibly that present at this locality from 4-9 Nov. (RAI *et al.*). Other records for the latter part of the year were of singles at Thorney Island from 7 Oct. to 3 Nov. (CBC, JRH), at an inland locality on 8 Oct. and 9 Nov., trapped at Icklesham on 18 Oct. (RBRG) and at Rye Hbr from 2 Nov. to at least 2 Dec. (DJF, BLY *et al.*).

397. **LESSER WHITETHROAT** (*S. curruca*):—The first of the year were 2 on 14 Apr. at Seaford Head followed by a single at Fairlight on 20th. A more widespread arrival was noted on 23rd with birds recorded at 5 sites.

Useful breeding season counts included 9 pairs at Thorney Deepes, 7 pairs at Seaford Head, 6 pairs on 240 ha at Moulsecomb Wild Park, 5 pairs at the Devil's Dyke, 3-4 pairs at Rye Hbr and 3 pairs on 60 ha at West Chilmington.

The first autumn concentration was 20 at Whitbread Hollow on 4 Aug. The numbers rose there to 100 on 20 and 30 Aug. with 80 still present in the whole of the Beachy Head area on 6 Sept. These then declined to 30 by 20 Sept. The only other notable concentrations were 39 at Sompting on 2 Sept. and over 20 at Hollingbury Camp from 14-18 Aug. In Oct. singles were noted at Seaford Head on 7th and Littlehampton West Beach on 8th.

398. **WHITETHROAT** (*S. communis*):—First recorded on 30 Mar. at Seaford Head, an early date. The remainder of the spring was very quiet, the only notable concentrations being at Beachy Head with 35 on 26 Apr. and 25 on 28 Apr.

In the breeding season counts of pairs included 20 at Lancing Clump, 19 at Devil's Dyke, 18 at Seaford Head, 15 on 240 ha at Moulsecomb Wild Park, 14 at Pulborough Brooks and 5 on 60 ha at West Chilmington.

As usual the highest numbers in autumn were recorded at Whitbread Hollow with 80 on 20th and 100 on both 21 and 31 Aug. In Sept. there were 101 at Sompting on 2nd and 100 in Whitbread Hollow on 5th and 9th. The last concentration was 20 at Beachy Head on 27 Sept. There were 3 Oct. records, at Seaford Head on 13th and 21st and Thorney Island on 16th.

399. **GARDEN WARBLER** (*S. borin*):—The first on 1 Apr. at Seaford Head (WJMS) was the earliest ever recorded in the county (previously 5 Apr. 1981). This was followed by singles on 10th at Weir Wood Res. (also very early) and Littlehampton GC on 16th. Despite this early arrival no more were seen until the 27th. The remainder of the spring was very quiet with no more than 2 recorded at any one site.

Amongst breeding reports were 13 singing males in 8 km from Ardingly to Balcombe, 11 pairs at Pulborough Brooks, 7 pairs in 240 ha at Moulsecomb Wild Park and 5 pairs at the Devil's Dyke.

In autumn the first significant concentration was 25 on 28 July at Whitbread Hollow with 60 there on 7, 12 and 18 Aug. and 75 on 11th, this being the highest total of the autumn. The peak count for Sept. was 17 at Sompting on 2nd. There was a single record in Oct. on 13th at Beachy Head.

400. **BLACKCAP** (*S. atricapilla*):—In Jan-Feb. there were only 7 at 5 sites, 3 being at Ayshe Ponds, Horsham. It is difficult to know whether one at Winchelsea was a wintering bird or migrant since 1990 produced so many early summer visitors. Small numbers seem to have arrived steadily throughout the second half of Mar. and into Apr. with 10 at Selsey Bill on 24 Apr. being the spring peak.

A number of breeding counts were received including 26 singing males in 8 km from Ardingly to Balcombe, 16 pairs on 240 ha at Moulsecomb Wild Park and 8 pairs at Devil's Dyke.

Autumn migration commenced with 40 at Whitbread Hollow on 21 July. As usual this site recorded the peak numbers with 150 on 31 Aug. and counts of over 100 on 15 dates in Sept. including 250 on 8th, 350 on 9th and 500 on 22nd. No site, however, recorded double figures in Oct. At Icklesham 1720 were ringed, a considerable reduction from 1989 when 2599 were trapped. Single birds were at 4 sites in Nov. and 6 in Dec.

404. **YELLOW-BROWED WARBLER** (*Phylloscopus inornatus*):—1977:—One seen at Rustington on 29 Oct. (ASC, RFG, CL) was the only record that year.

1990:—Four were seen during the autumn, at Church Norton on 26 Sept. (BJC, TJE), Seaford Head on 20 Oct. (WJMS), Church Norton from 25-27 Oct. (AJS *et al.*) and Littlehampton GC on 2 Nov. (RJLK). An average showing.

408. **WOOD WARBLER** (*P. sibilatrix*):—First recorded on 23 Apr. at Climping with a further 8 noted on spring passage elsewhere in the county. Breeding season reports dropped yet again to only 10 singing males. Autumn passage was first recorded on 24 July at Icklesham with a further 8 reports during the next month. The last record for the year was at Cissbury Ring on 29 Aug.

409. **CHIFFCHAFF** (*P. collybita*):—Wintering birds in Jan-Feb. totalled 16 at 13 sites including 3 at field MP on 8 Jan. As birds were noted at no fewer than 25 localities in the first

half of Mar. it is a little difficult to know which were wintering birds and which were migrants! Of particular note is the remarkable total of 14 on 10 Mar. at Seaford Head and 6 the following day at Pagham Hbr. Surely 12 on 17 Mar. at Fairlight and 20 on 18th at Bewl Water were incoming migrants? At least the observer of one on 2 Apr. at West Hove GC reported the bird flying N.

Despite the strong showing early on, later spring migration was very light with the only other double-figure numbers being 10 at Selsey Bill and Buchan Park on 24 and 28 Apr. respectively. Perhaps all the migrants did arrive both early and steadily without any obvious falls?

Breeding season counts in defined areas included 20 singing males in 8 km from Ardingly to Balcombe, 9 on 240 ha at Moulsecomb Wild Park, 9 at Stewards Copse, Arundel, 5 in 16.1 ha at Barns Copse, Binsted, 5 at Devil's Dyke and 3 on Thorney Island.

In autumn the first notable concentration was 100 at Beachy Head on 30 Aug. with 40 in Whitbread Hollow the following day. Peaks for early Sept. were of 55 on 4th at Hollingbury Camp and 80 on 7th in Whitbread Hollow. Later in the month numbers increased considerably with 300 on 20th at Beachy Head and 400 in Whitbread Hollow on 22nd, where there were also 125 on 25th and 100 on 29th. Consistently high numbers were noted at Hollingbury Camp with a maximum of 81 on 22 Sept. The peak count for Oct. was of 100 on 7th in Whitbread Hollow but thereafter numbers fell rapidly with 23 at Sompting on 10th and 12 at Belle Tout on 14th the highest counts for the remainder of the autumn. In Nov. a total of at least 22 were recorded at 19 sites while in Dec. at least 15 were noted at 11 localities including 4-5 at Rye Hbr on 4th.

A bird showing the characteristics of the race *tristis* was trapped at Charleston Reedbed, Littleington on 11 Nov. (TWP *et al.*). Singles at Littlehampton GC on 23 Oct. (ASC), Church Norton on 27 Oct. (TJW) and at Ifield MP from 4 Nov. into 1991 (JRH) were either of this race or *abietinus*. Observers of northern races of this species are referred to a recent paper titled 'The racial identification of wintering Chiffchaffs' which appeared in *Birding World* 2: 60-65.

410. WILLOW WARBLER (*P. trochilus*):—The first recorded was on 17 Mar. at Seaford Head, a very early date, followed by 1 on 23 Mar. at Burgess Hill and 2 on 25th at Pagham Hbr. Altogether at least 20 were recorded in Mar. at 14 sites as far inland as Crawley and Bewl Water where there were 3 on 29th. April was very low-key by comparison with notable numbers not appearing until late in the month, including 65 on 22nd at Bewl Water and 150 at Littlehampton GC and 125 at Selsey Bill on 24th.

In the breeding season, counts for defined areas included 30 pairs at Devil's Dyke, 28 on 240 ha at Moulsecomb Wild Park, 15-17 at Thorney Deepes and 5 on 60 ha at West Chillington.

Autumn migration got off to a good start with 100 at Worthing on 1 Aug. and 300 at Whitbread Hollow on 4th. Later in the month there were 250 at this site on 20th and 150 there on 22nd. In Sept. notable concentrations were again at Whitbread Hollow with 175 on 1st and 200 on 2nd and also at Sompting where there were 112 on the latter date. The last sizeable count was of 48 at Hollingbury Camp on 9 Sept. after which there were few records, although in Oct. singles were reported at Gossops Green on 13th and Whitbread Hollow on 9th and 28th, the latter a very late date.

411. GOLDCREST (*Regulus regulus*):—In the early months of the year the only concentrations reported were 22 at Old Lodge, Ashdown Forest on 18 Feb. and 12 at Darwell Res. on 14 Jan. A most unusual record was of 2 feeding on 'softbill' bird food daily at Bramber in March.

Spring passage was negligible. In the breeding season clearly under-recorded, the only counts received being of 14 singing along 8 km from Ardingly to Balcombe and 2 pairs at Devil's Dyke.

In autumn the first flock noted was 35 at Old Lodge on 16 Sept. This was just the start of one of the best autumns for a very long time for the species, following high numbers in the previous 2 years. Large concentrations at Whitbread Hollow included 100 on 29 Sept. and in Oct. 200 on 14th and 350 on 25th. Other totals of 100 or more were 150 on 18 Oct. at Beachy Head, 130 on 20 Oct. at Seaford Head, 100 on 25 Oct. at Hollingbury Camp and 100 on 27-28

Oct. at Goring. The main passage appears to have been in the period 23 Sept. to 28 Oct. with over 40 recorded on 15 dates at various sites in this period, in addition to the large numbers detailed. Some indication of the origin of these birds is given by one trapped at the Severals, Church Norton which had been ringed at Heligoland, Germany. Although numbers in Nov. were lower, there were still 40 at Climping and 70 at Whitbread Hollow on 10 Nov. and 20 at Goring the following day. Birds were reported from only 4 sites in Dec.

412. FIRECREST (*R. ignicapillus*):—A below-average spring was followed by the best autumn since 1984, the approximate monthly totals being:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	2	21	7	2	—	—	2	11	75	29	6

In the early part of the year reported from Church Norton with 2 on 9 Jan. and 1 on 21st, Stanmer Park on 18th, Arundel WWT on 21 Jan. and 18 Feb. and Beachy Head on 8 Feb. Five were seen during 2-4 Mar., 2 at Church Norton remaining to at least 8th, and singles in Stanmer Park, at Baldean and Woods Mill, although some may have been those seen earlier. Two were seen at Beachy Head on 9 Mar. and 4 in the Lower Cuckmere on 10th but subsequent March records were all of singles, the more unusual sightings being at Shoreham Sanctuary on 11th, Broadwater on 14th, Fairlight on 17th, Hassocks on 18th and Bewl Water on 31st. April records came from Fairlight on 4th, Pevensey on 5th, Beachy Head on 6th, 13th and 28-29th and Colgate and Climping on 29th, with 2 in Moulsecomb Wild Park on 6 May.

None were reported during the breeding season, perhaps not surprising after a poor spring.

Autumn passage commenced in late Aug. with singles at Seaford Head on 28-29th and Littlehampton GC on 30th. Beachy Head provided most of the Sept. records including an early 5 on 9th and 2 on 26th, the exception being 1 at Fairlight on 14th. Records were more widespread during Oct.: 18 were seen on 13-14th, including 4 at Beachy Head, 2 at Seaford Head, 6 at Hollingbury Camp, 1 at New Salts Farm, Shoreham and 2 at Littlehampton GC. Only 6 were reported during the next week, notable records including 1 at Shoreham on 22nd, 4 at Beachy Head and 3 at Hollingbury Camp on 25th, 1 at Pett from 26th into 1991, 3 in Goring Wood on 27th and 2 at Church Norton from 27th. November records included 3 at Climping on 3rd, 3 at Littlehampton GC on 11th, 1 in Lewes, 2 in Stanmer Park and 2 at Arundel WWT on 14th, 2 at Rackham on 17th, 4 at Church Norton on 18th, 1 at Amberley on 19th, 2 at Littlehampton GC and 1 at Newick on 25th and 2 at Baldean from 28th, 1 remaining to 5 Dec. Also in Dec. 1-2 were seen at Littlehampton GC on 5 dates to 29th and singles at Arundel on 9th and Winchelsea on 2nd, while the nearby Pett individual stayed into 1991.

413. SPOTTED FLYCATCHER (*Muscicapa striata*):—First recorded on 2 May at Chichester GP, a week earlier than in 1989. A further 3 singles were reported from the coast up to 5th followed by a more general arrival on 7th, on which date there were 4 at Beachy Head and 3 at Sidlesham Ferry. Passage continued into early June with a newly arrived bird on the seafrost at Hastings on 4th.

In the breeding season 3 pairs were present on 60 ha of mixed farmland at West Chillington. A pair at Westfield bred in an open-fronted nestbox while at North Mundham a pair was observed feeding young in a tree hole nest site.

A heavy autumn passage commenced with an early single at Bognor Regis on 27 July followed by 2 at Climping on 8 Aug. Numbers built up rapidly from 25 Aug. when there was a marked influx including 18 at Hollingbury Camp and 10 each at Church Norton and Durrington. Passage continued into Sept. with exceptional numbers recorded at Sompting including 91 on 2nd, 35 on 3rd and 30 on 4th. Other notable counts for the month included 14 at Beachy Head on 1st, 26 there on 9th, 10 at Church Norton on 17th and 9 at Bognor Regis on 20th. Few were recorded thereafter with singles at Pett and Woods Mill on 1 Oct. the last reported.

416. PIED FLYCATCHER (*Ficedula hypoleuca*):—A poor spring was followed by an above-average autumn. The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—	—	—	—	4	6	—	48	19	1	—	—

Not recorded until 26 Apr. when 1 was seen at Falmer Pond, 3 then being recorded on 29th, at Selsey, Midhurst and Moulsecomb Wild Park. Another at Selsey on 2 May was followed by singles at Beachy Head on 3rd, Hollingbury Camp on 4-5th, Beachy Head on 7th, Littlehampton GC on 8th and finally Beachy Head on 12th.

First of the autumn were singles at Findon on 2 Aug., Climping on 4th and Lancing on 5th with 4 scattered individuals seen on 7-8 Aug. None were then recorded before 1 on 19 Aug., at Balsdean, after which the species was seen on most days into early Sept. Notable records included 3 at Willington, 2 at Wivelsfield and 4 at Hollingbury Camp on 24th, 2 at Sompting on 26th, 2 at Beachy Head from 27 Aug-2 Sept., 7 at Church Norton/Severals on 28 Aug., 1 at Kings Standing, Ashdown on 30th, 1 at Newmarket Hill on 31st, 3 at Rye Hbr on 1 Sept., 2 at Church Norton on 2nd and 2 at Sompting on 3rd. Subsequent records involved 8 individuals along the coast between 5-26th, 2 at Beachy Head on 27 Sept., 1 there on 30th and finally 1 at Church Norton on 1 Oct.

417. **BEARDED TIT** (*Parus biarmicus*):—The approximate monthly totals outside the breeding season were as follows:

No. of sites	Jan.	Feb.	Mar.	Apr.	Sept.	Oct.	Nov.	Dec.
No. of birds	2	2	1	1	1	3	2	1
	5	3	11	8	12	12	18	14

As last year, rather scarce and reported from a total of only 6 sites with 4 at Warnham MP on 10 Jan. the only inland record.

At one site (the same as in 1989) 4 pairs bred and reared at least 35 young.

418. **LONG-TAILED TIT** (*Aegithalos caedatus*):—Roving parties were reported throughout the year, averaging a flock size of 13, with a maximum of 50 at Ashurst on 7 Jan.

In the breeding season, 8 pairs were found on 240 ha at Moulsecomb Wild Park and 4 pairs on 60 ha at West Chilmington.

Ringling totals were the highest in recent years at 325.

419. **MARSH TIT** (*Parus palustris*):—Reported from 29 localities throughout the year, with 5 pairs breeding at Bewl Water and 3 on 16.1 ha at Binsted. Unusually, 1 occurred at Shoreham Sanctuary on 20 July.

Nestbox usage was recorded at a new site in the north of the county.

420. **WILLOW TIT** (*P. montanus*):—Singles or pairs were noted at widespread locations, many reports being of breeding birds. Six pairs bred at Bewl Water and a pair with 3 juveniles were seen at Horsted Keynes on 12 July.

On 31 Dec. 1 was seen taking honeysuckle berries at Broad Oak, Heathfield.

422. **COAL TIT** (*P. ater*):—At Old Lodge, 40 were seen on 18 Feb. but no other winter counts were received.

At Ardingly, 14 singing males were noted in 8 km on 20 May and a nestbox was used at Storrington. Nestbox schemes have recorded a decline in use by this species since the 1987 storm largely destroyed the conifer stands frequented prior to that time.

A total of 30 were seen at Sompting on 17 Oct.

423. **BLUE TIT** (*P. caeruleus*):—From Jan-Mar. the maximum count was of 41 at Darwell Res. on 11 Mar.

Amazingly, a nestbox blown down at Hooe Level contained 8 new eggs on 25 Jan. The box was repaired and re-instated and on 18 Feb. contained a new nest (RJT)!

In breeding surveys, 57 pairs were on 240 ha at Moulsecomb Wild Park, 47 pairs at Old Park Wood, Bosham, 14 pairs at the Devil's Dyke and 17 pairs in nestboxes at Woods Mill.

Winter counts produced maxima of 42 at Brighton Cemetery on 15 Nov. and 41 at Withdean Park on 15 Dec.

Nestbox schemes in the High Weald revealed small clutches and broods, often as few as 3-4, probably as a consequence of the hot and dry weather, but nest failure rate was relatively low.

424. **GREAT TIT** (*P. major*):—At Friars Gate, 19 birds were counted in 5 km on 18 Mar.

In breeding surveys at Brighton, 12 pairs were located at the Devil's Dyke and 24 pairs on 240 ha at Moulsecomb Wild Park. Elsewhere, 7 pairs were on 16.1 ha at Binsted and 7 pairs used nestboxes at Woods Mill. One of the latter fell victim to a weasel which, because of its gluttony, was unable to exit from the box. In the High Weald, nestbox schemes revealed small clutches and broods (cf. Blue Tit).

Winter counts at Brighton produced maxima of 12 at Withdean Park and 8 at the cemetery.

425. **NUTHATCH** (*Sitta europaea*):—During the breeding season, 5 pairs were on 60 ha at West Chilmington, 4 pairs on 40 ha at Chelwood Vachery and 2 pairs on 16.1 ha at Binsted. Ringling totals were higher this year, helped in part by good numbers of pulli ringed in nestbox schemes. The species appeared less affected by the weather conditions than the tits.

427. **TRECREPPER** (*Certhia familiaris*):—An early nest was found at Crowborough on 18 Mar., and at Wakehurst Place on 27 Apr. 1 was noted feeding up the walls, door and roof of a building.

At Beachy Head, 7 were ringed in autumn and county ringling totals were double those of 1989.

An individual was seen on a peanut holder at Broad Oak on 18 Dec.

430. **GOLDEN ORIOLE** (*Oriolus oriolus*):—1989:—A male was heard at Fairlight on 6 May (CHD).

1990:—A male was seen at Beachy Head on 12 May (DC, DRC, JFC, TEC) while others were heard at Slaugham Pond on 31 May (SWMH) and Beachy Head on 9 June (AWF). In July a female was seen briefly at Fishbourne on 6th (BFF, RAI, DIS) and a male at Icklesham on 18th (SJRR), the third year out of the last four that the species has been recorded at this site. Five is the best showing since 1984.

434. **GREAT GREY SHRIKE** (*Lanius excubitor*):—Four were seen in Oct., at Beachy Head on 9th (BMM, DCM, SD-R), at Weir Wood Res. on 25th (KD, BMM, DCM) and on 28th an immature at Climping (RFG, HT) and 1 at Beachy Head (DC, JFC). An average showing in recent years.

435. **WOODCHAT SHRIKE** (*L. senator*):—A well-watched individual present at Littlehampton GC from 22-24 Apr. (RMS *et al.*) was the earliest county record by 2 days, the only other April record being at Newhaven in 1957. One at Thorney Island on 11 May (CBC, MAC, CJT) and an adult at Rackham on 14 Sept. (ASA, RJSA) were more typical. All have been accepted by *British Birds*, although 1990 is the last year this species will be considered by them. Full details of all future records will be required by the SOS. Thirty-five have now been recorded in the county, 3 in a year having been bettered only once, by 4 in 1976.

436. **JAY** (*Garrulus glandarius*):—Two pairs were present in 16.1 ha at Barns Copse, Binsted.

In autumn a number of probable migrants were recorded including 12 at Darwell Res. on 16 Sept., 6 at Beachy Head on 11 Oct. and 7 there on 3 Nov.

437. **MAGPIE** (*Pica pica*):—A breeding survey of Moulsecomb Wild Park revealed a total of 30 pairs in 240 ha.

Outside the breeding season the largest concentrations reported were 78 at a roost at Halsey's Farm, Sidlesham on 17 Jan., 24 at Hassocks on 6 Sept. and 120 at Eridge Park on 19 Nov.

438. **JACKDAW** (*Corvus monedula*):—Roost counts were of 1000 at Chingley Wood, Bewl Water on 2 Mar. and 2000 at West Chilmington on 15 Jan. and 23 Oct. and at North Stoke on 9 Dec.

441. **ROOK** (*C. frugilegus*):—A rookery at Hassocks, first occupied in 1988, held only 4 nests compared with 15 the previous year.
The only roost counts received were of 1000 and 2000 at West Chiltington on 15 Jan. and 23 Oct. respectively and 1000 at North Stoke on 9 Dec.

442. **CARRION CROW** (*C. corone*):—Six pairs were present in 240 ha at Moulsecoomb Wild Park.
Notable concentrations outside the breeding season were 140 at Bewl Water on 18 Mar., 87 at Goring on 11 Aug. and 43 at Weir Wood Res. on 15 Sept.

444. **STARLING** (*Sturnus vulgaris*):—Roost counts were of 5000 at West Hove GC on 4 Feb., 2000 at Gatwick Airport on 22 Oct., 3000 at Chyngton Farm, Cuckmere on 30 Nov. and 20000 in reedbeds at Thorney Island on 16 Dec. A pre-roost gathering of 10000 was noted at Lancing on 25 Oct.

Some visible migration was evident with reports of 45 W at Worthing on 3 Nov. and 368 in off the sea at Hastings the following day.

445. **ROSE-COLOURED STARLING** (*S. roseus*):—1970:—An adult at Eastbourne on 1 Dec. (AEN) was accepted by *British Birds* but has never previously been published in the *Sussex Bird Report*, although it is mentioned by Shrubb (1979). There were c. 18 recorded prior to this, including one at Lower Beeding from Nov. 1933–Mar. 1934, and there have been 2 since, in July 1983 and August 1984.

448. **TREE SPARROW** (*Passer montanus*):—In Jan.–Feb. up to 95 were present at Sidlesham Ferry and 71 at Seaford. The only other significant concentrations reported for the first quarter were 12 at Cuckmere Haven on 4 Jan., 10 at Darwell Res. on 11 Feb. and a peak of 40 at Rye Hbr on 22 Mar.

In the breeding season a total of 60–61 pairs were reported from 12 localities. Of these 30 were in nestboxes including 11 at Icklesham and 16 at Sidlesham.

Some autumn passage was evident in Oct. with, for example, 70 at Birling Gap, 10 at Fairlight and 6 at Hollingbury Camp, all on 7th. Up to 25 were noted at Woods Mill in Nov.–Dec. but only 3 other flocks of 10 or more were reported for this period, the largest being 68 at Seaford on 12 Dec.

All records of this species will be welcome.

451. **CHAFFINCH** (*Fringilla coelebs*):—In the first winter period, flocks of 150 were noted at Faygate and Sidlesham Ferry in Jan. but thereafter numbers were low with 100 at Rackham Woods on 25 Feb. the only significant concentration reported.

Counts of breeding birds in defined areas were of 13 pairs in a 16.1 ha CBC plot at Barns Copse, Binsted and 50 pairs in 240 ha at Moulsecoomb Wild Park.

In the latter part of the year, only 5 flocks of 100 or more were noted, the largest being 400 at West Dean Woods and Stoughton on 5 and 6 Dec. respectively and 200 at Stansted Forest on 11 Dec.

452. **BRAMBLING** (*F. montifringilla*):—A very poor year with approximate monthly totals as follows:

Jan.	Feb.	Mar.	Apr.	Oct.	Nov.	Dec.
5	1	16	21	21	4	4

A small spring passage was evident in late Mar. and Apr., including a flock of 17 at Guestling on 8 Apr. The last recorded were singles at Belle Tout on 24 and 28 Apr.

The first autumn record was of 2 at Hastings on 7 Oct. but thereafter no more than 3 were present at any one locality up to the end of the year.

455. **GREENFINCH** (*Carduelis chloris*):—In the first winter period the only flocks reported were 60 at Cuckmere Haven on 4 Jan. and 100 at Kingley Vale on 4 Feb.
A total of 17 pairs were located in 240 ha at Moulsecoomb Wild Park.

Several observers commented on the scarcity of the species in the latter part of the year with flocks of 400 at Pagharn Hbr on 7 Oct. and 100 at Climping, Lancing, Shoreham Hbr and Thorney Island the only significant concentrations reported.

456. **GOLDFINCH** (*C. carduelis*):—As with other finch species, few were reported in the first winter period, the largest flock being only 50 at Ifield on 31 Mar. An estimated 1500 were recorded at Selsey Bill in 3.5 hrs on 13 Apr. Of these, many were reported to be exhausted due to bad weather at the time.

More numerous in autumn with 4 flocks of 100 or more reported in Sept. including 500 at Amberley Wild Brooks on 14th. Visible migration was evident in Oct. with 650 over Seaford Head and 300 E at Worthing on 21st and 405 E at the latter locality on 23rd. A further 6 flocks of 100 or more were reported during the month. Scarce during Nov. and Dec. with no more than 47 recorded at any one locality.

457. **SISKIN** (*C. spinus*):—In the first quarter the largest flocks reported were 100 at Lavington Common on 17 Mar. and 50 at Gossops Green and Weir Wood Res. on 4 and 20 Jan. respectively. No more than 35 were recorded at any other locality although these figures may create a false impression given that 225 were ringed in an East Grinstead garden in the period Jan. to Apr. Elsewhere only 4 were recorded in Apr. while in May there were singles at Iping Common and Ambersham Common on 5th and 28th respectively.

In the latter part of the year the first reported was 1 at Arundel on 4 Aug., an unusual date, and more typically, 8 at Rye Hbr on 8 Sept. Subsequent autumn passage was very light with 7 E at Fairlight on 20 Oct. and 31 E at Seaford Head the following day the only visible migrants reported. In Nov. up to 53 were present at Gossops Green while elsewhere there were 40 at Rackham Woods and 20 at Wakehurst Place, both on 11th. Numbers increased in Dec. with 120 at Gossops Green on 8th, 100 at Midhurst on 20th and 40 at Pippingford Park.

458. **LINNET** (*C. camabina*):—In the first quarter only 5 flocks of 20 or more were reported, the largest being 100 at Waltham Brooks and 60 at Goring on 16 and 20 Jan. respectively.

Coastal movements at Worthing totalled 174 in Mar., 759 in Apr. and 102 in May while at Selsey Bill an estimated 1800 arrived from the direction of the sea with Goldfinches and Meadow Pipits during bad weather on 13 Apr.

Counts of breeding birds in defined areas were of 3 pairs on 60 ha of mixed farmland at West Chiltington and 4 pairs in 240 ha at Moulsecoomb Wild Park.

A flock of 50 feeding on oilseed rape pods at Rusper on 10 June indicated an early post-breeding dispersal although no further large numbers were reported until Aug. when there were 65 at Waltham Brooks on 11th. Up to 1000 were present later in the month at Rye Hbr feeding on linseed and 2000 in Sept. Other notable autumn concentrations included 400 at Beachy Head on 29 Sept. and 1000 there on 11 Oct., 500 at Bewl Water on 13 Oct., 320 at Mill Hill, Shoreham on 14 Oct. and 500 feeding with Goldfinches at Shoreham Airport on 26 Oct. Some visible migration was noted including 180 E at Sompting on 14 Oct., 487 E in 1 hr at Seaford Head on 21 Oct. and 168 E at Worthing the following day.

In Nov.–Dec. the only flock reported was 65 at Darwell Res. on 16 Dec.

459. **TWITE** (*C. flavirostris*):—The only records for the first part of the year were of 5 at Cuckmere Haven on 1 Jan., 8 there on 7 Jan., and 2 at Rye Hbr on 2–3 Mar.

In autumn there were 11 at the former locality on 23 Sept., 10 at Church Norton on 7 Oct. and 6 at Icklesham on 25 Oct. An unusual record was that of 4 feeding with Linnets on Newmarket Hill on 2 Nov. (R.J.F.). Reports for the remainder of the year were of 1 at Widewater, Lancing on 3 Nov., 2 at Cuckmere Haven on 8 Nov., 19 there on 2 Dec. but only 1 on 12 Dec., and 2 at Rye on 4 Dec.

460. **REDPOLL** (*C. flammea*):—A poor start to the year with only 23 reported in Jan., 30 in Feb., 119 in Mar. and 91 in Apr. Breeding season records totalled a mere 15 pairs/singing males. More were reported in the autumn with 2 in Sept., increasing to 117 in Oct., 243 in Nov. and 250 in Dec. The largest flock reported was 150 in Buchan Park, Crawley on 18 Nov.

463. **COMMON CROSSBILL** (*Loxia curvirostra*):—The approximate monthly totals were as follows:

Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
—	—	3	—	112	189	253	180	184	70	131	—

Prior to a very large invasion from June onwards the only record was of 3 at West Dean Woods on 18 Mar.

The first indication of a major influx was the presence of 8 in Ashdown Forest, 15 at Chithurst and 20 at Stedham Common, all on 13 June. The general pattern thereafter was of fluctuating numbers in 5 widely scattered areas of the county, occasional flocks elsewhere and small numbers of migrants, mainly at coastal sites. Monthly maxima for the main areas (allowing for some local movement between sites) were as follows:

	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Balcombe.....	27	100	10	10	20	3	4
Buchan Park.....	—	—	15	—	12	27	17
The Dover, Poling..	—	—	—	37	35	25	40
Henley.....	—	25	50	80	—	—	—
West Dean Woods..	—	40	—	15	25	—	29

Other flocks included 25 at Beauport Park, Hastings on 30 June, 20 in Friston Forest on 18 July, 25 at Guestling on 9 Oct. and up to 41 in Stansted Forest in Dec.

A total of 101 migrants were reported for the period 15 June-11 Nov. including 42 at Beachy Head, 9 at Broadwater on 15 June, 17 at Pett Level on 29 Sept. and 11 at Church Norton on 23 Oct.

Careful analysis of the available information suggests a minimum total for the county of 587, the largest invasion since 1966 when about 800 were recorded.

467. **SCARLET ROSEFINCH** (*Carpodacus erythrinus*):—Recorded for the second successive year at Icklesham where an adult male was seen on 29 May (IH). In June 1 was recorded at Beachy Head on 10th (EDU) with another there on 14 Oct. (SL). This is the first time more than one has been seen in a year in Sussex. The county total moves to 12.

469. **BULLFINCH** (*Pyrrhula pyrrhula*):—Counts of breeding birds in defined areas were of 3 pairs in 240 ha at Moulsecomb Wild Park and 1 pair in 16.1 ha at Barns Copse, Binsted.

470. **HAWFINCH** (*Coccothraustes coccothraustes*):—A very poor year with a total of just 10 reported, well below the 35 recorded in 1989.

In Feb. 2 were present at Wakehurst Place on 18th, a traditional locality for the species. Records for the breeding season were of singles at Ifield on 29 Apr. and 1 May, a pair at Buchan Park, Crawley on 9 May and 2 pairs at Beauport Park, Hastings on 3 June. Singles over Slinfold on 27 Aug. and at Pippingford Park on 16 Sept. were the only reports for the latter part of the year.

493. **LAPLAND BUNTING** (*Calcarius lapponicus*):—1989:—One was seen at Pett Level on 7 Jan. (CHD), 2 at Hooe Level on 15 Jan. (TJW) and 1 at Pett on 2 Dec. (CHD), bringing that year's total to 7.

1990:—During the latter part of the year singles were seen at Seaford Head on 13 and 21 Oct. (MJH), Pett Level on 13-14 Nov. (CHD) and Pulborough Brooks on 2 Dec. (TC), while at Thorney singles were recorded on 29 Nov., 24 and 26 Dec. with 4 there on 15 Dec. (CBC, RJS).

494. **SNOW BUNTING** (*Plectrophenax nivalis*):—In the early part of the year recorded at Pett Level, Shoreham Beach, Pilsey Island and East Head. Two were seen at Shoreham Beach up to 11 Jan., when 3 were present, but only 1 was reported subsequently, on 13 Jan. One at Pilsey on 5 Jan. was probably that seen intermittently at East Head between 10 Jan. and 10 Feb. At Pett Level 4 were seen on 1 and 7 Jan. and singles on 3 Jan. and 11 Feb.

First recorded in late autumn at Worthing where 2 flew E along the coast on 7 Oct. Singles were then recorded at Beachy Head on 25 Oct. and Pulborough Brooks on 28th. In Nov. 2 were seen at Littlehampton GC on 1st, 1 at Thorney on 3rd, 2 at Pett Level on 4th, 1 at Church Norton on 10th and 2 at East Head on 14-15th. On 2 Dec. 2 were seen at Rye Hbr, 4 at

Pett Level and 4 at East Head, the latter probably being part of 6 flushed from Pilsey towards East Head on 3rd. Four were present at Rye Hbr on 9 Dec., 2 at Thorney on 14th, singles at Rye Hbr on 14-16th and 27th and Lewes on 19th and 4 at Newhaven Tide Mills on 27th. Finally 3 were seen at Lancing from 23rd into 1991.

496. **YELLOWHAMMER** (*Emberiza citrinella*):—In common with other species of buntings and finches, numbers were low with few flocks noted, probably due to the removal of hedgerows and lack of stubble for autumn feeding.

In the first quarter only 6 flocks were reported, the largest being 60 at West Chiltington on 23 Mar. and 35 at Faygate on 4 Feb.

In the breeding season 2 pairs were present in 16.1 ha at Barns Copse, Binsted and 13 pairs in 240 ha at Moulsecomb Wild Park.

A total of 8 flocks of 15 birds or more were reported in the period Sept. to Dec., the largest being 60 at West Chiltington on 30 Oct. and 102 at Flansham on 5 Nov. All records of concentrations of this species will be welcome.

499. **ORTOLAN BUNTING** (*E. hortulana*):—One was present at Pagham Hbr on at least 26-27 Aug. (EDU, CFW *et al.*), while another was seen at Beachy Head on 8 Sept. (RHC *et al.*). The Pagham individual is only the 6th, out of 55, to be recorded in West Sussex.

506. **REED BUNTING** (*E. schoenichus*):—Counts of 25 at Hindleap Warren, Ashdown Forest in Jan. and 20 at Chichester GP in Mar. were the only significant concentrations reported for the first quarter.

In the breeding season a total of 34 singing males were located at Rye Hbr (38 in 1989) while on heathland, there were 2-3 pairs at Hindleap Warren and 1 pair at Ambersham Common.

Some autumn passage was evident in Oct. with 13 noted at Littlehampton West Beach on 10th and 34 W at Seaford Head on 21st.

A winter roost at Woods Mill held 100 on 15 Dec.

510. **CORN BUNTING** (*Miliaria calandra*):—In Jan. the largest concentrations reported were 23 at Waltham Brooks, 45 at Pagham Hbr, 51 at Seaford and 60 at Pulborough Brooks. Up to 70 were present at the latter locality in Feb. but no other flocks were reported for the month suggesting an early dispersal, perhaps due to the mild weather at the time.

Counts for the breeding season indicated a decline in the species with only 7 singing males at Rye Hbr and 10 at Thorney Island compared with 16 and 12 respectively in 1989.

In the latter part of the year up to 130 were present at Steyning in the period Aug. to Oct. and 100 at Offham in Sept. The only other significant concentrations reported were 18 at Barnham, 63 at Seaford and 70 at Icklesham, all in Dec.

Erratum for 1989: The Baird's Sandpiper observers were CBA *et al.*

ESCAPES AND FERAL BIRDS

All records of B.O.U. Category C species, of apparently feral individuals of other species, and of other probable or certain escapes from captivity, will be welcomed by the Hon. Recorder for this annual feature. Notes on age/sex, plumage, behaviour and, where known, status will be especially welcome. Such records should be submitted in the normal way but on separate recording forms from the main bulk of records.

The following escaped or feral birds, other than those Category C species in the main list, were recorded in the county in 1990:

WHITE STORK (*Ciconia ciconia*):—See main text of systematic list on pages 16-17.

AFRICAN SPOONBILL (*Platalea alba*):—The bird considered to be a hybrid Spoonbill × African Spoonbill, first recorded in the county in 1989, was again present at Chichester GP on 24 Feb. and at Arundel WWT the following day.

During 1990 a grand total of 73,402 birds, of 115 species, were ringed in Sussex. Of these 57,300 were by the Rye Bay Ringing Group. Record numbers of some passage migrants were ringed including 24,200 **Sand Martins**. An extra effort was made to coincide with an expedition to Sénégal in West Africa operating in the Parc National des Oiseaux du Djoudj, from early December 1990 to April 1991. Preliminary reports suggest that the expedition has been a great success with 19,000 birds ringed. The trapping has yielded a variety of controls including 70 **Sand Martins** previously ringed in Sussex. Fuller details of the expedition will be reported elsewhere.

The presence in the county of some unusual, not to say rare, warblers has been confirmed by trapping during the year. One **Savi's**, a **Marsh** and five **Aquatic Warblers** were ringed at Icklesham. At the same site single **Icterine**, **Dartford** and **Sardinian Warblers** were also trapped. To end this round-up of the unusual, a quartet of birds, again at Icklesham, were a **Spotted Crane**, a **Corncrake**, a **Bluethroat** and a **Little Bunting**. This last species breeds in north-east Europe and northern Asia and is one of the commonest 'rarities' on the British list. Between 1958 and 1989 there have been 409 accepted records; only White-winged Black Tern has exceeded this total (Whiteman and Millington, 1990). [It should be noted that the Savi's Warbler (SOS) and Little Bunting (BBRC) have not yet been accepted by the relevant committee at the time of going to press. *Ed.*]

There were no gulls ringed in the Worthing area during the year so the grand total of 13 for the whole county was the lowest for many years. Birds from previous years are still generating reports. Sussex-ringed **Black-headed Gulls** produced 38 reports from within Britain and 63 from outside. Of these 19 were from Germany, 14 from Denmark and 11 from Finland. The second **Mediterranean Gull** to be ringed in Sussex, trapped at Sompting on 7 December 1988, was found nesting at Salines d'Aigues-Mortes, Gard, Camargue, France (882 km, 43° 32'N, 4° 12'E) on 7 June 1990. A **Great Black-backed Gull** ringed at Sompting on 1 November 1980 was recovered at Shoreham on 14 September 1990. At 10 years this is nearly 14 years short of the British-ringed longevity record for this species.

As in previous years few waders were ringed in the county: 87 individuals of eight species. This is less than half the 1989 total. Contributing to this decline was a drop in the number of **Lapwing** chicks ringed at Icklesham. There were fewer pairs due to habitat change and there was some predation. For the first year since 1985 no **Little Ringed Plovers** were ringed. The number of **Snipe** (24) dropped but 17 **Jack Snipe** were ringed. There were two Snipe recoveries, both shot, involving normal winter movements.

The Department of Animal Ecology of the University of Lund (Sweden) have colour-ringed nearly 200 of the **Sanderlings** that use south-west Iceland as a staging post during spring migration. The birds were ringed in May 1989 and May 1990 with yellow above red rings on the left leg. The aim is to gain more information about the birds' wintering range. Already 10 sightings have been made, mostly within the British Isles, two of them in Sussex, at Pilsley in August 1989 and September 1990. One sighting in Ghana on 12 November 1989 was particularly exciting.

Prior to 1985 up to 200 **Canada Geese** were ringed annually in Sussex. Since that time the number has decreased until in 1990 no bird of any goose species was ringed. The numbers of duck ringed have increased, helped by the installation of a

GREATER FLAMINGO (*Phoenicopterus ruber*):—A juvenile at Pilsley Island on 6 Dec. had probably escaped from Whipsnade Zoo.

BLACK SWAN (*Cygnus atratus*):—Singles were recorded at Thorney Deepes from Apr. to end of July, Newhaven on 12 May, Dell Quay on 8 Sept., Chichester GP from 6 Oct. to at least 16 Dec. and Tilgate Park on 26 Dec.

PINK-FOOTED GOOSE (*Anser brachyrhynchus*):—The feral bird at Bewl Water was again present all year. One with Canada Geese at Rye Hbr on 1 Apr.

SNOW GOOSE (*A. caerulescens*):—1989.—A blue-phase bird with Canada Geese at Waterlot Level on 14 and 21 May.

1990:—Singles at Weir Wood Res. on 1 Mar. and Arlington Res. on 29 Sept. and 14 Oct.

BAR-HEADED GOOSE (*A. indicus*):—Singles at Warnham MP intermittently from 1 Jan. to 18 Nov. and at Pulborough Brooks in Nov-Dec.

CACKLING GOOSE (*Branta canadensis minima*):—One at Bewl Water on 14 Oct.

BARNACLE GOOSE (*B. leucopsis*):—The usual numerous reports were received of feral birds associating with flocks of Canada Geese: up to 10 at Arlington Res., 6 at Thorney Deepes, 5 at Powdermill Res. and Rye Hbr, 3 in the Lower Cuckmere Valley, 2 at Bewl Water, Buxted Park and Darwell Res. and singles at Amberley Wild Brooks, Barcombe Res., Chichester Hbr, Glynde Levels, Littlehampton GC and Pulborough Brooks.

RUDDY SHELDUCK (*Tadorna ferruginea*):—Singles at Sidlesham Ferry on 25 Apr. and at Weir Wood Res. on 3 Sept. Two at Paghham Hbr from 25 Oct. to 1 Nov. were part of a national influx at the time presumed to be comprised of feral birds from the Netherlands.

WOOD DUCK (*Aix sponsa*):—The only reports received were of a male at Bewl Water on 1 Apr. and 2 at Hardham on 10 May.

SPECKLED TEAL (*Anas flavirostris*):—Two at Weir Wood Res. on 15-16 Jan.

RED-CRESTED POCHARD (*Netta rufina*):—The male in abnormal plumage was again present at Brooklands throughout the year.

SCAUP (*Aythya marila*):—A free-flying female at Arundel WWT on 25 June was probably that recorded on Swanbourne Lake on 23 Apr. 1989. The long stay by this bird strongly points to it being of captive origin.

MANED GOOSE (*Chenonetta jubata*):—One at Pulborough throughout the summer.

SAKER FALCON (*Falco cherrug*):—One carrying jesses at Lower Standean on 22 Dec.

COCKATOO (*Cacatua sp.*):—One at Verdley Wood, Henley on 10 Aug.

COCKATIEL (*Nymphicus hollandicus*):—Singles at Polegate on 12 Mar., Rye Hbr on 3 May, Pett Level on 9 Oct. and Lancing on 5 Dec.

ZEBRA FINCH (*Poephila guttata*):—An adult female at West Kingston on 4 Sept.

JAVA SPARROW (*Padda oryzivora*):—One at Seaford from 12 Oct. to 11 Nov.

BLACK-HEADED WEAVER (*Ploceus caullatus*):—A male at Church Norton on 11 Nov. was probably of this species. Unidentified weavers were noted in an Ashington garden in Jan. and at Belle Tout on 23 May.

new trap, and a cannon-netting session, at Icklesham. **Mallard** (203) and **Teal** (94) were the principal species trapped. **Gadwall** (2), **Pintail** (1), **Shoveler** (3) and **Tufted Duck** (1) made up the total of 304. A late recovery, the details of which have just come to hand, was Teal EP29937 ringed at Icklesham on 7 December 1988 that was shot on 26 August 1989 at Zirmi, Latvia, USSR (1549 km, 56°41'N, 22°13'E). Teal are regularly reported from the Baltic States. The current year's recoveries of duck were **Mallard** (23) and **Teal** (6). Teal ER03065, an adult male ringed on 12 September 1989, was shot on 14 December 1990 at Ardwell, Stranraer (604 km, 55°12'N, 4°26'W). Another involving a north-westerly winter movement, ER03172 ringed 25 October 1990 at Icklesham, was shot on 28 December 1990 at Lynn Coron, Bodorgan, Anglesey (432 km, 53°12'N, 4°26'W). All the Mallard were shot locally. The following table gives a breakdown of the cause of death of the 118 birds, of all species, which were recovered dead, either in the county or outside if they were ringed in Sussex.

Shot	34
Killed by cat	30
Found dead	30
Road casualty	9
Trapped in building	6
Hit glass	6
Overhead wire	1
'Eaten' (no indication of by what or whom!)	1
Found in nest of Eleonora's Falcon	1
(Sand Martin — see below)	

Few adult owls are trapped. Most reports of owls involve dead birds ringed as nestlings. In 1990 there were recoveries of three **Barn Owls**. All had been ringed as chicks. Two of interest, GH23096 and GH23100, were from a brood of six in the east, ringed on 9 July 1988. Both were found dead in the autumn of 1990 within 20 km of the ringing site, having survived 810 and 818 days, respectively. The cause of death is not known. It would be helpful if persons finding dead ringed birds would include any information as to the cause of death when reporting to the British Museum or B.T.O. The knowledge could be of use in future studies of bird mortality.

A **Kestrel**, one of a brood of three ringed in the east on 7 July 1990, entered a building and was found dead on 26 August at Spalding, Lincolnshire (220 km, 52°52'N, 0°07'E). Post-juvenile dispersal of Kestrels appears to be random over short distances (Cramp and Simmons, 1980); however, winter distribution favours Eastern England, the birds' preference for the large areas of cultivated land there being the likely reason (Shrubb, 1986).

F144353, an adult male **Siskin** ringed at East Grinstead on 22 January 1989, was found dead on 1 April 1990 at Tuusula, Finland (1867 km). This is the second year in succession that a Siskin handled in Sussex has been found in Fennoscandia. The number of Siskins ringed in 1990 was down but I understand this was mainly due to reduced effort. Once again the majority of the birds were trapped in suburban gardens. In addition to the individual mentioned above, F401720, an adult male ringed on 23 February 1990, was controlled in Northern Ireland (638 km) on 4 April and F401770 ringed at the same East Grinstead location on 3 March 1990 was controlled in Hexham, Northumberland (449 km) on 14 April 1990. The eruptive behaviour of the Siskin with augmentation of the winter population by birds from the Continent means that very often the ringer of Siskins will be rewarded with controls from faraway places.

Evidence of winter movement from Britain to south-west Europe is given by **Linnets** E769112, a first-year male ringed at Hodcombe, Beachy Head on 29 September 1989 which was found dead on New Year's Day at Bailén, Jaén, Spain (1439 km, 38°06'N, 3°46'W). There have been over 170 British-ringed Linnets recovered in Spain but this is the first in the last few years. There has of course been a dramatic drop in the population since the 1970s (Marchant *et al.*, 1990).

I have already mentioned the large number of **Sand Martins** ringed in 1990. During the ringing activities at Icklesham more than 330 previously ringed birds were trapped. As I reported in 'Ringing in Sussex in 1988' (S&BR 1988), there is movement between roosts prior to the birds' departure from Britain. Between 12 July and 28 August, 12 birds ringed at Icklesham were subsequently retrapped at the Isle of Grain, Kent, which lies 61 km due north. The period between ringing and recapture varied from 4 to 46 days with the earliest birds at Icklesham being still present in the south-east 30 days and more after the initial contact. By contrast 40 Isle of Grain-ringed birds were recaptured at Icklesham; the number of days between each handling was on average much less. It seems that, having left their natal area, the vast majority of the birds trapped at this time are first-years and will spend five or six weeks, perhaps more, moving about in the south-east before they depart these shores. While the birds presumably from later broods are exploring south-east England, others have crossed the Channel and are moving south. F697464, a first-year ringed on 31 July at Icklesham, had travelled 577 km to Hiers-Brouage, Charente-Maritime, France (45°51'N, 1°04'W) by 4 August. In all, 21 Sand Martins ringed at Icklesham between 10 July and 1 August were controlled in France at distances between 100 and 600 km, before 14 August. The picture painted by this ringing activity is of a steady southerly flow of these birds from the middle of July to the end of September, while at the same time many thousands are circulating in this corner of the country for a month or more before leaving.

The extent of this circulation is shown by F878561, a first-year bird, ringed at Drumbeig Sand Quarry in the Central region of Scotland (56°03'N, 4°26'W) on 8 August. It was controlled at Icklesham on 10 September and had moved to Holbrook, near Ipswich, Suffolk by 12 September.

Another individual **Sand Martin** worthy of mention is E743426 ringed at Icklesham on 2 August 1988. It has been retrapped at Bergen Hohne Training Area near Fallingbommel, Luneberg, Germany (666 km, 52°55'N, 9°51'E) on 27 May 1989 and 1 August 1990. It is thought to have bred in both years.

The remains of Sand Martin F809947 ringed at Icklesham on 7 August 1990 were found in an Eleonora's Falcon's nest on Lanzarote, Canary Islands (2708 km, 29°04'N, 13°38'W) 39 days later on 15 September 1990.

Swallow F828928 ringed on 10 September at Icklesham was found dead at Kapanga, Shabas, Zaïre (6920 km, 8°21'S, 22°35'E) on 15 November.

The **Swift** has not been ringed to any significant extent in Sussex in recent years: 1990's total of 253 was exceptional. SB20733 ringed on 29 May 1986 at Rye Harbour chose a suitable place to rest up while it recovered from a bout of illness. It was reported on 21 May 1990 as being 'sick': now released, bird found — weak' at Fenwick Hospital, Lyndhurst, Hampshire.

Robin F410011 made rapid progress between Landguard Point, Suffolk and Icklesham, a distance of 121 km. A first-year bird, it had been ringed on 19 October 1990 and was controlled on 21 October. The criteria for ageing Robins in the hand suggested that this bird came from an early brood. Therefore it had probably travelled some distance before it was found at Landguard where a Bird Observatory has been established because it is a known landfill for birds on passage.

Redwing RX81712 ringed on 11 December 1984 at Widewall, South Ronaldsay, Orkney was found dead at Findon on 12 April 1990, apparently killed by a cat. It had survived for 1948 days since ringing. This species does not often figure in Sussex ringing reports.

Two Sussex-ringed **Chiffchaffs** were controlled at Djoudj, Sénégal (4094 km, 16°25'N, 16°18'W), in the first part of the year. 8R8041, originally ringed at Litlington on 9 September 1988, was in Sénégal on 31 January 1990. 6V4703 was ringed at Icklesham on 12 September 1989 and was retrapped on 25 January 1990 at Djoudj. When the 1990/91 expedition arrived at Djoudj in early December 1990, there were good numbers of Chiffchaffs at the site. By the time the expedition had returned home, 1821 had been ringed. However, 4V9234 was not among them; it had been ringed at Litlington on 23 September 1989, and on 3 November 1990 it was trapped by ringers at Hammaron, Värmland, Sweden (1256 km, 59°15'N, 13°30'E). This location is near Karlstad on the northern shore of Lake Vänern. I can find no recent records of British-ringed Chiffchaffs controlled in Sweden so late in the year. The main breeding area for this species is to the north of Lake Vänern where it probably spent the summer. The bird's weight on being retrapped was 7.6 grams which is about average. It was recorded as having some fat reserves so it was not obviously a sickly individual. The behaviour seems aberrant.

The number of **Garden Warblers** ringed in the county has doubled over the last two years. British birds winter in West Africa in the southern forest areas of Nigeria and Gambia (Simms, 1985) but so far the increased ringing activity has not produced any overseas recoveries. Of the four reports received three involve older birds. Two first-year birds ringed at Beachy Head on 18 August 1985 and 24 August 1986 had returned to Britain in 1990 and were controlled during May in Hampshire and Lincolnshire respectively. Another first-year ringed in Gloucestershire on 22 July 1986 was controlled at Cissbury on 4 August 1990. A first-year bird ringed in Lincolnshire in July was retrapped at Icklesham in August.

Blackcap F613244, a first-year female ringed at Cissbury on 23 September 1989, was found dead on the Leman F gas platform in the North Sea on 6 May 1990. This platform is located about 80 km east of Blakeney Point, Norfolk.

As in 1989 more **Sedge Warblers** than **Reed Warblers** were ringed. Two Sedge Warblers, F810318 and F811470, first-year birds trapped on 13 August at Icklesham, were still together at Veurne, West-Vlaanderen, Belgium on 21 August. By contrast Reed Warblers F813152 and F813168, ringed within minutes of each other on 20 August at Icklesham, had parted company, the former being retrapped at Dungeness Bird Observatory on 29 August, while the latter had travelled 530 km by 26 August when it was controlled by ringers at L'Aiguillon-sur-Mer, Vendée, France (45°20'N, 1°18'W). Few of the passage Reed Warblers trapped at this site remain in the area for long, according to the Icklesham retrap records. Of the birds of this species ringed on the same day as the two quoted above, only one was proved to be present, through retrapping, two weeks later.

Another couple of **Reed Warblers** provided a more dramatic record. B010207 and B010217 were first-year birds ringed on 15 August 1987 at Church Norton. Both were controlled during the exploratory expedition to Djoudj, Sénégal, on 11 April and 12 March 1990, respectively.

Two **Goldcrests** ringed in Sussex in 1989 were subsequently reported in 1990. 3X7194 ringed on 30 September 1989 at Cissbury fell foul of a cat at Dolwen near Abergelle, Clwyd (347 km, 53°15'N, 3°40'W) on 10 June; and 9R9862 ringed at Icklesham on 7 October 1989 was controlled at Copeland, Co. Down (590 km, 54°41'N, 5°31'W) on 31 March. Being able to survive British winters many Goldcrests do not stray far from their breeding areas. Others move considerable

distances to the south-east. These two would seem to be examples of the latter group (Marchant *et al.*, 1990).

A female **Bearded Tit**, F691907, ringed at Icklesham on 23 October 1989 was controlled on 31 March 1990 at St Jouin-Bruneval, Seine-Maritime, France (145 km, 49°39'N, 0°10'E). To the end of 1989 there had been only one previous recovery of a British-ringed Bearded Tit in France (Mead and Clark). F691923, another female trapped at Icklesham only two days later, was retrapped on 4 May at Stodmarsh NNR in Kent only 56 km to the north-east. There is ringing evidence that during movements pairs tend to travel together. There is also a tendency to travel in flocks (Bibby, 1983). The number of birds at Icklesham in October 1989 was probably fewer than six so this small group certainly split up before moving off to their breeding sites.

A Dutch-owned firm of lettuce growers with greenhouses at Chichester are having problems with **Pied Wagtails** that roost inside the greenhouses. The produce is getting badly soiled and birds that fail to find their way out are dying. It was decided to trap the birds and transport them from the area. The trapped birds were ringed and then moved to Shoreham-by-Sea, a distance of 35 km to the east. The firm also have greenhouses at Cranleigh, Surrey, where they have the same problems. Birds trapped there are moved to Ewhurst. Already there have been some interesting recoveries from the ringing activity. F630304 removed from Cranleigh to Ewhurst in October 1989 was found roosting in one of the Chichester greenhouses on 10 January 1990. E023905 was ringed on 24 August 1987 in Kirkcudbright, Scotland and was roosting at Chichester on 17 January 1990. Three of the birds transported to Shoreham from Chichester were found dead in the original Chichester greenhouse some time later. Finally a Chichester/Shoreham bird ringed on 10 January 1990 was controlled at Trostre, Dyfed on 6 April 1990, a distance of 283 km WNW.

The year has been one of mixed fortunes for Sussex ringers. Some of our oldest, i.e. most long-standing, hands have had their activities curtailed for a variety of circumstances that were beyond their control. To those ringers I hope 1991 will prove a more profitable year.

The preliminary results of the expedition to Sénégal are showing that it has been a success. Its continuation over the next few winters is planned so there are exciting prospects opening up for active ringers in the British Isles.

My thanks to all Sussex ringers who have provided me with their records. Please keep it up.

REFERENCES

- Bibby, C. 1983. Studies of West Palearctic birds. 186: Bearded Tit. *British Birds* 76:549-563.
Cramp, S. and Simmons, K. E. L. (eds.). 1980. *The Birds of the Western Palearctic*. Vol. 2. Oxford University Press.
Marchant, J. H., Hudson, R., Carter, S. P. and Whittington P. 1990. *Population Trends in British Breeding Birds*, p.229. BTO/NCB.
Mead, C. and Clark, J. A. Annual ringing reports. *Ringing and Migration*.
Shrubbs, M. 1986. In *The Atlas of Wintering Birds in Britain and Ireland*, ed. Lack, P., p. 148. Poyser, Calton.
Simms, E. 1985. *British Warblers*, pp.56-57. Collins, London.
Whiteman, P. and Millington, R. 1990. *Birding World* 3(12):433.
Derek Crawley, 67a Grange Court Drive, Bexhill-on-Sea, East Sussex TN39 4AY.
(Tel: 0424 210874)

RYE BAY RINGING GROUP, 1986-1990

by Stephen Rumsey

The Ringing Group is comprised of six local bird ringers and quite a large number of visitors from other parts of the country. In the first couple of years quite a few birds were ringed in winter. Latterly almost all birds have been ringed in the period from the beginning of July to the end of October. This is when a regular daily mistnetting regime is in operation which is responsible for about 99% of birds ringed. In addition a few ducks and waders are caught in maze traps.

Over the last five years we have progressively converted 50 acres of our East Sussex farm into a nature reserve. We decided that our bird ringing totals would give quite a good indication of the rate of improvement of the habitat for wildlife.

As the land at the outset was cereal fields and pasture intersected by reedy ditches and hedgerows, it was impossible to guess which areas would become most productive. Therefore it did not make sense to have a standardised mistnetting regime. We simply tried to ring as many birds as possible, with the constraints of ensuring that operations were sufficiently well managed so that the birds were released safely and speedily and that we did not interfere with the increasing numbers of breeding birds.

Management of the reserve has mainly involved some earth-moving, a certain amount of clearance of excess vegetation and the erection of a high-voltage electric fence to exclude foxes and badgers. The habitats are mainly aquatic — open water, reedswamp and sallow scrub.

As the reserve is small, it is extremely vulnerable to disturbance and we discourage casual visitors. If anyone is interested in learning to ring birds, they are welcome to contact me so that we can arrange some preliminary training.

Table 1 gives the number of birds ringed each year. All but a very few were ringed on the farm with the remainder within a radius of 5 miles.

TABLE 1. ANNUAL TOTALS OF BIRDS RINGED BY THE GROUP

	1986	1987	1988	1989	1990	Totals
Little Grebe	—	—	2	1	3	6
Fulmar	—	1	—	—	—	1
Manx Shearwater	—	2	—	—	—	2
Heron	6	12	1	4	—	23
Mute Swan	3	8	8	8	2	29
Canada Goose	—	—	1	—	—	1
Shelduck	—	—	—	1	—	1
Carolina Duck	—	—	—	2	—	2
Wigeon	—	1	2	—	—	3
Gadwall	—	—	—	3	2	5
Teal	—	3	17	42	94	156
Mallard	—	24	28	62	203	317
Pintail	—	—	—	—	1	1
Garganey	—	—	—	1	—	1
Shoveler	—	—	—	1	—	1
Pochard	—	—	—	3	—	3
Tufted Duck	—	—	—	—	1	1
Sparrowhawk	2	2	2	3	7	16
Kestrel	2	2	7	12	11	34
Hobby	—	—	—	—	1	1

	1986	1987	1988	1989	1990	Totals
Water Rail	—	10	14	26	37	87
Spotted Crane	—	—	—	—	1	1
Corncrake	—	—	—	—	1	1
Moorhen	6	36	144	133	79	398
Coot	—	—	6	21	21	48
Oystercatcher	—	1	—	—	—	1
Little Ringed Plover	—	4	16	14	—	34
Ringed Plover	—	8	6	8	20	42
Grey Plover	—	18	69	32	16	136
Lapwing	—	—	1	—	—	1
Curlw Sandpiper	—	—	—	1	—	1
Pectoral Sandpiper	—	—	—	—	—	—
Dunlin	—	2	3	25	2	32
Ruff	—	2	2	11	17	36
Jack Snipe	—	44	48	87	24	203
Snipe	—	—	—	—	—	—
Whimbrel	—	—	—	—	—	—
Spotted Redshank	—	—	1	—	—	1
Redshank	—	12	19	11	2	44
Greenshank	—	1	—	—	—	1
Green Sandpiper	—	3	2	4	2	17
Wood Sandpiper	—	2	5	3	—	10
Common Sandpiper	—	3	14	13	11	45
Black-headed Gull	4	3	1	—	2	3
Common Gull	—	3	—	—	—	3
Herring Gull	—	3	—	—	—	3
Great Black-backed Gull	—	—	—	—	—	—
Kittiwake	—	—	—	—	—	—
Little Tern	—	—	3	—	3	6
Woodpigeon	17	24	8	7	3	59
Collared Dove	7	12	16	57	4	96
Turtle Dove	1	4	3	2	9	19
Cuckoo	—	—	—	1	4	5
Barn Owl	—	4	10	14	15	43
Little Owl	12	11	11	2	8	44
Tawny Owl	1	—	6	1	3	11
Long-eared Owl	3	1	—	2	—	6
Short-eared Owl	—	—	1	—	—	1
Swift	33	14	6	14	250	317
Kingfisher	—	2	4	9	13	28
Wryneck	—	—	—	2	3	5
Green Woodpecker	—	1	4	3	2	10
Great Spotted Woodpecker	3	3	3	4	4	13
Lesser Spotted Woodpecker	—	4	—	—	1	5
Skylark	1	5	2	4	5	17
Sand Martin	14	435	3897	8465	24200	37011
Swallow	85	1134	4668	4125	8620	18632
House Martin	94	6	447	199	538	1284
Tree Pipit	—	1	—	—	3	6
Meadow Pipit	7	32	23	58	214	334
Yellow Wagtail	—	72	23	38	29	162
Grey Wagtail	1	—	2	—	—	3
Pied Wagtail	—	44	86	76	198	411
Wren	58	92	310	375	481	1316
Duncock	56	60	67	112	112	410
Robin	80	105	243	233	369	1030
Nightingale	1	2	4	6	19	32
Bluthroat	—	—	—	—	1	1
Black Redstart	—	—	1	1	—	2
Redstart	—	7	7	12	9	35
Whinchat	22	63	53	77	70	285
Stonechat	—	—	8	19	26	53
Wheatear	9	9	5	10	3	36

We have decided to publicise some of our results to demonstrate how rapidly farming land can be turned into high-value wildlife habitat. Hopefully farmers will be encouraged to embark on similar projects and perhaps the Government may modify its set-aside scheme or its successors. As we have not yet computerised our data, detailed analysis is not yet possible.

The totals of ducks and Water Rail demonstrate the progressive improvement of the aquatic habitat. Vegetation encroachment rapidly reduces the bare mud available for waders, though the numbers were also reduced in 1990 because priority was given to passerines rather than waders and Moorhens. The hirundine roost has steadily increased as the reedbeds have expanded.

The annual totals of seven of the nine common warbler species are higher than have been recorded before at any other site in Britain. Some of them are two-and-a-half times the previous highest total. Exceptions are Whitethroat which has not recovered from the 1968-69 crash, and Willow Warbler of which, for some as yet inexplicable reason, we catch relatively few.

TABLE 2. RECOVERIES OF SAND MARTINS (SM), SWALLOWS (SWA), SEDGE WARBLERS (SW), REED WARBLERS (RW), BLACKCAPS (BC), CHIFFCHAFFS (CC) AND WILLOW WARBLERS (WW) RINGED BY THE GROUP

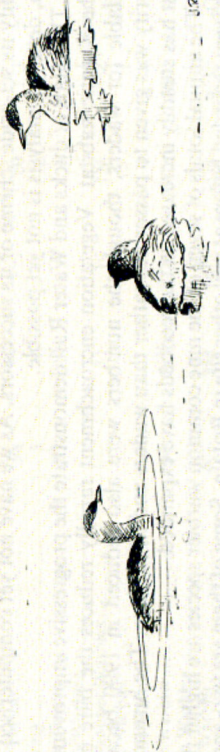
	SM	SWA	SW	RW	BC	CC	WW
S.E. England.....	181	32	59	100	10	15	8
S.W. England.....	7	6	9	5	1	1	—
East Midlands.....	97	23	19	20	5	1	3
West Midlands.....	107	3	1	4	1	2	—
N.E. England.....	25	13	15	6	1	—	5
N.W. England.....	44	9	6	4	—	1	2
Scotland.....	117	8	24	—	—	—	2
Wales.....	24	—	3	1	2	1	—
Ireland.....	9	2	5	—	—	—	1
Germany.....	1	—	—	1	—	—	—
Belgium.....	1	—	—	4	1	—	—
France.....	35	1	7	12	—	2	1
Spain.....	1	—	3	2	1	—	—
Portugal.....	—	—	1	2	—	—	—
Morocco.....	2	5	2	5	—	—	1
Algeria.....	—	2	—	—	1	—	—
Canary Is.....	1	—	—	—	—	—	—
Senegal.....	74	—	6	—	—	1	—
Mali.....	1	—	—	—	—	—	—
Zaire.....	—	3	—	—	—	—	—
Totals.....	727	107	161	166	23	24	23

Table 2 summarises the recoveries of the seven most frequently recovered trans-Saharan migrants (Sand Martin, Swallow, Sedge Warbler, Reed Warbler, Blackcap, Chiffchaff, Willow Warbler). They give some indication of the origin and destination of the migrants passing through Sussex. Most of the Senegalese recoveries are the result of our own 1990/91 BTO/Euring/ICBP Expedition to the Parc National des Oiseaux du Djoudj. A total of 19,000 birds were ringed between December and April. Three hundred already carried European rings of which 213 were British. BTO News has regularly reported on the progress of the expedition, which will be repeated in winter 1991/92.

S. J. R. Rumsey, Elms Farm, Icklesham, Winchelsea, East Sussex

	1986	1987	1988	1989	1990	Totals
Ring Ouzel.....	—	—	4	—	—	4
Blackbird.....	166	181	211	145	222	925
Fieldfare.....	41	144	2	27	23	237
Song Thrush.....	98	75	123	80	171	547
Redwing.....	7	4	41	10	28	90
Mistle Thrush.....	87	64	8	8	—	168
Cetti's Warbler.....	—	—	—	—	3	3
Grasshopper Warbler.....	—	11	19	126	251	407
Savi's Warbler*.....	—	—	1	—	5	6
Aquatic Warbler.....	—	—	—	1	—	1
Sedge Warbler.....	66	713	1274	3983	7670	13706
Marsh Warbler.....	—	—	—	—	1	1
Reed Warbler.....	401	958	1475	3576	4737	11147
Icterine Warbler.....	—	—	—	—	—	—
Melodious Warbler.....	—	—	—	—	—	—
Dartford Warbler.....	—	—	—	—	—	—
Sardinian Warbler.....	—	—	—	—	—	—
Barred Warbler.....	1	—	—	1	—	2
Lesser Whitethroat.....	45	134	202	333	245	959
Whitethroat.....	83	327	338	568	540	1856
Garden Warbler.....	32	52	115	251	428	878
Blackcap.....	115	131	320	2599	1720	4885
Wood Warbler.....	—	—	—	—	—	—
Chiffchaff.....	38	272	1305	1621	1553	4789
Willow Warbler.....	127	1021	1450	1521	1699	5818
Goldcrest.....	—	12	94	109	594	809
Firecrest.....	—	—	2	4	8	14
Spotted Flycatcher.....	7	22	5	17	16	67
Red-breasted Flycatcher.....	—	—	—	—	—	—
Pied Flycatcher.....	—	—	—	—	—	—
Bearded Tit.....	—	—	—	—	—	—
Long-tailed Tit.....	2	21	53	37	73	186
Marsh Tit.....	—	—	1	—	—	1
Willow Tit.....	—	2	—	—	—	2
Coal Tit.....	3	14	7	1	1	26
Blue Tit.....	384	446	417	291	266	1804
Great Tit.....	92	110	109	109	90	510
Nuthatch.....	—	23	7	6	—	36
Treecreeper.....	3	6	15	15	30	69
Penduline Tit.....	—	—	—	2	—	2
Jay.....	2	2	5	—	—	9
Magpie.....	1	6	1	1	3	11
Jackdaw.....	3	13	1	3	—	20
Rook.....	—	—	—	—	—	—
Carrion Crow.....	—	—	—	—	—	—
Starling.....	310	228	86	109	183	916
House Sparrow.....	181	34	59	59	13	346
Tree Sparrow.....	153	19	23	29	75	299
Chaffinch.....	80	83	32	214	57	466
Brambling.....	5	5	1	5	1	17
Greenfinch.....	417	415	265	427	92	1616
Goldfinch.....	92	121	156	261	194	824
Siskin.....	—	—	18	2	1	21
Linnet.....	63	181	154	179	76	653
Redpoll.....	25	4	571	63	50	713
Bullfinch.....	12	31	34	24	32	133
Yellowhammer.....	35	26	53	29	33	176
Little Bunting*.....	—	—	—	—	—	—
Reed Bunting.....	170	105	268	234	327	1104
Totals.....	3883	8396	19692	31564	57300	120835
Species.....	63	95	105	106	103	142

*1990 records subject to verification by SOS/BBRC.



THE LITTLE GREBE IN SUSSEX
Part II — Non-breeding Distribution and Status, 1966-1989

by S. W. M. Hughes

The breeding distribution and status of the Little Grebe *Tachybaptus ruficollis* in Sussex during the period 1966-1986 has been described in Part I of this report (Hughes, 1989). This second part is concerned with the distribution and numbers at other seasons and is based on information available for the period 1966-1989.

INFORMATION SOURCES AND METHODS

The main sources of information used have been the autumn-spring (September-March inclusive) monthly counts made by members of the Sussex Ornithological Society (SOS) for the Birds of Estuaries Enquiry (BOEE) during 1973/74-1989/90, unsolicited records submitted to the SOS (1966-1989) and two surveys organised by the SOS. The first survey was of all waterfowl species and took the form of an extension of the mid-January 1984 count for the National Wildfowl Count scheme (NWC). On this occasion the number of sites counted was increased from the usual 50 to 172. The second survey was planned specifically to investigate the distribution and numbers of winter grebes and was performed on the mid-November 1985 and mid-January 1986 NWC dates. The sites visited were extended to include all localities, including rivers, from which grebes had been reported at any season during the previous 20 years. Other sources consulted have included the annual reports of the Shoreham Ornithological Society and Rye Harbour Local Nature Reserve.

In Sussex Little Grebes breed from March to October. This paper is concerned primarily with the distribution of the species during the months November-February, which are referred to hereafter as *winter*. Young from early broods and some failed breeding pairs may disperse from their sites during July, thus records for the period August to October (referred to as *autumn*) have also been reviewed in detail. Evidence of *spring* movements in March and April is sparse and has been considered only briefly.

To illustrate geographical distribution maps have been prepared on a presence or absence basis per tetrad (2 x 2 km square) rather than attempting to map individual localities. To further assist the description and interpretation of the geographical and numerical distribution at various seasons, localities have been

classified as either 'coastal' or 'interior'. Coastal include any localities south of the Downs (i.e. at the coast or on the coastal plain) or within 10 km of the nearest coast in other parts of the county.

DISTRIBUTION

Geographical distribution

Part I of this review included a map of the known breeding distribution of the species during the years 1966-1986. This has since been updated (Fig. 1) to include new localities reported in the years 1987-1989, and simplified by not differentiating between proven and probable breeding. These changes facilitate a direct comparison with the distribution in autumn and winter during the same period, i.e. 1966-1989 (Fig. 2). The non-breeding distribution is predominantly coastal, being associated with the harbours and estuaries, the levels and the major rivers. Inland

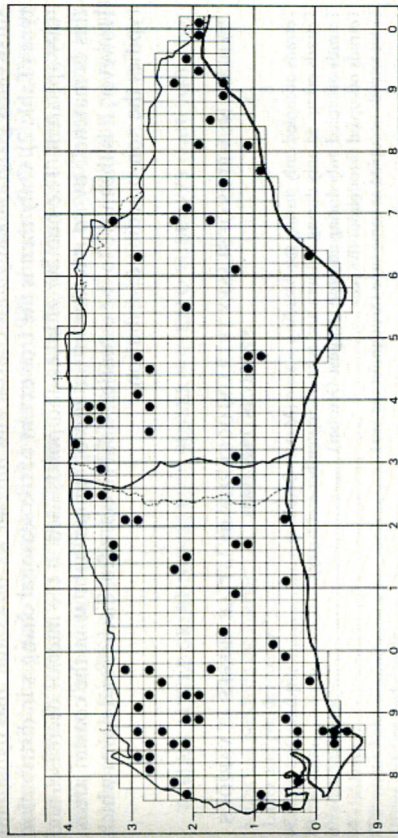


Fig. 1. Little Grebe breeding distribution in Sussex (1966-1989).

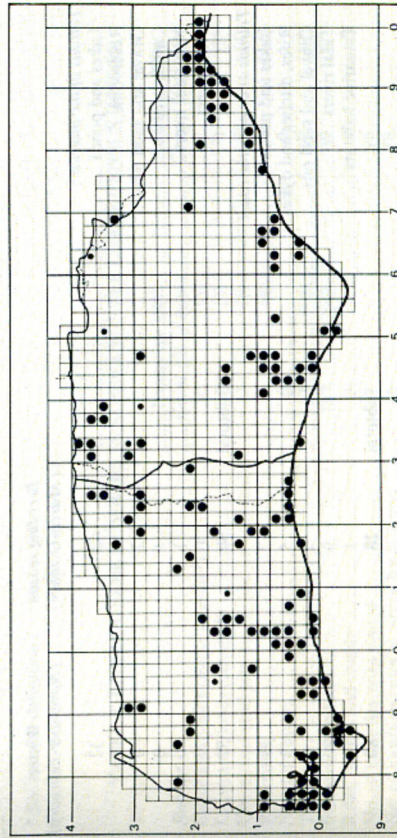


Fig. 2. Little Grebe non-breeding distribution in Sussex (1966-1989) (small dots refer to autumn only).

the distribution shows some similarities to that in the breeding season, though almost half of the breeding localities are deserted, whilst other localities, which are quite unsuited for breeding, come into use. A few localities appear to be used for only a short period during the autumn.

The winter distribution in any particular year depends on the prevailing weather and specifically on the extent to which waters ice over. The breeding population in the interior disperses in autumn, often to larger waters prior to moving, as conditions worsen, to coastal areas where they consolidate during winter. Nevertheless a proportion of the population, which is thought to be mainly immatures, disperses direct to the coastal habitats in the late summer and early autumn, irrespective of the prevailing weather.

During the period under review the number of localities known to have been used, at any season, has totalled 172 (Table 1). Of these 138 have been used outside the breeding season (including six used only in the autumn) and 78 have been used during the breeding season. Only 44 localities are known to have been used throughout the year. These totals have a greater significance when they are subdivided geographically into coastal and interior localities and also by habitat type (Table 2). Only then is the true extent of the seasonal changes in distribution fully apparent. The number of lakes and ponds used in the interior decreases and this is matched by an increase in the use of similar habitat in the coastal areas. However, it is the move to the estuaries, tidal rivers, rifes, ditches and dykes which typifies the non-breeding distribution.

TABLE 1. NUMBERS OF SUSSEX TETRADS OCCUPIED BY LITTLE GREBES AT VARIOUS SEASONS (1969-1989)

Tetrads occupied only during the breeding season (March-October)	34
Tetrads occupied only during autumn and winter (September-February)	88
Tetrads occupied only during autumn (August-October)	6
Tetrads occupied throughout the year	44
Total tetrads occupied at some time throughout the year	172

TABLE 2. LITTLE GREBE SEASONAL TETRAD OCCUPANCY CLASSIFIED GEOGRAPHICALLY AND BY HABITAT TYPE

Tetrads in the interior*	Breeding season (March-October)		Winter (November-February)	
Lakes and ponds	42	37	7	2
Reservoirs	4	7	0	0
Gravel and sand pits	2	0	0	0
Canals	1	0	0	0
Non-tidal rivers	1	0	13	52
Tidal rivers	0	0	17	29
Subtotal	50	52	5	13
Tetrads at or near the coast				
Lakes and ponds	17	13	6	20
Rifes, ditches and dykes	5	6	0	12
Gravel and sand pits	5	6	1	28
Tidal rivers	0	0	28	78
Estuarine habitats	1	12	0	132
Subtotal	28	80	34	132
Overall total tetrads	78	132	34	132

* See text for definition.

Numerical distribution

The non-breeding distribution as depicted in geographical terms (Fig. 2 and Table 2) gives a misleading impression of the distribution in numerical terms. Normally only a few of the ponds, lakes and reservoirs in the interior are occupied at any one time and the total number of birds involved in all the habitats in the interior is small compared with those at coastal sites. In the January 1984 survey, which provided exceptionally good coverage of the waters in the interior, birds were found at only 25 of the 172 sites visited (Table 3). Lakes, ponds and gravel pits near the coast accounted for 24% of the total birds reported compared with only 19% in similar habitats, including the reservoirs, in the interior. An additional 45% were present on the estuaries. With the benefit of hindsight it was apparent that the coverage of the tidal reaches of the rivers in this survey had been inadequate. This was addressed during the winter of 1984/85 when a few observers were asked to explore this habitat more fully and confirmed its relative importance.

The 1985/86 survey achieved good coverage of all habitats, including the tidal rivers, and the results (Table 4) again showed that the numbers in the interior (all habitats) were very low. In November 1985 only nine birds were found in the interior and these had reduced to five by January 1986 compared with 19 in January 1984. This difference was probably due to the severity of the weather in November 1985, when the mean monthly temperature in southern England was only 4°C compared with 8°C in November 1983 (Marchant *et al.*, 1990), sending more birds

TABLE 3. LITTLE GREBE NUMBERS IN SUSSEX WATERFOWL SURVEY (JANUARY 1984)

Habitat	January 1984 count
Lakes and ponds (in the interior*)	13
Lakes and ponds (coastal*)	8
Gravel and sand pits	16
Reservoirs	6
Non-tidal rivers	0
Tidal rivers	2
Estuarine habitat	45
Rifes, ditches and canals	6
No. of localities/sites visited	172
No. of localities/sites at which birds found	25
No. of birds counted	96

* See text for definition.

TABLE 4. LITTLE GREBE NUMBERS IN SUSSEX WINTER GREBE CENSUS (1985/86)

Habitat	November 1985		January 1986	
	Count	(% of total)	Count	(% of total)
Lakes and ponds (in the interior*)	10	(5)	2	(1.5)
Lakes and ponds (coastal*)	6	(3)	4	(3)
Gravel and sand pits	12	(6)	5	(4)
Reservoirs	8	(4)	3	(2.5)
Non-tidal rivers	0	0	0	0
Tidal rivers	33	(18)	12	(10)
Estuarine habitats	117	(62)	89	(72)
Rifes, ditches and canals	4	(2)	9	(7)
No. of localities/sites visited	101		96	
No. of localities/sites at which birds found	26		18	
No. of birds counted	190		124	

* See text for definition.

TABLE 6. MEAN SEPTEMBER-MARCH MAXIMUM COUNTS (AND RANGES) OF LITTLE GREBES IN THE LOWER CUCKMERE VALLEY (1969/70-1988/89)

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Mean maximum.....	8.6	20.5	26.8	25.5	22.7	19.0	13.5
Range	(2-15)	(8-39)	(12-51)	(7-55)	(9-40)	(6-62)	(2-27)

TABLE 7. MEAN SEPTEMBER-MARCH COUNTS (AND RANGES) OF LITTLE GREBES AT FOUR COASTAL LOCALITIES

Locality	Years	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Chichester Harbour	1973/74-1989/90 (17 years)	5.9 (1-17)	15.0 (0-52)	39.1 (7-101)	39.0 (13-84)	32.8 (12-101)	26.1 (4-47)	26.1 (5-42)
Pagham Harbour	1973/74-1989/90 (17 years)	6.7 (4-25)	12.6 (3-27)	16.7 (5-28)	15.1 (5-28)	14.2 (2-27)	9.9 (3-24)	8.5 (3-21)
Rye Harbour	1977/78-1989/90 (13 years)	24.7 (11-60)	21.5 (6-39)	23.6 (5-56)	15.5 (4-30)	12.1 (5-26)	11.8 (4-29)	10 (2-26)
Lower Cuckmere Valley	1982/83-1989/90 (8 years)	0.5 (0-7)	11.7 (4-21)	16.1 (8-23)	17 (7-24)	11.9 (8-20)	11.1 (6-25)	10.7 (2-27)

North Point. At the latter site there was a maximum winter count of 27 in November 1989. In addition to the localities listed in Table 5, good numbers have been reported from the Crumbles gravel pits (e.g. 11, January 1987), but this was rather exceptional.

The Cuckmere Valley, below Exceat, is probably the best locality in Sussex in which to observe good numbers of the species with relative ease. As a result it has become the most regularly watched and thoroughly documented locality in the county. The information available demonstrates clearly the annual, monthly and even daily variations, that occur. Data derived from the BOEE counts on fixed dates are considered later in the context of the county totals and these provide an interesting comparison with the maximum counts recorded in the same locality (Table 6).

Inland localities

Only three inland localities can be considered especially important, i.e. Chichester gravel pits, Weir Wood Reservoir and Bewl Water (see Table 5), but the numbers seen are very dependent on the weather conditions. Counts of 10 or more have also been reported from a few other sites, e.g. 20 at Barcombe Reservoir (January 1979) and 11 at Swanbourne Lake (January 1976), which have not qualified for inclusion in Table 5.

Tidal rivers

The 1985/86 census provided the first coordinated count of the tidal reaches of the four main rivers and demonstrated the relative numerical importance of this habitat. In November 1985 approximately 20% of the birds found were in this habitat but by January 1986 this had fallen to approximately 10%. Since then this habitat has received more attention, and it is clear that the River Ouse is by far the most important of the four rivers, birds being reported from Lewes and Glynde Reach to the northern outskirts of Newhaven, though the most regularly used stretches of river have been to the north of Southsea. Generally birds are concentrated in loose parties in one or two areas rather than spread over the entire

TABLE 5. LITTLE GREBE MAXIMUM COUNTS AT IMPORTANT LOCALITIES IN SUSSEX (1966-1989)

	January		February		November		December	
	Count	Year	Count	Year	Count	Year	Count	Year
Chichester Harbour (total).....	101	76	56	72	101	76	84	76
Bosham Channel	38	76	29	76	21	75	20	75
Thorney Channel and Deepes	39	73	22	73	33	75	34	73
Pagham Harbour (total).....	30	79	24	81	38	81	28	81
Pagham Lagoon	20	76	20	76	22	77	20	66
Chichester gravel pits	34	81	24	81	27	80	33	80
Widewater (Shoreham)	18	82	16	83	13	82	22	81
Shoreham Harbour (Adur Estuary and Southwick Canal)	12	87	10	87	19	73	20	81
Newhaven (Harbour and Tidelms)	24	79	15	76	45	68	34	67
Lower Cuckmere Valley (south of Exceat)	40	82	62	75	51	74	55	79
Weir Wood Reservoir	12	70	10	70	14	70	17	87
Bewl Water	26	82	15	82	32	80	20	81
Rye Harbour	26	90	29	78	56	83	33	78

to the coast early in the winter. In November 1985 the estuaries and tidal rivers accounted for no less than 80% of the total count, the gravel pits and other coastal sites approximately another 11%, thus leaving only about 9% on the ponds and reservoirs in the interior. By January 1986 the total number of birds wintering had fallen by more than a third (35%) and those in the interior accounted for only 5% of the reduced population.

IMPORTANT LOCALITIES

Coastal localities

Chichester and Pagham Harbours with their mosaic of lagoons, ditches, marinas and estuarine habitats; Rye Harbour with the river and gravel pits; and the lower Cuckmere Valley (south of Exceat) with the new river, lengths of old river and the smaller oxbow lakes and lagoons, are all extremely important localities for the species and regularly support good numbers of birds in autumn and winter. Maximum counts for these four localities are given in Table 5. Other localities have also attracted good numbers (10 or more) but not necessarily each year and are not therefore of the same importance as those mentioned previously. However, to illustrate their potential, other localities which are known to have supported 10 or more birds in four or more winters are also included in Table 5 with details of the maximum monthly counts and the year in which they were reported.

Within the Chichester Harbour complex certain areas, e.g. Thorney Deepes and Thorney and Bosham Channels, have been particularly favoured (see Table 5). Other important sites have included Dell Quay (maximum 26, December 1989), Birdham Pool (maximum 12, November 1988) and Chichester Yacht Basin (maximum 16, December 1970). Within Pagham Harbour a consistently important area has been Pagham Lagoon (see Table 5) but up to 12 birds have often been reported at the harbour mouth, or in the coastal waters at Church Norton and also in the general area of Sidlesham Ferry. The numbers given in Table 5 for Rye Harbour are for the entire SSSI, plus the river to the first lock and the gravel pits at

length of the river. Even so, when individual localities are considered, numbers are low, e.g. counts of more than five in Glynde Reach and 10 between Lewes and Southeast would be deemed exceptional. There has been only one record for the river north of Lewes.

The Adur Estuary and Shoreham Harbour complex is important (see Table 5) but birds also occur on the river north of the A27 and particularly in the vicinity of Cuckoo Corner where a gathering of six would not be unusual. Winter records north of Bramber are scarce. The River Arun is not of similar importance. Although a few birds are reported occasionally in Littlehampton Harbour, the majority of records are for the river north of the A259 and south of Ford marina and usually involve six birds or less. In recent years there have been a few sightings near Arundel, Amberley, Greatham Bridge and occasionally as far north as Pulborough, but it has been rare for more than a single bird to be involved. The importance of the lower Cuckmere Valley has been referred to already. The numbers using the tidal river vary considerably, often on a daily basis, depending on the local weather. However, it is surprising that the species has been reported only rarely from the river north of Exceat.

NUMBERS

Regular September-March monthly counts have been made in the Chichester and Pagham Harbour localities since winter 1972/73, at Rye Harbour since 1977/78 and in the lower Cuckmere Valley since 1982/83. The mean count has been calculated for each month at each locality and these are given, together with ranges (i.e. lowest and highest counts) in Table 7. As the majority of the county's autumn and winter population is known to occur in coastal localities and as the four main estuarine areas hold approximately 65% of all the coastal birds, the combined total for these four localities gives a good indication of the species' status in any year.

The combined counts for the four localities for the eight winters 1982/83-1989/90 are given in Table 8. These demonstrate clearly that, for the county as a whole, numbers increase gradually throughout September and October and peak in November and December before declining slightly in January and February. However, it is noteworthy that the counts at Rye Harbour do not conform to the overall pattern. Peak figures at Rye occur in September, possibly as a result of local dispersal from other breeding sites nearby, and thereafter a gradual decline occurs during the autumn and winter. This early decline in the east and the fact that numbers decline in January and February at sites further west may indicate a gradual westerly drift of the population throughout the winter.

Numerical trends

With a population which is subject to fluctuations due to local weather and which may not be truly resident, it is difficult to determine numerical trends with any reliability. Nevertheless, the available data for the four main localities have been plotted individually on a monthly basis and 12-month moving averages calculated. The combined totals for the four localities, over eight winters, have also been analysed in the same way. The results of the latter (Fig. 3) could be interpreted as suggesting a declining population; however, the graphs for the individual sites, over much longer periods, are more reassuring and show a remarkably stable position with the occasional marked peak and a few troughs. This situation is best exemplified by the data for Chichester Harbour over a period of 17 years (Fig. 4).

TABLE 8. ANNUAL TOTALS OF SEPTEMBER-MARCH COUNTS OF LITTLE GREBES AT CHICHESTER HARBOUR, PAGHAM HARBOUR, RYE HARBOUR AND THE LOWER CUCKMERE VALLEY (1982/83-1989/90)

	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
1982/83.....	42	76	87	84	82	67	78
1983/84.....	76	76	137	99	62	79	99
1984/85.....	58	54	71	119	68	35	42
1985/86.....	27	54	125	84	76	56	54
1986/87.....	35	64	80	91	60	33	58
1987/88.....	16	54	79	41	37	49	32
1988/89.....	19	38	85	91	76	80	69
1989/90.....	35	64	50	57	84	34	37
Mean over 8 years.....	38.5	55.7	89.2	83.2	68.1	54.1	58.6

POST-BREEDING DISPERSAL AND OTHER MOVEMENTS

Post-breeding dispersal

The dispersal from breeding sites can be seen in both geographical and numerical terms. In the period under review there were August-October records for six sites where the species had not been recorded at any other time of year (Fig. 2). Waters of all types and sizes are involved in the autumn dispersal, but the reservoirs are notable for the numbers involved, e.g. at Arlington and Darwell where the maxima recorded have been 12 (October 1975) and 25 (October 1967) respectively. Two other reservoirs, both of which are also frequented in winter, also feature strongly in

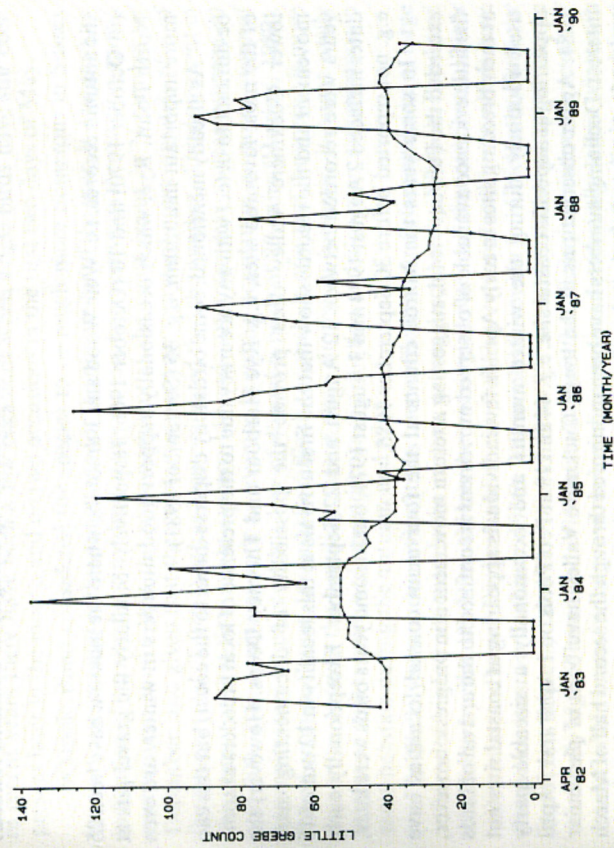


Fig. 3. Little Grebe: combined monthly totals (and 12-months moving averages) for Chichester Harbour, Pagham Harbour, Cuckmere Haven and Rye Harbour.

DISCUSSION

On a national basis the Little Grebe has been traditionally regarded as a mainly sedentary species, and the Atlas studies in recent years have shown that the breeding and winter distributions are very similar (Lack, 1986). Many adults stay on their breeding territories, unless forced to leave by bad weather, but others (especially juveniles) disperse locally or migrate to a wide variety of habitats, which include rivers, streams, brackish and saline coastal sites.

Nationally the birds wintering inland far outnumber those on the estuaries (Prater, 1981); however, being a maritime county, it is not too surprising that this is not true for Sussex. Walpole-Bond (1938) considered it most unusual to find the species inland in Sussex during the winter, but des Forges and Harber (1963) noted that a few had started to winter inland since 1951 and Shrubb (1979) mentioned up to 60 wintering inland since 1965. This review has shown that after breeding the species disperses very widely inland and can occur on waters of almost any type and size. Full advantage is taken of the reservoirs, particularly in autumn; nevertheless as the winter progresses the majority of birds move to sheltered waters at the coast, or within 10 km of it, and to the river valleys.

The timing of the arrival at the coast appears not to have changed over the years. In most the first birds are reported in the second half of August but occasionally they may arrive in the first week of the month, as reported by des Forges and Harber (1963) and also more recently in 1971 and 1974. Similarly this review has shown that the species has left the coast in most years by the second or third week of April, which is in accord with previous published accounts. However, in recent years there have been a few occasions when single birds have still been present later in the month and on two occasions in the first two days of May.

Walpole-Bond considered the species to be much more numerous in Sussex between autumn and early spring than for the remainder of the year, but he gave no indication of the numbers involved at any season. In recent years the autumn-spring counts have shown that the peak numbers at the coast occur in November or December, and given that the coastal counts may represent approximately 65% of the county total (Table 4), it has been estimated that the number of birds present in the county at that time might average 140 and vary from year to year between 80 and 200. This compares with an average breeding population in recent years of approximately 60 pairs with a low of 40 and a peak of 80 pairs (Hughes, 1989). Based on these figures, it would be difficult to conclude now that the species is more numerous outside the breeding season than during it; however, it might easily appear so as it is more widespread in its distribution and also more conspicuous in most habitats during the autumn and winter.

In the 25 years under review it has been difficult to find clear evidence of large influxes of birds from outside the county, as was described by Walpole-Bond and alluded to by Shrubb. Nevertheless there is ringing evidence that continental birds move into south-east England and these probably replace local birds which have moved on westwards (Lack, 1986). The available counts for Chichester Harbour show two winters, i.e. 1975/76 and 1982/83, when the numbers appear to be unusually high. There is no evidence to suggest that these peaks were the result of exceptional success in the previous breeding season, or unusually severe winters in inland Britain; thus it is possible that they were due to population peaks or adverse winter conditions in continental Europe.

There is still considerable scope to improve our knowledge of this species in Sussex. The coastal counts are important as only long-term data can provide

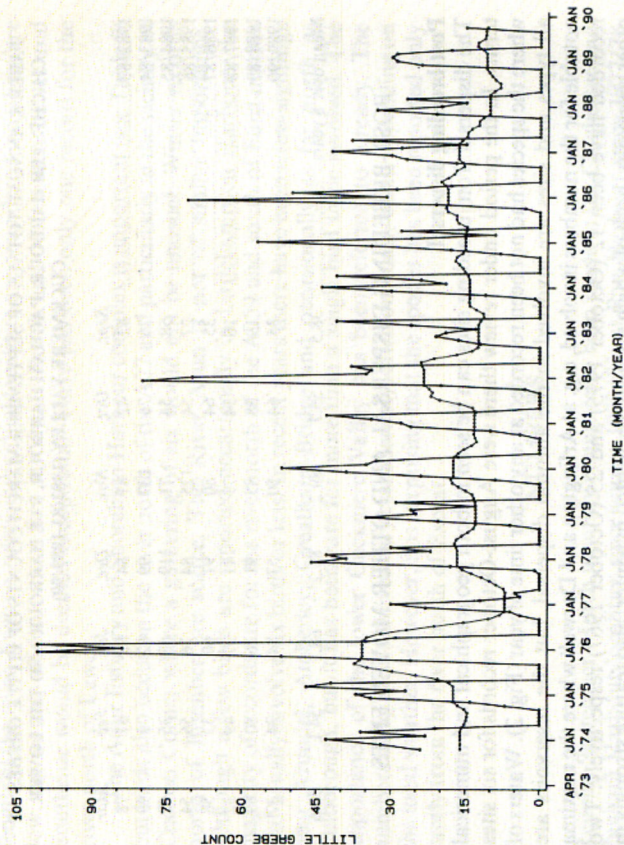


Fig. 4. Little Grebe: monthly totals (and 12-months moving averages) for Chichester Harbour.

the autumn records, i.e. Weir Wood and Barcombe where the maxima have been 25 (in October 1970) and 10 (October 1966) respectively. Similarly the gravel pits at North Point, Rye, which occasionally support good numbers in winter, are even more important in autumn, e.g. 35 (September 1981).

As already mentioned, some birds may disperse direct to the coast, but this can be difficult to detect with any accuracy due to the presence of local breeders at some of the most favoured sites, e.g. Rye Harbour and Thorney Deep. However, the lower Cuckmere Valley does provide the possibility of documenting such movement and the records show that the first arrivals at this locality in 12 out of 15 years were recorded between 12 August and 22 September. Exceptionally early dates included 2 August 1974 and 3 August 1971, but in some years birds were later, e.g. not reported before 30 September 1986.

In some years the March counts at the four main coastal localities have exceeded the February total, suggesting a return movement is in progress; however, the little evidence available of observed movement is confined to the arrival of birds at their breeding sites in early April, a few individuals appearing at coastal sites not used routinely during the winter months and occasionally a sizeable party appearing at a specific coastal site, e.g. 44 and 18 at Pett Pools on 1 April and 5 April 1981. Again observations in the lower Cuckmere Valley have been of particular interest. Declining numbers have been monitored through the second half of March and early April and the last date for the species has been recorded in 17 years. In 1966 all birds had departed by 27 March, but in 13 years the last departure was between 4 April and 19 April, with most going in the first 10 days of the month. Later departures were 27 April 1978, 1 May 1989 and 2 May 1988.

ACKNOWLEDGEMENTS

I wish to thank Mrs Sheila Allwood for typing the manuscript, David Codd for drawing the maps and Dr Adrian Wilson for statistical advice. This paper would not have been possible without the dedication of those members who participate in the National Wildfowl Counts and in the Birds of Estuaries Enquiry and whose continued efforts are now establishing a most valuable long-term data base. I also wish to acknowledge the participation of a further 103 members in the extended counts performed in January 1984, November 1985 and January 1986, which resulted in the best-ever winter coverage of wetland habitats in Sussex.

REFERENCES

- des Forges, G. and Harber, D. D. 1963. *A Guide to the Birds of Sussex*. Oliver and Boyd, Edinburgh.
- Hughes, S. W. M. 1989. The Little Grebe in Sussex. Part I — Breeding distribution and status, 1966-1986. *Sussex Bird Report* 41: 78-87.
- Lack, P. 1986. *The Atlas of Wintering Birds in Britain and Ireland*. Poyser, Calton.
- Marchant, J. H., Hudson, R., Carter, S. P. and Whittington, P. 1990. *Population Trends in British Breeding Birds*. British Trust for Ornithology, Tring.
- Prater, A. J. 1981. *Estuary Birds of Britain and Ireland*. Poyser, Calton.
- Shrubb, M. 1979. *The Birds of Sussex, their present status*. Phillimore, Chichester.
- Walpole-Bond, J. 1938. *A History of Sussex Birds*. Witherby, London.
- S. W. M. Hughes, 6 West Way, Slinfold, Horsham, West Sussex.

Note: Great Spotted Cuckoo at Shoreham Airfield, April-May 1990

I was phoned by Richard Millington at about 18.00 BST on 4 April 1990 and told that a Great Spotted Cuckoo had just been phoned into Birdline by a Hampshire lorry-driver while stopped at red traffic lights by the entrance to Ricardo's Engineering Works. The sighting sounded genuine, though related to that lunchtime. I immediately visited the site but there was no sign of the bird (it had presumably gone to roost). It was a cold, frosty night but the bird was back in its original area the next morning, being first seen by Richard Ives. It remained until at least 1 May and was reported on 2nd. I visited the site daily from 4 April to 7 May and saw the bird each day apart from 19 and 22 April and 2-7 May. On most days the bird was on view but it often went missing for several hours and some days (particularly at weekends when it was more prone to disturbance) I had to visit two or three times to see it. In total I spent over 28 hours watching the bird and was quite saddened when it finally left.

The bird was most often to be found in the triangle formed by the A27 dual carriageway, Ricardo's Engineering Works and the northern perimeter of Shoreham Airfield. In particular much of its stay was spent feeding on brown-tail moth caterpillars hatching out on brambles on the south side of the dual carriageway or sitting in a small line of hawthorns in Ricardo's 'triangle'. The bird did, however, cover a large area, increasingly including the west side of Shoreham Airfield which is practically inaccessible and so was often not to be found for several hours. During my periods of observation I saw the bird cross to the east of the River Adur on two occasions (once to the north and once to the south of the A27). It followed hedges bordering the A27 west past the weighbridge and nearly as far as

reliable information on population trends. The extent to which this species routinely uses the tidal stretches of the four main rivers needs further investigation. Finding the species in this habitat can be difficult, particularly when a strong tide is running; under these conditions the birds shelter under the banks and resort to the slack water on the inner curvature of the river bends. More attention is also required at specific inland waters. For example, numbers using Weir Wood Reservoir have declined since the 1970s, for no apparent reason, and a similar situation applies at Bewl Water since the early 1980s. At Chichester gravel pits autumn and winter numbers have also declined but here it has probably been due to changes in water usage in autumn, particularly on Ivy Lake. Swanbourne Lake was a special site where one could look down and watch birds diving and swimming in crystal-clear water, but it is now in need of dredging and has been starved of water in recent winters.

At the coast two previously favoured sites have deteriorated during the last few years. Widewater lagoon at Shoreham, having supported up to 22 birds in some winters in the early 1980s, appears suddenly to have become unsuitable, whereas the lagoons at Tidemills, Newhaven, have deteriorated slowly due to encroaching development and associated disturbance. On the positive side the species is now seen regularly, if not yet in great numbers, in Brighton Marina; numbers appear to be increasing in the Shoreham Harbour complex, particularly in Southwick Canal; and it is becoming increasingly common for birds to shelter and feed in the marinas in Chichester Harbour, where they can be particularly difficult to count.

The Little Grebe remains widely distributed in Sussex but numerically quite scarce at all seasons. Its size and secretive habits make it relatively inconspicuous and more difficult to study than most waterfowl. However, the breeding season records (reviewed in Part I) and the records outside the breeding season (Part II) fail to show any evidence of a change in status during the approximately 25 years of this review, nor do they suggest any marked change in the longer term (approximately 60 years) since the time of Walpole-Bond.

SUMMARY

The non-breeding distribution of the Little Grebe in Sussex varies with the season. During the years 1966 to 1989 the Sussex Ornithological Society received relevant records from 138 widely scattered localities. These have shown that in late summer and autumn many birds disperse from their breeding sites to other, often larger, waters in the interior of the county, whilst others move direct to coastal areas. As winter approaches the coastal distribution becomes more marked, the extent and timing of the changes depending on the prevailing weather. Birds concentrate in the harbours, estuaries, tidal reaches of the main rivers, the ditches and dykes on the levels, and other undisturbed waters of any size on the coastal plain or elsewhere, within 10 km of the coast. A survey in the winter of 1985/86 showed more than 90% of the winter population in coastal areas; of those remaining in the interior very few were at breeding localities. Autumn and winter counts on the coastline suggest that many of the birds seen are moving westwards and show that peak numbers occur in November or December. The annual peaks have varied considerably, but over the last eight years the average total for the county was approximately 140. The combined counts for the four most important localities at the coast have failed to show any conclusive short-term trend in numbers, nor do the data as a whole suggest any change in status over the last 60 years.

the edge of Lancing, went north up the Coombes road to the end of Lancing College Playing Field, out to behind the windsock on the west side of the Airfield and to the bushes on the river bank at the north-east edge of the airfield. The bird was impervious to traffic and aircraft (having picked one of the noisiest places in Sussex), but not too keen on humans getting too close (on foot or bike) or on cars backfiring.

It was a large, long-tailed cuckoo with broad, rounded wings and a slight crest. It had a sooty cap and ear coverts, a few greyer feathers on the crown were discernible in some lights and the crown appeared slightly crested at some angles (towards the end of its stay the crown was noticeably greyer and more crested). The crest feathers were longer than the crown but were usually held flat over the crown, occasionally being caught by the wind, or raised in alarm. It was ochraceous-buff on the throat, lower face and upper breast and extending round the sides of the neck to form an almost complete collar. The rest of the underparts were white with a slight creamy tone, more obvious on the undertail coverts which were, if anything, very slightly buffier.

The nape and upperparts were a dark grey-brown, being paler than the cap. The centre of the back was unspotted. The scapulars were grey-brown with white diamonds on the tips. The coverts had large white tips, forming a solid bar across the greater coverts and a disjointed, but solid, bar across the median coverts. The area at the bend of the wing, from the median coverts to the alula and the scapulars, had lots of small pale spots (tips to lesser coverts?), not quite in rows. The tertials were notched at the tip and had thin white edges to the upper three and a thick white tip to the lower one. The secondaries (not easy to see when perched) had smaller white tips than the coverts. The white tips to the primaries were even smaller (little more than dots), being smallest on the outers. The inner primaries had rufous-brown bases, extending three-quarters the length of the feathers, only noticeable when the wing was stretched or in flight. The underwing was creamy white, the inner underwing coverts being ochraceous-buff, an extension of the upper breast coloration. The first primary was very short (being recently moulted?) The third primary was the longest, the second being shorter than the fourth. All three had hardly any white at the tip.

The outer uppertail coverts had long broad white edges. The tail was dark brown, usually held closed when perched so only the two central feathers were visible from above. These had no white tips, though a small buffy spot was discernible at close range. The others, when seen, had striking extensive white tips (half an inch or more). This was also obvious from below. The tail was extremely long, almost the length of the body, but was somewhat untidy (recalling a Hoatzin). The body feathers were very loose and fluffy, often giving the bird the appearance of having feathered legs.

The bill was black, slightly decurved and hooked at the tip, with a slightly paler basal half of the lower mandible. The bird had a bright red gape. At the corner of the closed bill a paler trace of a juvenile-type gape was evident, especially on the right-hand side. Despite close scrutiny on many occasions the eye-ring was not seen. The eye was dark, almost reddish. The legs were dark slate.

The bird was superb in flight. It was grey-brown above, heavily spotted with white on the wings, extending right across the coverts in regular lines, with white tips to the trailing edge of the secondaries (and to a lesser extent the inner primaries). It was very hawk-like in flight despite being very long-tailed. It was often a bit floppy on short flights but very powerful and direct when alarmed. Its normal distant flight (i.e. not in a hurry) often consisted of a few deep flaps and a glide on bowed wings. Fortunately it always crossed the A27 at some height, its longer flights often being at 20-30 feet above the ground, while short dashes were at, or close to, ground level. It preferred hopping short distances (tail usually horizontal) when on the ground, but flying for anything much over a metre — clumsy flops at times.

It was often feeding voraciously on brown-tail moth caterpillars in web-like

nests on brambles beside the A27 and then sitting motionless for long periods to digest them. At times it was quite acrobatic when feeding, even ending up upside-down. On one occasion when watching the bird feeding in rough grass on the northern edge of the airfield it caught at least 15 big brown hairy caterpillars (1.5-3 inches long with small yellow spots) in an hour. Towards the end of its stay the brown-tail moth caterpillars were much less numerous and the bird had to travel further for food. It is likely that it was lack of food that caused the bird to go; on all occasions it looked perfectly healthy, though its habit of sitting motionless for long periods was rather worrying to those who were not familiar with it.

The bird was photographed superbly by Tim Loseby (see *Birding World* 3:140). Behaviour by birdwatchers was generally good and I was pleasantly surprised not to see any photographers trying to get too close. While probably no more than 200 people were gathered at any time to see the bird, several thousand must have visited the site during its stay.

Present from at least 4 April to 1 May 1990, a 'large grey bird with white spots' was reported at this site being mobbed by crows on 1 April. Typically I was birding within half a mile of the site on 1 April. I visited the site on 2 May and heard of a second-hand sighting from earlier that day. It is the second county record, the first being found dead at Shripney, near Bognor, on 4 August 1967.

Richard J. Fairbank

19 Crown Road, Shoreham-by-Sea, West Sussex

THE 1990 MUTE SWAN CENSUS IN SUSSEX

by S. W. M. Hughes

A national census of the Mute Swan *Cygnus olor* was organised jointly by the British Trust for Ornithology, the Wildfowl and Wetlands Trust and the Scottish Ornithologists' Club in the spring of 1990. This paper reports the results for Sussex and compares them with the results of the last survey of the species, performed in 1983, which have been published previously (Hughes and Watson, 1984).

METHODS

The methods adopted were identical to those employed in 1983 and have been described in detail elsewhere (Ogilvie, 1981). The basis of the census was the 10 km square of the National Grid with observers being asked to count breeding pairs and other pairs holding territory in April/May and non-breeding birds in April only. Counting was arranged by the Sussex Ornithological Society's network of 10 km stewards.

COVERAGE

Each 10 km steward was provided with a list of sites in which the species had been found in previous censuses, in 1978 and 1983, plus additional sites which had been identified from unsolicited reports submitted to the SOS since 1983 and during the Great Crested Grebe survey in 1985.

A total of 432 sites were identified and 405 (94%) of these were visited. In addition individual observers reported spontaneously on another 52 waters, some of which were found to support swans. Coverage was therefore considered to be excellent and included a thorough search of East Guldeford Level, to the east of Rye, which was not covered adequately in 1983.

RESULTS

Numbers

The numbers of pairs and non-breeding birds found in 1990 in each 10 km square are given in Table 1 together with the similar figures for 1983. The 1990 totals for pairs are subdivided into those which were known to have nested and others which were only reported as holding territory. The comparable figures for 1983 have been published previously (Hughes and Watson, 1984).

The overall total number of birds counted in 1990 was 1111, an increase of 263 over the total in 1983. The 1990 total comprised 175 nesting pairs, plus another 52 territorial pairs and 657 non-breeders. The similar figures for 1983 were 133 nesting pairs, another 52 territorial pairs and 478 non-breeders. Thus the raw data for both years, without any consideration of the inadequate coverage in some areas in 1983, showed a 23% increase in the number of pairs establishing a territory, a 37% increase in non-breeders and a 30% increase overall. However, taking variations in coverage into account and assuming an estimated total of 890 birds in 1983 (Hughes and Watson, 1984), the overall increase was approximately 20%.

Nesting and other territorial pairs

The percentage of territorial pairs known to have nested in 1990 was 77% compared with 72% in 1983. This increase may just reflect more extensive monitoring of individual pairs and might have been even higher if more second visits had been achieved at various sites in TQ41.

The increase in numbers of nesting and other territorial pairs appears to have been mainly due to the increases reported in SZ89 (Selsey peninsula), TQ00 (lower Arun valley), TQ11 (upper Adur valley), TQ81 (Brede valley) and TQ91 and 92 (Rye and East Guldeford Levels). In the latter two squares the increases accounted for 23 pairs (almost half of the total increase for the whole county) due to improved coverage and this suggests that a realistic figure for the increase in territorial pairs for the county as a whole would be nearer 12%.

In many important areas the numbers of territorial pairs were very similar in 1983 and 1990. However, of particular interest was Pevensy Levels (TQ60 and 61) which had 26 pairs in 1976, 24 in 1983, 23 in 1987 (Hitchings, 1988) and 21 in 1990, and where the trend seems to indicate a gradual deterioration of the breeding habitat. Elsewhere 15 squares recorded small increases and 15 small decreases.

Non-breeding birds

The large increase in non-breeding birds can be attributed to the increases in SU80 (Chichester Harbour and Chichester GP), TQ40 and 41 (Ouse valley), TQ81 (Brede valley) and TQ91 and 92 (Rye and East Guldeford Levels). Some non-breeders may have been missed in TQ91 and 92 in 1983 but there is no reason to believe that the increases in TQ81, TQ40 and 41 and SU80 were not genuine. The possibility of a herd of non-breeding birds being duplicated in SU80 has been examined, and

discounted as pivotal counts of two large herds were made in both Chichester Harbour and Chichester GP on the same day. However, there remains the remote chance that a single herd was involved and that it flew from one site to the other

TABLE 1. MUTE SWAN NUMBERS IN SUSSEX, APRIL-MAY 1983 AND 1990

	Nesting/territorial pairs			Non-breeding birds		
	1990 nesting pairs	1990 other pairs	1983 total pairs	1990 total birds	1983 total birds	Change (birds)
SU72	2	1	3	0	1	-1
SU70	7	0	7	13	6	+7
SU83	0	1	1	0	0	0
SU82	2	0	2	12	2	+10
SU80	6	3	9	105	18	+87
SZ89	11	0	11	14	6	+8
SU93	0	0	0	1	1	0
SU92	1	0	1	3	2	+1
SU91	4	1	5	0	0	+1
SU90	0	0	0	0	0	0
SZ99	1	0	1	0	0	0
TQ03	1	1	2	0	1	-1
TQ02	2	1	3	1	1	0
TQ01	16	2	18	119	148	-29
TQ00	13	0	13	44	12	+32
TQ13	1	0	1	0	1	-1
TQ12	4	0	4	2	0	+2
TQ11	10	1	11	6	43	+13
TQ10	1	0	1	0	14	-14
TQ23	3	0	3	1	2	+1
TQ22	0	0	0	3	2	+2
TQ21	0	1	1	0	0	0
TQ20	2	0	2	0	2	-2
TQ33	5	0	5	5	4	+1
TQ32	4	0	4	3	2	+1
TQ31	1	0	1	0	0	0
TQ43	0	0	0	0	0	0
TQ42	3	0	3	6	9	-3
TQ41	1	15	16	17	10	+7
TQ40	11	6	17	60	48	+12
TQ53	0	0	0	0	3	-3
TQ52	0	0	0	0	5	-5
TQ51	0	0	0	0	1	-1
TQ50	7	0	7	5	16	-15
TV59	1	1	2	0	20	+20
TQ63	0	0	0	0	3	-3
TQ62	0	0	0	0	1	-1
TQ61	1	0	1	0	3	-3
TQ60	12	8	20	24	61	-7
TQ72	0	1	1	8	0	+8
TQ71	1	0	1	0	1	-1
TQ82	0	0	0	3	19	-16
TQ81	16	2	18	48	14	+34
TQ92	11	5	16	2	47	+47
TQ91	14	1	15	6	19	-10
TR02	0	1	1	0	0	0
Totals	175	52	227	657	478	+179

No birds were found in either year in Sussex in 10 km squares SU71, SZ79, SU81, TQ24, TQ30, TV49, TV69, TQ70, TQ80, TR01.

between the counts. Even if this did occur SU80 would still have an increase of more than 40 birds.

It is of interest to note that the numbers of non-breeding birds in TQ00 and 01 (Arun valley), TQ10 and 11 (Adur valley), TQ50 and TV59 (Cuckmere valley) and TQ60 and 61 (Pevensey Levels) were very similar in 1983 and 1990. The substantial drop in TQ82 may have been due to inadequate coverage in part of the area. Elsewhere 10 squares recorded small increases and 14 small decreases. Overall, taking account of the lack of coverage in TQ91 and 92 in 1983, the percentage increase for the county as a whole was probably nearer 29%.

Habitat utilisation

Details of the habitats in which swans were found in the 1983 and 1990 censuses are compared in Table 2 and show a gratifying consistency between the two years. The 1990 census results confirmed that the levels in the major river valleys and at the coast provide the most important habitat for territorial pairs and non-breeders alike. Ponds and lakes are also an important breeding habitat but they are of far less significance for non-breeders. The figures also suggest that in 1990 a proportionally larger number of non-breeders resorted to the gravel pits, tidal rivers and estuaries and for some reason, which is unclear, fewer were found on non-tidal rivers.

TABLE 2. MUTE SWAN HABITATS IN SUSSEX, APRIL-MAY 1983 and 1990

Habitat	% of nesting and territorial birds		% of non-breeding birds		% of total population	
	1990	1983	1990	1983	1990	1983
Levels and ditches	46.7	41.6	62.4	70.3	56.0	57.8
Ponds and lakes	30.8	31.9	10.2	13.6	18.6	21.6
Estuary and coast	4.0	7.6	12.0	5.0	8.7	6.1
Rivers (non-tidal)	3.5	5.9	0.8	6.1	1.9	6.0
Rivers (tidal)	6.6	4.9	5.2	2.1	5.8	3.3
Gravel pits	4.0	4.9	7.9	1.1	6.3	2.7
Reservoirs	1.3	1.6	1.4	1.2	1.4	1.4
Canals	3.1	1.6	0	0.6	1.3	1.1

DISCUSSION

Nationally the Mute Swan population had been stable for 30 years prior to 1986 (Owen *et al.*, 1986); however, the surveys of 1955-56, 1961, 1978 and 1983 had demonstrated that the overall stability was masking considerable changes in regional abundance (Rawcliffe, 1958; Campbell, 1960; Eltringham, 1963; Ogilvie, 1981, 1986; Brown and Brown, 1984). Ogilvie (1967) had shown that hard winters resulted in considerable mortality but in the late 1970s and the early 1980s the impact of lead poisoning, caused by the ingestion of anglers' fishing weights, was acknowledged (Goode, 1981; Birkhead, 1982, 1983; Birkhead and Perrins, 1985) and it was also recognised that this might be the major factor responsible for the regional changes.

A comparison of the Mute Swan annual population indices obtained from the National Wildfowl Count (NWC) data with the indices for three species with broadly similar habitat requirements (i.e. Great Crested Grebe, Canada Goose and Tufted Duck) showed that the Mute Swan was exceptional in not having shown a considerable increase in population since 1955 (Ogilvie, 1986). Furthermore following the ban on most sizes of lead weights for fishing, in early 1987, the NWC

index for the Mute Swan increased markedly (Salmon *et al.*, 1988, 1989) and this resulted in a request from the Nature Conservancy Council for the 1990 national census. The preliminary results of this census suggest that the national population may have increased by as much as 49% since 1983 (Delany, 1990).

In the various national surveys the data for Sussex have always been difficult to interpret fully, because of gaps in coverage; nevertheless they have been adequate to provide assurance that Sussex has not experienced the lead poisoning problems reported in many other counties. The county population was estimated at 770 and 890 in 1978 and 1983 respectively, after taking account of the coverage achieved, thus suggesting that the population was at least stable but probably increasing (Hughes and Watson, 1984). The coverage in 1983 was very good, compared with former surveys, except for the levels east of Rye, which had been shown to be very important in the 1978 census. The 1983 data were therefore considered to provide a reliable baseline for the first time, and it was against this that the 1990 census was performed.

The coverage achieved in 1990 was even better than that of 1983, with no major area unvisited and only one 10 km square (TQ82) which could have been done more thoroughly. The result has been the unequivocal demonstration of an increase in population which is now 20% greater than that estimated in 1983. Given that Sussex has not had the lead poisoning problem, this increase could be due to immigration from other counties, improved breeding success or reduced mortality. It is possible that some counts of non-breeders in the far west and far east of the county might have been of herds which could just as easily have been recorded in the neighbouring counties in the previous census. There is no evidence of improved breeding success in recent years; therefore it seems that the factor responsible for the increased numbers is most likely to have been reduced mortality in recent mild winters.

The 1990 census, like its predecessors in 1978 and 1983, has produced a wealth of additional data which are still being analysed and which will be reported, at a future date, together with other information on the species which has been collected in recent years.

SUMMARY

A census of the Mute Swan in Sussex was performed in spring 1990. The coverage achieved of suitable habitats was estimated to be in excess of 95%, with no major areas unvisited. A total of 1111 birds were found, comprising 175 pairs which were known to have nested, an additional 52 territorial pairs and 657 non-breeding birds. Based on an estimated population of 890 birds in 1983, these results indicate an increase in the total population of approximately 20%. The levels in the river valleys and at the coast constituted the most important habitat for territorial pairs and non-breeders alike. Ponds and lakes throughout the county provided the second most important breeding habitat but were used little by non-breeders.

ACKNOWLEDGEMENTS

I wish to acknowledge the many members of the SOS who assisted in this census and whose participation ensured its success. In particular I am indebted to the 10 km stewards, who undertook the local organisation with great efficiency, and to my son Richard for his assistance with the collation and analysis of the counts and in the preparation of the manuscript.

REFERENCES

- Birkhead, M. E. 1982. Causes of mortality in the Mute Swan, *Cygnus olor* on the River Thames. *J. Zool. Lond.* 198: 15-25.
- Birkhead, M. E. 1983. Lead levels in the blood of Mute Swans, *Cygnus olor* on the River Thames. *J. Zool. Lond.* 199: 59-73.
- Birkhead, M. E. and Perrins, C. M. 1985. The breeding biology of the Mute Swan, *Cygnus olor* on the River Thames with special reference to lead poisoning. *Biol. Cons.* 32: 1-11.
- Brown, A. W. and Brown, L. M. 1984. The Scottish Mute Swan Census 1983. *Scott. Birds* 13: 140-148.
- Campbell, B. 1960. The Mute Swan census in England and Wales, 1955-56. *Bird Study* 7: 208-223.
- Delany, S. 1990. *National Mute Swan Survey 1990 — Preliminary Report to the Nature Conservancy Council*. Wildfowl and Wetlands Trust, Slimbridge.
- Eltringham, S. K. 1963. The British population of the Mute Swan in 1961. *Bird Study* 10: 10-28.
- Goode, D. 1981. Report of the Nature Conservancy Council's Working Group on Lead Poisoning in Swans. London.
- Hitchings, S. P. 1988. The ornithological status of Pevensey Levels. *Sussex Bird Report* 40: 71-80.
- Hughes, S. W. M. and Watson, A. B. 1984. Censuses of the Mute Swan in Sussex in 1978 and 1983. *Sussex Bird Report* 36: 69-73.
- Ogilvie, M. A. 1967. Population changes and mortality of the Mute Swan in Britain. *Wildfowl Trust Ann. Rep.* 18: 64-73.
- Ogilvie, M. A. 1981. The Mute Swan in Britain, 1978. *Bird Study* 28: 87-106.
- Ogilvie, M. A. 1986. The Mute Swan *Cygnus olor* in Britain 1983. *Bird Study* 33: 121-137.
- Owen, M., Atkinson-Willes, G. L. and Salmon, D. G. 1986. *Wildfowl in Great Britain*, 2nd ed. Cambridge University Press.
- Rawcliffe, C. P. 1958. The Scottish Mute Swan Census 1955-56. *Bird Study* 5: 45-55.
- Salmon, D. G., Prys-Jones, R. P. and Kirby, J. S. 1988. *Wildfowl and Wader Counts 1987-1988*. Wildfowl Trust, Slimbridge.
- Salmon, D. G., Prys-Jones, R. P. and Kirby, J. S. 1989. *Wildfowl and Wader Counts 1988-1989*. Wildfowl and Wetlands Trust, Slimbridge.
- S. W. M. Hughes, 6 West Way, Slimfold, Horsham, West Sussex.



UNUSUAL RECORDS

All records of unusual species are considered by the Records Committee and it may be assumed that those published have been fully authenticated. Such reports should be submitted on special forms available from the Recorder. Reports of rarities as defined by *British Birds* should be submitted on, or in the same format as, the forms obtainable from the Secretary to the Rarities Committee. The following list, which includes a number of changes from previous years, embodies those unusual species in Sussex for which descriptions are normally required. The Recorder may seek supportive evidence in the case of other species occurring under unusual circumstances. This list is not exclusive and any observer in doubt or needing further advice on any species should send details accordingly.

All divers (except Red- and Black-throated on the coast)
 Red-necked and Black-necked Grebes
 All shearwaters and petrels (except Fulmar)
 Shaugh (inland records only)
 Bittern
 Purple Heron
 Little Egret
 White Stork
 Spoonbill
 Whooper Swan
 Bean and Pink-footed Geese
 Black Brant (*Branta bernicla nigricans*)
 Green-winged Teal (*Anas crecca carolinensis*)
 Red-crested Pochard
 Ferruginous Duck
 Surf Scoter
 Honey Buzzard
 Red Kite
 Marsh and Montagu's Harriers
 Goshawk
 Rough-legged Buzzard
 Osprey
 Spotted Crane
 Corncrake
 Crane
 Stone Curlew
 Kentish Plover
 Dotterel
 Temminck's Stint
 Pectoral Sandpiper
 Buff-breasted Sandpiper
 Grey and Red-necked Phalaropes
 Pomarine Skua (except on spring passage)
 Long-tailed Skua
 Sabine's, Ring-billed, Iceland and Glaucous Gulls
 Roseate Tern
 Black Guillemot
 Little Auk
 Puffin
 Bee-eater
 Hoopoe
 Wryneck
 Woodlark and Shore Lark
 Richard's, Tawny and Water Pipits
 Waxwing
 Dipper
 Bluthroat
 Siberian Stonechat (*Saxicola torquata naura/steppeseri*)
 Warblers: Cetti's, Savi's, Aquatic, Marsh, Icterine, Melodious, Barred, Pallas's, Yellow-browed
 Red-breasted Flycatcher
 Golden Oriole
 Red-backed, Great Grey and Woodchat Shrikes
 Raven
 Serin
 Scarlet Rosefinch
 Lapland, Cirl and Ortolan Bunting

In addition: all unusual races of Herring Gull (except *L. a. michalhelis*), Yellow Wagtail and Rock Pipit.