



BTO Research Report No. 166

**Provision of breeding bird atlas
data to the Countryside
Information System**

Claire Forrest and Nick Carter

*A report by the British Trust for
Ornithology under contract to
the Department of the Environment*

April 1996

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The Nunnery, Thetford, Norfolk IP24 2PU

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British Trust for Ornithology

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1. INTRODUCTION

Ornithological data on breeding birds in Britain have been supplied to the Department of the Environment by BTO for use with the Countryside Information System (CIS). Section 2 of the report outlines the nature of the breeding bird distribution and abundance data which have been supplied to DoE, and those data which will be available to other CIS licence holders upon request. Section 3 details the nature of the agreement between BTO and DoE over use of the data with CIS, and also details the terms and conditions to which other CIS licence holders will be subject if they request breeding bird data. Section 4 of the report provides information on the copyright implications of data owned by organisations other than the three involved in organising the atlases (BTO, Scottish Ornithologists Club and Irish Wildbird Conservancy). The final Sections, 5 and 6, outline respectively the charges that will be levied for the supply of breeding bird data to CIS licence holders outside DoE, and the support that will be available to users of the datasets. Appendices 1 and 2 contain the agreements referred to in Section 3. Appendix 3 contains metadata describing the collection, limitations and format of the data provided and Appendix 4 contains a list for the Environmental Catalogue of the breeding atlas datasets available in CIS format.

2. DATASETS

2.1 Datasets provided

The following datasets have been provided for use with CIS:

- * 1968-72 Breeding Atlas distribution data for all species at 10 x 10 km square
- * 1988-91 Breeding Atlas distribution data for all species at 10 x 10 km square
- * 1988-91 Breeding Atlas frequency abundance data for all species at 10 x 10 km square
- * 1988-91 Breeding Atlas count abundance data for counted species at 10 x 10 km square.

2.2 Source and short description of each dataset

Each dataset is split into individual species.

2.2.1 1968-72 Breeding Atlas distribution data

Source: *The Atlas of Breeding Birds in Britain and Ireland*, by J.T.R. Sharrock (1976). Published by T & AD Poyser.

The dataset contains separately all the possible and confirmed breeding records collected in England, Scotland and Wales for all species during fieldwork between 1968 and 1972 inclusive. The records are at 10 x 10 km square level. Every 10km square in England, Scotland and Wales was visited for the Atlas.

2.2.2 1988-91 Breeding Atlas distribution data

Source: *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991*, by D.W. Gibbons, J.B. Reid and R.A. Chapman (1993). Published by T & AD Poyser.

The dataset contains separately all the possible and confirmed breeding records collected in England, Scotland and Wales for all species during fieldwork between 1988 and 1991 inclusive. The records are at 10 x 10 km square level. Every 10km square in England, Scotland and Wales was visited for the New Atlas.

2.2.3 1988-91 Breeding Atlas frequency abundance data

Source: *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991*, by D.W. Gibbons, J.B. Reid and R.A. Chapman (1993). Published by T & AD Poyser.

The dataset contains data on the relative abundance of all species in England, Scotland and Wales which were recorded during timed tetrad (2 x 2 km square) visits by fieldworkers. The data are at the 10 x 10 km square level and represent the number of tetrads in which a species was observed divided by the number of tetrads visited in that 10km square.

2.2.4 1988-91 Breeding Atlas count abundance data

Source: *The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991*, by D.W. Gibbons, J.B. Reid and R.A. Chapman (1993). Published by T & AD Poyser.

The dataset contains data on the absolute abundance of species which were counted during fieldwork for the New Atlas (117 species out of 214 species covered by the Atlas). These species were counted during timed tetrad visits by fieldworkers. The data are at the 10 x 10 km square level and represent the mean count per visited tetrad of a species in a 10km square. Species which were counted include inland seabird colonies, species of open water such as ducks and species whose estimated British population is less than 10,000 pairs. Counts of coastal seabird colonies were not carried out by Atlas fieldworkers. Instead, the JNCC/Seabird Group provided data from the 1985-87 Seabird Colony Register. These data were combined with the Atlas counts of inland colonies to provide count abundance data for seabird species.

3. AGREEMENTS ON THE USE OF ATLAS DATA WITH CIS

3.1 Agreement between BTO and DoE

Appendix 1 contains the Conditions of Use of BTO Atlas data by DoE. This document outlines the agreement between BTO and DoE over the use of breeding bird distribution and abundance data by CIS licence holders within DoE.

3.2 Agreement between BTO and other CIS users

Appendix 2 contains the BTO Policy and Conditions for Countryside Information System (CIS) data requests, which will apply to the provision of breeding bird data to CIS users outside DoE. Additional conditions governing the use of data may be attached to particular requests, at the BTO's discretion.

4. COPYRIGHT IMPLICATIONS OF ATLAS DATA NOT OWNED BY BTO

For the majority of species included in both the 1968-72 Breeding Atlas and the 1988-91 Breeding Atlas, data on their distribution and (1988-91 only) abundance were provided by atlas fieldworkers. For certain species however, the bulk of data in the atlas datasets was provided by organisations outside those involved in producing the atlases. Atlas data for these species is therefore owned by the organisations that supplied them. The species that this applies to are as follows:

<u>Species</u>	<u>Owned by</u>
Black-throated Diver	RSPB
Corncrake	RSPB
Stone Curlew	RSPB
Cirl Bunting	RSPB
Fulmar	JNCC
Manx Shearwater	JNCC
Storm Petrel	JNCC
Gannet	JNCC
Cormorant	JNCC
Shag	JNCC
Arctic Skua	JNCC
Great Skua	JNCC
Black-headed Gull	JNCC
Common Gull	JNCC
Lesser Black-backed Gull	JNCC
Herring Gull	JNCC
Great Black-backed Gull	JNCC
Kittiwake	JNCC
Sandwich Tern	JNCC
Roseate Tern	JNCC
Common Tern	JNCC
Arctic Tern	JNCC
Little Tern	JNCC
Guillemot	JNCC
Razorbill	JNCC
Black Guillemot	JNCC
Puffin	JNCC

Data owned by the RSPB are from the 1988-91 Atlas only; JNCC-owned data are from both the 1968-72 and 1988-91 Atlases. Distribution and abundance data for the above species have been supplied to DoE as part of the atlas datasets. The original source of the data must be acknowledged in any publications using distribution or abundance data relating to the above species.

If data for the above species are requested by CIS licence holders outside DoE, permission will have to be obtained from the source organisation before the supply of data can go ahead for each individual request. This permission will be sought by BTO on behalf of the licence holder.

5. ATLAS DATA CHARGES FOR CIS LICENCE HOLDERS OUTSIDE DOE

The charge for supplying breeding bird data to CIS licence holders outside DoE will be £250 plus VAT per species. This charge covers distribution data from both atlases (1968-72 and 1988-91) and abundance data from the 1988-91 atlas. The charge does not take into account the cost of converting the atlas data to CIS format, this cost has already been covered by DoE. The charging system will be reviewed six months after introduction.

6. SUPPORT FOR DoE AND GENERAL CIS LICENCE HOLDERS

Full support will be provided to CIS users within DoE for the five year licence period in the first instance.

Other CIS licence holders who obtain breeding bird data will be provided with up to three free consultations. A consultation constitutes the communication necessary to solve the queries raised at any one time by a licence holder. A communication may be by fax, phone, mail or e-mail (although the latter not presently available at the BTO). Further consultations will be charged at BTO standard rates, available upon request.

APPENDIX 1

Conditions of Use of BTO Atlas Data by DoE

The following agreement is between the British Trust for Ornithology and the Department of the Environment and refers to the ornithological data used for the following publications:

Sharrock J T R (1976) *The Atlas of Breeding Birds in Britain and Ireland*. T & A D Poyser, Berkhamsted.

Gibbons D W , Reid J B & Chapman R A (1993) *The New Atlas of Breeding Birds in Britain and Ireland 1988-1991*. T & A D Poyser, London.

The terms agreed between BTO and DoE concerning the holding and use of data collected for the above publications, which data and which publications are herein known collectively as the "Atlases", are:-

1. The Atlases are wholly owned by BTO.
2. Data for the Atlases will be passed by BTO to DoE in a format suitable for CIS.
3. These data may not be passed on to third parties by DoE (which includes organisations working for DoE) and all requests for Atlas data by third parties will be referred to BTO. As the Atlas data contains many sensitive records, it is vital that such records are not circulated beyond those people who need to know within DoE.
4. The DoE is free to use these data for internal purposes such as site, species and policy issues. The DoE will provide an annual report to BTO on such uses by 30 April (for the previous period April to March inclusive).
5. Where DoE undertakes analyses internally that may be suitable for external publication, BTO will be consulted at the earliest possible opportunity to gain advice on scientific interpretation and to develop possible collaborative ventures. Any external publication arising from the use of these data will be subject to consultation with BTO whose consent shall not be unreasonably withheld. Unless determined otherwise by both parties, BTO will co-author all such work. Any publication arising from the interpretation and analysis of these data shall appropriately credit the source of the data, BTO, its members, the volunteers and compilers of the data.
6. Two copies of all external publications using these data will be supplied to BTO free of charge.
7. Atlas data are supplied with standard notes on the format of the data. These notes contain important qualifications about the limitations of the data to aid interpretation.
8. The DoE will rent the data as follows:-

Year 1	£2,500)	
Year 2	£2,000)	
Year 3	£1,500)	Plus VAT
Year 4	£1,000)	
Year 5 onwards	£500)	

The DoE has paid the first five years of this rental in advance. The DoE will be able to use the data over the next 20 years, or until the next breeding atlas is produced, whichever is sooner. Access to any new data is not covered by this agreement.

For: (DoE) For: (BTO)
Date: Date:

APPENDIX 2

BTO POLICY AND CONDITIONS FOR COUNTRYSIDE INFORMATION SYSTEM (CIS) DATA REQUESTS

PLEASE READ THIS FORM CAREFULLY BEFORE SIGNING DATA REQUEST FORM

Thank you for your request to access data held by the British Trust for Ornithology (BTO). Please complete and sign the attached form in order to clarify the nature of the data you require and the purposes to which it will be put. The BTO wishes to encourage maximum use of its ornithological datasets. Your request will be considered by staff and, if necessary, by one of the Trust's scientific committees. The release of data will normally be agreed unless one of the following situations occurs:-

1. BTO research staff are actively working in the same area or are seeking funds to work in that area. In cases where collaborative studies are appropriate, this will be encouraged.
2. The amount of data released to external researchers will normally be limited in relation to the size of the dataset. In the case of research projects, where data have already been supplied to an external researcher, further copies of the data will not normally be released for similar studies without their agreement. Both researchers will be advised of their joint interest.
3. The data have been submitted to the BTO 'in confidence' and the donor is unwilling to release them, or the data are particularly sensitive from a conservation standpoint.
4. A significant proportion of the data has been collected by one researcher or team, who intend to carry out the same analyses themselves.
5. The researcher cannot agree to the conditions listed below, has not adhered to the conditions on a previous occasion, and/or is not prepared to pay the charge levied.

CONDITIONS

Data can be released only after you have completed and signed the attached form, agreeing to the following conditions:-

1. The data are not to be passed to a third party, without written permission from the BTO.
2. Permission must be obtained in writing from the BTO before analyses that are additional to those described on the attached form are carried out.
3. The data must not be entered onto any permanent computerised databank other than CIS without written permission from the BTO.
4. The BTO and principal sponsors of the project in question shall be acknowledged in any publications relating to the data.
5. Two copies of any such publication will be supplied, free of charge, to the BTO's Membership and Development Department. In the event of confidential reports, please negotiate this condition with the Membership and Development Department.
6. Brief progress reports will be submitted annually by 30 April to the BTO.
7. All sources of outside funding for a project must be referred to on the Data Request Form before BTO data can be supplied.

APPENDIX 3

PROVISION OF BREEDING ATLAS DATA TO THE COUNTRYSIDE INFORMATION SYSTEM

METADATA

1. Introduction

This document gives a description of the datasets provided to the Department of the Environment by the British Trust for Ornithology for use with the Countryside Information System (CIS). The use of breeding atlas data by DoE is governed by the conditions set out in the document 'Conditions of Use of BTO Atlas Data by DoE'.

The datasets that have been provided were collected during fieldwork for the following publications:

The Atlas of Breeding Birds in Britain and Ireland (J.T.R. Sharrock 1976). BTO, IWC. Published by T. & A.D. Poyser, Calton.

The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991 (D.W. Gibbons, J.B. Reid & R.A. Chapman 1993). BTO, SOC, IWC. Published by T. & A.D. Poyser, London.

The datasets provide information, at the 10km square level, on the distribution and, in most cases, the abundance of all bird species recorded during the periods of the two breeding atlases.

Please refer to the Environmental Catalogue in CIS for a full list of the datasets available.

Important

Some datasets, as indicated in the Environmental Catalogue, are sensitive or confidential. These datasets have been provided to DoE for their use, along with all the other breeding bird datasets. The supply of confidential or sensitive datasets to other users will be judged by the BTO on a case-by-case basis. Under no circumstances must sensitive or confidential records be published without prior permission from the BTO .

The breeding bird datasets contain four types of data:

- 1968-72 distribution data
- 1988-91 distribution data
- 1988-91 count abundance data
- 1988-91 frequency abundance data

The collection of these data, their limitations and the format of the datafiles are described below.

2. Collection and limitations of the data

2.1 1968-72 Breeding Atlas

The 1968-72 Atlas of Breeding Birds in Britain and Ireland (full reference above) was the first project in this country to completely map the distributions of all breeding birds on a national scale. Fieldwork for the Atlas took place over five breeding seasons from 1968 to 1972 inclusive, and by the end of this period each of the 10km grid squares in Britain and Ireland had been visited by observers.

Please refer to the Introduction in the published Atlas for full details of the background to the Atlas, the method of data collection and the data checking and processing stages. Very concisely, volunteer observers visited all 10km squares over the five-year fieldwork period and attempted to record every species breeding in each square and, if possible, to prove breeding for each one. Their aim was simply to record the presence and breeding status of all species, not their abundance. Towards the end of the five-year period those 10km squares which had not been covered were targeted by volunteer observers and the Atlas Organiser to ensure that there were no gaps in coverage. It proved impossible to find 100% of breeding species in every square, however, in the opinion of the regional organisers, at least 75% of the expected species were found in every 10km square.

The collected data went through several checking procedures, during the course of which a master card was compiled for each 10km square. The data on these cards were then computerised and the distribution maps produced. Every square in which a species was recorded, even if it was only recorded once out of the five years of fieldwork, was mapped. The exception to this was certain rare species, for which several or all breeding records were omitted or moved in the published Atlas. The CIS species datafiles for the 1968-72 Atlas do not contain any of these false records; they contain a complete and true list of all records for every species including the rare ones.

The methodology of the Atlas enabled the breeding distributions of species to be mapped at the 10km grid square level. The CIS datafiles pinpoint those 10km squares in which a species was recorded, even if only once, between 1968 and 1972. **It is important to note that these data are not valid at a scale finer than 10km square and therefore must not be interpreted or analysed at anything other than 10km square level. It cannot be assumed that if a species is recorded as present in a 10km square it is present in all parts of that 10km square - it may in fact occupy only a small area of the 10km square.**

2.2 1988-91 Breeding Atlas

The second atlas of breeding birds in Britain and Ireland (full reference above) was compiled from fieldwork carried out between 1988 and 1991, 20 years after the first atlas. The aims of the second atlas were to re-map the distributions of all breeding species at the 10km square level, to highlight any changes in those distributions that had occurred in the interval between the atlases and to map regional variation in abundance of each species.

Please refer to the Introduction and Methods in the published Atlas for full details of the methodology of data collection, coverage, data checking and processing and the additional

data submitted to the Atlas. In summary, volunteer observers visited a minimum of 8 tetrads (2 x 2 km squares) in every 10km square in Britain and Ireland over the course of 4 years of fieldwork between 1988 and 1991. A timed two-hour period was spent in each visited tetrad and a species list compiled for each. From these timed tetrad visits a frequency of occurrence index for each species in each 10km square was calculated. Additional supplementary observations (non-timed) were also made and together with the tetrad species lists an accurate list of breeding species was compiled for every 10km square. These 10km square lists enabled distribution maps to be created for every species.

Selected species were counted during timed tetrad visits (see list in Environmental Catalogue). These included species with highly clumped distributions such as Sand Martins, birds of open water and inland seabird colonies. In addition, all species with an estimated British population of less than 10,000 pairs were counted. Counts of coastal seabird colonies had been carried out between 1985 and 1987 by the NCC and the Seabird Group. It was decided to incorporate these data into the Atlas dataset and avoid wasting valuable resources repeating these counts as part of the Atlas.

The breeding status of each species recorded in a 10km square was assessed by observers using two categories: 'confirmed breeding' and 'seen but not confirmed breeding'. The first category was applied by observers only if there was direct or indirect evidence (*eg* nest with young or courtship display) that a bird was breeding. Some of the birds assigned to the second category were 'summering' (non-breeding). A difference in the recording of summering birds exists between the 1968-72 and 1988-91 atlases. In the first atlas summering birds were only recorded if there was suitable breeding habitat in the 10km square whereas in the second atlas summering birds were included regardless of whether suitable habitat existed in the square or not.

A number of confidential records were submitted to the Atlas for various species. To maintain their confidentiality these records were either omitted from the published map, downgraded from 'breeding' to 'seen' or shifted from their true location. The CIS datafiles however do not contain these false records; they contain a complete and true list of records for every species including rare ones.

The abundance data, because they were gathered during timed fieldwork periods only, are thus corrected for variation in fieldwork effort. If tetrad fieldwork had not been limited to a set time period, then clearly a lot more time would have been spent in tetrads in well covered areas such as SE England compared to tetrads in the remoter parts of Scotland and other poorly covered areas. The disadvantage of limiting tetrad visits to two hours however was that rare and elusive species, particularly nocturnal ones, could be missed. Thus for some species the abundance data yields little more information than the distribution data. No abundance maps were published for these species in the Atlas.

The distribution data comprise both records collected during timed tetrad visits and supplementary, non-timed records. These data are thus not corrected for variation in fieldwork effort. The Atlas illustrates in the Introduction and Methods the enormous regional variation in fieldwork effort, which necessarily introduces some bias into the distribution data.

The regional variation in fieldwork effort during both the 1988-91 Atlas and the 1968-72

<u>Character</u>	<u>Variable</u>	
1-5	10km square grid reference	
6	Maximum breeding category:	1 = seen but breeding not confirmed 2 = breeding confirmed

3.3 1988-91 count abundance data

The species datafiles have the suffix NEW.COU. Not all species were counted during fieldwork, only selected species totalling approximately half of all species recorded were counted. Each file contains a list of the 10km squares in which the species was recorded during timed tetrad visits (squares in which it was only recorded during a non-timed visit are excluded). The exact format of the data in each line is as follows:

<u>Character</u>	<u>Variable</u>
1-5	10km square grid reference
6-11	Mean count per visited tetrad

For some species that were counted the data collected were considered insufficient to produce an abundance map in the published atlas. These species have NEW.COU files but the data in them should be treated with caution. Seabird species have count abundance data provided from the Seabird Colony Register - these files have a different format which is described in section 3.5 below.

3.4 1988-91 frequency abundance data

The species datafiles have the suffix NEW.FRE. All species recorded during timed tetrad visits have frequency abundance data. Each file contains a list of the 10km squares in which the species was recorded, and a value representing the frequency of occurrence of the species in each 10km square (achieved by dividing the number of tetrads in which it was recorded by the number of tetrads visited in the square). The exact format of the data in each line is as follows:

<u>Character</u>	<u>Variable</u>
1-5	10km square grid reference
6-13	Frequency of occurrence

3.5 Seabird count abundance data

The datafiles have the suffix NEW.SCR. They contain counts collected for the JNCC/Seabird Group Seabird Colony Register (SCR) and counts of inland seabird colonies collected by Atlas fieldworkers between 1988 and 1991. The majority of data for the SCR were collected during the period 1985 and 1987, but some were collected between 1981 and 1991. These datafiles were used to produce the seabird dot abundance maps in the published Atlas. Each file contains a list of the 10km squares in which the species was recorded as breeding, and a total count for each square. The exact format of the data in each line is:

<u>Character</u>	<u>Variable</u>
1-5	10km square grid reference
6-14	Total count (of pairs or individuals - see Environmental Catalogue)

APPENDIX 4

INFORMATION ON BREEDING ATLAS DATASETS PROVIDED FOR INCLUSION WITHIN THE CIS ENVIRONMENTAL CATALOGUE

This document gives a description of the datasets provided for inclusion in the Environmental Catalogue. These datasets were collected during fieldwork for the following publications:

The Atlas of Breeding Birds in Britain and Ireland (J.T.R. Sharrock 1976). BTO, IWC. Published by T. & A.D. Poyser, Calton.

The New Atlas of Breeding Birds in Britain and Ireland: 1988-1991 (D.W. Gibbons, J.B. Reid & R.A. Chapman 1993). BTO, SOC, IWC. Published by T. & A.D. Poyser, London.

The datasets provide information, at the 10km square level, on the distribution and, in most cases, the abundance of all bird species recorded during the periods of the two breeding atlases.

Explanation of information provided in table below

Species

All species datasets collected by the 1968-72 Breeding Atlas and the 1988-91 Breeding Atlas are listed in alphabetical order.

Original data source

The organisations responsible for collecting distribution and abundance data are listed for each species.

BTO - British Trust for Ornithology, RSPB - Royal Society for the Protection of Birds, JNCC - Joint Nature Conservation Committee, UD - University of Dundee, NCC - Nature Conservancy Council, GOSG - Golden Oriole Study Group, KC - Kite Committee, SEPT - Sea Eagle Project Team.

Data type

D1: Breeding distribution data 1968-72

D2: Breeding distribution data 1988-91

C: Count abundance data 1988-91 (mean count per visited tetrad)

Cp: Count abundance data from the Seabird Colony Register 1985-91 (total number of pairs)

Ci: Count abundance data from the Seabird Colony Register 1985-91 (total number of individuals)

F: Frequency abundance data 1988-91 (frequency of occurrence of species in visited tetrads)

Data availability

A: Available (subject to permission by originating organisation).

S: Sensitive species. Some records are confidential and these may not be released. The non-confidential records are available.

C: Confidential species. All records are confidential and will only be released in special circumstances.

<u>Species</u>	<u>Original Data Source</u>	<u>Data Type</u>	<u>Data Availability</u>
Avocet	BTO	D1,D2,C,F	A
Arctic Skua	JNCC	D1,D2,Cp,F	A
Arctic Tern	JNCC	D1,D2,Cp,F	A
Barn Owl	BTO	D1,D2,C,F	A
Bearded Tit	BTO	D1,D2,C,F	A
Bittern	BTO	D1,D2,C,F	S
Blackbird	BTO	D1,D2,F	A
Blackcap	BTO	D1,D2,F	A
Black Grouse	BTO	D1,D2,C,F	A
Black Guillemot	JNCC	D1,D2,Ci,F	A
Black-headed Gull	JNCC	D1,D2,Cp,F	A
Black-necked Grebe	BTO	D1,D2,C,F	C
Black-tailed Godwit	BTO	D1,D2,C,F	S
Black-throated Diver	RSPB	D1,D2,C,F	S
Black Redstart	BTO	D1,D2,C,F	A
Blue Tit	BTO	D1,D2,F	A
Bullfinch	BTO	D1,D2,F	A
Buzzard	BTO	D1,D2,C,F	S
Canada Goose	BTO	D1,D2,C,F,	A
Capercaillie	BTO	D1,D2,C,F	A
Carrion Crow	BTO	D1,D2,F	A
Cetti's Warbler	BTO	D1,D2,C,F	A
Chaffinch	BTO	D1,D2,F	A
Chiffchaff	BTO	D1,D2,F	A
Chough	BTO	D1,D2,C,F	S
Cirl Bunting	RSPB	D1,D2,C,F	A
Coal Tit	BTO	D1,D2,F	A
Collared Dove	BTO	D1,D2,F	A
Common Crossbill*	BTO	D1,D2,C,F	A
Common Gull	JNCC	D1,D2,Cp,F	A
Common Sandpiper	BTO	D1,D2,F	A
Common Scoter	BTO	D1,D2,C,F	A
Common Tern	JNCC	D1,D2,Cp,F	A
Coot	BTO	D1,D2,C,F	A
Cormorant	JNCC	D1,D2,Cp,F	A
Corn Bunting	BTO	D1,D2,F	A
Corncrake	RSPB	D1,D2,C,F	A
Crane	BTO	D2	C
Crested Tit	BTO/RSPB/UD	D1,D2,C,F	A
Cuckoo	BTO	D1,D2,F	A
Curlew	BTO	D1,D2,F	A
Dartford Warbler	BTO	D1,D2,C,F	A
Dipper	BTO	D1,D2,C,F	S
Dotterel	BTO/NCC	D1,D2,C,F	A
Dunlin	BTO	D1,D2,C,F	A

<u>Species</u>	<u>Original Data Source</u>	<u>Data Type</u>	<u>Data Availability</u>
Dunnock	BTO	D1,D2,F	A
Egyptian Goose	BTO	D1,D2,C,F	A
Eider	BTO	D1,D2,C,F	A
Fieldfare	BTO	D1,D2,C,F	A
Firecrest	BTO	D1,D2,C,F	A
Fulmar	JNCC	D1,D2,Cp,F	A
Gadwall	BTO	D1,D2,C,F	A
Gannet	JNCC	D1,D2,Cp,F	A
Garden Warbler	BTO	D1,D2,F	A
Garganey	BTO	D1,D2,C,F	A
Goldcrest	BTO	D1,D2,F	A
Golden Eagle	BTO	D1,D2,C,F	S
Goldeneye	BTO	D1,D2,C,F	A
Golden Oriole	BTO/GOSG	D1,D2,C,F	C
Golden Pheasant	BTO	D1,D2,C,F	A
Golden Plover	BTO	D1,D2,C,F	A
Goldfinch	BTO	D1,D2,F	A
Goosander	BTO	D1,D2,C,F	A
Goshawk	BTO	D1,D2,C,F	S
Grasshopper Warbler	BTO	D1,D2,C,F	A
Great Black-backed Gull	JNCC	D1,D2,Cp,F	A
Great Crested Grebe	BTO	D1,D2,C,F	A
Great Skua	JNCC	D1,D2,Cp,F	A
Great Spotted Woodpecker	BTO	D1,D2,F	A
Great Tit	BTO	D1,D2,F	A
Greenfinch	BTO	D1,D2,F	A
Greenshank	BTO	D1,D2,C,F	A
Green Woodpecker	BTO	D1,D2,F	A
Grey Heron	BTO	D1,D2,C,F	A
Greylag Goose	BTO	D1,D2,C,F	A
Grey Partridge	BTO	D1,D2,F	A
Grey Wagtail	BTO	D1,D2,F	A
Guillemot	JNCC	D1,D2,Ci,F	A
Hawfinch	BTO	D1,D2,C,F	A
Hen Harrier	BTO/RSPB	D1,D2,C,F	A
Herring Gull	JNCC	D1,D2,Cp,F	A
Hobby	BTO	D1,D2,C,F	A
Honey Buzzard	BTO	D1,D2,C,F	C
Hooded Crow	BTO	D1,D2,F	A
House Martin	BTO	D1,D2,F	A
House Sparrow	BTO	D1,D2,F	A
Hybrid Crow	BTO	D1,D2,F	A
Jackdaw	BTO	D1,D2,F	A
Jay	BTO	D1,D2,F	A
Kestrel	BTO	D1,D2,F	A
Kingfisher	BTO	D1,D2,C,F	A

<u>Species</u>	<u>Original Data Source</u>	<u>Data Type</u>	<u>Data Availability</u>
Kittiwake	JNCC	D1,D2,Cp,F	A
Lady Amherst's Pheasant	BTO	D1,D2,C,F	A
Lapwing	BTO	D1,D2,F	A
Lesser Black-backed Gull	JNCC	D1,D2,Cp,F	A
Lesser Spotted Woodpecker	BTO	D1,D2,C,F	A
Lesser Whitethroat	BTO	D1,D2,F	A
Linnet	BTO	D1,D2,F	A
Little Grebe	BTO	D1,D2,C,F	A
Little Owl	BTO	D1,D2,C,F	A
Little Ringed Plover	BTO	D1,D2,C,F	S
Little Tern	JNCC	D1,D2,Cp,F	A
Long-eared Owl	BTO	D1,D2,C,F	A
Long-tailed Tit	BTO	D1,D2,F	A
Magpie	BTO	D1,D2,F	A
Mallard	BTO	D1,D2,F	A
Mandarin Duck	BTO	D1,D2,C,F	A
Manx Shearwater	JNCC	D1,D2,Cp,F	A
Marsh Harrier	BTO	D1,D2,C,F	S
Marsh Tit	BTO	D1,D2,F	A
Marsh Warbler	BTO	D1,D2,C,F	C
Meadow Pipit	BTO	D1,D2,F	A
Mediterranean Gull	BTO	D1,D2,C,F	A
Merlin	BTO	D1,D2,C,F	A
Mistle Thrush	BTO	D1,D2,F	A
Montagu's Harrier	BTO	D1,D2,C,F	S
Moorhen	BTO	D1,D2,F	A
Mute Swan	BTO	D1,D2,C,F	A
Nightingale	BTO	D1,D2,C,F	A
Nightjar	BTO	D1,D2,C,F	A
Nuthatch	BTO	D1,D2,F	A
Osprey	BTO	D1,D2,C,F	C
Oystercatcher	BTO	D1,D2,F	A
Peregrine	BTO/RSPB/NCC	D1,D2,C,F	A
Pheasant	BTO	D1,D2,F	A
Pied Flycatcher	BTO	D1,D2,F	A
Pied Wagtail	BTO	D1,D2,F	A
Pintail	BTO	D1,D2,C,F	A
Pochard	BTO	D1,D2,C,F	A
Ptarmigan	BTO	D1,D2,C,F	A
Puffin	JNCC	D1,D2,Ci,F	A
Purple Sandpiper	BTO	D2	C
Quail	BTO	D1,D2,C,F	A
Raven	BTO	D1,D2,C,F	A
Razorbill	JNCC	D1,D2,Ci,F	A
Red-backed Shrike	BTO	D1,D2,C,F	A
Red-breasted Merganser	BTO	D1,D2,C,F	A

<u>Species</u>	<u>Original Data Source</u>	<u>Data Type</u>	<u>Data Availability</u>
Red Grouse	BTO	D1,D2,F	A
Red Kite	BTO/KC	D1,D2,C,F	C
Red-legged Partridge	BTO	D1,D2,F	A
Red-necked Grebe	BTO	D2	C
Red-necked Phalarope	BTO	D1,D2,C,F	S
Redpoll	BTO	D1,D2,F	A
Redshank	BTO	D1,D2,F	A
Redstart	BTO	D1,D2,F	A
Red-throated Diver	BTO	D1,D2,C,F	A
Redwing	BTO	D1,D2,C,F	A
Reed Bunting	BTO	D1,D2,F	A
Reed Warbler	BTO	D1,D2 F	A
Ringed Plover	BTO	D1,D2,C,F	A
Ring-necked Parakeet	BTO	D1,D2,C,F	A
Ring Ouzel	BTO	D1,D2,C,F	A
Robin	BTO	D1,D2,F	A
Rock Dove/Feral Pigeon	BTO	D1,D2,F	A
Rock Pipit	BTO	D1,D2,F	A
Rook	BTO	D1,D2,F	A
Roseate Tern	JNCC	D1,D2,C,F	A
Ruddy Duck	BTO	D1,D2,C,F	A
Ruff	BTO	D1,D2,C,F	A
Sand Martin	BTO	D1,D2,C,F	A
Sandwich Tern	JNCC	D1,D2,Cp,F	A
Savi's Warbler	BTO	D1,D2,C,F	A
Scottish Crossbill*	BTO	D1,D2,C,F	A
Sedge Warbler	BTO	D1,D2,C,F	A
Shag	JNCC	D1,D2,Cp,F	A
Shelduck	BTO	D1,D2,C,F	A
Short-eared owl	BTO	D1,D2,C,F	A
Shoveler	BTO	D1,D2,C,F	A
Siskin	BTO	D1,D2,F	A
Slavonian Grebe	BTO	D1,D2,C,F	C
Skylark	BTO	D1,D2,F	A
Snipe	BTO	D1,D2,F	A
Snow Bunting	BTO	D1,D2,C,F	A
Song Thrush	BTO	D1,D2,F	A
Sparrowhawk	BTO	D1,D2,C,F	A
Spotted Crake	BTO	D1,D2	S
Spotted Flycatcher	BTO	D1,D2,F	A
Starling	BTO	D1,D2,F	A
Stock Dove	BTO	D1,D2,F	A
Stonechat	BTO	D1,D2,F	A
Stone Curlew	BTO/RSPB	D1,D2,C,F	S
Storm Petrel	JNCC	D1,D2,Cp,F	A
Swallow	BTO	D1,D2,F	A

<u>Species</u>	<u>Original Data Source</u>	<u>Data Type</u>	<u>Data Availability</u>
Swift	BTO	D1,D2,F	A
Tawny Owl	BTO	D1,D2,C,F	A
Teal	BTO	D1,D2,C,F	A
Temminck's Stint	BTO	D1,D2	C
Treecreeper	BTO	D1,D2,F	A
Tree Pipit	BTO	D1,D2,F	A
Tree Sparrow	BTO	D1,D2,F	A
Tufted Duck	BTO	D1,D2,C,F	A
Turtle Dove	BTO	D1,D2,F	A
Twite	BTO	D1,D2,F	A
Water Rail	BTO	D1,D2,C,F	A
Wheatear	BTO	D1,D2,F	A
Whimbrel	BTO	D1,D2,C,F	A
Whinchat	BTO	D1,D2,F	A
White-tailed Eagle	BTO/SEPT	D2,C,F	C
Whitethroat	BTO	D1,D2,F	A
Whooper Swan	BTO	D1,D2	S
Wigeon	BTO	D1,D2,C,F	A
Willow Tit	BTO	D1,D2,F	A
Willow Warbler	BTO	D1,D2,F	A
Woodcock	BTO	D1,D2,C,F	A
Wood Duck	BTO	D1,D2,C,F	A
Woodlark	BTO	D1,D2,C,F	A
Woodpigeon	BTO	D1,D2,F	A
Wood Sandpiper	BTO	D1,D2,C,F	S
Wood Warbler	BTO	D1,D2,F	A
Wren	BTO	D1,D2,F	A
Wryneck	BTO	D1,D2	A
Yellowhammer	BTO	D1,D2,F	A
Yellow Wagtail	BTO	D1,D2,F	A

* In the 1968-72 Breeding Atlas records of Common Crossbill and Scottish Crossbill are combined as 'Crossbill'. By the time of the 1988-91 Breeding Atlas, Crossbill had been split into the two separate species.

Notes

1. Coverage

Both the 1968-72 and 1988-91 breeding atlases covered every 10km grid square in England, Scotland and Wales. The above datasets contain all the information collected in these grid squares. Data are not provided for the Channel Islands.

2. Data supplier

The BTO will handle all requests for the above datasets and will supply data, provided that they are available and the requester agrees to the BTO's Policy and Conditions for CIS data requests (see Appendix 2).

3. Data support

Recipients of breeding bird data for use with CIS will be provided with up to three free consultations. A consultation constitutes the communication necessary to solve the queries raised at any one time by a licence holder. A communication may be by fax, phone, mail or e-mail (although the latter not presently available at the BTO). Further consultations will be charged at BTO standard rates, which are available upon request.

4. Cost

The charge for supplying breeding bird data to CIS licence holders is £250 plus VAT per species. This charge covers distribution data from both atlases (1968-72 and 1988-91) and abundance data from the 1988-91 atlas. The charge will be reviewed after six months.

5. Copyright conditions

The table above indicates the original source of each dataset. These sources must be acknowledged in any publication or report that uses information from the dataset. For the purposes of CIS data requests, the BTO holds the copyright for those datasets for which it is the sole or part original data source. Some datasets, however, are wholly owned outside the BTO and in these cases the organisation originating the data holds the copyright. Permission will have to be obtained from these organisations before any of their datasets can be supplied to a CIS licence holder. This permission will be sought by the BTO on behalf of the CIS licence holder.

