# Non-native breeding birds in the UK, 2015–20

### Mark A. Eaton & the Rare Breeding Birds Panel



Red-crested Pochard Netta rufina with Tufted Ducks Aythya fuligula and Gadwall Mareca strepera

Abstract This report covers records of rare, non-native birds breeding in the UK during the six years 2015–20. A total of 22 species were reported as showing signs of breeding and 18 of these were confirmed breeding. Perhaps surprisingly, only one species, Red-crested Pochard Netta rufina, appears to be increasing, whereas eight species appear to have declined. Ruddy Duck Oxyura jamaicensis and Monk Parakeet Myiopsitta monachus are nearly extinct in the UK due to government-led control programmes, and the last male Lady Amherst's Pheasant Chrysolophus amherstiae died in 2016, apparently ending the 120-year history of this species breeding in the UK.

#### Introduction

This is the 12th report by the Rare Breeding Birds Panel (RBBP) summarising the breeding occurrence of non-native species in the UK. It includes reports of 22 rare, non-native species, as well as summaries on the status of the eight commoner species and a summary of species previously reported upon by the RBBP but which did not occur in the current reporting period (Appendix 1). To match other national reporting schemes, such as the BTO/JNCC/RSPB Breeding Bird Survey (Heywood *et al.* 2023), the geographical scope of the report includes the Isle of Man and the Channel Islands (as well as Britain and

Northern Ireland), but the term 'United Kingdom' is used as a shorthand reference.

Since 1996, the RBBP has collated records of confirmed or potential breeding by non-native species for which the total number of breeding pairs each year is fewer than 300. Initially, reports on rare non-native breeding birds were produced annually, in the same way as for the separate reports on native species. However, this moved to a three-year cycle from 2003 onwards (Holling *et al.* 2007), and now, following the last report covering 2012–14 (Holling *et al.* 2017), we present a summary for the six years from 2015 to 2020. This longer period means that we are reporting on the

same periodicity as is used for compiling UK population estimates by the Avian Population Estimates Panel (e.g. Woodward *et al.* 2020).

The current RBBP is made up of Dawn Balmer (Chair), Mark Eaton (Secretary), Helen Baker, Ian Francis, Mark Holling, David Norman, Andy Stanbury and David Stroud. The Panel is funded by the JNCC (on behalf of the country nature conservation bodies) and the RSPB, with an additional financial contribution from the BTO.

# An overview of rare non-native breeding birds in the UK, 2015–20

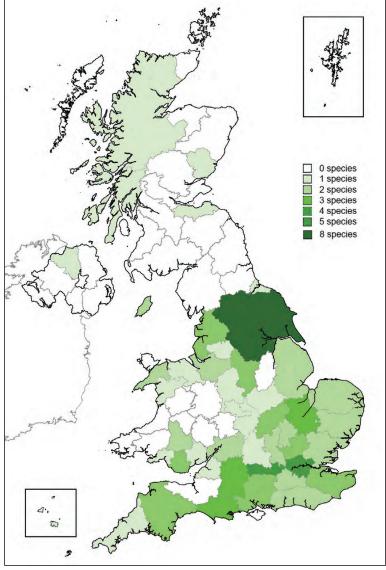
In all, 22 rare, non-native breeding species were reported over the six-year period, of which 18 were confirmed as having bred in at least one year (two, Cackling Goose *Branta* 

hutchinsii and Lanner Falcon Falco biarmicus, bred only in mixed pairings). As is the norm, the majority of species reported upon here are Anatidae (two swans, five geese and four ducks) and Galliformes (six species); no passerine species are reported upon during 2015-20. Only four species were confirmed as breeding in every year during the period. Most of the species covered in this report are extremely rare as breeding birds in the UK, and only four species - Black Swan Cygnus atratus, Red-crested Pochard Netta rufina, Muscovy Duck Cairina moschata and Monk Parakeet Myiopsitta monachus - exceeded ten pairs in any single year.

Over the 25 years covered by the RBBP's reporting on non-natives, three species have increased to the point where they are no longer considered rare, and are thus no longer covered by this report: Barnacle Goose *Branta leucopsis*, Egyptian Goose *Alopochen aegyptiaca* and Rose-ringed Parakeet *Psittacula krameri*. There are, however,

no species currently included here that are approaching our upper threshold for reporting of 300 pairs. Indeed, only one species, Red-crested Pochard, is assessed as increasing at all. There are a number of species that have small populations with no discernible signs of increase, for example Snow Goose *Anser caerulescens*, Black Swan and Eagle Owl *Bubo bubo*, and there are others, such as Muscovy Duck and Indian Peafowl *Pavo cristatus*, for which low levels of reporting may be obscuring any actual trend.

More strikingly, there are eight species that have been assessed as having declining populations. Four – Bar-headed Goose *Anser indicus*, White-fronted Goose *Anser albifrons*, Wood Duck *Aix sponsa* and Wild Turkey *Meleagris gallopavo* – have never been any-



**Fig. 1.** Number of rare non-native breeding birds by recording area, 2015–20. Only records of species with breeding evidence (not presence-only) are included in county totals.

thing other than occasional breeders arising from recent escapes or releases, and that status is likely to continue as such; but four other species have shown substantial declines bringing populations to, or close to, extinction in the UK. The Golden Pheasant Chrysolophus pictus continues to hang on in a few counties but records of breeding are infrequent and it seems likely that, at least in some areas, the species persists only through illegal releases. The last remaining Lady Amherst's Pheasant C. amherstiae, from the established population in Bedfordshire and Buckinghamshire, died in 2016. There is reason to doubt whether either species ever had genuinely self-sustaining populations in the UK. The driver of decline for the two other declining species in this report is quite different: the UK populations of both Ruddy Duck Oxyura jamaicensis and Monk Parakeet Myiopsitta monachus have been reduced to just a few individuals as a consequence of government-led eradication programmes.

Mapping rare, non-native breeding birds by county shows a clear pattern of higher diversity in southern counties, though there is some effect of county size, e.g. in the case of Yorkshire (fig. 1). This may in part be related to the higher density of observers in the south resulting in better reporting of non-natives, but it is likely that there is a positive relationship between high human density and the presence of non-native species, given that the latter arise from escape or release from captivity. In addition, some species with native ranges in warmer climes, such as Black Swan, may be constrained currently to the south of the UK because of the colder temperatures in northern Britain.

# Why record rare non-native breeding species?

The impacts of non-native species are a major driver of loss of biodiversity worldwide and a significant issue for conservation (IPBES 2019). Although some non-native species appear to be harmless, others are invasive and may have a serious impact on native species and ecosystems – for example, through competition, displacement, hybridisation and/or modification of habitats. Indeed, Target 6 of the recently adopted Kunming-Montreal Global Biodiversity

Framework specifically addresses the need for countries to prevent and control invasive non-natives. For these reasons, it is critical to report and monitor their occurrence and particularly any attempts at breeding; the data and information presented here helps UK governments to fulfil their international obligations under Article 8(h) of the Convention on Biological Diversity.

In the UK, any deliberate release of a nonnative species (apart from Common Pheasant *Phasianus colchicus* and Red-legged Partridge *Alectoris rufa*) is illegal under either the 1981 Wildlife and Countryside Act (as amended, in Great Britain) or the 1985 Wildlife (Northern Ireland) Order.

The status of non-native breeding species as documented in these reports is also used by the British Ornithologists' Union Records Committee (BOURC) to assess inclusion of species on the British List. Non-native species with populations deemed to be self-sustaining are included in Category C of the British List (see Dudley 2005, Holling *et al.* 2011). Non-native species where the populations are thought not to be currently self-sustaining are placed in Category E; those which have bred at some point within Britain are designated E\*.

#### The status of commoner nonnative breeding birds in the UK

The RBBP's remit in the context of this report is to monitor populations of nonnative species that may be establishing themselves, or have the potential to establish themselves, in the UK. Once the population of a non-native species has outgrown 'rare' status, the Panel ceases its reporting. Since the RBBP began monitoring non-natives in 1996, this has happened in the case of Egyptian Goose (last reported upon in 2011), Barnacle Goose (2011) and Rose-ringed Parakeet (2008). There are, of course, other species which exceeded this threshold prior to this, in some cases centuries ago, and table 1 provides a brief summary of the status of these commoner species.

The UK's two commonest non-native breeding birds are the only species that have their populations supplemented by annual introductions on a massive scale. Aebischer (2019) estimated that 47 million (95% confi-

Table 1. The status of commoner non-native breeding species in the UK.

			• .			
	date and location of first escapes/ releases	current breeding population <sup>1</sup>	10-year population trend <sup>2</sup>	long-term population trend <sup>3</sup>	GB range <sup>4</sup>	GB range trend <sup>5</sup>
Canada Goose Branta canadensis	late 19th century (England)	54,500	+33%	+122%	1,790	+49%
Barnacle Goose Branta leucopsis	late 20th century (England)	1,550	+47%	+273%	82	+88%
Egyptian Goose Alopochen aegyptiaca	late 17th century (England)	1,850	+54%	+1,726%	232	+163%
Mandarin Duck Aix galericulata	early 20th century (England)	4,400	+90%	+611%	497	+121%
Common Pheasant <i>Phasianus colchicus</i>	11th century (probably England)	2,350,000	+3%	+34%	2,392	+5%
Red-legged Partridge Alectoris rufa	1770s (England)	72,500	+7%	+26%	1,645	+35%
Little Owl Athene noctua	1842 (England)	3,600	-40%	-70%	1,238	-11%
Rose-ringed Parakeet Psittacula krameri	1969 (England)	12,000	+90%	1,960%	91	+43%

<sup>&</sup>lt;sup>1</sup> Number of pairs, taken from Woodward *et al.* (2020). Note that these are estimates derived from data up to 2017 (or earlier, for some species), so may be underestimates for current populations of rapidly increasing species such as Egyptian Goose and Rose-ringed Parakeet.

dence intervals 39–57 million) Common Pheasants and 10 million (95% CI 8.1–13 million) Red-legged Partridges were released for shooting in the UK in 2016. As a consequence, populations of these two species peak in the early autumn, following the release of birds, and the estimates of breeding populations given in table 1 represent the low point of their UK populations.

Rose-ringed Parakeet, which is continuing to expand from a core distribution in southeast England, is now abundant in some areas. For example, the winter roost at Kingston-on-Thames, Greater London, reached 5,600 birds in December 2020 (LNHS 2022). To date, there is little evidence of harmful

impacts in the UK (Newson et al. 2011a), though studies elsewhere across the species' non-native range have shown negative impacts on other hole-nesting species, such as the Eurasian Nuthatch Sitta europaea (Strubbe & Matthysen 2009) and Greater Noctule Nyctalus lasiopterus bats (Alcaldé et al. 2016), and serious agricultural damage (e.g. Shiels & Kalodimos 2019).

A number of theories of the source of Rose-ringed Parakeets in the UK have been mooted, including that the population originated from releases on the set of the 1951 film *The African Queen*, starring Humphrey Bogart and Katharine Hepburn, or from a pair released by Jimi Hendrix in 1968. An

<sup>&</sup>lt;sup>2</sup> Trend from BTO/JNCC/RSPB Breeding Bird Survey 2011–21 (Heywood *et al.* 2023), except for Barnacle Goose, which is the winter trend for the naturalised population, from the BTO/JNCC/RSPB/WWT Wetland Bird Survey for the ten years 2010/11–2020/21 (Austin *et al.* 2023).

<sup>&</sup>lt;sup>3</sup> Trend from BTO/JNCC/RSPB Breeding Bird Survey 1995–21 (Heywood *et al.* 2023), except for Barnacle Goose, which comes from the BTO/JNCC/RSPB Wetland Bird Survey for the 25 years 1995/96–2020/21 (Austin *et al.* 2023).

<sup>&</sup>lt;sup>4</sup> Number of 10-km grid squares occupied by birds in the breeding season in *Bird Atlas 2007–11* (Balmer *et al.* 2013). Note that there are 2,876 10-km squares in Britain.

<sup>&</sup>lt;sup>5</sup> Percentage change in the number of 10-km grid squares occupied by birds in the breeding season between the 1988–91 and 2007–11 breeding bird atlases (Gibbons *et al.* 1993; Balmer *et al.* 2013).

analysis by Heald *et al.* (2019) debunked these glamourous suggestions, finding no spatial pattern of sightings around the purported release locations and instead suggested that the population resulted from multiple releases and escapes in southeast England.

While the rate of increase in the UK's breeding population of Canada Goose Branta canadensis appears to have stabilised, with only a moderate, slowed increase over the last ten years, three scarcer wildfowl species -Barnacle Goose, Egyptian Goose and Mandarin Duck Aix galericulata – are continuing to increase rapidly. The UK population of Mandarin Duck has nearly doubled in the most recent decade of monitoring, with breeding confirmed as far north as Highland; a similar range expansion and population increase has been recorded in Europe, with the range expanding west, south and east from an origin in the Netherlands (Keller et al. 2020). In some county recording areas (e.g. Cheshire & Wirral (Norman 2010)), Mandarin Duck is the third-most widespread breeding duck, exceeded only by Mallard Anas platyrhynchos and Tufted Duck Aythya fuligula.

The ecology and movements of the UK's rapidly growing naturalised Barnacle Goose populations are the subject of a new Naturalised Barnacle Goose study. In 2022 alone, 1,298 Barnacle Geese were caught, ringed and colour-marked, and a full census of the population is being conducted in 2023 (see https://waterbirdcolourmarking.org/barnacle-goose).

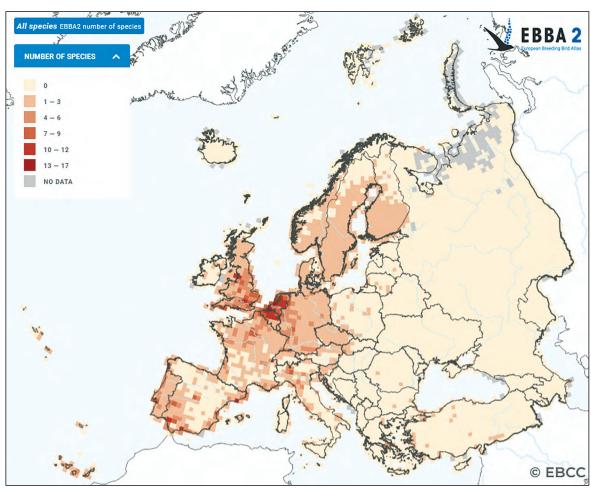
By contrast, the Little Owl Athene noctua, a species that was introduced into Britain in 1842, has been declining rapidly in recent years. If it were a naturally occurring species in the UK, it would be Red-listed. It remains widespread in England, however, with some range expansion at the northern margin, but range contraction in southwest England and Wales (Balmer et al. 2013). The decline mirrors that across the species' native range in western and, in particular, central Europe (Keller et al. 2020), with the species reported as being on the brink of extinction in several countries (e.g. it has declined by around 90% in the Czech Republic in two decades; Chrenková et al. 2017). As a consequence, the species is the recipient of national conservation programmes, including releases to reinforce the breeding population (e.g. Bušina 2021). The driver of decline in mainland Europe is low food availability as a result of intensive farmland management (Thorup *et al.* 2010).

# Non-native breeding birds across Europe

The publication of the European Breeding Bird Atlas 2 (EBBA2; Keller et al. 2020) gave a valuable update on the current status of non-native species across Europe, as well as showing change in species' distribution since the first atlas, which was based on data collected in the 1980s (EBBA1; Hagemeijer & Blair 1997). EBBA2 reported the confirmed breeding of 57 species regarded as non-native at the European scale (i.e. that do not breed naturally anywhere within Europe; this does not include species such as Red-legged Partridge and Common Pheasant, which occur naturally in parts of the Continent although are introduced elsewhere in Europe, including the UK). This is almost 10% of Europe's breeding bird species, and a marked increase since the 1980s - only 18 non-native species were reported breeding in Europe by EBBA1.

The six most widespread non-native species, recorded in more than 100 50-km squares during EBBA2 fieldwork during 2013-17, were Black Swan, Canada Goose, Egyptian Goose, Mandarin Duck, Roseringed Parakeet and Common Waxbill Estrilda astrild, with the last being the only species not found in the UK (and unlikely to be, at least for some time, as its Iberian distribution is restricted by the temperature of the coldest winter month). Of the species to have arrived as breeders since EBBA1, Black Swan has shown the biggest expansion, with breeding confirmed in nine countries. Of the 18 species that were breeding in Europe by the time of EBBA1, seven have at least doubled their range, with the range of Egyptian Goose increasing 13-fold.

Perhaps unsurprisingly, only three nonnative species showed a range retraction in Europe over the 30-year period between the two atlases: Ruddy Duck (owing to the efforts to eliminate the population – see the species account below), Golden Pheasant (reflecting the UK decline, as this species has not been introduced elsewhere in Europe) and



**Fig. 2.** Diversity of non-native species by 50-km square as recorded by the *European Breeding Bird Atlas 2* (Keller et al. 2020).

Northern Bobwhite *Colinus virginianus*. The last species seems unable to establish truly self-sustaining populations in Europe and populations have dwindled following cessation or reduction of releases for shooting purposes.

Red-billed Leiothrix Leiothrix lutea is an Asian passerine that has become established and locally common in discrete areas of France, Italy, Spain and Portugal. It was recorded in 25 50-km squares by EBBA2. Broughton et al. (2022) reviewed the status in Europe and highlighted the potential for the species to colonise the UK, with possible although largely unproven - deleterious effects on native species. They located 16 records of the species in the UK between 2019 and 2022 and suggested that a cluster of records from Wiltshire and Somerset indicated that colonisation could already be under way. RBBP has, however, yet to receive a breeding record of the species.

Much as the establishment of the Ruddy Duck in the UK led to small breeding populations in France and Spain, it seems highly likely that the population increase and range expansion of some non-native birds in Europe will result in vagrants to the UK becoming established here, particularly given the proximity of the hotspot of non-native diversity in the Low Countries (fig. 2). The non-native assemblage in this hotspot is dominated by waterfowl species for which the North Sea may not provide much of a barrier, such as Cackling Goose and Barheaded Goose *Anser indicus*.

# Data sources and issues with recording of non-native breeding birds in the UK

The data sources for this report are the same as for native rare breeding birds in the UK, which are reported on annually (most recently Eaton *et al.* 2022) and described in Stroud *et al.* (2023). The most important source (even more so than for native species) is the annual returns made by

county bird recorders, and using those returns we have reported on non-native species in an appendix to our main annual reports since our report covering 2015 (Holling et al. 2017). Additional effort was made to gather records of rare non-native breeding birds for this report by contacting each current county bird recorder, providing an extract of the data we held for the years 2015-20 and asking whether they were aware of any additional records that had not been submitted previously. In addition, all recorders were asked about the presence of non-native birds (excepting the common species reviewed above) in the wild regardless of breeding evidence; recorders from 39 counties responded to this request.

Even with this additional effort, we are aware that the reporting of non-native breeding birds in the UK is incomplete, and thus the numbers presented here are likely to underestimate true population sizes for most of the 22 species reported upon. They are, however, still the best assessments available. We welcome records of *all* nesting and potential nesting pairs of the species covered in this report, and we hope that its publication will encourage improved recording.

Since non-native wildfowl occur widely but do not breed in most locations, the Panel aimed to collect only those records that would be categorised as probable or confirmed breeding for this group of species. Thus, birds apparently paired should be reported, as well as those seen on nests or with broods of young. For other species, mainly exotic gamebirds and escaped raptors, evidence of breeding is often harder to determine; breeding pairs may be elusive and, in some cases, individuals may pair up in mixed pairs with native species. Accordingly, it is useful to submit all records of individuals, as continued presence may be an indication of a breeding attempt. As is the case for wildfowl, recording the sex of the birds is important, where possible, especially for the pheasants, since the number of males recorded can be a useful metric to compare between years. Many records that reach the Panel give only the number of birds seen, with no indication of how many of each sex were counted.

Observers may struggle to determine whether a non-native species is living 'in the

wild', particularly for species which may be kept free-ranging around gardens or farms, such as Helmeted Guineafowl *Numida meleagris* and Indian Peafowl. Birds that are clearly captive and/or seen to be pinioned are straightforward, and should be excluded. Populations of some species outside collections may be maintained by artificial feeding, but this is not a reason to exclude the record; the sustainability of a population is not important in choosing whether to report a bird. Birds such as Indian Peafowl often persist in the wild, perhaps having recently escaped or been deliberately released from a collection, and have the potential to breed in the wild.

Records of non-natives should be submitted via county recorders and we ask recorders to be diligent in collating actual or potential breeding records and to submit them annually to the RBBP Secretary. Many county bird reports note apparently escaped species in an appendix at the end of the systematic list - useful records can often be found in these sections, but even these do not always reach the RBBP. The full list of non-native species considered by the RBBP is available at www.rbbp.org.uk but breeding attempts by any other rare nonnative species will also be archived and included in future reports. We welcome the submission of any records of breeding nonnative species from any year, including those that might have been overlooked from previous years.

It is especially useful if records are submitted with a breeding evidence code, and BirdTrack (www.birdtrack.net) makes it easy to enter such a code, allowing those records to be filtered and used in this report. As well as codes used to indicate confirmed breeding, the use of the code 'P' to indicate a pair in suitable breeding habitat is especially useful.

Note that data for 2020 may have been affected by Covid-lockdown restrictions imposed across the UK that spring – see Eaton *et al.* (2022) for a review of the impact on the reporting of native rare breeding birds. It may be that the impact was less marked for at least some non-native species, given a bias in distributions towards urban areas in which recording was maintained (or even enhanced) during lockdown periods.

# **Species accounts and terminology**Species account banners

In this report the banners at the head of each species account, alongside the species name, include five pieces of information:

- 1. An indication of breeding status, based on the occurrence of *confirmed* breeding over the last ten years (in this report the ten years concerned are 2011–20):
  - Regular breeder breeding has been confirmed in at least eight out of the last ten years;
  - Occasional breeder breeding has been confirmed in 1–7 of the last ten years;
  - Former breeder confirmed breeding occurred before 2011 but has not been recorded since;
  - Potential breeder breeding has never been confirmed in the UK, but pairs or territorial birds have been recorded in potentially suitable breeding habitat.
- 2. A population estimate, based on the mean annual maximum population size (in pairs or numbers of individuals) from the six years covered by this report (2015–20).
- 3. An indication of the population trend, whether increasing, stable or decreasing. Note that this trend is based only on the information received by the RBBP, and is not a formal statistical assessment of trend.
- 4. The category in which the species is placed on the British List by the BOURC (see BOU 2022).
- 5. A description of the natural breeding range of the species.

#### Recording areas

For a key to the recording areas (usually 'county') used in this report see Holling *et al.* (2007); these match the recording areas used by bird recorders across the UK, with Gower

and East Glamorgan presented separately, *contra* Ballance & Smith (2008).

To reduce the possibility of duplication with surrounding areas, records from the Greater London recording area, which covers all areas within a 20-mile radius of St Paul's Cathedral, are reported as follows. Under the Greater London heading we list only records from the Inner London area and the old county of Middlesex. Records away from this area and within the counties surrounding London – Hertfordshire, Essex, Kent and Surrey – are listed under those county headings.

#### Breeding evidence

The definitions of 'Confirmed breeding', 'Probable breeding' and 'Possible breeding' follow those recommended by the European Bird Census Council (EBCC) (Hagemeijer & Blair 1997). It is important to note that confirmed breeding is not the same as successful breeding; nests that fail with eggs or with young still fall into the confirmed category. A successful breeding pair is one that fledges at least one young bird from a nesting attempt. Readers should note that, in all cases, the identity of the birds has been confirmed; it is only breeding status that is possible/probable/confirmed. The report does not routinely include breeding records of hybrid individuals; mixed pairs are, however, included where one of the parents is a species or race on the RBBP list.

Beneath the heading banner of each species account, the number of pairs for each of the six years in this report are given in the format '1–4 pairs', which indicates (in this case) one confirmed breeding pair and a possible maximum total of four breeding pairs. A single rule on its own indicates no breeding reported.

For those species where the numbers of pairs in each county are presented in a table, the same format is used as in the heading. Where a single number is given, this refers to the number of confirmed breeding pairs; if a range is given, it refers to the number of confirmed pairs then the maximum total number of pairs.

#### **Cackling Goose Branta hutchinsii**

Occasional breeder (1/10) 6-yr mean <1 bp

Native to Arctic North America

AE

2015 - 2016 - 2017 1 mixed pair 2018 - 2019 - 2020 -

One bred with a Barnacle Goose *B. leucopsis* in Sussex in 2017; the pair was seen with three hybrid young on 5th June. This is the first breeding record of any type that the RBBP has received for this species. In recent years, there have been non-breeding records of birds in southeast England, presumably originating from the naturalised population that breeds mainly in urban areas of the Netherlands (460–770 pairs in 2013–15, Sovon Vogelonderzoek Nederland 2018); it is possible that future breeding records may arise from this source.

#### **Bar-headed Goose Anser indicus**

Occasional breeder (5/10) 6-yr mean <1 bp; declining

E\*

Native to central Asia from Mongolia to Tibetan Plateau

2015 - 2016 1 pair 2017 - 2018 1 presumed mixed pair 2019 - 2020 -

There was only one confirmed breeding record during the period covered: a nest with eggs in Yorkshire in 2016. A single gosling seen with an adult bird in Meirionnydd in 2018 was presumed to have arisen from a hybrid pairing, since a second adult Bar-headed Goose was never observed. In Berkshire, a single bird was seen paired with a Canada Goose in 2017 and with a Greylag Goose *Anser anser* in 2018, but no further evidence of breeding was obtained. Numbers of this species reported breeding in the UK have declined since the Panel began monitoring non-native species in 1996; 22 confirmed breeding pairs were reported across our first six years of coverage, in comparison with just two pairs over the last six years. The species does, however, still occur widely – 22 of 39 corresponding county recorders reported the species in the wild over the 2015–20 period.



285. Bar-headed Geese Anser indicus with Greylag Geese A. anser, Suffolk, January 2020.

lames Kennerley

#### **Emperor Goose Anser canagicus**

Occasional breeder (4/10) 6-yr mean <1 bp; stable

E\*

Native to Alaska and Siberia

2015 1 pair 2016 1 pair 2017 1 pair 2018 1 pair 2019 0-1 pairs 2020 -

Birds were present at a site in Cumbria between 2015 (five individuals) and 2019 (two individuals), and a pair made an unsuccessful breeding attempt there each year between 2015 and 2018. In addition, an Emperor Goose raised one chick in a mixed pairing with a Barnacle Goose in 2018 and between one and three Emperor × Barnacle Goose hybrids were present throughout the period.

#### **Snow Goose Anser caerulescens**

#### Occasional breeder (6/10) 6-yr mean 1 bp; stable

AC2E\*

Native breeder in Arctic North America, with smaller numbers in northeast Siberia

2015 2 pairs 2016 5 pairs 2017 3 pairs 2018 1 pair 2019 1-3 pairs 2020 -

A flock of Snow Geese has been resident on Coll, Argyll, for many decades – this originally arose from birds held in a collection at Treshnish Point on Mull in the 1950s and 1960s. A feral population established on Mull but then moved to Coll in 1983, where it has sustained itself ever since (Forrester *et al.* 2012). In recent years, however, numbers have dwindled and, within the current period, they fell from 20 in 2015 to eight in 2020. The only successful breeding reported was in 2019, when one of the three pairs attempting to breed managed to produce a single chick. There may have been other, unsuccessful, breeding attempts in other years that were not reported.

Away from Coll, the Panel is aware of two sites with resident flocks of Snow Geese from which there are occasional breeding attempts. Two pairs bred in **Oxfordshire** in 2015, and four juvenile birds in the same flock in 2016 presumably came from an undetected breeding attempt at the same location. A site in **Yorkshire** had a resident flock of between 24 and 29 individuals; breeding occurred in 2016 (four pairs with eight goslings reported), 2017 (three pairs) and 2018 (one pair).

#### White-fronted Goose Anser albifrons

Occasional breeder (1/10) 6-yr mean <1 bp; declining

AE\*

Native breeder to Arctic regions of North America and Asia

2015 - 2016 - 2017 1 pair 2018 - 2019 - 2020 -

In 2017, a pair of unknown origin and unspecified race appeared with two young at a site in Essex on 27th August; they had not bred there but were believed likely to have bred elsewhere in Essex or Greater London. As the statistics above show, White-fronted Geese are occasional nonnative breeders in the UK, but this was not always the case; breeding was confirmed annually between 1996 and 2003, involving birds of both the Greenland *A. a. flavirostris* (from a collection release) and the European *A. a. albifrons* race.

#### Black Swan Cygnus atratus

Regular breeder (10/10) 6-yr mean 16 bp; stable

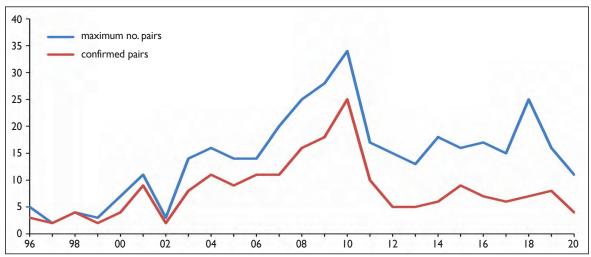
E\*

Native to Australia

2015 9–16 pairs 2016 7–17 pairs 2017 6–15 pairs 2018 7–25 pairs 2019 9–16 pairs 2020 4–11 pairs

Although relatively widespread in the southern half of the UK (reported as occurring in the wild by 24 of 39 corresponding county recorders), the Black Swan remains rare as a breeding bird in the UK and there is no sign of any population increase. The peak in records occurred around

2010 (fig. 3) and seems likely to relate to an increase in recording during fieldwork for *Bird Atlas* 2007–11 (Balmer *et al.* 2013). This in turn suggests that some breeding pairs are now unrecorded.



**Fig. 3.** Numbers of confirmed breeding pairs and total number of pairs of Black Swans *Cygnus atratus* in the UK, 1996–2020.

	2015	2016	2017	2018	2019	2020	
England, SW	2013	2010	2017	2010	2017	2020	
Dorset		0-1	0-1	1	1		
Gloucestershire	1			0-1			
Hampshire	1	1	2	2	3		
Wiltshire	0-2	0-1	0-2	0–2	1-2*	2*	
England, SE							
Bedfordshire	1						
Berkshire	1-3	1					
Buckinghamshire	2			0-2	0-1	0-1	
Greater London				0-1			
Kent	1	1-2		1			
Sussex		1	1-2	1-2	1		
England, E							
Cambridgeshire		0-3		0-1			
Norfolk		1					
England, C							
Derbyshire			0-1			0-1	
Northamptonshire				0–2			
Staffordshire					1		
England, N							
Cheshire & Wirral			1	0-1	0-1		
Cleveland		0-1	0-1	0-1			
Lancashire & N Merseyside					0-1		
Yorkshire				0-1			
Wales							
Caernarfonshire				0-1			
East Glamorgan						0-1	
Gwent				0-1			
Northern Ireland							
Co. Kerry						0-1	
Channel Islands	2 -	2 5	2 5	2 5	2.5	2.5	
Jersey	2–5	2–5	2–5	2–5	2–5	2–5	
TOTALS	9–16	7–17	6–15	7–25	9–16	4–11	
* Includes confirmed breeding of a mixed pair with Mute Swan Cygnus olor.							

#### Ruddy Shelduck Tadorna ferruginea

#### Occasional breeder (5/10) 6-yr mean <1 bp; stable

**BDE**\*

Native to North Africa, southeastern Europe, west and central Asia

2015 - 2016 1 pair 2017 0-1 pairs 2018 - 2019 - 2020 0-1 pairs

Ruddy Shelduck remains an extremely rare non-native breeder in the UK. The pair that has bred regularly in Wiltshire since 2010 was last reported in 2017. This pair laid eight eggs in 2016 (outcome not known), and probably bred in 2017. The only other breeding record during the period was of a pair at a site in Yorkshire in 2020. There has, however, been a marked upturn in sightings reported by birdwatchers in recent years – the frequency of reporting to the BTO/RSPB/BWI/SOC/WOS BirdTrack system increased threefold between 2017 and 2022 (from 0.04% to 0.15% of all complete lists; Scott Mayson pers. comm.). This may reflect an increase in the number of free-flying birds in the UK (and, in turn, potentially breeding), or an increase in the number of birds arriving from the naturalised population centred in the Netherlands, although clear evidence of this immigration is lacking. Additionally, a review looking at potential records of wild, vagrant birds in the UK is being undertaken by BOURC (https://bou.org.uk/british-list/recent-announcements/ruddy-shelduck-request-for-records).

#### Muscovy Duck Cairina moschata

Regular breeder (10/10) 6-yr mean 8 bp; stable

E\*

Native to central and South America

2015 3-7 pairs 2016 4-8 pairs 2017 16-17 pairs 2018 3-5 pairs 2019 3-6 pairs 2020 3-4 pairs

Muscovy Ducks are often kept domestically and in farmyards, so it can be difficult to determine whether birds are living (and sometimes breeding) in the wild or have simply strayed from areas where they are being kept. In addition, we suspect that many birdwatchers disregard them, or fail to make note of breeding attempts. Thus, reporting varies widely between years and undoubtedly underestimates the true size of the breeding population in the UK. There were reports of small populations in Berkshire, Breconshire, Cambridgeshire, Derbyshire and West Midlands, but few counts are made; the paucity of confirmed breeding records may reflect that, or a genuine rarity of breeding attempts away from domestication.

	2015	2016	2017	2018	2019	2020
England, SW						
Devon						1
England, SE						
Berkshire	0-1					
England, E						
Cambridgeshire	1	1	10		1–3	
Norfolk				1		1
England, C						
Derbyshire	1		3		2	1
West Midlands		1-4	1	1		
England, N						
Yorkshire	1	1	2	1		
Wales						
Breconshire		1				
East Glamorgan						
Gower	0–3	0-1	0-1	0-2	0-1	0-1
TOTALS	3–7	4–8	16–17	3–5	3–6	3–4

#### Wood Duck Aix sponsa

#### Occasional breeder (4/10) 6-yr mean 1 bp; declining

Native to North America and Cuba

E\*

2015 0-1 pairs 2016 - 2017 - 2018 3-5 pairs 2019 2 pairs 2020 -

Confirmed breeding records were received from three counties. In East Glamorgan, one of two pairs (believed to have been recently released) hatched chicks in 2018; birds were reported from the same site in 2020. Single pairs bred at different sites in Hampshire in 2018 and 2019, and a pair bred in Lancashire & North Merseyside in 2018 and 2019. Other reports of birds in potential breeding habitat came from Cambridgeshire, Highland and Kent.

While the Wood Duck has never been anything other than an extremely rare non-native breeding species in the UK, there does seem to have been a decline in breeding in recent years. The mean for the previous six-year period (2009–14) was three pairs per year.

#### Red-crested Pochard Netta rufina

Regular breeder (10/10) 6-yr mean 47 bp; increasing

AC2E\*

Native to central and southern Europe, east into central Asia

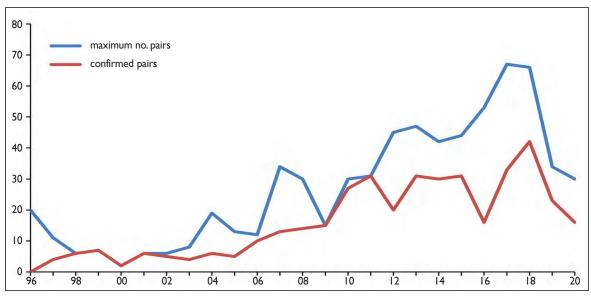
**2015** 31–44 pairs **2016** 16–53 pairs **2017** 33–67 pairs **2018** 42–66 pairs **2019** 23–34 pairs **2020** 17–32 pairs

The numbers of Red-crested Pochards breeding in the UK – still entirely restricted to England – have increased steadily over the last two decades (fig. 4). A large proportion of the population is found around the scattered lakes of the Cotswold Water Park in Gloucestershire and Wiltshire. There are evidently difficulties in monitoring the population around this large site, and reporting (particularly of pairs with breeding evidence) varies between years. The apparent drop in numbers in 2019 and 2020 relates at least partly to a drop-off of reporting at this site; a count of 363 individuals in August 2019 suggests that the population is considerably larger than represented through records of breeding pairs. We encourage any birdwatchers visiting that site in the breeding season to submit records of breeding Red-crested Pochards to aid the two county bird recorders in their reporting.



286. Red-crested Pochard Netta rufina, Greater London, January 2020.

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**Fig. 4.** Numbers of confirmed breeding pairs and total number of pairs of Red-crested Pochards *Netta rufina* in the UK, 1996–2020.

	2015	2016	2017	2018	2019	2020
England, SW						
Gloucestershire	6	1-5	1-12	9–12	4	4
Wiltshire	11–17	4-21	2-14	11–16	12	5–6
England, SE						
Bedfordshire		1			1	
Berkshire	1	0-3	4–5	0-5	1–3	2–6
Buckinghamshire				0-1	0-1	
Essex		2–3	16	8-12	0-1	
Greater London	4	5	4	1–2	1	3
Hertfordshire	0–2	0-1	1–2	1	0-1	3
Surrey	1			2		
England, E						
Cambridgeshire	0–2	0-1	0-5	0–2	0-3	0–2
Lincolnshire	0-2	0-1	0-3	6–8	3–6	0–7
Norfolk	5	1-7	1	4	1	0-1
Suffolk	1	1				
England, C						
Derbyshire		0-2	2			
Leics & Rutland	1	1	0-1			
Northamptonshire			1	0-1		
England, N						
Greater Manchester	0-1	0-1				
Yorkshire	1		1			
TOTALS	31–44	16-53	33–67	42-66	23-34	17–32

Ruddy Duck Oxyura jamaicensis					
Regular breeder (9/10)	6-yr mean 3 bp; declining	CIE*			
Native to North America					

2015 5 pairs 2016 2-3 pairs 2017 3-6 pairs 2018 2 pairs 2019 - 2020 1-2 pairs

In addition to the breeding records tabulated above, a few records of single birds were received – from Sussex and West Midlands (2016), Cambridgeshire and Clyde (2017 and 2018), Leicestershire & Rutland (2019).

The nationwide cull of Ruddy Ducks, initiated in 2005 by the Animal and Plant Health Agency (APHA) in response to the threat that the spread of the species into Europe posed to populations of White-headed Duck *O. leucocephala*, has almost run its course. At its peak, the wintering population of Ruddy Ducks in the UK was estimated at 6,000 individuals; recent estimates suggest that only around 15 individuals are left (https://bit.ly/3rQvwXS), and there are now only sporadic breeding attempts.

Similar progress has been made on removing the smaller populations in other European countries that had established following spread from the UK. While some countries have missed the target set by the international action plan of completely eradicating Ruddy Ducks by 2020, good progress has generally been made, with the possible exception of the Netherlands.

	2015	2016	2017	2018	2019	2020
England, SW						
Avon						0-1
Hampshire			0–2			
England, SE						
Greater London	1			1		
Surrey		1	1	1		
England, C						
Northamptonshire	1					
Warwickshire		0-1				
England, N						
Cheshire & Wirral	2		1–2			1
Greater Manchester		1				
Yorkshire	1		1			
TOTALS	5	2–3	3–6	2	0	1–2

Helmeted Guineafowl Numida meleagris					
Occasional breeder (3/10) 6-yr mean 1 bp; stable	E*				
Native to Africa, largely south of the Sahara					

The only confirmed breeding records during the reporting period came from 2020, when single pairs bred in Berkshire and Devon. The only other report was of two flocks roaming in the wild in the Isle of Man in 2016. This is a species that occurs widely around farms and for which it is difficult to distinguish between domesticated stock and birds living in the wild. The paucity of records does, however, suggest that breeding in the wild is very rare, although we would encourage birdwatchers to be aware of the possibility of this occurring and submit any relevant observations.

2015 - 2016 0-1 pairs 2017 - 2018 - 2019 - 2020 -

There was a short period between 2007 and 2011 when a small number of breeding pairs were reported from Lancashire & North Merseyside, and reports have been received previously from Herefordshire and Breconshire. It appears that gamekeepers occasionally illegally release Wild Turkeys at Pheasant-rearing sites in the belief they may provide some protection to the Pheasants from predators. In this reporting period, only one record was received, of a male displaying in Herefordshire in 2016. The last confirmed breeding record was in 2011.

#### Reeves's Pheasant Syrmaticus reevesii

Potential breeder (0/10) 6-yr mean 3 individuals AE\*

Native to north central China

2015 2 individuals 2016 1 individual 2017 6 individuals 2018 5 individuals 2019 – 2020 1 pair, 2 individuals

This species continues to be sporadically reported in the wild in the UK – records have been received for 17 of the 25 years covered by our non-native reporting – but without any evidence of breeding. Indeed, we are unaware that Reeves's Pheasant has ever bred in the UK up to 2020. Within the six-year period covered here, records were received from Berkshire, Dorset, Moray & Nairn (two sites), Sussex (four sites) and Wiltshire (seven sites), mostly of single males, although a pair was reported from Dorset in 2020.

#### Golden Pheasant Chrysolophus pictus

Occasional breeder (3/10) 6-yr mean 13 males; decreasing

CIE\*

Native to central China

2015 5 males (1 confirmed pair) 2016 7 males 2017 7 males 2018 14 males 2019 20 males 2020 27 males (2 confirmed pairs)

Monitoring the UK's naturalised population of Golden Pheasants is tricky, as few reports are received, and most of these record presence only or, at best, counts of males, rarely with any evidence of breeding. This may, of course, be because breeding attempts are rare, and it may be that males outnumber females (as can be the case for declining populations; Donald (2007)). What is evident is that the population has dwindled from the estimate of 1,000-2,000 individuals in the 1980s (Lack 1986) and it may be that there are no truly self-sustaining populations remaining. There is also evidence that releases continue, albeit on a small scale, despite this being illegal under the 1981 Wildlife and Countryside Act (in Great Britain) or the 1985 Wildlife (Northern Ireland) Order.

Over the six-year period covered by this report, records of Golden Pheasants were received from seven counties (table 2).

<b>Table 2.</b> Summary	of records of Gold	len Pheasants <i>Chry</i> s	solophus pictus in	the UK. 2015–20.

<b>Table 2.</b> Summary of records of Golden Pheasants <i>Chrysolophus pictus</i> in the UK, 2015–20.					
county	summary of records received 2015-20				
Angus & Dundee	Confirmed breeding (nest with 11 eggs) at one site in 2019.				
Dorset	Reported from five sites over the period, mainly islands within Poole Harbour, one of which held eight pairs in 2020. Numbers on other islands have dwindled and/or may arise from recent restocking.				
Highland	Single males reported from two sites in 2017, and 4–5 birds at another site in 2018.				
Isles of Scilly	Birds were reported from Tresco every year, with five males counted in 2018 and 2019, but just three in 2020. It is not known whether breeding occurred during this reporting period.				
Norfolk	Reported from single sites in the Brecks in 2015 and 2016, and two locations in northwest Norfolk; the remaining male at the well-known location at Wolferton was last recorded in 2018.				
Perth & Kinross	One individual reported in 2016.				
Suffolk	One area in west Suffolk maintains a population, estimated at 20 individuals in 2018, including 6–8 females (and reported as being 'stable' in 2020). Birds were reported to have bred in 2015, and two broods were seen in 2020, although it is not known whether any chicks survived to fledging.				

There are only two or three locations, in Dorset, Suffolk and possibly on the Isles of Scilly, where any appreciable numbers of Golden Pheasants remain and where breeding may still occur on a regular basis. Even at these locations, it may be that the species persists only through continuing releases, and occurrences elsewhere are likely to come from recent escapes or deliberate releases. Given the frequency at which this attractive species is held in captivity, it seems likely that records of birds in the wild will continue to be reported, but the chances of the Golden Pheasant maintaining breeding populations in the UK for much longer seem slim. As discussed for Lady Amherst's Pheasant (see below), it seems likely that a combination of habitat loss and fragmentation, increased predation, and overgrazing from burgeoning deer populations may have driven the decline. It may be, however, that populations were always artificially maintained by continuing releases, which became less frequent (albeit not ceasing altogether) once the practice was made illegal in 1981.

# Lady Amherst's Pheasant Chrysolophus amherstiae Former breeder 6-yr mean <1 male; declining

C6E\*

Native to southwest China

2015 1 male 2016 1 male 2017 - 2018 - 2019 - 2020 -

A single male was present at a site on the edge of a car-testing track at Milbrook, **Bedfordshire** until May 2016. Although there have been occasional reports of birds in the wild subsequently, there is nothing to suggest they were anything other than recent releases/escapes. The Bedfordshire male was the last individual of a population once thought to number 200 pairs (Sharrock 1976).

The first Lady Amherst's Pheasants were brought to the UK in 1823 by Countess Amherst, a nineteenth-century naturalist who was based in India while her husband, the 1st Earl Amherst, served as British Governor-General. The birds, two males, died shortly after they were presented to London Zoo but, by 1871, the species was being bred in captivity in the UK and it was introduced into the wild at the Duke of Bedford's estate at Woburn, Bedfordshire, in the 1890s. Introductions were attempted at a few other sites, including in Dumfries & Galloway, Hampshire, Suffolk and Surrey, but none seemed to succeed in the same way as around Woburn, from where the population spread along the Greensand Ridge, a low, well-wooded geological feature running across the south of Bedfordshire, probably supported by regular top-ups from estate gamekeepers. In 1971, the species was added to category C1 of the British list as a species with a self-sustaining population, derived from translocation(s) (i.e. human-mediated movement and release).

By 1991, numbers in Bedfordshire, which held the bulk of the population, were estimated to have fallen to 100–200 individuals (Trodd & Kramer 1991). Just a few years later, a survey of the Bedfordshire population between 1995 and 1998 found a total of 85 territories (Cannings 1999), with eight to ten territories reported from Buckinghamshire over the same period. Further decline meant that, by 2004, a Bedfordshire survey located only nine males and one female, at seven different localities (Nightingale 2005). The population continued to decline (fig. 5) until just a single male remained in 2015 and 2016.

In retrospect, it may be that this exotic pheasant was never truly self-sustaining in the UK; introductions in a range of locations away from Bedfordshire were generally short-lived, and the Bedfordshire population may have persisted only through top-up releases that continued up to 1984 if not more recently. However, conditions may also have become less favourable and driven the decline. The loss of breeding sites to woodland clearances and golf course expansion may have had an impact, compounded by habitat fragmentation, that bête noire of struggling species with poor dispersal abilities. Once chance factors had caused a local extinction in an isolated wood, the chances of Lady Amherst's Pheasants recolonising across inhospitable farmland were low. However, the biggest problem for Lady Amherst's Pheasants (and the similarly

disappearing Golden Pheasants in the Norfolk and Suffolk Brecks) may, ironically, have been another species originating from introduction at Woburn: Reeves' Muntjac *Muntiacus reevesi*. The Muntjac deer population has increased rapidly (for example, it is estimated to have tripled between 1995 and 2018; Ward *et al.* (2021)) and evidence is growing on the severe impact their grazing can have on tree regeneration and the vegetation in the woodland understorey and the species that inhabit it, for example Common Nightingale *Luscinia megarhynchos* and Willow Tit *Poecile montanus* (Newson *et al.* 2011b). The high densities of Muntjacs around their original release site in Bedfordshire may have resulted in the reduction of the dense understorey vegetation that the Lady Amherst's Pheasants seemed to require.

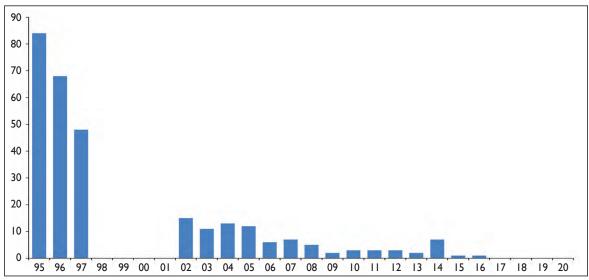


Fig. 5. Number of male Lady Amherst's Pheasants Chrysolophus amherstiae in the UK, 1995–2020.

Indian Peafowl Pavo cristatus				
Regular breeder (9/10)	6-yr mean 6 bp; stable	E*		
Native to the Indian subcontinent	including Sri Lanka			

2015 2 pairs 2016 4 pairs 2017 5 pairs 2018 2 pairs 2019 11 pairs 2020 9 pairs

Indian Peafowls occur widely in the UK, being kept as a free-flying ornamental species around stately homes and country houses, as well as some farms; 17 of 39 corresponding county recorders reported the species as occurring 'in the wild' during the 2015–20 period. In some areas, birds have strayed further from their place of origin and have bred in the wild, and it may be that there is a considerable feral population. Cheke (2019) documented a feral popula-

	2015	2016	2017	2018	2019	2020
England, SW						
Cornwall	2	2	3	2	2	2
Dorset		1				
England, E						
Lincolnshire			1			
England, C						
Derbyshire					3	
England, N						
Yorkshire			1		6	6
Wales						
Breconshire						1
Isle of Man		1				
TOTALS	2	4	5	2	11	9



**287.** Indian Peafowl *Pavo cristatus*, Ashton, Northamptonshire, July 2023.

tion at Harcourt Arboretum, Oxfordshire, where birds have been present for 70 years (possibly considerably longer), and proposed that, as a consequence, the species should be considered a naturalised species in the UK (and thus added to category C1 or C4 of the British List). He also used online searches to identify locations where free-ranging Indian Peafowls occur, and catalogued 96 such sites. It was not, however, possible to determine whether breeding had occurred at these sites or indeed whether groups were 'kept' or feral.

The difficulties of determining whether birds are breeding in the wild undoubtedly undermines recording of this species, as

well as a general disinterest from birdwatchers in a species generally regarded as domesticated (and which occurs in a wide variety of domesticated forms in addition to the natural blue, e.g. all-white). This obscures the true status of the species in the UK and means that the numbers reported here are undoubtedly lower than the true situation. We urge all birdwatchers to submit records of Indian Peafowls in circumstances which suggest they may be living independently from humans, particularly if there is any evidence of breeding in the wild.

#### Harris's Hawk Parabuteo unicinctus

Occasional breeder (5/10) 6-yr mean 2 bp; stable

Native to southwest USA, central and South America

2015 - 2016 0-1 pairs 2017 1-3 pairs 2018 1-4 pairs 2019 0-1 pairs 2020 0-1 pairs

This species was reported from four counties and in five of the six years in the reporting period, but the only confirmed breeding was by a pair in Yorkshire, which fledged two young in 2017 and one in 2018. A recently released pair built a nest in Caernarfonshire in 2018, but other records involved birds attempting mixed pairings with Common Buzzards *Buteo buteo*. A bird may have bred with a Common Buzzard in Lancashire & North Merseyside in 2017 and was observed nest-building in 2018, and a male in Cambridgeshire attempted to pair with a Common Buzzard in 2017 before being displaced by a male Buzzard; it remained on territory in the area until 2020.

#### Eagle Owl Bubo bubo Regular breeder (8/10)

6-yr mean I bp; stable

E\*

**E**\*

Native in Europe and temperate Asia

2015 1 pair 2016 1-2 pairs 2017 1 pair 2018 2-3 pairs 2019 0-2 pairs 2020 0-1 pairs

A pair resident in the Forest of Bowland in Lancashire & North Merseyside was present throughout the recording period. Breeding was confirmed in 2015 when a clutch of four eggs was laid but subsequently taken by an egg-collector – it is not known whether the birds relaid; in 2016, when three young fledged; and 2017, when two young fledged. There was no sign of attempted breeding at this site in the subsequent three years, although calling was recorded each spring.

Other confirmed breeding attempts included a pair elsewhere in Lancashire & North Merseyside in 2018, which raised four young, and a pair which raised two young in **Highland** during the same year. A single bird was recorded at the same site the following year. The only other record received by the RBBP concerned a bird singing in **Devon** between February and June 2016.

#### Lanner Falcon Falco biarmicus

#### Regular breeder (8/10) 6-yr mean <1 bp; stable

Native to southeast Europe and much of Africa

2015 1 mixed pair 2016 1 mixed pair 2017 1 mixed pair 2018 1 mixed pair 2019 1 mixed pair 2020 1 mixed pair

This species has not been reported upon by the RBBP previously but it has come to our attention that a male has attempted to breed in a mixed pairing with a female Peregrine Falcon *Falco peregrinus* in **Lothian** every year since 2012. Between 2014 and 2022, a total of 23 hybrid young have been fledged by this pairing.

#### Monk Parakeet Myiopsitta monachus

Occasional breeder (6/10) 6-yr mean 5 bp; declining

E\*

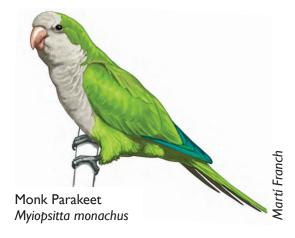
Е

Native to South America

2015 11–13 pairs 2016 13–17 pairs 2017 – 2018 – 2019 – 2020 0–3

While there had previously been a scattering of breeding records of Monk Parakeets across England, the species became established in the London area in the 1990s, with two main population centres being on the Isle of Dogs, **Greater London** and Borehamwood, **Hertfordshire**. The RBBP's last report (Holling *et al.* 2017) suggested that these held a stable population of 20–30 pairs between 2012 and 2014.

There has been rapid expansion of the range of Monk Parakeets in Europe, particularly in Spain and



Italy, and the European population has been estimated at 24,000 individuals (Keller *et al.* 2020). Damage to agricultural crops has been recorded (Senar *et al.* 2016), and there is a risk of infrastructure damage and public health risks arising from their habit of nesting in colonies where they build large stick nests, often using man-made infrastructure.

Therefore, an eradication programme was initiated by APHA in 2011, seeking to eradicate the species in the UK before the population grew too large to do so, as has happened with the Roseringed Parakeet. A combination of nest removal, live capture for rehoming and shooting has reduced numbers, although as of 2023 there are still a small number of birds present on the Isle of Dogs.

#### **Greater London**

- 2015 13 pairs; 11 confirmed breeding.
- 2016 11 pairs; seven confirmed breeding pairs but all nests destroyed.
- 2017 16 birds up to March; none reported thereafter.
- 2018 Peak counts of five, four and three birds from three sites.
- 2019 Peak of eight birds; no reports of breeding.
- 2020 Peak of 12 birds; one site with nests, occupied by at least two pairs and a single bird.

#### Hertfordshire

- 2015 At least 20 birds, but no reports of breeding.
- 2016 Six confirmed breeding pairs; 62 birds counted in December.
- 2017 Three individuals in March, two in November. No breeding recorded.
- 2018 No reports received.
- 2019 No reports received.
- 2020 No reports received.

#### Blue-crowned Parakeet Thectocercus acuticaudatus

Occasional breeder (0/10)

6-yr mean < I bp

E\*

Native to South America

2015 - 2016 - 2017 - 2018 0-1 pairs 2019 - 2020 -

A probable breeding pair was reported in Greater London in 2018. This is only the second year in which this species has been reported upon after a pair bred in Kent in 2001.

#### Acknowledgments

The compilation of this report would not be possible without the support of the many contributors who have supplied the data that it is based upon. Birdwatchers across the country provide many of the original observations and we gratefully acknowledge their contributions. Much of these data are submitted via the BTO/RSPB/BirdWatch Ireland/SOC/WOS BirdTrack system. In most cases, records then reach the RBBP via county and regional bird recorders, whose invaluable but time-consuming work is completed on a voluntary basis; we salute the willing cooperation and assistance of recorders past and present. The work of the RBBP simply would not be possible without the support of recorders. The names of the individual recorders and others who provided data for this report, either directly or as part of their organisational responsibilities, are listed at www.rbbp.org.uk/acknowledgements-2023.

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## **Appendix 1.** Rare non-native breeding birds reported in 1996–2014 but not during the current recording period.

no. years reported	year last reported	no. years confirmed breeding	year of last confirmed breeding
3	2012	3	2012
2	2011	2	2011
1	1997	1	1997
16	2013	12	2011
5	2011	1	2010
1	1998	0	_
2	1997	1	1997
2	2011	2	2011
4	2011	1	2010
6	2005	0	-
1	1999	0	_
6	2003	5	2003
4	2008	1	2006 (mixed pair)
4	2001	4	2001 (mixed pair)
1	1998	0	_
2	2006	2	2006
10	2005	6	2002
	reported  3 2 1 16 5 1 2 2 4 6 1 6 4 4 1 2	reported  3	no. years reported         year last reported         confirmed breeding           3         2012         3           2         2011         2           1         1997         1           16         2013         12           5         2011         1           1         1998         0           2         1997         1           2         2011         2           4         2011         1           6         2005         0           1         1999         0           6         2003         5           4         2008         1           4         2001         4           1         1998         0           2         2006         2

<sup>&</sup>lt;sup>1</sup> Refers to records of escaped/naturalised birds, not naturally occurring breeding pairs.

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