Non-native breeding birds in the UK, 2012–14

Mark Holling and the Rare Breeding Birds Panel



Monk Parakeets Myiopsitta monachus

Abstract This Rare Breeding Birds Panel report covers only non-native species recorded breeding in the UK during 2012–14. A total of 25 species was recorded breeding or potentially breeding during this period. Reported numbers of the rarer species remain extremely small, with annual totals in double figures for only three species: Black Swan *Cygnus atratus*, Red-crested Pochard *Netta rufina* and Monk Parakeet *Myiopsitta monachus*.

This is the 11th report by the Rare Breeding Birds Panel (RBBP) summarising breeding reports of non-native species in the UK. To match other national reporting schemes, 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 for convenience in this report to encompass these additional areas. The RBBP collates records of confirmed or potential breeding by nonnative species for which the total number of breeding pairs each year is fewer than 300 pairs. A three-year period is used to help overcome significant year-to-year variations in the availability of records of rarer nonnative species, which have been monitored by the RBBP since 1996. For completeness, we provide a status summary for the commoner non-native breeders, including both Barnacle Branta leucopsis and Egyptian Geese Alopochen aegyptiaca, which were formerly included in this report (see below).

The current membership of the Panel is Mark Eaton (Chairman), Dawn Balmer, Ian Francis, Andrew King, David Norman, David Stroud and Mark Holling (Secretary).

Rare non-native breeding birds in 2012–14

A total of 17 rare non-native species bred or showed some indication of breeding during 2012–14. The most numerous species were Black Swan *Cygnus atratus*, Red-crested Pochard *Netta rufina* and Monk Parakeet *Myiopsitta monachus* with maxima of 18, 47 and 29 pairs respectively. Black Swan numbers seem to be stable, although it is likely that the total number of pairs is higher than reported, as some pairs go unrecorded.

Red-crested Pochard appears to be one of the few rarer non-natives to be increasing. Monk Parakeets have a stable population in the London area but are subject to an eradication programme, which is likely to be constraining the potential for population increase; this report includes a review of the species and its status in Europe. Ruddy Duck Oxvura iamaicensis numbers continue to decline as a result of the eradication programme for that species; in 2014 we received records of only five confirmed breeding pairs. There were no confirmed breeding records for either Lady Amherst's Pheasant Chrysolophus amherstiae or Golden Pheasant C. pictus. There were two mixed pairs of Harris's Hawk Parabuteo unicinctus × Common Buzzard Buteo buteo nesting in 2012 and 2013. A pair in Devon produced six hybrid young over the two years while the pair in Surrey was successful only in 2013. No pairs bred in 2014. Indeed, several other species which have bred regularly in recent years were not confirmed breeding in 2014, including naturalised Whooper Swan Cygnus cygnus, Wood Duck Aix sponsa, Eagle Owl Bubo bubo and Snow Goose Anser caerulescens (in Orkney).

Almost all the records received came from English counties, with a concentration in the south and east. The only species recorded in Wales were Black Swan, Bar-headed Goose Anser indicus, Muscovy Duck Cairina moschata and Ruddy Duck; in Scotland, Snow Goose; and in Northern Ireland, Ruddy Duck. Black Swans were also recorded in the Channel Islands. No rare non-natives were reported from the Isle of Man.

Problems associated with the recording of non-native birds

The three-year period covered by the 2009–11 report (Holling et al. 2014) coincided with fieldwork for Bird Atlas 2007–11 (Balmer et al. 2013), which gave a boost to the recording of non-natives. We hoped that the focus on recording all species encountered might continue after the atlas period, but it is clear that non-natives continue to be significantly under-recorded by the birdwatching community. Consequently, the figures in this report, from which we calculate five-year means, should be treated with some caution, since

they are based solely on information supplied to the Panel. 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, for this group we aim to collect only those records that would be categorised as probable or confirmed breeding. 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 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 seen 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.

One question often asked is how birdwatchers should determine whether a nonnative species is living 'in the wild'. This can be difficult to decide. Birds which 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 Pavo cristatus 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. Such instances often go unrecorded yet birders are well placed to find and count nesting females or broods of young.

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 nonnative species considered by the Panel is available at www.rbbp.org.uk but breeding attempts by any other rare non-native species will also be archived and included in future reports. We welcome the submission of any records of breeding non-native 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 'P' to indicate a pair in suitable breeding habitat is especially useful.

Why collect data on non-native species?

The data and information presented here helps UK governments to fulfil obligations under Article 8 of the Convention on Biological Diversity, and international regulations such as the EU Birds Directive (79/409/EC) and EU Regulation (1143/2014) on invasive alien (non-native) species. In the UK, any deliberate release of a non-native species (apart from Common Pheasant *Phasianus colchicus* and Red-legged Partridge *Alectoris rufa*) is illegal under either the 1981 Wildlife and Countryside Act (in Great Britain) or the 1985 Wildlife (Northern Ireland) Order.

The impacts of non-native species are a major driver of biodiversity loss worldwide and a significant issue for conservation (Millennium Ecosystem Assessment 2005; Secretariat of the Convention on Biological Diversity 2014; UNEP-WCMC 2015). Although some non-native species appear to be harmless, others are invasive and may have a serious impact on native species – for example, through competition, displacement, hybridisation and modification of habitats. For these reasons, it is critical to report and monitor their occurrence and particularly any attempts at breeding.

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 UK has a number of commoner nonnative bird species, some of which are long established as part of our avifauna (table 1). Four of these might be considered common and widespread, and have been for centuries; a further two have increased substantially over recent decades; while the remaining two species, Egyptian Goose and Barnacle Goose, have recently been removed from the list of rare non-native breeding species due to continuing population expansion.

The Common Pheasant is one of the UK's commonest birds, and the population estimate given in table 1 underestimates its presence as it does not encompass the huge numbers released each autumn for shooting purposes, estimated recently at 35 million (Bicknell et al. 2010) and 27.9 million (BASC 2016) birds per annum. About 3% of the UK's breeding birds are non-natives, but it has been estimated that they contribute 23% of total avian biomass, largely due to the numbers of (relatively large-bodied) Pheasants (Eaton et al. 2012); in the post-release period, Pheasants may contribute over half the biomass of all birds in the UK. The Redlegged Partridge is another gamebird with a population swelled by autumn releases, estimated at 6.5 million birds per annum by Bicknell et al. (2010). The impact of such gamebird releases on other bird populations, and on biodiversity more widely, is poorly understood but likely to be significant.

The Rose-ringed Parakeet *Psittacula krameri* continues to increase rapidly; it is now abundant in some areas of southeast England, particularly in parts of Greater London and Surrey, and is establishing new populations in other regions as far north as Newcastle. Also increasing is the Mandarin

Table 1. The status of commoner non-native breeding species in Great Britain.

	date and location of first escapes/releases	current breeding population ¹	short-term population trend ²	long-term population trend ³	GB range ⁴	GB range trend ⁵
Canada Goose Branta canadensis	late 19th century (England)	62,000	+84%	NA	1,790	+49%
Barnacle Goose Branta leucopsis	late 20th century (England)	1,000	+118%	+453%	82	+88%
Egyptian Goose Alopochen aegyptiaca	late 17th century (England)	1,100	+151%	+481%	232	+163%
Mandarin Duck Aix galericulata	early 20th century (England)	2,300	+418%	NA	497	+121%
Red-legged Partridge Alectoris rufa	1770s (England)	82,000	+13%	-22%	1,645	+35%
Common Pheasant Phasianus colchicus	11th century (probably England)	2,300,000	+32%	+74%	2,392	+5%
Little Owl Athene noctua	1842 (England)	5,700	-58%	-65%	1,238	-11%
Rose-ringed Parakeet	1969 (England)	8,600	+1,314%	NA	91	+43%

- Number of pairs, taken from Musgrove et al. (2013). Note that these are estimates for 2009 or before, so may
 be underestimates for current populations of rapidly increasing species such as Egyptian Goose and Roseringed Parakeet.
- Trend from BTO/JNCC/RSPB Breeding Bird Survey 1995–2014 (Harris et al. 2016). Trends for Barnacle
 Goose and Egyptian Goose are derived from winter counts from the BTO/JNCC/RSPB/WWT Wetland Bird
 Survey for the ten years 2003/04–2013/14.
- 3. Trends for the three goose species are from winter counts from the Wetland Bird Survey for the 25 years 1988/89–2013/14, except for Egyptian Goose, which is for 19 years, 1994/95–2013/14. Trends for Red-legged Partridge, Common Pheasant and Little Owl are from the Common Birds Census and Breeding Bird Survey 1970–2014.
- 4. 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.
- 5. 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).

Duck Aix galericulata; the population estimate in table 1 dates from 1988 and, given the trend since then, it is conceivable that the true breeding population is now approaching 10,000 pairs. The exception to the pattern of increasing non-natives is the Little Owl Athene noctua, which has decreased considerably over the last two decades, for reasons which are unclear. It remains widespread, with some range expansion at the northern margin, but with range contraction in southwest England and Wales (Balmer et al. 2013).

Egyptian and Barnacle Geese have both increased rapidly in recent years. Largely restricted to East Anglia, particularly Norfolk, for several decades, the Egyptian Goose has expanded into southeast England and the Midlands in recent years (Balmer *et*

al. 2013). Wetland Bird Survey data show a near five-fold increase in numbers in the non-breeding season since 1994/95 (Frost *et al.* 2016). The non-breeding trend for naturalised Barnacle Goose populations has risen sharply since 2006/07, with a three-fold increase between then and 2014/15 (Frost *et al.* 2016). Thirteen widely dispersed sites report average winter peaks of naturalised Barnacle Geese in excess of 100 birds.

Non-natives in Europe

Significant populations of non-native bird species occur across Europe. In response to the potential threat that these aliens can have on native species, a new EU regulation was introduced in January 2015 (EU regulation No. 1143/2014) on the prevention and

management of the introduction and spread of invasive alien species http://bit.ly/2ikcAvY. The implementing act (July 2016) http://bit.ly/2jeGvFB listed an initial 37 species of 'Union concern' (animals and plants) and included three bird species: Ruddy Duck, House Crow Corvus splendens and Sacred Ibis Threskiornis aethiopicus. Member States are obliged to take a range of legal measures with respect to such species (including enhanced monitoring procedures). The Ruddy Duck story is well known, but the other two species are still unfamiliar in the UK. However, in 2014 a zoo in Cumbria was prosecuted under the Wildlife & Countryside Act (1981) and fined for allowing Sacred Ibises to fly free. This species has caused major problems in France, where the birds have affected other waterbird populations through competition and predation (Yésou et al. in press). The GB Non-native Species Secretariat has prepared an action plan (www.nonnativespecies.org//download Document.cfm?id=942) with the aim of preventing the establishment of a population of Sacred Ibises in Britain. Note that, although the UK is expected to leave the EU in due

course, the UK Government has stated that, under the 'Great Repeal Bill', all existing European legislation will be incorporated into UK domestic law, so our obligations on non-native species will remain, at least initially.

Increases in the numbers of non-migratory Barnacle Geese in the UK mirror the establishment and expansion of non-migratory populations of this species in many other north European countries (Feige 2008; van der Jeugd 2013; UNEP-WCMC 2015). Indeed, following establishment in 1982, the Dutch-breeding population was estimated at 13,800 breeding pairs in 2012 (Schekkerman 2012). In 2015, the African-Eurasian Waterbird Agreement (AEWA) updated its review on the status of non-native waterbirds in the Agreement area (UNEP-WCMC 2015). Range States of high and very high risk non-native waterbird species populations were urged to increase and coordinate their efforts to contain, control and as much as possible eradicate these populations, in particular Canada Goose, Egyptian Goose, Black Swan, Ruddy Duck and Sacred Ibis (AEWA 2015).



35. Black Swan *Cygnus atratus*, Essex, October 2015. One of the more widespread, and certainly the most visible, of the rare non-native breeders in the UK, yet it is still under-recorded.

Max Hellicar

Species accounts

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 2005–14):
 - 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 2005 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 maximum population size (in pairs or numbers of individuals) from the last five years (in this report the five years are 2010–14).

- 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 2013).
- 5. An indication of the natural breeding range of the species.

Beneath the heading of each species account, numbers for each of the three years in this report are given in the format '1–4 pairs', which in this case indicates one confirmed breeding pair and a possible maximum total of four breeding pairs. A single rule indicates no breeding reported. For a key to the geographical regions used in this report see Holling *et al.* (2007).

For those species where the numbers of pairs in each county are presented in a table, all figures refer to the total number of breeding pairs, except for figures in parentheses, which refer to the number of confirmed breeding pairs.

Black Swan Cygnus atratus Regular breeder (10/10) 5-yr mean 19 bp; stable

AC2E*

Native to Australia

2012 5-15 pairs 2013 5-13 pairs 2014 6-18 pairs

The number of pairs reported was consistent across the three years, although the number of nesting pairs was rather lower than in 2009–2011, when between ten and 25 confirmed breeding pairs were noted. The total number of pairs each year is similar to that reported in 2011, which

Black Swan							
	2012	2013	2014		2012	2013	2014
England, SW	6	4	4	England, E	1	1	1
Cornwall	1			Lincolnshire	1(1)	1(1)	
Devon	1			Northamptonshire			1(1)
Dorset		1	1	England, C	2	2	1
Gloucestershire		1(1)		Derbyshire		1	
Hampshire	1	1	3	Staffordshire	1(1)	1	1
Wiltshire	3	1		West Midlands	1		
England, SE	2	3	9	England, N	3	2	3
Bedfordshire	1(1)	1(1)	1(1)	Lancashire &			1
Berkshire			2	N Merseyside			
Buckinghamshire		1	1	Yorkshire	3(2)	2(1)	2(1)
Essex	1	1(1)	1	Wales	1	1	0
Kent		` ,	2(1)	East Glamorgan	1	1	
Oxfordshire			1(1)	total (confirmed)	15 (5)	13 (5)	18 (6)
Sussex			1(1)	breeding pairs			

was lower than before, perhaps an indication that the cold winters of 2009/10 and 2010/11 may have reduced the overall population (see fig. 1 in Holling *et al.* 2014). Yet although the Black Swan is a conspicuous and familiar species, we are sure that it is under-recorded, and the quality of recording is sometimes poor. Black Swans are prone to wandering and pairs reported from a site for only a short period are not included here.

It is notable that there are no records from the northern half of Britain (Balmer *et al.* 2013); this may be related to the distribution of original release/escape sites and perhaps the ability of this species to overwinter in colder areas. Data from the Channel Islands are not included in the table because no accurate counts were available but the islands support a potentially self-sustaining population of about ten pairs, some of which fledge young every year. More information on that population, including historical records, would be very welcome.

Whooper Swan Cygnus cygnus

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

AE*

Breeds mainly in Iceland, Fennoscandia and northern Russia, with small populations (5-yr mean 24 bp) in northern Scotland and Northern Ireland

2012 0-1 pairs 2013 0-1 pairs 2014 -

A naturalised pair was present at Dunstable, **Bedfordshire**, throughout 2012 and 2013, although the birds did not breed. The other regular site in the county, at Luton, was no longer occupied. Between 2006 and 2013, 1–2 pairs of Whooper Swans have been present at these two sites. Nesting has been attempted on nine occasions (2006–2011) but only one bird has fledged (at Luton in 2008). In 2014 there were still up to five birds at large in Bedfordshire, but none appeared to be paired.

There were no other reports of naturalised Whooper Swans in the UK in 2012–14. Records of assumed wild birds are included in the Panel's main report; 24 wild pairs were reported in 2014 (Holling *et al.* 2016).

Bar-headed Goose Anser indicus

Regular breeder (8/10) 5-yr mean 1 bp; stable

E*

Breeds central Asia from Mongolia to Tibetan Plateau

2012 One pair 2013 0-1 pairs 2014 1-3 pairs

There were two records of confirmed breeding. In Carmarthenshire in 2012, a female laid three eggs, which proved infertile; it is not clear whether this female was paired. In 2014, a pair was seen in Kent with two young. Elsewhere, pairs were reported from Cornwall (2014), Dorset (2013) and Yorkshire (2014). Breeding birds were not recorded in any of these counties in *Bird Atlas 2007–11*, or in our last report. There are, however, a number of wandering birds, associating with other naturalised geese; some of these may be paired but breeding seems to be infrequent and not sustained in any one area.

Snow Goose Anser caerulescens

Regular breeder (8/10) 5-yr mean 2 bp; stable

AC2E*

Breeds mainly in Arctic North America, with smaller numbers in northeast Siberia

2012 Three pairs 2013 Three pairs 2014 One pair

The main site for breeding Snow Geese continues to be the island of Coll, in Argyll. In 2012, at least one pair was assumed to have bred, as a juvenile was seen with the naturalised flock of 23 adults in February 2013. In June 2013, the flock (then numbering 21) held four juveniles, and in August 2014 the flock of 24 adults held one juvenile.

In Orkney, where breeding began in 2009, a single juvenile was seen with a pair of birds in 2012. In 2013, two pairs bred: two broods, of four and nine goslings, were seen in June, and three had fledged by September. No breeding was reported in 2014, when there were reports of only 1–2 birds in the autumn.

In 2012, breeding was also confirmed in **Yorkshire** when three newly fledged juveniles were seen among a flock of 21 naturalised Snow Geese.

Red-breasted Goose Branta ruficollis

Occasional breeder (2/10) 5-yr mean <1 bp

AE*

Breeds Arctic Siberia

2012 One pair 2013 - 2014 -

In Essex in 2012, a bird was recorded sitting on a nest at the site used in 2011; no further information was supplied.

Ruddy Shelduck Tadorna ferruginea

Regular breeder (8/10) 5-yr mean 1 bp; stable

BDE*

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

2012 One pair 2013 One pair 2014 One pair

In all three years, one pair bred in Wiltshire, using the same nestbox that was occupied in 2010 and 2011 (see plate 36 below, from spring 2015). Nine young fledged in 2012. Eggs were laid in 2013 but the outcome was unknown; in 2014, nine eggs (on 15th May) failed to produce any young.

In July 2013, two juveniles were seen in Lancashire & N Merseyside but their origins are unknown and they are not included in the statistics.



Nige/Lew

36. Male Ruddy Shelduck *Tadorna ferruginea* in a nestbox (originally intended for owls or Common Kestrels *Falco tinnunculus*) in Wiltshire, May 2015.

Muscovy Duck Cairina moschata

Regular breeder (9/10) 5-yr mean 10 bp; stable

E*

Native to central and South America

2012 3-12 pairs 2013 4-6 pairs 2014 4-7 pairs

Muscovy Ducks are frequently seen with farmyard ducks, and separating these individuals from those apparently living in the wild is difficult – and means that breeding is probably underrecorded. There are a few instances of breeding by isolated pairs, such as those in Breconshire, Cornwall, Suffolk and West Midlands in 2014. There is a well-known and well-established population at Ely, in Cambridgeshire, which is counted occasionally and breeding confirmed for 1–2 pairs each year: one brood of 14 ducklings in 2014 led to seven fledged young being recruited into the population. We have recently become aware of another such population, of roughly similar size, at Buxton in Derbyshire. The maximum count was 31 in 2012 and 27 in 2013; breeding was not noted in those years. No counts were available for 2014 but breeding was confirmed when a brood of young was reported. We would welcome more information on this and any other established flocks.

Muscovy Duck							
	2012	2013	2014		2012	2013	2014
England, SW	0	0	1	England, N	1	1	0
Cornwall			1	Lancashire &	1(1)	1(1)	
England, E	10	3	3	N Merseyside			
Cambridgeshire	10(2)	2(2)	1(1)	Wales	1	2	1
Suffolk		1	2	Breconshire	1	2(1)	1(1)
England, C	0	0	2				
Derbyshire			1(1)	total (confirmed)	12(3)	6 (4)	7 (4)
West Midlands			1(1)	breeding pairs			

Wood Duck Aix sponsa		
Occasional breeder (7/10)	5-yr mean 3 bp; decreasing?	E*
Breeds North America and Cuba		

2012 4-5 pairs 2013 0-2 pairs 2014 0-1 pairs

Four pairs were proved to breed in 2012: in the Isle of Wight, Kent, Surrey, and Sussex. In addition, a male was paired with a female Mandarin Duck in Berkshire. The pair in the Isle of Wight was not present in 2013. In both Surrey and Sussex, females were seen with broods of young in 2012 but there were no subsequent records.

The pair in Kent, originally from a free-flying collection, was still there in 2013, but did not breed. In both 2013 and 2014 there was also a pair in Lancashire & N Merseyside, but no broods were reported there. It remains to be seen whether this recent reduction in numbers of pairs is due to a temporary drop in reporting or if there are genuinely fewer Wood Ducks now breeding in the UK.

Red-crested Pochard Netta rufina					
Regular breeder (10/10)	5-yr mean 39 bp; increasing	AC2E*			
Breeds patchily in central and southern Europe, east into central Asia					

2012 20-45 pairs 2013 31-47 pairs 2014 30-42 pairs

Fig. 1 shows that over the most recent 15-year period the breeding population has increased and that the number of counties with confirmed breeding has increased too. Since 2001, breeding has been confirmed in 15 counties, all to the south of a line between the Mersey and the Humber and

	2012	2013	2014		2012	2013	2014
England, SW	22	13	13	Northamptonshire	1		
Gloucestershire	16 (4)	6 (6)	7 (7)	Suffolk		1	1(1)
Wiltshire	6 (6)	7 (7)	6 (6)	England, C	2	4	1
England, SE	18	26	18	Leicestershire		1(1)	1(1)
Berkshire	2	4	3(1)	& Rutland			
Essex	6 (5)	2(1)	1(1)	Nottinghamshire	2(2)	3 (3)	
Greater London	4(3)	8 (8)	5 (4)	England, N	0	0	1
Hertfordshire	6	11(2)	7(1)	Greater Manchester			1
Surrey		1(1)	2(2)				
England, E	3	4	9	total (confirmed)	45 (20)	47 (31)	42 (30)
Cambridgeshire		2(1)	3(1)	breeding pairs			
Lincolnshire	1		1(1)	no. counties with	5	10	12
Norfolk	1	1(1)	4 (4)	confirmed breedir	ng		

east of the Severn, most frequently in Essex, Gloucestershire, Greater London, Hertfordshire, Norfolk and Wiltshire. There has been no apparent change in range since *Bird Atlas 2007–11*, although the first confirmed breeding records for Cambridgeshire and Leicestershire & Rutland were reported in 2013.

In Europe, Redcrested Pochards have a scattered distribution within their native range, with the most important breeding

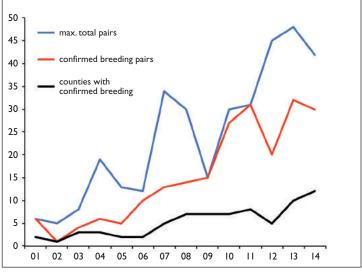


Fig. 1. Numbers of confirmed breeding pairs and total number of pairs of Red-crested Pochards *Netta rufina* in the UK, 2001–14; and the number of counties in which confirmed breeding was recorded.

populations in Spain (7,200 pairs), France (1,000–1,500 pairs), Romania (477–2,433 pairs) and Germany (850–1,100 pairs) (Gedeon *et al.* 2014; http://bit.ly/2jjBXLw; http://bit.ly/2jGG4jP).

Ruddy Duck Oxyura jamaicensis					
Regular breeder (10/10)	5-yr mean 22 bp; declining	CIE*			
Native to North America					

2012 18-24 pairs 2013 7-8 pairs 2014 5-6 pairs

Ruddy Ducks have been included in this report since 2009 (Holling *et al.* 2014). The eradication programme run by the Animal and Plant Health Agency (APHA, part of Defra) has continued in recent years, and the impact is apparent in fig. 2. Potentially, this decline may be exaggerated, as some birdwatchers are not reporting Ruddy Ducks to county recorders, but the steep decline over the last six years is real nonetheless.

Although only five breeding pairs were documented in 2014, it is estimated that the population in that year may have been 8–10 pairs, decreasing to perhaps 4–6 pairs by 2016 (Iain Henderson



37. Ruddy Ducks *Oxyura jamaicensis* in Britain currently need to keep a low profile to avoid the ongoing eradication programme. This male was photographed at St James's Park, London, in March 2015; in the background are two drake Red-crested Pochards *Netta rufina*, another rare non-native breeder in the UK.

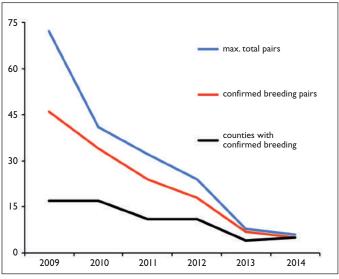


Fig. 2. Numbers of confirmed breeding and total number of pairs of Ruddy Ducks *Oxyura jamaicensis* in the UK, 2009–14; and the total number of counties in which confirmed breeding was recorded.

pers. comm.). Two broods, totalling five young, fledged and dispersed in 2014. Reports show that there are still some Ruddy Ducks, both males and females, moving between inland waterbodies (mainly) in England, but it seems that they are finding it increasingly difficult to locate each other. Indeed, in 2014 there were reports of a male Ruddy Duck displaying to a female Common Pochard Aythya ferina and elsewhere a female apparently paired with a male Common Pochard, although the outcome of these associations is unknown.

Ruddy Duck					2012	2013	2014
	2012	2013	2014	England, SE	6	2	3
England, SW	1	1	0	Greater London	2(2)	1(1)	1(1)
Gloucestershire	1(1)			Hertfordshire	1(1)	1	
Hampshire		1(1)		Kent	1(1)		1
				Sussex	2 (2)		1(1)

Ruddy Duck con	t.						
•	2012	2013	2014		2012	2013	2014
				Wales	2	0	0
England, E	4	1	1	Anglesey	1		
Cambridgeshire	4(2)	1(1)	1(1)	Denbigh & Flint	1		
England, C	2	0	0	Northern Ireland	1(1)	0	1(1)
Nottinghamshire	1(1)						
West Midlands	1(1)			total (confirmed)	24 (18)	8 (7)	6 (5)
England, N	7	4	1	breeding pairs			
Cheshire & Wirral	5 (4)	4(4)	1(1)	no. counties with	11	4	5
Yorkshire	2 (2)			confirmed breedi	ng		

Helmeted Guineafowl Numida meleagris Occasional breeder (6/10) 5-yr mean 1 bp; stable? E* Native to Africa, largely south of the Sahara

2012 - 2013 - 2014 Two pairs

There were two records of confirmed breeding in 2014, in Hertfordshire and Yorkshire, but no records submitted in 2012 or 2013. The Hertfordshire record was of a pair with three chicks in September, while the Yorkshire record was of a clutch of ten eggs in July.

Lady Amherst's Pheasant Chrysolophus amherstiae					
Former breeder	5-yr mean 4 males; stable	C6E*			
Native to southwest China					

2012 Three males 2013 Two males 2014 Seven males

The only county to report this species was **Bedfordshire**. Although there were reports of just two or three in 2012–13, in 2014 additional records were received and these indicated that by December 2014 there were still up to seven males at three different sites. There were no reports of females.

Golden Pheasant Chrysolophus pictus					
Occasional breeder (4/10)	5-yr mean 15 males; stable?	CIE*			
Native to central China					

2012 16+ males 2013 6+ males 2014 15+ males

In the three years covered by this review, there were no records of confirmed breeding, and little information received generally. Potentially the most useful data available are maximum counts of males. The last records of confirmed breeding were from Norfolk and Suffolk in 2011, but it is unknown just how self-sustaining any of the populations now are.

In southwest England, there are populations in **Dorset** (Poole Harbour islands) and **Scilly** (Tresco) but no counts from these sites were received. In East Anglia, Golden Pheasants occur in the Breckland forests in both **Norfolk** and **Suffolk**, and in west Norfolk near Dersingham where a maximum of two males was recorded in each of the three years. In the Norfolk Brecks, records were received from three sites in 2012, with a total of eight males. In Suffolk, reports were received from three sites. Up to four males were reported in 2012 while in 2014 there were up to 19 birds (these counts were not broken down by sex).

The third main area is Lancashire & North Merseyside. At one site in 2012 a pair was seen occasionally; in 2013 there were at least two males here and a calling male at a second site over 20 km away. No records were submitted for 2014.

Richard Moores



38. Male Golden Pheasant *Chrysolophus pictus* in the Norfolk Brecks, April 2016. There were no records of confirmed breeding in the UK for the period of this report, so it is unclear whether the populations of this eye-catching pheasant will persist in the long term.

Indian Peafowl Pavo cristatus Regular breeder (9/10) 5-yr mean 4 bp; stable? Native to the Indian sub-continent including Sri Lanka

2012 0-1 pairs 2013 Four pairs 2014 1-3 pairs

In 2012 the only report received was of a pair at a site in Wiltshire where breeding occurred in 2009 and 2010. In Cornwall, where a small population has survived in one area since around 2000, four pairs were known to breed in 2013 and five young fledged. There was no information on breeding in 2014, but birds were still present in that year and into 2015. At a site in Lancashire & N Merseyside where breeding was reported in 2011, up to four males and three females were seen in 2014, plus a small juvenile, which confirmed that breeding took place again. Other reports included a count of ten birds at one site in Sussex in 2013 and of eight at a site in Northamptonshire in 2014, but there was no indication of breeding at either site.

Small groups of peafowl are seemingly living in the wild in various parts of Britain, and breeding may be going unnoticed or unrecorded. One example is the village of Ushaw Moor in Co. Durham where reports in April 2016 (e.g. www.bbc.co.uk/news/uk-england-tyne-36140145) suggested that about 30 birds have roamed loose in the area for a number of years, potentially since the early 2000s. Complaints have been made to Durham County Council and there is even a petition to save them, though no reports of these birds have reached the county recorder. The sustained presence of Indian Peafowl both there and in Cornwall suggests either persistent (and illegal) releases or that the populations are sustaining themselves through breeding.

Harris's Hawk Parabuteo unicinctus Occasional breeder (7/10) 5-yr mean 2 bp; stable Native to southwest USA, central and South America

2012 Two mixed pairs 2013 Two mixed pairs 2014 -

In **Devon**, a male Harris's Hawk again bred with a Common Buzzard in both 2012 and 2013, fledging at least three young in both years. The male was taken into care and died in May 2014, having been resident in the area since at least 2007. Breeding first occurred at the site, in a town

park in Plymouth, in 2010 when three hybrid young were raised. It is not known what has become of these distinctive young birds. For more details see Hopper (2014) and Eynon (2014).

In Surrey, a female attempted to breed with a Common Buzzard in 2012, but the attempt failed; a repeat attempt in 2013 produced two hybrid young. There was no breeding in 2014 and the bird was not seen after May; by then the hawk had been present at this site for over six years and had bred in at least five of them.

We are also aware of at least one, possibly two, birds nesting in Derbyshire during the last decade. These records will be added to the published totals once more detail is available.

Eagle Owl Bubo bubo Regular breeder (9/10) 5-yr mean 2 bp; stable Widespread in Europe and temperate Asia

2012 Two pairs 2013 Two pairs 2014 One pair

In Lancashire & N Merseyside, two pairs nested in both 2012 and 2013, in the same area as they have done since 2006. In 2012, both pairs fledged two young. In 2013, one pair failed after human disturbance, relaid close by but was disturbed again. A second pair laid three eggs, all of which hatched but the young died in the nest. In 2014 only one pair was present but did not lay eggs, perhaps due to the low numbers of Rabbits *Oryctolagus cuniculus*, their main prey.

These were the only reports of breeding. Single birds are reported regularly in the wild but many of these are recent escapes. At present there is no evidence that there are other breeding pairs in the UK.

Monk Parakeet Myiopsitta monachus				
Regular breeder (10/10)	5-yr mean 18 bp; stable?	E*		
Native to South America				

2012 29 pairs 2013 20-21 pairs 2014 24 pairs

Breeding Monk Parakeets in the UK are confined to the London area, occurring in the Isle of Dogs and an area northwest of the city; during 2012–14 breeding was recorded at four separate sites. This species has been under-recorded in the past but improved reporting in recent years has revealed higher numbers; overall the population is believed to be stable at 20–30 breeding pairs. An eradication programme, coordinated by the Animal and Plant Health Agency (APHA) and funded by the UK Government, has been underway since 2011, encouraged by fears of damage witnessed in other countries, and this is part of the reason for better information on this species.

Monk Parakeets are unique among parrots in that they build large, communal nests, constructed mainly from sticks, rather than nesting in cavities. The nests are usually built in trees but also on other structures such as pylons, where they may cause power outages after heavy rain. It was considered necessary to reduce the population while it was still small and restricted in range, unlike that of the Rose-ringed Parakeet, which has grown to such an extent that eradication is no longer considered a realistic option. The decision to remove Monk Parakeets from the wild in England was taken after a peer-reviewed risk assessment (see www.nonnativespecies.org) which considered all the evidence on the potential threat they pose to economic interests and to biodiversity.

Between 2009/10 and 2014 the Government had spent £259,000 on the eradication programme, with a total of 62 birds killed and 21 nests destroyed (www.gov.uk/government/uploads/system/uploads/attachment_data/file/355052/RFI_687I__2_amended. pdf). The capture

Monk Parakeet								
	2012	2013	2014		2012	2013	2014	
England, SE	29	21	24	Hertfordshire	15 (15)	6 (6)	12 (12)	
Buckinghamshire	1(1)	1(1)	1(1)	total (confirmed)	29	20-21	24	
Greater London	13 (13)	14 (13)	11 (11)	breeding pairs				



39. Monk Parakeets Myiopsitta monachus, at a typical nest site, in Greater London, January 2015.

of mature birds and the removal of some nests continues.

The Monk Parakeet is a native of lowland tropical and subtropical forests in South America from central Bolivia and southern Brazil south to central Argentina. In Europe, it has become established mainly in urban parks, large gardens and golf courses. Its food includes the seeds of grasses and trees but also fruit, leaf buds and blossom (*BWP*; Collar & Bonan 2016). In some parts of the world it is deemed to be an agricultural pest, especially of maize, sunflowers and fruit.

It is now a familiar sight in several southern European cities, for example in Italy and Spain, where the climate is closer to that in its native range. A Europe-wide census of parakeets was undertaken in 2015 and 2016 but full results are not yet available. However, in Spain the census estimated at least 18,980–21,455 birds spread across 27 provinces, with concentrations in urban environments (Molina *et al.* 2016). The provinces with the most individuals and nests are Madrid and Barcelona – these cities holding 6,000–7,000 individuals and more than 2,000 nests each. About 90% of nest sites sampled are in trees, with only 1% on man-made structures such as electricity pylons.

Monk Parakeets are scarce in northern Europe. They first bred in Belgium in 1979, where the only population is in Brussels; this and the English populations are among the most northerly in the world. Weiserbs & Paquet (2016) found 139 communal nests in eight colonies in Brussels; roost counts outwith the nesting season suggested that the total population in the city is 220–250 individuals. This is similar to a count undertaken in 2006 so the population is clearly being limited, probably by climate-related factors. The stability of the Monk Parakeet population in Brussels is in contrast to increasing numbers of two other non-native parakeets nesting in Belgium (Rose-ringed and Alexandrine Parakeets *Psittacula eupatria*).

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Appendix 1. Records of other non-native bird species in the UK. Although some records of other non-native species were submitted to the Panel, none included any evidence of breeding having occurred or being attempted. Birders should, however, be aware that breeding by these and other alien species may occur and all such records should be submitted to county and regional recorders in the usual way.

species	no. years reported to RBBP, 2005–14	status update
Swan Goose Anser cygnoides	3	Last confirmed breeding 2011, Worcestershire (not Herefordshire as reported previously)
Bean Goose Anser fabalis	1	Confirmed breeding 2005 only, Norfolk
Emperor Goose Anser canagicus	6	Last confirmed breeding 2010, Cumbria
South African Shelduck <i>Tadorna cana</i>	3	Last confirmed breeding 2010, Breconshire
Yellow-billed Teal Anas flavirostris	2	Last confirmed breeding 2011, Hampshire
Northern Bobwhite Colinus virginianus	2	Last report, singing males 2010, Cambridgeshire
Wild Turkey Meleagris gallopavo	5	Last confirmed breeding 2011, Lancashire & N Merseyside
Reeves's Pheasant Syrmaticus reevesii	9	No evidence of confirmed breeding but at least 15 individuals reported in 2014, mainly in East Anglia
Red-tailed Hawk Buteo jamaicensis	4	Last potential breeding (mixed pair with Common Buzzard) 2006, Nottinghamshire
Rosy-faced Lovebird Agapornis roseicollis	1	Last confirmed breeding 2006, Lothian
Red-winged Laughingthrush Trochalopteron formosum	2	Last reported sightings 2005, Isle of Man
Canary Serinus canaria	1	Confirmed breeding 2005 only, Co. Durham



40. Widely kept in captivity, Reeves's Pheasants Syrmaticus reevesii occasionally escape and there were introduction attempts as recently as 1970, but no wild-breeding population has been established; Norfolk, February 2015.

Max Hellicar