

*Irish Raptor Study Group*

*Grúpa Staidéir Éan Creiche na hÉireann*



ANNUAL REVIEW 2017



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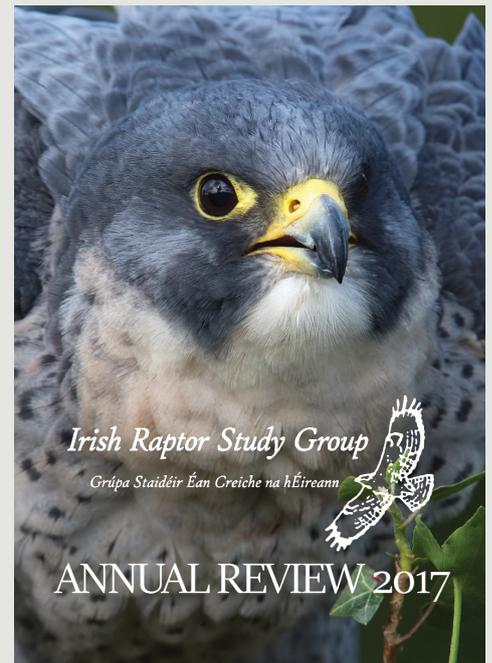
## FROM THE COMMITTEE

This report presents the main Raptor related news of 2017 and provides Raptor nest monitoring records submitted to the Irish Raptor Study Group for the 2017 breeding season. Last years Conference was again well attended with over 100 delegates.

The biggest news of 2017 was the National Peregrine Survey which was an overwhelming success. The survey showed our population of Peregrine is still in recovery which is excellent news, but the main positivity from the survey was the interest and engagement this generated within our network of fieldworkers, especially the uptake of new volunteers. The survey has also received attention on social media and in the press further raising the profile of the Group and Birds of Prey in general across a wider audience. There was also cause for celebration in 2017, with welcome news that all the reintroduction Projects managed by the Golden Eagle Trust continue to expand into new areas.

There was also welcome news from the Department of Agriculture, which announced the investment of 25million euro for a new 5 year Pilot results based agri-environment Programme specifically targeted at farmers with land designated as Special Protection Areas for breeding Hen Harrier. This investment is a promising step forward towards developing a holistic approach to providing meaningful supports for farmers in High Nature Value farmland.

In order to produce a report, we need our Members and supporters to submit records. The total number of nest records submitted in 2017 was 657. We will endeavour to continue to increase awareness about our native Birds of Prey IN 2018, and encourage more members to engage in site visits and nest recording. We have a standardised spreadsheet for reporting and an email address for which to send records ([monitoring@irsg.ie](mailto:monitoring@irsg.ie)). We are also extremely interested in any Raptor sightings, even casual records of common Raptors are of great value and are much appreciated. On that note, we would like to thank everyone who contributed Raptor nest and sighting records to the IRSG in 2017.



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*Traipsing over kilometres of open quaking bog, across deep bog streams, around long irregular shaped loughs, scrambling through thick island undergrowth and climbing up trees in a dry suit at the height of summer is exhausting work"*

# BREEDING MERLIN IN CONNEMARA

## DERMOT BREEN

As a Conservation Ranger with National Parks and Wildlife Service I've been monitoring breeding Merlin within the Connemara Bog Complex Special Protection Area since 2012. The SPA was designated in 2010 and is 19,210 hectares in size. Merlin are one of four breeding bird species listed under Annex I of the EU Birds Directive for which this site has been designated, the other Special Conservation Interests being Cormorant, Golden Plover and Common Gull. The only previous complete Merlin survey covering the area of the SPA was carried out over 1985 - 1986 when pairs were located at fifteen different sites over the two years by Paul Haworth and Padraic Reaney. Aonghus O'Donail a NPWS colleague, has undertaken survey work in the eastern side of the SPA in more recent years. Connemara breeding Merlin are unique amongst Irish Merlin in that they generally do not utilise conifer forest edges and do not nest on the ground., as they do traditionally in the UK. Connemara Merlin select old Hooded Crow nests on islands situated on the many loughs distributed widely and numerous in the extensive blanket bog. As is the case with all falcons they don't build their own nests and have no real nest maintenance skills. Therefore after using a crow's nest for one season they are obliged to find a new nest the following year.

This means that pairs have to move to a different island or more often than not move to an entirely new lough each year which makes locating nests rather challenging. Peregrines and cliff nesting Kestrels can use the same ledge year in year out making life a lot easier for the fieldworker.

Merlin are also notoriously secretive during the breeding season and can prove tough to pin down especially early in the season before the eggs are laid, showing little evidence of occupancy. Merlin are also sensitive to disturbance during the egg stage of the breeding cycle. Various survey methods can be used, the two most frequent techniques used are vantage point watches over suitable nesting locations and plucking posts searches.

The use of decoy falconer's birds and playback of Merlin alarm calls have also been deployed to disappointing levels of success. I found over the last few seasons that to ultimately confirm breeding requires one to swim out to each suitable island and climb up to each crow nest present to inspect the contents. Even then pairs have been known to escape confirmation when seen using a particularly small island! Most of these islands are incredibly rich in flora due to the lack of the usual constant grazing of sheep.

2017 HAS BEEN MY MOST

PRODUCTIVE SEASON SO FAR

WITH FIVE NESTS

RECORDED IN THE WESTERN

REGION OF THE SPA

*Acknowledging the difficulties in surveying this sprightly and feisty little falcon... a national survey for the species is now long overdue.*



OVER THE

PAST FIVE YEARS I'VE

RECORDED TWENTY

SUCCESSFUL BREEDING ATTEMPTS -

ALL IN THE WESTERN PROPORTION

OF THE SPECIAL PROTECTION AREA

Some fine examples of Yew trees can be seen, some of which must surely be several hundred years in age. At a rough count Roundstone Bog alone contains approximately 280 different loughs. Fortunately, most don't have suitable islands to search. The SPA consists of three separated polygons/parts and monitoring has concentrated on the western-most and middle polygons i.e. Roundstone Bog and the bog between Recess and Kilkieran.

All chicks are ringed with the help of John Lusby and Irene O'Brien. Due to the small numbers ringed so far, the only recovery so far has been a 20km north-west movement of a chick from Roundstone Bog out to the coast just two months after its ringing in 2016. The deployment of satellite tags would prove invaluable. Little is as known of Irish Merlin during the breeding season (how far away do males hunt from the nest, what are the important foraging habitats, etc.). Nothing is really known about Merlin outside of the breeding season e.g. do the adults remain on the territories all year round, how far do young birds roam in their first year or two before settling down to breed, do they return to their natal grounds?



A Merlin Pilot Survey was undertaken from 2010 to determine what the best survey methods would be to assess the Irish breeding population. The results of that Pilot Study were quite mixed and there doesn't seem to be any one sure way of surveying the species. As the species is a listed Annex I there is a legal onus on Ireland to monitor the Merlin and to establish the conservation status of the species. Merlin are now a "feature of interest" for six Special Protection Areas around the country. They seem to be a slightly neglected bird of prey species if one compares them to Hen Harrier whom they share several different features but differ in how they have been studied in recent decades. Both species possibly have a similar population size, are reliant on open countryside and have also possibly declined due to land use changes such as afforestation. To date there have now been four national Hen Harrier surveys compared to zero Merlin national surveys.

Dermot Breen

<http://dermotbreen.blogspot.ie/>

# GOLDEN EAGLE: A MEMORABLE YEAR

LORCAN O'TOOLE

*The small Golden Eagle population in County Donegal had a memorable breeding season in 2017 - three separate pairs each fledged a single chick.*

After a number of difficult breeding seasons, with no chicks in 2015 and 1 chick in 2016: it was a great boost to the small population to have three additional young fledge from three separate mountain ranges in Donegal.

For the first time in a century, an Irish bred Golden Eagle, reared in a eyrie in Glenveagh, reared a chick herself alongside her mate - one of the numerous Scottish bred chicks, which were released in Glenveagh National Park (2001-2012).

Golden Eagle pairs can now be found in the Derryveagh and Bluestack Mountains and the Glencolumbkille and Inishowen Peninsulas. Whilst this fragile population is still confined to County Donegal; the addition of three healthy juveniles to a small population total of 20-25 birds, is a very welcome boost.

The majority of the Golden Eagles are still found in Donegal, though there have been periodic sightings in other parts of Ulster and to the Southwest (Leitrim, Sligo, Mayo and Galway).



In parallel, with the encouraging breeding news, there seems to be a concomitant focus on the sustainability of Irish Mountains and Uplands as indicated by several Governmental environmental and agricultural initiatives. These are aimed at increasing upland farming viability, improving water quality and management and the focus on the importance of carbon sequestration from our bog lands in general.

We know that wild bred young Eagles tend to be more productive than released or reintroduced eagles (See analysis or comparisons between the productivity of reared and released

White-tailed Eagles in Scotland). So, in several years-time, if we can see the Irish population fledge 3-4 young Golden Eagles a year, consistently; we may anticipate a slow upturn in the small Irish population, trying to take root in the Northwest.

There is an ongoing debate on how best to manage these isolated pairs, covering large tracts of ground, in the Donegal Mountains. The primary options revolve around a 'high media profile and tourism potential' versus a 'low key and conservative' approach. Whilst such an attractive species has a huge "public profile"; nonetheless there could be very real consequences

in terms of pairs in isolated and remote spots, which are difficult to protect on a daily basis. A short-term flurry of activity and positivity may result in some unintended negativity and attitudinal responses subsequently.

The low profile of the Golden Eagle Project probably reflects these upland risks to, and the human concerns for, the species' welfare in Ireland. A gradual, if modest, positive trend in annual productivity would be a welcome sign that Irish Uplands can be enhanced, from quite a low ebb.

# MONITORING & RINGING RAVEN AND RAPTORS IN NORTH WEST IRELAND

IRENE O'BRIEN

The west of Ireland is a wild and wonderful place but it can also be a desolate, exposed and unforgiving. It is mainly devoid of the lovely deciduous woodlands and productive farmland of the east coast and the midlands. What occurs in abundance in the west though, are mountains, sea cliffs and boglands. Therefore, the Raptor species that we concentrate on, are those that occur in these habitats, mainly Peregrine Falcons, Kestrels, Merlin, and the occasional White-tailed Eagle. Despite the abundance of upland habitat, the Hen Harrier is only a rare winter visitor. Our ringing season begins in early April with Ravens. As I was out surveying sites for Peregrine Falcons, I was picking up a lot of Raven sites along the way. I began a colour ringing project in 2011, initially in Mayo, but thanks to Dermot Breen who now has over 50 Raven breeding sites in Connemara, the project has expanded into this region too. Many of the sites in Connemara, are easier to access for ringing. We manage to access about 15 - 20 nest sites a year, this is on average 50-60 chicks in a good year, between North

Mayo, South Mayo (Eoin McGreal) and Connemara (Dermot Breen). It may not seem a lot but the whole activity is time consuming, some of these nests are on high cliffs, there is usually a walk in involved, then time to set up, ringing time, cleaning up and walking out. The most I have managed to ring in a day is six nests, and that is a long day. On occasion we have six young in the nest, but this is quite rare. Four or five is more common.

The North Mayo sea cliffs are massive and the birds often nest in very precarious locations. It can take a considerable effort to locate the nest at times, and every winter some of the nests get washed out and the birds will re-build again the following year. They rarely build in the same location on the cliff face, sometimes I have noticed them make a couple attempts at re-building, resulting in some half built nests within the territory. They can re-build over a kilometre away, within their territory, so this usually involves a lot of walking in order to find the new nest.

COLOUR RINGING OF RAVEN

BEGAN IN 2011.

TO DATE WE HAVE RINGED OVER

300 PULLI

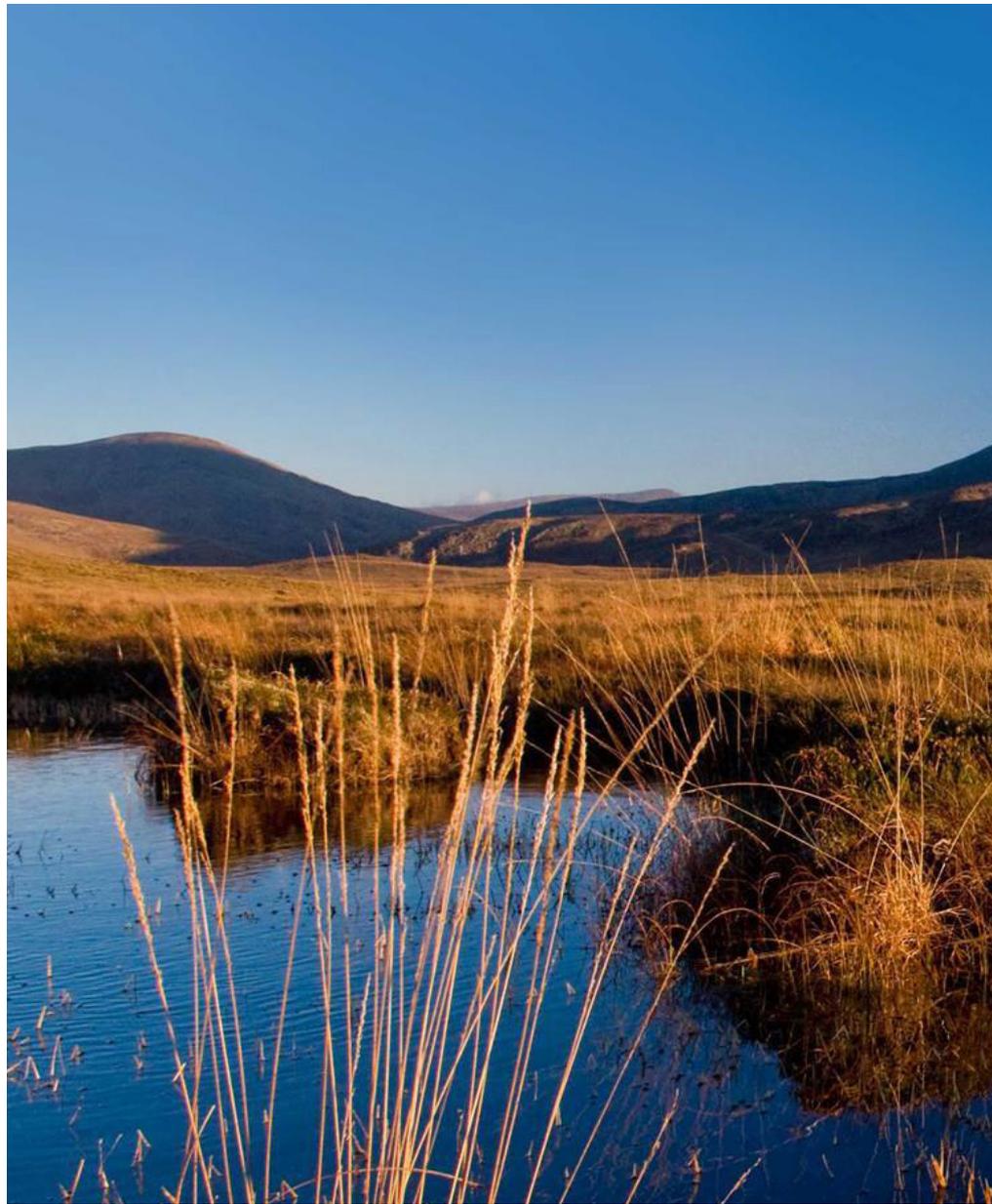


*Raven ringing is usually finished by the third week in April except for the occasional late brood. After a reprieve of a few weeks, by mid- May, it is time to begin ringing Peregrine Falcons”*





*2011 was the first year of ringing Peregrines. In 2012, colour ringing began. To date, over 230 Peregrine chicks have been ringed between Mayo, Galway and Sligo.”*



In 2017, I had three different pairs re-build on sea stacks, though after recent storms, I would be surprised, if these nests are still around. Along the coastline, the Raven nests are relatively evenly spaced out and this is similar to what Eoin McGreal recorded in South Mayo, where the mean nearest neighbour distance was 2.96 km (Irish Birds 2007, Vol 8, No.2) It has taken years of walking to fill in the gaps, but slowly it is happening. 2011 was the first year of ringing Peregrines. In 2012, colour ringing began. To date, over 230 Peregrine chicks have been ringed between Mayo, Galway and Sligo. There have been 12 recoveries and I know of three colour ringed birds that are now breeding. A couple of these birds have been picked up by Michéal Casey and his extreme diligence at photography. There are possibly more birds breeding that we haven't discovered yet. Birds have been recovered in Limerick, Waterford and Kerry, and others more locally. Many of the Peregrine sites are difficult to access, and some of the upland sites can take a day to get in and out. We also have to work with the weather of course. In 2017, Eoin McGreal and myself walked into an upland site in May on three different occasions, in the hope that the cloud would clear and each time we had to abandon the mission. We did eventually manage to access the site. The ringing season comes upon us quickly. For a long time, it seems as if



there is not much happening and then suddenly, there are large chicks in eyries that need attention. Every year, despite best efforts, some sites are missed due to the chicks gone past the ringing stage. There are always one or two sites that are very late, possibly relays, in 2017, the last site was ringed in Sligo on the 30 June. During this time, we make a concerted effort to ring some Kestrels as well. Kestrels are usually ready to ring around the first week of June. The time line with Kestrels is very short, as once they get to over 17 days, there is a real chance of them jumping from the nest and nobody wants to risk that happening. I have had very few Kestrel recoveries

over the years, but in 2016, a chick ringed in Connemara, was picked up in Pembrey, Carmarthenshire in the UK, 440km away in poor condition. That same year, another ringed bird was captured by ringers on Cape Clear, in October.

Finally, then we manage to ring some Merlin, mainly in Connemara. This involves a few kilometres walk across the bog, changing into a dry/wet suit, a swim across a bog lake with the ringing gear and a scramble up a tree to the Merlin nest, as well as dealing with the dreaded midges. 2017, was the most successful year, when we managed to access five nests. In 2016,

on one occasion, we managed to ring the three different Falcon species on the same day, due to a late Kestrel and Peregrine brood.

The few months of the ringing season is my favourite time of the year. You just do not know what the day will bring, what unusual species you may find at a nest site or what you are going to come across. Hopefully, at some stage in the future, we will see more White-tailed Eagle nests, Buzzard and maybe even Osprey in the west of Ireland and we won't only be confined to the Ravens and the Falcon species.



# PEREGRINE SURVEY

## 2017

In 2017, the IRSG aimed to investigate the population size, distribution and breeding success of Peregrine Falcon in the Republic of Ireland, and to compare results with similar surveys since the early 1980s. The last National Survey was undertaken in 2002. What has been happening with our Peregrine population over the last 15 years?.

The National Parks & Wildlife Service provided part funding for the National Survey through Grant Award and in Spring the IRSG sought a focused, energetic individual with excellent organisational and interpersonal skills to manage and coordinate the Survey. The Committee received many excellent applications from candidates in Ireland, the UK and Europe. After the difficult task of narrowing down the short-list, Jen Lynch was offered and accepted the role of National Peregrine Survey Co-Ordinator.

A Peregrine Steering Group was set up to get external expert opinion and input on developing a robust approach for the Survey. IRSG are very grateful to Damian Clarke and David Tierney of the NPWS, John Lusby of BirdWatch Ireland and our own Committee Members Irene O'Brien and Alan Lauder for their time and direction.

Historical, current and prospective breeding territories of the Peregrine Falcon were surveyed during the breeding season of 2017 applying a prioritised hierarchy of three complementary regular sampling approaches. These comprised site-based surveys; prioritised 5km by 5km squares; and randomised 5km by 5km squares with suitable habitat. Survey coverage aimed to achieve two (preferably three) visits timed to establish presence, absence or evidence of Peregrine Falcon occupancy and breeding success, where possible.

Jen identified and recruited participants to carry out survey and monitoring for the Survey and was the main point of contact for the Peregrine fieldworker network, keeping them motivated to contribute to the Survey and updating the network and Committee on activities and progress. First visits were undertaken March – mid April; second visits between late April to end of May and third visits between early June and mid-July 2017. An urgent and considerable task at the outset of the Survey was the dissemination of survey methods, mapping and field sheets to fieldworkers. The IRSG would like to acknowledge the crucial support provided at this time by Dr. Eimear Rooney and Dr. Marc Ruddock of the

THE SURVEY ACHIEVED A

NATIONAL SAMPLE COVERAGE

OF 721 5KM SQUARES

*257 individual  
surveyors contributed  
to the national survey...  
equivalent to over  
c.4,000 hours of survey  
effort.*



Northern Ireland Raptor Study Group who provided and generated national scale 5km grid satellite orthophotography and ordnance survey mapping within a matter of days. As Jen developed the network, we have to recognise the extremely important role of Regional Co-ordinators who assisted overseeing project delivery at a regional geographical level, allowing Jen to track surveyor effort and progress. This allowed the identification of gaps in possible coverage and the mobilisation of fieldworker effort in these areas.

257 individual surveyors contributed to the national survey... equivalent to over c.4,000 hours of survey effort. If considered as a 8 hour working day, this equates to over 500 fieldworker days over one breeding season. This is a truly remarkable achievement and the IRSG are extremely grateful for all the time, energy and personal expense that went into volunteering. Every site checked, whether occupied or not, and every sighting submitted was invaluable. In total over 450 individuals provided some form of support in survey, either providing access to sites, distributing information through media and the press.

Of those 257 surveyors, the National Parks and Wildlife Service (NPWS) provided support from 62 staff and accepted a very high allocation of 5km sample squares. Quite simply the National Survey could not have been completed without their hard work, local knowledge and commitment.

We also recognise the significant amount of trust from the NPWS Birds Unit and Principal Officers extended to the IRSG in allocating this level of staff resource. A key aim of the Survey was to ensure high standards of field data collection and collation, leading to robust scientific outputs for the Survey. Before the end of 2017, the IRSG had issued the final National Geodatabase Dataset to NPWS compliant with their GIS operating systems and is now available to Departmental staff to inform monitoring, site protection, assist the role of the Development Applications Unit, and crucially, provide extremely accurate data for reporting to the European Commission on the status and trends in the Peregrine population (Article 12).

The IRSG Committee would like to offer our gratitude to the professionalism and commitment of Jen Lynch in her role as Peregrine Survey Co-Ordinator, and wish her every success in her new role as NPWS Conservation Officer for Co. Monaghan. From the interest generated through the survey, there is momentum within the IRSG network. With targeted training and workshops planned for Spring 2018, we hope to upskill and encourage more people to get involved in monitoring and develop an interest in other species. Anyone interested in getting involved can contact us through our website [www.irsg.ie](http://www.irsg.ie).

IRSG would also like to thank CLSpatial for providing quality checks of the GIS files prior to issue to NPWS.



Peregrine Falcon inhabit some of our most spectacular, wild upland and coastal landscapes. A rewarding part of monitoring is discovering and exploring these special places. However, some of the best places to see and enjoy Peregrine are often on our doorstep. The iconic Poolbeg Chimneys, at over 200m, can be seen from most parts of Dublin. At the top, a Peregrine holds territory, looking down over the sprawling city, bustling with over a half a million people. The view from this eyrie on a clear day must be breathtaking.



# RAVEN RINGING PROJECT, SLIGO

MICHAEL CASEY & DAVID MCNICHOLAS

David and Mícheál, active members of the IRSG in Co. Sligo, have been ringing Raven chicks under licence for several years, often in challenging terrain. The study aims to gain a better understanding of the distribution, movement, site fidelity, number of alternative nest locations, mate fidelity, turnover, and population of Ravens in County Sligo. In the wild, the average lifespan for Ravens is 13 years. The oldest wild bird on record was 23. Given the longevity of the birds, it is hoped to gain an insight into the Co. Sligo population through the colour ringing project started in 2016. Colour rings will allow for easier identification of individuals in the field following fledging. A good inventory of nest sites, in excess of thirty, has been recorded throughout the county. Given the topography of Co. Sligo, many of the nest sites occur in upland areas, in particular the Ox Mountains, Glencar Valley and Benbulbin. Additional nests have also been recorded along coastal cliffs, active and inactive quarries, mature trees and old buildings. They have recorded alternative nest sites, as many pairs switch sites within their territory from year to year.

The study has shown that Sligo's Ravens are doing quite well, productivity-wise, having recovered rapidly from a very low ebb when poisoning was legal and widely

practiced in Ireland in the nineteen hundreds. In 2016, three broods of five chicks were ringed, with three and four chicks occurring in other nests. Since 2015, 75 chicks have been ringed, of which 27 have been fitted with a unique colour/"darvic" ring.

It is hoped that with an increasing number of nest sites monitored each year that the number of chicks ringed will increase as the project progresses. As Ravens occur in upland habitats throughout the year, feeding mainly on carrion, they can act as a good indication as to the health of our upland habitats. Where Ravens are lost from traditional nest sites, this may be a sign of other impacts on the landscape including poisoning for other wildlife such as crows, fox and other "vermin" species. In this way, there is potential for such projects to identify areas where other species such as Golden Eagle may be threatened.

David and Mícheál would like to acknowledge the assistance of the Sligo-Leitrim Mountain Rescue Team whose volunteers help them gain safe access to Raven eyries on cliffs and crags. They would also like to thank the landowners and quarry owners who give them access to their properties for monitoring Raven nests. Without their co-operation this work would not be possible.

SINCE 2015, 75 CHICKS

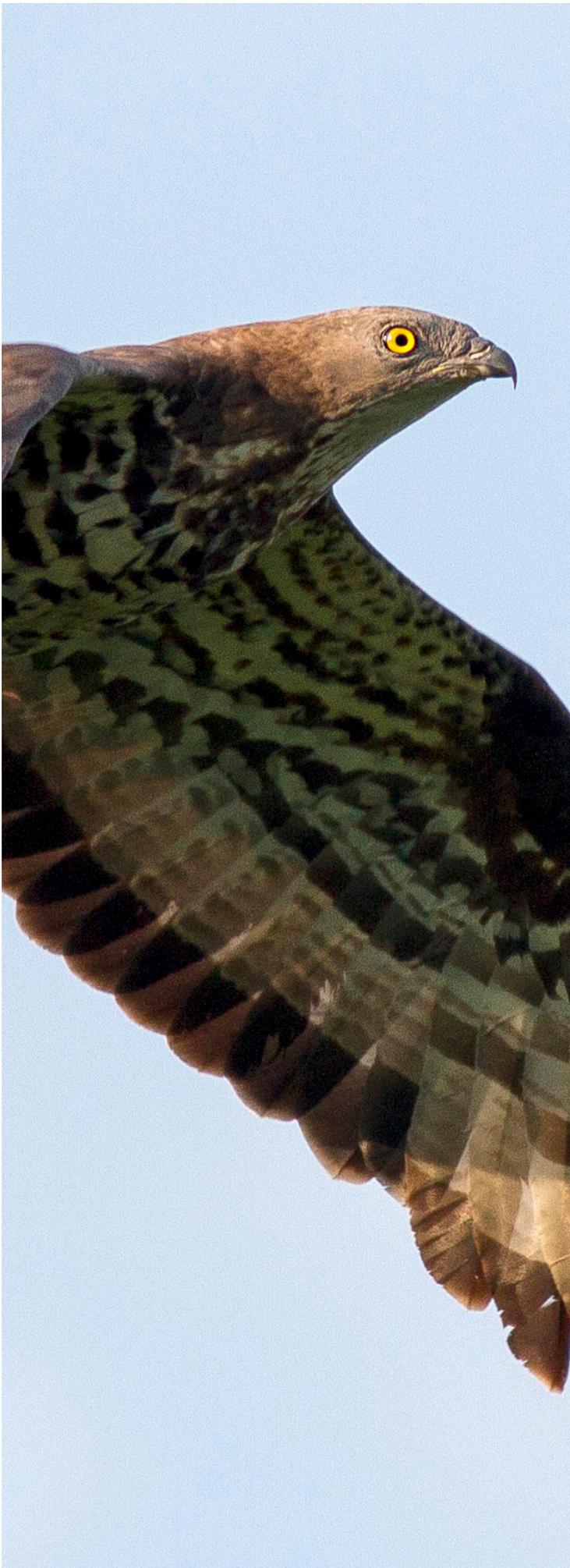
HAVE BEEN RINGED, OF WHICH

27 HAVE BEEN FITTED

WITH A UNIQUE COLOUR RING



*Since the project began in 2013, over 30 nests have been monitored annually. ”*



# CLAMHÁN RIABHACH

HONEY BUZZARD

*PERNIS APIVORUS*

The Honey Buzzard breeds in most European countries, although it generally has a southerly distribution, being absent from northern Fennoscandia. Across much of its range, its distribution is rather patchy.

In the UK, at the western extent of its range, Honey Buzzards can occur in high-quality mixed deciduous forests in the lowlands of southern England, central hill country with mixed farmland/woodland, and upland, even-aged coniferous plantations. Honey Buzzard are highly secretive and a specialist insectivore that feeds mostly on the larvae and pupae of wasps and bumblebees. When this food source is temporarily unavailable, it also eats other insects, pulli and occasionally small mammals and reptiles. The Honey Buzzard is a passage species in Ireland, arriving from Africa in May and leaves again in August or September.

There was only one noted sighting of Honey Buzzard in May 2017: Cape Clear, Co. Cork (Sam Bayley).

TERRITORIAL PAIRS	PAIRS EGGS	WITH	FAILED PAIRS	SUCCESSFUL	F L E D G E D YOUNG
-	-	-	-	-	-

No breeding records received.

# CÚR RUA

## RED KITE

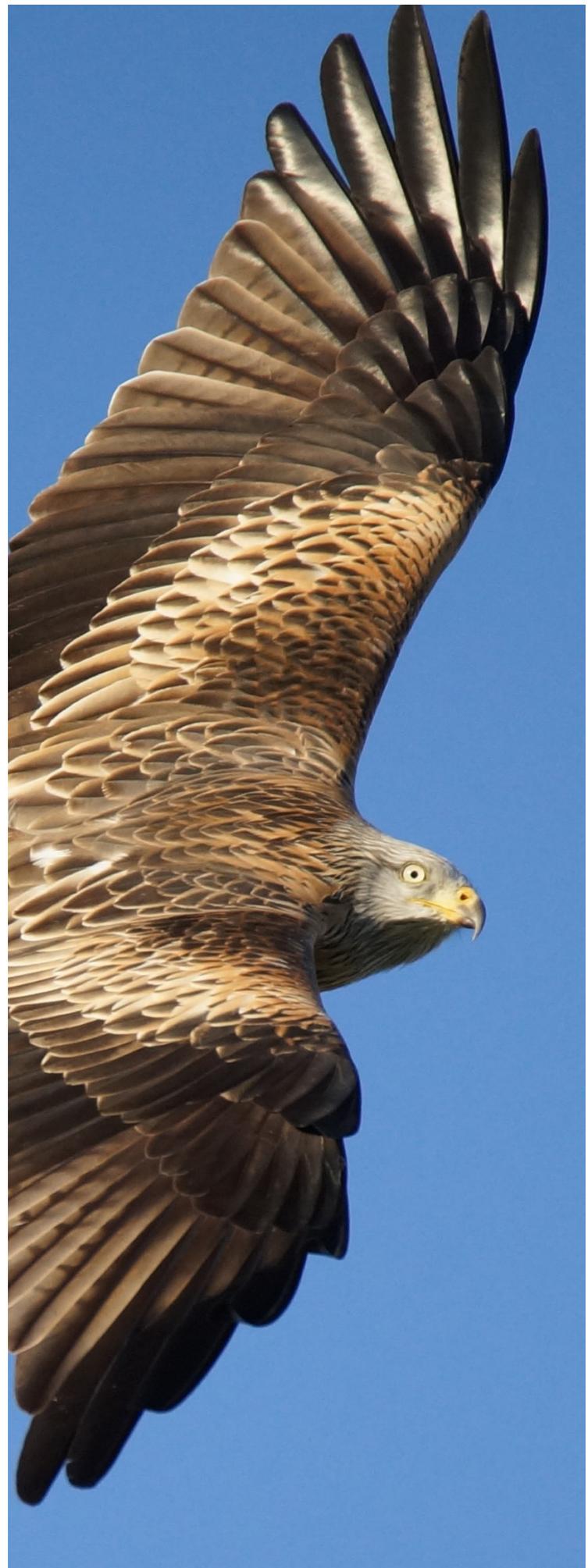
### *MILVUS MILVUS*

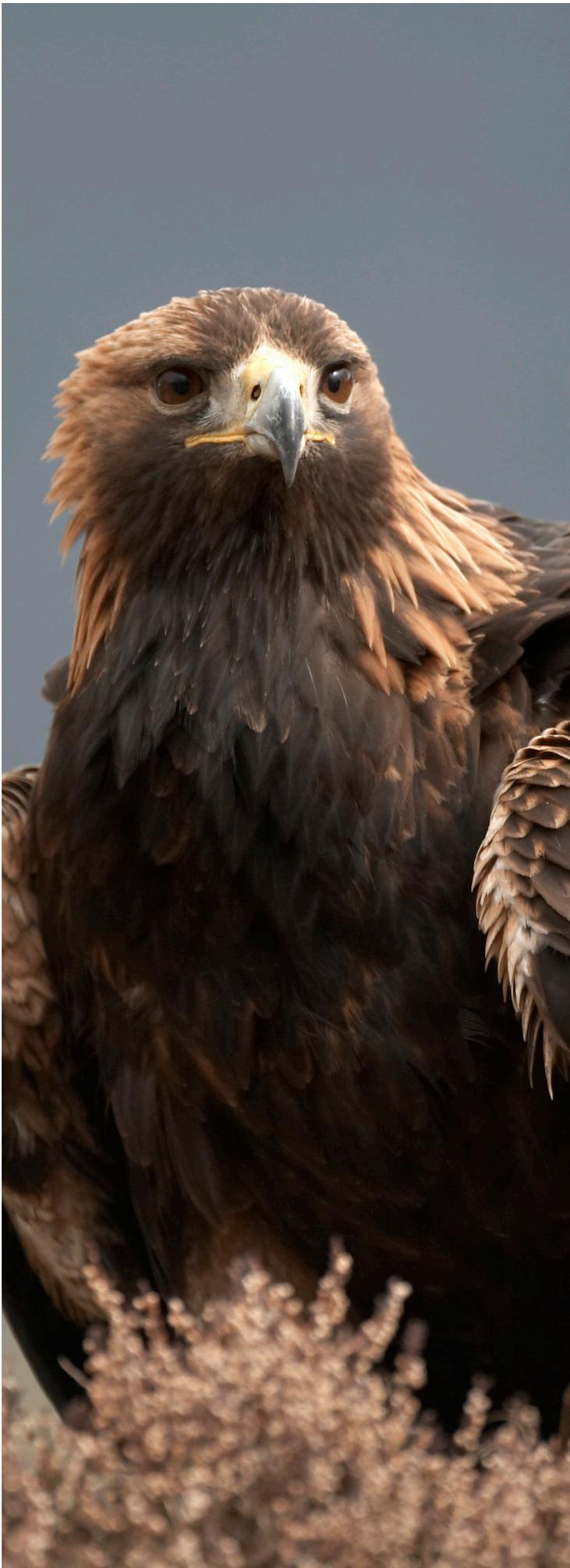
The Red Kite project along the east coast continues to go from strength to strength. More than 80 pairs of kites were recorded and they produced more than 60 young in 2017. When combined with the Royal Society for the Protection of Birds (RSPB) restoration programme, in County Down; it means that more than 100 pairs of kites are now established across the island of Ireland. The Red Kites have been quickly integrated into the community fabric across its range and groups of kites, in flight or at communal roosts, are now a spectacle to behold, at all times of the year, particularly in many towns and villages in County Wicklow. Kites in the Wicklow release area are gradually spreading out along the southern, northern and western parts of their range; which now stretches from Gorey, Wexford in the south to Roundwood in the north and from the coastal fringe to the Wicklow Mountains in the west. The Fingal Red Kite population (6 pairs) was boosted again this year with two successful pairs, which produced five young between them. The Golden Eagle Trust remains buoyant about the prospects of the Red Kite in Ireland with the continued growth and expansion of the population. Wing-tagging continues to be undertaken across the red kite range and tags were Blue (left wing) and Black (right wing) in 2017.

Recent wintering counts carried out in early January found 188 birds in Co Wicklow and along the edge of Co Wexford and 26 in Fingal (Co Dublin / Co Meath).

Dr. Marc Ruddock has kindly submitted the following Red Kite Project data for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
85	46	18	28	61





# IOLAR FIRÉAN

GOLDEN EAGLE

*AQUILA CHRYSÆTUS*

The Golden Eagle Project in the northwest has faced a number of obstacles, in 2016, three pairs laid eggs again and thankfully one chick fledged. In 2017, the three pairs of Golden Eagle in County Donegal fledged a single chick each.

Lorcán O'Toole has summarised Golden Eagle Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAI L E D PAIRS	SUCCESSFUL	F L E D G E D YOUNG
6	3	-	3	3

# IOLAR MARA

## WHITE-TAILED EAGLE

### *HALIAEETUS ALBICILLIA*

The Irish White-tailed Sea Eagle (WTSE) Reintroduction Project is managed by the Golden Eagle Trust. Releases of birds took place every year for five years (2007-2011) in Killarney National Park, Co. Kerry. In August 2011 the final cohort of 23 birds were released bringing the number released to 100 over the five year release phase of the Project. By early 2010 the first territorial pair of WTSEs had formed in south-west Kerry. This increased to 4 territorial pairs in 2011, 6 in 2012, 10 in 2013, 14 in 2014, but declined again to 13 in 2015 and 10 in 2016 and 2017.

Ten pairs held territory in Ireland in 2017. Nine pairs built nests and laid eggs. Eight pairs hatched chicks across four counties although three nests failed at the early chick stage. Thus, five successful pairs fledged seven chicks with doubles at two nests on Lough Derg. This brings the number of White-tailed Eagle chicks fledged to date in Ireland to 21.

Allan Mee has summarised White-tailed Sea Eagle Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	WITH FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
10	9	4	5	7





# CROMÁN MÓNA

## MARSH HARRIER

### *CIRCUS AERUGINOSUS*

The Marsh Harrier has a wide breeding distribution throughout temperate regions of the Palearctic, from western Europe and the tip of northern Africa throughout Asia to Pacific coasts on Sakhalin and northern Japan. The species is highly migratory, and outside the breeding season, it moves south to winter in Africa, India and south-east Asia.

A pair of Marsh Harrier attempted to breed at Tacumshin, Co. Wexford in 2016, however were unsuccessful. The Marsh Harrier was last known to have bred in Ireland around 1917. Marsh Harrier bred in Northern Ireland in 2009 and 2011, the first breeding records there since the 1840s. There was no evidence of breeding at Tacumshin in 2017. There was one submitted observation of a possible pair in suitable habitats at Iron Lough, Co. Westmeath.

There has been an increase in the number of records in recent years, however over the last two years there has been a relatively stable c. 80 sightings of Marsh Harrier in the Republic of Ireland in 2016 & 2017.

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
-	-	-	-	-

No confirmed or possible breeding records received.

# CROMÁN NA GCEARC

## HEN HARRIER

### *CIRCUS CYANEUS*

Hen Harriers have been surveyed at a national level every five years since 1998-2000 but have also been monitored at a local or regional level by IRSG at some important sites since the 1990s. The current estimated Hen Harrier population in Ireland is between 108- 157 pairs and a declining population trend.

In 2017, as part of the Hen Harrier Locally Led European Innovation Project (EIP) extensive monitoring was carried out across all the six Special Protection Areas (SPA) designated for breeding Hen Harrier in Ireland by the Golden Eagle Trust. Overlapping data was also received from the NPWS via contracted work undertaken by BirdWatch Ireland in the Slieve Bloom Mountains SPA for a separate research project.

During 2017 there were a total of 58 confirmed territories and 12 possible pairs – which yields a population range of 58 – 70 within the SPAs during 2017. Compared to population estimates utilised in designation from 2005, the total population is therefore 25.5% smaller in 2017. The overall numbers in 2017 did appear to be larger in some sites than the previous survey in 2015 in particular the Slieve Blooms and Slievefelims to Silvermines SPAs; whilst all other sites were recorded to be lower than at designation

The table below summarises Hen Harrier Breeding records for 2017.

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	F L E D G E D YOUNG
70	58	32	26	62





# SPIORÓG MHÓR

NORTHERN GOSHAWK

*ACCIPITER GENTILIS*

The Goshawk inhabits mature woodland, preferring areas near clearings and the forest edge. The species's optimal habitat appears to be areas of farmland interspersed with mature woodlands and forest. Goshawks are generally resident resulting in stable patterns of distribution and occupancy between seasons. There have been large scale increases in range in the UK over the last 20 years.

Goshawks are rare in Ireland, though probably under recorded. A pair of Goshawk were reported displaying in suitable habitat early in the breeding season in Co. Monaghan and there were other isolated observations from the Midlands and also from Co. Wicklow.

TERRITORIAL PAIRS	PAIRS EGGS	WITH	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
-	-	-	-	-	-

No confirmed or possible breeding records received.

# SPIORÓG

SPARROWHAWK

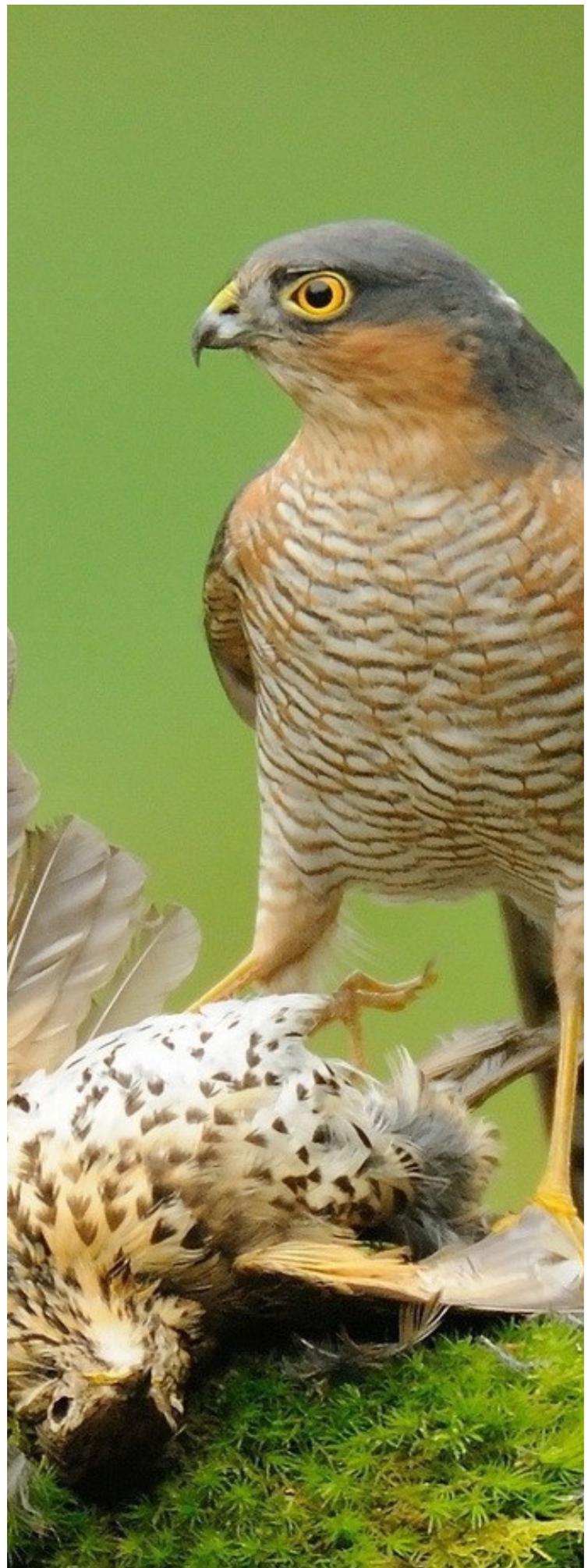
*ACCIPITER NISUS*

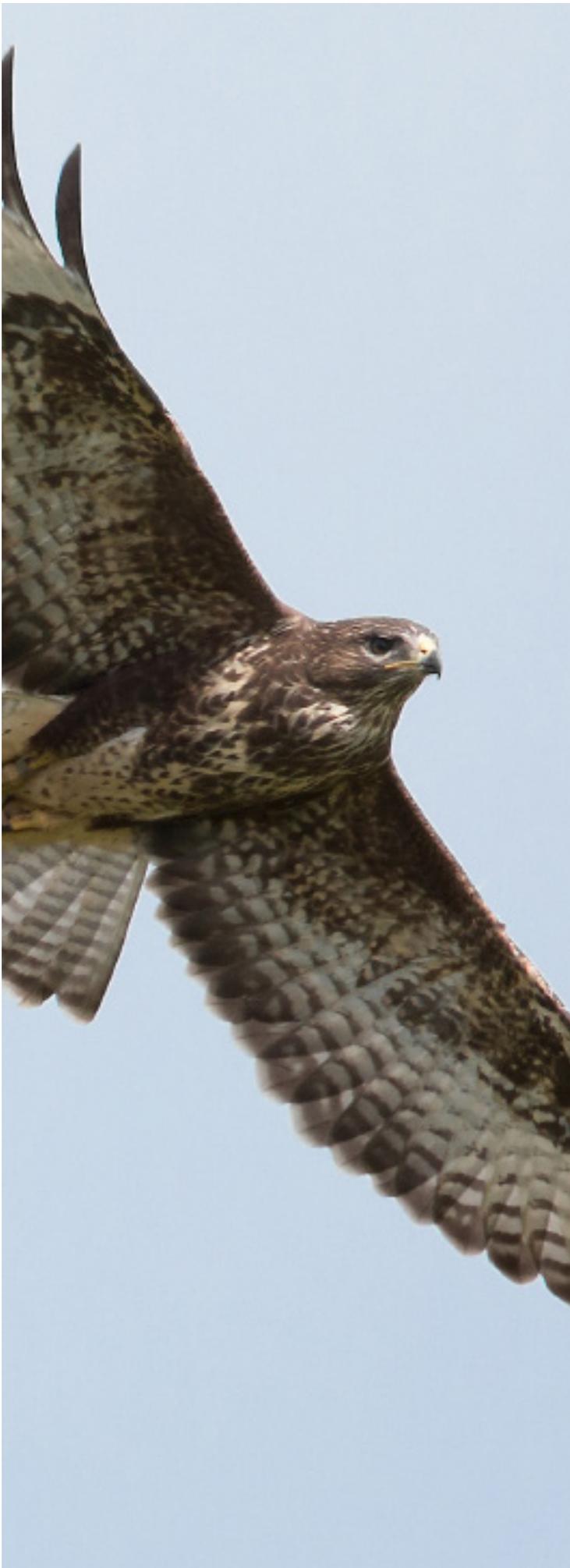
The Sparrowhawk is one of our least studied species in the Republic of Ireland. Due to the fact they are an elusive breeding species, nesting in woodland, moving nest each year. While Sparrowhawk is one of our more common species, and frequently encountered in urban settings, they are under recorded and poorly monitored throughout the country.

A pilot Sparrowhawk Project was initiated in 2015 which collated data mainly from Dublin, Donegal and Wicklow and identified 48 successful breeding sites. Monitoring of sites nationally has decreased since with 10 sites checked in 2017.

The following tables summarise Sparrowhawk Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
9	4	-	4	5





# CLAMHÁN

## COMMON BUZZARD

### *BUTEO BUTEO*

The re-colonisation of the Common Buzzard throughout Ireland, is a true success story. Initially, this expansion was primarily concentrated in the eastern half of the country, as well as Donegal and Northern Ireland with large gaps along the western seaboard.

We received 39 breeding records for the Common Buzzard in 2017. These records are from several areas around the country, as the Buzzard is now confirmed as breeding in all counties apart from Kerry. Many of these records came from the IRSG sightings database. 26 possible breeding records were derived from entries which stated that there were adult pairs soaring/displaying within suitable habitat during breeding season. All the possible breeding records have been reported at various stages during the breeding season. However, nests were not located, therefore, the outcome for these records is reported as unknown. There were 14 confirmed breeding records reported. A total of 524 Buzzard sightings were also submitted/collated in 2017.

The following tables summarise Buzzard Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	WITH	FA I L E D PAIRS	SUCCESSFUL	F L E D G E D YOUNG
39	14		5	9	13

# CÓIRNEACH

OSPREY

*PANDION HALIAETUS*

In Europe, the distribution of Ospreys is largely northern and eastern. Over 90% of the breeding population occurs in Sweden, Finland and Russia.

Colour leg rings and satellite tagging has shown that most Ospreys seen in Ireland today are from the expanding Scottish breeding population, now holding over 200 territorial pairs. A proportion of Scottish Ospreys pass south through Ireland each autumn (July to October) and return north each spring (March- June) en route to and from their wintering grounds in West Africa. These migrants seem to favour several corridors in Ireland, including (1) down the east coast, (2) down the River Bann and on to the Lough Erne system and the River Shannon basin and (3) down through Lough Swilly and Lough Foyle in the north-west and on to the great lakes of Mayo and Galway.

The number of sightings over the last 15 years has steadily increased. Over 50 sightings of Osprey were recorded in 2017, slightly down from c. 60 in 2016. Osprey are most consistently recorded in Waterford, Wexford, Dublin and Louth. There are no published records of Ospreys nest building in Ireland in recent decades – though an occasional pair has spent the summer here.

TERRITORIAL PAIRS	PAIRS WITH EGGS	WITH FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
-	-	-	-	-

No confirmed or possible breeding records received.





# POCAIRE GAOITHE

## COMMON KESTREL

### *FALCO TINNUNCULUS*

The Kestrel population densities are highest in South-west Ireland, however many regions have recorded a long term decline, possibly linked to the effects of agricultural intensification on farmland habitats and small mammal populations.

In 2017, we received 85 Kestrel breeding records, in contrast to 2016, when we received 25 records. The increase in records can be accredited to the National Peregrine Survey as several new Kestrel breeding sites were identified. There was an unknown outcome for 40 of these sites.

The following table summarises Kestrel Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
84	36	2	35	78

# MEIRLIÚN

MERLIN

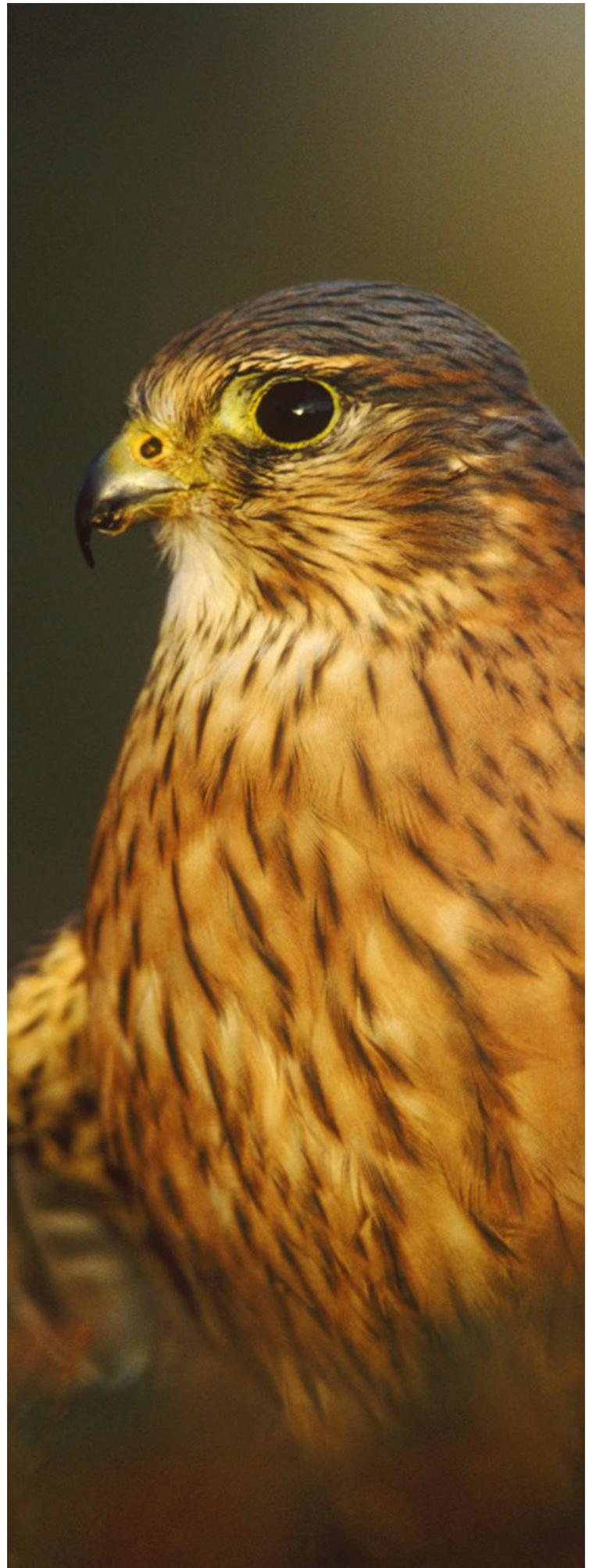
*FALCO COLUMBARIUS*

The Merlin, one of our most secretive Raptor species, is also one of the most difficult species to survey. There is a paucity of accurate data on abundance and population trend for Merlin in the Republic of Ireland. This is reflected in the poor number of breeding records submitted. A national survey concentrated on this species is required.

The following table summarises Merlin Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
7	5	2	5	17

Most of the Merlin records come from Connemara, where there is intensive annual monitoring within the Connemara Bog complex. Five nests monitored by Dermot Breen all had large young in the nest, 17 young from five nests were ringed.





# FABHCÚN

# GORM

PEREGRINE

*FALCO PEREGRINUS*

A National Breeding Peregrine Survey ran from February to end of September 2017. The IRSG Committee and a specifically appointed Peregrine Survey Co-Ordinator Superintendence and Quality Management was provided by the IRSG Committee Members most experienced in large scale Peregrine monitoring, notably IRSG Secretary Irene O'Brien and Alan Lauder.

The last National Survey recorded a minimum of 390 confirmed occupied sites. In 2017, this minimum is 425, equivalent to a c.8% increase. There were 399 5km squares with at least 1 occupied nest site in 2017. 342 natural sites were surveyed in 2017 with 195 of those occupied. 300 Man made sites/structures were surveyed in 2017 with 230 of those confirmed occupied.

In terms of the physical characteristics of occupied sites recorded in 2017, 185 coastal sites were surveyed in 2017 of which 108 were occupied. 458 inland sites were surveyed of which 317 were occupied. The full geodatabase of the National Survey is still ongoing analysis at the time of issue of this Annual Review and productivity data is not available. The full results of the survey are currently being prepared for peer review and Jen Lynch will be presenting the results at the Annual Conference in 2018.

The following table summarises Peregrine Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
425	328	75	220	TBC

# FABHCÚN COILLE

HOBBY

*FALCO SUBBUTEO*

Most individuals of the species are migratory, with western birds wintering in Africa and others in southern Asia. Birds leave their breeding grounds between August and October, arriving at wintering quarters from late October onwards. The return journey begins in March and April, and breeding territories are occupied again in May and June. Birds are usually seen singly or in pairs or family groups, even on migration, with larger groups being rare except at roosts and especially rich feeding sites. Birds almost always nest in trees, using abandoned nests of other raptors or corvids. Flying insects form the main part of its diet, although birds are often taken in the breeding season

This species is too rare and unobtrusive to be monitored in Ireland. In 2017, only c. 20 sightings were collated / submitted, far lower than the c. 50 sightings of Hobby recorded in 2016. Most records are from during May and June predominantly from several sites in Wicklow and Wexford.

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
-	-	-	-	-

No confirmed or possible breeding records received.





# ULCHABHÁN CEANN CAIT

LONG-EARED OWL

*ASIA OTUS*

This is one of the most poorly monitored Irish species, being very secretive and nocturnal. Only brood size is recorded in sufficient numbers for this species, due to the vocal nature of juveniles. Monitoring for this species is currently too variable to produce any robust trend data.

Targeted survey effort for this species was last undertaken in the North-west region in 2012 using tape lure monitoring under the direction of Aongheus O Domhnaill, Irene O'Brien and Joe Shannon under licence by NPWS. The IRSG will aim to enhance monitoring for this species in the future.

The following table summarises Long-eared Owl Breeding records for 2017:

TERRITORIAL PAIRS	PAIRS EGGS WITH	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
14	10	-	10	25

# ULCHABHÁN RÉISC

SHORT-EARED OWL

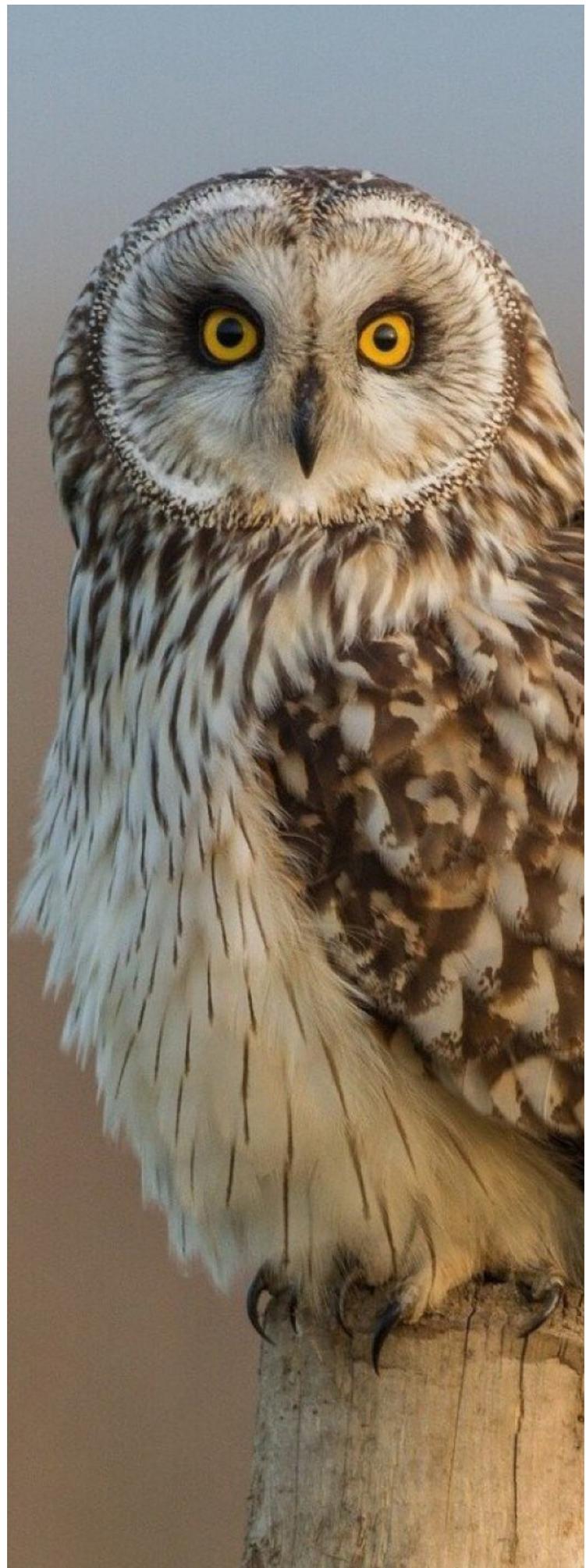
*ASIO FLAMMEUS*

Short-eared Owls have a scattered breeding distribution in western Europe, occurring in upland, moorland and heathland areas. In much of its range, the Short-eared Owl is migratory, moving south in winter from northern breeding areas. The species is an opportunistic feeder, heavily reliant upon vole and mice populations, upon which its distribution and nesting success tend to revolve.

This is a very scarce breeding species in Ireland and there is limited data available. The last recorded breeding in the Republic of Ireland was 1985. A total of 39 Short-eared Owl sightings were submitted/collated in 2017.

TERRITORIAL PAIRS	PAIRS WITH EGGS	WITH	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
-	-	-	-	-	-

No confirmed breeding records received.





# SCRÉACHÓG

## REILIGE

### BARN OWL

### *TYTO ALBA*

John Lusby summarises Barn Owl monitoring activities in 2017, coordinated by BirdWatch Ireland with input and assistance from a wide network of organisations including NPWS, IRSG and individual surveyors throughout the country. Barn Owl monitoring is carried out under licence to National Parks and Wildlife Service and the British Trust of Ornithology. In 2017 Barn Owl monitoring work was funded by Dublin Zoo and Transport Infrastructure Ireland. In 2017, Barn Owl occupation was assessed at 156 sites in the Republic of Ireland, which included sites traditionally used and monitored on an annual basis, and additional sites classed as suitable for breeding Barn Owls. Of all sites inspected (n = 156), 105 were confirmed as active in 2017. Of all the sites assessed in 2017 (n = 156), 108 were occupied by Barn Owls in 2016, of which 90 remained active in 2017, representing an occupancy rate of 83% between years (2016 – 2017). A total of 19 sites which were active in 2016 (eight breeding sites and 11 roosts) were no longer in use in 2017. Barn Owl occupation was recorded at an additional 15 sites which were known to be traditionally occupied (seven) or discovered for the first time (eight) in 2017, bringing the total number of active sites recorded in 2017 to 105.

Of 83 confirmed breeding attempts, 66 pairs (79.5%) successfully fledged young in 2017, and 11 (13.3%) breeding attempts failed, four at egg stage, two of which were predated, and the reasons for failure for the remaining pairs (seven) was unknown. It was not possible to accurately determine the outcome for six (7.2%) breeding attempts. Laying predominantly took place in April, ranging from the 25th of March to the 21st of June, with an average first egg date of the 15th of April in 2017. The productivity of all breeding attempts monitored in 2017 was 2.4 young per breeding attempt (n = 57, range = 0 - 5), which was higher than the productivity of 2.1 (n = 91, range = 0 - 5) recorded in 2016.

TERRITORIAL PAIRS	PAIRS WITH EGGS	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
105	83	11	66	137

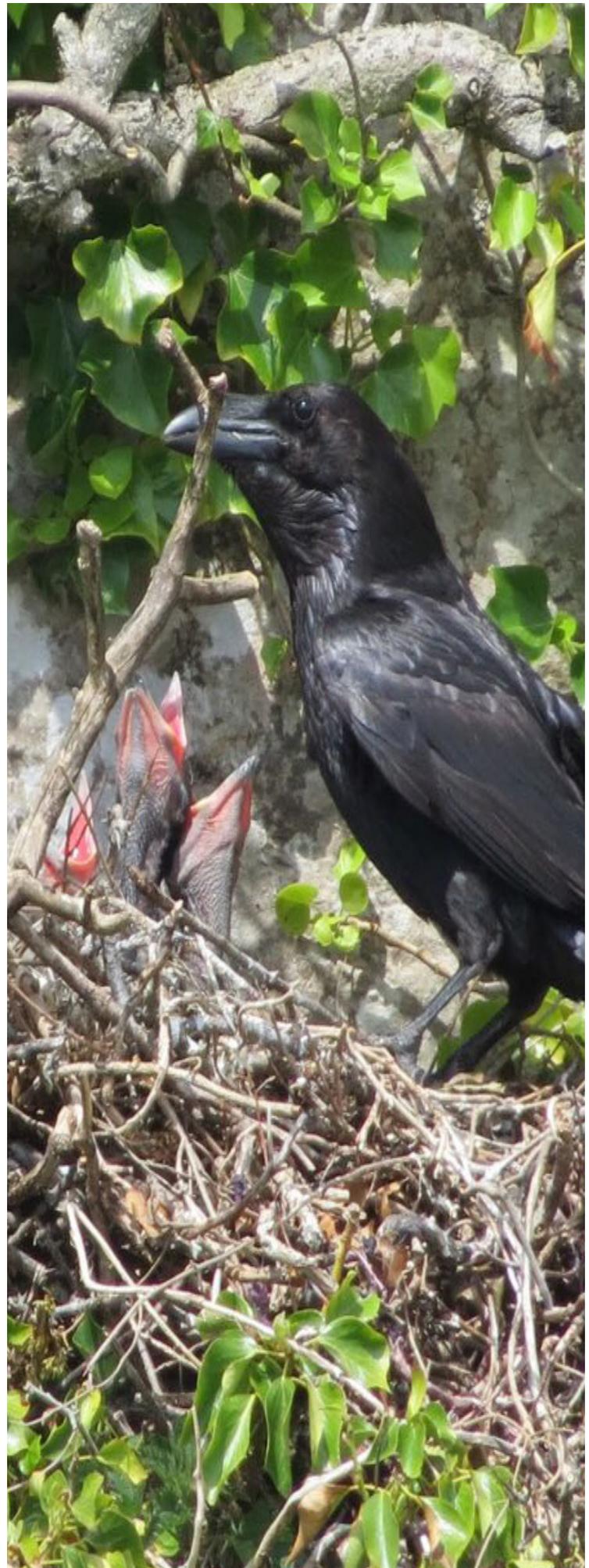
# FIACH DUBH

RAVEN

*CORVUS CORAX*

In 2017, 130 Raven breeding records were submitted due to the large sample coverage of the National Peregrine Survey. Many extra Raven sites were discovered, as the two species often nest in the same habitat and within proximity to one another. Indeed, Peregrines will often use old Raven nests, especially where there is a poor availability of suitable nest ledges. There are on-going colour ringing and monitoring projects on Ravens in Wicklow, Sligo, Mayo and Connemara. A further 91 Raven sightings were submitted/collated in 2017.

TERRITORIAL PAIRS	PAIRS WITH EGGS	WITH	FAILED PAIRS	SUCCESSFUL	FLEDGED YOUNG
129	61	-		58	174



# OVERVIEW OF THE IRSG

The IRSG are a voluntary organisation committed to the monitoring and conservation of Raptors and Owls in the Republic of Ireland. We depend on the hard work and enthusiasm of fieldworkers in collating and collecting data on Raptor species annually.

## The Role of the Raptor Study Group in Ireland

The Irish Raptor Study Group (IRSG) has two primary aims, as stated in our group constitution, namely to (a) promote the conservation and protection of all wild breeding and migratory Raptor species and their habitats in Ireland and (b) encourage research and monitoring of all Raptor species and the publication of such work where appropriate.

## Get Involved

Why monitor Raptors? Raptors, as top avian predators, are environmental indicators and the first to be affected by environmental pressures. They are barometers of ecosystem health. There are a variety of ways that you can help IRSG, depending on your skills and interests. Taking part in IRSG surveys is both enjoyable and rewarding. You can contact us through our website [www.irsg.ie](http://www.irsg.ie)

## Raptor Study Group Membership

The IRSG membership is open to anyone who is interested in the conservation of Irish Raptors. There are two main Membership categories, namely Full Membership and Supporting Membership. Full Members are those that are engaged in Raptor fieldwork and submit data annually (at least a single Raptor nest record annually to the IRSG). Supporting Members are those that contribute a subscription fee annually. The financial contributions made by our Members enable us to deliver the most pressing 'self-directed' work through surveys, monitoring, conferences and training workshops. Apart from merely paying a membership fee, we urge you to go out in the field and collect valuable breeding and non breeding Raptor data.

## Data Policy

Personal data form an integral part of any voluntary biological monitoring scheme and it is essential to maintain an audit trail of the individuals who submitted particular records. The IRSG holds many data on the locations of rare and sensitive raptor species. IRSG will seek to ensure that this information is made available to National Parks & Wildlife Service who need such data to ensure that species and sites are adequately protected and only used by the IRSG to further conservation aims and objectives of the Group. The IRSG recognizes that it has a special responsibility to ensure that the datasets that it holds are properly managed and curated. The IRSG will manage such data securely, in line with Data Protection Rules. The IRSG will not sell, distribute or lend personal information or raptor data to third parties. Access to personal and raptor data within the IRSG is restricted to the Secretary and Chairman and not accessible or distributed to Members of the Committee. No data is stored on file hosting or sharing services.

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The Red Kite population monitoring would not be possible without the huge efforts of volunteers and supporters and as always Dr. Marc Ruddock are hugely grateful to the immense efforts of volunteers and supporters and landowners in monitoring of this population of birds in Ireland. The population monitoring would not be possible without the huge efforts of volunteers and supporters in particular Marc Ruddock, Mark Lewis, Paul Kavanagh, Robert Kelly, Keeva Kelly, Oran Kelly, Brendan Byrne, Bridget Byrne, Sophie Byrne, Ann Fitzpatrick, Damian Clarke, John Byrne, Sam Rhodes, Lorcan O' Toole, Ronan Hannigan, Niall Harmey, Derek O'Brien, Richard Nairn, Mick Hetherington, Brendan Black, Phil Moore, Sean Pearce, Paul Larmor, Alan Ferguson, Conrad McGeough, Ciaran Dunne, Nessie Bergin, Eric Quinn, Hans Visser, Craig Swenarton, James Irons, Jessica Harley, Fingal BWI branch, NPWS, Welsh Kite Trust, KPMG, Burren Bird of Prey Centre, Tayto Park, Coillte, Fingal Leader, Dublin Regional Game Council, LA21. Huge thanks also to the myriad of landowners who welcome the team each year and report sightings. This project and associated monitoring would not be possible without you all. Apologies for any names I have missed – entirely unintentional!

## EURAPMON

The Monitoring for Raptors in Europe (EURAPMON) scheme is a new initiative funded by the European Science Foundation to co-ordinate raptor survey and research effort across Europe. The IRSG is widely recognised as the primary non-governmental source for Raptor population data in Ireland. IRSG Committee Member Dr Allan Mee, currently serves as the National EURAPMON Co-ordinator for the Republic of Ireland.



## *Irish Raptor Study Group*

*Grúpa Staidéir Éan Creiche na hÉireann*

