

The BTO Magazine for Ringers and Nest Recorders

LIFECYCLE



AUTUMN 2017 ■ ISSUE 6

MONITORING WILLOW TITS ■

WHOOSH NETTING ■

BLACKCAP MIGRATION

RED KITES

Spring trapping
techniques



BTO

Looking out for birds

Editorial

ISSUE 6 AUTUMN 2017



Welcome to the latest edition of *LifeCycle*. The snow falling outside the window as we write this is indicative of the delay in publishing this edition and for that we send our sincere apologies. By the time you read this, we will have met and chatted to some of you at one or more of the conferences and many of you will (hopefully) be sitting in front of a computer getting to know DemOn – more about that on page 20. We would like to extend a warm welcome to Richard Broughton, who has joined the *LifeCycle*

Editorial Board. Many of you will know Richard from his involvement on Ringing Committee, his work at CEH or from his studies on Marsh and Willow Tits; it will come as no surprise therefore that there is a *Poecile* theme running through this edition (Willow Tits on page 12 and Marsh Tits on page 24)! We would also like to take this opportunity to say goodbye to Findlay Wilde as a regular contributor to the magazine. The last of Finn's 'Wilde about' series can be found on page 14 and we would like to thank him enormously for his contributions over the past three years; we are sure that this is not the last time we will hear his name or see articles from him in *LifeCycle*. If, like here in the east, the wind has been blowing too hard to put up a mist net recently, articles on spring trapping (page 15) and whoosh netting (page 5) might be of interest. And, if you have Blackcaps visiting your ringing sites regularly over the winter, you might be able to help with a new research project (page 8).

As ever, we would love to receive your feedback or ideas for content, and if you would like to share your experiences and expertise by writing or contributing to a future article, we would be delighted to hear from you. Finally, a big thank you to the contributors to this edition of *LifeCycle* and to all the ringers and nest recorders whose hard work and dedication ensure that we have such inspiring projects and interesting data to share with you all!

Ruth Walker & Carl Barimore

IN THIS ISSUE . . .

News	3
Retired: 47 not out.....	4
When the wind blows...whoosh	5
Blackcap migration mysteries	8
Review of duck ageing and sexing guide.....	10
News from the Ringing Committee.....	11
Obituary	11
Hooked on Willow Tits	12
Wilde about <i>LifeCycle</i>	14
Let's go catch a kite.....	15
The role of bird observatories	18
Demography Online: a tester's view.....	20
Publications	22
Noticeboard.....	23
Monitoring priorities: Marsh Tit.....	24

LIFECYCLE

THE BTO MAGAZINE FOR RINGERS AND NEST RECORDERS

The Ringing and Nest Record Schemes are funded by a partnership of the BTO and the JNCC on behalf of the statutory nature conservation bodies (Natural England, Natural Resources Wales, Scottish Natural Heritage and the Department of Agriculture, Environment and Rural Affairs, Northern Ireland). Ringing is also funded by The National Parks and Wildlife Service (Ireland) and the ringers themselves. The BTO supports ringing and nest recording for scientific purposes and is licensed by the statutory nature conservation bodies to permit bird ringing and some aspects of nest recording. All activities described are undertaken with appropriate licences and following codes of conduct designed to ensure the welfare of birds and their nests are not adversely affected.

CONTACT US

The British Trust for Ornithology is a charity dedicated to researching birds. For membership details please contact: membership@bto.org

British Trust for Ornithology, The Nunnery, Thetford, Norfolk IP24 2PU

Tel: (01842) 750050

Website: www.bto.org

Email: ringing@bto.org, nrs@bto.org,

ces@bto.org, ras@bto.org

Registered Charity No 216652 (England & Wales)
No SC039193 (Scotland)

LIFECYCLE PRODUCTION

LifeCycle is the biannual magazine of the BTO Ringing and Nest Record Schemes. It is freely available on the BTO website.

Articles in *LifeCycle* are written by ringers and nest recorders, so please send ideas and contributions to the editors:

Carl Barimore, NRS Organiser

Email: nrs@bto.org

Ruth Walker, Ringing Surveys Organiser

Email: ruth.walker@bto.org

Editors:

Carl Barimore, Ruth Walker, Dave Leech & Richard Broughton.

Layout, design, imagesetting and typesetting:

Ruth Walker & Mike Toms.

Printing:

Swallowtail Print, Norwich.

Copy dates:

Spring edition – 31 December

Autumn edition – 30 June

Thanks to the proof readers for all their efforts.

Cover image: Red Kite, by Greg Coyne/BTO

The views expressed by the contributors to this magazine are not necessarily those of the Editors, the Council of the BTO or its committees. Quotations should carry a full acknowledgement.

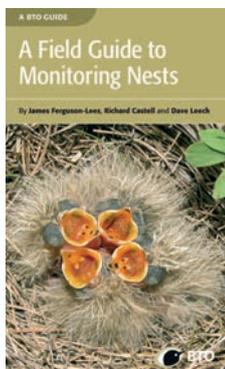
© BTO 2017



NEWS FROM RINGING & NEST RECORDING

BTO NEST-FINDING GUIDE OFFER

BTO is offering readers of *LifeCycle* a special deal on the acclaimed *Field Guide to Monitoring Nests*. Written and illustrated by experts, this field guide contains a wealth of information for 145 British and Irish species, together with introductory sections on nest-monitoring techniques, nest identification, legislation, the BTO Nest Record Scheme and nest-finding skills. You can order your copy, by phoning BTO Sales on 01842 750050, for just £17 (RRP £25) plus £3 p&p. Please mention 'LifeCycle Offer' to get your special price.



USUTU VIRUS FACTSHEET

Although it has not yet been detected in Britain or Ireland, incidences of Usutu virus (USUV) in wild birds, particularly Blackbirds and owls, have been observed on the near continent, most recently in the Netherlands in 2016 when over 1,800 Blackbirds died. The virus is transmitted between its avian hosts by mosquitoes; to date the virus has been found in at least 30 European wild bird species. USUV has, on rare occasions, caused neurological disease in humans. A new factsheet on the virus, published through the Garden Wildlife Health project, of which BTO is a partner, can be downloaded from: www.gardenwildlifehealth.org/files/2013/06/Avian-Usutu-virus_disease-factsheet_GWH.pdf

BTO OWL APPEAL

Ringing and nest recording will play an important part in a suite of new BTO work that seeks to improve our knowledge of the UK's owls. In addition to new national surveys of the numbers of breeding Tawny Owls and their habitat associations, we will also be collecting demographic information on Tawny Owl, Little Owl and Barn Owl. We will put structures in place to support local owl study groups (and individuals) who monitor nest boxes and natural sites, providing guidance on when to visit and what to record, promoting new information and encouraging the sharing of ideas. You'll hear more about this work in 2018 but you can support the project now by making a contribution to the BTO Owl Appeal. www.bto.org/support-us/appeals/bto-owl-appeal

INTRODUCING ROS GREEN, LICENSING ASSISTANT

I first got involved with the BTO during my gap year (2010) when I joined Garden BirdWatch (GBW). This was the first time I had ever made a concerted effort to identify British birds, and I soon became fascinated by the diversity of species using my garden feeders. Using the GBW reference material and the Collins Bird Guide I learnt the basics, such as telling the difference between Blue Tits and Great Tits. Shortly after this I moved to Bangor University to study Zoology with Animal Behaviour. During my time there I continued to expand my involvement with the BTO; I became a BTO Student Ambassador, helped survey BBS squares, ran a WeBS count, got involved with nest recording and signed up as a ringing trainee with Steve Dodd.

Ringing fuelled my passion for birds and after a few months of training I knew I was hooked for life. Ringing and birding became my life; I managed to weave ornithology into all of my university assignments, and spent most of my free time genning up on birds and getting out in the field to improve

my ID skills. I spent my summers volunteering for the RSPB, conducting bird surveys, visiting bird observatories (funded through the BOC/BTO Young Bird Observatories Volunteer Fund) and travelling the country to join other ringing projects (The Wash, Storm Petrel ringing in Scotland, tern monitoring in Northumberland). By the end of my three years at Bangor I had gone from not being able to tell a Chaffinch from a House Sparrow to gaining my C permit and landing a fantastic job as a Seabird Fieldworker on Skomer Island.

Since graduating in 2014, I have worked on Skomer Island, monitoring seabirds for three summer seasons, gaining further experience in seabird ringing and special methods (GPS & GLS attachment), and have travelled to the southern hemisphere in the winters. All of this experience, plus my continued involvement with cannon-netting waders in North Wales and on The Wash, led to me gaining my A permit (restricted to seabirds and waders) in July 2016. I am a C-permit holder for all other species and am

currently training for my cannon-net licence. I hope my ringing and nest-recording experience will allow me to handle all your queries with genuine understanding and administer all the permits to a high quality.



Ros Green, by Jacquie Clark

Retired: 47 not out

One of the great strengths of the BTO is the enthusiasm of many of its staff for birds, not only at work but also during their free time. Not for them is it a nine-to-five job. This was particularly true in the case of Jeff Baker, who retired in May, after 47 years of working for the Trust. Although he worked in just about every department, he will be remembered best for the 29 years that he spent in the Ringing Unit. In this article, Moss Taylor looks back at Jeff's time at the BTO.



Jeff in Mallorca, by Jenna Baker

The data gathered on ringing expeditions to Mallorca helped to protect Albufera Marshes wetland site that is now recognised by the Mallorcan government as a National Park.

It was as a 14-year-old, on a visit to Dungeness Bird Observatory in 1966, that Jeff caught the ringing bug after accompanying Bob Scott on a round of the traps. Two years later, after leaving school, he spent eight weeks on Bardsey as assistant warden under George Evans. In 1970, despite not yet having qualified for a ringing permit, Jeff successfully applied for the post of Licensing Officer in the Ringing Unit of the BTO, which in those days was based at Beech Grove in Tring. Here he worked under the guidance of Bob Spencer and later Chris Mead. A year later he had obtained his

A permit, which enabled him to assist at the ringing courses at both Spurn and Gibraltar Point.

During his 'free time', Jeff joined Bob Morgan, the Nest Records Officer, and together they began a colour-ringing programme on Stone-curlews in East Anglia and Wiltshire to investigate their movements and longevity. He also undertook studies of breeding Sparrowhawk and Hobby, which necessitated him developing skills as a tree climber, an art that stood him in good stead when he joined the Golden Oriole Study Group in the 1990s. No doubt it also came in useful during his 34 years as a retained fireman!

His forays abroad took him, in particular, to the Albufera Marshes in Mallorca, where he organised and led three spring ringing expeditions in the early 1980s.

During his time in the Ringing Unit, Jeff was influential in improving the standard and training of ringers. This eventually led to the Training Standards Select Committee and its successors, which have ensured that British and Irish ringers are recognised as the best in the world. In 1999, after working in the Ringing Unit for 29 years, Jeff took over as Head of Membership, and

during his tenure both the BTO's profile and membership increased dramatically, thanks to his infectious enthusiasm. At that time he was responsible for running the Regional Network, the sale of merchandise, marketing, publications and running conferences.

In 1991 the BTO moved its headquarters from Tring in Hertfordshire to The Nunnery at Thetford, and for reasons only known to himself, Jeff decided to change his name from Kevin (by which he was known to staff and members) to Jeff, the name by which he is known today (actually he was simply reverting to his given name of Jeffrey). I shall never forget the Swanwick Conference, where we first came across the 'new' Jeff Baker. As a joke, several of us also changed our name badges so that our first names were Jeff; it quickly caught on and by the end of the conference there were more than a hundred Jeffs in attendance!

Away from work, Jeff has always been a keen sportsman, including fishing, cricket, golf, karate, and a skydiving photographer, which almost cost him his life. If anyone deserves a long and happy retirement it is Jeff, and I know he'll find plenty of interests to fill his time.

Stone-curlew, by Chris Knights/BTO





Waxwings in the catching area, by Harry Scott

Waxwings can be attracted into a garden by placing apples in a tree, before enticing them onto the ground with more apples.

When the wind blows...whoosh

The one thing that is almost guaranteed about ringing in autumn and winter is that there will be many days when the weather isn't suitable to operate a mist net. There are, of course, many other trapping methods that can be used instead. One such method is whoosh netting; in this article Raymond Duncan, Chris Jones and Ewan Weston share their knowledge and expertise of using this technique in a garden setting.

In addition to being able to catch when the weather means you can't operate a mist net, there are a number of other benefits to using traps and whoosh nets; you can be selective about the birds you catch, you can catch species such as crows and pigeons that rarely find their way into a mist net, you can use traps in locations that a mist net wouldn't fit, and you can be very flexible in terms of the time spent using them.

WHOOSH NETS

Whoosh nets are a flexible option for catching in gardens of all sizes. Anything that habitually feeds on the ground, or will take food on the ground when provided, can be caught in a whoosh net, including finches, buntings, thrushes, Starlings, Waxwings, waders, ducks, gulls, pigeons and corvids (although you might be unlikely to catch some of these in your garden!). Needing only very slightly more space to operate than the area occupied by an open net, whoosh nets can be made to virtually any dimensions necessary to suit the available space. Good quality pulleys can be used to double elastics around a peg in tight spaces. Everything runs a lot more smoothly

if you can reduce the friction at these points by, for instance, using a short length of plastic waste-pipe over the peg with the elastic running around that.

Different species require different mesh sizes. Large birds, such as gulls, will quickly flap their way out from under small mesh nets and there is nothing more annoying than a few Redpoll coming in with the Linnets and most of them escaping because the mesh is too large. Using small, thick mesh netting with a lot of 'bag' stops Starlings getting carpalled, as they all tend to get pocketed at one end making for easy extraction.

A good pull-string is thin, strong, flexible and has no stretch in it. A sharp tug at the operating end has to be translated into an equally sharp tug at the release mechanism. Any kind of textile, string or rope will stretch a lot over all but the shortest distances and so is not ideal. Electrical cable (search online for 2491x cable 1.50 mm) works well; winding it onto a garden hose drum keeps it neat. As an alternative to a pull-string, a remote control trigger can be constructed from the steering mechanism of a remote-controlled toy car,

Whoosh net area with feeders above, by Chris Jones



A feeder hanging on a branch over the middle of the catching area helps attract birds, and any seed that falls lands in the area.

a windscreen-wiper motor or an electric car door-lock with remote key-fob trigger.

BAIT

Birds need to be attracted into a catching area. Place bait below, or beside, a favoured resting or feeding area. In the garden, use whatever food you use in your feeders; for targeting specific species it pays to find out what they really want. For small finches, rapeseed is much cheaper than niger; Yellowhammers love crushed oats and Tree Sparrows are very fond of red millet. Wintering Blackcaps will readily come to apples or fat balls and Nuthatches and Great Spotted Woodpeckers to nuts on the ground if their usual feeder is empty. On catch days, remove most of the food from the feeders and just bait the catching area.

Bait should be scattered in a narrow strip along the line of the net and close to it at the back of the catching area, though not on or touching it; a separation of 20 cm is adequate. Do not bait right up to the sides of the catching area; leave about 50 cm short at each end. This way, the birds on the bait will be concentrated in the safest zone when the net is triggered, you'll have the best chance of maximising your catch and, more importantly, there is a minimal chance of any birds being hit by the elastics or the leading edge of the net when it is triggered.

If whoosh netting for finch flocks or other perching birds, provide a perch of

some kind (if one isn't there naturally in the form of shrubs or trees) for the birds to gather on and eye up the bait before dropping into the catching area. A sunny site is always better than a shady one as birds prefer to feed in the warmth.

PLACEMENT

Whoosh nets work well if the furled net bundle, when in its set position, is disguised by aligning it along a linear feature. In a garden this could be the edge of the lawn, a line of bricks, a line of unmown grass or a line of vegetation. If setting for gulls, ensure easy flight access to the catching area.

When a site has been chosen and the birds are coming to the bait, arrange natural objects in the place of the net, poles, and elastics and leave them there for the birds to get used to. Poles are replaced by sticks, dummy elastics can be laid out with sticks or plant stems and a dummy net in the same sort of way with some old sacking, dead foliage or similar.

When the net and elastics are set, they should be further disguised by a light covering of grass or other vegetation to match the surroundings, just enough to break up their solid linear appearance. Great care should be taken to ensure that this covering doesn't include anything the net could catch on as this will either tear the net or stop it firing properly. Beech mast and dry seaweed should be avoided at all costs. In snow, the net can be concealed beneath a strip of white material or a very light covering of snow. Camouflaging nets is particularly important for more wary species such as crows, ducks and gulls.

WEATHER CONDITIONS

Although you can use a whoosh net even in reasonably strong wind conditions, it is best not to fire directly into the wind, as the wind will hold the net up in the air slightly, giving the birds more time to evade it. Birds can also be more nervous and flighty in windy conditions, making them harder to catch. Very small catches can be taken in light rain if the birds can be quickly covered after capture, but avoid heavy rain.

If catching in snow and cold conditions, dry the net and elastics, but put the net

ENDORSEMENTS

To obtain a whoosh-net endorsement, a ringer must undergo training with a trainer who already has a whoosh-net endorsement, until they are competent to operate the equipment safely. The application form can be found on the ringers-only pages of the BTO website.

outside somewhere dry before setting it; this allows the net to cool and stops the elastics or net getting wet and freezing. If dried on a radiator and put straight out, it will get wet immediately and freeze. If a net has been out all night when it's frosty, it will need to be fired once or twice to free it up a bit. Likewise, stretched elastics don't contract well when they're frozen, so they shouldn't be left out all night in tension, even if the net itself is 'safe'.

SETTING AND CATCHING

If used correctly, good awareness and care make using whoosh nets extremely safe. When preparing to set the net, and when it is set, nobody should stand in front of the net or where there is the possibility of being hit by part of the equipment in the event of a misfire. Make sure the pull-string is visible and signed if necessary.

Never fire unless you have an unimpeded view of the entire catching area. Before firing, go through a set routine of checking that there are no birds perched on the poles, no birds sitting on or very close to the furled net, no birds sitting on or very close to the elastics and no birds flying into or out of the catching area. Never rely on

another observer telling you that it's safe to fire. Do not fire if there is a mixture of large and small birds present as the large birds may bounce about under the net and injure a smaller bird. Do not catch small birds on wet grass due to the risk of soaking.

Usually there will be a surge of birds coming into the catching area before this slows down to ones and twos dropping in. Some may then start to leave, or often the entire flock will go off at once. Prepare to pull in a gap when birds are still coming down in ones and twos. Pull in a single, quick and strong forward to back movement of the arm. Do not stand up or make any other motion until you have set off the net.

Be prepared for large catches and ensure there are sufficient bags and somewhere convenient to hang them during extraction. If you have more than a few birds, cover the catch with a sheet of lightweight material to keep birds calm, rolling it back a bit at a time to reveal the next birds to be extracted.

Never leave a set net unsupervised. In the garden it is fine to arm it in the morning and keep an eye on it throughout the day, taking catches as and when, but it must be disarmed overnight.

TRAPPING GUIDE

The Trapping Guide, available on the [ringers-only web pages](#), includes specifications and guides for operating a range of other traps, many of which are suitable for using in a garden.



Gulls can't easily flap out from under large-mesh nets

Gulls under the net, by Ewan Weston



Blackcap with a geocator, by Ben Porter (www.benporterswildlife.co.uk)

During the 2016/17 winter, 36 Blackcaps were fitted with geolocators (identifiable by a BTO metal ring over a red colour ring, on either leg). This winter's birds will have metal over a yellow colour ring; geolocators should not be removed from these until winter 2018/19.

Blackcap migration mysteries

The natural world is changing rapidly, often faster than we can fully grasp the causes and consequences. For migratory birds that rely on timing and navigation strategies honed by thousands of years of evolution, this may pose a serious challenge. In this article, Benjamin Van Doren and Greg Conway consider whether birds can successfully adapt to earlier and more variable springs; or, as winters warm, will migration itself become less appealing?

Certainly, we don't have to look far to find historical evidence for flexibility in birds' migration patterns. Thanks to retreating glaciers and expanding deserts, present-day migratory routes look very different to those of a few thousand years ago. But are today's environmental changes occurring too fast for birds to keep up?

WINTERING BLACKCAPS

Blackcaps wintering in Britain may provide insights into this question. Numbers of wintering Blackcaps have increased greatly in recent decades, and these birds show a strong affinity for gardens, especially those where bird food is provided. Recent research by the BTO suggests that it may be the feeders themselves, in association with warming temperatures, that have enticed them to spend the winter here, instead of migrating further south. However, many unanswered questions remain. Where are these new winter visitors coming from, and what is the secret to their flexibility? Research on Blackcaps breeding in Germany suggests that some may actually migrate north-west from Germany to the UK for the winter, but the full story may be more

complex. Are others coming from outside central Europe, and have some British-hatched Blackcaps stopped migrating as well? Lastly, of the British winterers, do the migratory individuals have longer and more pointed wings than the more sedentary birds, as is the case for other migrants?

Over the past century, ringing has taught us much about Blackcap migrations and movements but has generated only a relatively small number of recoveries relating to British wintering birds. The majority tend to be ringed on migration, leaving very few to link wintering and breeding sites, which is the most sought-after information.

More recently, colour ringing has provided useful data on the occupation of a small number of wintering sites. Today, while conventional ringing and colour ringing still play a crucial role in monitoring populations and understanding migration, new tracking technology in the form of miniaturised geolocators is allowing us to follow migration routes and the timing of movements throughout the annual cycle. Other tracking technologies (e.g. VHF radio) provide opportunities for collecting ever more detailed movement information.

REFERENCES

- Plummer, K.E. et al. (2015) Is supplementary feeding in gardens a driver of evolutionary change in a migratory bird species? *Global Change Biology* **21**, 4353–4363.
- Bearhop, S. et al. (2005) Assortative mating as a mechanism for rapid evolution of a migratory divide. *Science* **310**, 502–504.
- Berthold, P. et al. (1992) Rapid microevolution of migratory behaviour in a wild bird species. *Nature* **360**, 668–670.

A combination of approaches will probably be necessary to reveal how migration is being modified in a changing world.

CURRENT RESEARCH

A new research project involving a team of researchers from the BTO, University of Oxford, University of Exeter and the Max Planck Institute, Germany aims to improve our understanding of the Blackcaps that spend the winter in gardens across Britain. The study combines colour ringing with tracking to investigate winter survival and site fidelity, which is still largely unknown, and reveal migration routes, migration timing and breeding origin. In addition, genetic and morphological differences will be assessed and compared among other individuals from known breeding locations.

During the 2016/17 winter, 36 Blackcaps were fitted with geolocators, miniature devices that record ambient light levels and can be used to pinpoint a bird's location throughout the year. Dozens more Blackcaps were colour-ringed across British & Ireland. This coming winter, the ringing and tracking effort will be expanded and we need your help to ring wintering Blackcaps and to report any with colour rings to Greg Conway. These may include individuals carrying geolocators (identified by a metal ring over a red colour ring). These birds will need to be caught and the device removed to retrieve the migration data; however, geolocators **should not** be removed from birds with metal over yellow colour rings.

HOW YOU CAN HELP?

Ringers interested in colour-ringing during mid-November to mid-March (ideally only at sites with regular Blackcaps and good options for resighting or recatching) and gathering biometric data on wintering Blackcaps, can contact Benjamin or Greg to request colour-rings and protocols. For those who are willing to travel locally, the BTO may be able to connect ringers with birdwatchers who are interested in having Blackcaps colour-ringed in their gardens.

- Benjamin Van Doren (Oxford):
benjamin.vandoren@zoo.ox.ac.uk
- Greg Conway (BTO):
greg.conway@bto.org

Tips for catching Blackcaps in the garden

The best catching method will depend upon the layout of your garden and the food resources present. Blackcaps tend to prefer to remain within dense vegetation, so it can be difficult to get them to come out of cover. Before attempting to catch, observe the birds for a few days to identify their regular flight lines, favoured perches (ivy banks, dense cover, berry bushes) or feeding circuits (these may vary with the time of day). Also, check what food is present in neighbouring gardens as these may offer other catching options.

CATCHING METHODS

Mist nets can be very effective if you have a bird table or feeders that Blackcaps fly to or if placed in a narrow gap within a line of dense bushes. Playback (with appropriate endorsement) using a contact call, song or even an agitated call can help increase catching success as they can be quite inquisitive, at least initially.

Potter and Chardonneret-type traps can be very effective in gardens where even a small mist net cannot fit and in weather conditions when mist netting is not possible. The success of the traps will depend upon them being baited for a number of weeks prior to catching. Bait could consist of fat blocks, apples, bread, cake or whatever they have been using in the garden; however, avoid seeds and peanuts which might attract unwanted species and prevent the Blackcaps from using them. Traps can be positioned within or next to bushes, 1–2 m from the ground (to avoid rodents) or even on or next to a bird table where food is visible. In the early stages it may help to position the bait just inside the trap entrance, then once they are feeding regularly the bait can be moved further into the trap to ready it for catching.

TIMING

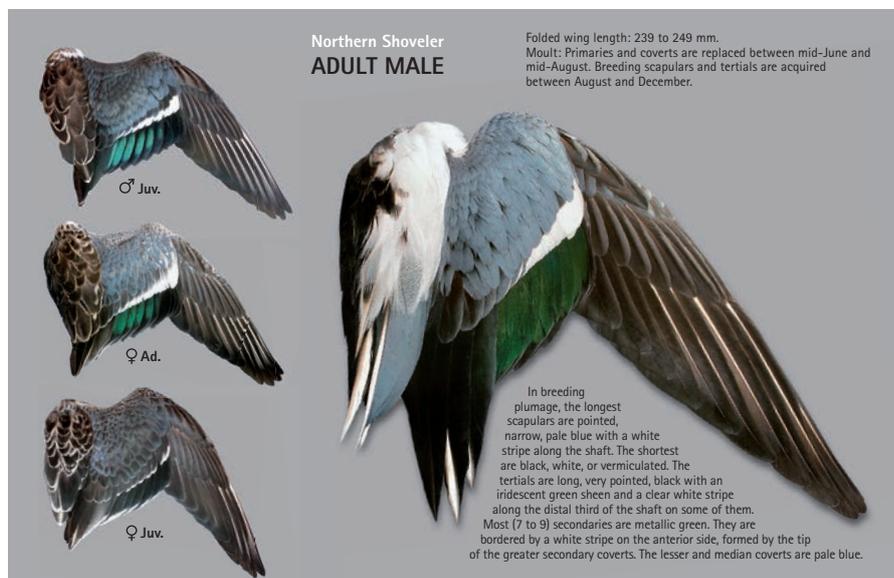
Wintering Blackcaps tend to arrive from late October and remain until early April, with highest numbers reported from December to February, and these are the priority for ringing. During October and early November and after mid-March, substantial numbers of migrant Blackcaps may also be moving through gardens and mixing with the wintering birds. Early morning is usually the best time for catching, when birds make their first big feed of the day. As cold temperatures require birds to feed more frequently to maintain their energy reserves and ensure they can survive the night, caution is required if catching is considered during periods of prolonged cold weather and short days. If the conditions are safe then ensure that catching is restricted to a few hours during the morning and avoid catching during the last three hours of the day, so birds can feed before roosting. In warm conditions, when feeders are infrequently visited, there is greater reliance on intercepting birds along regular flight lines and also while coming to drink.



Measuring a Blackcap, by Ben Porter (www.benporterswildlife.co.uk)

Review of duck ageing & sexing guide

For a long time, there has been very little specific information available on ageing ducks that includes good photographs. Duck ringers have had to rely on their own experience and the odd wildfowlers' guide they might have been able to get their hands on. A new online guide, *Guide to the sex and age of European ducks*, covers 10 common freshwater species of duck in good detail and has recently been translated into English, giving a welcome reference for any ringers catching duck. In this article, Paul Roper offers his opinion on this new resource.



Each species has a separate page for the different age and sex classes.

Being rather an old dinosaur of course, the first thing I did to review this guide was to print it off! Personally I would recommend printing off a copy if you intend to use it in the field.

A good thing about this guide is that it covers eye and bill colour and patterns, criteria used by regular duck ringers who know these characteristics but that may not always be obvious to the casual duck ringer. It might have been more useful as a field guide if this feature had been located with the excellent pictures of wings and varying ages of specific feathers, rather than separately.

There is a short section outlining the technique of ageing juveniles using the 'v' nick on the tail feathers caused by the down breaking off and exposing the

rachis. This is a reliable character before juveniles have moulted and can be used in all the duck species dealt with in this guide, as well as many others.

There is a section on cloacal sexing which, although of interest, is not something that ringers should attempt without guidance and some practice under tuition. Of course at many times of the year most ducks can be sexed from plumage characteristics and, even during eclipse, eye and bill colour and pattern can help determine the sex of most of the common duck species dealt with here, so this is more for interest rather than use.

There are 10 species accounts, with a range of excellent photographs showing all the features for ageing and sexing, with a separate page for each

age and sex class. Flicking backwards and forwards through the printed version was a bit difficult when trying to compare features; it may be easier on a phone or tablet but taking these out into the field may not always be an option. To enable comparison of features between adults and juveniles, it may be worth keeping this guide in a ring binder to allow side by side comparison, rather than binding it into a book.

The good points of this guide are the excellent photos and the good detail and text which should help anyone catching duck to easily age and sex these species. The downside is the fact that it deals with only 10 species and no sea duck at all.

Overall, I would recommend this guide to anyone catching these duck species for ringing; the detailed photos and information of feather patterns of various ages should help to accurately age and sex all the birds you catch.



Bill colour highly variable. Usually black above and orangeish at the base, tip and sides, the two colours being poorly delineated and in variable proportions. A few rounded or elongated black spots at the commissure and the sides.



Bill colour highly variable. Usually black above and orangeish at the base, tip and sides, the two colours being poorly delineated and in variable proportions. During summer, few or no small spots, but some fine mottling or brown patches on the sides.

The guide contains a section showing bill characteristics of the different ages and sexes. This example shows an adult (left) and juvenile (right) female Mallard.

REFERENCE

Mouronval, J.B. (2016) *Guide de détermination de l'âge et du sexe des canards*. Office National de la Chasse et de la Faune Sauvage, Paris. English edition, translated by Guillemain, M. & Hearn, R.D., 2017.

News from the Ringing Committee

Since taking over as Chair of the Ringing and Nest Recording Committee (RIN) last December, there really seems to have been 'never a dull moment'. I have been deeply impressed by the commitment, effort and enthusiasm of BTO staff and volunteers alike, in dealing with a wide array of interesting, tricky and vital issues which are essential to the running of the schemes and their data management. Jacquie Clark's retirement as the head of the team left a major gap to be filled, and Dave Leech is getting to grips with the new challenges he faces. Ken Smith chaired RIN for six years, with drive, good humour and sound sense; I hope I can do half as good a job. We all owe

a debt of thanks to Jacquie and Ken for all of their work over many years.

One major issue that took a huge effort over the summer was securing the future of the ring production and supply for ringers through the BTO's acquisition of Porzana. While Porzana's business remains the same (it will still be based at the original site in Sussex for instance), it does feel like the end of an era. We are all grateful to Stephen Rumsey, Chair of The Wetland Trust, and his team, for their support of the Ringing Scheme over the years; via Porzana, through the creation of the Icklesham ringing station that has provided training for so many visiting ringers, and in many other ways.

Porzana aside, what else? There are ongoing major discussions about the ways in which ringers are trained. This is no small matter as in 2016 101 people were awarded C permits and 27 became A-permit holders, and the approval process is an ongoing job for a mix of staff and committee members, carried out diligently on the BTO's behalf. The long-awaited revision of the *Ringers' Manual* is also well under way, and we're all excited about the launch of DemOn which will transform the way in which ringers and nest recorders input and manage their data.

As I said, never a dull moment in the BTO...

Ian Bainbridge, Chair of RIN

Obituary

Mike Hounsome, by Kevin Peace



MIKE HOUNSOME (1943–2017)

One of Mike's most treasured memories was of finding a pair of breeding Black Tern at Loch Erne whilst studying for a degree in Zoology from Queen's University, Belfast. After graduating, Mike undertook a PhD at Manchester University, studying ostracods. He completed this in 1975 and was then appointed as the Keeper of Zoology at the Manchester University Museum. Mike developed this position to its full potential, both through his teaching and involvement in field trips which often introduced students to scientific ringing; many of his former students are now ringers. He held this post until retirement in 1999 and in 2002 he and his wife Beryl moved to Devon.

Mike and Beryl's children, Juliet, Tim and Penny, never stood a chance of being anything other than keen

naturalists. As well as student field trips to Madeira, Mike's idea of a family holiday was to tag along with Bernie Zonfrillo for Gannet-ringing visits to Ailsa Craig.

Mike was always ready to help ringers, particularly with mark-recapture analyses, before ringers routinely computerised data; this must have cost immense amounts of time and effort, yet he said he never found it onerous and understood more about mark-recapture analyses with every data set. Collaborations with other ringers, such as Jim Fowler and Hugh Insley, led to many ringing expeditions to Scotland and a steady flow of scientific papers, largely thanks to Mike's number-crunching skills. Perhaps Mike directly published fewer scientific papers than many in comparable positions, but his contribution to papers and books was immense. His indirect output increased considerably between 1995 and 2001 when, as editor of *Ringing & Migration*, he worked hard to encourage amateur ringers to publish their work.

Mike attended several bird observatories and ringing courses as a ringing trainer, but he always regarded these as learning opportunities for himself as much as for trainees. He was elected and served on the Ringing

Committee from 2013 to 2016, a particularly difficult time for him as his wife, Beryl, died in 2015 after a very long struggle against cancer.

A quiet person, Mike was never given to self-promotion and was always uncomplaining if his contributions were under-credited. It was typical of him that when Countryfile filmed the Axe Estuary Ringing Group cannon-netting Shelduck in 2013 he could be seen in the background on his hands and knees quietly extracting birds rather than pushing himself into the limelight. In 2004, Mike was awarded the Bernard Tucker Medal for services to the BTO. We know how much this award meant to him but it was received with typical modesty, describing his contribution as 'hardly the stuff of medals'.

Mike's interests extended beyond birds and ringing but he was always willing to give his time and expertise wherever needed. One ringer said '*Mike had the rare ability to make you feel that you and your little problem were the most important thing he had to attend to*'. Mike was inspirational; his contribution to ringers and the Ringing Scheme has been great and he will be sorely missed.

This obituary was prepared by Chris du Feu and Hugh Insley.



Willow Tit, Nestbox attached to sapling, by Wayne Parry

Twenty nest boxes, designed using the information gathered from the tree-stump research, were erected in 2015. All had some material excavated, with four being used successfully in 2017.

Hooked on Willow Tits

Back in 2012, Wayne Parry chanced upon Kane Brides, a ringer on the local site in Greater Manchester where Wayne had been a birder and nester for 45 years. After being invited to watch some pulli being ringed, Wayne was hooked. Later that year, he started training to ring and, after helping with a Willow Tit colour-ringing project, decided to focus his efforts on this red-listed species.

I started to ring with John Gramauskas and, when we caught and colour ringed a Willow Tit, John explained that he was studying the species, colour ringing the adults and recently fledged young to look at their distribution and demographics. The following year I focused my nest recording on Willow Tits, with a target of finding five nests, which I achieved. Other commitments meant that John was struggling to find enough time for the Willow Tit project so he allowed me to take the lead that year and combine our data.

NEST-BOX RESEARCH

I wanted to design a suitable nest box to trial in my study area, so at the end of the 2014 breeding season I collected 10 nest stumps to study. From these, I recorded data including tree type, tree diameter, entrance-hole diameter, cavity volume, orientation of the nest and nesting material. All the pairs I monitored used reed-mace as the bulk of the nesting material; if you find a nest that contains moss, it is likely that a Blue Tit has taken it over.

The following year I discovered that pairs tend to remain in the same territory

and, provided I had left enough of the tree stump in place, excavate a new nest in the same stump; fresh chippings on the floor are a good indication that this has occurred. Where I had left the whole nesting stump in place, Blue Tits often took over the old nest cavity the following season. Some of the Willow Tits nested in dead stumps that I had found on the woodland floor and strapped to a sapling.

NESTING

Willow Tit territories are located by listening for contact calls in the breeding season. One or two nestboxes are erected in each territory, usually in January or February, as Willow Tits start nest digging in early March. Boxes should be fixed to saplings so that the hole is one metre above the ground, orientated in any direction but north, and then screwed in place with an L-shaped bracket attached to the roof.

I start nest finding from 1 March, when there is little ground cover and it is easier to spot the shavings resulting from small, prospective nest excavations. Most nests are in dead tree stumps, but I have found two in old rotten fence posts and one in a live

"I was lucky enough to find one nest as the excavations were beginning; the chamber was dug out after two days and fully lined after a further three days. As this was observed in the middle of May, it is possible that this was a repeat attempt after a previous nest had failed."

tree with a fissure in it. The majority of nests are about a metre from the ground, but some are lower and I have found a few as high as five metres.

Willow Tits lay 7–10 eggs from the second week in April, with young appearing from the first week in May; fledging takes 17–20 days. My nest totals for the past four seasons have been 19 in 2014, 24 in 2015, 21 in 2016 and 29 in 2017. I monitor my nests using an endoscope attached to a tablet to view the nest contents.

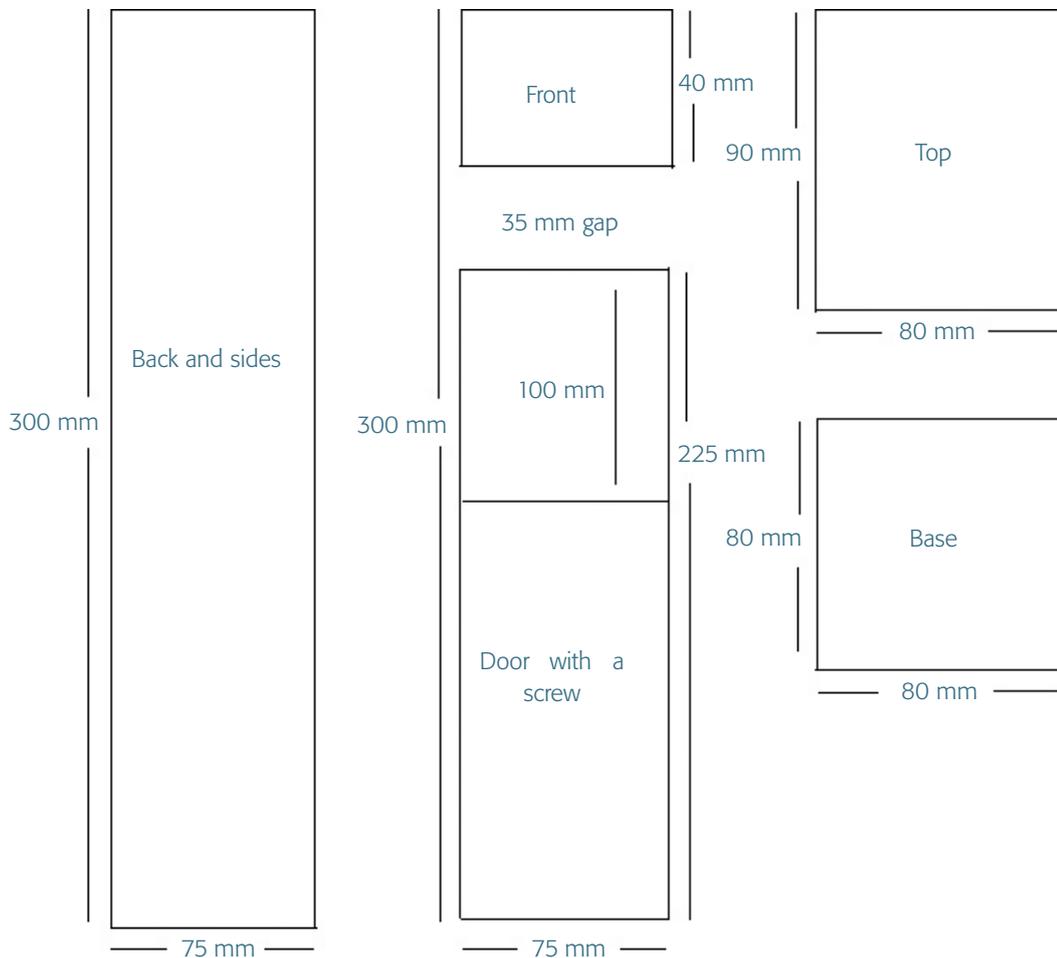
Adult birds are ringed mostly in the autumn and winter; birds can be caught in the breeding season using a mist net placed outside the box, but this should only be done once the chicks are at least 10 days old due to the risk of desertion. Numbers ringed each year have been 43 adults and 51 pulli in 2014, 37 adults and 110 pulli in 2015, five adults and 69 pulli in 2016 and

four adults and 126 pulli in 2017. Unfortunately, half of my nests in 2017 were predated by Grey Squirrels or Great Spotted Woodpeckers, which, in my experience, predate Willow Tit nests at equal rates.

Five years on and I am still as keen as the first day I started to study Willow Tits. I am learning more each breeding season about their breeding cycle, habitat and what we can do to improve the managed woodlands that they breed in.



Willow Tit box and inserts, by Wayne Parry



NESTBOX DESIGN

The boxes are made from wood 10 mm thick. The door is screwed in place rather than hinged as this is more waterproof. Fill the bottom of the box with a block of solid wood 60 mm wide by 40 mm high. To provide the material above that the birds will excavate, I find dead tree stumps, dry them out over winter and cut them into a block 60 mm square to fit inside the box. I remove my boxes in winter to replace the internal wood and make any necessary repairs.

Wilde about *LifeCycle*

This is the last of my 'Wilde About' series for *LifeCycle*. I hope that I will have plenty to contribute in the future, but in my last official article I'd like to reflect back on some of the young contributors to the series and the magazine.



A 'life cycle' can be defined as a continuing sequence of changes, but when we talk about 'a life cycle', what do we mean? Anybody reading this magazine perhaps automatically thinks of bird life cycles and of course that is always in our mind as ringers, nest recorders and ornithological volunteers.

What about the life cycle of the ornithological volunteer though? How many new ornithological volunteers have been created this year? How many are juveniles? How many are adults?



I don't know the answers to these questions, but I have seen a definite surge of young volunteers over the last three years during my involvement with this publication. New names are popping up on social media all the time and it is great to see so many young people getting involved in valuable survey work.

During my time writing for *LifeCycle*, I have tried to give an insight into what young volunteers are getting involved with. In previous 'Wilde about' articles, we have heard from young contributors (all under the age of 18) getting stuck in to volunteer activities, such as setting up a school nestbox scheme, visiting bird observatories and learning about migration as part of the BTO's Young Bird Observatory Volunteer Fund and even international ringing in Norway. These young people are a vital part of the volunteer life cycle.

Conservation questions cannot be answered without the important work of volunteers, and BTO has one of the largest volunteer bases of any NGO. The wide variety of options for young and old to take part in is exciting, and new volunteers should never feel worried or out of their depth when

deciding to join in. As Albert Einstein once said "*anyone who has never made a mistake has never tried anything new*".

But how do we continue to reach out to potential new volunteers? I think they are engaged with in two main ways: regular communication and education. However, the communication and education must be clear, easily accessible, appropriate to each age group, energetic and meaningful.

I think the BTO's approach to the younger generation has been all these things – for example, setting up a blog just for the young volunteers to contribute to, running the annual Young Birders' Camps, having under-18s on the stand at Birdfair.

I hope all of you have enjoyed the articles in the 'Wilde about' series from the young, energetic contributors. I would like to take this opportunity to thank them for their excellent contributions and also thank the BTO for allowing me some very valuable space in this magazine.

We are all a part of a life cycle, but it can't move forward if we stand still.



Red Kite, by Jill Pakenham/BTO

The traps used are purchased from David Dutton (see advert on page 23). The frames should be painted with dark green Hammerite.

Let's go catch a kite

In the winters of both 2015/16 and 2016/17 Trevor Squire trialled a method of catching full grown Red Kite using spring traps. By the end of February 2017, he had trapped 38 Red Kites and 13 Buzzards and found this to be a very safe trapping method. In this article, Trevor explains the method he uses to catch these stunning raptors.

This method of catching Red Kites uses large spring traps (e.g. one metre square), which should be covered with 38 mm (stretched) wader netting. This netting should be soft, as this will lie snugly on the ground. Ideally, try to trap following a run of cold frosty days and avoid strong winds. When siting the trap, it is advisable to have it firing with the wind as the birds prefer to land into the wind. Most misfires are caused either by swooping birds or when birds approach the trap from the rear. Birds are most easily trapped when leaving a roost, so setting the trap in the dark works best.

SETTING

Thread two 35 mm safety pins, both facing the same direction, onto 16 lb fishing line and tie in a 950 mm loop. Once tied, thread the loop through the top hole of the firing mechanism and then back through itself, making sure that the knot is at the mechanism end.

Three tent pegs, approximately 150 mm long are required; one should have a loop at the top, with a small gap in the side to allow the fishing line to slide through it. A strong elastic band, 80 mm by 7 mm, is needed to

secure the firing mechanism release pin into the holding position (over the front pin and around the rear of the unit) whilst setting to prevent premature firing.

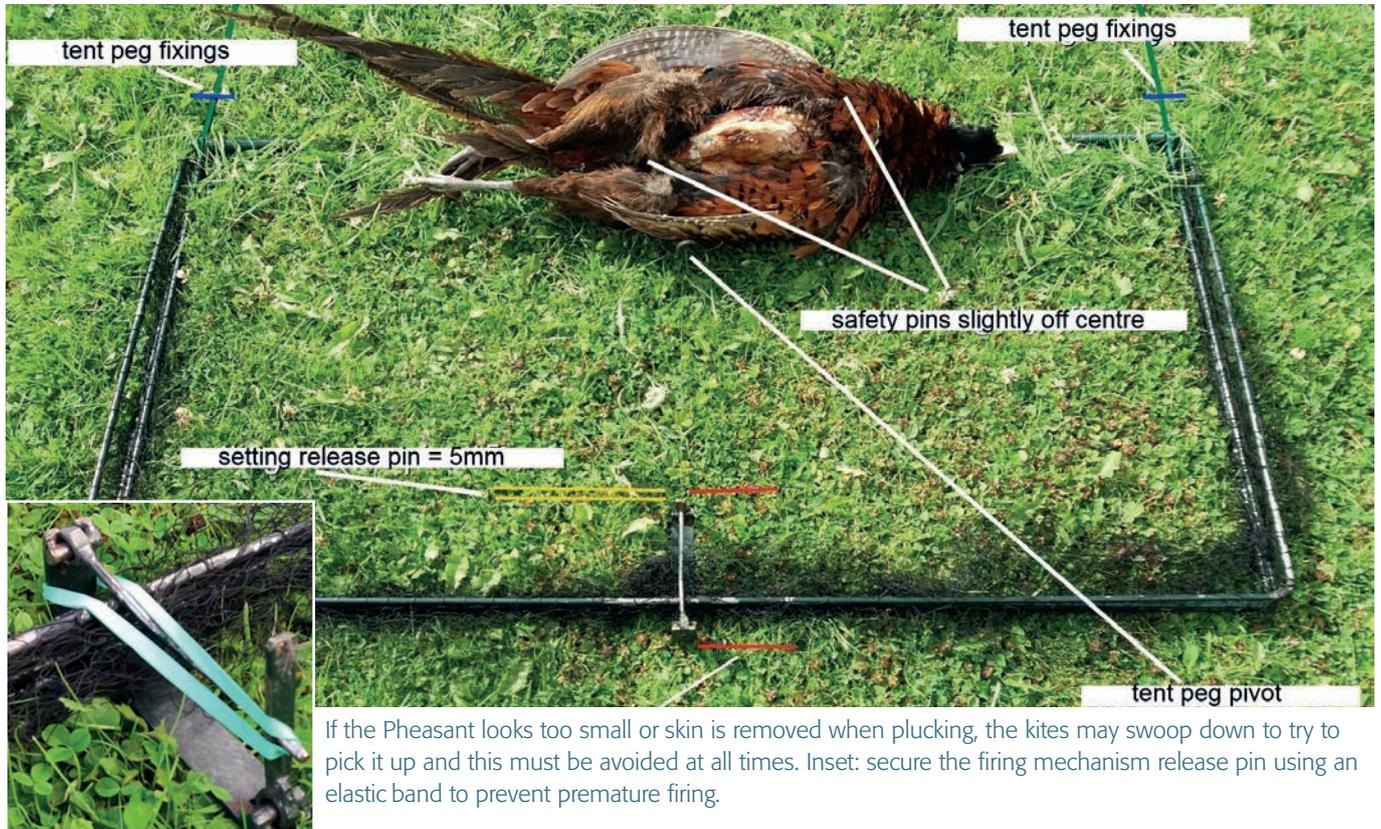
When first setting the trap, place it on the ground in the middle of a field, in the pre-fired position with the fishing line and safety pins in the middle of the trap. Secure the trap to the ground with the two tent pegs by placing them just to the front of the springs of the non-netted section (additional pegs may be required along the back edge of the frame if the ground is soft and therefore two aren't sufficient to hold the trap in place when fired). Remove the elastic band and test fire by, slowly, releasing by hand, making sure that no netting is trapped under the frame. Once tested, take the apex section of the frame, slowly bring the trap back over to reset it, tucking the net carefully under the frame, and refit the elastic band to stop any misfires.

BAIT

The trap will need to be baited with a Pheasant carcass (preferably a large male) to attract the raptors. Smaller bait, such as a rabbit, will attract kites but will increase

SCHEDULE 1

Although Red Kite is a Schedule 1 species, a Schedule 1 licence is not required if catching away from the nest or outside the breeding season.



Spring-trap set-up and trap secured by elastic band, by Alan Maberion

"I find Red Kites to be the most placid of all the raptors I have ever handled; I have only ever been bitten once and clawed once. Buzzards can be handled in the same way, but more caution should be taken as they tend to be more aggressive when being removed from the trap."

the chance of the birds swooping down to snatch the carcass rather than landing to feed, causing the trap to misfire. Try to make the bait look as large as possible by cutting open the carcass to expose the muscle. Before placing on the ground, pluck the back of the bird (feather by feather to avoid removing the skin) and scatter the feathers in and around the trap, saving a few for the final setting. Tip – plucking feathers from a frozen Pheasant is much quicker.

Standing at the rear of the trap, place the Pheasant with the head facing one spring and the tail facing the other, ensuring it is positioned close enough to the firing mechanism that the kite will be completely within the footprint of the trap when fired. Take the fishing line, opening it up in a loop, and fix one safety pin securely to the vent skin and feathers. The other pin should be attached to the throat area, but slightly off centre towards the front of the trap, again through the skin and feathers; it is advisable to pierce the skin more than once.

Take the remaining tent peg (with the loop at the top – labelled as ‘tent peg pivot’

in the photograph) and thread the two sections of fishing line to the open side, then slide the peg up to within two inches of the Pheasant. Open the primaries to allow the outer ones to lie on top of the fishing line, then hammer the peg into the ground leaving the top open circle about an inch out of the ground. Slide the primaries back up to cover the peg. Very slightly tilt the bird towards the rear of the trap. At this stage the fishing line should be taut; remove the elastic band and the firing pin should be about 5 mm from the release position. As the kite stands and pulls at the carcass, it will automatically pull the firing pin.

With the trap now set, pull the top three inches of the surrounding grass and sprinkle it lightly (to ensure the net can fire straight through it) over the complete frame and netting. Never bring grass from another area as this may be a different colour and the kites will detect that something is wrong. Scatter the remaining feathers over the sprinkled grass. Retreat to a hide or vehicle situated at least 50–75 metres away and remain very still.

EXTRACTING BIRDS

When a bird sees the bait, it usually comes straight in, lands and immediately goes to the carcass so trapping may take only a matter of seconds. There may be other individuals in the vicinity of the trap but these will usually fly off as soon as the trap fires. As the trap is only one metre square, there is little chance of a second bird getting too close.

Once the bird is in the trap it is best to approach it from the front, as it will be lying flat on the ground, with its head in the corner. By lifting the leading edge of the trap, the slack netting will lie on top of the bird. Gently slide your hand over the top to the rump, gathering both wings and tail, and you will find that your fingers will be in front of the thighs. Carefully take the bird out, paying special attention that it is not tongued.

On removal, I find it best to slide the bird two-thirds into a tube of fabric (the leg of a pair of XXL corduroy trousers, measuring 720 mm in circumference by 700 mm long and 480 mm wide, works for me) making sure that the head is facing forward, then fold over the bottom section of the fabric and lay it on the ground. When removing the bird from the trousers it is best to move your hand down the sleeve and grasp the bird, as when first handling it, and simply slide it out the bottom.

When the trap is not in use I tie a length of string around the spring, wrap it around both the frame and netting and tie it off on the opposite spring, then gather both safety pins and secure them to the string.

OBITUARY

SANDY ANDERSON (1927–2017)

Sandy Anderson was born and raised in Aberdeen and became interested in birds in the 1940s particularly after he met Prof VC Wynne-Edwards with whom he shared a love of cross-country skiing and the hills. In 1946 he was offered a job by Wynne-Edwards as a technician in Aberdeen University's Natural History Department. He worked in the museum there and assisted with fieldwork on expeditions to the high Arctic. From 1958 he was appointed as research officer at the University's new Culterty Field Station at Newburgh on the

River Ythan under the direction of Professor George Dunnet. Over several decades, staff and scores of research students, now scattered across the ornithological world, benefited from his wide-ranging knowledge, practical assistance and sage advice. He was a pioneer of wing-tagging (*Journal of Wildlife Management* 27, 284–288.), a technique still widely used today which he developed for his study on Moorhens. He was a fine man.

This obituary was prepared by Alan Knox

Wing tagging

Fitting only metal rings on Red Kites is unlikely to provide much data as retraps will be few and far between; fitting Red Kites with wing tags, as part of a well-planned research project, will hugely increase the amount of data generated from resightings. Wing-tagging project proposals must be submitted to the Special Methods Technical Panel for approval; projects must be adequately resourced with clear objectives for publishing results.

Data from wing tagging can be and has been used by researchers. One such study by Smart et al. (2010) examined survival rates of wing-tagged Red Kites in Scotland to assess the impact of illegal killing on population growth following reintroduction schemes.

Red Kites were reintroduced to Scotland from 1989, with 93 juveniles released in north Scotland over a five-year period; subsequent releases took place in central and southern Scotland from 1996 and 2001 respectively. Monitoring of the birds took place on an annual basis since 1989, with 99–100% of nests monitored and 85–100% of fledged chicks fitted with wing tags. Despite similarities in the numbers released, there was a marked difference in population growth between the north Scotland release and a release in the Chilterns; by 2006, the Scottish population stood at only 41 pairs compared to over 300 pairs in the Chilterns. By 2006, Scotland had the highest rate of illegal poisoning of birds of prey for 25 years and this was speculated to be the cause of the lower population rise. The study aimed to identify the proximate demographic and ultimate environmental constraints on Red Kites in north Scotland.

The results showed that survival rates of wild-fledged birds from north Scotland were low for first-year birds and that second-year survival declined over time. 40% of 103 Red Kites found dead in north Scotland were illegally killed, mostly by poisoning. The authors estimated that without illegal killing, annual survival rates of wild Red Kites might increase from 0.37 to 0.54, 0.72 to 0.78 and 0.87 to 0.92 for first-year, second-year and adult birds respectively. The study concluded that the poor population growth in north Scotland was caused by the illegal killing of Red Kites.

REFERENCE

Smart, J., et al. (2010) Illegal killing slows population recovery of a re-introduced raptor of high conservation concern – the Red Kite *Milvus milvus*. *Biological Conservation* 143, 1278–1286.

The role of bird observatories

Our bird observatories are based at prime migration points around Britain & Ireland's coastline. It is at these special sites where a daily census of all birds is undertaken and other standardised methods of data collection are used within each observatory's defined recording area. In this article, Steve Stansfield, the warden at Bardsey Bird & Field Observatory and Chair of the Bird Observatories Council, explains the role of the modern bird observatory.



Bardsey, by Miles Jenks

Observatories enable and encourage volunteers to participate in scientific studies, the results of which are freely available to researchers and to visiting members of the public.

To many, the heyday of the bird observatory was during the 1960s; however, recent work by the observatories, the Bird Observatories Council (BOC) and the BTO has shown that the daily census information, which each has been collecting since their advent in the 1930s, '40s and '50s, is a valuable tool for the long-term monitoring of bird populations. The daily census is an integral part of life at an observatory and is one of the criteria by which an observatory is assessed for accreditation to the BOC. The BOC and the observatories are all working on digitising the vast archive of census and ringing data to make it accessible to researchers, and several observatories have had their entire dataset added to the BTO's BirdTrack programme and ringing database.

RESEARCH

More and more of the observatories are moving forward with their own research projects. Colour ringing of birds adds another dimension to the tracking of our migrants and breeding species. On Skokholm in 2017, most of the island's Wheatear population was fitted with Darvic rings and already one of the

youngsters has been resighted on the south coast on its way to Africa. Then, there are the untold possibilities of data collection from utilising some of the latest technologies. In collaboration with Falmouth University, Bardsey have been attaching GPS tags to Manx Shearwaters to try and discover which areas of the Irish Sea the birds are feeding in. Spurn has joined ranks with Falsterbo in Sweden and Cape May in America to attach micro radio transmitters to migrant passerines in order to track their migration.

BIRD RINGING

Observatories offer training and ringing to visiting ringers and most either provide or can arrange accommodation for visitors. Fair Isle recently had a £4 million rebuild of its accommodation, whilst Spurn has just bought and completely renovated a sparkling new observatory building in Kilnsea. North Ronaldsay is a 3-star guest house so the idea of staying at an observatory should not be one of the squeaky bunk beds and damp buildings of the past!

Some observatories, like Skokholm, rely quite heavily upon volunteers to help with their ringing programmes. One area where the observatories

are promoting both education and volunteering together is through the BOC/BTO Young Bird Observatories Volunteer Fund (YBOVF). Each year a number of under-25s get to experience life at one of the observatories, gaining a valuable insight into their work and helping them into careers in conservation. So far, two recipients of the fund have become full-time staff at observatories and another has a job at BTO HQ. Bardsey runs a week-long event each year for the Next Generation Birders group and the Isle of May also run a Young Birders week in association with the Scottish Ornithologists Club.

Education is a key objective for today's observatories and their future depends on this. Spurn have begun running an annual Migration Festival, where attendees get to experience migration, hear lectures and see displays. Bardsey staff undertake weekly guided walks to see the island's wildlife, encouraging visitors to engage with the natural world. Sandwich Bay have a whole range of activities on a daily basis for both its members and the general public, with guided walks, talks and events throughout the year.

For further details visit: www.birdobsCouncil.org.uk

Home ¹ Enter Data ▾ Explore Data ▾ Sites Management ▾ Operating as: Dr D M I C Wawman [Change](#) Logout

Demography Data Home



Enter Ringing Data



Add New Nest Record



Manage Sites



Notifications
1



Explore Ringing Data



Add Visit / Explore Nest Data



Effort Recording



Manage Permissions

Live Demography Online Stats Last Updated: 17/07/2017 13:55

	You	Everyone
Most encountered species	Siskin	Blue Tit
Least encountered species	Sparrowhawk	Whooper Swan
Ringing records this month	135	2307
Subsequent encounters this month	66	1041
Registered Users		302

If you have any feedback about the statistics you would like to see here, please email apps.demon@bto.org.

Screenshot of the DemOn home page – note, Effort Recording is pale because this functionality is not yet available, but is coming soon.

Demography Online: a tester's view

The long-anticipated DemOn has now been released and, while many of you will hopefully be using it already, not everyone will have yet taken the plunge. Back in 2016, a small number of ringers were invited to become DemOn 'testers' and they have been using the system to enter real data ever since. In this article, Denise Wawman, provides her opinion of the system, the functionality and how she has found the transition from IPMR.

I'm not tech-y (it's not long since one of my trainees pointed out that it was possible to capture an image of the computer screen without having to use a camera!) so I was surprised to be asked to be a spearhead tester for DemOn, the BTO's new ringing and nest recording web application. Initially, with only limited functionality and frequent bugs, it was hard going, but now things are coming together it is becoming more stable and easier to use. As DemOn nears general release, I've been asked to write a review giving my honest perspective.

INITIAL THOUGHTS

To start with, I love that DemOn saves directly to the BTO database after the addition of each record and that submissions (now called 'Start BTO Processing') are done by pushing a few brightly coloured buttons. There's no more fighting Microsoft Access, trying to find files to attach to emails, no worries over lost data or running out of submission files in a year and no more complicated updates.

The downside of an online system is that it relies on a good internet connection; from a rural location, saving and searches can

be slow. [Ed comment: the DemOn team assure me that the speed is actually related partly to the speed of the server, which will only ever improve, and to the particular query you are running. Queries are constantly being optimised by the IS team, so these too will only ever get faster – in fact, searches have speeded up considerably in the last few weeks and speed will remain a constant priority for the DemOn development team.]

It is also possible to access ringing records using DemOn via a mobile phone without having to have your whole IPMR database saved on it. At sites on the hills where there is 3G this is far quicker than using my computer at home, although I find the smaller screen is difficult to use for more than the odd record or quick search.

HOME PAGE

Once you have logged in using your BTO username and password you will see that DemOn looks very different to IPMR. The home page has big friendly buttons to click on for the main functions and far fewer dropdowns on the top bar than in IPMR, which makes it easier to find things.



DemOn has simpler drop-down lists to find field setups, ring allocations, etc.

The instructions or ‘guidance notes’, available under the help menu, are at first glance scarily long, but are clearly illustrated with screenshots showing how to use the application. I would have liked some of the settings to be more intuitive, although I’m sure that most ringers and nest recorders who have used IPMR and Google Maps will have no difficulty with DemOn.

On the right-hand side of the page it says ‘Operating as: ...’. For A ringers who don’t work in groups this will be their own name but C-permit holders and those wishing to enter data for a group or another permit holder will need to click on the adjacent blue ‘Change’ button to select the correct user account – much easier than changing databases in IPMR.

SET UP

Setting up ringing sites and nestboxes can be done precisely rather than purely by 1-km square and is easier than in IPMR as it can be done by clicking on an aerial photograph. This is easy if you are recording a site with a visible boundary or a nestbox on a lone tree in a field, but almost impossible for a boundary or box in a large area of dense woodland. Switching to the Open Street Map view shows footpaths and streams hidden in aerial photographs but not contour lines and other useful features

MOULT CODES

More information about the new moult codes can be found in the September 2017 Ringing Committee papers, downloadable from the ringers-only pages of the BTO website.

shown on Ordnance Survey maps which I would have preferred. You can also set up nest sites using a grid reference taken from a GPS app on a phone, even if it is a bit slower. There are new options for recording the exact positions of traps and nets, which will be useful for some ringers. I would have preferred to have kept the old names of ‘sites’ and ‘subsites’ rather than switching to ‘general sites’ and ‘encounter areas’.

RINGING DATA ENTRY

Although it looks different, ringing data entry is much the same as in IPMR, with the option to have your own field setups, although I personally find the colours look a bit washed out and would prefer slightly darker shades to highlight which data field you are in and when a field value is being repeated. It’s great that the date is a field in the data entry form, rather than reached from a box at the top of the screen as it was in IPMR, so that it can be changed when you have already started entering a record. If a reason for a value outside the expected range is required it is possible to cut and paste from responses (if you copy the response on the first occurrence), although there isn’t the option to repeat the previous response as there was in IPMR.

Moult obsessives will welcome the new moult code, F, ‘for a post-juvenile moult involving partial replacement of flight feathers’, e.g. a Goldfinch in eccentric moult, replacing outer primaries, with primary moult scores $0^54^{13}1^21^10^1$. M remains the code for juveniles of species which normally do a full post-juvenile moult, e.g. House Sparrows and Long-tailed Tits. M is also used for juveniles of other species which are undertaking a full wing moult, following the usual pattern of wing moult for their species, even if they don’t normally do so, e.g. the juvenile Dunnock which I caught recently in descendant moult, with primary moult scores $4^23^{11}0^6$. Confused? I was at first when I got an error message from DemOn, for trying to use F, but it makes sense and will help monitor changing moult patterns.

A few aspects of making the change to DemOn have been a bit difficult. Until I got used to it I found it very frustrating having to remember to put an E in the fat

score column before the number (e.g. E10) rather than being able to set the fat score method to either ESF or BWG and enter numbers as you can in IPMR. The speed at which you type in DemOn can cause some problems with some of the fields. Tabbing to the next field too quickly can result in some interesting changes to the expected species, so it is best to avoid listening to Bach's Toccata and Fugue in D Minor while entering data! I have found that using the two-letter species codes works better than five-letter codes or full names but being able to type the species name is useful if you can't remember the codes.

NEST RECORDING

It is great being able to see the whole nest record site details and visits together and data entry of nest records seems far simpler, even though it is almost identical to IPMR. Unlike IPMR, there are options for recording additional types of nest visits, including 'observation from a distance' and 'camera'.

The incorporation of additional fields also extends to individual visits. For many of the status codes, it is now possible to add additional information such as numbers or age of adults sighted, location away from the nest, evidence for causes of failure and number of young thought to have fledged.

DemOn uses icons at the end of each line of data to reach the ringing fields rather than the 'Chick Handling' and 'Adult Handling' buttons at the bottom of the IPMR nest visits card. When you click on them, the date, time, species, etc populate the ringing data entry fields and, unlike IPMR, you can have your own field setup, if you wish to include additional data fields. There is still the option to enter ringing records via the ringing section and to link these to individual nests if you prefer.

Sadly, at present, the nest record card part of DemOn fails to get a 10 from Den because there is no option to set data entry to short date and set the year in advance as you could in IPMR, so you have to retype the year for each visit date.

OVERALL IMPRESSION

The greatest advantages of DemOn are the security of entering data online and the

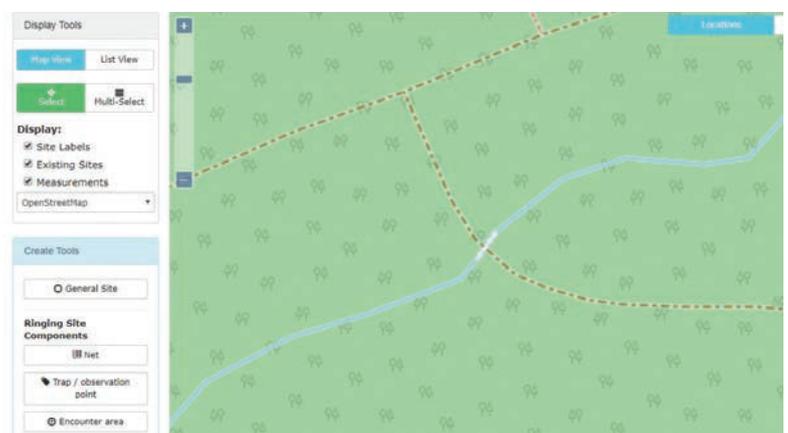
fact that there will be no need to install updates. Those new to ringing and nest recording will find DemOn easy to use, as the various functions are easy to find and there are fewer things to set up. More experienced ringers and nest recorders will find that most of the changes are superficial and, although irritating if you are used to entering data into IPMR on autopilot, these will soon become second nature.

When the final functions are added and the last few bugs ironed out DemOn should surpass IPMR, but with an application this complex, and a small team working on it, this is bound to take a while. Considering the problems experienced by some of the large specialist computer software companies, the DemOn programmers have done an excellent job.

ADMINISTRATION

Ring Administration under 'Management' on the top bar is now mostly dealt with by the BTO, so that when you buy new rings they will automatically appear in the list. Trainers and ringing group members who wish to allocate rings will find this is much quicker now as the ring strings are already listed.

Site Creation, Maintenance & Management



It is easy to record the position of a box on a tree in a field using satellite imagery (top) and to see the river amongst the trees by switching to the Open Street Map view (bottom).

Using your data

This feature highlights some of the scientific papers that have been produced using the data that you collect through the Ringing and Nest Record Schemes.



Pied Flycatcher, by John Harding/BTO, Great Tit nest, by Ruth Walker, Willow Tit, by Gray Images

PIED FLYCATCHERS SEPARATED BY BREEDING AND WINTERING SITES

Understanding the decline of migratory woodland birds requires basic knowledge of their breeding and wintering grounds, and also the timing of their migrations between them. This paper used light-level geolocators to show that Pied Flycatchers from different breeding locations across Europe (including Devon) wintered in different parts of West Africa. These results matched ring recoveries, showing that southerly breeders from Britain and the Netherlands wintered in Liberia or southeast Guinea, hundreds of kilometres further east than northerly breeders from Fennoscandia. All birds used a westerly migration route through Iberia and along the West African coast, but took a more direct northerly route across the Sahara in spring, which indicated an anticlockwise 'loop migration'. The British and Dutch birds also migrated and bred earlier than the Fennoscandians, which the authors suggested may be linked to the timing of food availability in the different wintering grounds that fuels the spring migration. The authors conclude that further study is needed on how food availability in the wintering grounds affects migration and the ability to adapt to environmental change.

Ouwehand, J. et al. (2015) Light-level geolocators reveal migratory connectivity in European populations of Pied Flycatchers *Ficedula hypoleuca*. *Journal of Avian Biology* 47, 69–83.

SPECKLED EGGS LINKED TO REDUCED SOIL CALCIUM

Nestbox monitors are familiar with the variation in the speckling of Great Tit eggs, both within and between clutches. Some eggs are densely covered in reddish speckles, whilst others are almost completely white. These markings are thought to provide structural support for thinner shells where calcium is scarce, and a new long-term study from Wytham Woods provides further evidence of this. The paper reports a significant link between increased speckling among 2,313 clutches of Great Tit eggs and declining soil calcium over a 20-year period. Soil calcium was tested along a gradient of clay, sand and limestone-rich soils across the wood, which were found to have become more acidic over time. This was considered to have resulted in calcium leaching from the soil reducing its availability to the birds, particularly in the limestone areas. Consequently, eggshell thickness had declined by 6.7% and eggs became more densely speckled, although hatching success was unaffected. The cause of declining soil calcium was suspected to be acid deposition from the atmosphere, most likely from industrial emissions, including those from a nearby power station.

Gosler, A.G. & Wilkin, T.A. (2017) Eggshell speckling in a passerine bird reveals chronic long-term decline in soil calcium. *Bird Study* 64, 195–204.

ONLINE SURVEYS AS A RINGER TRAINING TOOL

How can you test an in-hand identification feature for a tricky species pair when few ringers catch enough of them to assess it? This paper overcame that problem by using an online survey to validate a new feature for separating Marsh and Willow Tits, using the coloration of the greater coverts. The online 'quiz' consisted of an illustrated training page describing the differences to look for in both species, and then a series of further images where the user could test the feature with a multiple choice answer of Marsh Tit or Willow Tit. A total of 140 ringers took part, providing a robust test of the feature, and 84% of images were correctly identified. In addition to proving a useful new tool for separating these declining species, the paper demonstrated the value of simple online surveys to reach a large pool of ringers for testing new features for ageing, sexing or identification. With many free or low-cost survey platforms now available, such as SurveyMonkey and Google Forms, ringers can easily create their own online training and assessment material.

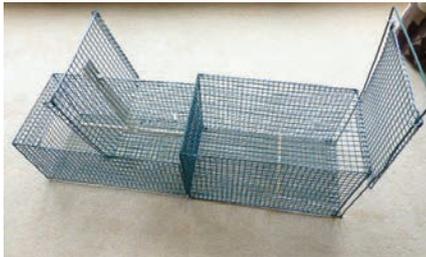
Broughton, R.K. & Alker, P.J. (2017) Separating British Marsh Tits *Poecile palustris* and Willow Tits *P. montana* using a new feature trialled in an online survey. *Ringing & Migration* 32, 43–49.

Noticeboard

ADVERTS

POTTER TRAPS FOR SALE

Two sizes (12" & 16"); also Chardonneret and other traps on request. Please contact John Mawer on 01652 628583 or via email johnrmawer@hotmail.com



LARGE SPRING TRAPS

One metre square. £85 each + £9 p&p to most UK postcodes, or free p&p for 2+ traps. Proven success in catching harriers, buzzards, Great Skua, Sparrowhawk and gulls. Netting not supplied, but instructions provided. Traps can be dismantled for painting etc. Made to order.

Please contact Dave Dutton via ruth.walker@bto.org



CONTACTS

Nest Record Scheme: nrs@bto.org
 Ringing Scheme: ringing@bto.org
 Constant Effort Sites: ces@bto.org
 Retrapping Adults for Survival: ras@bto.org
 Colour Ringing: colour.ringing@bto.org
 Ringing Data Submissions: ringing.data@bto.org
 Licensing (general): ringing.licensing@bto.org
 Schedule 1: ringing.schedule1@bto.org
 Special Methods: ringing.specialmethods@bto.org
 Ringing Sales: ringing.sales@bto.org

2018 TRAINING COURSES

Further details of ringing courses for current ringers can be found on the ringers-only pages of the BTO website. Further details of NRS courses can be found on the website at: www.bto.org/nrs-training

Further details of the bird identification and survey techniques training courses run by the BTO can be found on the Events pages of the BTO website at: www.bto.org/news-events

NRS Training Courses

19–20 May: BTO, Thetford, **Norfolk** / Contact: nrs@bto.org

26–27 May: Knepp Estate, West Grinstead, **West Sussex** / Contact: nrs@bto.org

Ringing Courses

26–29 July: Chew Valley RS Ringing Course, **Avon** / Contact: Bob Medland

1–5 August: Icklesham Ringing Course, **East Sussex** / Contact: Gary Clewley

9–12 August: Sandwich Bay Observatory Ringing Course, **Kent** / Contact: Ian Hunter

7–10 September: Gower Ringing Course, **Swansea** / Contact: Kelvin Jones

13–16 September: **Isle of Wight** RG Ringing Course – for all ringers (including experienced trainees) / Contact: Anthony Roberts

THE 2018 CES VISIT PERIODS

Visit	First Date		Last Date	No of Days
1	Thursday 3 May	to	Saturday 12 May	10
2	Sunday 13 May	to	Wednesday 23 May	11
3	Thursday 24 May	to	Saturday 2 June	10
4	Sunday 3 June	to	Wednesday 13 June	11
5	Thursday 14 June	to	Saturday 23 June	10
6	Sunday 24 June	to	Wednesday 4 July	11
7	Thursday 5 July	to	Saturday 14 July	10
8	Sunday 15 July	to	Wednesday 25 July	11
9	Thursday 26 July	to	Saturday 4 August	10
10	Sunday 5 August	to	Wednesday 15 August	11
11	Thursday 16 August	to	Saturday 25 August	10
12	Sunday 26 August	to	Wednesday 5 September	11

Monitoring priorities: Marsh Tit

Although on the UK *Birds of Conservation Concern* Red List due to severe breeding population declines, the cause of the dramatic drop in numbers experienced is, as yet, unknown. Find out how you can help improve current knowledge of this increasingly elusive species.



Marsh Tit, by Liz Cutting/BTO

CURRENT KNOWLEDGE

Marsh Tits are woodland specialists that have declined by 75% since BTO monitoring began in the 1960s. The species is now almost extinct in Scotland, and doesn't occur in Ireland, but is still widespread in England and Wales. Exact causes of the fall in numbers remain unknown, but nest recording has shown that breeding success is generally high, suggesting that reduced survival could be driving the decline. Woodland connectivity is also vital for maintaining viable populations, and Marsh Tits are known to be sensitive to hedgerow loss between woodlands.

HOW YOU CAN HELP

Monitor nests in spring – Marsh Tits occupy large territories (generally 4–6 ha) and so occur at low density.

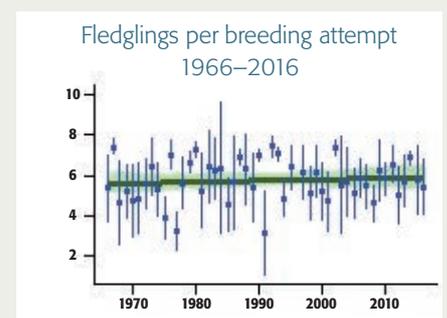
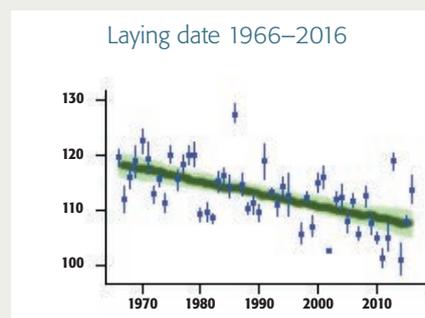
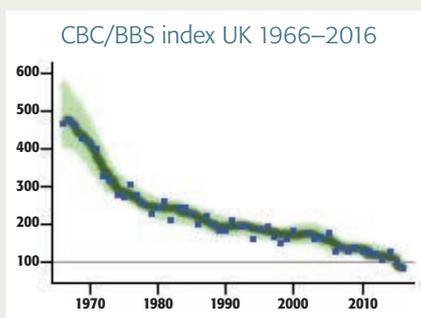
They will occasionally use nestboxes, but these are of little use in increasing populations due to habitat limitations. Nevertheless, nestboxes account for most of the 30–45 annual nest records and the 170–280 pulli ringed. Finding natural nests in tree holes by following back or listening for scolding calls around nests is a rewarding challenge during late April and May. Accessible nests can be monitored with an endoscope or a flexible torch and small mirror, providing valuable information on productivity.

Ring in the non-breeding season

– of the 915 Marsh Tits ringed in 2015, 93% were aged on plumage features, providing vital information on the proportion of juveniles in the population. Marsh Tits can be targeted between September and March by

setting up temporary feeders in local woods. These can be rotated around the different territories every few weeks to catch each resident pair or small group, using short nets or cage traps. Colour-ringing greatly increases the chance of encounters if used with a playback survey in March to find territory occupants, which reduces the need for recapture.

Start a RAS – approximately 100 ha of woodland habitat is needed to hold enough Marsh Tits to provide the target of 30 annual resightings for a RAS. By combining autumn/winter trapping with a March playback survey, this is certainly feasible. Marsh Tits are an excellent project species, being resident and site-faithful, and with the right approach they are relatively easy to catch and resight.



Graphs shown are taken from the BirdTrends report (www.bto.org/birdtrends), where results from the Ringing and Nest Record Schemes are published annually.