RAS Newsletter

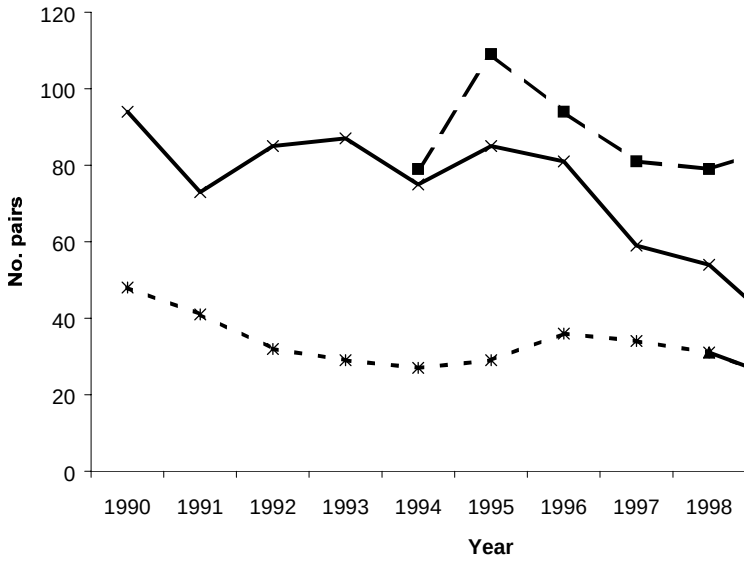
Number Three
March 2001

Are Pied Flycatchers declining?

One of the most enjoyable aspects of running the RAS Project is receiving data at the end of the season and reading the accompanying letters describing the highs and lows of RAS ringing. Over the last two seasons, many of the letters from ringers working on Pied Flycatchers have described a decline in the number of pairs at their study sites, and also poor breeding success on some sites. For this issue of *RAS Newsletter*, Graham & Gary Austin, Iain Livingstone and John Wood kindly offered to tell us more about their RAS studies. On all three study areas, the number of breeding pairs has fallen.

Photo Colin Varndell

The graph below shows the number of pairs on each of the three study areas, plus some data from Frank Lander's long-running project at Nagshead, Gloucestershire (see *Ringers' Bulletin* Autumn 1999). This apparent decline is worrying, and we would like to investigate whether survival rates have changed using RAS data as soon as we can find funding.



Pied Flycatchers on the Shropshire/Powys border by Graham and Gary Austin

Artist Su Gough

Since the mid eighties, we have been running approximately 400 nestboxes on the Shropshire / Powys border – believe it or not this would only be considered medium scale for that neck of the woods. About one quarter of the boxes are situated along Alder-lined streams in open pasture, about half in oak woods and the remainder along field boundaries in hill pasture. In good years we would expect over half the boxes to be occupied. The target species is Pied Flycatcher, with as many as 110 pairs in our study area in its heyday but only 54 pairs this past season. We also expect up to 50 pairs of Blue Tits and 30 pairs of Great Tits. Bonus species include small numbers of Nuthatch, Redstart, Tree Sparrow, Marsh and Coal Tits and Treecreeper. Boxes are sited close together, about 10 metres apart, which prevents an early breeding and aggressive species like Great Tit from occupying all the boxes. Flycatchers are often found nesting in adjacent boxes.

RAS ringing has much to offer a ringer; if ringing Pied Flycatchers were not reward enough, you will get a chance to get to know individual birds to a degree not offered by many other forms of ringing. Not only will you be able to follow the year-to-year fortunes of the adults birds and so contribute valuable RAS data but you will have the opportunity to ring their chicks. Many of these nestlings will return in years to come and become RAS birds themselves. We have even had birds breeding in their natal nest box and can trace the ancestry of some individuals back three or four generations. Incest is not unheard of. We have some individuals that have been faithful to their chosen box for up to seven years while others move considerable distances between years. This is the sort of information normally only available from detailed scientific studies rather than as a result of just three visits per year. Pied Flycatchers are also pretty good at generating recoveries. We've had recoveries from Algeria, Morocco, France and Norway in addition to over 100 from within theUK.

Pied Flycatchers in Teesdale by John Wood

This project covers two sites 7km apart in Teesdale, Co. Durham. They lie in separate, narrow, predominantly broad-leaved wooded valleys at mean altitudes of 185m and 240m asl, the lower one having plenty of suitable habitat both down and up-stream from the nest box site but the higher being at the very top limit in its valley.

The nestboxes were put up in the late 1970s and, once fully established with 72 boxes at the lower and 60 at the higher site, occupancy built up quite quickly to a best total of 48 (33 and 15) in 1990. The lower site then experienced three successive years of abnormally high brood losses, 1990-92 inclusive, though the higher site was only affected in 1992 (coincidentally its best ever occupancy year) losing three broods out of 18. Numbers recovered reasonably well up to 1996, with occupation of 25 and 12 respectively but this proved to be a catastrophic year, with huge brood losses (19 of 24 lost and 8 of 9 at the two sites respectively). In fact, the only successful brood at the higher site was from a re-lay. Clearly the food supply failed badly at the 'normal' time, though other species did not seem to suffer. There were further but much less severe brood losses in 1997 at the lower site and 1998 at both and, by 2000, total occupancy was down to 20 (12 and 8). A point of interest, unique here, occurred in 1986 at the higher site, when a very late spring resulted in 10 birds out of 16 aborting their breeding attempts at advanced nest-building stage. Whether they wrote the season off, or moved to a lower elevation to try again, is anyone's guess.

Adults have been caught at the higher, smaller site on a semi-intensive basis since 1986, though the small numbers involved had not allowed meaningful survival data to accrue, hence the addition of the lower site for this RAS project. There are sites operated by other ringers between 10 and 16km to the north and south in other east-flowing river valleys, as well as further afield in the Tyne valley. These sites provide controls on a regular basis, mostly concerning movements from natal sites for their first breeding attempts (females generally at one year but males often at two) but also a number relocating after their first breeding at natal sites. Some even return to a previous site after a season away. Though not directly RAS-related, my RAS study

has turned up some other interesting results leading to puzzling questions. We have had 5 immigrants from, and 1 immigrant to Wales, and 1 immigrant each from Staffordshire and Lancashire – all in the 1980's and none since (even though more local movements have been fairly evenly spread). We have also had some interesting glimpses regarding the routes taken. We have had 2 spring controls from the east coast (Lincolnshire and Cleveland) and, more recently, 2 autumn controls from Cumbria and Lancashire. Does this mean that the autumn route is further west than the spring return route? Did our Welsh birds arrive via the east, or via the west and overshoot?

Pied Flycatchers at Sanquhar, Dumfries by Iain Livingstone

The Sanquhar RAS site comprises three fragments of mature oak woodland, scattered over a 3km stretch of south facing hillside in the Southern Uplands of Dumfries & Galloway. Two fragments are largely on open ground and are heavily grazed with virtually no regeneration; the third area is in a steep gully and has some natural regeneration present.

Clyde RG first became interested in the area in 1996 but nest boxes had already been in the area on and off for over 30 years. Between 1989 and 1995, a reasonable population of Pied Flycatchers (7-16 pairs annually) bred in plastic tube boxes with some success; the woods usually only hold 1-2 pairs in natural sites. When I took over in 1996, we put up typical wooden boxes and expanded the boxed area by approximately 30%. The visit down to Sanquhar was always the highpoint of the passerine pulli ringing for the summer, Pied Flycatcher's, Redstarts and Wood Warblers being somewhat exotic species to someone living in the industrial central belt of Scotland. We all had an enjoyable but tiring day out and we only had to wait for the exciting recoveries to arrive - but they don't do they?

So why RAS? I've always wanted to maximise the conservation value of ringing (*eg* by carrying out CES), so the current BTO development of RAS would give us greater reason to continue with the Pied Flycatcher's and the ring refund would help with the high ring costs, so I registered the project at Sanquhar as a RAS. Having just completed our third RAS year, this project has taken on a whole new meaning for me. In addition to the good day out, I now have a population of birds that I feel I know. I can follow returning pulli, see birds recruited into the newly boxed areas, as well as see movements between the woods. I have a population of known age, including a bird in 1998 and 1999 ringed as a pullus in 1991! Always very wary of trapping adults near nests, I took advice from other Pied Flycatcher ringers (see later section). I was promised no problems with desertions. In 1998, our first RAS season, we grasped the nettle, and, using small swing door box traps, we targeted most of the boxes with well grown young. Success! We caught 26 adults, 11 with old rings, out of a bumper population of 31 pairs that year and there were no desertions at follow-up.

Having joined the RAS Project I am now even keener to visit; we now make two or three trips a year and catch most of the adults. I have seen the old aged population from 1998's catch largely die off to be replaced by young birds from our sites and from outside the area (unringed birds). In 2000 the population fell, down from 24 pairs in 1999 to 18 pairs now. It is depressing and potentially worrying, however, the comparable population for the 1985-95 counts was 12 pairs, similar to the 11.6 pairs mean for the more recent time period. Perhaps the much larger population in 1998 was an anomaly rather than the norm. Time will tell.

I still wait, in vain, for the recoveries but RAS has increased my interest significantly in the project, as well as producing useful data. I can recommend it to anyone who regularly rings a site(s) for a particular species.

Catching methods recommended by Graham, Gary and John

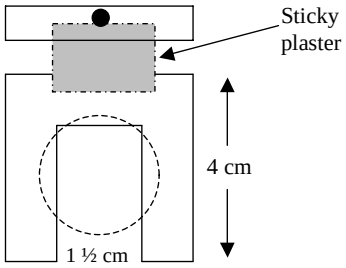
Artist Jan Wilczur

At Graham and Gary's site, most of the adults are trapped over the course of three visits. The majority of the females will be caught during the first visit, when they can be lifted off the eggs or newly hatched chicks. Obviously great care is needed to ensure

that the eggs are not damaged but female Pied Flycatchers are very broody at the egg and small chick stages and rarely struggle. They will even settle straight back on the nest if "posted" through the nest hole after ringing or ring reading. **Graham and Gary recommend that ringers should always post the female back through the hole**, and, if both the male and female are caught at the same time, post the female and release the male (he might not actually be part of the pair!). John notes that a long-handled butterfly net can sometimes deal with the odd female that allows close approach to the box before slipping off. Once the chicks have hatched, it is possible to catch the males and "mop up" any females not previously trapped. Most adults will have been caught once the second visit is complete.

Males, and any remaining females, require the use of some form of nest-box trap during the nestling period, a quite short window of opportunity as, in the later stages, John notes that the young may be called up to the hole for food if the adults are nervous of any trap. Males can be difficult to catch, being sometimes less motivated than females in feeding the young; this may be particularly true for polygynous males at other than primary nests, where they seem to take only a small share of the feeding duties.

Graham and Gary describe two nest trapping methods that have proved particularly successful. The first is to use automatic flap-traps on the inside of the nest hole. The flap-trap is made out of a 4 cm square of thin black plastic shaped like an inverted 'U' (see diagram). The opposite side is hinged to a second strip of plastic using sticking plaster. This is attached to the inside of the box by a mapping pin stuck through the smaller plastic strip. Birds will happily push past the flap to enter the box but because the square of plastic is larger than the hole cannot get back out. Traps are left on the box for up to 10 minutes if chicks are small or the weather is poor, longer for larger chicks on a warm day (up to a maximum of 40 minutes). If it is a miserable day, no attempt should be made to trap adults, on other days look at the chicks carefully and assess their condition before setting the trap and deciding how long to leave it in place. Depending on how close together pairs are nesting, traps can be put on a series of boxes as the broods are ringed, retracing ones steps shortly afterwards to collect the adults. Graham and Gary prefer to do things in this order, at least if the chicks are small, as it allows adults to be "posted" back into the boxes without further disturbance. John recommends another type of automatic nest box trap. This is a loosely-hinged elongated wire loop, like a large paper clip, fixed so as to hang flush with the inside of the box over the hole, and reaching below it. The bird pushes this inwards to gain access whereupon it falls back to block the exit. He notes that such automatic traps are not suitable if one of the pair, generally the female, has already been caught that season, as they are not selective.



John suggests that it can save time and temper if, risk of human interference permitting, a few manually-operated traps are set at one time, so that birds have got used to them by the time one returns to the first one. There is a good chance that both birds, particularly the male that is likely to be the target and more nervous, will have been in and out of the box, becoming used to the trap, and so can be trapped relatively quickly. **If more than one trap is operated it is important to have a fail safe method of ensuring none could be forgotten**. Graham and Gary suggest that all traps are individually numbered and the number is written against the nest box record in the recording book as each is fitted. Guidelines for catching adult birds at nestboxes (*Ringers' Bulletin* Vol. 7, No. 6 December 1989) recommend that all nestboxes are numbered on the outside and accurately mapped and that the map should be taken in to the field so that boxes can be quickly located if necessary. It is essential that traps and cloths for blocking up holes are counted at the start and end of a ringing session.

The second method recommended by Gary and Graham is to use a half squash ball or a piece of roughly circular leather, about 6 cm in diameter, fitted to a long piece of cord. The half ball is pushed through the nest hole and hangs below the hole. When the bird enters the hole the string is pulled and the nest hole blocked. Because the trap is operated

manually, it has the advantage of being selective, and so if one of the pair has already been caught only its mate needs to be trapped. It is best to use fine cord for the first metre or so, mist net shelf string is ideal, with thicker, less tangle-happy cord thereafter. It is important to have a clear line of sight to the nest hole to ensure the bird has cleared the entrance before the string is pulled. John notes that it is better to operate from one side of the box, rather than facing the hole, so that the line runs close to the box and not outwards from the hole, possibly impeding the birds' flight path. Once the target bird is in the box, a strong pull on the line, not forgetting a means of anchoring the free end of the line to maintain the tension, will complete the capture and allow the operator to remove the bird from the box. Because the string is less obtrusive than the flap-trap, birds are rarely intimidated by the squash ball method, although the presence of the ringer lurking nearby may make some birds hesitate. Some form of sleeve to prevent escape while extracting the bird is recommended in all situations of nestbox trapping.

When you put up nestboxes, you will almost certainly attract birds into the area, particularly in Pied Flycatcher country, and so Graham and Gary note that it is only responsible that you should keep the boxes in good repair. After the first few years, you can expect to have to replace or repair perhaps 10% of boxes each season depending on the quality of material used. In areas where there is human access, remember to position the boxes well out of reach, but in private areas boxes can be lower (boxes at chest height make it easy to look in the nest).

Artist Derek Robertson

These methods have been endorsed by Chris Mead, long-time Pied Flycatcher ringer.

Welfare

You will also attract other species to your nestboxes, the welfare of which must be considered when carrying out a RAS study. Graham and Gary note that Blue Tits don't present any particular problems. Females can be lifted off eggs in the late stages of incubation and, although they usually leave the nest after "posting" them back, they have not had any problems with birds deserting. This does not seem to be true of Great Tits and Redstarts, and although they can be lifted off chicks, they should not be lifted off eggs. Note that the nests of Redstarts can be identified by the presence of feathers. When a female of one of these species is inadvertently lifted off eggs in mistake for a different species, Graham and Gary have found that returning it to the box and using a leaf to block the entrance will stop it making a rapid exit, so helping it settle and avoiding desertions. This is also a useful method of settling those awkward chicks that don't want to stay put after ringing. Make sure you check the box after 20 minutes to see that the birds have been able to dislodge the leaf. Alternatively, use a piece of cloth attached to a cord to put in the hole and pull the cord when you think the bird has settled. Once the chicks have hatched, the methods described for Pied Flycatchers can be employed safely for these species as well. Nuthatch can also be trapped safely once the chicks have hatched, as can the other tits but not so Tree Sparrows. Disturbing Tree Sparrows off eggs should not be attempted, and even catching them off small chicks is ill advised. In the past, the occasional adult was lifted out of the nest along with larger chicks and the chicks did go on to fledge. However, further broods from the same box appear to be less likely.

Graham & Gary Austin

A final word on RAS from Graham & Gary

There are already more than 10 Pied Flycatcher RAS studies registered and there must be many more potential projects out there. If you have Pied Flycatcher adult retrap data collected over several years but have not registered a RAS project, can we encourage you to contact the RAS team at BTO HQ with a view to having your data included in future analyses. Although RAS is only a few years old, with this species it has had a flying start, with a number of projects providing data from earlier years. This species can therefore offer the RAS team an early opportunity to demonstrate the benefits of this type of focused ringing study.

Catching techniques for Swallows

by Ian Rendall and Garth Lowe

So far, five ringers have taken up the challenge to catch adult Swallows as part of the RAS Project. Swallow is currently graded 'Amber' on the *Birds of Conservation Concern* list, on the grounds of a moderate decline in the UK breeding population or in range; it is a species with 'Unfavourable Conservation Status' in Europe. RAS studies could provide important information on survival rates and, perhaps, clues to the reasons for any declines. Here Ian Rendall and Garth Lowe share their experiences of catching adult Swallows and, hopefully, provide inspiration to others to take up the challenge.

Artist Andrew Chick

Swallows in Aberdeenshire
by Ian Rendall

Until 2000, the third year of my RAS study, I caught adult Swallows at their breeding sites by placing a mist net inside the building that contained the nest. Catching was attempted when the young were large to minimise the risk of desertion, and this was when the parent birds were most frequently flying in and out to feed their young. Some buildings were large enough inside to accommodate a 20ft mist net but many were too small and, for these, custom-made nets had to be used. One was made to fit a stable-sized chamber and another was just large enough to cover a single window or doorway. This technique was far from ideal, however, as success was seriously affected if (a) the birds came in while the net was going up or (b) one bird got caught and it's partner saw this happen!

I persevered with this method nonetheless, until 2000, when I tried a more certain way of catching both adults. Knowing that they roost in the vicinity of the nest, I figured I would have more success if I attempted to catch them as they left at dawn. This method was not considered in previous years as I only had my bicycle as transport – the acquisition of a car this year changed all that though. Despite the fact it means being on site at first light (3.30–4.00am at the height of summer), catching both adults was all but assured – or so I believed! By placing a mist net across the outside of the doorway/window of the nest building, adults should get caught as they depart from roosting. Nothing is perfect however, with birds getting out through holes in the net, bouncing out of the net and some even leaving and flying past me when they detected my presence as I put the net up! This made me very cautious after it happened a few times, and I then found myself going out that bit earlier (while it was still dark) and trying to be as quiet as possible when erecting the net. I still have to use the old method at sites where it's not possible to catch them at first light, when the nest site is in a loft for example. Buildings containing roosting pigeons were also discounted for this new method!

With the total of adults caught almost doubled from 1999, catching adult Swallows as they leave in the morning appears to be the most successful, least time-consuming method possible – unless someone out there knows differently!

Swallows in Worcestershire
by Garth Lowe

As with most studies, once a number of nest sites have been identified for the RAS study, one should be prepared to keep meticulous records of the progress of each nesting attempt. This is most important in making decisions on when to catch adults, and ring the nestlings. With such a large numbers of nests to keep track of, I find my notes have to be referred to time and time again, to organise visits. Nest Record Cards seem to be the best way to store the data, and a useful way to keep additional important records for the BTO.

Each site is unique in deciding how to catch adults; simple ones have only one doorway, while others have multiple exits. Some doorways are extremely wide; others give nowhere to hide. Open barns are the most difficult, necessitating the use of a longer net. Most of my birds have been caught using a hand-made net, approximately one metre wide. It has two poles, in halves, held together by strong elastic bands. This gives more scope for the variety of ceiling heights that I encounter. This system can also be left intact all season, short enough to just slip inside a vehicle, saving a lot of time in setting up.

My main strategy is to wait inside the entrance, when young are present, and quickly cover the entrance once adults have entered to feed. The mesh is easily visible to the birds, and if they do bounce they learn very quickly and become harder to entice into the net again, sometimes just sitting there, and watching you. If forced to fly, they may attempt the doorway again. Ensure the net covers the entire opening, a very small gap is spotted immediately. Once a bird is in the net, I close the two poles, after having early escapes when birds not prone to getting very tangled in the net, easily escaped. If working on your own, the method has its disadvantages but most problems can be overcome. When using a longer net, I have camouflaged myself, when too exposed, then raised the net once the birds have entered.

Extra equipment I regularly take includes a length of garden netting to cover larger exits, such as triangular gaps between multiple stables (these are the most important nesting sites in my area). Also a large curtain, to reduce exits to a manageable size by hanging it down one side, is useful. Sites with multiple exits can be attempted by temporarily closing the less used ones. High escape routes can be made unusable, after the bird has entered, by having a long pole with an attachment to dissuade a fast exit. In this case, I leave the small net over the lower exit and pray the bird enters it near a shelf string.

Over three seasons, my catching methods have improved, with catching time reduced to around 15 minutes per bird. In 2000, I also caught birds as they left their eggs when incubating, and had no problems with desertions. This can give a head start with catching, and extends the length of time over which birds can be caught. Occasionally, the latter method will catch a male, as some take part in incubating.

My study is proving very rewarding, through the many facts that have emerged, and the frequent meetings with interested site owners, to whom I am very grateful. More RAS studies set up around my area may help me to discover where all my juveniles go on their return!

RAS Newsletter

If you require extra copies of *RAS Newsletter* to distribute to landowners or ringing group members, then please contact Dawn Balmer. We are always keen to include articles that summarise your RAS studies. If you are interested in writing something for forthcoming issues of the newsletter, please contact Dawn. Budding artists are also welcome to submit line drawings for inclusion but no Bee-eaters or Golden Eagles – only suitable RAS species please!

A Study Of Breeding Tawny Owls

by John Massie, Grampian Ringing Group

Artist Brian Cosnette

The study

The study has been a long-term one, arising from a conservation need in the 1960's identified by the author in the face of increasing coniferous aforestation in the Grampian area when he provided nest boxes for owls where natural sites were absent. The study itself was formalised in 1978 and thereafter supported by Grampian Ringing Group; annual reports have been published.

The RAS area

That part of the study area selected for the RAS Project is a one hundred kilometre square based on the village of Garlogie in Aberdeenshire, and includes a broad range of habitats including hill, moor, marsh, wood and water.

Adult trapping

Initially only pulli were ringed, but some adults were trapped in the current RAS area in 1985 and 1993 and to a lesser degree in 1997 and 1999. Trapping adults in an intensive way started in 2000, the first year of the RAS study. Nesting females are safely trapped during the short time period when they are covering downies (and not when they are incubating eggs). The females are caught by placing a net over the nest box hole and tapping the box.

[Long-time Tawny Owl ringer, Steve Petty suggests that adult females are caught when the chicks are 5-15 days old, before 5 days of age the chicks are generally too small and an occasional female may desert and after 15 days there is no guarantee that the female will still be brooding]- Ed.

Nest boxes

One hundred nest boxes are maintained in the RAS area, which holds 50 or moreTawny Owl territories, so that the RAS area is saturated with boxes. Seventy-three of these boxes have been used, some annually, others regularly and the odd one once only. Each year, between 30-40% of the Tawny Owl pairs in the area are found nesting in natural sites, such as holes in the ground, chimneys, old open nests (eg those of Magpies), under bridges, rock faces, in the roots of trees and even in a bramble bush. This wide range of sites used means that access is impossible to some nests. This is less of a problem for a RAS study than it may first appear because there is evidence that once a Tawny Owl starts using a nest box it is likely to always use a box.

Numbers trapped

Since 1993, 41 adults have been trapped and 286 pulli ringed in the area. There have been 19 re-traps so far. In 2000, 16 adults were trapped from 31 nests monitored. Of these 31 nests, seven failed at the egg stage (about the national average, Humphrey Crick *pers comm*.) so the actual capture rate of birds that could be trapped safely was two-thirds. Of these 16 adults, 12 nesting female owls had to be newly ringed and there were only four re-traps in this first year of intensive RAS study.

Results

The study has already shown that Tawny Owls can breed in their first year after hatching. They also appear to have a low natal dispersal and breeding losses in poor feeding years are large. In some years, Tawny Owls do not breed, for example in 1986 only five pairs bred, probably due to a lack of food, yet the following year 40 pairs bred. Tawny Owls have been known to waste no time occupying boxes, and, once a box was occupied and one egg laid within 24 hours of the box being erected! One highlight is the continuing 'recovery' of a female Tawny Owl GK77451 in its nesting wood, now in its 18th year. Information from birds that have been recovered so far suggests that the main causes of death resulting in recovery in this study population are starvation, road traffic accidents and drowning.

Previous research on Tawny Owls

Rinne, J., Lokki, H. & Saurola, P. 1990. Survival estimates of nestling recoveries:forbidden fruits of ringing? *Ring* 13, 1-2: 255-270.

In Finland, 17,772 Tawny Owls were ringed as nestlings between 1953 and 1987 and 2,151 of them were later reported dead. The most common finding circumstances were: found dead, no more details (37%), hit by car (21%), and found dead in a building, mainly in a chimney (17%). Most of the Tawny Owls start nesting at 2-3 years of age. The survival rates estimated were:

1st year	22.6%
2nd year	61.1%
3rd year	66.5%
older birds	73.3%.

Artist Cliff Robinson

Percival, S.M. 1990. *Population trends in British Barn Owls and Tawny Owls in relation to environmental change*. BTO Research Report No. 57. BTO, Thetford.

Analysis of the BTO ringing database for the period 1976-1987 showed that the percentage of ringed birds recovered is around 8%, which is quite low compared to Barn Owl (16%). Using the software package SURVIV, survival rates were estimated as shown below. The regional differences in Tawny Owl survival highlight the importance of being able to divide the data regionally. It is possible that different population processes occur in different regions, and this is why a number of RAS studies of the same species in different habitats and regions will be very valuable.

Area	**1st year**	**Adult**
Scotland / N England	26.7%	79.4%
SE England	28.0%	9.2%
SW England / Wales	46.6%	71.8%

RAS on birds of prey

We are keen to promote more RAS studies on raptor and owl species. Species that regularly use nestboxes are likely to be particularly suitable. A couple of existing Barn Owl studies have joined RAS, and we are keen to hear from any ringers that already have Schedule 1 licences to catch adult Barn Owls at the nest. The article on Tawny Owls above suggests that this species might also make a good RAS study. Kestrels nesting in boxes are also suitable and it is possible that existing studies could be developed into successful RAS studies with little extra work. Please contact Dawn Balmer or Chris Wernham if you think you may have a suitable study.

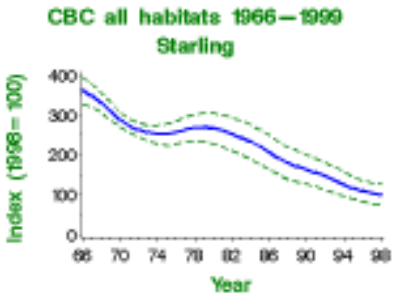
Artist Anon

Focus on…..Starling & Whinchat

Starling

Amber list/Candidate for Red list
Breeding Bird Survey 1994-99
- 6% significant decline in adult numbers
Common Birds Census 1970-98
- 5% significant decline in adult numbers

Populations of Starlings have declined sharply since the early 1980s. Their preferred feeding habitat, permanent pasture, has been under threat and much has been lost from south and east England. Information from the Nest Records Scheme suggests that breeding success has improved over the last 25 years, so it is possible that adverse changes in survival rates have reduced the population size. BTO has secured funding from DETR and is leading a consortium that will investigate the causes of the population decline. Information from the Nest Records Scheme, Common Birds Census and ringing will be combined, to help understand the factors driving the population decline. The project is due to run for 2-3 years, so we will report on the findings in the future. A major part of the project involves computerising ringing data for Starlings from 1962 onwards and, with 3/4 million ringed in that period, it's a big job!



At the time of writing, we have no RAS studies on Starling – surely it would make a good nest box study species? Starlings can be caught safely in nest boxes. In early spring, roosting pairs can be caught in the box, and later females can be caught whilst incubating. The use of a pole with a bird bag on the end, to jam in to the hole before approach, is advised. During chick feeding, both sexes can be caught by fixing a trap door to the box, either spring loaded or gravity-aided, and triggered by the bird on entry. To extract the bird from the box, it is best to use a large black sheet with draw strings, one end attached to the box and the other end around your arm, to prevent birds escaping when you open the lid. Thanks to Siân Whitehead and Jon Wright for advice.

Whinchat

Green list
Breeding Bird Survey 1994-99
–9% no significant change

We currently have little information on Whinchat population changes because, being mainly an upland species, it has not been well covered by the CBC. The BBS is now providing information on recent population trends. Whinchats showed an alarming range contraction in lowland Britain between the 1968-72 and 1988-91 breeding Atlases. We have two very successful RAS studies on Whinchat, one in Gwent and the other in Powys. Around 100 and 50 adult birds are monitored respectively, using a variety of techniques to catch birds, such as mist-nets, Potter traps and spring traps. In addition, Nest Record Cards are completed (80 and 40 respectively), which adds greatly to the value of the RAS study. More projects on this species, and on similar species like Stonechat and Wheatear, would be really useful!

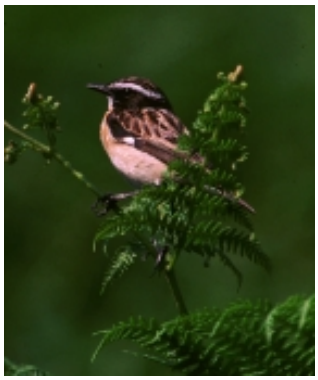


Photo Tom Holden

News Items

Ringing & Migration Conference 2001

At the conference in January, for a change we had a RAS meeting on Saturday evening instead of the usual CES meeting. We invited Bob Swann and Garth Lowe along to talk about their projects on Eiders and Swallows respectively. Both Bob and Garth gave excellent presentations, which inspired many ringers to think how they could take part in RAS. Bob's methodical approach to catching sitting female Eider ducks was the envy of many! Garth showed us how he was faced with different catching problems with each pair of Swallows he attempted to catch but how he has found ways of overcoming most of the difficulties. Thanks to all who came along and made it a successful evening. At the BTO Annual Conference in December 2001 we will be having a RAS workshop - hope to see you all there!

Arctic Terns

The Natural History Society of Northumbria has started a RAS study of Arctic Terns. They are using walk-in traps to catch the adult birds and wish to find a technique for marking birds during the breeding season (that will last for the whole season) so that birds that have already been caught are not targeted again for catching. If you have any suggestions, please contact Dawn Balmer at BTO so that the information can be passed on.

The Sanctuary Award

Lulworth Conservation Group was awarded a Highly Commended certificate in recognition of the useful contribution made towards the conservation of Sand Martins. An artificial nesting face was created in a china clay pit in Dorset with the co-operation and assistance of English China Clay – and it was designed with ringing in mind! The face is 10-12 feet high and about 120 feet long, so with the aid of a single 60 foot mist-net that can be moved across the face, the Sand Martins can be easily caught. Ringer Steve Hales has been ringing at the site since 1992 and started a RAS study in 1998. The Sand Martins took to the face well: by the end of the first year, 40 pairs were using it and in 1999 there were over 100 pairs!

Artist Rob Hume

RAS Update

RAS continues to grow in popularity and a number of new species have been registered for the 2000 season: Ringed Plover, Little Ringed Plover, Bearded Tit, Goldcrest and Swift. Data have been received for a total of 39 species so far (1998-2000 seasons) and data for several new species are expected in the coming months. Of the 39 species, almost 50% are 'Red' or 'Amber' on the *Birds of Conservation Concern* list.

'Red'-listed Species	**No. studies**
Nightjar	1
Woodlark	1
Song Thrush	2
Tree Sparrow	2
Linnet	3
Bullfinch	1
Reed Bunting	1

'Amber'-listed Species	**No. studies**
Storm Petrel	1
Eider	2
Dunlin	1
Razorbill	1
Barn Owl	2
Sand Martin	10
Swallow	5
Dunnock	1
Stonechat	1
Blackbird	3
Grasshopper Warbler	1
Goldfinch	1

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Visit us on the Web at:
www.bto.org/ringing/ringinfo/ringing-rasp.htm

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