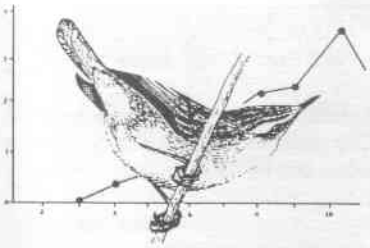


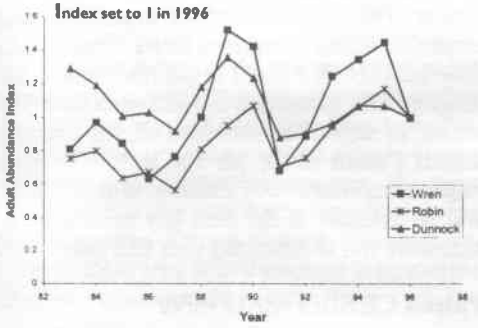
CES News

British Trust for Ornithology

NUMBER THIRTEEN FEBRUARY 2000

BOBBIN' ROBINS & ROCKETING WRENS!

For Wren, Dunnock and Robin, catches of both adults and juveniles increased between 1998 and 1999. All us CES ringers can easily relate to these year-to-year changes, but they tell us little about the pattern of long-term changes. Long-term trends are far more important in conservation terms.



Catches of adult Wrens increased by 81%, and Robins increased by 82% between 1983 and 1995 (both statistically significant results). These are the largest increases recorded for any of the 28 species monitored by the Scheme (Peach, Baillie & Balmer, 1998, *Bird Study* 45: 257-275). The graph shows that catches of Wrens fluctuated markedly between years whereas Robins showed a more sustained increase. There was a statistically significant decline in the catches of adult Dunnock (-17%) between 1983 and 1995 and the graph shows that catches of Dunnocks have also fluctuated greatly over time. Dunnock is currently Amber-listed on the *Birds of Conservation Concern* list because its UK breeding population has shown a moderate decline over 25 years. It is incredible how similar the shorter-term patterns of change are for these three resident species. The pronounced fluctuations in catch size can be attributed to unfavourable weather conditions in Britain and Ireland. For example, the severe weather of February 1991 probably accounts for the reduced catches of Wren, Robin and Dunnock in 1991.

Artwork by Dr G Fisher

This is the thirteenth edition of CES News, the newsletter for the British Trust for Ornithology's Constant Effort Sites Scheme. If you require further copies of this newsletter please contact Dawn Balmer at The Nunnery.

The Constant Effort Sites (CES) Scheme, now running for 19 years, uses catches from standardised mist-netting to monitor changes in the abundance and productivity of common breeding songbirds. Licensed ringers at over 130 sites throughout Britain and Ireland erect mist-nets in the same positions and for the same length of time, during twelve visits spread between early May and late August each year – a real labour of love by dedicated ringers! Changes in the total number of adults caught provide a measure of changing population size, while the proportion of young birds caught is used as an estimate of breeding success. We also use retraps of adult birds ringed in previous years to estimate annual survival rates. Recent advances in analysis methods mean that long-term trends in numbers, productivity and survival rates can be calculated from CES information.

CES RINGING IN 1999

Weather conditions during the 1999 breeding season were very similar to those in 1998 and resulted in mixed fortunes for Britain's common songbirds. Early nesting residents took advantage of the mild conditions in March and April and successfully fledged young. For other species, the generally unsettled weather and the particularly heavy downpours in late May and June probably affected breeding success.

Continued growth of CES in 1999

The number of CE sites operated continues to grow steadily, reaching a new peak of 133 in 1998. By mid-January, we had received ringing returns from 126 sites operated in 1999 and we expect more returns in the next few weeks. Seven sites were operated for the first time in 1999 (SW Lancs RG – Lancs, N Lancs RG – Lancs, Reg Lanaway – Sussex, John Glazebrook – Suffolk, Michael O'Donnell – Wicklow and two sites by Leigh RG – Greater Manchester). The majority of CES sites operated are in England (103 sites), but valuable contributions are received from Scotland (12 sites), Ireland (7 sites) and Wales (4 sites). We particularly need new sites in Wales, south-west England, Ireland and Scotland.

High level of effort

The unsettled weather mid-way through the CES season caused many visits to be cancelled at the last moment or curtailed. However, all 12 main visits were still completed at over half of all CES sites and 10 or more visits were achieved at 92% of sites - a fantastic effort by all ringers involved.

More computerised data

More ringers than ever before submitted their CES returns on floppy disk using the B-RING package of computer programs – an incredible 85%! This saves considerable staff time and special thanks are due to the majority of CES ringers who now computerise their own data. We are grateful to Sam Rider for computerising the rest of the CES data. *A Guide to using B-RING for CES ringers* is available from Dawn Balmer. Free computers are still available to CES ringers, for further information please contact Robin Cole Tel: (01438) 813403 or Jez Blackburn in the Ringing Unit. Remember, in addition to your CES refund, all ringing data submitted on disk currently attracts a rebate of 50p per 100 birds. For those ringers using Windows 95 machines or above, IPMR will be available in the next few months as an alternative way of submitting your CES data.

Paired CE Sites for 1998/99

The results presented this year are based upon standardised catches at 112 sites which were operated in the same way in both 1998 and 1999, and at which at least eight visits were completed in both years. The breakdown of habitats covered does not tend to change much from year-to-year. In 1999, of these 112 sites, 61 were located in reedbed or wet scrub, 39 in dry scrub and 12 in deciduous woodland (a small increase in woodland sites). The annual report on CES ringing for the 1998-99 season will be published in the March-April edition of *BTO News* (227).

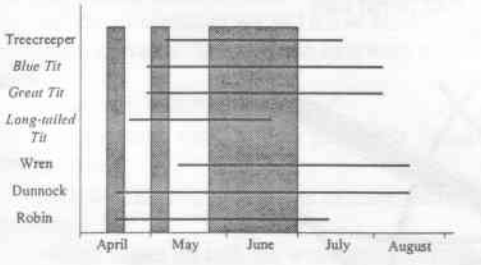
Adults – welcome increase for Sedge Warblers

Another mild winter probably enabled many of our resident species to survive in reasonable numbers, although there was only one statistically significant increase in numbers amongst the resident species, for Wren. There was a welcome increase in the number of adult Sedge Warblers caught, following two successive years of poor adult catches (1997 & 1998). There were three statistically significant decreases in numbers between 1998 and 1999 for Chiffchaff, Willow Warbler and Blue Tit (see Table 1). The long-term trend for adult Chiffchaff shows an increase, and coupled with fairly good breeding success in 1997 and 1998, the population level is presumably quite high. There is no clear reason for the downturn in adult numbers in 1999, but this could suggest less favourable conditions in their wintering grounds. The decline in catches of adult Blue Tits is perhaps easier to explain as simply a knock on effect of a very poor breeding season in 1998. Given another below average breeding season in 1999, we may see a further decrease in 2000.

More rain in June

The now familiar pattern of mild weather in early spring and unsettled summers, characterised by heavy downpours, resulted in mixed breeding success. Early breeding residents, particularly Wren and Dunnock, took advantage of the mild conditions early on and managed to fledge good numbers of young. Unsettled weather in early and late May, and most of June, made finding sufficient food to feed the chicks difficult. In some areas, cool spells added to the problem and resulted in many chicks starving to death. The heavy downpours caused some localised flooding on CE sites and wiped out the nests of several ground nesting species, notably Chiffchaff, Willow Warbler and Nightingale. The figure below illustrates the period of unsettled weather (shaded area) for much of the country in 1999, together with the approximate time when chicks are in the nest (solid lines). It is interesting that Blue Tit and Great Tit, both single-brooded species, failed to fledge good numbers of young. The main period that chicks are in the nest coincided with poor weather and may have resulted in few chicks fledging. Another single-brooded species, Long-tailed Tit, breeds slightly earlier than Blue Tit and Great Tit and managed to fledge young successfully. Those species that have more than one brood (*eg* Treecreeper, Wren, Dunnock and Robin) seemed more likely to raise good numbers of young.

Following on from two successful breeding seasons, Blackcap and Chiffchaff both had a poor year. However, the Reed Warbler, one of the latest of our summer visitors to start breeding, had a successful breeding season, benefiting from the dry, sunny weather throughout July and August.



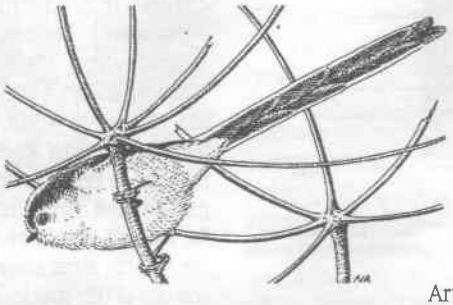
Measures of breeding success

For the first time we are presenting a new measure of productivity. This year we are using *the percentage change in juveniles per adult* as our measure, which is more in line with the way we present long-term changes in productivity (see page 5 for further explanation). Looking at Table 2, only Blackcap and Redpoll show statistically significant changes. Blackcap shows a significant decline in productivity (no change in adult numbers but a decrease in juveniles) whilst Redpoll is showing a significant increase in productivity (moderate increase in adult numbers but a huge increase in juveniles). The result for Redpoll should be treated with caution because the sample sizes are now very small owing to the scarcity of this species on CE sites.

Table 1. Changes in captures on CES sites from 1998 to 1999 (all 12 visits).

Species	ADULTS n	ADULTS Total 1998	ADULTS Total 1999	ADULTS % Change		JUVENILES n	JUVENILES Total 1998	JUVENILES Total 1999	JUVENILES % Change	
Wren	98	618	690	+12	*	98	1567	1771	+13	*
Dunnock	99	575	611	+6		99	762	975	+28	*
Robin	94	463	498	+8		99	1655	1718	+4	
Blackbird	97	799	798	0		94	600	594	-1	
Song Thrush	88	262	247	-6		73	201	216	+8	
Sedge Warbler	73	992	1115	+12	*	74	1503	1620	+8	
Reed Warbler	61	2012	1971	-2		69	1937	2402	+24	*
Lesser Whitethroat	42	79	81	+3		46	146	90	-38	
Whitethroat	70	316	294	-7		75	507	432	-15	
Garden Warbler	74	347	329	-5		73	382	280	-27	*
Blackcap	94	878	878	0		94	2118	1522	-28	*
Chiffchaff	81	442	255	-42	*	97	1542	939	-39	*
Willow Warbler	94	1855	1552	-16	*	97	2856	2340	-18	
Spotted Flycatcher	12	18	16	-11		15	12	11	-8	
Long-tailed Tit	87	444	418	-6		84	950	990	+4	
Willow Tit	22	35	25	-29		29	90	74	-18	
Blue Tit	98	710	604	-15	*	99	1725	1455	-16	
Great Tit	96	473	456	-4		99	1201	1002	-17	*
Treecreeper	48	66	69	+5		71	163	178	+9	
Chaffinch	86	517	496	-4		73	270	297	+10	
Greenfinch	53	194	205	+6		32	61	95	+56	
Goldfinch	44	79	97	+23		29	70	69	-1	
Linnet	22	94	89	-5		18	53	60	+13	
Redpoll	12	26	35	+35		6	6	35	+483	
Bullfinch	85	517	483	-7		76	377	429	+14	
Yellowhammer	19	46	48	+4		12	16	15	-6	
Reed Bunting	69	332	322	-3		57	224	237	+6	

n = number of paired sites
Total = number of individuals captured at all paired sites
* = significant change at the 5% level



Artwork by Norman Arlott

Table 2. Changes in the percentage of juveniles per adult caught on CE sites from 1998 to 1999.

For the first time we are presenting a new measure of productivity. In the past we have used the percentage of juveniles in the catch to present changes in breeding success. This year we are using *the percentage change in juveniles per adult* as our measure (Table 2), which is more in line with the way we present long-term changes in productivity . This is a preferable way of showing changes in breeding success from one year to the next because the amount of change should be directly proportional to true changes in productivity. **However, the ratio of juveniles to adults is not a measure of absolute productivity because the chances of catching juveniles at CE sites may differ from the chances of catching adult birds. Rather, the ratio is an *index* of breeding success.**

Species	*1998*		*1999*		*ratio*	*%change in juveniles per adult*
	Adults	*Juveniles*	*Adults*	*Juveniles*		
Wren	618	1567	687	1750	1.01	+1
Dunnock	571	756	605	970	1.21	+21
Robin	463	1655	498	1715	0.96	-4
Blackbird	798	599	798	594	0.99	-1
Song Thrush	252	199	233	211	1.15	+15
Sedge Warbler	990	1500	1113	1618	0.96	-4
Reed Warbler	2012	1932	1963	2395	1.27	+27
Lesser Whitethroat	72	133	77	84	0.59	-41
Whitethroat	304	498	286	423	0.90	-10
Garden Warbler	344	363	323	276	0.81	-19
Blackcap	876	2114	878	1522	0.72	-28 *
Chiffchaff	432	1513	254	932	1.05	+5
Willow Warbler	1844	2839	1550	2339	0.98	-2
Spotted Flycatcher	13	6	14	6	0.93	-7
Long-tailed Tit	427	936	407	972	1.09	+9
Willow Tit	32	83	23	69	1.16	+16
Blue Tit	708	1711	604	1455	1.00	0
Great Tit	471	1198	456	1002	0.86	-14
Treecreeper	64	146	64	152	1.04	+4
Chaffinch	497	264	489	291	1.12	+12
Greenfinch	175	57	189	89	1.45	+45
Goldfinch	60	64	77	56	0.68	-32
Linnet	89	49	79	54	1.24	+24
Redpoll	18	3	35	35	6.00	+500 *
Bullfinch	501	373	472	423	1.20	+20
Yellowhammer	44	14	46	12	0.82	-18
Reed Bunting	306	209	321	234	1.07	+7

* = statistically significant change at 5% level

Example for Bullfinch (based on above figures)

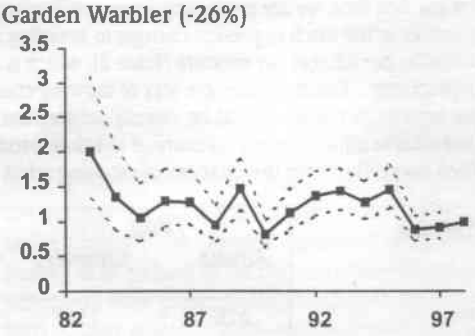
	Adults	Juveniles	Old Index	New Index	
1998	501	373	373/874=0.42	373/501=0.74	
1999	472	423	423/895=0.47	423/472=0.89	Ratio = 0.89/0.74=1.20
		Difference in % change = **5%**		% change in juvs per adult =**20%**	
		(0.47-0.42 x 100 = 5%)		((0.89-0.74)/0.74 x 100 = 20%)	

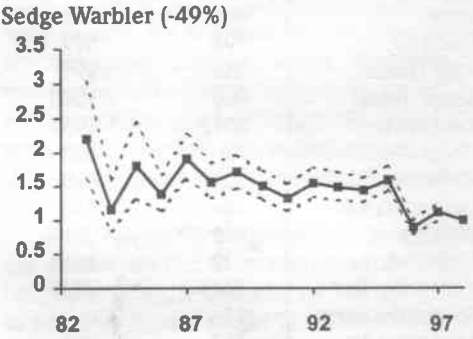
The new index is better because it is directly proportional to productivity whereas the old index method used the percentage of juveniles in the catch and was not directly proportional to productivity.

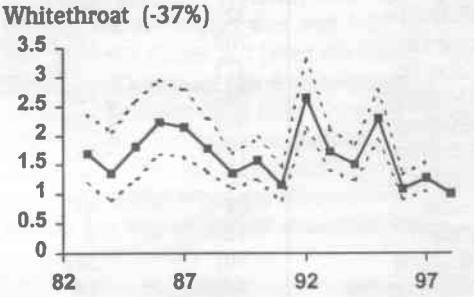
LONG-TERM TRENDS IN PRODUCTIVITY

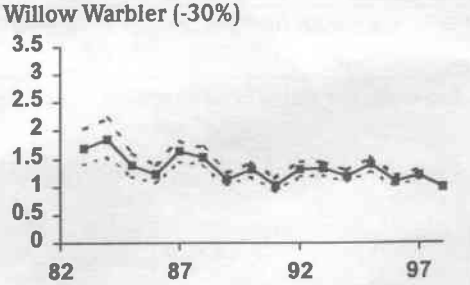
Last year in *CES News*, we presented some preliminary results from Steve Freeman's work developing new methods for indexing productivity from CES data. Monitoring long-term changes in breeding success is a key component of the BTO's Integrated Population Monitoring programme. CE Sites provide unique information on productivity because CES integrates success (or failure) across the whole breeding cycle, including all breeding attempts and early post-fledging mortality. We have been able to investigate changes in productivity through the application of logistic regression models (a special kind of regression to deal with information based on proportions of birds). The results of the work on long-term trends in 26 species are currently being written up for publication, and we will tell you more about them in a later edition of *CES News*. We owe many thanks to Steve for developing the statistical methodology and for carrying out these analyses.The graphs opposite show the statistically significant declines in productivity for four species of trans-Saharan migrant. Their particularly low productivity in 1996 may have been due to the very wet summer that we all remember from that year!

Artwork by D A Thelwell









Note: Index set to 1 in 1998

LONG-TERM TRENDS IN PRODUCTIVITY

Percentage changes in the breeding success of passerines on CE sites between 1983-1998

No significant change				*Significant decrease*				*Significant increase*			
W	Wren	-7	↑	W	Robin	-16	↑	W	Blackbird	+19	↓
W	Dunnock	-10	↓		Sedge Warbler	-49	→	W	Bullfinch	+25	↓
W	Song Thrush	-21	↓		Whitethroat	-37	→				
	Reed Warbler	-7	↓	W	Garden Warbler	-24	→				
W	Chiffchaff	-17	↑	W	Willow Warbler	-27	↓				
W	Lesser Whitethroat	+14	↓	W	Blue Tit	-35	→				
W	Blackcap	-3	↑	W	Great Tit	-18	→				
W	Long-tailed Tit	+6	↑		Chaffinch	-23	↑				
	Willow Tit	-31	→		Greenfinch	-70	↑				
	Treecreeper	-9	→		Goldfinch	-46	→				
				W	Linnet	-61	↓				
				W	Redpoll	-40	↓				
				W	Yellowhammer	-76	↓				
				W	Reed Bunting	-38	↓				

W - detected effects of weather (either rainfall or temperature) during the breeding season on productivity.

↑↓→ Linear changes in adult abundance 1983-96 (↑ significant increase, ↓ significant decrease, → stable)

What causes variation in productivity between years?

Our main aim in this work is to establish whether species are showing long-term trends in breeding success, because such trends help us to decide whether the population of a particular species is 'healthy' or experiencing problems. However, other factors (of which weather is thought to be a principal one) cause variation in productivity from one year to the next; in some cases these may lead to 'noise' that can prevent us from detecting a long-term trend. Equally, we need to know whether any observed long-term trend is due to man-induced effects (such as drainage of wetlands) or due to a long-term trend in weather (whether man-induced global warming or natural).

The preliminary results from Steve's analyses suggest that weather is responsible for some of the between-year variation in productivity for 18 of the 26 species (see Table above). After removing any significant effects of weather for the appropriate species, 14 of the 26 species show negative long-term trends in productivity (middle column of table) and 2 species show positive long-term trends in productivity (right hand column of table). The 14 species with declining productivity are a mixture of species with increasing, decreasing or stable population size over a similar time period. For those with decreasing breeding populations, reduced breeding success may be playing a part. For those with increasing populations, breeding success could be decreasing as a result of density dependent effects (*eg* increased competition for food). We will investigate these ideas in more detail as we prepare the results for publication. The two species with increasing productivity (Blackbird and Bullfinch) both show decreasing population size over a similar time period, and the increased breeding success could be a density-dependant effect of reduced competition.

A Nightingale Story

By Ian Grier, CES ringer

At my Constant Effort Site in Wiltshire I have embarked on my eighth season in the company of F918162 who has enriched my life enormously. He has proved to be a faithful partner in the mood swings associated with a site managed essentially as a single hander. He gives his best night song as I arrive at 3.30am, the dark hour of mind and body when I embark on the manic struggle to get nets up before dawn. He tracks me through the wood as I make far from silent progress dropping metal poles and issuing all the expletives to go with badly furled nets, untrimmed brambles and a dibble left three poles behind. His boundaries are well known to both of us. He always sings from a few feet behind and tends to switch to the shorter daytime song, keeping his best phrases but putting in some angry unmusical warbles to express his dominance. The 'chooc, chooc' sequence he never spares on and it seems to go on forever. I am convinced that this combination of behaviour by the pair of us has been the last straw for the bird next door who has to cope with a smaller patch of inferior quality vegetation, noisy neighbours and consequently has never had the stamina for a return match.

F918162 is a Nightingale ringed as a 4 male on 7 June 1991. His arrival followed a day of activity in March when I embraced the concept of woodland management and layered a patch of five metre tall Blackthorn. I emerged after about three hours deeply lacerated and blowing like a roe deer at rut and spent a further 3 hours admiring my handiwork which covered an area of about 10 metres by six. A month later he arrived and took possession of my piece of managed woodland. I felt like a proud father again. With no nets close to and being a disciplined CES ringer I had to wait until June to catch him on a feeding foray but then he could not keep out of a net and visits 5,6,7 and 8 were graced by his presence. His partner for the year was F918141 and they raised a brood of which I caught one on visit 8, retrapped on visit 11.

In 1992 he came back and this time was partnered by H513131, which proved to be an enduring relationship for the 93 and 94 seasons too. She fancied the territory but not the Blackthorn so established in dense Cherry Plum (*Prunus cerasifera*) which was planted as an orchard by the owner's great great grandfather and now grows in neglected profusion at all sorts of crazy angles with decaying logs and nettles to make an interesting habitat for Nightingales. They were closer to the wet ditch this year but I am no nest recorder and caught no juveniles. A second Nightingale set up in the adjacent territory but he only had a few Blackthorn and a dense bramble patch with a dry boundary ditch. His song lacked the majestic grace of his neighbour and I felt that he was whinging badly.

1993 was serious competition for the first time and was the year that he became known as Pavarotti (anthropomorphic associations are frowned upon by all but single handed ringers in whom madness is a necessary attribute). H513481 took the adjacent territory but was ousted after visit 1 by H513477 who attracted a mate and lasted the season. They fledged young because visit 8 seemed to have them croaking from every other bush but not in my nets. 1994 was without competition and incident. I caught one of the juveniles and the partnership with H513131 was finally broken when she failed the adult survival statistic that winter. Images of southern Europeans

Artwork by D A Thelwell

with shotguns, limed sticks, a bad Sahara crossing or predation in tropical Africa. Infidelity? Never. Not after Pavarotti.

In 1995 it was again to be two pairs in the wood with Pavarotti in great voice and attracting a new partner whilst keeping his neighbour in restricted second class habitat. All were shocked at the sight and sound of me doing habitat recording, which silenced them and me for the rest of the season. 1996 was much the same with yet another mate for Pavarotti in the traditional territory. I had coppiced more Blackthorn but not to Nightingale standard and a Blackcap expressed his gratitude instead.

1997 was bizarre, Pavarotti was back. I could tell by his song and he continued to trail around behind me as I put the nets up but I never caught him. I caught 3 males who held territories tentatively but I am not convinced anyone attracted a female. Pavarotti and the others seemed to be singing endlessly and it occasionally sounded as if they were in vocal battle in the same bush. They never settled down to any partnership behaviour and remained like delinquent adolescents without female influence (I know about these things). Three males caught on a single occasion each and only my credibility to say that the fourth was Pavarotti. Visits by the occasional ringer during the season had my conclusions met with a healthy scepticism. I retreated into defensive paranoia: "what do they know about anything". 1998 could not come quickly enough.

April 1998 and net ride clearance time, with a Nightingale in territory but not at his most vocal mid-afternoon on a Wednesday. But at 3.30am on Saturday 2 May, welcome back Pavarotti! Richard, my sceptical occasional ringer and fellow Blackthorn enthusiast, arrived at 5am after the nets were up, as usual.

"Pavarotti is back", I said.

"Caught him then", was Richard's blunt contribution.

"No but he followed me up the net rides and it's him singing."

Richard sloped off into the wood and returned with a smile on his face, a rare feature at 5am.

"You caught him then", I said with a proper smile.

"He followed me up through the wood and went in by the last pole in his patch".

The dialogue left us exhausted!

Pavarotti never made it back in 1999, so a great character was sorely missed. I knew at ride clearance time in April that a usurper was in his territory and the leader of a Nightingale dynasty, F918162, was no more. Where was the song, the defiant spirit and the camaraderie?

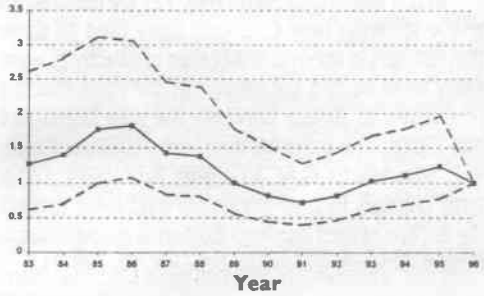
So I cussed the poles, nets, dibble, guys, weather, New Labour and old age with no vocal challenge. I even had the new experience of getting lost in the wood in the absolute darkness of 4.30am on 21 August and having to crawl back to the car on all fours feeling the contours of the path. He would have been on his way back to the Gambia by then but I like to think how he might have enjoyed the sight/sound of mighty catcher humbled by darkness.

The longevity record for Nightingale quoted in Ringing & Migration (Vol 18 Part 2) is 7 years for a bird ringed as a 3. Pavarotti is a few days short but was ringed as a 4. I'll tell him when I'm next in the wood that he has not made the record books yet, I think I know his reply.

Nightingales on CE Sites

The long-term trend in adult numbers for Nightingale shows a –39% decrease (not statistically significant) between 1983 and 1995. Each year about 10 constant effort sites catch Nightingales (less than 10% of all sites). Between 30-40 adults and 1-10 juveniles are caught on average each year.

Adult Abundance Index



Note: Index set to 1 in 1996

UNUSUAL CATCHES IN 1999

Pintail –Lothian
Stonechat - Wicklow
Barred Warbler – Merseyside
Tufted Duck – Herts
Little Owl - Suffolk
Long-eared Owl – Merseyside
Wood Warbler - Cambs
Redstart - Dorset
Fieldfare - Borders
Teal – South Yorkshire
Snipe - Durham

Artwork by R.Simpson

SELECTED RETRAPS

N545382	Reed Warbler	4	02.05.99	Cow Lane CES, Cambs
		4	25.06.99	Wicken Fen CES, Cambs

An example of breeding dispersal (short distance).

N376283	Lesser Whitethroat	3	02.08.98	Eskmeals, Bootle, Cumbria
		5	02.05.99	Lovell Hill CES, Cleveland

An example of probable natal dispersal (long distance).

H775680	Blue Tit	3J	06.08.92	Seaton Burn CES, Tyne & Wear
		6	01.05.99	"

A good age for a Blue Tit, but still well short of the 21 year old ringed and retrapped at Spurn Point (Humberside).

RC17751	Blackbird	5M	02.05.92	Slimbridge Decoy CES, Glos
		4M	07.08.93	"
		6M	26.08.95	"
		6M	05.06.99	"
P100542	Blackcap	3M	14.08.99	Queen Mary Reservoir CES, Surrey
		3M	31.08.99	Titchfield Haven, Hampshire

NEWS ITEMS

The decline of the Reed Bunting

In last year's *CES News* (No. 12) we featured an article showing how CES data were used to show that changes in survival rather than productivity were likely to lie behind the decline of the Reed Bunting population in Britain between the mid-1970s and mid-1980s. This paper has now been published: Peach, W.J., Siriwardena, G.M. & Gregory, R.D. 1999. Long-term changes in over-winter survival rates explain the decline of reed buntings *Emberiza schoeniclus* in Britain. *Journal of Applied Ecology*, 36, 798-811.

Refunds

As in 1999, refunds for CES ringing in 2000 will be calculated from the Summary Sheet. It is important that you return your CES data by the end of February for your claim to be accepted. Claims submitted after 28 February 2001 will not be met.

CES at the Ringers' Conference 2000

The annual CES meeting at Swanwick was again well attended. The evening kicked off with the presentation of the provisional results for 1998-99, and was followed by Chris Wernham with news of recent research involving CES data. For light entertainment, Dawn showed a few slides from a recent conference on Helgoland (see below) and a few slides of the results of the recent analytical work on productivity. The evening was superbly rounded off by Rowena Langston who gave an informative

talk on the CE site at Weston Fen in Suffolk, operated by Market Weston RG. The Nightingales and orchids were the envy of many! Many thanks to Rowena for a well presented and illustrated talk. Two offers of talks for next year's conference have already been received. Many thanks! We hope that CES will have an even higher profile at the next Swanwick R&M conference – look out for next year's programme!

Helgoland Conference

A small group of BTO staff was fortunate enough to attend the 100 years of bird ringing conference on the very special island of Helgoland, Germany at the end of September 1999. Several other ringers (both amateur and professional) from the UK also attended. In all, 39 countries were represented at the conference – a truly unique gathering of ringers. The BTO Ringing Scheme was given a high profile in a plenary talk given by Stephen Baillie. A symposium session entitled 'Integrated Monitoring' included talks on the MAPS programme (the equivalent to our CES) in North America by Philip Nott and the role of the CES Scheme in the UK by Dawn. There was an opportunity to meet organisers from other constant effort mist-netting schemes and to share experiences. One of the highlights of the trip was a visit to the trapping station, where they operate a constant effort regime using Helgoland traps only! Helgoland really is a remarkable place and is worthy of a visit by anyone with an interest in migration and ringing – there was plenty of visible migration during our visit. Just one word of warning - a strong stomach or plenty of sea-sickness tablets are a must if you want to survive the three hour crossing to the island!

Survival rates of Blackbird and Song Thrush using CES data.

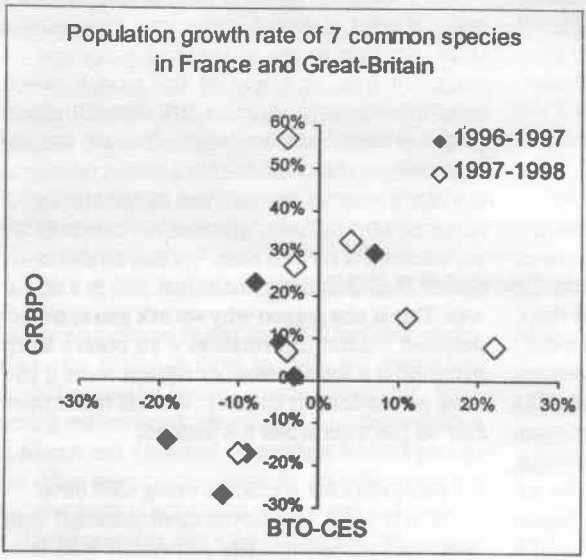
Steve Freeman has been carrying out this analytical work this year, funded through the JNCC/BTO Partnership. The aim is to build on previous work led by David Thomson (Thomson *et al*, 1997, *Journal of Animal Ecology*, 66, 414-424), which showed that reductions in the survival of Song Thrushes during the first year of life were large enough to have driven the population decline that took place between 1975 and the early 1990's. Results from the CES Scheme and the Common Birds Census show that Blackbirds have been experiencing a similar decline to that of the Song Thrush. Steve has used data from 8 CE sites that catch large numbers of Blackbirds to estimate adult survival rates and has shown that these have decreased by around 15% between 1983 and 1998. Steve's preliminary results are also of interest from a practical point of view because they show quite a large variation in the chances of recapturing a Blackbird from one year to the next between individual CE sites (from only a 20% chance to almost 70%). However, we are finding that we can use characteristics of each CE site (such as total net length) to explain some of the variation in the chances of recapture between sites, which allows us to improve our estimates of survival rates. We may be able to use habitat characteristics of individual sites in a similar way. **This is one reason why we ask you to collect detailed habitat information – so please keep submitting it when asked or submit some if you have never done it before!** We will report more fully on this work when it is finished.

Bio-indicators for wetlands using CES data

In late 1998, the Government launched their 'Indicators of Sustainability', in which wild birds formed one of 13 'statistics' to provide simply understood measures of the health of our social and natural environment (see *BTO News* 220, page 2). Although such indicators can conceal some detailed changes (and so must sometimes be interpreted with caution), they represent a powerful way of alerting politicians and the general public about conservation issues. The national indicators have generated a lot of interest.

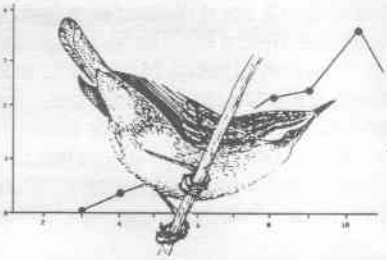
Early last year, Chris Spray (himself a keen CES ringer) expressed an interest from Northumbrian Water in developing indicators specifically for wetland habitats, which would allow conservation problems to be highlighted and any effects of positive management of wetland sites for wildlife to be shown. Gavin Siriwardena has been using BTO data from various schemes to develop these specific indicators. CES data from reedbed and wet scrub sites have formed an important part of the work, providing the best information that we have on bird populations in these habitats (which are difficult to monitor well using other BTO schemes). The results should be finalised this year.

CES in Europe



At the last general meeting of the European Union for Bird Ringing (EURING) on Helgoland in autumn 1999 there was considerable interest in trying to standardise, as far as possible, CES techniques across Europe. This would make it possible to directly compare species trends between countries and to produce combined trends at the European scale. We met with Romain Julliard, a researcher working with the Centre de Recherches sur la Biologie d'Oiseaux (CRBPO) that runs the Paris Ringing Scheme. He has done some preliminary work comparing the population trends of common species (Dunnock, Blackbird, Reed Warbler, Garden Warbler, Blackcap, Chiffchaff and *Parus* sp.) from the British and Irish CES Scheme and a similar French scheme, and has shown that the trends are well correlated.

At the meeting it was agreed that BTO should take the lead in developing CES at the European scale, and BTO Council have agreed to provide funds for the work. The work will start this summer and we will keep you informed of progress. This is a particularly exciting development, acknowledging the BTO's expertise in the development of standardised ringing programmes. It should allow us to move towards looking at changes in bird populations at a larger, and perhaps more appropriate geographical scale. It will also allow us to compare changes across Europe, which might provide further insights into the environmental causes of adverse change and ways of taking remedial action.



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