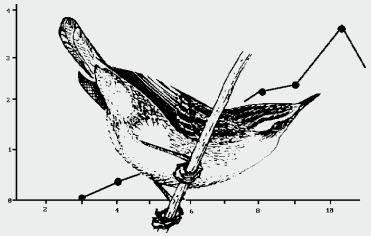

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MAPS

Monitoring Avian Productivity and Survivorship is the North American equivalent to CES (see CES News No. 15 for further information). The MAPS website (www.birdpop.org) is really comprehensive and has lots of useful information on adult abundance, productivity and survival.

There is a section on recent research which covers a wide range of subjects such as the relationship between adult survival rate estimates from MAPS and body mass and migration. Perhaps of greatest interest to CES ringers is the work showing that MAPS provides a good measure of population change. They did this by working out the population change over a four-year period expected from the survival and productivity rates and comparing this with the change in adult numbers over the same period for a range of species (shown in Figure 8). In general, the two measures correlate well. As MAPS uses very similar methods to CES, this means that CES is likely to be providing good quality data to feed into the BTOs Integrated Population Monitoring Program. Those interested can read more in Bird Study 46 Suppl. 178-188.

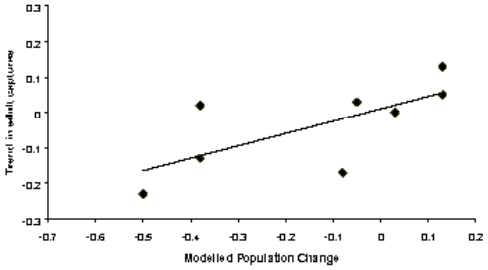
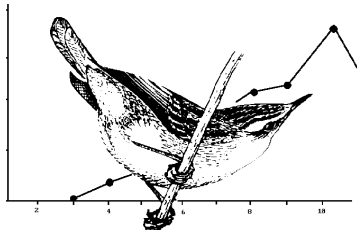


Figure 8 shows the relationship between population change calculated from survival and productivity and observed population change in the number of numbers caught. Graph redrawn from the MAPS website.

CES News

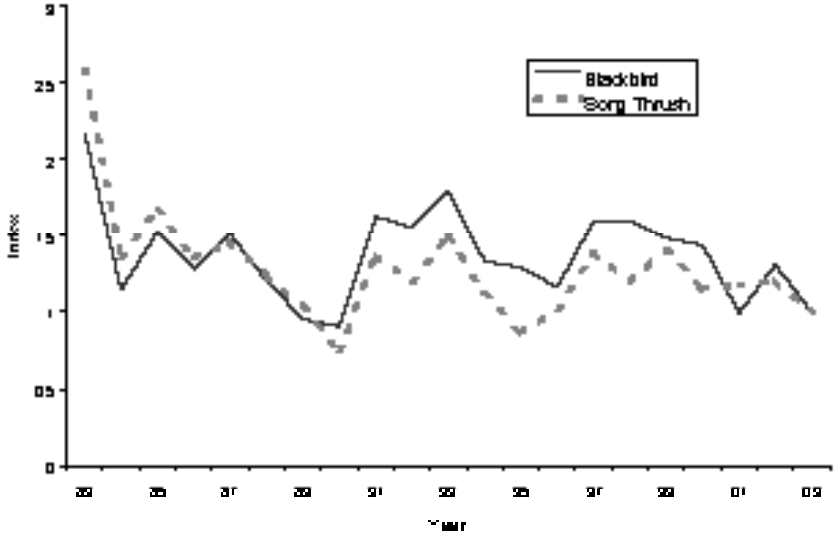


This is the seventeenth edition of CES News, the newsletter for the British Trust for Ornithology's Constant Effort Sites Scheme. If you require further copies, then please contact Dawn Balmer at The Nunnery.

Number 17

March 2004

Hot weather affects breeding success for Blackbird and Song Thrush



Blackbird and Song Thrush both had a poor breeding season in 2003; the cold and wet weather during the first part of the season may have caused early broods to suffer and later the hot weather is likely to have made it difficult for the adult birds to get the preferred earthworms from the baked ground. The long-term indices in productivity for these two species show remarkable similarities suggesting that similar environmental conditions affect them (Figure 1 above). Productivity was low for both species in 1984, 1986, 1988-1990, 2003 for Song Thrush only in 1995, and for Blackbird only in 2001. The summer weather in these years was characterised by high temperatures and drought conditions. Breeding success tended to be better in the wetter summers of 1985, 1991, 1993 and 1997.

CES in 2003

Coverage in 2003

We were delighted that 11 new sites were started in 2003, including three sites in Wales and one in Scotland. The results we present here come from the 110 sites that have submitted data for 2003 so far: 85 from England, 15 from Scotland, six from Wales and four from Ireland. We expect more datasets to arrive in the coming weeks and to achieve a similar level of coverage as in 2002 (120 sites). The habitats covered are comparable to previous years, with sites located in dry scrub (35%), wet scrub (27%), reedbed (24%) and deciduous woodland (14%). The map below (Figure 2) shows the locations of CES sites used in these analyses. Virtually all CES data now comes in electronically, which is a fantastic achievement and makes life here at The Nunnery much

Figure 2. CE sites used in these analyses

Following a successful breeding season for most species in 2002 and generally mild over-winter weather, the adult populations of some resident species in 2003 were high compared with the previous year. South-easterly winds in April led to the early arrival of some migrants and early nesting attempts, but later in the month poor weather in North Africa and Iberia held up many migrants heading for Britain and Ireland. Table 1 (page 5) shows the changes in captures on CES sites from 2002 to 2003. There were statistically significant increases in adult abundance for Wren, Song Thrush, Chiffchaff, Blue Tit, Great Tit and Linnet. For Wren, Chiffchaff and the tits the increase in adult abundance in 2003 reflects a very productive breeding season in 2002.

Song Thrush on the up?

Song Thrush is currently red-listed on the Population Status of Birds in the UK list on the basis of a rapid (>50%) decline in the UK breeding population in the last 25 years. The long-term trend in adult abundance on CES sites (Figure 3) is also downwards but from 1997 has shown a shallow but consistent upward trend. Results from the Breeding Bird Survey also suggest an increase in Song Thrush abundance between 1994 and 2002, so perhaps there is some hope of a recovery for this species. Previous work by BTO staff has suggested that a reduction in survival of birds during their first year of life probably drove the decline. CES productivity shows no clear pattern over time, though evidence from the Nest Record Scheme indicates that breeding performance has improved. It is possible that the recent increase in adult numbers on CES sites may be due to increasing survival rates.

Marsh Warbler (2) – Essex

Wood Warbler – Highland, Fife & Avon

Crossbill (5)– Fife

News Items

CES Email Forum

The CES email forum proved to be a great success last summer. Just under 100 ringers subscribe to the forum. Many CES ringers found it interesting to know how others were getting on across Britain and Ireland. The number of emails ranged from 12-17 per month during the summer months.

To subscribe to the CES Forum please send a blank email to: btocesforum-subscribe@yahoogroups.co.uk If you want to be able to change the way you receive messages (daily summary, one message at a time) or view previous messages on the web then you will need to become a member of Yahoo Groups. To join Yahoo Groups visit the website http://uk.groups.yahoo.com and click on the links to register.

Habitat Analysis

Rob Robinson is currently analysing the CES habitat data that were collected (so painstakingly!) by ringers between 1995 and 2003 to look at the effect of succession on catches on CE sites. We will report on the results of this piece of work in the near future.

Andrew Chick

Goldfinch were caught on 46 CE sites in 2003.

IPMR

The current version of IPMR is 2.1.75 and we recommend all ringers using IPMR to upgrade to the latest version. You can download the programme from the BTO website (http://www.bto.org/ringing/ringsoft/ipmr/index.htm) or request a CD from the Ringing Unit.

IPMR Nest Records

A new guide to nest recording using IPMR has been written by Ian Spence and is available from the BTO website (http://www.bto.org/ringing/index.htm). This is a step-by-step guide to entering your nest details into IPMR. If you are interested in finding out more about the Nest Record Scheme please contact the Nest Record Unit at BTO for a Starter Pack or email nest.records@bto.org for further details.

CES Meeting at Swanwick

Last December we held a CES meeting at the BTO Annual Conference at Swanwick. Dorian Moss gave an excellent presentation about the CES at Rutland Water and also showed trends in the species caught. We thank Dorian for producing such an interesting talk. In December 2004 we will have our usual gathering of CES ringers at the Ringing & Migration Conference and we would like to hear from ringers who would be interested in giving a short talk about their CES (around 20 minutes), largely focusing on habitat, species caught, problems, benefits etc – nothing too serious! Please contact Dawn Balmer at BTO HQ for further details.

CES News

Thanks to everyone who has contributed to this issue of CES News; it is really good to receive short articles, interesting recoveries and retraps. Please send any contributions (articles, artwork

Red letter day

Having just completed my 16th CES year without missing a single visit, it is still fantastic and exciting when you have 'red letter' day. Mine for 2003 was visit nine on 27 July. Incredibly two Green, a Great Spotted and the elusive Lesser Spotted Woodpecker were caught and ringed on the same day! This was against a backdrop of 123 birds on the day of different species. It will be well remembered.

With regard to interesting retraps, I have three very different examples. First a resident Chaffinch ringed as an adult and recaught over the last seven years in the same net!!

K410779

N	6M	24 March 1996
R	6M	27 April 1996
R	6M	12 April 1997
R	6M	21 June 1998
R	6M	25 April 1999
R	4M	21 August 2000
R	6M	26 May 2002
R	6M	18 May 2003

I also had a regularly returning Willow Warbler which presumably was reared on site.

4G5458

N	3JM	6 July 1997
R	4M	24 April 2000
R	4M	21 April 2002
R	4M	25 May 2003

Garden Warblers are usually quite faithful to my site and I usually have two, three and four year old retrap birds breeding. Although the first new birds turned up on the earliest spring date ever on my site, the numbers of breeding Garden Warblers were well down. Consequently the only returning adult caught was this one which seems to have come back after a five year absence.

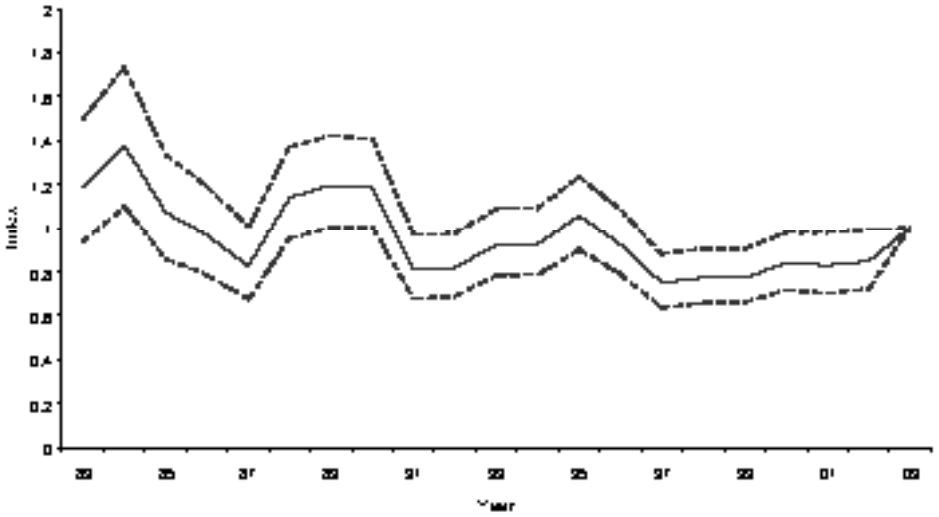
Thelma Sykes

N399819

N	4M	9 May 1998
R	4M	22 June 2003

Dave Hazard
Doncaster RG

Figure 3. Song Thrush Adult Abundance 1983-2003



Four species showed a statistically significant decline in the numbers of adults caught between 2002 and 2003: Sedge Warbler, Reed Warbler, Whitethroat and Willow Warbler. As discussed in BTO News 245, both Sedge Warbler and Reed Warbler have shown large inter-annual fluctuations but the long-term pattern for Sedge Warbler is stable whilst Reed Warbler shows a decline. In the longer-term, the number of adult Whitethroats caught on CES sites seem to show a cyclical pattern (see BTO News 239) whilst Willow Warbler is in long-term decline, so a further drop in numbers in 2003 is worrying.

Below average breeding season for most

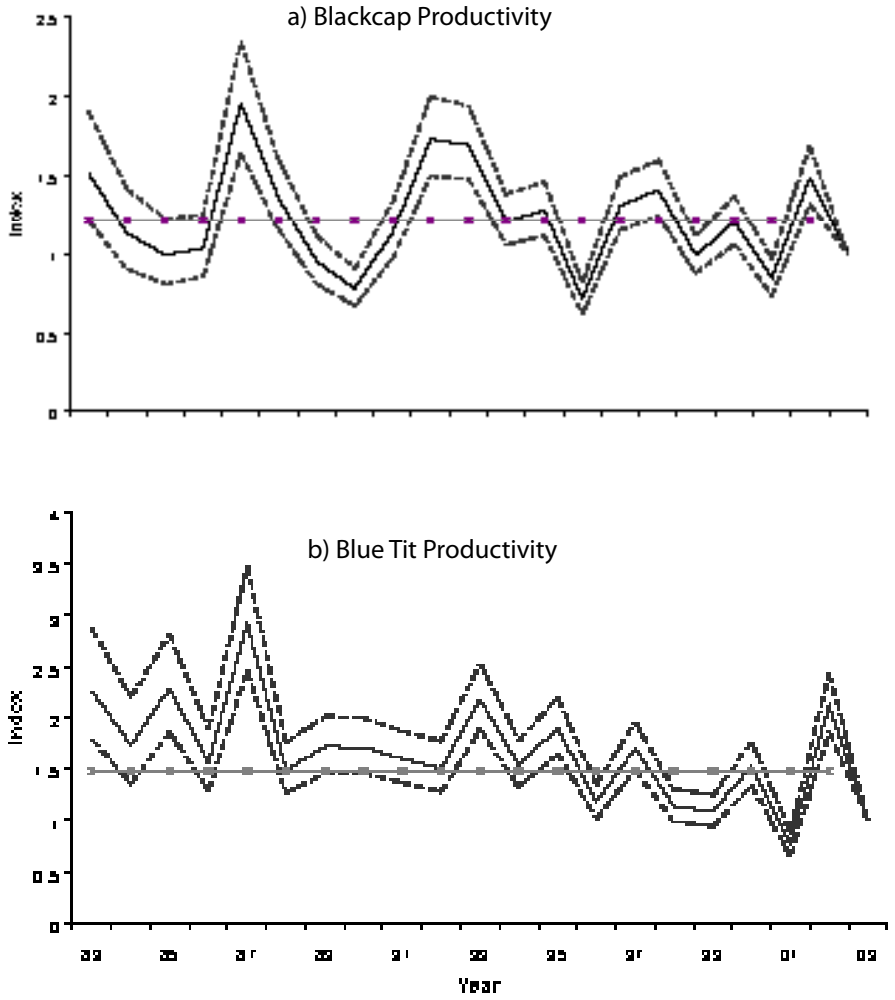
The breeding season got off to a good start with a sunnier and drier February than normal and by March early broods of Robins and thrushes were reported. Many of these broods were later lost in sharp night frosts during April. Temperatures fluctuated throughout May and sharp frosts affected tits, finches and warblers. Ringers and nest recorders reported small clutches for Blue Tits and Great Tits. The reduced availability of caterpillar prey caused by the wet and cold weather meant that broods were small with partial and complete losses in some areas. Heavy rains mid-month caused more losses for early breeding species (BTO News 245). Warm weather throughout much of June benefited second broods, whilst July and August will be remembered for blistering heat which may have caused some problems for late nesting birds.

Given this mix of weather, it might not be too surprising that the overall breeding season was below average (Table 1). There were 12 statistically significant changes in productivity between 2002 and 2003 and no significant increases. Both residents (Wren, Dunnock, Robin, Blackbird, Long-tailed Tit, Blue Tit, Great Tit, Bullfinch and Reed Bunting) and migrants (Reed Warbler, Blackcap and Chiffchaff) were affected. The mix of harsh frosts and rain during the early part of the season and later hot temperatures and drought conditions in some areas is likely to have caused problems for some species.

This year we have introduced a new measure of productivity in Table 1, which is the percentage change in 2003 from the

average breeding success for each species during previous years, 1983-2002. This gives us a much better indication of how good a season it has been, relative to the longer-term average. Figure 4a shows the long-term pattern in productivity for Blackcap and it is immediately evident that productivity varies widely between years as we might expect. The average breeding success for Blackcap between the start of the CES index (1983) and the penultimate year (2002) is shown as a straight line through the graph. You can then see how productivity in 2003 compares with the average for Blackcap and this shows that productivity in 2003 was below average (-17%) Blue Tit (Figure 4b) also had a poor year for productivity; the straight line through the graphs shows that 2003 was below average.

Figures 4. Productivity of a) Blackcap and b) Blue Tit (index and confidence limits). The straight line shows the average breeding success 1983-2002, note therefore productivity in 2003 was below average for both species.



Cetti's Warbler – can CES monitor them?

In 2003 Cetti's Warblers were caught on 16 CE sites, which surprisingly, is double the number of sites Willow Tits were caught on. The number of sites catching Willow Tit has gradually declined to such a low level that we may not be able to monitor it using CES for much longer. However, the number of CE sites catching Cetti's Warbler has been increasing and perhaps we could start monitoring this species in the future? The number of birds caught at present is quite low with most sites catching just one or two. The increase on CE sites is well demonstrated by looking at the totals in 1985– 0, 1990 – 4 (4% of sites), 1995 – 8

Figure 6. CE sites where Cetti's Warblers were caught in 2003

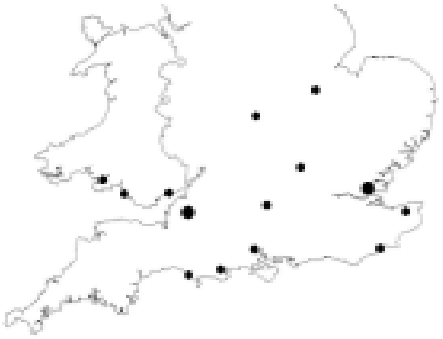
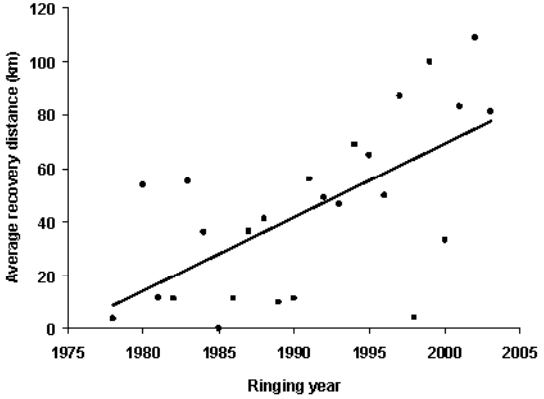


Figure 6 shows the sites that caught Cetti's Warblers in 2003. Note that the two larger circles in Essex and Avon represent two CE sites close together.

Recoveries Officer, Mark Grantham, recently looked at the average recovery distance for Cetti's Warbler between 1975-2003. Mark, like many ringers and birders, had noticed Cetti's Warblers turning up in new locations over the last couple of years. The graph below (Figure 7)shows that the average recovery distance of Cetti's Warblers in each year has increased, which corresponds well with the local expansion we have been seeing.

Figure 7. The average recovery distance of Cetti's Warblers over time

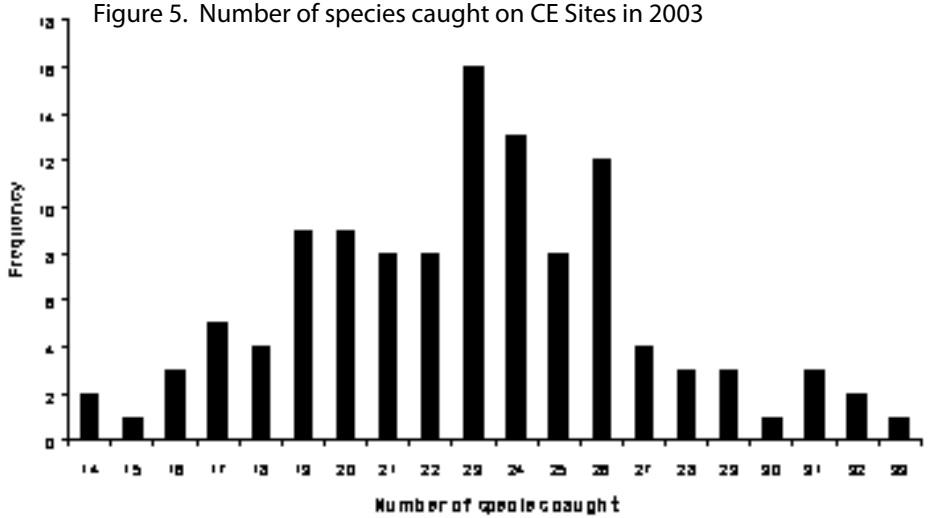


In Britain the distribution of Cetti's Warbler has been largely south of a line from South Wales to the Wash but numbers have fluctuated in response to cold winters (Bibby, The Migration Atlas). The stronghold has shifted from East Anglia and Kent to more westerly areas where winters are generally milder. Over the last couple of years Cetti's Warblers have expanded and increased again in Norfolk, Suffolk and Essex (per local bird reports).

Species on CE sites in 2003

The graph (Figure 5) below shows the frequency of the number of species caught on CE sites in 2003 which varied from 14 to 33. The most homogeneous habitats tend to catch a smaller range of species.

Figure 5. Number of species caught on CE Sites in 2003



Over the years that CES has been running the number of species monitored has remained fairly stable. In recent years Nightingale and Redpoll have been removed from the list due to the small sample size. Willow Tit is currently recorded on a very small number of sites (see page 9). It is interesting to look at other species which are not currently monitored by CES and to see how many sites they occur on. Perhaps CES will be able to monitor some of these species in the future?

Species	No sites
Goldfinch	46
Great Spotted Woodpecker	45
Kingfisher	41
Woodpigeon	29
Jay	26
Sparrowhawk	21
Green Woodpecker	18
Grasshopper Warbler	17
Cetti's Warbler	16
Yellowhammer	12
Nightingale	10
Tawny Owl	8

D A Thelwell

Table 1. Changes in captures on CES sites from 2002 to 2003

	n 2003		Adult % change	Trend	Productivity % change vs 83-02		Trend
	Ads	Juvs	vs 2002		vs 2002	ave	
Species							
Wren Troglodytes troglodytes	102	105	+13 *	→	-30 *	-17	→
Dunnock Prunella modularis	100	101	+5	→	-26 *	-22	→
Robin Erithacus rubecula	101	104	+7	↑	-20 *	-19	↓
Blackbird Turdus merula	102	96	+2	↓	-24 *	-25	→
Song Thrush Turdus philomelos	93	79	+18 *	↓	-16	-17	→
Sedge Warbler Acro. schoenobaenus	66	67	-11 *	→	-11	-12	↓
Reed Warbler Acro. scirpaceus	55	53	-14 *	↓	-12 *	-2	→
Lesser Whitethroat Sylvia curruca	31	42	-26	↓	-32	-29	→
Whitethroat Sylvia communis	62	71	-26 *	→	-10	-7	↓
Garden Warbler Sylvia borin	54	59	0	→	-15	-17	↓
Blackcap Sylvia atricapilla	96	97	+3	↑	-33 *	-17	→
Chiffchaff Phylloscopus collybita	86	93	+35 *	↑	-36 *	-28	↓
Willow Warbler Phylloscopus trochilus	75	91	-13 *	↓	-3	+15	↓
Long-tailed Tit Aegithalos caudatus	84	82	+6	→	-45 *	-32	→
Willow Tit Parus montanus	8	15	+1	↓	-39	-8	→
Blue Tit Parus caeruleus	99	103	+14 *	→	-53 *	-33	↓
Great Tit Parus major	96	102	+33 *	→	-44 *	-25	↓
Treecreeper Certhia familiaris	43	77	+16	→	-12	+25	→
Chaffinch Fringilla coelebs	88	68	+4	→	-2	+37	↓
Greenfinch Carduelis chloris	54	36	-1	↑	+21	+24	↓
Goldfinch Carduelis carduelis	36	25	+13	→	+1	+22	↓
Linnet Carduelis cannabina	15	11	+74 *	↓	+90	-6	↓
Bullfinch Pyrrhula pyrrhula	83	64	+1	↓	-20 *	+5	→
Reed Bunting Emberiza schoeniclus	53	45	-10	↓	-36 *	-24	↓

n 2003 = number of sites operated in 2003 at which the species was captured
vs 2002 = percentage change between 2002 and 2003
vs 83-02 ave = % change with respect to 1983-2002 average in productivity
* = significance (at the 5% level) of increase/decrease with respect to previous year only
Trend = long-term trend during the period of CES ringing. See Wider Countryside Report on the BTO website for further details (www.bto.org/birdtrends)
↑ = long-term trend shows an increase
↓ = long-term trend shows a decline
→ = long-term trend shows stability

Interesting controls and retraps

R507793	Sedge Warbler	3J	03.08.2003	Loch Spynie CES (Grampian)
		3	17.08.2003	Icklesham (West Sussex)

14 days, 794 km. A fairly rapid movement south.

R488844	Blackcap	3J	16.06.2003	Lockburn CES (Hampshire)
		3F	20.08.2003	Icklesham (West Sussex)

65 days, 141 km. Weight at ringing 17.1g at 0920 hrs and at recapture 19.4g at 1000 hrs.

R078130	Reed Warbler	3J	07.08.2002	Thetford Nunnery CES (Norfolk)
		3	05.09.2002	Tauste, Zaragoza (Spain)

29 days, 1,185 km. A rare foreign control for the Nunnery RG!

2Y0475	Chiffchaff	3J	01.09.1999	Thetford Nunnery CES (Norfolk)
		4M	03.05.2001	
		4M	09.05.2001	
		4	23.05.2001	
		4M	26.07.2001	
		4M	12.07.2002	
		4M	08.07.2003	

Where was this bird in 2000?

RR26201	Blackbird	3J	09.07.1997	Low Hauxley CES (Northumberland)
		4F	31.05.1997	"
		4F	02.08.1997	"
		4F	10.04.2001	"
		4F	11.05.2002	Hauxley Reserve

6yrs 306days. Where did this bird go in 1998, 1999 and 2000?

3D1215	Willow Warbler	4M	02.05.1999	Loch Eye CES (Highland)
		4M	14.05.1999	Loch Eye
		4M	08.06.1999	Loch Eye
		4M	04.05.2000	Loch Eye
		4M	13.05.2000	Loch Eye
		4M	21.05.2000	Loch Eye
		4M	03.05.2001	Loch Eye
		4M	25.06.2001	Loch Eye
		4M	13.06.2002	Loch Eye
		4M	04.06.2003	Loch Eye

4 yrs , 33 days. A good sequence of captures at Loch Eye, although well short of the longevity record for Willow Warbler of 10 years, eight months and five days.

P623437	Blackcap	3M	15.09.2001	Queen Mary Reservoir, CES (Surrey)
		4M	21.04.2003	Letchworth STW CES (Hertfordshire)

An interesting movement between CE Sites.

ADP067	Chiffchaff	3J	22.08.2002	Thorp Arch CES (West Yorks)
		2	23.08.2003	Queen Mary Reservoir CES (Surrey)

282km. First Chiffchaff control from CES ringing at Thorp Arch CES (since 1988).

8K1403		Treecreeper	2	17.10.1986 Westbere (CES) (Kent)
		4M	13.04.1987	Westbere (RAILWAY)
		4M	27.04.1987	Westbere (RAILWAY)
		4M	06.05.1987	Westbere (CES)
		4M	27.05.1987	Westbere (RAILWAY)
		4	30.06.1988	Westbere (RAILWAY)
		4M	07.03.1989	Westbere (CES)
		4M	09.05.1989	Westbere (CES)
		4M	16.06.1989	Westbere (RAILWAY)
		2	16.11.1989	Westbere (RAILWAY)
		4M	11.05.1990	Westbere (CES)
		4M	30.05.1991	Westbere (CES)
		4M	07.06.1991	Westbere (RAILWAY)
		4	01.07.1991	Westbere (CES)
		4M	30.04.1993	Westbere (CES)
		4M	24.05.1993	Westbere (CES)
		4M	29.04.1994	Westbere (CES)
		4M	09.05.1994	Westbere (CES)

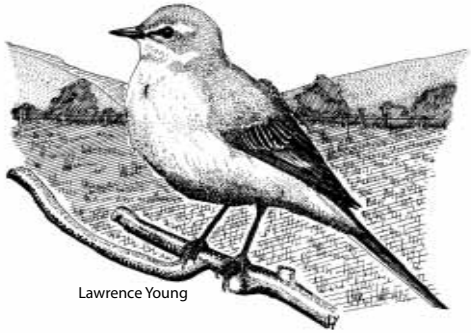
7yrs, 204days. Just short of the longevity record for this species (8 years and 18 days)

P158012	Reed Warbler	3	14.09.1999	Abbotsbury Swannery CES (Dorset)
		4	10.06.2002	Er Rachida, (Morroco)

A late date for a migrant Reed Warbler to be in North Africa.

Unusual captures

Shelduck – Gloucestershire
Tufted Duck – Gloucestershire
Common Sandpiper – Hertfordshire
Collared Dove – Gwynedd
Little Owl – West Yorkshire
Long-eared Owl – Herefordshire & S Yorkshir
Swift – Dorset & Cheshire
Yellow Wagtail – Dorset



Lawrence Young