

CES News

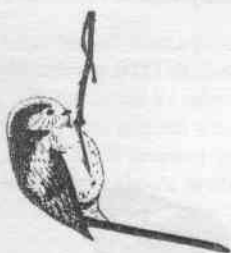


Number Ten

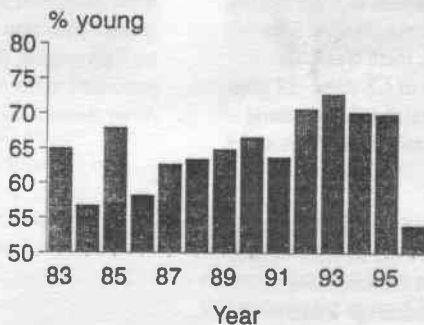
May 1997

1996 - The Poorest Breeding Season on Record

Long-tailed Tit



26 w



The CES Scheme monitors breeding success by measuring the percentage of juveniles in the catch each year. For six species, the percentage of young birds caught was lower in 1996 than in any other summer since the start of CES ringing in 1983. These species were Dunnock, Robin, Chiffchaff, Long-tailed Tit, Great Tit and Blue Tit, most of which nest early in the season suggesting that this is when conditions were most difficult. The bar chart shows the long-term trend in the proportion of juveniles in CES catches for Long-tailed Tit. We would expect this species to recover from such a dismal breeding season within two or three years.

Quote of the Year

"The most depressing, demoralising empty year I've ever ringed"

Harry Vilkaitis, CES ringer

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This is the tenth 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 BTO HQ.

The CES Scheme uses bird-ringing as a tool to monitor the populations of some of our common breeding songbirds. At 120 sites spread throughout Britain and Ireland licensed ringers erect a series of mist-nets in the same positions, and for the same length of time, during twelve visits between May and August. Year-to-year changes in the numbers of adults caught provide a measure of changing population size, and we use the proportion of young birds in the catch as an index of breeding success.

CES RINGING IN 1996

More sites - Information was received from 118 CE sites operated in 1996. Despite relatively small catches in late summer, CES ringers completed all 12 main visits at 58% of sites and at least 10 visits were completed at 88% of sites. All CES ringers should have received a printout of their data for final checking, it is important to check this printout carefully, particularly ring numbers. Please let Dawn Balmer know of any errors or omissions.

Boost for Scotland - Commitment to CES ringing in Scotland continues to increase, with 11 sites operated in 1996. Elsewhere, there was little change in the regional spread of CE sites. 38 sites were operated in southern England, 33 in central England, 26 in northern England, 5 in Wales and 5 in Ireland.

The table below shows the distribution of CE sites by country in 1986 and 1996. The number of sites operated in Ireland and Wales has remained at roughly the same level (in percentage terms too), whilst England and Scotland have shown a substantial increase.

Year	England	Ireland	Scotland	Wales	Total
1986	63	3	1	4	71
1996	97	5	11	5	118

Similar habitats - As usual, there was little changes in the habitat split of CE sites. Of the 118 sites operated in 1996, 44 were located in wet scrub, 42 in dry scrub, 24 in reedbed and 8 in deciduous woodland.

More computerised data - We received 70% of the 1996 CES returns on floppy disk using the B-

RING package of computer programs, an increase of 9% on 1995. A big thankyou to all CES ringers who take the trouble to computerise their data. *A Guide to using B-RING for CES ringers* is currently being written and will be available upon request from July.

Paired CE sites for 1995/96 - The results we present here are based upon catches at 98 sites which were operated in the same way in both 1995 and 1996, and for which at least eight visits were completed in both years. This is more 'paired' sites than ever before. The annual report on CES ringing for the 1995-96 season was published in the January-February edition of *BTO News* (Issue 208).



Blackcap by Simon Gillings

CES RESULTS 1995-96

Adult catches remain stable

For most species catches of adults were similar to those of 1995. Exceptions to this were the increased catches of adult Blue Tits, Great Tits and Chiffchaffs (Table 1 on page 4) all of which experienced a much improved breeding season in 1995. CES catches of Blue Tits and Great Tits have remained relatively stable since the early 1980s. Harsh winter weather probably explains the smaller catches of breeding Wrens in 1996.

Several of the migrant warblers continued to increase in numbers following the dramatic declines of 1991, with catches of adult Chiffchaffs, Reed Warblers and Whitethroats increasing for the fifth consecutive year. Only Lesser Whitethroats showed any real evidence of decline although numbers of this species are known to fluctuate markedly from year to year. Perhaps more worrying is the continuing failure of Willow Warblers to recover following their sudden decline during the early 1990s.

Early breeders suffer

There was a slow start to the season with vegetation growth some 2-5 weeks behind. Warmer conditions in mid April saw a flurry of nesting activity but early insectivorous breeders were faced with a shortage of food. Wren, Robin, Dunnock and the tits suffered heavy losses at this time. Migrant warblers arrived only to be confronted with cold north-easterly winds and frosts over much of the country during early May.

The combination of these difficult breeding conditions and, for some species, reduced breeding populations, resulted in the smallest overall juvenile catches ever recorded by the CES method. Of the 27 species listed in Table 1, there were no increases in juvenile catches during 1996, and 17 significant declines. Although Long-tailed Tits suffered the largest reduction in juvenile catch size, fewer young Dunnocks, Lesser Whitethroats, Blackcaps, Willow Warblers, Linnets and Reed Buntings were caught in 1996 than during any other year since the start of CES ringing in 1983.

Poorest breeding season on record

As mentioned on the front page, for six species the percentage of young birds caught was lower in 1996 than in any other summer since the start of CES ringing in 1983; these species were Dunnock, Robin, Chiffchaff, Long-tailed Tit, Great Tit and Blue Tit. Overall, 11 species showed significant declines in breeding success in 1996 (Table 2 on page 5) and only one (Song Thrush) showed an increase.

The consequences of last summer's dismal breeding season remain to be seen. Under normal circumstances most species would be expected to recover within 2 or 3 years. However, birds like Linnets, Reed Buntings and Willow Warblers have been declining in numbers for several years, and a bad breeding season can only make matters worse. Whatever happens in 1997 it is crucial that CES ringers continue with their important work.

Scarce CES species

The number of adult Grasshopper Warblers increased from 29 in 1995 to 40 in 1996, whereas juvenile numbers showed little change (about 20 birds in both years). Although fewer adult Nightingales were trapped in 1996 than in 1995, there was a large increase (2 to 18) in the number of juveniles caught over the same period. Following a large and significant increase in the number of juvenile Goldcrests caught in 1995, the poor breeding season of 1996 brought the catches back down to something near average (only 69 trapped compared with 170 in 1995).



Goldcrest by Andy Wilson

Table 1. Changes in captures on CES sites from 1995 to 1996 (all 12 visits).

Species	ADULTS				JUVENILES			
	n	Total 1995	Total 1996	% Change	n	Total 1995	Total 1996	% Change
Wren	90	728	508	-30 *	90	1831	1008	-45 *
Dunnock	89	640	603	-6	90	1150	599	-48 *
Robin	90	552	493	-11	90	1643	1201	-27 *
Blackbird	89	845	823	-3	89	549	458	-17
Song Thrush	86	343	290	-15	76	180	166	-8
Sedge Warbler	74	1460	1535	+5	72	2290	1551	-32 *
Reed Warbler	55	1733	1861	+7	58	1642	1470	-10
Lesser Whitethroat	53	225	158	-30 *	63	321	195	-39 *
Whitethroat	79	618	665	+8	80	1261	705	-44 *
Garden Warbler	74	386	432	+12	72	480	369	-23 *
Blackcap	80	751	754	0	84	1579	895	-43 *
Chiffchaff	69	320	386	+21 *	81	1142	851	-25 *
Willow Warbler	89	1678	1658	-1	90	3208	2638	-18 *
Spotted Flycatcher	22	14	35	+150 *	14	23	13	-43
Long-tailed Tit	85	457	413	-10	77	1085	485	-55 *
Willow Tit	33	50	48	-4	41	181	99	-45 *
Blue Tit	90	577	661	+15 *	90	2345	1735	-26 *
Great Tit	89	358	464	+30 *	88	1231	925	-25 *
Treecreeper	45	69	77	+12	68	219	160	-27 *
Chaffinch	82	647	578	-11	69	546	404	-26 *
Greenfinch	53	265	246	-7	42	174	145	-17
Goldfinch	45	112	104	-7	33	112	51	-54
Linnet	29	81	83	+2	18	52	45	-13
Redpoll	21	95	95	0	14	70	38	-46
Bullfinch	80	585	628	+7	69	361	307	-15
Yellowhammer	22	74	89	+20	13	55	27	-51 *
Reed Bunting	68	363	352	-3	55	260	225	-13

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

Table 2. Changes in the percentage of juveniles caught at CES sites from 1995 to 1996.

PAIRED SITES 1995-1996				
Species	n	% juv 1995	% juv 1996	Diff in % juv
Wren	90	71	66	- 5 *
Duncock	90	64	50	- 14 *
Robin	89	75	71	- 4
Blackbird	89	39	35	- 4
Song Thrush	73	34	36	+ 2
Sedge Warbler	66	61	50	- 11 *
Reed Warbler	55	49	44	- 5
Lesser Whitethroat	47	59	55	- 4
Whitethroat	72	67	51	- 16 *
Garden Warbler	68	55	46	- 9
Blackcap	81	67	54	- 13 *
Chiffchaff	75	78	69	- 9 *
Willow Warbler	89	65	61	- 4
Spotted Flycatcher	8	62	27	- 35
Long-tailed Tit	73	70	54	- 16 *
Willow Tit	33	78	67	- 11 *
Blue Tit	90	80	72	- 8 *
Great Tit	87	77	66	- 11 *
Treecreeper	50	76	67	- 9
Chaffinch	72	46	41	- 5
Greenfinch	34	40	37	- 3
Goldfinch	22	50	33	- 17
Linnet	16	39	35	- 4
Redpoll	14	42	29	- 13
Bullfinch	77	38	33	- 5
Yellowhammer	14	43	23	- 20 *
Reed Bunting	57	42	39	- 3

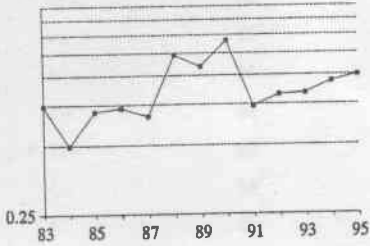
n = number of paired sites
 % juv = percentage of captures which were juveniles in 1995
 Diff in % juv = % juvenile in 1996 minus % juveniles in 1995
 * = significant change at 5% level

LONG TERM TRENDS IN CATCHES OF CHIFFCHAFF AND WILLOW WARBLER

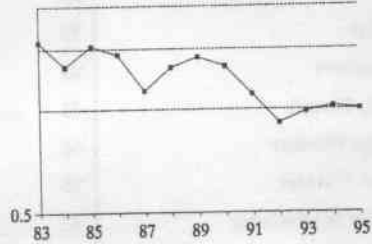
CHIFFCHAFF

WILLOW WARBLER

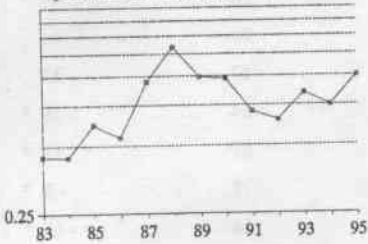
adult index (log scale)



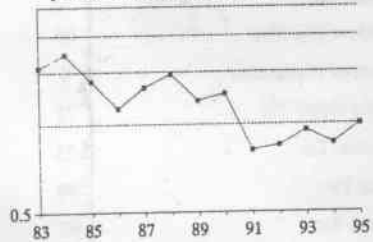
adult index (log scale)



juvenile index (log scale)



juvenile index (log scale)



Year

Year

CHIFFCHAFF

WILLOW WARBLER

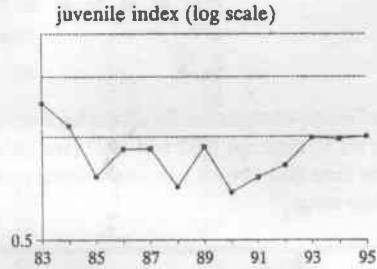
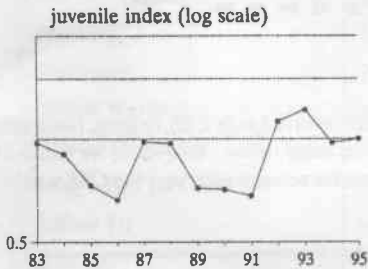
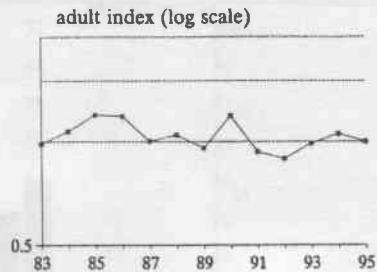
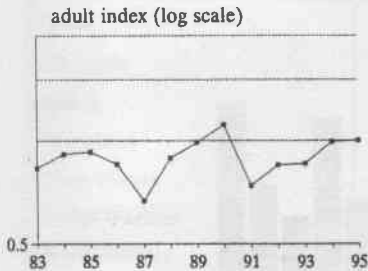
Recent analyses have shown that catches of both adults and juveniles increased by 34% between 1983 and 1995. The graphs above show a pattern of quite sustained increases. Catches of adults declined dramatically in 1991, possibly as a consequence of stormy weather over the Mediterranean in April 1991.

Long-term trends show significant declines in the catches of both adults (down by 42% since 1983) and juveniles (down by 49% since 1983). The decline has also been documented by the Common Birds Census which suggests that numbers have fallen by nearly 50% in southern Britain but by less than 10% in the north. Between-year retraps on CE sites indicate the decline has been caused by increased mortality of adult birds, either on migration or in the African winter quarters. Long-term declines in catches are of far greater conservation concern than annual fluctuations linked to weather patterns.

LONG TERM TRENDS IN CATCHES OF BLACKCAP AND GARDEN WARBLER

BLACKCAP

GARDEN WARBLER



Year

Year

BLACKCAP

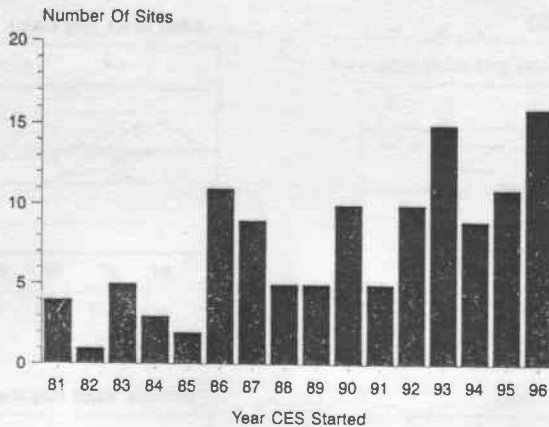
GARDEN WARBLER

Catches of both adult and juvenile Blackcaps have shown increasing trends since 1983. Catches of adults have increased by 18% and juveniles by 35% between 1983 and 1995. The graphs show the catches fluctuating markedly between years. The low catches of juveniles in 1994 (relative to adult catches) may have been caused by poor weather in the UK that year. Like the Chiffchaff, there was a dramatic decline in the adult catch in 1991. Both these species are thought to winter in the Mediterranean basin. It is possible that a higher proportion of these species over-winter further south than originally thought and their populations may have been affected by the sub-Saharan drought in 1990-91.

Catches of Garden Warblers have shown no significant trends between 1983 and 1995. Small juvenile catches in 1985, 1988 and 1990 may have been due to unfavourable spring weather in the UK affecting breeding success. The Garden Warbler population reached a low point in 1975-76 (Common Birds Census data), since when the population has steadily recovered. This pattern of decrease in the mid 1970s and subsequent slow recovery is similar to those of other trans-Saharan migrants which have been affected by drought conditions in their wintering area. Since 1983, changes recorded by CES ringing and the CBC have been almost identical.

LONG-RUNNING CONSTANT EFFORT SITES

The bar chart below shows the starting year for all CE sites operated in 1996. Only 12% of current sites were set up prior to 1986, and these long-running sites are amongst the most valuable in the whole scheme.



By way of acknowledgement for all the hard work and commitment involved with CES ringing, those sites that were set up between 1981 and 1985 (and still running today) are listed below. Of course, we thank all ringers for their efforts each year and without new sites coming into the scheme each year the CES would rapidly fade away.

Year Started	CES Number	Site Name	County	Ringers
1981	4	Denford Mill	Berkshire	Rupert Wilson
	10	Llangorse Lake	Powys	Llangorse RG
	13	Tresswell Wood	Nottinghamshire	Tresswell Wood RG
	25	Marsworth Reservoir	Hertfordshire	Aylesbury Vale RG
1982	28	Threestoneburn	Northumberland	Northumbria RG
1983	34	Tewinbury	Hertfordshire	Robin Cole
	42	RAF Woodvale	Merseyside	SW Lancs RG
	54	Ensbury	Dorset	Chris Reynolds
	70	Theddlethorpe Dunes	Lincolnshire	Mike Boddy
1984	92	Theddlethorpe Dunes	Lincolnshire	Mike Boddy
	82	Stodmarsh	Kent	Sandwich Bay BO
	84	Clanger Wood	Wiltshire	Rob Turner
1985	86	Westbere	Kent	Jan Pritchard
	95	Mitcham Common	Greater London	Mike Netherwood & Mick Cook
	105	Sprotborough Flash	South Yorkshire	Doncaster RG

SEASONAL CHANGES IN CES CATCHES

The graphs below show the seasonal pattern of catches of new birds for the year over visits 1-12. CES catches from 1983-95 have been used in these analyses. Some of the patterns are quite striking and suggest that all 12 CES visits are important but for different reasons. For many species, visit 1 is the most productive for adult catches (eg Willow Warbler) but peak catches of juveniles can occur as early as visit 5 (Robin, not shown) or as late as visit 11 (Bullfinch).

BLACKBIRD-Adults



BULLFINCH-Adults



BLACKBIRD-Young



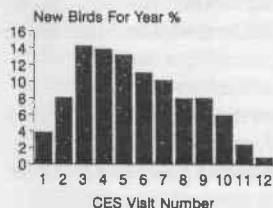
BULLFINCH-Young



Catches of adult Blackbirds tail off rapidly after visits 6 and 7 whereas Bullfinch adults are caught more steadily throughout the season.

Young Blackbirds have been caught on all 12 visits but catches peak in early August. Bullfinches are late breeders and this is reflected in the peak catches of young during visits 11 and 12.

REED WARBLER-Adults



WILLOW WARBLER -Adults



REED WARBLER-Young



WILLOW WARBLER-Young



Catches of adult Reed Warblers are small to begin with and peak during visits 3-5. In contrast, Willow Warblers are early migrants and over 25% of all adult Willow Warblers are caught on visit 1. Young Willow Warblers are caught as early as visit 4 and catches peak on visit 9 (late July).

UNUSUAL CATCHES IN 1996

Thrush Nightingale - Dorset
 Redwing - Berks
 Shelduck (2) - Glos

Marsh Warbler (2) - Dorset
 Water Rail - Kent
 Short-eared Owl - Highland

NOTABLE RETRAPS/RECOVERIES

J569660	Sedge Warbler	3J	25.07.95	North Slob CES, Wexford, Ireland Thorney Island, Hampshire
		Control	02.08.95	
J998247	Sedge Warbler	3	29.07.95	Pitsea Marshes CES, Essex Seine-Maritime, France
		Control	21.08.95	
J540284	Reed Warbler	3	19.08.95	Pitsea Marshes CES, Essex Kotu Strand, Gambia
		Control	20.01.96	
T12618	Lesser Whitethroat	4	18.03.94	Ne'ot Hakikar, Israel Cowleaze Wood CES, Wilts
		Control	11.05.94	
5S0603	Willow Warbler	4M	13.07.94	Helton Tarn CES, Cumbria Labranga, Morocco
		Dying	02.02.95	
K038030	Robin	3J	10.06.95	Turnhouse CES, Lothian Beachy Head, Sussex
		Control	23.08.95	

INTERNATIONAL NEWS

CES style ringing has become established in several European countries and in North America. Schemes based largely on the BTO methodology are running in France, Finland, the Netherlands, Spain and the USA.

News from the MAPS Program in America is of great success. Participation in the program has increased dramatically. The organisers expect about 430 stations to be operated in 1997, compared with only 17 stations in 1989. This expansion is a result of a number of federal agencies operating sites as a part of the Neotropical Migration Bird Conservation Initiative "Partners in Flight".

The CES scheme in Finland (SSP) started in 1986 and interest in the scheme has been growing steadily. About 50 sites are operated mainly near the southern and western coasts of Finland. The French scheme started in 1989 and involves both point counts and mist-netting. 31 French sites were operated in 1992.

NEWS ITEMS

CORRECTION TO CES NEWS 9

Apologies to Alan Hilton for the typing error that appeared in the Site Efficiency table on page 10. The total catch for site 244 should have read 689 and not 213 as printed.

FREE COMPUTERS

From time to time free computers become available to ringers, and CES ringers in particular are encouraged to take advantage of this offer. If you are interested in receiving a computer, please contact Robin Cole (tel: 01438 813403 home or 01252 392475 work). Of course, Robin is also on the look out for computers going spare!

If you already use computers to store your ringing records, please remember to check disks for viruses before sending them to BTO HQ or transferring data between members of a ringing group.

CES REFUNDS

Remember that all claims for CES ringing should arrive at BTO HQ before the end of February. Claims should be submitted on the Refund Claims Form sent out with the winter mailing. If the CES is operated through a ringing group, then the claim should be made by the secretary of the group.

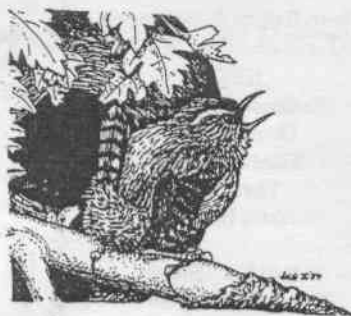
CES NEWS

Many thanks to those of you who sent in your most interesting retraps and recoveries. Contributions (articles or artwork) are always welcome. Please send all items to Dawn Balmer.

CONGRATULATIONS TO MIKE AND FRANCES BODDY

Mike and Frances Boddy have been awarded the English Nature Voluntary Wardens Award for 15 years of monitoring and conservation work on the Theddlethorpe Dunes NNR in Lincolnshire. Mike and Frances operate

two CE sites on Theddlethorpe Dunes, and it was their pioneering work that led to the setting up of the CES Scheme in the early 1980s. Many of you will remember Mike as the volunteer coordinator of the scheme during the early days. Will Pearce attended the presentation at Theddlethorpe Dunes in March. It is amazing to think that Mike's initiative at Theddlethorpe has now spread to more than 200 sites across Europe and more than 400 sites in North America.



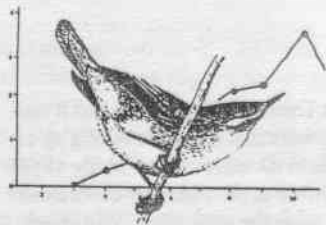
Wren by Su Gough

HABITAT RECORDING

Many thanks to those of you who completed habitat recording forms in 1996. We are close to having at least one set of new habitat information for every CE site, and we shall be asking all sites to carry out habitat recording again in 1998. If you were sent habitat recording instructions and forms with the recent 1997 mailing, please make a special effort to complete them this year. Receiving these forms means that either you are new to the scheme or that you have not managed to complete the forms in the last couple of years!

NEW CE SITES

New CE sites are not issued with a CE site number until the first year's data have been submitted to BTO HQ. Please leave the space on the forms for site number blank during your first year. B-RING users need to input a site number, but initially you should use 999 or similar.



RINGING & MIGRATION CONFERENCE 1997

The scientific merit of CES ringing was mentioned time and time again by delegates at the R&M Conference at Swanwick in January. The conference was devoted to the new Scientific Strategy of the BTO Ringing Scheme, and the CES Scheme came out as a shining example of the sort of organised ringing project that more ringers should be doing.

The annual gathering of CES ringers on the Saturday evening was well attended by current and prospective CES ringers (was it the lure of free wine?). The atmosphere was extremely positive, despite many ringers having had a miserable year in terms of catches. As usual, the provisional results were presented and provoked much discussion. A system of standardising weather recording was agreed by the majority to be a useful step forward, and this has been implemented for the 1997 season (see the reverse site of your yellow CES summary sheet). The evening was rounded off by Jill Tardivel who spoke enthusiastically about CES ringing in Kent. Jill's talk compared long-term changes in CES catches across the four long-running Kent CES sites. Many thanks Jill.

MEMBERSHIP NEWS

The BTO's membership is rising steadily and is currently standing at around 10,500. Amongst our most active members are the large proportion of ringers who support the BTO year in, year out. We in the Membership Unit, are very grateful for your continued support, especially when you consider the amount of money that you spend on ringing equipment.

Having recently taken over as Head of Membership, I am keen to improve on the benefits that we currently offer the membership. News of the new incentives will be circulated to you in the very near future. I am also very keen to hear your views and thoughts on what BTO membership should be offering ringers, so please feel free to contact me at HQ. In the meantime, if you know of fellow ringers who are not members, why not encourage them to join. Please contact Sue Starling (Membership Secretary) at HQ for more details

David Lindo
Head of Membership



CES News

Newsletter No. 10
May 1997

Dawn Balmer & Will Peach

BTO,
National Centre for
Ornithology,
The Nunnery,
Theford,
Norfolk, IP24 2PU.

Tel: 01842 750050

Fax: 01842 750030

e-mail:

dawn.balmer@bto.org

will.peach@bto.org

Newsletter Production

Dawn Balmer

Typesetting

Sonia Davies

Illustrations

Simon Gillings

Su Gough

Mike Toms

Andy Wilson

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