



Bittern *Botaurus stellaris* **monitoring and research in the UK:** **Summary of the 2005 season**

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Key Results:

- Reduction in the number of booming males from 55 in 2004 to 46 in 2005, a decrease of 16%.
- A further increase in the number of boomers in Suffolk (a 500% increase here in the past eight years!).
- The first booming in Dorset for at least 20 years!
- First booming and nesting at Titchwell since at least 1989.
- A doubling in the booming population in Cambridgeshire from 2 to 4 males.

This year saw a slight reduction in the number of booming male bitterns, a minimum of 46 were recorded in the UK, representing a 16% decrease on the 55 counted in 2004. The number of sites used by booming male bitterns stayed almost static, however, with 28 this year compared to 30 in 2004.

This report provides a short summary of the findings of this year's bittern monitoring and research programme. The bittern team endeavours to investigate any reports of booming bitterns in the country. If confirmed this will be followed up later in the season with observations to establish whether breeding has occurred. With a fairly large and rapidly growing number of sites scattered far and wide, this task is only made possible with the support of many landowners, site managers, wardens, volunteers and local birders who go out listening and watching on our behalf. We thank them all.

For the past four years, we use a standardized non-invasive method of assessing nesting attempts that provides an estimate of the number of breeding females active during the season.

RSPB and English Nature have jointly funded the work carried out and the RSPB wishes to acknowledge the financial support of English Nature. This report will be widely distributed and therefore mentions only a few sites that are already well publicized.

UK Population Monitoring

The unit used when counting breeding bitterns is booming (singing) males. With recent new colonisations, it is worthwhile reiterating the criteria to which all records are subject and which define whether one territorial male is considered different from another. This is not always straightforward, particularly when a bird is heard to boom only briefly at new or unexpected sites. Bitterns have been included in the minimum population figure if they meet (at least?) one of the following criteria:

1. Heard at the same time as other birds in nearby territories
2. A booming period which overlaps that of birds on nearby sites
3. A bird must boom for a minimum of one week

Only reports from reliable observers, such as site wardens and county recorders, are accepted. Records meeting these criteria have been used to arrive at the minimum population figures.

A maximum population figure is also given, which includes the records of other confirmed boomers that did not fulfil any of the above criteria. However it is the minimum figures that should be quoted, as they are the most reliable, and they are comparable with the published figures from earlier years.

2005 Results

Booming

Table 1. The number of booming male bitterns in the UK since 1995 and the number of sites involved; figures in brackets are maxima.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Males	19(20)	22	11(12)	13(18)	19(22)	22(28)	30(33)	31(37)	43(52)	55(65)	46(54)
Sites	10(11)	10	7(8)	9(12)	11(14)	14(16)	18	20(23)	24(29)	31(33)	28 (30)

Figure 1. The number of booming male bitterns in the UK since 1994 and the number of sites involved (only minimum figures are shown).

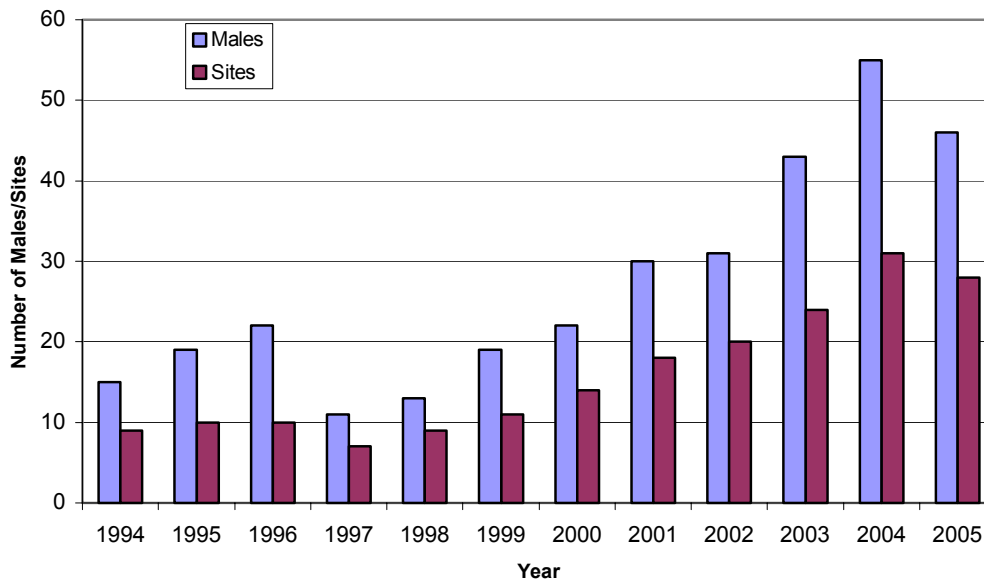
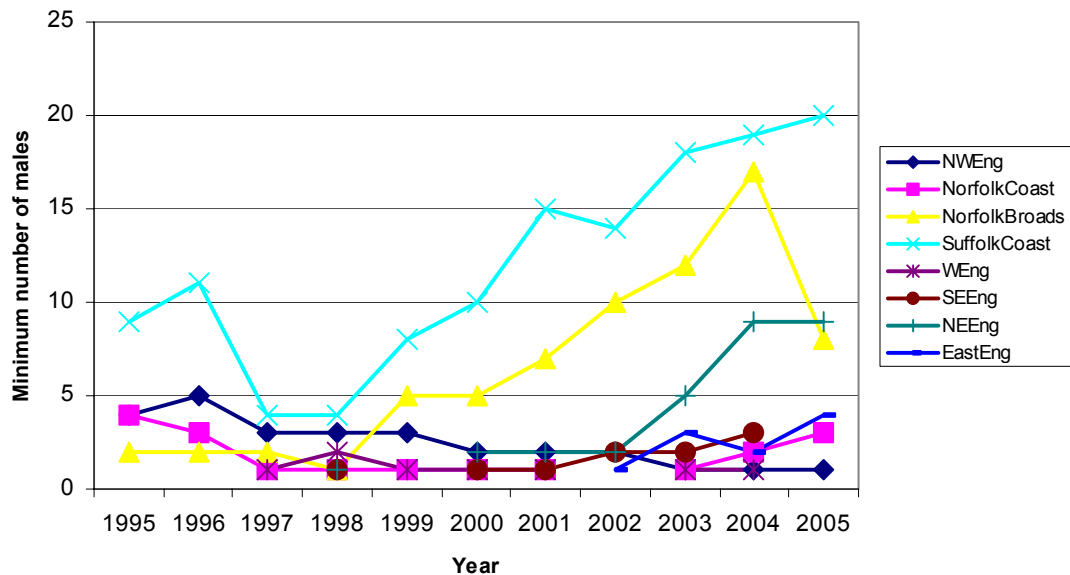


Table 2. The number of booming males since 1995 in each county/region are shown below; figures in brackets are maxima.

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Change (04-05)
NW England	4	5	3	3	3	2	2	2	1	1	1	0
Norfolk Coast	4(5)	3	1(2)	1	1(3)	1(3)	1(2)		1	2(3)	3	+1
Norfolk Broads	2	2	2	1(3)	5	5(6)	7	10(11)	12(15)	17(22)	8	-9
Suffolk Coast	9	11	4	4(6)	8	10(13)	15(17)	14(19)	18(19)	19(20)	20(24)	+1
SW England		1					1				1	+1
W England			1	2	1	1	1	(1)	1	1	(1)	-1
SE England				1	(1)	1	1	2	2(3)	3(4)		-3
NE England				1(2)		2	2	2	5(8)	9(10)	9(11)	0
C England					1				(1)			0
E England								1(2)	3	2(3)	4	+2
Wales										1	(1)	-1
TOTALS	19(20)	22	11(12)	13(18)	19(22)	22(28)	30(33)	31(37)	43(52)	55(65)	46(54)	-9

Figure 2. The number of booming males since 1995 in each county/region



Most regions saw only small changes in the number of boomers on last year, with two exceptions. SE England saw a reduction from 3 boomers last year to none in 2005 but by far the greatest losses were in the Norfolk Broads, where numbers dropped from 17 boomers in 2004 to just 8 in 2005. Two of the birds that boomed in the South East region last year boomed early and just for a short period and it is thought they were probably wintering birds ‘tuning up’ before departing - maybe this years cold snap in late February and early March may have put pay to such activity this year? The reduction in the Norfolk Broads is much harder to explain but certainly this early booming before leaving to the continent accounts for some of the losses, and it should also be noted that water levels at several sites are known to have been much lower than in recent years.

Within the regular five sites on the Suffolk Coast there was again a slight increase from 19 birds in 2004 to 20 this year and in late March, 10 birds could be heard booming simultaneously at Minsmere!

Four birds boomed at four different sites in Cambridgeshire (one of which was a new site), a 100% increase on last year. In the North West just one boomer was again located at Leighton Moss. Newly created reedbeds at Ham Wall and Malltraeth RSPB reserves both held boomers that made it onto the minimum figures last year, unfortunately this year both sites had calling birds for very short periods early in the season and only managed to get into the maximum figures. In the North East there was once again 9 boomers, one bird of which was calling at a new site.

In Dorset, regular booming was heard at Radipole for the first time in over 20 years (although in 1998 booming was heard here on 1 night only in early February)! . On the North Norfolk coast, a bird was heard grunting briefly at Titchwell in 2004 but this year a bird was booming well in early May and made it onto the minimum figures, the first time since at least 1989.

Breeding

This year, like last year, using non-invasive techniques, we have attempted to record all nesting attempts made at sites where booming was confirmed in the spring. We also watched at several sites adjacent to, or near, booming male territories. As in previous years, a huge amount of effort and time was put into watching. In line with the booming totals, there are two figures quoted; **minimum** – which includes only confirmed nesting attempts and **maximum** – which includes both confirmed and probable nesting attempts.

A confirmed nest is one where:

- An adult bittern is observed leaving and subsequently returning to the same small area within the reedbed or fen (usually less than 20m x 20m) on four or more occasions in the same day or on two separate days if the nest is advanced and the female is away for long periods.
- A probable nest becomes inactive and a nest is located during a search of the reedbed.

A probable nest attempt is one where:

- An adult bittern is observed leaving and subsequently returning (or vice versa) to the same small area within the reedbed (usually less than 20m x 20m) on only two or three occasions in the same day and is not recorded on subsequent watches.

Table 3. The number of nesting attempts identified in the UK in 2005. All booming sites were surveyed for the presence of females. The totals for 2001 to 2004 are provided for comparison.

County/Region	Minimum number of nesting attempts	Maximum number of nesting attempts	Number of sites (maximum in brackets)
NW England	2	2	1
Norfolk Coast	1	1	1
Norfolk Broads	6	7	4 (5)
Suffolk Coast	17	17	5
NE England	1	1	1
2005 Total	27	28	12 (13)
2004 Total	31	33	18
2003 Total	34	37	14(15)
2002 Total	26	31	11(14)
2001 Total	26	26	11

As in previous years, female nesting activity was not recorded at a large number of the sites where booming was confirmed. Only 12 of the 28 sites (43%) that held males had breeding females.

On the Suffolk Coast there was a slight increase in the number of nesting attempts, and by far the best site was once again Minsmere, where eight active nests were detected. Activity at two nest locations here ceased early on and they are thought to have failed but flights at the other six nest continued for between 36 – 60 days and it likely that the majority were successful. All eight nests were active simultaneously so we can be sure eight different females were involved. Once again, the well-known female bittern with the droopy neck was present, she only had one nesting attempt this year, but she has breed at Minsmere now for at least eight years!

In the Norfolk Broads, unlike the large reduction in booming males the number of active nests here was only down one on last year, and included nesting at a new site. Up on the north Norfolk coast, a bird nested at Titchwell for the second year running.

The isolated population at Leighton Moss once again held two nests, one of which was very close to a hide and the female could be watched feeding the chicks. It is thought that this nest was successful and she probably raised four chicks! Despite many co-ordinated watches there was quite a large drop in the number of nesting attempts identified in the North East from five last year to just one in 2005.

Radio-tracking

As no active nests have been visited for four years, there are no radio-tagged birds.

NEWS

Sea Level Rise

It has been identified that of the 46 booming males present this season at least 22 (48%) are on sites that are immediately threatened by sea level rise, of the breeding females this figure is even higher with over 60% in danger. As new reedbed sites are created away from the coast and safe from sea level rise, it is hoped that ultimately birds will colonise these sites and secure a stable future for the bittern.

EU Life Bittern 2 Project

The ambitious second LIFE project is developing a strategic network of sites suitable for bitterns, covering work on 19 different sites in England. The project runs over 4 years, is due to end in 2006 and involves a partnership of 8 organisations – the Herts and Middlesex Wildlife Trust, Lancashire Wildlife Trust, Yorkshire Wildlife Trust, English Nature, Broads Authority, Rye Harbour Nature Reserve, Lee Valley Park Authority and RSPB. The project aims are to:

- Increase the number of fledged young produced
- Provide fledglings with suitable sites to move on to
- Provide more suitable sites for wintering bitterns from home and abroad

This year success was had at Titchwell (Norfolk) with the first booming and breeding since 1989, booming again this year at Ham Wall (Somerset), another increase in boomers at both Minsmere (Suffolk). If you would like to know more, then please contact: Sarah Alsbury, Project Manager on 01767-680551, or email: sarah.alsbury@rspb.org.uk

Contact Us

We are always interested to hear of any bittern seen with metal rings, radio-tags or colour rings away from the main breeding sites. Although there are no longer any birds with operational radios, sightings of these individuals provide useful information on the distances they are moving and the type of habitats they are utilizing - particularly outside the breeding season. Metal (BTO) rings were fitted to the bird's tarsus, the radio-tags are fitted onto the tibia with a leather strap.

With reedbed creation throughout the UK and a rapidly expanding bittern population, we are increasingly reliant on landowners, site managers, wardens and local birders to report booming to us. Please keep an ear out for them next spring, even at sites where they have not been heard for many years. To report an observation or for more information on the best survey methods and when to listen, please contact one of us at the Lodge (address above).

Simon Wotton – 01767-680551 or simon.wotton@rspb.org.uk

David Fairhurst - 07776-367314 or david.fairhurst@rspb.org.uk

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