

## Summary of the 2016 Bittern breeding season

This report provides a brief summary of the results of the Bittern Monitoring Programme in 2016. Although there have been no full-time Bittern monitoring field staff since 2011, it was again encouraging to see the excellent coverage of sites across the country. Many thanks to all the volunteers, conservation site staff and landowners who helped to monitor sites in 2016.

### 2016 breeding season

There was a slight increase in the number of booming males in 2016, although there were some regional differences since 2015. There were a minimum of 162 boomers recorded at 78 sites, compared to 157 at 72 sites in 2015. The number of boomers in Somerset increased by three, from 44 to 47 boomers, and it is still the predominant county for booming Bitterns. Booming was also reported from a number of new sites, including in East Anglia, SE England and in Wales.

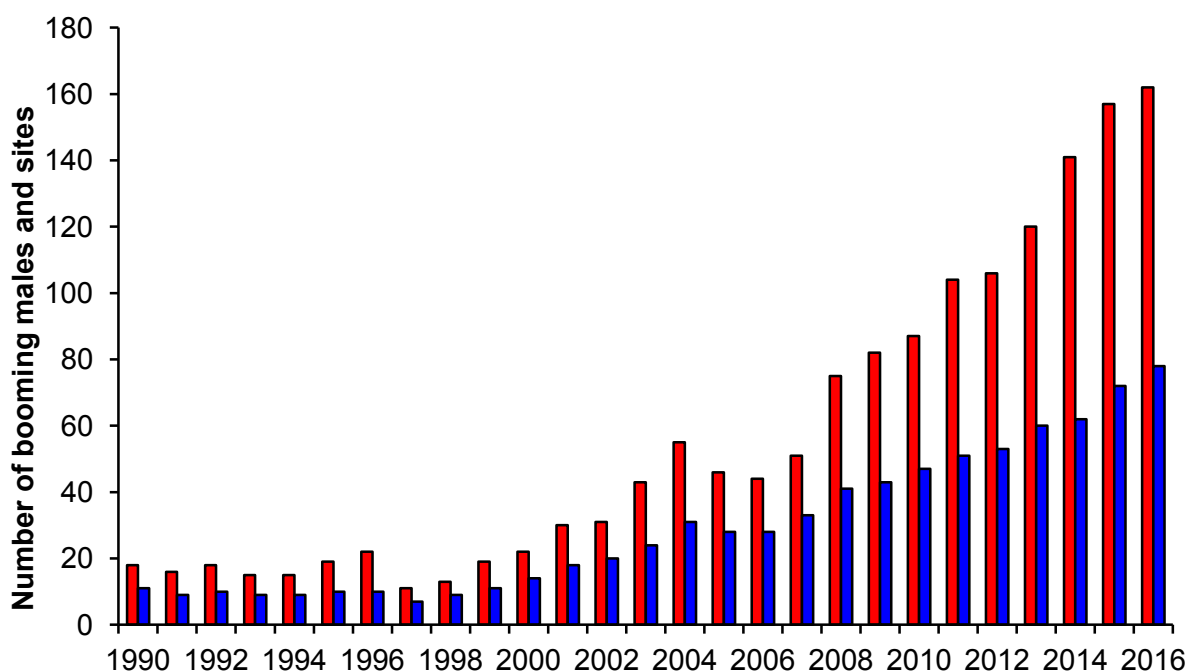
It was not possible to monitor all sites for nesting activity in 2016, which has now been the case since the last full census in 2011. From the sites monitored in 2016, there was confirmed or probable nesting at 35 sites, with a minimum of 64 active nests recorded.

**Table 1.** The minimum number of booming male Bitterns in the UK since 2004 and the number of occupied sites involved each year (with the maximum figures shown in brackets).

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Males</b>	55 (65)	46 (54)	44 (63)	51 (63)	75 (87)	82 (100)	87 (106)	104 (128)	106 (129)	120 (139)	141 (154)	157 (178)	162 (179)
<b>Sites</b>	31 (33)	28 (30)	27 (35)	33 (40)	41 (47)	43 (55)	47 (58)	51 (63)	53 (65)	60 (70)	62 (69)	72 (83)	78 (87)

The 47 booming males in Somerset were mostly on sites in the Avalon Marshes, although there were two boomers at another site elsewhere in the Somerset Levels. Booming numbers in the Fens continue to increase, with booming males at a record 12 sites here, and there was also another increase in the traditional stronghold on the Suffolk Coast. However, fewer boomers were recorded in the Norfolk Broads and on the North Norfolk coast in 2016. The most encouraging news in 2016 was the presence of three booming males in Wales.

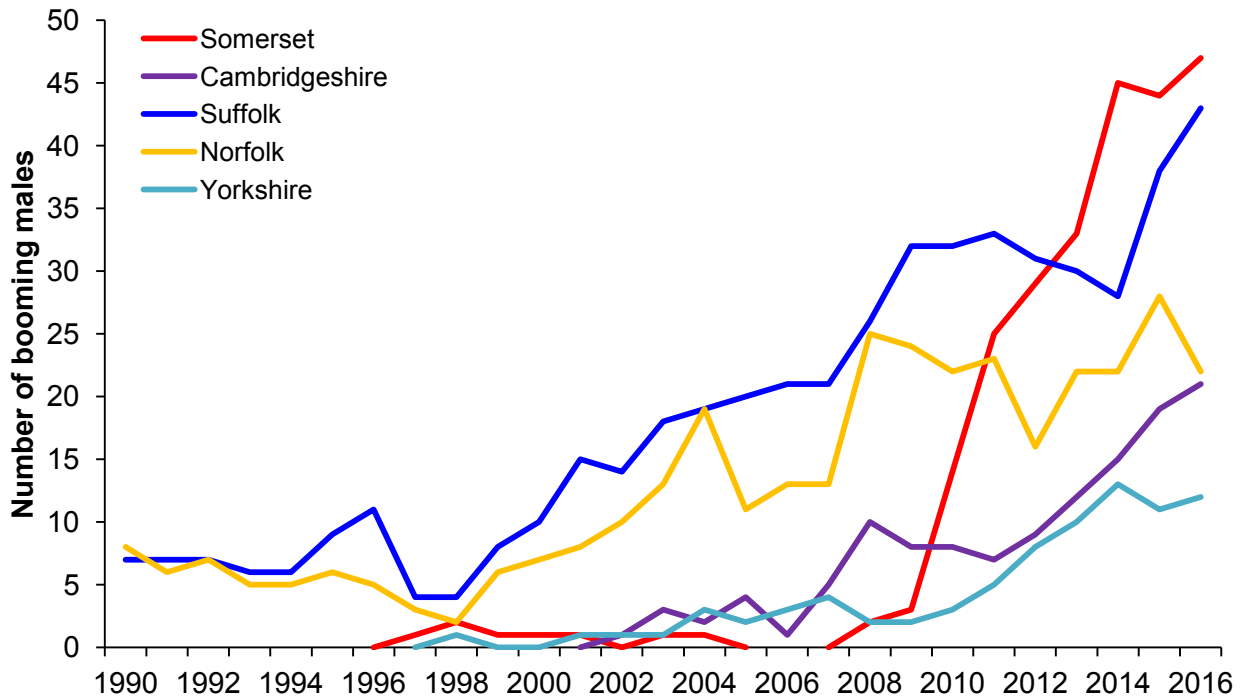
**Figure 1.** The minimum number of booming male Bitterns (in red) in the UK and the number of occupied sites (in blue) between 1990 and 2016.



**Table 2.** The minimum number of booming males within regions in England, and in Wales, between 2004 and 2016 (maximum booming numbers are shown in brackets).

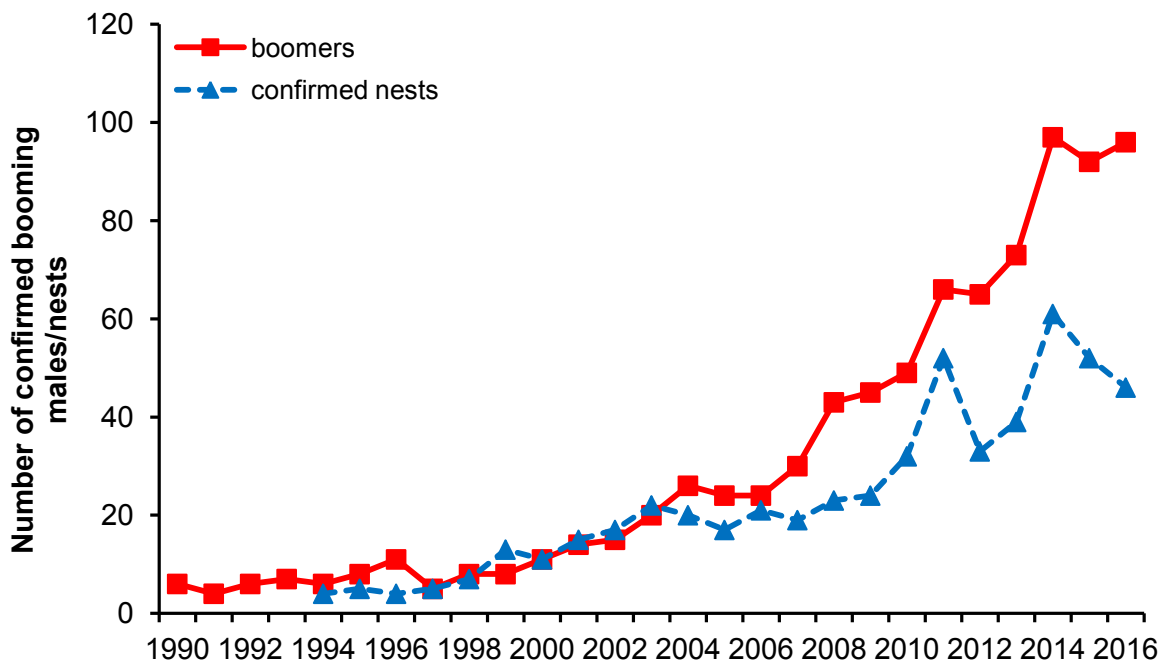
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Somerset</b>	1	0	0	0	2 (3)	3 (5)	14 (17)	25 (28)	29 (34)	33 (35)	45 (49)	44 (45)	47 (48)
<b>Suffolk Coast</b>	19 (20)	20 (24)	20 (29)	20 (25)	24 (27)	28 (31)	26 (29)	25 (30)	25 (27)	25 (27)	21 (22)	32 (35)	36
<b>The Fens</b>	2 (3)	4	2 (3)	6	12 (13)	12 (14)	14 (16)	15 (19)	15 (17)	16 (21)	22 (24)	25 (30)	28 (29)
<b>Norfolk Broads</b>	17 (22)	8	10 (12)	10 (17)	21 (25)	19 (23)	17 (20)	20 (25)	13 (15)	19 (19)	18 (20)	21 (22)	17 (22)
<b>NE England</b>	9 (10)	9 (12)	7 (9)	9	8 (9)	6 (8)	6 (8)	9 (10)	10 (15)	13 (19)	16 (18)	13 (15)	13 (18)
<b>SE England</b>	3 (4)	0 (2)	1 (2)	1 (2)	2	4 (5)	4 (5)	4 (5)	5 (7)	3 (4)	7	8 (9)	7 (8)
<b>North Norfolk</b>	2 (3)	3	3 (4)	3	4	5	5 (6)	3 (4)	3 (5)	3 (4)	4	7 (8)	5
<b>E England</b>	0	0	0	0	0 (1)	1 (2)	0 (1)	0	1	2	3	1 (2)	3 (4)
<b>SW England</b>	0	1 (2)	0 (1)	0	0	0	0	0	0 (1)	0	1	0 (1)	2
<b>Midlands</b>	0	0	0	0	0	1 (2)	0 (1)	2 (3)	3	5	1 (2)	3 (7)	0 (2)
<b>NW England</b>	1	1	1 (2)	2 (3)	2	2 (3)	1 (2)	1 (2)	2 (3)	1 (3)	2	2	1
<b>Wales</b>	1	0 (1)	0 (1)	0	0	1 (2)	0 (1)	0	0 (1)	0	0 (1)	1 (2)	3 (4)
<b>UK</b>	<b>55</b>	<b>46</b>	<b>44</b>	<b>51</b>	<b>75</b>	<b>82</b>	<b>87</b>	<b>104</b>	<b>106</b>	<b>120</b>	<b>140</b>	<b>157</b>	<b>162</b>

**Figure 2.** Annual change in the number of booming males in key counties for breeding Bitterns, between 1990 and 2016.



Although not all sites with booming males are now being monitored for nesting activity, 65 confirmed or probable nests were recorded, on 36 sites. There were at least 20 nests in Somerset, of which most were found in the Avalon Marshes, an increase from 2015, and an increase in nesting attempts again in NE England. There was, however, confirmed nesting activity for the first time at a number of sites in 2016, in Cambridgeshire, Norfolk, Suffolk, the Midlands and in Wales. Figure 3 shows that there was a further drop in nesting activity on the 36 sites that have been monitored annually for both booming and nesting activity. This can be attributed to a poor year for nesting attempts in East Anglia, particularly on the Suffolk coast, which was likely to have been linked to unseasonably high spring rainfall in the east of England in 2016. For instance, only five nests were recorded on the Suffolk coast in 2016, down from 15 in 2015 and there was another drop in the number of reported nesting attempts in the Fens. On a positive final note, the number of sites with nesting activity in 2016 is the highest recorded since nest monitoring began in 1994, despite not all sites now being monitored for nesting activity.

**Figure 3.** A comparison between the number of booming male Bitterns and confirmed nesting attempts from the 36 sites where there have been annual counts for both booming and nests in each year since the dedicated monitoring programme ceased in 2011.



## Bittern monitoring in 2017

Please be aware that RSPB will not have dedicated Bittern monitoring field staff on the ground again this year. The RSPB will, however, still be coordinating Bittern monitoring across the country next year, through the Bittern Monitoring Programme, an *Action for Birds in England (AfBiE)* project. Under the *AfBiE* agreement, a conservation partnership between Natural England and RSPB, it is proposed that there will be periodic, rather than annual, full surveys every few years from now on.

For 2017, we would request that the many volunteers, conservation site staff and landowners continue to monitor sites for booming males and nesting attempts as has happened this year. Given the increasing number of successful nests reported across the country, it is increasingly likely that new and formerly-occupied sites will become occupied by booming Bitterns in the near future. The RSPB will aim to collate all of the records, with the intention of producing a similar report next year. To report any observations this season, or to request a copy of the survey methods and recording forms, please contact me on the details below.

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