

## Nesting Tree Sparrows at Tyttenhanger and Coursers Farms in 2010

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Nest boxes for the benefit of tree sparrows have been in place at Tyttenhanger Farm and Coursers Farm since at least 1996 and have been monitored systematically since 1999. These tree sparrows are the only known breeding colonies in the whole of Hertfordshire and monitoring of their breeding performance and numbers are actions listed in the Hertfordshire Biodiversity Action Plan.



This short report describes the results of the breeding season monitoring in 2010 and compares these figures with those from previous years.

2010 was a mixed year; Table 1 summarises the results. On the positive side the numbers of simultaneous nests, nesting attempts and eggs laid was the highest since systematic monitoring started. In addition, birds nested successfully at Tyttenhanger Farm for the first time since 2007. There was also no evidence of an adverse impact of the cold winter of 2009/10. On the negative side, the nest failure rate was very high so that the numbers of young fledged was only 66. There were two factors involved in this. The cold weather early in the season meant that some early clutches were abandoned but, most importantly, at Coursers Farm there was an extremely high loss of eggs and young to predation through the middle and late season. A total of 11 nesting attempts at Coursers Farm were lost to predation. We suspected a mammal, probably weasel, but were unable to prove this for sure. Fortunately, there was no predation at Tyttenhanger Farm so the overall figures for numbers fledged were not too disastrous. Predation by weasels is something which occasionally occurs with nest box schemes and was last an issue at Coursers Farm in 2005.

**Table 1.** Summary of the 2008 and 2009 results from Coursers Farm

	Coursers Farm 2010	Tyttenhanger Farm 2010
Number of available boxes	25	9
Number of boxes with any sign of tree sparrow nest building	16	3
Number of boxes in which tree sparrow eggs were laid	14	3
Number of tree sparrow nesting attempts	26	5
Total number of eggs laid	132	26
Mean clutch size	5.08	5.20
Total number of young fledged	50	16
Mean number fledged per nesting attempt	1.92	3.20
Number of simultaneous nesting attempts	11	2

The numbers of nesting attempts, eggs laid and young fledged for the period 1999 to 2010 are shown in Table 2. 2010 was the best year ever for the numbers of nesting attempts and eggs laid but the output of young was low. Unfortunately past experience suggests that the low breeding success in 2010 is likely to have a negative impact on the numbers of pairs in 2011. However, it would be great to be proved wrong on this!

**Table 2.** A summary of tree sparrow numbers and breeding performance from 1999 to 2010.

Year	Tyttenhanger Farm			Coursers Farm			Overall				
	Number of nests	Eggs laid	Young fledged	Number of nests	Eggs laid	Young fledged	Number of nests	Eggs laid	Young fledged	Mean clutch size	Mean number fledged
1999	0	0	0	5	-	c 20	5	-	c 20	-	3.40
2000	0	0	0	22	-	c 40	22	-	c 40	-	1.80
2001	0	0	0	14	73	c 45	14	73	c 45	5.21	2.50
2002	0	0	0	22	-	c 70	22	-	c 70	-	3.18
2003	1	5	5	16	85	61	17	90	66	5.29	3.88
2004	7	39	26	11	66	29	18	105	55	5.83	3.06
2005	11	58	27	11	60	15	22	118	42	5.36	1.91
2006	2	13	4	11	66	47	13	79	51	6.08	3.92
2007	4	21	12	13	77	40	17	98	52	5.76	3.06
2008	0	0	0	16	87	65	16	87	65	5.44	4.06
2009	2	8	0	25	133	79	27	141	79	5.22	2.93
2010	5	26	16	26	132	50	31	158	66	5.10	2.13

### Actions in 2009/10

The Herts Bird Club continued the programme of supplementary feeding for the birds over the 2009/10 winter and plans are in place to run this through the 2010/11 winter. In 2010 we replaced some of the existing boxes and added a few new ones at Coursers Farm. Interestingly the Tree Sparrows showed strong preference for these new boxes. Five out of the six new boxes were used (83%) compared with only nine out of 19 old ones (47%). We plan to replace more boxes over the winter of 2010/11 and look for opportunities to increase the number of available boxes at Tyttenhanger Farm. Although we hope that the high predation in 2010 was a 'one-off' we will look for ways of minimizing the risk for 2011.

There have been occasional reports of Tree Sparrows seen at natural holes particularly in the Tyttenhanger Farm area and we cannot rule out the possibility that a few pairs are using natural sites. We urge any observers who come across birds at natural sites to provide us with full details so we can check out the nest with a nest viewing camera whilst the birds are still nesting. Such reports have been received for Warren Farm where we have seven nest boxes but as yet no tree sparrow nests have been found there.

Following reports of wintering Tree Sparrows at Cromerhyde Farm near Welwyn Garden City, we erected six nest boxes in a suitable area adjacent to gravel workings but these were not used by Tree Sparrows. (photo right)



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Photo credits: Tree Sparrow by Sandra Sandbridge; installing nest boxes by Ken Smith