European Stonechats Breeding at Cley and Salthouse in 2012.

Reports in March 2012 of a male European Stonechat, Saxicola rubicola, in territorial display and accompanied by a female at the northern boundary of Arnold's Marsh near the East Bank, Cley and also similar behaviour by a pair at Gramborough Hill, Salthouse, aroused local interest. The interest was twofold; firstly the species had not been recorded as breeding at Cley since organised annual breeding bird surveys began at Cley in 2003 and indeed it took intensive enquiries among local observers and a lengthy search through part of a county bird record archive before the last known record of breeding at Cley, in 1992 behind the North Hide, was confirmed. It is noted that the 1992 breeding record does not appear in the archive examined which shows the last recorded breeding at Cley as 1980. The exact location of the 1980 breeding site is not given but the field notes of one of the observers suggest the southern end of the Beach Road as likely. A date for the last recorded breeding at Salthouse took much less research; the Norfolk Bird Report for 2001 records a single pair at Gramborough Hill. Of further interest and in particular to the writer, both females were noted to be marked with colour-rings which had been fitted while nestlings on Kelling Heath, the Salthouse bird in 2010 and the other in 2011.

A project to colour-ring Stonechats breeding on Kelling Heath began in 2009 and was extended to include Weybourne Camp a year later. It has already provided valuable nestling survival and movement data and it now seemed logical to also include the Cley and Salthouse birds in the project. The ringing of wild birds in the UK is strictly controlled and coordinated, particularly so if colour-rings are involved and also if the ringing site is located within a National Nature Reserve or Site of Special Scientific Interest. Three national organisations had to be contacted and by the time their collective permissions had been received, the first brood of the pair breeding at Arnold's Marsh had fledged. The position of the now empty nest was marked by a 10-digit GPS reading, as were all subsequent nests at both sites, for future data analysis.

Within a few days of the Arnold's Marsh nestlings fledging, the female began to prepare for the next brood. The male was noted to be carrying out the major share of feeding the still dependent young while the female began prospecting for a new nest site and eventually, lengthy disappearances from view suggested that a second clutch was complete and incubation had commenced. The nest, in dense and featureless long grass on the edge of the shingle, proved particularly difficult to find. Situated at the end of a horizontal tunnel 15cms long at ground level, the exact location and contents of the nest could only be established by touch and this led to the initial conclusion that the nest was empty as the actual nest cup, containing 5 eggs, was in fact a few centimetres past a hollow which by touch, was thought to be the nest. When the eggs hatched, the growth of the young to a size suitable for ringing again had to be judged by touch. Fortunately this proved successful and all 5 nestlings were colour-ringed at the first attempt. All the nestlings were known to have

fledged but only 4 were confirmed as long-term survivors when sightings, well away from the natal site, denoted post-fledging dispersal had begun. In the UK, Stonechats regularly raise three broods in a single year but there was no evidence of this pair attempting a third brood.

During the third week of March 2012, regular reports were received of a colourringed female European Stonechat at Gramborough Hill which had been marked in the nest on Kelling Heath in 2010 and had not been seen since. Interest increased as a male joined the female and the pair showed every sign of claiming the area as a breeding site. Further interest centred on the male which was considered by some observers to show the characteristics of the closely-related but separate species, Siberian Stonechat, Saxicola maurus.. Although Siberian Stonechat is an annual vagrant in the UK, hybridisation between the two species has yet to be recorded anywhere within their range and it may be relevant to note here that careful field observation of this individual resulted in the conclusion that it was nothing more exotic than an unusually colourful European Stonechat. This conclusion was later confirmed when the bird was trapped and biometric measurements taken. S. maurus as a longer distance migrant than S.rubicola, would be expected to have a longer wing. For males this would be in the range 68-71mm. whereas the Gramborough bird measured only 65mm. Additionally, the axillary feather tract, although dark grey, was not considered to approach the black colour characteristic of S.maurus. The male remained at Gramborough Hill while undergoing the post-breeding moult and when this was complete, it was noted that the new rump feathers showed little or no white and the visible parts were finely streaked dark-brown. These features, postmoult, are again more characteristic of *rubicola* than *maurus*.

Regular observation of the Gramborough pair in April confirmed that the female was incubating a first clutch but no attempt was made to find the nest due to prolonged rain during the incubation period. Unfortunately, the eggs hatched during a particularly cold, wet spell and it was evident that the nestlings did not survive more than 48 hours. A second clutch was more successful, all 5 eggs laid hatched and the nestlings colour-ringed before fledging successfully. The nest, although in long grass, differed from that at Arnold's Marsh by being located at the end of a shorter and almost vertical tunnel and remarkably, survived being located within only a metre of a well-used path. Unlike the Arnold's Marsh birds, the Gramborough pair embarked on a 3rd brood but of the 6 eggs in the clutch, only 2 hatched but both nestlings fledged successfully after colour-ringing. Again, the nest was in long grass but this time with a vertical tunnel of over 15cms. in length. Observer coverage of this pair was much less relative to the Cley pair but there were reported sightings of at least 2 juveniles, from the 2nd brood, well away from the nest site which would indicate survival at least to post-fledging dispersal. Sightings at Weybourne Camp and on Blakeney Point of Stonechats colour-ringed in the nest at both Cley and Salthouse enabled their origin to be confidently established unlike that of the unringed juveniles which were also present at times. Although speculation, it could be that these un-ringed birds were from the Arnold's Marsh first brood.

Summary.

Archive research showed that detailed accounts of Stonechats breeding in Norfolk and in the Cley Square in particular, are not well documented. Perhaps the most complete account is given in *The Birds of Norfolk* (1999) but even here, no specific mention is made of breeding away from Kelling and Salthouse Heaths. This report details the successful breeding by single pairs of European Stonechat, *Saxicola rubicola*, at Arnold's Marsh, Cley and Gramborough Hill, Salthouse in 2012. In addition to the Ringing Details shown in the table, Nest Record data for each nest have been submitted to the British Trust for Ornithology for entry on to the National Database.

Distance Between and Orientation of Successive Nests.

Arnold's Marsh;	1 st and 2 nd	30m. at 162 degrees.
Gramborough Hill;	2 nd and 3 rd	10m. at 315 degrees.

Top Left	Bottom Left	Top Right	Bottom Right	Ring Number	Age	Site	Date
Brown	Dark Pink	Dark Green	Metal	L217140	2 c-y male	Arnold's Marsh	12/07/2012
Violet	Dark Blue	Dark Green	Metal	L217128	2 c-y male	Gramboro' Hill	18/06/2012
Yellow	Brown	Dark Green	Metal	L217133	Nestling 5/5	Arnold's Marsh	26/06/2012
Black	Dark Blue	Dark Green	Metal	L217132	Nestling 4/5	Arnold's Marsh	26/06/2012
Brown	Dark Blue	Dark Green	Metal	L217131	Nestling 3/5	Arnold's Marsh	26/06/2012
Dark Blue	Dark Blue	Dark Green	Metal	L217130	Nestling 2/5	Arnold's Marsh	26/06/2012
Dark Pink	Dark Blue	Dark Green	Metal	L217127	Nestling 5/5	Gramboro' Hill	01/06/2012
Dark Green	Dark Blue	Dark Green	Metal	L217126	Nestling 4/5	Gramboro' Hill	01/06/2012
Grey	Dark Blue	Dark Green	Metal	L217129	Nestling 1/5	Arnold's Marsh	26/06/2012
Lime	Dark Blue	Dark Green	Metal	L217125	Nestling 3/5	Gramboro' Hill	01/06/2012
Orange	Dark Blue	Dark Green	Metal	L217124	Nestling 2/5	Gramboro' Hill	01/06/2012
Pale Blue	Dark Blue	Dark Green	Metal	L217123	Nestling 1/5	Gramboro' Hill	01/06/2012
Dark Blue	Dark Pink	Dark Green	Metal	L217141	Nestling 1/2	Gramboro' Hill	22/07/2012
Dark Green	Dark Pink	Dark Green	Metal	L217142	Nestling 2/2	Gramboro' Hill	22/07/2012

Ringing Details.

Acknowledgments.

My grateful thanks go to the following:-

The National Trust and Natural England for permission to ring Stonechats at the two sites within Blakeney Point NNR.

Victoria Francis, Ed Stubbings and John Ebbage for expediting the bureaucratic process in their respective organisations.

Moss Taylor for negotiating with the British Trust for Ornithology an extension to the colour-ringing permission for Weybourne Camp and for sharing my enthusiasm for Stonechats. My thanks also for unrestricted access to his extensive bird record archive and field notes.

David and Pat Wileman for providing historic Stonechat records in the Cley Square and for constructive comments at the draft stage of this report.

Mark Golley and James McCallum for providing historic Stonechat breeding records from their personal observations.

John Wagstaff for his valued support in nest finding and ringing both on Kelling Heath and the coastal sites.

Perhaps my greatest debt of gratitude is to all those, both locals and visitors who continue to send me reports and digital images of their sightings of colour-ringed Stonechats. Without their interest, my time and effort would have been largely wasted.

Noel Elms. September 2012.