Stonechat Colour-Ringing Project; Kelling Heath, Norfolk 2009 - 2012

After retiring to North Norfolk in 1998, I began to notice just how different in appearance many of the breeding male European Stonechats, *Saxicola rubicola*, were compared to those I was familiar with in Hampshire. Formerly living in the north-east of that county and surrounded by heath land, I was ideally situated to form what has become almost a compulsive interest in Stonechats over the past 30 years.

The complexity and divisiveness of Stonechat taxonomy is well documented and at present, the BOU Records Committee treats the European Stonechat *Saxicola rubicola* as a species with 2 subspecies, nominate *S.r.rubicola* and *S.r.hibernans* and has yet to admit the nominate ssp. to the British List. The inference is therefore that *hibernans* is the ssp. to occur naturally and breed in Britain. The distinct lack of definitive criteria to reliably distinguish between the two ssp. and the fact that some taxonomists consider there is no justification either genetically or morphologically for the split, explains the BOURC's hesitation in my view.

An adult male European Stonechat of the ssp. *hibernans* in breeding plumage is described as having an all-black head, mantle and tail, white patches on the neck and inner-wing and orange-buff underparts. An adult breeding male of the ssp. *rubicola* is described as having the same all-black head, mantle and tail but the white on the neck and inner-wing is more extensive and may be visible on the rump and upper-tail coverts. The orange-buff on the underparts is said to be less extensive with white extending up the flanks, sides and lower breast. However, as a species acquiring the breeding plumage by abrasion, there is significant variation not only between individual birds but also in an individual with the passage of time between moults. This process of abrasion is accelerated in breeding birds and I have found Stonechats choosing to nest in dense heather particularly prone to feather wear. Plumage variation between individuals is further complicated by the fact that post-juvenile moult is partial only, thus much of the plumage of a Stonechat entering its first breeding season i.e. in its second-calendar year, could have been subjected to at least two month's extra wear if from an early brood.

Reports of sub-specific *Saxicola rubicola rubicola*-like Stonechats on passage and sometimes staying to breed in eastern and south-eastern England have increased in recent years and if for no other reason, the proximity of eastern and south-eastern England to mainland Europe makes the regular occurrence of Stonechats of Continental origin more than a likelihood. On the face of it, good reason for adding *S.r. rubicola* to the British List but the two ssp. are considered to intensively intergrade - at least around the intergrade zone. At present, the intergrade zone is considered to include north-west France, western Belgium and the Netherlands and there are those who believe there is a strong case to include parts of eastern and south-eastern England in that zone.

Clearly, many of the reports of *S.r.rubicola*-like Stonechats have been the result of careful observation by experienced observers and in some instances, supported by photographic images taken both in the hand and in the field but the only option currently available to those attempting to identify European Stonechats to ssp. level in the field would appear to be, in simple terms, to make a visual assessment of the extent and the location of white in the plumage of the male. A bird in the hand can be no more revealing, the same subjective plumage assessment applies and differences in the length of wing, tail and bill are only a millimetre or so and subject to overlap between the two ssp. The ssp. *rubicola* is said to have under-wing coverts and axillaries of a darker grey than *hibernans* but this feature is probably of limited use except when dealing with extremes. If the observer is fortunate enough to have simultaneous comparison with another specimen, it would be

reasonable to state that one or the other is more or less *rubicola*-like as the case may be. In summary, although the extremes may be separable, going further than that is not possible with any conviction in my view.

Eventually, my curiosity prompted me to start a colour-ringing project on Kelling Heath in 2009 with the aim of maybe tracing the origin of these birds which were claimed by some observers to be of the Continental form *Saxicola rubicola rubicola* or even in the case of some individuals, of the closely related but separate species Siberian Stonechat *Saxicola maurus*. Since colour-ringing of nestling and breeding adult Stonechats commenced in North Norfolk in 2009, 17 pairs have been proven to breed and of these 12 males and 8 females have been trapped and examined in the hand. With such a small sample size and without the benefit of simultaneous comparison, it is considered that there is insufficient evidence to reliably assign a ssp. to any of the birds examined.

A second-calendar year male trapped and examined in 2010 while raising a second brood on Kelling Heath, was recorded as showing extensive areas of white in the plumage accompanied by heavy abrasion throughout. Without simultaneous comparison with another specimen, no reliable conclusion could be drawn as to the shade of grey of the axillary tract and the wing length was also inconclusive. Additional note was also made of the bird's unusually 'black and white' appearance in the field. The bird returned the following year, now in full adult male plumage and was described as a 'stunning bird' by more than one observer but did not find a mate. Attempts to re-trap this bird were unsuccessful but it was noted from field notes that this bird again was considered to be noticeably 'black and white' particularly when simultaneously compared in the field with the 2 other males present on Kelling Heath during the 2011 breeding season.

A second-calendar year male Stonechat breeding at Gramborough Hill, Salthouse in 2012 was initially identified by some observers as a Siberian Stonechat, *Saxicola maurus*, mainly it is believed due to the generally ' black and white' appearance and the extent of white on the rump. The bird was subsequently trapped and examined in the hand and while the axillary tract colour was a dark grey, insufficiently dark to be considered as *S.maurus* but perhaps more significant was the wing length of 65mm. which did not approach the expected 68-71mm. of any Siberian ssp. likely to be found in the Western Palearctic. The male remained at Gramborough Hill while undergoing the postbreeding 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, post-moult, are again more characteristic of *rubicola* than *maurus*.

Summary.

A total of 12 male and 8 female European Stonechat, *Saxicola rubicola* breeding in North Norfolk (which includes birds breeding on the coast at Cley, Salthouse and Weybourne) between 2009 and 2012 inclusive were trapped and examined in the hand but without established and definitive criteria to reliably separate the 2 ssp., it was considered that no credible conclusion could be drawn from any of the birds examined in the hand. In addition to the adult birds referred to above, a total of 62 Stonechats were ringed in the nest on Kelling Heath and apart from a sibling pair which remained on Kelling Heath after fledging, none returned to the Heath to breed but individuals were subsequently recorded breeding at sites as far apart as Weybourne, Kelling Quags, Salthouse, Cley and Dersingham Bog.

No Stonechats were proven to breed on Kelling Heath in 2013 and again in 2014, presumably due to a reduction in numbers caused by a succession of harsh winters affecting the survival of the populations breeding in North Norfolk, so it was considered an appropriate moment to bring the project to an end.

Acknowledgements.

Undertaking any colour-marking project is seldom successful without the help of others and I'm grateful to the late Paul Adams for the many hours he spent helping me to find nests. John Wagstaff has been a tower of strength throughout both in nest finding and assistance during the ringing process. Moss Taylor provided a valuable input by colour-ringing the Stonechats he encountered at Weybourne and kindly shouldered the burden of registering the project with the BTO. Graham Austin at the BTO, provided a choice of colour-combinations from his Stonechat project database for me to use.

Perhaps my greatest debt of gratitude is to all those, both locals and visitors who sent me literally hundreds of reports and digital images of their sightings of colour-ringed Stonechats. Without their interest, my time and effort would have been largely wasted. All these reports have been summarised and published in the monthly updates to "Ringed Birds in the Cley Square" and I'm grateful to David and Pat Wileman for making this facility available.

NOTE: A more scholarly dissertation on the likely provenance of the *rubicola*-like Stonechats seen in North Norfolk was provided by Marcus Nash in the 2012 issue of the Norfolk Bird Report which I commend to those with an interest in these enigmatic birds.

Noel Elms.

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