# Status, distribution, ecology and behaviour of White-tailed Stonechat Saxicola leucura in Nepal with reference to Indian subcontinent

## Hem Sagar Baral

Himalayan Nature, PO Box 21016, Nil Saraswatithan, Lazimpat, Kathmandu, Nepal. Email hem@himalayannature.org

#### Introduction

White-tailed Stonechat *Saxicola leucura* was first described to science in 1847 by Blyth from a specimen collected from upper Scinde (=Sind) (Blyth 1847). It is near endemic to the Indian subcontinent (Ripley 1982, Roberts 1992) where, it is recorded in the three major river systems Indus, Ganges and Brahmaputra (Ali and Ripley 1987). Four countries within our region; Pakistan, India, Nepal and Bangladesh have White-tailed Stonechat. Although not yet recorded in Bhutan, this is likely to occur along larger river courses. Outside our region, White-tailed is found also along the Irrawaddy River systems in Myanmar (Robson 2000, Urquhart and Bowley 2002).

Although a locally common species at various places in our region, status of this bird is poorly known. In this paper I try to find out the current status and distribution of the species in Nepal with a reference to the Indian subcontinent.

#### **Field Characters**

Adult male is very similar to Common Stonechat *Saxicola torquata* but with darker head, back and wings. The inner webs of all but central tail feathers are largely white; as a result shows much white on tail in flight and also when alighted on perch, although this feature is not usually apparent when at rest. The rusty patch on the breast is limited to upper part and usually does not flow to the belly and flanks. Adult female is similar to female Common Stonechat but much greyer body in general (Common Stonechat has rufous wash). Juvenile birds are similar to female but with scales/barring on the breast, wing, back and on head. Juvenile birds have feathers with broad buff fringes therefore giving them mottled effect. They look darker and slightly more rufous than adult females.

No subspecific variations are known to occur at present. However Grimmett et al. (1998) mention birds from Manipur are darker and may resemble a different subspecies. Similarly, Roberts (1992) writes in Pakistan specimens rufous area on the breast is almost a blood red. Further work is needed on this field to find out the extent of variation and presence of any subspecific status.

#### Distribution and status

In the Indian subcontinent, White-tailed is resident, subject to local movements, found west from Indus River system in Pakistan, and in Ganges River system from Punjab, India, east through the Nepal terai to Assam and Manipur in the Brahmaputra River systems as well as south to N Orissa (Ali and Ripley 1987, Roberts 1992, Grimmett et al. 1998, Urquhart and Bowley 2002). It is described as 'very restricted and scarce in Pakistan' (Roberts 1992). In India, it is locally fairly common in the terai (Grimmett et al. 1998). Based on some previous notes and widespread loss of grassland habitat, this species may have significantly declined in India. For example I quote Jerdon (1863): "Found it far from rare at Thyet-myo in Upper Burmah, frequenting grassy churrs on the Irrawaddy, but never in the low jungles that lined the banks. Somewhat to my surprise I found it most abundant in the Gangetic valley, from

Rajmehal (=Rajmahal) to Monghyr (=Munger, Bihar, India), frequenting fields and long grasses. It is a permanent resident, and breeds here; for I found the young birds just flown in April, but did not succeed in procuring the nest. On referring to Buchanan Hamilton's MSS. notes I find that he has confounded it with the last, for writing of *rubicola*, he says that he has found them breeding in the Bhagulpore (=Bhagalpur) and Gya (=Gaya) districts, making their nests among thick tufts of grass, but whether attached to the grass, or on the ground, he does not state. He gives the native name as *Kat-pidda*."

Rajmahal, Munger, Bhagalpur and Gaya may not have any White-tailed Stonechat habitat left. Jerdon (1863) compares the status of the bird in Upper Myanmar (Burma) compared to that of Gangetic plains and writes how abundant the birds were in the latter localities. This is not true anymore as grassland habitat is converted to agriculture field or has been developed to build other physical structures in these areas.

In Nepal, it is regularly recorded at Koshi Tappu, Koshi Barrage, Chitwan, Bardia and Sukila Phanta (Inskipp and Inskipp 1991, Baral 2001). It has once been recorded at Pokhara at 915m, which is unusually high altitude record for the species (Choudhary 1996). More than 90% of current population in Nepal is found in protected areas. This means that outside the protected areas, its habitat is lost. The loss of grassland habitat in the country has made the species as nationally threatened (Baral and Inskipp in prep.).

The current status of this bird in Bangladesh is not clearly known. Formerly it was found to be resident (Ali and Ripley 1987). Grimmett et al. (1998) mention White-tailed possibly a vagrant to the country.

Outside our region, it is described as locally fairly common resident in N (south-east), E, S Myanmar (Robson 2000). Although described as locally fairly common looking at the widespread loss of habitat elsewhere, this species must have suffered population decline also in Myanmar. Future surveys in Myanmar are urgently needed to establish status of this and several other species.

#### Habitat

Although similar in appearance and habit as to the Common Stonechat, it is distinctly segregated from the latter in terms of habitat utilization. White-tailed Stonechat is an obligate grassland bird found mostly in and around *Saccharum spontaneum* grassland (Baral 2001). In Koshi Tappu and Chitwan, it is also noted in *Saccharum spontaneum* and *Typha elephantine* grasslands. Roberts (1992) gives similar account for the species' habitat in Pakistan. In Nepal, it is highly restricted to riverine or large phantas of grasslands and is found in grasslands along large rivers such as Narayani, Karnali, Rapti, Mahakali, and Koshi. This is not found in overgrazed grasslands. The average sward height of grasses needed to be at least half a meter preferably over a meter for the species to occur. In phantas at Chitwan and Sukila Phanta, it showed preference for grasslands with considerable open patches. This confirms with observations made by W. G. Harvey near Delhi (cited as W. G.

Harvey in litt 2001 in Urquhart and Bowley 2002). In Sukila Phanta, more birds were located after cutting and burning of the main phanta. Whether this is what birds really like or there was better detectability when the grasses were thin- is not clearly understood.

#### **Ecology**

It performs only very local movements probably for breeding. In summer, in many places this is found in close proximity with Pied Bush Chat *Saxicola caprata*, although for the latter a habitat with more woody species and shrubs are required. In winter, I have witnessed White-tailed Stonechat with other 5 species of *Saxicola* nearby. The other five species being Common Stonechat, Pied Bushchat, Grey Bushchat *Saxicola ferrea*, Hodgson's Bushchat *Saxicola insignis* and Jerdon's Bushchat *Saxicola jerdoni*. Of all these species, in terms of habitat ecology White-tailed is most closely associated with Hodgson's Bushchat followed by Common Stonechat.

White-tailed is mostly found in loose pairs, singles are rarer. Its behaviour is similar to that of Common Stonechat and Hodgson's Bushchat. Adult males along the river courses are found spaced apart at least by 200 meters. The densest concentration of White-tailed may be in the proper Sukila Phanta where more than 100 birds could easily be found.

#### **Breeding**

It has been found breeding in grasslands of Koshi (including Koshi Tappu), Chitwan and Sukila Phanta. It possibly breeds also in Royal Bardia National Park but confirmation is desirable. Nests have been found at Sukila Phanta in both December and May, which may indicate two breeding seasons or possibly that it has a single, more extended breeding season than elsewhere. Ali and Ripley (1987) suspected double broods in a year. Further work is needed to confirm this.

#### **Conservation Outlook**

As White-tailed Stonechat is near endemic to the Indian subcontinent, it is our responsibility to keep a close watch on the status and ecology of this species. This will enable us to understand the species better and if needed to alert the like-minded organizations and individuals for its conservation. Due to loss of tall riverine grasslands, which is the exclusive habitat for this species, White-tailed population has declined in Nepal (Baral 2001). As a result, the species has been included in the national red data book on birds (Baral and Inskipp in prep.). Elsewhere in its range, at least in Bangladesh and Pakistan, it is considered rare and vagrant (Roberts 1992, Grimmett et al. 1998). A true assessment of its status in India and Myanmar will be priority work for species conservation. It is likely these countries may hold most of the global population of White-tailed Stonechat.

### Acknowledgements

I would like to thank The VSA Trust of the Netherlands for sponsoring the study. My sincere thanks are to Lt Col. Hikmat Bisht, Silent Safari Pvt Ltd, Gaida Wildlife Camp Pvt Ltd and Koshi Camp Pvt Ltd for logistical support. I would like to thank Bishnu Mahato and Badri Choudhary for assistance in the field.

#### References

Ali, Salim and S. D. Ripley. 1987. *Handbook of the birds of India and Pakistan*. Compact Second edition. Bombay: Oxford University Press.

Baral, H. S. 2001. *Community structure and habitat association of lowland grassland birds in Nepal*. University of Amsterdam, The Netherlands. Ph.D thesis Published?

Baral, H. S. and Carol Inskipp. in prep. The state of Nepal's birds 2004.

Blyth, E. 1847. Notices and descriptions of various new or little known species of birds. *J. Asiat. Soc. Bengal* 16: 117-157.

Choudhary, H. 1996. Additional Sightings! *Bird Conservation Nepal Bull*. 5(2): 2-3.

Grimmett, R., Carol Inskipp and Tim Inskipp. 1998. *Birds of the Indian subcontinent*. London: Christopher Helm.

Inskipp, C. and Inskipp, T. P. 1991. *A guide to the birds of Nepal*. 2<sup>nd</sup> edition. London: Christopher Helm.

Jerdon, T. C. 1863. The birds of India. Calcutta.

Ripley, S. D. 1982. *A synopsis of the birds of India and Pakistan*. 2<sup>nd</sup> edition. Bombay: Bombay Natural History Society.

Roberts, T. J. 1992. *The birds of Pakistan*. Vol. II. Oxford University Press, Karachi.

Robson, C. 2000. A field guide to the birds of south-east Asia. New Holland, UK.

Urquhart, E. and Bowley, A. 2002. *Stonechats: A guide to the Genus* Saxicola. Christopher Helm, London.

## A Bibliographic Index to the Birds of the Indian Subcontinent

CD-ROM compiled by Aasheesh Pittie

This keyword-based bibliographic database covers:
Afghanistan, Bangladesh, Bhutan, Burma, India,
Maldives, Nepal, Pakistan, Sri Lanka, and Tibet.
It is an indispensable reference tool for ornithologists,
amateur birdwatchers, research scholars, faculty
of universities, editors of ornithological journals,
newsletters, etc.

Price: India: Individuals: Rs600/-; Institutions: Rs1200/(Add: Postage: Rs50/-; outstation cheques Rs25/-)
For general enquiries and foreign sales contact:
Aasheesh Pittie, 8-2-545 Road No. 7, Banjara Hills,
Hyderabad 500034, India. Email: aasheesh@vsnl.in