# **Threatened Species of the Northern Territory**

## **YELLOW CHAT**

## (Alligator Rivers subspecies)

## Epthianura crocea tunneyi

#### Conservation status

Australia: Vulnerable

Northern Territory: Endangered



Yellow chat. (Photo: M. Armstrong)

## Description

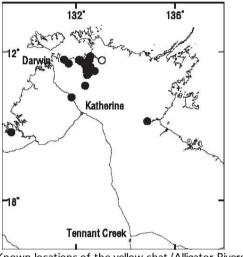
The yellow chat is a small bird that typically forages on the ground, in dense grass or in low shrubs. The male is a bright golden-yellow, with a prominent black chest band. The female is pale lemon yellow, and has no chest band.

### Distribution

Yellow chats occur patchily across northern Australia, most typically in chenopod shrublands and grasslands around water sources in semi-arid areas. However, the subspecies Epthianura crocea tunneyi is restricted to a small geographic area encompassing the floodplains from the Adelaide River to the East Alligator River (Schodde and Mason 1999), and within this area it is known from only a small number of sites (Armstrong 2004). There have been recent (2005, 2006) records from Harrison Dam.

Conservation reserves where reported:

Harrison Dam reserve, Kakadu National Park, Mary River National Park.



Known locations of the yellow chat (Alligator Rivers subspecies).

 $\square$  = pre 1970; •= post 1970.

## **Ecology**

Yellow chats have been reported from tall grasslands and samphire shrublands (on coastal saltpans).

Most records of the Alligator Rivers subspecies are from floodplain depressions and channels, concentrating around wetter areas at the end of the dry season (Armstrong 2004). The diet is mostly invertebrates (Higgins et al. 2001).

Yellow chats typically occur in small groups of 2-10 individuals.



#### Conservation assessment

For this endemic Northern Territory subspecies, Garnett and Crowley (2000) estimated the extent of occurrence as 500 km2, area of occupancy at 100 km2, and the total number of breeding birds as 500.

However, these estimates are of relatively low reliability. The subpopulation structure is unknown:

Garnett and Crowley (2000) considered there was only one subpopulation, but it may be that there are small resident subpopulations in the floodplain system associated with each river system in the Adelaide to East Alligator area

The most systematic assessment of the status of this subspecies (Armstrong 2004) considered that it met the criteria B1ab, B2ab and C2a for Endangered:

- extent of occurrence <5000km2;</li>
- severely fragmented;
- continuing decline in habitat quality;
- population fewer than 2500 mature individuals;
- continuing population decline; and
- no sub-population estimated to contain more than 250 mature individuals.

#### Threatening processes

The preferred floodplain habitats are being altered by invasion of exotic plant species (notably by Mimosa pigra, para grass Brachiaria mutica and gamba grass Andropogon gayanus) and vegetation change due to grazing by buffalo and cattle, by wallowing and rooting by pigs, and by altered fire regimes. Saltwater intrusion and sea-level rise may further consume preferred habitat. Feral cats may reduce reproductive success. Of these possible threats, Armstrong (2004) considered that habitat degradation by pigs was the most serious.

## Conservation objectives and management

The principal research priorities are to:

(i) provide more informed estimates of population size, distribution, patterns of movement, habitat

preference and response to the putative threatening processes.

### Management priorities are to:

- (i) maintain extensive areas of suitable habitat, most likely through control of exotic plants;
- (ii) develop a monitoring program (this may be most readily based on the survey undertaken by Armstong (2004) in Kakadu National Park).

### Compiled by

John Woinarski Martin Armstrong [May 2006]

#### References

Armstrong, M. (2004). The yellow chat Epthianura crocea tunneyi in Kakadu National Park. Report to Parks Australia (North). (NT Department of Infrastructure Planning and Environment, Darwin.)

Garnett, S.T., and Crowley, G.M. (2000). The action plan for Australian birds. 2000. (Environment Australia, Canberra.)

Higgins, P.J., Peter, J.M., and Steele, W.K. (eds) (2001). Handbook of Australian, New Zealand and Antarctic birds. Volume 5. Tyrant-flycatchers to Chats. (Oxford University Press, Melbourne.)

Schodde, R., and Mason, I.J. (1999). The Directory of Australian Birds: Passerines. (CSIRO, Melbourne.)