

EURASIAN BITTERN (BITTERN) | *Botaurus stellaris*

RE Simmon | Reviewed by: AJ Williams



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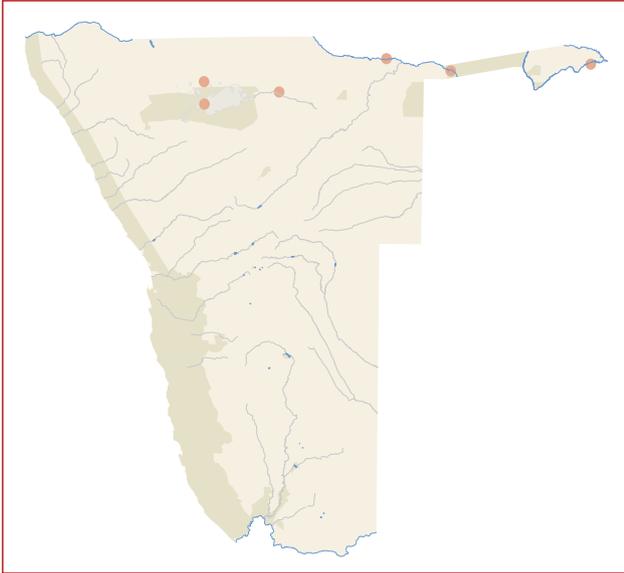
Conservation Status:	Critically Endangered
Southern African Range:	North-east Namibia, northern Botswana, north-east South Africa
Area of Occupancy:	1,000 km ²
Population Estimate:	Unknown (estimated at fewer than 50 individuals)
Population Trend:	Assumed to be declining
Habitat:	Dense reeds, grasses, ephemeral wetlands
Threats:	Wetland degradation



DISTRIBUTION AND ABUNDANCE

The subspecies *Botaurus stellaris capensis* is found in south-central Africa, particularly Zambia, and is isolated from the nominate subspecies found throughout the Palearctic and Holarctic in increasingly smaller numbers (del Hoyo *et al.* 1992). Its range in southern African is extremely limited. Birds are found in the Okavango Swamps, at a few well-studied wetlands in northern South Africa (e.g. Nylsvlei), and from wetlands along the KwaZulu-Natal coast of South Africa (Allan

1997b). Several populations in South Africa and Lesotho are known to have gone extinct (Brooke 1984) through wetland degradation. In Namibia, it has been recorded in just four places in the last 34 years. These are Etosha National Park, the Chobe River (near Salambala Conservancy), the Mahango area of Bwabwata National Park on the Okavango River (Allan 1997b) and as a visitor to Tsutsab Vlei, 60 km north-east of Tsumeb (Friederich & Friederich 2001). Birds have also recently been heard from the Rundu Sewage works (C Boix-Hinzen pers. comm.). Three historical records stem



from the Otavi-Grootfontein area (Winterbottom 1971, Williams 1985). No birds were recorded by wetland observers between 1990 and 2002, despite extensive surveys on the Chobe, Okavango and Zambezi rivers and in ephemeral wetlands such as Nyae Nyae Pans, and there are no known nesting records (Hines 1993, Simmons *et al.* 1998a, Jarvis *et al.* 2001). It occupies an area of 1,000 km², of which 73% occurs in conservation areas.

The global breeding population of the Eurasian Bittern is thought to be about 5,000 birds and is declining (Wetlands International 2002). Its highly secretive nature and dense reed habitat make it likely that it is overlooked in some areas. It is estimated that between 50 and 100 birds occur in Namibia in years of good rains. Given that it prefers shallowly flooded freshwater swamps (Allan 1997b), it probably occurs in the Linyanti Swamps and the Zambezi floodplains of the Zambezi region, although it has yet to be recorded there.



ECOLOGY

While it prefers ephemeral over perennial swamps (Tarboton *et al.* 1987) and especially shallowly flooded freshwater sites (Taylor 2000), it is found in the Okavango Delta. It occurs there in extensive papyrus swamps wherever there is dense emergent vegetation (Allan 1997b). In other areas of Africa, it is found in rice fields, grass and papyrus (Brown *et al.* 1982, Tarboton *et al.* 1987). Its secretive nature is betrayed only by the male's low booming song early in the breeding season, and this is the main method of censusing this species. Males in the Okavango Swamps boom from April to June, the period of peak flooding (Allan 1997b). In South Africa, nests with eggs were recorded from the Nyl River in January and Blesbokspruit in September (Tarboton *et al.* 1987). About 10 to 20 males are found in an area of 160 km² (Tarboton *et al.* 1987). It may be dispersive in

southern Africa, judging from its fluctuating occurrence in Nylsvlei, South Africa and the ephemeral Tsutsab Vlei in Namibia (Friederich & Friederich 2001), and the occurrence of birds away from suitable habitat (Allan 1997b). Bitterns feed on fish (including eels), insects and crustaceans, and less often on snakes, lizards, birds and their eggs. At Tsutsab Vlei, where Eurasian Bitterns are visitors, the main fish in the pan is the Sweet Water Barbel *Clarias sp.* (Friederich & Friederich 2001). They usually feed alone in well-hidden locations, and are most active in the evening and at night (del Hoyo *et al.* 1992).



THREATS

Given its dependence on pristine or ephemerally flooded wetland habitat, the main threat to this species is the degradation of such wetlands. An example of a potential future threat is the abstraction of water from the Karst region around Tsumeb. Extraction of water at NamWater boreholes and mine shafts threatens to lower the water table by up to 55 m over a 15 km radius in the Abenab region. This catchment area feeds the Omuramba Owambo (Christelis & Struckmeier 2001) that flows into Fischer's Pan, where Eurasian Bitterns have been recorded. Local knowledge (Friederich 2004) shows that despite strong rains in 1999 and 2000 (of over 1,000 mm in one case) and despite flowing four times, it did not reach Fischer's Pan in that year. Extraction of water in the Karst region could further reduce the amount of water that reaches the pan. The overall influence of water extraction on the habitat – and thus the Eurasian Bittern population – is unknown because no research has been undertaken there. This should be a priority research area.



CONSERVATION STATUS

This subspecies is classified as *Critically Endangered* because it is exceedingly rare everywhere, with probably fewer than 100 birds in Namibia. For this reason, it should be given *Specially Protected* status in Namibia. Systematic surveys may reveal greater numbers than presently estimated. It is not classified as globally threatened (IUCN 2012a).



ACTIONS

Urgent research is required for this species to assess its numbers, breeding output and dispersal patterns (Taylor 2000). Surveys should focus on areas where it is likely to occur, such as the Linyanti floodplains, the Omuramba Owambo and the ephemerally flooded wetlands in the Tsumkwe area of the Nyae Nyae Conservancy. Because of its crepuscular nature and booming call, surveys should be focused on auditory cues at the appropriate time of day (mornings and evenings).