Notes on the breeding biology of the Loango Weaver *Ploceus subpersonatus* and its adaptation to urban habitats

by Guillaume Passavy

Les Concizes, 63390 Chateauneuf-les-bains, France. <passavy@netcourrier.com>

Received 14 March 2011; revised 4 August 2011.

Summary

From 2007 to 2009, the Loango Weaver was regularly observed in and around Port-Gentil, Gabon. One nest was found in a *Eucalyptus* tree, another in farmland close to an industrial area. Two juveniles were fed boiled rice by an adult male in a suburban garden. Loango Weavers can thus breed in suburban areas. The nest and the plumage detail of two juveniles of the Loango Weaver are described for the first time.

Résumé

Notes sur la reproduction du Tisserin à bec grêle *Ploceus subpersonatus* et son adaptation à un milieu urbain. De 2007 à 2009, le Tisserin de Loango a été observé régulièrement dans la ville de Port-Gentil et ses environs. Un nid a été trouvé sur un *Eucalyptus*, un autre dans des champs situés à proximité d'une zone industrielle. Deux jeunes ont été nourris de riz bouilli par un male adulte dans un jardin de banlieue résidentielle. Ces éléments prouvent que le Tisserin de Loango est capable de se reproduire dans une zone urbanisée. Sont décrits pour la première fois le nid et le détail du plumage de deux juvéniles du Tisserin de Loango.

Introduction

The Loango Weaver is an endemic resident of the Atlantic coast from Gabon to Northern Angola, recorded historically from Cabinda (Dean 2000) in Angola, along the Congo River in DRC (Chapin 1954) and coastal Gabon (Rand *et al.* 1959). Regarded as Vulnerable on the IUCN Red List (Birdlife International, 2000), it was formerly considered rare, although recent sightings suggest that this is not the case, and that it occurs over a wider distributional range than previously thought. It is now known in Gabon from Akanda National Park (Christy 2001) and the Port-Gentil area (Sargeant 1993), in the Congo from Pointe Indienne, Pointe Noire (Bulens & Dowsett

2001) and 3 km west of Fouta (one male on 6 Apr 2008, pers. obs.). There is also a recent record from Soyo in Northern Angola (Dean & Le Maitre 2007).

The Loango Weaver is poorly known (Collar & Stuart 1985), and occurs in swamp forest, mangroves and savanna margins (Fry *et al.* 2004), secondary habitats near water and seasonal swamps (Bulens & Dowsett 2001), mainly in the vicinity of small patches of swamp forest surrounded by savanna (*e.g.* on Mandji Island, Gabon, pers. obs.). The presence of water seems to be common to all the habitats frequented by the Loango Weaver. It has been recorded to nest on *Caesalpinia bonduc* (Birdlife Inter-national 2000), on the Black Mangrove tree *Avicennia nitida*, on *Chrysobalanus icaco* (a small tree of coastal savannas), and most frequently on the palm *Phoenix reclinata*, which seems to be its favoured nesting tree in natural habitat (P. Christy pers. comm.). However, the Loango Weaver has not been recorded nesting on *Rhizophora* (P. Christy pers. comm.) although the birds occur in habitat adjacent to *Rhizophora* mangroves.

There is apparently no published information about the breeding period of the Loango Weaver. It is estimated, but without documented records, as from September to March and May for nest building, and from July to August and October to March for the begging immatures (Alexander-Marrack 1990). The eggs are reported to be "pink, spotted with brown" and the nest to "resemble those of *Ploceus nigricollis*" (Alexander-Marrack 1990), which seems to be the first known description of its eggs and nest. The soft parts of the female have also not been described. In this note I present some observations, made from 2007 to 2010, on the breeding biology of the Loango Weaver and its occurrence within suburban areas.

Results

On 25 Jul 2007, a nest of Loango Weaver was found under construction by a male and a female (Fig. 1), and another complete nest was found a few meters away (Fig. 2), in degraded farmland several hectares in area. These are the first published pictures of Loango Weaver nests. The nests were attached to a small White Mangrove *Laguncularia racemosa*, 1.5–2 m above water in a 2-m wide drainage ditch. The nest site was 100 m from one of the main roads at Port-Gentil, between the airport track and a residence for timber workers. A male was frequently seen in the early mornings flying over the road towards his nest, until the farmland was cleared early 2009.

On 13 Dec 2009, a male and female Loango Weaver were seen to leave another nest (Fig. 3) in a mixed patch of mangroves, savanna, native swamp forest and introduced *Eucalyptus* forest at the northern part of Cap Lopez. The nest was also 1.5 m above water, attached to a *Eucalyptus* tree.

Both completed nests had a retort shape (Figs 2 and 3), quite similar to those of *Ploceus nigricollis* (Fry *et al.* 2004, p. 117, type B) but with a shorter entrance tube. They both had a spherical chamber of *c.* 10 cm in diameter, with a vertical entrance

tube 10 cm long and *c.* 4–5 cm in diameter. Both were made of grass, mainly dry leaves but also some thin and flexible stems. The nests were not tightly woven, and presented a somewhat loose appearance from the outside.

On 31 Oct 2009, a male and two juvenile Loango Weavers were observed in a residential area of Port-Gentil, feeding on boiled rice put out for garden birds. The male also fed the juveniles with boiled rice, although the juveniles fed by themselves on rice on the ground. At least one juvenile constantly begged for food when the male was close, and regularly flicked its wings while doing so. This juvenile (Fig. 4: first published picture of a juvenile Loango Weaver) had a pale pink gape. It was olive on the back, upper wing-coverts and the top of the head, with a smooth transition to the yellowish face. The underparts were yellowish as well, with a slightly paler throat. The wings and tail were greyer and much darker than the upperparts, with olive-yellow fringes, broader on the tertiaries than on the secondaries and primaries. The bill and legs had a greyish pink (horn) colour. The juvenile Loango Weaver is thus very similar to the juvenile Black-necked Weavers *P. nigricollis brachypterus* observed in the area, but the latter have a paler, slightly longer and slightly thinner bill, as well as a blackish forecrown and a faint black eyebrow.

The other juvenile was apparently older than the first one. It fed most often by itself and did not show an obvious gape. It was olive overall, including the underparts and face, which gave it a darker appearance than the first bird. The wings and tail had the same darker greyer colour with olive-yellow fringes, but the fringes were more apparent on the secondaries and primaries. The bill and legs were darker, pinkish grey.

These descriptions match the available descriptions of the immature Loango Weaver, which is “as adult female, but with darker, dull olive forehead, and paler, brownish bill” (Borrow & Demey 2001), “duller than female, with brown bill” (Del Hoyo *et al.* 2010) and with a “paler bill” (Sinclair & Ryan 2003)

The juveniles were able to fly short distances but were not very mobile. These observations were made 100 m from the seashore but within the town of Port-Gentil, and 1 km away from the closest undisturbed area. The area includes many gardens, some vacant lots and also one 5-m wide drainage waterway. Other birds at the feeding site were two Red-Eyed Doves *Streptopelia semitorquata*, two Laughing Doves *S. senegalensis*, two Common Bulbuls *Pycnonotus barbatus*, two Grey Sparrows *Passer griseus*, five Bronze Mannikins *Spermestes cucullata*, and three Slender-billed Weavers *Ploceus pelzelni*. No competition for food or any interactions were observed between those species and the Loango Weavers. A few months earlier, an adult male Loango Weaver was seen occasionally feeding on rice at the same place.

Finally, on 15 Aug 2009 at Cap Lopez, a few km from Port Gentil, one female Loango Weaver was observed feeding a juvenile sitting on small bushes, at the edge between a swamp forest and a freshwater swamp. The juvenile was similar to that pictured in Fig. 4, but with a slightly paler bill. The female had a black bill, pinkish-grey legs and feet, and pale horn claws. This appears to be the first description of the female soft part colours.

Figure 1. Male Loango Weaver building a nest, July 2007.

Figure 2. Nest of Loango Weaver on *Laguncularia racemosa*, July 2007.

Figure 3. Nest of a Loango Weaver on a *Eucalyptus* tree, December 2009.

Discussion

The breeding dates (begging immatures August and October, nest visit in December) are mostly consistent with the previous observations mentioned above (Alexander-Marrack 1990). The July nest building date is also not unexpected given the observations of begging immatures in August and from October to March (Alexander-Marrack 1990). The breeding season thus seems to be either irregular or spread throughout the year, and it is difficult to deduce a clear breeding pattern from the scarce available data. An irregular pattern would not be an isolated case in the area,

Figure 4. Juvenile Loango Weaver feeding on rice.

since the Black-necked Weaver may breed in most months in Gabon, although with reduced activity during the dry season from June to September (Del Hoyo *et al.* 2010).

The Loango Weaver has been shown to live in secondary habitats such as the vegetation surrounding small coastal villages (Birdlife International 2000) and has been observed feeding on bread in small cities like Omboue and Sette Cama (P. Christy pers. comm.). This suggests that Loango Weavers can live close to settlements. They quite possibly nested in the Port-Gentil suburbs in 2009: the two juvenile Loango Weavers observed there were not very good fliers. There was also open water in the surroundings due to a drainage waterway, and thus it is likely that Loango Weavers are able to find favourable nesting conditions in the disturbed habitats of the Port-Gentil suburbs.There is apparently no strict preference for a particular tree species for nest sites, since several species, including one alien species (*Eucalyptus* sp.) were used as nest sites.

In Port-Gentil, most of the suburban area is well-vegetated and humid. The high-class residential areas contain a lot of gardens, and the allotments of labourers that expand into regularly flooded areas often allow the original vegetation of freshwater swamps to remain, with in consequence species not often found close to development, such as African Jacana *Actophilornis africanus* or Little Bittern *Ixobrychus minutus* occurring alongside the houses (pers. obs.). One of the most common urban species in Port-Gentil is the Slender-billed Weaver, which has been considered to form a superspecies (Hall & Moreau 1970) or a species group (Sibley & Monroe 1990) with

the Loango Weaver. Slender-billed Weavers, restricted in West Africa to mangroves and marshes along coastal lagoons and river banks (Borrow & Demey 2001) can be found almost everywhere in the town and have apparently managed to adapt well to urban conditions there. Similarly, the Loango Weaver may be able to survive, perhaps at lower densities, inside an urban or suburban area.

However, it is not known whether the Loango Weaver is able to develop a viable population inside an urbanized area. The swamp forest of Cape Lopez, its core nesting area on Mandji Island, is threatened by the expansion of Port-Gentil (Birdlife International 2000) and should be kept in good condition to maintain the natural breeding sites and ensure the survival of the Loango Weaver on the island. More details on the ecology and breeding biology of the Loango Weaver are required to assess its exact ecological needs before concluding that it has indeed adapted well enough to survive as a viable population in urban habitats, or to revise its currently "Vulnerable" status.

Acknowledgments

I would like to thank particularly Patrice Christy for his advice and unpublished communications on the Loango Weaver.

References

ALEXANDER-MARRACK, P.D. (1990) *Bird List for Mandji Island*. Unpublished; electronic copy available from me on request.

BIRDLIFE INTERNATIONAL (2000) *Threatened Birds of the World*. Lynx, Barcelona.

BORROW, N. & DEMEY. R. (2001) *Birds of Western Africa: an Identification Guide*. A. & C. Black, London.

BULENS, P. & DOWSETT, R.J. (2001) Little-known African bird: observations on Loango Slender-billed Weaver *Ploceus subpersonatus* in Congo-Brazzaville. *Bull. Afr. Bird Club* 8: 57–58.

CHAPIN, J.P. (1954) *The Birds of the Belgian Congo. Part 4. Bull. Amer. Mus. Nat. Hist.* 75B: 316–317.

CHRISTY, P. (2001) Gabon. Pp. 349–356 *in* FISHPOOL, L.D.C., & EVANS, M.I. (eds) *Important Bird Areas in Africa and its Associated Islands: priority sites for conservation*. Pisces, Newbury.

COLLAR, N.J., & STUART, S.N. (1985) *Threatened Birds of Africa and Related Islands*. International Council for Bird Preservation, Cambridge.

DEAN, W.R.J. (2000) *The Birds of Angola*. Checklist 18, British Ornithologists' Union, Tring.

DEAN, W.R.J. & LE MAITRE, D.C. (2007) The birds of the Soyo area, northwest Angola. *Malimbus* 30: 1–18.

DEL HOYO, J., ELLIOTT, A., CHRISTIE, D.A. (eds) (2010). *Handbook of the Birds of the World*, vol.15. Lynx, Barcelona.

FRY, C.H., KEITH, S. & URBAN, E.K. (eds) (2004) *The Birds of Africa*, vol. 7. Academic Press, London.

HALL, B.P. & MOREAU, R.E. (1970) *An Atlas of Speciation in African Passerine Birds*. British Museum (Natural History), London.

RAND, A.L., FRIEDMANN, H. & TRAYLOR, M.A. (1959) Birds from Gabon and Moyen Congo. *Fieldiana Zool*. 41: 383.

SARGEANT, D. (1993) *A Birders Guide to Gabon, West Africa*. Privately published by the author.

SIBLEY, C.G., MONROE, B.L. (1990) *Distribution and Taxonomy of Birds of the World*. Yale University Press, New Haven, CT.

SINCLAIR, I. & RYAN, P. (2003) *Birds of Africa South of the Sahara*. Struik, Cape Town.