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NOTES ON RED-BILLED FIREFINCH *LAGONOSTICTA SENEGALA* BREEDING IN CENTRAL NAMIBIA

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Red-billed Firefinch Lagonosticta senegala is known to occur across northern Namibia from the Kunene River in the west throughout the Oshana areas in north central Namibia, Okavango River and western and eastern Caprivi regions and also along the Orange River bordering Namibia in the south (Tarboton 2001, Hockey et al. 2005).

Since circa 1995 Red-billed Firefinch have been observed in Windhoek in central Namibia although their presence in central Namibia was thought to be as a result of escapees (Brown 1997, Cunningham and Cunningham 2009, Thomson 2009) as they are known to be captured for the cage-bird industry (Nuttall 1997).

Although juvenile Red-billed Firefinch were captured on 19/03/2009, 22/03/2009 and 16/05/2009 confirming local breeding and a nest confirmed from Monte Christo – a farm approximately 28 km north of Windhoek – no other nesting sites have previously been confirmed from central Namibia. A total of 144 birds have been ringed in Windhoek since February 2003 (H Kolberg pers. comm.). Of 86 birds ringed at one Klein Windhoek location between May 2008 and October 2010, two have been recovered in the immediate vicinity and 31 have been recaptured at the same location, 13 of these more than once. The mean wing lengths for 10 males and 10 females was 49.9±1.2 mm and 49.1±1.4 mm and found to be significantly different between the sexes (Students t-Test: df = 9, p = 0.07). Active primary moult was observed throughout the year. The mean mass for 10 males and 10 females was 8.34±0.52 g and 8.37±0.24 g and was found not to be significantly different between the sexes (Students t-Test: df = 9, p = 0.45).

Nests

During January 2010 two pairs of Red-billed Firefinch were observed constructing nests in a residential garden in Windhoek, 20 m apart, which differs from “widely spaced” as indicated by Tarboton (2001). The loosely constructed sphere shaped nests were well camouflaged and located at a height of 1.55 m and 1.40 m in dense leaf litter in Plumbago capensis/Bougainvillea spp and Strelitzia nicolai/ Bougainvillea spp combinations, respectively. Nest dimensions were 13x10 cm and 15x9 cm (height x width) with an opening of 4x3 cm in each case which is similar to dimensions provided by Tarboton (2001). The nest openings faced north and south. Nest building was conducted by both sexes, albeit very secretively, with only a few sightings of birds in action. The nest construction consisted mostly of slivers of dried bark (eg Strelitzia nicolai and Phoenix dactylifera), dried leaves (eg Acacia erubescens and Bougainvillea spp) and dried Dwarf Grass Oropetium capense with the nest cup almost entirely constructed of feathers (eg Helmeted Guineafowl Numida meleagris, Laughing dove Streptopelia senegalensis, domestic chicken and unidentified down) and human waste (eg cotton, lint, hair) (see Table 1).

Nesting material	Weight (g)	% of nest
Nest 1		
Bark & leaves	31	73.8
Feathers	11	26.2
Nest 2		
Bark & leaves	9	47.4
Feathers	9	47.4
Human waste	1	5.2

Table 1: Nest construction material used by Red-billed Firefinch *Lagonosticta senegala* from central Namibia (n=2)

Eggs
Three eggs were observed in each nest with 100% hatching success in one and 33.3% in the other. Egg size for the two eggs that did not hatch was 13x10 mm and 13x9 mm and within the range for this species (Maclean 1993, Tarboton 2001). Although the laying dates could not be confirmed, the young fledged on 8 and 14 March 2010 from each nest.

These nesting records confirm the breeding of Red-billed Firefinch from central Namibia. Although initially thought to be a population established from escapees, the recent sighting of Village Indigobird *Vidua chalybeata okavangoensis* on 20/12/2009 – another new species to central Namibia – raises an interesting question regarding bird distributions and climate change or unexpected long distance movements. Village Indigobird *Vidua chalybeata* is known to parasitize nests of Red-billed Firefinch (Tarboton 2001) with the closest confirmed sightings from the Okavango Delta approximately 600 km northeast of Windhoek.

The close proximity of the nests observed (ie 20 m apart) probably contradicts the existence of traditional home ranges as suggested by Sullivan (1976), although this was not tested, or indicates that very little is known about this aspect of its ecology.

Although localised seasonal movements and nomadism are known for Red-billed Firefinch (Nuttal 1997) – eg one previous long distance movement of 480 km was viewed as questionable (Irwin 1981) – the closest known "natural" populations of Red-billed Firefinch and Village Indigobird are from the Okavango Delta area, approximately 600 km northeast of Windhoek, and from the north west of Namibia approximately 510 km from Windhoek. This either confirms such unexpected long distance movements and range extensions or indicates that both species have been introduced – successfully – to central Namibia.

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References

Brown CJ 1997. The Pavlovian Phenomenon (Another Windhoek Garden List). Lanioturdus 30(4): 32-37.

Cunningham PL, Cunningham J 2009. Red-billed Firefinch *Lagonosticta senegala* Observed in a Windhoek garden. Lanioturdus 42(3): 7.

Irwin MPS 1981. The Birds of Zimbabwe. Quest Publishing, Salisbury.

Maclean GL 1993. Roberts' Birds of Southern Africa, 6th edition. John Voelcker Bird Book Fund, Cape Town.

Hockey PAR, Dean WRJ, Ryan PG 2005. Roberts - Birds of Southern Africa, VIIth ed. The Trustees of the John Voelcker Bird Book Fund, Cape Town, RSA.

Nuttall RJ 1997. Red-billed Firefinch In: Harrison, J.A. et al. (eds). The atlas of Southern African birds, Vol 2: 606-607, BirdLife South Africa, Johannesburg.

Sullivan GA 1976. Song of the finch *Lagonosticta senegala*: interspecific mimicry by its brood-parasite *Vidua chalybeata* and the role of song in the host's social context. Animal Behaviour 24:880-888.

Tarboton W 2001. A guide to the nests and eggs of southern African Birds. Struik Publishers, Cape Town, RSA.

Thomson N 2009. Red-billed Firefinches in and around Windhoek. Lanioturdus 42(3): 8-9.