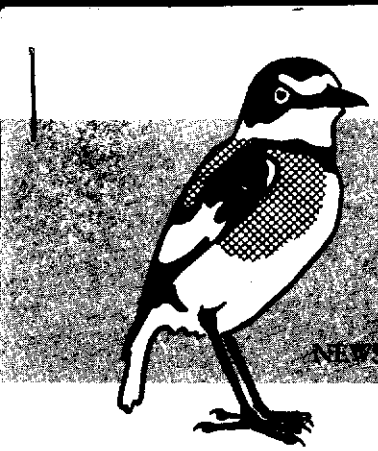

LANIOTURDUS

MITTEILUNGEN DER ORNITHOLOGISCHEN ARBEITSGRUPPE
NEWSLETTER OF BIRD CLUB · NUUSBRIEF VAN DIE VOëLWAARNEMERSKLUB

✉ 67 · ☎ (061) 25372 · 9000 WINDHOEK · SWA

Laniioturdus torquatus

Nr./No. 11 Vol./Jg.20 Februar 1985

DATURA INNOXIA SEEDS EATEN BY DOUBLEBANDED SANDGROUSE

C.J.Brown, B.R. Riekert and R.Vinjevold

During August 1984 a week was spent in the Ganab area of the Namib-Naukluft Park attempting to trap a small sample of sandgrouse to investigate their behaviour in captivity. Mistnets were set up at waterholes, and as soon as a group had been caught, they were removed from the nets and placed in small holding boxes. On 7 August at about 19h30, one of the Doublebanded Sandgrouse which had recently been removed from a net was found dead in its holding box. There was no sign of injury, and the cause of death could not be determined.
On dissection, the sandgrouse was found to have a large number of seeds in its crop and gizzard. These were removed, placed into a glass phial, and sent to the Windhoek Herbarium where they were identified as the seeds of the invasive alien and toxic plant Datura innoxia. In total, the crop contained about 857 of these seeds and 12 small stones, and the gizzard, about 135 seeds and 3 small stones. The seeds of no other plant species were present.

It is interesting that prior to this, no birds or mammals were known to utilise D. innoxia (Tarr in prep). If sandgrouse are in fact able to feed on these seeds without suffering any harmful effect, then they may play an important role in the prevention of spread of this invasive alien, as the seeds are completely destroyed in the digestive process. On the other hand, the death of the sandgrouse may have been due, to a greater or lesser extent, to the toxins ingested. This aspect requires further research.

Stones in the digestive tract are also of interest. Were these picked up by mistake or are they used to assist in the digestive process of breaking up the hard seeds ingested?
Finally, the presence of these seeds give us some indication of the distance travelled by sandgrouse from their foraging areas to water each day. In the Ganab region of the Namib-Naukluft Park, D.innoxia is confined to the Kuiseb river and its larger tributaries. The distance between the closest place at which D.innoxia is known to occur and the point of capture is about 30 km. Thus a round trip each day of some 60 km is being undertaken. In addition, many of the sandgrouse, detecting our presence at the waterhole, flew on. These birds presumably went to the next waterhole, some 16 km further. A round trip for these birds would have been in the region of 94 km.

We would like to thank Miss Hertha Kolberg of the Windhoek Herbarium for identifying the seeds.

2 / . . .