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Editorial

Another year is about over and we have produced four issues of the *Lanioturdus*. The Namibia Bird Club would like to thank all those who contributed. Your articles are what keep the club informed and active. As you read the articles you will see that some people were prompted to write because of an article they had read in the journal. It either confirmed an observation they had made or pointed out the rarity of such observations. That is the reason the journal is published to inform readers about club activities and to stimulate members to report on their observations. I am still waiting for the Chairman's annual report as given at the Annual General Meeting in March 2003. Regretably no reports of club outings in 2003 have been submitted. Perhaps if the club would undertake outings to the remote and exotic areas of Namibia participants would be impressed enough to share the results.

Once again it is the time of the year when everyone is wishfully looking into the sky for clouds that can build up into something bigger to convert the parched landscape into green vistas. The Red-crested Korhaans are calling but whether they breed or not will depend on the amount of rain. Last season they called but no breeding took place in northern Namibia. As of late November there have been reports of rain but not in all regions.

Once again I appeal to all members to try and sign up a friend as a member of the Namibia Bird Club. It would be nice to see the club membership double this year.

Notes on the breeding of White Pelicans (*Pelecanus onocrotalus)* at Hardap Dam, Namibia.

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Introduction

White pelicans *Pelecanus onocrotalus* were studied by students studying for the diploma in Nature Conservation at the Polytechnic of Namibia whilst conducting their in-service training at the Hardap Game Park outside Mariental during 1999, 2001 & 2003. Hardap Game Park is situated 24 km north of Marien-tal and is 25177 ha in size (including the dam). The dam receives its water main-ly between December and March due to ephemeral rivers such as the Fish River, Groot and Klein Komatsas flooding after heavy downpours. Hardap dam has the capacity of 232 million cubic meters of water and a surface area of 25 km^2 .

P. onocrotalus occur in coastal waters and larger inland waters throughout Namibia, although they are known to breed regularly at only four sites in southern Africa, which includes the Walvis Bay bird platform, and occasionally Hardap Dam (also Etosha Pan) (Berry 1972, Berry *et al* 1973, Maclean 1985, Tarboton 2001). *P. onocrotalus* are classified as endangered in Namibia's Red Data Book mainly as a result of threats and disturbance to their breeding cites (Simmons pers. comm.).

This paper reports on some of the data gathered during fieldwork conducted on *P. onocrotalus* at Hardap dam.

Methods

A total number of 46 nests were selected on two separate islands (Island A: 25 nests & Island B: 21nests). Island A was located in the restricted "bird breeding area" and exclusively used for breeding by P. onocrotalus while Island B was close to the dam wall and in the open access area and used by P. onocrotalus and Whitebreasted Cormorant *Phalacrocorax carbo* for breeding. Each nest was marked with a small metal tag to ensure identification and monitored every two weeks. A boat was used to reach the islands. 15 clutches, each consisting of 2 eggs (i.e. 30 eggs), were randomly selected and egg measurements (with a calliper) taken to determine the length and width of the eggs. Bird numbers were also estimated and compared with previous counts conducted during 1999 and 2001, with the use of binoculars.

Results

The number of eggs laid, hatched, survival and mortalities of the chicks is presented in Table 1. 87% and 89% of the eggs hatched on Islands A & B, respectively. Of the hatchlings, 83% & 87% of the chicks survived while 28% and 23% of the eggs either did not hatch or chicks succumbed at Islands A & B, respectively.

Table 1. Indicates the results of *P. onocrotalus* eggs monitored on two different islands at Hardap Dam during 2003.

No. of Nests	No. of Eggs	Eggs hatched	Unhatched Eggs	Chicks survived	Mo
Island A 25 Nests	53	46	7	38	8
Island B: 21 Nests	44	39	5	34	5

Figure 1 indicates the number of eggs per nest. 65% of the nests contained 2 eggs while 22% contained more than 2 eggs and 13% contained less than 2 eggs per nest, respectively.

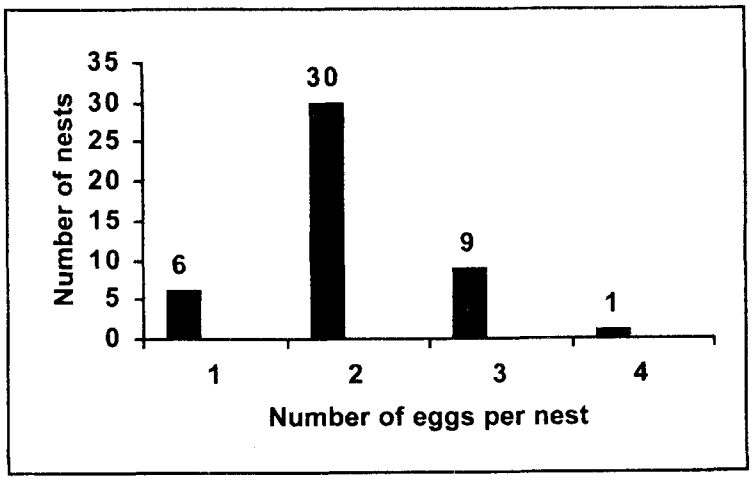

Figure 1: Eggs counted per nest for *P. onocrotalus* at Hardap Dam during 2003.

Figures 2 & 3 indicate the egg length and width classes for 30 eggs measured in nests containing 2 eggs per clutch. 43% of the eggs have a length of between 76-80 mm (Range: 71-94 mm) (Figure 2) and 50% of the eggs have a width of between 46-50 mm (Range: 31-54 mm) (Figure 3).

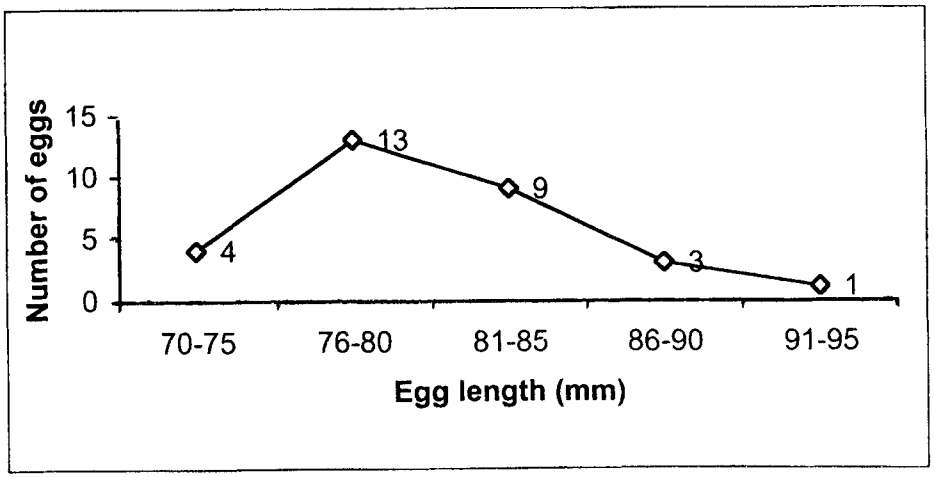

Figure 2: Egg-length (mm) classes for *P. onocrotalus* at Hardap Dam during 2003.

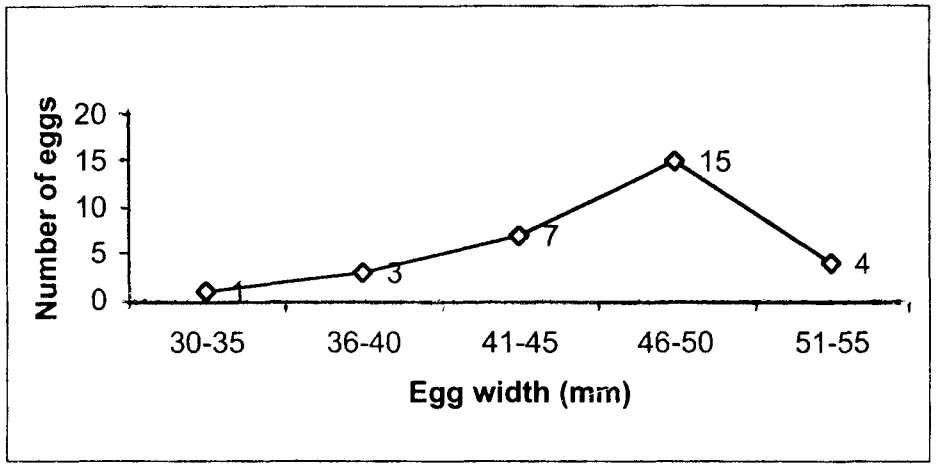

Figure 3. Egg width (mm) classes for *P. onocrotalus* at Hardap Dam during 2003.

A maximum total number of 4024 birds were counted during the first quarter of 2003 compared to a maximum total of 800 birds counted during the same period during 1999.

Discussion

White Pelicans breed successfully on islands, which are inaccessible to land predators and regular breeding may be abandoned in colonies that are excessively disturbed (Maclean 1985, Tarboton 2001). Although breeding is stated to be opportunistic and may occur during any month (Tarboton 2001), very little literature on breeding data could be located for Namibia. Berry *et al* (1973) recorded pelicans to breed for the first time on the flat and waterless Etosha pan during July 1971. Previously *P. onocrotalus* had been known to breed at Lake Oponono, north of Etosha National Park during June and at the guano platform at Walvis Bay during September (Berry *et al* 1973). Pelepele (1999) states that *P. onocrotalus* breed during January and may even breed twice during one season at Hardap Dam. Mamili (2001) also refers to breeding during early 2001, but does not mention which month. This study indicates that *P. onocrotalus* breeds during the early part of the year in central Namibia (Hardap dam) at a site previously described by Berry *et al* (1973) during the 1970's as "harbouring a

few White Pelicans from time to time". The mortality of chicks and eggs not hatched is similar for both Islands A & B and it would thus seem that neither anglers and boat users nor the joint breeding of Whitebreasted Cormorant (Island B) influences the breeding success of *P. onocrotalus* at Hardap Dam. This will have to be monitored further. Berry (1972) states that P. onocrotalus nesting could have influenced the breeding success of Flamingo's at Etosha Pan during the early 1970's thus indicating that allied breeding species could affect each others success under certain circumstances.

A clutch usually consists of 2 eggs (1-3) with an average size of 93 x 61 mm (Range: 89-95.6 x 53.6-64.5) (Berry *et al* 1973, Maclean 1985, Tarboton 2001). This study indicates that 65% of the nests contain 2 eggs, similar to Berry *et al* (1973), Maclean (1985) and Tarboton (2001), although the size of the eggs was considerably smaller (length 76-80mm & width 46-50mm). The reason therefore is unknown, but could be related to time of the year and/or diet.

The increase of *P. onocrotalus* from 800 birds during early 1999 (Pelepele 1999) to 1187 (789 adults & 398 juveniles) birds during early 2001 (Mamili 2001) to 4,024 birds counted during the first half of 2003 indicates the growing importance of Hardap Dam as a breeding and feeding site. Further monitoring of the breeding success is suggested.

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The diet of Barn Owl *Tyto alba* from the Otjivasando area, Etosha National Park

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Introduction

The diet of the Barn Owl *Tyto alba* was studied by students studying for a diploma in Nature Conservation at the Polytechnic of Namibia whilst conducting their in-service training at Otjivasando in the western part of Etosha National Park.

Barn Owls are widespread throughout Namibia and probably one of the best known, and easiest to recognize, owl species in Namibia. Although various people throughout the world have investigated their diet, very little work has been conducted on the species from Namibia, especially the far-western regions of the Etosha NP.

This paper looks at some of the results of their studies.