

the day on Anchovy and Horse Mackerel which occur closer to the surface during daylight than do mesopelagic species, but are still too deep for the gull and tern. Cetacean, arian and fish predators may have driven the fishes to the surface (Ashmole *et al.* 1967) during the day and thus increased their availability to the birds. Anchovy, which is found nearer the surface, should also be driven to the surface by such predators. However, no anchovy otoliths were found in the gull and tern pellets. This suggests that predators were not an important influence on fish availability in surface waters, unless the anchovy taken by gulls and terns were so small that the otoliths were digested (W. Suter pers. comm.).

Although the sample sizes in this study are small, the data are sufficient, to suggest that temporal variation in prey availability and seabird foraging are important in the Benguela ecosystem.

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Belly-soaking in the Avocet

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Belly-soaking or wetting of belly feathers for the purpose of transporting water to eggs and chicks has been recorded in some families of Charadriiformes: Charadriidae, Glareolidae, Recurvirostridae, Laridae, Sternidae and Rynchopidae (Maclean 1973, *J. Bombay Nat. Hist. Soc.* 72: 74–81). In the family Recurvirostridae it has been observed only in the Blackwinged Stilt *Himantopus himantopus*.

According to Maclean (pers. comm.), there is no evidence that belly-soaking occurs in the Avocet.

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However, on 11 July 1980, during a study on the breeding ecology of the Avocet in the Evros delta (Greece) I observed belly-soaking in this bird. I erected a hide about 4 m from an Avocet nest and entered it at about 15h00 when the ambient temperature was above 30°C. Only one of the parent birds appeared, coming to the nest site without sitting on the eggs and then moving some 10 m away, bobbing its head and displacement-pecking at the water surface. After 10 min the bird bobbed down several times in the water, came to its nest, sat on the eggs for about 5 seconds and immediately returned to the water. The same behaviour was repeated three times at intervals of about 15 min. Finally, the bird flew away, so I removed the hide. The parent birds did not come

back to the nest either that day or the next four days and I concluded that the nest was deserted.

No other Avocets incubating nearby displayed similar behaviour. Observations by telescope at that site on previous days did not reveal occurrence of belly-soaking either in the birds of the observed nest or in any other pair at the small colony of nine pairs. Although quite clear in the case of our observation, belly-soaking appeared to be induced by stress, because my presence might have

prevented the parent bird from incubating. The purpose of this belly-soaking appeared to be cooling of the eggs to protect them from overheating. However, I have never seen similar behaviour in any other incubating Avocet from 1979 to 1982 even under similar temperature conditions. Furthermore, the desertion of the nest in this case was unusual during our study, as other Avocets were subjected to greater disturbance than this without deserting.

Ongewone NESTE van Kransduiwe

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Twee jaar nadat 'n ongewone "draadnes" van Kransduiwe *Columba guinea* vir die eerste keer in die Oranje-Vrystaat beskryf is (Woodall 1973), is 'n soortgelyke nes by 'n Bloemfonteinse besigheidskompleks gevind (Anon. 1974). Sedertdien is nog drie sulke neste in die stad versamel, twee wat oorwegend uit metaalitems opgebou is en een wat 'n groot aantal plastiekstukke bevat het, waarvoor daar hier gerapporteer word.

Tydens 'n navorsingsprojek van 'n ander aard het 'n nagraadse student, Mej A. Bester, van ongewone Kransduifneste op 'n munisipale watertoring in die Uitsig-uitbreiding van Bloemfontein te hore gekom. Danksy die vriendelike hulpvaardigheid van Mnr J. Uys, verbonde aan die plaaslike munisipaliteit, kon 'n persoonlike besoek ter plaatse afgelê word. Twee "draadneste", waarvan een 'n enkele eier bevat het, is op die geklipgruisde top langs 'n ventilator aangetref. Ses dae later was die eier weg en is albei neste vir nadere ondersoek verwyder. 'n Derde Kransduifnes wat grootliks uit stukke plastiekmaas opgebou is (Fig. 1), en bo-op 'n watertenk op die dak van 'n gebou op die kampus van die Vrystaatse Universiteit aangetref is, is in dieselfde tydperk (Junie 1983) versamel.

Besonderhede van die nesmateriaal wat vir die konstruksie van die onderskeie neste gebruik is, word in Tabel 1 aangedui. Afgesien van die droë takkies (3–38 cm lank) van die "plastieknes", is draadstukke van wisselende lengtes die meeste as nesmateriaal benut. Dikkere stukke het meestal deel van die nesbasis uitgemaak, terwyl die dunner en langer lengtes (langste elektriese draad 57 cm)

TABEL 1
NESMATERIAAL VAN DRIE ONGEWONE KRANSDUIFNESTE.
SYFERS TUSSEN HAKIES DUI MASSA (G) AAN.

Nesmateriaal	Aantal items		
	A	B	C
<i>Metale en plastiek</i>			
Blik	6	1	
Draad	233	266	3
Elektriese draad	25	14	
Fietsspeel	1		
Haakspeld	1		
Haarnaald	10	4	
Kram	7	14	
Plastiekmaas			93
Skuifspeld	29	14	
Splitpen	1		
Spyker	8	3	
Sweisstok		3	
Wasser	1		
Subtotaal	322 (360,7)	319 (294,0)	96 (47,4)
<i>Plantaardig</i>			
Blaar			5
Grashalm	2	7	
Takkie	112	123	331
Wortel	2	7	
Subtotaal	116 (20,0)	137 (26,2)	336 (150,7)
Totaal	438 (380,7)	456 (320,2)	432 (198,1)

hoofsaaklik as voering vir die nesholte gebruik is. Ander metale wat relatief dikwels voorgekom het, is skuifspelde, krammetjies, haarnaalde en spykers (Fig. 2) waarvan die swaarste item 'n massa van 10,0 g en 'n dikte van 5 mm gehad het. Woodall (1973) verwys in hierdie verband na 'n ongewoon gebruikte haelgeweerpatroon van 37 g wat al in 'n Kransduifnes gevind is. Hoewel die individuele massas van die drie neste aansienlik hoër is as dié van 'n "tipiese" nes van 92,1 g soos beskryf deur Skead (1971) en deur persoonlike data ondersteun (\bar{x} = 88,1 g; n = 26), is die buitenste deursnit van 22 × 19 cm, 25 × 20 cm en 32 × 29 cm respektiewe-