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CONSIDERATIONS ON A SPECIMEN OF CORY'S SHEARWATER RINGED AT SELVAGEM GRANDE AND RECOVERED IN THE CENTRAL MEDITERRANEAN

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With 2 tables

On 16 May 1987 at 9.30 p.m. one of us (M. L. V.) spotted among the individuals of the colony of Cory's Shearwaters of Linosa (Sicilian Channel, 35°50'N, 12°52'E) a specimen which wore a ring with the following details: "CEMA Lisboa 1 — L 003576". It had been ringed as a chick on 4 October 1978 at Selvagem Grande (Atlantic Ocean, Portugal, 30°09'N, 15°52'W), and was therefore nearly 9 years old (Zino, *pers. comm.).*

It was alone, in the open, outside the breeding sites in the holes and underground caves. This behaviour is frequent in the immature birds during the breeding season. For want of a ruler and caliper, we unfortunately can only give the weight (750 g.) of this individual. In May 1987 we weighed 29 males and 22 females of the Linosa colony, obtaining the following values: males 690.7 $\pm$ 37.7 (600-760); females 601.8 $\pm$ 38.5 (560-700). The Atlantic individual we recovered weighed as much as the biggest males of Linosa and the smallest females of Selvagem Grande (730 g. according to Zino 1971). (see also table Ia).

Half the population of Selvagem Grande begins to nest at the age of 9 years, some individuals may breed earlier (7 years, exceptionally 6 years), while others breed for the first time at the age of 13 years (Mou-

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	Weight		Wing		Tarsus		Bill Length		Bill Depth		Bill Length × Bill Depth		Egg Weight/ Female Weight × 100
	grams		mm.		mm.		mm.		mm.				
	m	f	m	f	m	f	m	f	m	f	m	f	
Selvagem	1014	877	363	358	57	54,6	58,2	54,5	17,1	15,3	996 (860-1149)	837 (707-968)	11,8
Chaffarinas	717	622	361	351	56,8	54,1	52,2	48,7	14,7	12,1	767 (688-851)	589 (539-655)	
Zembra	703	575	355	343	—	—	50,7	46,9	13,8	12,1	701 (652-751)	570 (529-613)	14,6
Linosa	675	577	356	345	53,6	52,8	53,6	50,6	13,7	12	734 (673-798)	607 (563-652)	14,5
Aegean	587	514	342	333	53,4	52	49,5	46,2	12,9	11,6	638 (587-692)	536 (504-569)	14,9

Table Ia. — Biometrics of Cory's Shearwater from Atlantic and Mediterranean breeding sites. (m = males; f = females).

gin *et al.* 1986a). Thus the individual we recovered could well have been physiologically in condition to breed.

As in other Procellariiformes, the young of Cory's Shearwaters return to the areas with the colonies where they were born (Jouanin *et al.* 1977; Massa & Lo Valvo 1986; Cachia Zammit & Borg 1987; Wink *et. al.* 1987). Other populations of this species are biometrically different (Massa & Lo Valvo 1986; cfr. Tab. Ia). The laying period and the number of days of incubation in the ssp. *borealis* (in this case the population of Selvagem Grande) are different from those of the Mediterranean populations, while within the Mediterranean basin the laying period and the days of incubation are extremely synchronous (cfr. Tab. Ib). Moreover, it would seem that the Mediterranean subspecies lays for the first time earlier than the Atlantic subspecies, for Cachia Zammit & Borg (1987) observed one Cory's

	Laying Period	Incubation Days		Laying Period	Incubation Days
Selvagem	24.V - 15.VI (av. 2.VI)	54.46 ±1.12	Aegean	20.V - 1.VI	51 ?
Zembra	19.V - 2.VI (av. 27.V)	50.8	Malta	24.V - 1.VI (av. 27/28.V)	51.3
Linosa	20.V - 3.VI (av. 27.V)	51	Corsica	20.V - 2.VI (av. 26.V)	

Table Ib. — Laying period and incubation days of different populations of Cory's Shearwater.

Shearwater in Malta breeding at the age of four years.

Differences observed between Atlantic and Mediterranean populations are certainly genetically fixed. Randi *et al.* (in press), carrying out an electrophoretical analysis of the blood of Cory's Shearwater, discovered that genetic differences between one Atlantic (Azores) and two Mediterranean samples were greater than those observed between the Mediterranean samples studied (Sardinia and Linosa).

It is for the above mentioned reasons that the recovery of the individual reported in this note seems to be an exceptional event that occurred after the wintering period, when the Atlantic (*borealis*) and the Mediterranean (*diomedea*) populations very probably mix and live in the same area.

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