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PRELIMINARY BIOMETRICAL DATA OF *Calonectris diomedea* IN THE TREMITI ISLANDS (SOUTH ADRIATIC SEA)

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Since 1987 the population of the Cory's Shearwater (*Calonectris diomedea*) which breeds in the Tremiti Islands has been regularly controlled. Until now, no study has been made of the few Adriatic colonies which are geographically separated from those in the Mediterranean.

Breeding sites were found on two of the three principal islands of the archipelago in different locations. On the island of Santo Domino, a colony of approximately 20 pairs was found in a large cave, while on the island of Caprara, isolated pairs or small groups of 2 to 4 were found in cavities and fissures in vertical cliffs above the sea. Preliminary data indicate that the peak of egg laying occurs several days ahead of the other Mediterranean colonies.

The unique situation of the breeding site and the ringing of both adults and chicks make it possible to identify single pairs and their respective offspring. It will thus be possible to study specific aspects of this small population's reproductive biology and demography.

The population of the Tremiti is biometrically between those of the Aegean Sea (Wink *et al.*, 1982) and those of the Sicilian Channel (Linosa: Iapochini *et al.*, 1983).

The significance of differences in biometrical measurements (wings and total bill length; males n=37, females n=17) is reported in Table 1 (Student's T Test).

Nonetheless, the weights of the male Tremiti population are significantly greater than those of Linosa and Paximada, and the weights of the female population greater than those of Linosa. However, the temporal variability of this parameter makes it more difficult to compare the various populations.

The results obtained would tend to validate the hypothesis (proposed by Iapichino *et al.*, 1983 and taken up again by Massa & Lo Valvo, 1986) that a clinal variation exists between the Atlantic populations and those of the eastern Mediterranean (Figure 1: data from Witt *et al.*, 1984; Araujo *et al.*, 1977; Gaultier, 1981; Wink *et al.*, 1982).

Certain populations of the Balearic Islands, and perhaps of Corsica and Sardinia, which are biometrically the smallest of the western Mediterranean, are not considered to follow this hypothesis.

As a long-term part of this research, certain colleagues have taken blood samples in order to complete biochemical analyses performed on other Mediterranean populations.

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		Aegean Sea		Tremiti		Linosa
Wing	m	342	p<0.001	352	p<0.05	356
	f	333	p<0.05	338	p<0.05	345
Bill	m	49.5	p<0.01	52.5	p<0.01	53.6
	f	46.2	p<0.05	48.9	p<0.01	50.6

Table 1: Significance level of the differences between wing and bill length for three Mediterranean populations (Student's T Test)

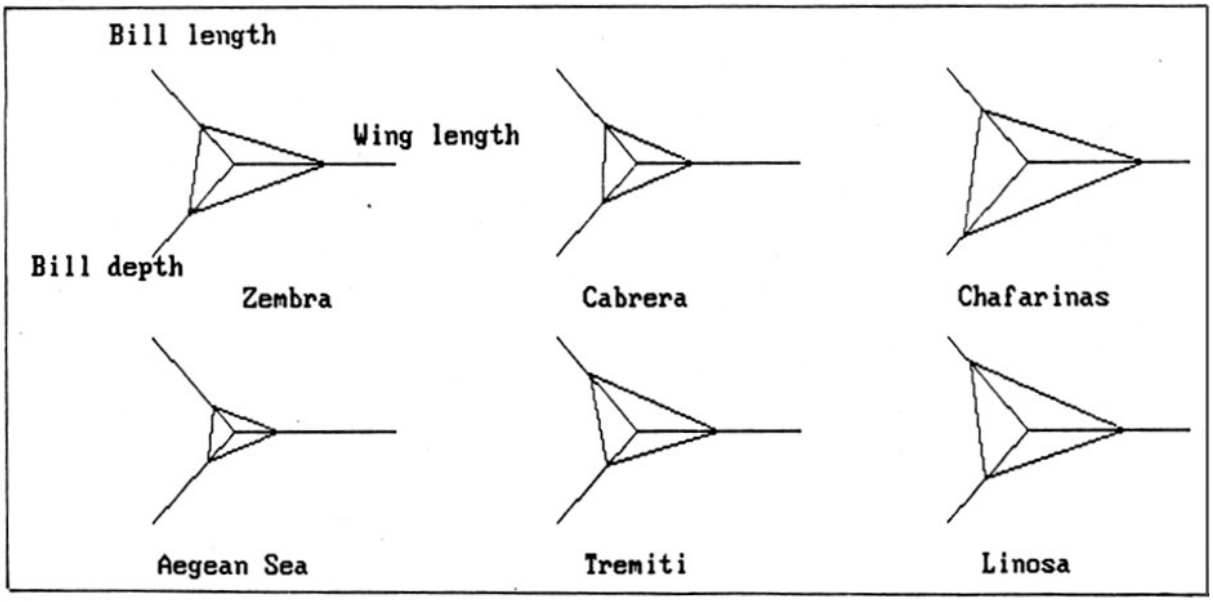

Figure 1: Sun-ray plot of the average biometric measurements of six Mediterranean populations of Calonectris diomedea