THE PRESENCE OF A BROOD-PATCH IN NON-BREEDING CORY'S SHEARWATERS CALONECTRIS DIOMEDEA

Feathers in the nests of Cory's Shearwaters Calonectris diomedea are most evident during the incubation period mainty due to the formation of the broad-patch (Cachia Zammit & Borg 1986-87). However, feathers can be also found in dummy nests occupied at night by non-breeders, suggesting that even non-breeders may have a broad-patch. In incubating birds of both sexes, the broad-patch is quite evident when parting the ventral feathers. It consists of a relatively large bare area, roughly 9cm in length and 5-6cm in width, and is situated just above the closeal aperture. The bare skin has a somewhat bluich coloration.

On 12 June 1987, 6 non-breeding Cory's Shearwaters were caught at a celony at night, and were examined for the presence of a brood-patch. 5 of these birds showed no sign or only a trace of a brood-patch, but one female had a complete one similar to that of an incubating bird except for the Lighter celour of the bare skin. Inspection of the cloaca showed no sign of laying. Breeding females have a clearly distended cloaca which can still be evident up to 3 weeks after laying. A male, known to be a non-breeder, was also examined on 20 June 1987 and was found with a poorty defined brood-patch with scattered tufts of feathers. The colour of the skin was pinkish, lacking the bluish tings of incubating birds.

It seems that the formation of the brood-patch or at least the loss of feathers from the abdominal region is a seasonal occurrence effecting both incubating birds as well as other mature birds which for unknown reasons are not breeding.

Birds are judged to be non-breeders from their behaviour (Cachia Zammit & Borg 1986-87), while they are sexed using Ristow's and Wink's methodology (Ristow & Wink 1980).

The presence of a brood-patch amongst non-breeding birds has already been documented in the Storm Petrol Hydrobates pelagicus (Scott 1970 in Love 1974).

References

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CORY'S SHEARWATER CALONECTRIS DIOMEDEA BREEDING IN ITS 2nd YEAR

A male Cory's Shearwater *Calonectris diomedea* was found occupying a nest site on 28 March 1987, in the same area of a colony where it was ringed as a pullus in 1985. The same bird was found incubating on 14 June 1987 in the same nest site which it occupied in March. The egg did not hatch. The following year the bird turned up again, breeding in the same nest site. This time the egg hatched and the pair successfully raised the young.

There was already a record of a bird ringed as a pullus and retrapped in its second year, as well as another record of a bird which was found breeding in its fourth year (Cachia Zammit,R. & Borg,J. Notes on the Breeding Biology of the Cory's Shearwater in the Maltese Islands. *II-Mexill* 24: 1-9, 1986-87).

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