

Mammalian Content of Barn Owl Pellets from Gozo

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Introduction

Owl pellets are indigestible food remains, mainly feathers, fur and bones, which are compacted and regurgitated by the bird. Pellets can give valuable information on the composition of the food and food preferences of birds of prey (Miles 1952) and also on the distribution of small mammals, particularly in areas which are not readily sampled by the usual methods. It is thus surprising that the study of owl pellets has received no attention locally, with the exception of a single publication by Sultana (1971) who extracted remains of six species of mammals from 20 Barn Owl *Tyto alba* pellets. The present work reports on the mammalian content of Barn Owl pellets collected from Gozo. A future publication will report on the avian remains from these pellets.

Material examined

Sixteen intact pellets and fragments from about another three pellets were collected from one locality in Gozo on 15th July 1978; the material was sent to Dr. P.D. Jenkins of the British Museum (Natural History) who has examined and classified the mammalian remains. A list of the mammal species recorded from the pellets is given in Table 1.

TABLE 1 : The number and identity of skulls recovered from sixteen intact (Nos. 1-16) and fragments of about another three pellets of *Tyto alba* from Gozo. Pellets also contained numerous other bones and fur; yg.-young. Material marked by an asterisk has been deposited at the British Museum (Natural History).

Pellet No.	<i>Crocidura suaveolens</i>	<i>Mus musculus</i>	<i>Apodemus</i> sp.	<i>Rattus</i> spp.
1	1	mandible	mandible	-
2*	3	1	-	-
3	1	2	-	-
4	3	-	-	-
5*	1	2	1	-
6*	2	2+	-	-
7	1	1	-	-
8*	1	2	-	1 yg.
9	-	3	-	-
10	-	2	-	-
11	-	-	1	1
12	-	2	-	-
13	-	1	-	-
14	-	1	1	-
15	-	1	-	1 yg.
16	-	-	-	mandible yg.
ca. 3 (fragmented)	4	5+	-	2+

Discussion.

Three rodent genera *Mus*, *Apodemus* and *Rattus* and one insectivoran genus *Crocidura* were recorded from the pellets. All four genera have been previously

recorded from the Maltese Islands (Lanfranco 1969). The House Mouse *Mus musculus* (L.) is the most common species in the pellets, followed by the Lesser White-toothed Shrew *Crociodura suaveolens* Pallas. The specific identity of *Apodemus* sp. and *Rattus* spp. could not be ascertained from the material available for study. Lanfranco (1969) records the Wood Mouse *A. sylvaticus* (L.), the Brown Rat *R. norvegicus* (Berk.) and the Black Rat *R. rattus* (L.) from Malta and it is likely that the pellet-material belonged to these species.

Sultana (1971) found that *M. musculus* (L.) was the most abundant species in the Barn Owl pellets. A total of 32 skulls were extracted from the 20 pellets collected; this compares well with our findings, as do the numbers of *A. sylvaticus* (4), *R. norvegicus* (1) and *R. rattus* (4). *C. suaveolens* was however represented by only 3 specimens. Two specimens of an additional species of shrew the Greater White-toothed Shrew *C. russula* Hermann, were also present in the pellets.

The presence of *C. suaveolens* Pallas in the pellets is very interesting. This shrew has recently been definitely confirmed to occur in the Maltese Islands (Schembri & Schembri 1979). The large number of skulls found in the pellets suggests that this species is far more common than previously thought.

It is interesting that while Sultana (1971) found remains of *C. russula* from Barn Owl pellets from Gozo, we have found no trace of this species in our material; it is worth mentioning though that the material came from totally different localities. The status of this shrew in the Maltese Islands thus remain unclear.

In view of the apparent restriction of the different species of shrew to the different islands of the Maltese Archipelago (Schembri & Schembri 1979) it would be very interesting to examine Barn Owl pellets from the other islands.

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