ANALYSIS OF YELLOW-LEGGED HERRING GULL PELLETS FROM FILFLA ISLAND

The Yellow-legged Herring Gull *Larus cachinnans* colony on Filfla numbers about 150 pairs, and is mainly restricted to the inaccesible plateau surface. A very few pairs breed on the upper parts of the steepest slopes beneath the cliffs. It is from the latter nests and from among nearby boulders that this sample of pellets was collected.

The aim of this analysis was to find out whether the Storm Petrel *Hydrobates pelagicus* was under threat from the Herring Gull. From 11 samples (10 whole pellets, 2-3 fragments), remains of Storm Petrels were found in only four pellets. However, a much larger sample is needed to determine the extent of Herring Gull predation on Storm Petrels.

Herring Gulls have been noted to be very active at night, especially on moonlit nights, when petrels are most numerous (Sultana & Gauci 1982). This was so on the night of 24 May 1986, when a good number of petrels came ashore. The gulls were seen flying throughout the whole night. The chances of preying on flying petrels during daytime are very remote. Six adult Herring Gulls failed to catch an adult petrel flying off Filfla in broad daylight (Sultana & Gauci 1970). This might indicate that birds taken are probably weak or tired.

Material examined : Ten whole pellets and two to three fragments where dissected. The average weight of each was 3.5gm with a range of 1.5gm to 8.0gm. Weight was measured using a Pesola spring balance.

TABLE 1 : Contents in Yellow-legged Herring Gull pellets collected on 24 May 1986 on Filfla.

Pellet	Storm Petrel	Other Birds	Molluscs	Fish	Insects	Others
1	-	1	-	-	-	-
2	1	-	1	-	-	-
3	1	-	-	-	-	-
4	-	2	1	-	-	-
5	-	3	1	-	1	-
6	1	-	-	-	-	-
7	1	1	1	-	-	-
8	-	2	-	-	-	-
9	-	-	2	-	-	-
10	-	-	4-5	-	-	2
11 (frag.)	-	1	4	1	-	1

Contents of pellets

Aves : Hydrobates pelagicus: 2 sternums, 2 fused clavicles, 3 tarsi,one with a ring attached, and a large amount of feathers. Pellets with remains of petrels had a strong oily smell. *Passer hispaniolensis :* 2 upper mandibles, 2 pairs of legs and an amount of feathers also in evidence. *Ficedula albicollis :* 1 wing, 1 tail, 1 leg. *Gallinula chloropus :* 1 bill. *Merops apiaster :* 1 wing. *Anthus trivialis :* 1 leg. *Phylloscopus sp. :* 1 leg. *Phoenicurus sp. :* 1 tail, 1 leg.

With the exception of the Spanish Sparrow *Passer hispaniolensis* and the Storm Petrel, all the other species are trans-Saharan migrants which are probably caught as soon as they alight on Filfla, after their long journey, when they are weak and tired. The Spanish Sparrow is sedentary in the Maltese islands, and a few pairs breed also on Filfla. The Storm Petrel is a summer visitor to the Maltese islands where it is found breeding only on Filfla.

Cephalopoda : Sepia officinalis : 2 beaks, 2 fragmented backbones.
The Cuttlefish is rather common in Maltese waters, coming close to shore from early March to mid-May to breed.

Cirripedia : Lepas anatifera : Shells were found in five of the pellets, one of which was composed entirely of barnacles. The Goose Barnacle is very common, and is found attached to rocks and debris by the shore.

Osteichthyes : (Bony fishes) *Trachurus trachurus :* Half end of the fish was present in the fragments. The Horse-Mackerel is one of the most common fishes found in Maltese waters. In size it varies from 20 to 52cm (Lanfranco 1965). This fish is also much favoured by the Cory's Shearwater *Calonectris diomedea,* being frequently found amongst its regurgitations.

Insecta : Tenebrionidae (family): One complete specimen was found in pellet 5, along

with remains of birds and crustaceans. This is a large family, the members of which are commonly called nocturnal ground beetles, or darkling beetles, names which reflect their habits and general coloration.

Other material : Three small pieces of nylon thread as used by the local fishermen.

In a colony in Sardinia, marine organisims, predominantly fish, were taken, followed by beetles, plant matter (Olives), and human waste, in that order (Witt 1974). These were found in fifteen pellets collected at the same period as those from Filfla. Herring Gulls are noted scavengers with almost anything forming part of their diet (Cramp & Simmons 1982).

Identification Guide to European Passerines by Lars Svenson (1984) was consulted for the identification of bird remains, while the Flora and Fauna of the Mediterranean Sea by A.C. Campbell (1982) was consulted for the identification of marine organisims.

The authors would like to thank Mr. Louis Cassar for the identification of insect remains.

References

Cramp, S. & Simmons, K.E.L. (eds.), 1982. The Birds of the Western Palearctic, Vol. 3. Oxford University Press: Oxford.

Lanfranco, G.G. 1965. A Complete Guide to the Fishes of Malta. Valletta.

Sultana, J. & Gauci, C. 1970. Bird Studies on Filfla. The Ornithological Society: Valletta.

Sultana, J. & Gauci, C. 1982. A New Guide to the Birds of Malta. The Ornithological Society: Valletta.

Witt, H. 1974. Zur Nahrungsökologie der Mittelmeersilbermöwe *Larus argentatus michahellis* an einem Brutplatz auf Sardinien. *Vogelwelt*.95 : 148-150.

John Borg & Richard Cachia Zammit

J.B. - Block C2 Flat 5 Housing Estate, Ta'Xbiex, Malta.
R.C.Z. - 20 Oleander Ave. Sta.Lucia, Malta.

FIRST BREEDING RECORDS OF THE MOORHEN IN THE MALTESE ISLANDS

The Moorhen *Gallinula chloropus* is a fairly common passage migrant from March to May and from Late August to November (Sultana, J. & Gauci, C. A New Guide to the Birds of Malta, 1982). Adult and immature birds have been occasionally noted at Girgenti Valley in the summer months (V. Cilia, pers. comm.). Since 1982, as many as twenty have been wintering at the newly established Ghadira Nature Reserve and occasional birds have also been seen in summer (C. Gauci, pers. comm.). In 1984, a nest was found in a flooded quarry. Since then three more nests have been found - two in 1985 and one in 1986.

In May 1984, the undersigned were informed by a hunter that he knew of a Moorhen nest in a flooded quarry in the south-eastern part of Malta. The site was visited on 18th May. Four nestlings, about one day old, were observed. An empty nest was later found. This nest was located on an isolated boulder surrounded by water under an over-hanging Glaucous Tobacco Shrub *Nicotina glauca*.

On 1st April 1985 a nest containing nine eggs was found in another flooded quarry. The nest was under a shrub of the same species as that under which the 1984 nest had been found. It was lying on a muddy slope, a few centimetres from the water's edge. The nest was visited again on 21st April. One chick was seen swimming near it. On the following day the nest was revisited; it contained four unhatched eggs.

Another nest containing no eggs was found in another flooded quarry on 14th April 1985. On being visited again on 5th May, the nest was found to contain 5 eggs. On 23rd May, an adult bird was disturbed while incubating 7 eggs. This nest was found attached between stems of the Giant Reed *Arundo donax*, a few centimetres above the water surface. On 29th May, seven chicks were seen swimming near the nest.

On 12th June 1986 four birds, about fifteen days old, were seen, accompanied by an adult, swimming in the quarry where the 1984 nest had been found. An empty nest was found lying on muddy ground.

Joe A. Doublet & Paul Portelli

J.D. - 60, Manwel Dimech Street, Sliema, Malta.
P.P. - 23, Paceville Avenue, Paceville, Malta.