

FROM FIELD AND STUDY

Why is the Galápagos Lava Gull the Color of Lava?—"Lava Gull" is a suitable name for *Larus fuliginosus*, since the species not only resembles dark lava in color but also because it spends much of its time on the lava rocks adorning the shores of the Galápagos Islands. Even the bill of this endemic gull is nearly black, the extensive distal red coloration found on bills of most gull species having been reduced to a median line less than 2 mm. wide and 8 mm. long (notwithstanding the erroneous description of "bill red," in W. B. Alexander, *Birds of the Ocean*, ed. 2, 1954:88). Charles Darwin (*Voyage of the Beagle*, Bantam ed., 1958:329) noted the dark color of the Lava Gull and of other Galápagos animals and ended his discussion with a carefully worded speculation hinting that coloration is related "perhaps to the conditions of existence being generally favourable to life."

Today most biologists would agree that dark coloration has probably been evolved through natural selection, although the selective advantage of such coloration is still a matter for speculation in most cases. Bowman (*Univ. Calif. Publ. Zool.*, 58, 1961) has provided a convincing interpretation of evidence that predation pressure has caused the cryptic coloration in Darwin's finches (*Geospizinae*). It would be natural to suggest that all dark animals in the Galápagos have evolved melanism to escape predators. However, I wish to propose an alternative explanation for the Lava Gull's color and thereby introduce caution concerning attempts to ascribe the dark coloration of all Galápagos animals to an identical cause.

Gifford (*Prcc. Calif. Acad. Sci.*, 2, 1913:44) described the Graceful Petrel (*Oceanites gracilis*) and the Man-o'-War Birds (presumably both *Fregata magnificens* and *F. minor*) as competitors of the Lava Gull, since all these species eat refuse. Twice, on Tower Island in the Galápagos in November, 1962, I noted individuals of *Fregata minor* swooping down on pieces of fish we had cast on the sand beach in order to attract Lava Gulls; each time the Man-o'-Wars routed the gulls present. A perusal of the literature and of field notes by others would probably multiply such observations. My suggestion, then, is that the Lava Gull is cryptically colored in order to hide its presence on lava shorelines, not from predators (as it appears to have none), but, rather, from competing scavengers.

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Notes on the Feeding Behavior, Metabolism, and Weight of the Saw-whet Owl.—In a recent article Graber (*Condor*, 64, 1962:473-487) presented data on the feeding habits and food consumption of three species of owls including the Saw-whet Owl (*Aegolius acadicus*). During the winters of 1960-61 and 1962-63 I observed three Saw-whets (1 ♂, 1 ♀, 1 ♀?) in captivity and similarly recorded information on their food and feeding habits. As this information differs somewhat from that of Graber I present it here.

The owls were maintained on a diet of laboratory mice (*Mus musculus*) which usually weighed between 25 and 35 grams. In feeding, these owls tore the mouse into pieces starting anteriorly by ripping through the brain case and gradually working posteriorly. In no case was a food item observed to be swallowed whole as has been frequently noted in larger owls and recorded on one occasion for a Saw-whet (Bent, *U.S. Nat. Mus. Bull.*, 170, 1938:234). In most instances the head and one or both forelegs of the mouse were eaten at first. This event was followed by a pause of four to five hours until a pellet was cast, after which the rest of the mouse was consumed. The second pellet was cast sometime during the next nine hours. The stomach and occasionally portions of the intestines were usually rejected as being distasteful, this being indicated by head shaking, bill snapping, and vigorous wiping of the bill on the perch. Bill wiping was routinely observed at the conclusion of feeding.

Smaller mice weighing about 10 to 15 grams were also torn apart but often completely consumed at one time. These feeding procedures explain the earlier observation by Randle and Austing (*Ecology*,