

Motunau River mouth. All day, house sparrows may be seen flying into holes in a cliff on the north bank of the river with food for young birds.

STARLING (*Sturnus vulgaris*).—A small flock of six birds was noticed about the river mouth in January 1953 and 1954. These birds roosted in the cliffs on the north bank of the river.

WHITE-BACKED MAGPIE (*Gymnorhina hypoleuca*).—Two pairs each with a single juvenile, frequented the river mouth during our stay in January 1954. In January 1953 three miles up the Motunau River a flock of three hundred white-backed magpies was noted in a paddock of gorse, in the evening they roosted in pine trees nearby. It is unusual to see such large flocks of magpies in Canterbury.

NESTING OF SOUTHERN BLACK-BACKED GULLS.

By A. R. Harris, Dunedin.

For several years I have watched a small group of southern black-backed gulls (*Larus dominicanus*) gradually building up a nesting colony on four small tidal islands or reefs at Te Anawaewae Peninsula, Portobello, Otago Harbour. The colony has grown since 1940 from one nest to six in 1952 and five in 1953. One nest is on a low-lying rock 40 yards from the shore and this frequently results in the loss of the nest when fresh winds at high tide drive the seas right over the top. Three "islands" are islands only half the time, i.e., approachable from land towards low tide twice daily.

The breeding place is 700 yards from a weekend dwelling, 1,000 yards from a biological station, and well off the beaten track except to occasional picnickers who frequently are Guides and Boy Scouts and of a non-destructive nature. The birds have become accustomed to my coming and going without causing them unnecessary molestation. An Otago Harbour Board by-law prohibits the discharge of firearms on the harbour; this unwittingly provides another protection.

During the non-breeding period pairs of birds have territorial ambitions over sections of the harbour and small bays and drive off intruders which they quickly recognise, but during periods of plentitude of food such as whalefeed or eyed ova, they tolerate large flocks of their own types. They also tolerate red-billed gulls, blue herons, shags, Caspian terns and grey ducks without demur.

During the breeding season they take up station and drive off all-comers. The nesting birds both contribute to the building and collection of nesting material for a short period before the female lays. Eggs are laid over a period of three to five days—the period of incubation is 28 days and eggs hatch at intervals over two days. The normal clutch for old birds is three eggs and for younger birds two eggs. I have never recorded an infertile egg and if there is no interference a full clutch is assured. The young leave the nest early and take shelter behind anything offering near the nest. They are fed regularly by both parents on disgorged food such as whalefeed, small fish, crabs or fragments of fish offal. If seriously disturbed, the young take to the water even at the age of two days and swim about 40 or 50 yards into the wind and are then shepherded by the adults and skilfully brought back to the nesting site and conceal themselves in rocky crevices until danger passes, and they resume their nesting or hatching areas. At three weeks they often accompany their parents swimming and at four or five weeks they are able to fly short distances, up to a chain at first. By this time they are as large as their parents and crane for food. At about five months the young are treated as "reared," but the batch keep together quite a deal.

Although the plumage of both sexes is the same at maturity, the males can be recognised fairly surely by their thicker necks and the male usually calls "kaloo, kaloo," while the female calls "kla, kla, kla, kla," much the same as a hen. This year there were five nests, thirteen eggs laid and twelve chicks reared. Nesting cards are submitted accordingly.