

DETECTING THE PRESENCE OF BLUE DUCK FROM ITS FAECAL SIGN

In some of its range, the Blue Duck (*Hymenolaimus malacorrhynchus*) is largely crepuscular in habit, hiding amongst log-jams or beneath stream-side vegetation during the day and emerging to feed mainly at dusk and in the early hours of darkness, and again briefly at dawn. Surveys of its habitat during daylight may therefore fail to record its presence. The purpose of this note is to advise how the presence of Blue Duck may be detected by observing its highly characteristic faeces.

Blue Ducks feed almost entirely on aquatic invertebrates and the larvae of various species of caddis fly (Trichoptera) dominate the diet. To obtain this food, the ducks grovel amongst the rocks on the stream or river floor or scoop the prey from the surface of large boulders. Their faeces therefore contain the undigested remains of these insects as well as other material inadvertently swallowed. A close examination of the faeces will usually reveal a mixture of fine sand and the horny external cases of the caddis larvae. Often it is also possible to find tiny, hard, round black specks in the faeces, these being the head capsules of the caddis larvae.

Fresh faeces appear as dark grey or black, wet blobs on the rock surface; when dried, they become lighter grey, with the caddis



FIGURE 1 — Blue Duck faeces (arrow) on boulder in middle of stream.



FIGURE 2 — Several Blue Duck faeces on boulder top. The large white circular objects on the boulder are lichens. INSET — Close-up view of faeces showing caddis cases.

cases dark brown or black. Sometimes the faeces may be streaked with white, the product of urinary discharge.

The faeces are invariably located on the tops of prominent rocks or boulders in the midst of the water or immediately at the water's edge. It is my impression that they are especially abundant on rocks where side-streams enter the main water-course and also at particular localities on the main river, which are the boundaries of a bird's territory. It may be possible to estimate the number of territorial pairs on a river if the faeces are concentrated in this way — a point worthy of further investigation — although the presence of non-territorial birds should not be overlooked.

Few other animals leave droppings on rocks in Blue Duck habitat. The droppings of Grey Duck (*Anas superciliosa*), Black Shag (*Phalacrocorax carbo*) and Little Black Shag (*P. sulcirostris*) found in the Hopuruahine River in Urewera National Park contained no solid matter, being whitish streaks down rocks or in small hollows on rocks. Faecal pellets of possum (*Trichosurus vulpecula*), often encountered on rocks at the stream edge or on fallen logs projecting into or across the water-course, may sometimes cause confusion. After rain, the characteristic form of these pellets is lost and they appear as a small dark green or black blob. They are composed of finely macerated plant material only.

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