

# You never catch the black ones

SMALL CHILDREN get immense pleasure from catching fish, usually from wharves and jetties, with hook and line, or in shallow backwaters and bays, with a small net. The picture of youngsters wading around shallow lake margins with a small round net and preserving jar is especially familiar. However, fish available for such activities in New Zealand's rivers and lakes are rather sparse. Most of our species seem to live in bush-covered streams, in overgrown swamps, or in the broken-water rapids of the larger rivers; in all these places they are seldom seen and certainly are hard for children to catch.

IT'S THE FISH they can see, resting on the bottom or darting around in the open, that capture the attention and which are the target of budding anglers in the 5 to 10 years age group. Sometimes their "prey" is juvenile trout, but more often it is small bullies (*Gobiomorphus* spp.) they are after.

Most usual among these are the common bully (*Gobiomorphus cotidianus*) and occasionally the upland bully (*G. breviceps*), with other species like the red-finned bully (*G. huttoni*), giant bully (*G. gobioides*), or Cran's bully (*G. basalis*) sometimes being included.

## Abundant

The common bully, as its name implies, is widespread and abundant, particularly in the lower reaches of the river systems and in lakes at all elevations. Its apparent abundance is accentuated by the fact that it is much less secretive than other species.

It is quite normal to see common bullies darting around among the rocks in the marginal shallows, near lake margins, or beneath jetties. Other species are much more rarely seen.

Observant youngsters notice that, especially in spring and summer, some of the bullies are jet black and others are a grey-brown, and it is their ex-

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perience that though they can apparently catch the grey-brown ones, they can't catch the black ones. This apparently factual observation reflects an interesting peculiarity of the habits of our bullies.

## Highly territorial

The male bullies are highly territorial in behaviour, especially in spring and summer, when they are spawning. The female must have a surface on to which she can place her eggs, where they will adhere, and where they will be safe from attack by predators.

The male selects a site suitable for breeding. A flat-tish, firm, clean surface is required and usually it is beneath a rock, sometimes on the lower surface of a log or can, occasionally an old car tyre, and sometimes on the surface of plants growing in the water. Occasionally, too, it is on the upper, exposed surface of some such object.

In preparation for spawning he clears it of silt, debris, and bottom fauna insects. The male lives in this territory,

patrolling it on a regular basis and chasing away intruders, especially other bullies.

In addition to defending his territory and doing some "housework and maintenance" the male has to lure a ripe female from the neighbourhood and so is engaged in courtship behaviour with females passing near or through the territory.

## Colour change

Little is known about this courtship, but one of its consistent characteristics is that the male changes colour. Regardless of species, as far as is known, the male's blotching and banding pattern is obscured by his becoming jet black.

About the only relief from this black is the outer fringe of the first dorsal fin, which is orange in some species (common bully and upland bully), green (red-finned bully), or blue (blue-gilled bully). This seems to be a nuptial colouration present during courting, spawning, and afterwards during the guarding of the nest site by the male.

The male lures the female into the nest area, where she deposits the tiny eggs in a uniform layer over the chosen surface. After she has completed spawning, the female is probably driven from the nest, but evidence suggests that the male may then court another