

# From Barnacle to Hair Seal

By BONNYCASTLE DALE

WITH PHOTOGRAPHS BY THE AUTHOR



AS anyone paused for a moment and attempted to calculate the myriad life of old ocean? This island of Vancouver, where our work lies, is cut up and intersected by many deeply penetrating arms of the sea. For several weeks we have been busy along the shores of Sooke Harbour, and day after day we have wondered at the seeming extravagance of old Mother Nature; but the closer we examine, the greater our belief that there is no waste in nature—not a grain, an atom or a particle. Instead, there is for each order and family a bountiful table always spread. The motto of this mile square of throbbing life is "Eat or be eaten."

Neglecting the thousands of varieties of living creatures that are visible only to the microscope, we will examine those visible to the naked eye. On every rock and pebble, water-covered root and branch, millions of barnacles may be seen, mostly about the size of a single grain from an ear of corn. The tide is just starting to come in. As it circles about and covers the rocks and pebbles each of these barnacles opens its shell and protrudes a set of long, feathery tongues. These wave in the current, busily fishing. All over the flat rocks, just at high tide edge, thousands of periwinkles can be seen; in fact, so closely do they lie that we hate to walk along these rocks, as we are forced to crush dozens at every footstep. All of these are feeding on the orders below them. Attached to the perpendicular sides of the rocks thousands of limpets cling. These are about a half an inch long. All of this multitude are greedily sucking in their food from the flowing tide. Larger shell-fish than these, the mussels, incrust and cover the big surf rocks farther out. These in their millions, too, are taking their regular meal from the advancing tide.

Creeping on and over these, ever following the incoming water is a regular army of creeping things, those that wear their bones outside their flesh. We were eating our lunch on the "Spit" when we made these notes. Fritz was throwing the bones, very cleanly polished, of a fat bluebill we had just disposed of—for although later the bluebills are fish feeders of the worst type, now they are living on the sea grass and are excellent eating. No sooner would one of these bones, to which little save some strong muscles clung, sink to the bottom than it would be covered by shore crabs, horse-shoe crabs, small spider-crabs, tearing at the muscles—and at one another. Farther out giant blue crabs, huge spider crabs, red crabs, crept on over the bottom.

Hermit crabs peered out from the whelk shells into which they had stuck their fragile tails. All over the muddy parts of the bottom long muscular tubes protruded. Touch one of these leathery-looking tubes and it closes and slips down the muddy hole it had formed; these are the largest of the clams, a very coarse shell fish. Two other varieties, one similar to the little neck clam of the Atlantic, literally fill the mud a foot below. At very low tide beds of oysters are disclosed, a very small species, about the size of a twenty-five-cent piece.

Sweeping in with the flood of clear sea-water were numerous jellyfish, using their many tentacles

pounds, each and every one of this mass of creatures steadily feeding from the advancing tide.

In the water, over and around these, swam schools of smelt, the young of three varieties of salmon, great schools of garfish, young sea perch and bass. Feeding on these were mighty runs of steelhead, that beautiful sea trout which weighs a dozen pounds and leaps straight up four feet into the brilliant sunlight, great darting masses of silver salmon, and huge, dark, leaping dog salmon. Farther down sped codfish, great dogfish, flounders, sea perch, sea bass—while out in front of the bobbing flock of decoys, over which we were photographing, could be seen the winged host that inhabit this mile square of old ocean. Seal popped their whiskered faces out and raised themselves up on their fore-flappers, so that they could see the two strange animals on the "Spit"—then dived below and took a big, plunging salmon in their sharp teeth and savagely tore huge mouthfuls out or swallowed it whole if small enough. Huge porpoises splashed along. Great blue herons drove their sharp bills beneath and came up with a struggling smelt. Cormorants dived down to the sea grass below. Gulls of five varieties stole their living from the mouths of the mergansers and grieve or were driven to eat from the thousands of salmon that lay dead on the river's bank. Loons, the great northern diver and the black-throated, gorged themselves on the myriad young fish that swam beneath. Three varieties of grieve, western, pied and an unclassified grieve, fed on the ready feast. Guillemot, those active sea-pigeons, darted under for their meal. Tiny sea-doves sped along after the finny hosts. Kingfishers and great ospreys fell into the water with sun-sparkling splashes, finding the table ready spread at every entrance; the great fish hawks flew with watchful eyes lest that king of fish robbers, the bald eagle, did not despoil him of his meal.

Dotting the scene, in pairs and bunches and thousands, were the species that is sought for food by man, bird and beast. Eighteen varieties of ducks littered the glittering surface of the harbour—mallard, teal, widgeon, pintail, bluebill, buffle-head, whistling, old squaw, ruddy and surfduck, calling and diving—and splashing—yet all busily feeding. So were the coot scattered among them, and the jacksnipe and golden plover, the spotted sandpipers and the killdeer plover on the flats.

Count them up, this polyglot host, this moving mass of scale, fur and feather, this countless multitude that no man may number. Scan them well, you believers in the new faiths that exclude the One that made and feeds this innumerable mass. So



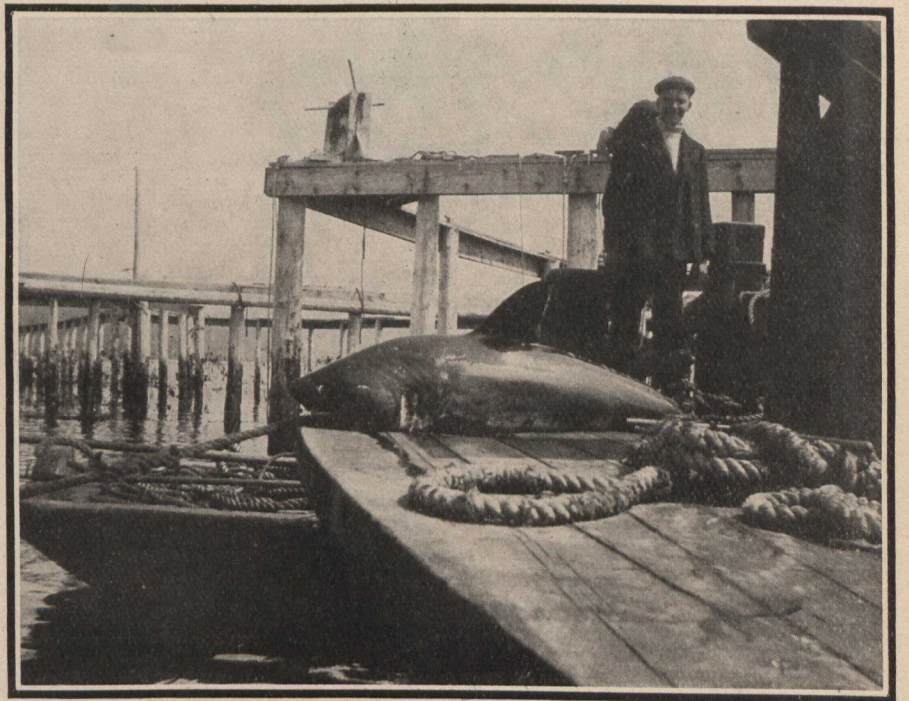
Guillemot or Sea Pigeon, in its Winter Plumage.

for fishing also. Anemones, those beautiful water flowers that at the same time are living animals, waved from the rocks far below, each big, flower-like head protruding many long leaf-like arms—all busily fishing. On the tide flats, thousands of big cockles, a shell fish as large as good sized apple, lay greedily feeding. Sea cucumbers, a long, semi-transparent, jelly-like fish, were gorging themselves on the tiny orders invisible to our unaided sight.

Scattered among these shellfish were thousands of starfish, tiny, brittle stars, as red as an angry loon's eye; larger ones of a terra cotta shade; great five-armed purple ones that clung in bunches to the tide line, looking cold and injurious in the shadows, but brilliant creatures where the sun searched them out. Beneath these, on the sands, lay huge, repulsive, eighteen-armed stars, some that weighed twenty



Purple Star Fish and Sea Urchins.



The Porpoise.