

"Pub. in Journal"

EFFECT OF OIL POLLUTION ON SEAFOWL

Done by J. Inley

How would you like to be a walker-on-the-waters and get up one morning to find that your customary roadways had been so slobbered with oil from careless steamers that you were all stuck up ^{and} ~~that~~ all you could do was to stand ~~up~~ and yell for help? But there was no help. Such was the calamity of this California murre in the picture taken by Mr. and Mrs. J. A. Rhodes at Rock-away Beach on April 29.

The murre had been far out at sea easing along in the bright morning breeze, thinking of spring and ^a ~~mate~~ ~~and~~ home on one of the big sea rocks, when he suddenly struck a deadly-smooth ~~slick~~ spot on the water. In two minutes his beautiful white breast was coated with the gummy stuff and his wings were glued to his sides. He got pannicky and tried to rise and leave the bewitched spot, but he was held fast to the water. Floundering about made things worse and he got all tired out. For several hours he was helpless and the big patch of oil, wafted by the wind and the tide, carried him toward shore. At last he was buffeted by the surf and washed up on the sand, and there he was found barely able to move, with starvation or worse ahead of him.

Of all the birds that intrigue the vacationist at the seashore, few hold more interest than the murre. Penguin-shaped birds they are about the size of wild ducks, chocolate-brown above with snowy breasts, flashing eyes and sharp bills. They abound in myriads along the north Pacific coast. Truly birds of the sea, not shore birds or surf riders, they are seldom seen alive on the beaches, though untold thousands of them have been nesting on Three Arch Rocks for uncounted centuries. Located close to the Tillamook County coastline, these three great piles of basalt lifting from

the sea constitute the greatest sea bird nesting grounds along the entire Oregon coast.



Spring brings the murre to these rocks. The flank of every green wave is flecked with them. Every schooner that plies the trade pushes its way mile after mile through these great rafts of sea fowl. The murre multitudes are moving under the homing instinct, pressing north with flap of wing and patter of foot, lifting now here, now there, rising and falling in the trough of white-tipped waves. They move steadily and with purpose as vast as armies move. June awakens to find the murre tribe gathered thick on cliff, crag, and pinnacle. The very basalt and granite are warmed by the mothering multitude.

Among our diving birds that live beyond the shoreline, the murre is the most populous species. One might wonder how there came to be so many of them. The reasons are sufficient. Although the mother murre cradles but one egg a setting, and a duck or grouse may lay from ten to fifteen eggs a season, the latter have decreased rapidly in numbers everywhere, but the murre still remain something like the numbers of yesterday. They have certain traits and habits that have helped them to grow and flourish.

The murre is not helpless. He is built upon serviceable lines, equipped for the life he leads. Not graceful in flight like the gull, he cannot poise, turn quickly, drop or rise with ease. He pushes forward on rapid wing, swift of purpose and bent on business. He rises from the sea with difficulty, splashing along the surface to get a start. His legs and webbed feet are at the very end of his body, so he walks upright and like a man with his feet hobbled. But these feet are where they are the most useful as propellers. He flies below the surface more expertly than he does above, using his wings like the side flippers of a seal. A stiff

tail as a rudder helps him turn and twist in the chase for fry.

It is a comedy to watch the daily round of life in a big loomery. When an old murre returns from the fishing ground, he takes a good start off seaward to gather speed so he can swing up to the eaves of his home rock. Like a man in an airplane, safe landing is often a puzzle. Twenty paces from the ledge, he looks uneasily for a soft spot, then begins back-pedaling rapidly and with webbed feet spread, he heaves in awkwardly and lands with the same lack of grace as a man on a patch of glare ice. Then he must face the phalanx of sword bills of a great rookery and find his own nest site to change places with his mate in the brooding. But all this training for efficiency in his own realm has not educated him to the danger of oil on the waters. This is a ^{comparatively} modern affliction.

Grave and ^{(devastating} disastrous epidemics of one disease and another have fallen on different regions of the earth, but few have touched the dwellers on the waters. On the contrary, the life-giving essences of the saline surfaces have fostered and fed the forms of life they touch. Now has come to the sea birds a veritable travail as pestilential as leprosy to human beings, and this from modern progress in the use of oil burners on ships that ply the oceans, and even the inland waterways. The sea can usually purify itself from almost any pollution, but not from heavy crude oil. Nor can it make immune to this the feathered tribes.

One recent incident will reveal the slaughter of the unsuspecting birds. On March 6, 1937, an oil tanker carrying a cargo of 2,730,000 gallons of crude oil was disabled at the entrance of the Golden Gate. Helpless, the ship drifted seaward with the outgoing tide and was finally stranded some hundred yards off shore.

She lay with her stern rising and falling in the ocean swells, her hull spewing oil at each heave. This continued for several months until the vessel broke up. The area covered by oil extended about fifty-five miles along the coastline of California and from fifteen to twenty miles seaward. The stretch between the wreck and the Golden Gate was in a constant state of pollution, endangering the lives of many sea and shore birds that frequented the region.

As gruesome as the scene was, it furnished a chance to study the effect of oil on the birds. One bay and nearby lagoon, a space of more than three miles, showed literally hundreds of dying birds. Eared grebes seemed to outnumber all other species affected here. At several places where thick weeds ran down to the water's edge, the clumps appeared to be moving. Upon closer inspection, this puzzle was shown to be caused by the heads and necks of dozens of grebes trying to remove the oil from their feathers with their bills.

Many saturated and helpless birds were picked up on the beach, and others that were dead. When captured, murrets usually gave a hoarse squawk, loons quacked almost like mallard ducks, and western grebes gave their regular grating call, but it sounded broken. Some were so weak they could hardly raise their heads, yet their last bit of energy was being spent in attempts to preen their feathers. Many lay trembling and shivering because the oil had matted and separated their feathers, allowing the cold wind and rain to reach their skins. Some of the live murrets, gulls, and western grebes managed to reach the bases of cliffs back on the shore and they hid in crevices where it was difficult to find them. Approach to these prompted a rush for the surf. Grebes and scoters, which are accustomed to surf-swimming, attempted to dive through the breakers

no matter how exhausted they were. Murres, not being well acquainted with bucking the surf, were usually tumbled over and over and washed back on the shore.

Some of the dead birds were difficult to identify. They were greased to the extent that they were tallied as "unidentifiable". Even outlines of bills and heads were blanketed over, and some looked like oval masses with feathers sticking out. An odd sight was a glaucous-winged gull completely devoid of oil except for a black spot of it behind the eye.

In the census ^{of one searcher,} 269 dead birds were found on five and a half miles of beach. ^{of the beaches inspected,} In the complete census 452 dead birds were ~~taken~~ ^{observed} from thirteen species, the California murres showing the largest number ^{with 205} of victims, with the grebes second with 94. This probably was barely a drop in the bucket of the mortality of birds snuffed out by this oil disaster, but assuming it as an average, if the full length of coastline affected had been canvassed, some 6600 murres must have been killed by the oil.

Lone murre, smudged of breast and rigid wing, ^{standing helpless on the sand} petition all powerful man to abate thy persecution.