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Tribal Net Fisheries And The Marbled Murrelet

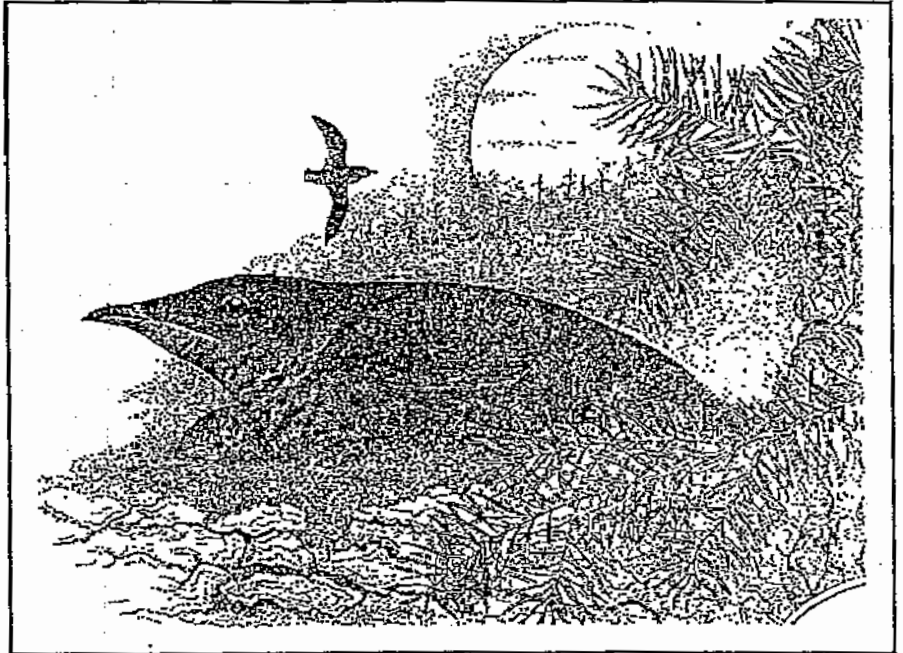
A small seabird sits at the center of a controversy with far more questions than answers. At issue is the effect of salmon gillnetting on the marbled murrelet. Little is known about the bird, which is listed as threatened under the Endangered Species Act (ESA), except that its population is declining.

Equally little is known about the impact of net fisheries on marbled murrelet populations. Those effects are the focus of three-month monitoring programs being conducted by treaty Indian tribes of Western Wash-

ington and the Washington Department of Wildlife (WDW). The studies began in August, and so far, no marbled murrelets have been found entangled in nets.

Yet another area of contention is the effect of the ESA listing and the Migratory Bird Act on the ability of treaty Indian fishermen to exercise their fishing rights. ESA measures to protect threatened or endangered species, such as curtailing fishing, could collide with the tribal right to harvest fish as upheld by the U.S. Supreme Court under U.S. v. Washington.

The marbled murrelet is a robin-sized marine diving bird that nests in old growth coastal forests from



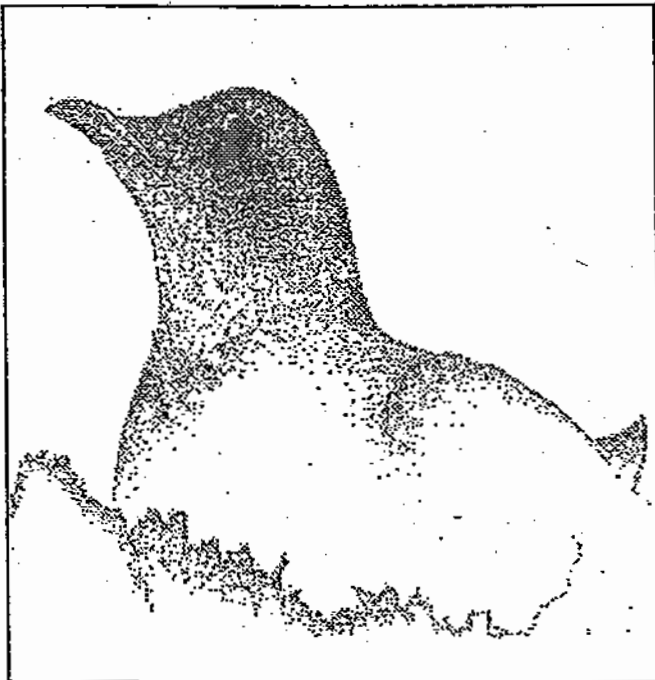
Alaska to northern California, but spends much of its life at sea, feeding on small fish near shore. Although marbled murrelets have a life expectancy of 10 to 15 years, they have a low reproduction rate. The birds do not become sexually mature until their second or third year, and may not breed annually. Female marbled murrelets lay a single egg.

Marbled murrelet populations have declined since the early 1900s as timber harvests have increased, but little historical population data exists to determine the extent of the decline. Little data also exists to support the current population estimate of 5,000 breeding birds in Washington. Distribution is scattered, with concentrations tied to available mature forest habitat.

In January 1988, the National Audubon Society filed a petition with the U.S. Fish and Wildlife Service (USFWS) to list the marbled murrelet as a threatened species in Washington, Oregon and California under the ESA. Timber harvesting was identified as the primary cause of the bird's population decline. Oil spills and marine gillnetting were also included as contributing factors. The marbled murrelet was listed as a threatened species in September 1992.

Following consultations with tribal and Bureau of Indian Affairs officials, which included development of the bird monitoring program, the USFWS in July issued a "no-jeopardy" biological opinion regarding the potential impacts of the tribal net fishery on marbled murrelet populations.

The ruling forestalled a conflict between ESA protection measures and treaty Indian fishing rights,



but included a provision requiring tribal fisheries to close, and are-consultation to occur, if five marbled murrelets are found by monitors.

Tribal efforts to work with the USFWS were frustrated throughout the consultation process. USFWS officials admitted early on that little was known about the marbled murrelet and the impact of net fisheries on its populations, and initially stated that they would not es-

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establish any limitations on 1993 fisheries. They reversed that decision and indicated they would make a jeopardy opinion for the salmon fishery.

Officials later said they would become concerned only if hundreds of birds were caught in nets. Then they conceded to a no-jeopardy opinion, but with an incidental take of no more than 25 birds from the monitoring program. This was later cut to an allowable take of five birds in the monitoring program, a decision made without further consultation with the tribes or the Bureau of Indian Affairs.

"This pattern of inconsistency leaves us with the impression that the decisions of the Fish and Wildlife Service are arbitrary and unsupported," said Bill Frank, Jr., chairman of the Northwest Indian Fisheries Commission (NWIFC).

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The timber industry already has filed suit over the ESA listing of the marbled murrelet. The suit



followed a USFWS draft opinion that U.S. Forest Service plans to allow logging in some coastal areas in Washington and Oregon could harm the bird's habitat.

Shutting down entire tribal salmon gillnet fisheries is not warranted even if the incidental take of five marbled murrelets occurs, Frank said.

"The Endangered Species Act points out the United States' trust responsibility to uphold its sovereign commitments that were made to the tribes when the treaties were signed, and as enunciated by the U.S. v. Washington court," he said.

Under this principle of trust responsibility, closure of the tribal net fisheries could occur only after all other reasonable and prudent measures were taken to protect the marbled murrelet throughout its range, Frank said. Logging, development, pollution and other activities threatening marbled murrelets and their habitat would all have to be stopped before treaty gillnet fisheries could be halted. Restrictions on tribal treaty right activities under the ESA or any other conservation law must be demonstrated to be reasonable and necessary for

the preservation of the species at issue, he said. Further, any measures must be the least restrictive available to achieve the required conservation purpose, and must not discriminate against Indian activities either directly or as applied, Frank added.

While fishing nets were cited in the formal listing as a "potentially significant" cause of the bird's decline, how serious a threat to marbled murrelets are they? No one really knows. These fisheries have been conducted for many years. Few studies have been conducted on the role net fisheries play in the bird's life history.

A battery of Western Washington fisheries monitoring programs with a combined budget in excess of \$250,000 have begun in an effort to fill the knowledge gap. Planned by the treaty Indian tribes and the NWIFC, Bureau of Indian Affairs, National Marine Fisheries Service, Washington Department of Fisheries (WDF) and WDW, these studies are required under the Marbled Murrelet/Net Fishery Biological Opinion issued by the USFWS.

The studies have two primary objectives:

- Count the number of murrelet entanglements and mortalities; and
- Document the conditions under which entanglement occurs, with recommendations for minimizing mortality.

Monitoring will take place by three general methods:

- On-board fishing boats. Trained tribal and NWIFC staff will voluntarily collect seabird entanglement data from fishermen.
- On a separate observation vessel. This method is proposed to collect data from a larger number of boats at times when fishing activity is concentrated in a particular area or at the peak of a run.

During test fisheries. There are nine test fisheries planned for the summer and fall of 1993. These fisheries, conducted by the Pacific Salmon Commission (PSC), WDF and various treaty tribes, are designed to collect data for salmon fisheries management. They also provide an excellent opportunity to observe bird interactions with gillnets.

At least one fisheries biologist with bird identification training will be on board when monitoring is conducted to collect seabird data. They will make preliminary identifications and record a wide range of data, including:

- Date, time, location;
- Weather and sea conditions;
- Water depth;
- Distance from land; and
- Tide stage and current velocity.

The biologist will also record the fishing operation, including:

- Boat type and length;
- Gear: net dimension/mesh size;
- Set or "soak" time; and
- Set direction and orientation to the current and wind.

Data on any birds found will be recorded, including:

- Preliminary species identification;
- Location of bird in net; and
- Any observed bird behavior when entangled.

Any dead birds will be sent to WDW for positive identification. The NWIFC will compile all data collected from tribal fishery observations, and from NWIFC and tribal test fisheries, while WDF

will compile data from its test fishery and the PSC test fishery.

"We're not gathering this information just to address the marbled murrelet issue," Frank said. "We're collecting data to positively address the overall question of net fisheries' impacts on all by-catch, including marine mammals, birds and non-targeted fish species. The tribes are taking a pro-

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There are many potential ways to minimize the net threat, including:

- Physical gear modifications. Fishing gear can be changed to avoid encounters between nets and birds. There are plans for a 1994 study to test the effectiveness of some modifications.
- Operational modifications. Changing fishing times or locations can reduce the threat to birds.
- Mortality reduction. There are ways to improve the chances of a bird surviving an encounter with a fishing net.

"There will likely be two or three more years of studies before the tribes may determine if changes should be made to treaty fisheries," said Frank. "There is so little information available on these birds that it would be virtually impossible and even counterproductive to make any kind of biologically sound recommendations today."

Frank said the treaty Indian tribes are committed to protecting all natural resources.

"We have cooperated fully from the beginning of this effort, despite the arbitrary decisions made by the Fish and Wildlife Service," he said. "We will continue to do all we can to help the marbled murrelet."