

# The Environmental Contaminants Program

by Cindy Schexnider



Gus Van Vliet

**Marbled murrelet**

The Fish and Wildlife Service has been studying the effects of contaminants on fish and wildlife since the agency's earliest days, but the Environmental Contaminants Program did not begin to take form until the 1950s, when increasing awareness of pollution problems spurred the American public to demand action. Then, in 1962, Rachel Carson, a former Service employee, captured national attention with her landmark book, *Silent Spring*, which described the widespread harmful effects of pesticides on the environment. Carson's alarming message—that the effects of these substances on wildlife serve as indicators of what may ultimately jeopardize our own health—struck a chord with the American public.

Many believe that Carson's book inspired the modern environmental movement and prompted the develop-

ment of many of the pollution prevention laws that are in place today. After her book was published, Congress passed the National Environmental Policy Act and pollution prevention laws such as the Clean Water Act; Clean Air Act; Federal Insecticide, Fungicide and Rodenticide Act; Safe Drinking Water Act; Toxic Substances Control Act; and the "Superfund" toxic waste cleanup law also known as the Comprehensive Environmental Response, Compensation, and Liability Act.

Today, the Service's Environmental Contaminants Program includes contaminants specialists stationed at more than 75 locations around the country. These scientists are on the front lines in the fight against pollution. They specialize in detecting toxic chemicals; addressing their effects; preventing harm to fish, wildlife, and their habitats; and remov-



Olympic Coast National Marine Sanctuary

**Old-growth habitat at Cape Flattery is now being protected for the marbled murrelet and other wild life.**



Douglas Zimmer/USFWS

**Dancers from the Makah Tribe celebrated the agreement to protect old-growth habitat.**

ing toxic chemicals and restoring habitat when prevention is not possible. They are experts on oil and chemical spills, pesticides, water quality, hazardous materials disposal, and other aspects of pollution biology. Integrated into all other Service activities, the Service's contaminants specialists often work in partnership with other agencies and organizations that rely on our expertise.

An example of the program's work can be seen in our response to an oil spill off the U.S. Pacific Northwest coast that posed a serious threat to a population of marbled murrelets (*Brachyramphus marmoratus*). These small seabirds live in nearshore marine environments from California to Alaska and are the only seabird to nest in mature coastal forests. Extensive losses of such habitat led to a decline in marbled murrelet numbers along the West Coast, resulting in the 1992 listing of the Washington, Oregon, and California population as threatened under the Endangered Species Act.

On July 22, 1991, the Chinese freighter Tuo Hai hit and sank the Japanese fishing vessel Tenyo Maru near the entrance to the Straits of Juan de Fuca, which separates Washington State and Vancouver Island, Canada. The Tenyo Maru released much of the 452,600 gallons (1.7 millions liters) of fuel oil and diesel aboard, oiling a large swath of the coasts of Washington and Oregon. The spill killed over 20,000 sea birds, including marbled murrelets.

Under the 1990 Oil Pollution Act (OPA), natural resource trustees (selected Federal agencies, States and Tribes) hold

the parties responsible for an oil spill liable for injury to natural resources and to restore those injured resources. The trustees involved in the Tenyo Maru spill included the Department of the Interior (represented by the Service's Environmental Contaminants Program), the State of Washington, and the Makah Tribe. Through the natural resource damage assessment and restoration (NRDAR) process under the OPA, the trustees quantified the natural resource injuries and, with public input, determined the appropriate restoration projects.

Because habitat loss is the greatest threat to marbled murrelets, most of the Tenyo Maru restoration projects focused on habitat protection and enhancement. The trustees used approximately \$4.7 million of the settlement funds to permanently protect and restore over 900 acres (365 hectares) of coastal forest in three parcels. These included 220 acres (90 ha) of rare coastal old growth forest currently supporting nesting marbled murrelets, as well as high-quality second growth forest and younger stands of trees that will serve as a buffer to the old-growth stands and eventually grow into mature forests. One parcel is now a part of the Willapa National Wildlife Refuge, while two others are being managed under a 200-year land use agreement with the Makah Tribe. All of these areas are now protected from logging, development, and other activities detrimental to the recovery of marbled murrelets. The trustees also provided funding to survey potential marbled murrelet nesting areas, which through our partners has resulted

in increased protection of another 3,000 acres (1,215 ha) of mature forest habitat in Washington.

In August 2006, the trustees held a commemoration to share completion of the restoration projects with the public and to inform them of the needs of Washington and Oregon's seabirds. Held on the Makah Reservation, where two of the newly protected old-growth forest tracts are located, the ceremony included tribal traditions, complete with a smoked salmon feast, tribal dancing, and blessings for the newly protected land.

A final summary of the entire restoration can be found at <http://www.fws.gov/westwafwo/index.html>.

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