

# The Montrose Settlements Restoration Program



Acting on behalf of the public to restore coastal and marine resources injured by hazardous substances.

## Restoring Bald Eagles

*From the 1940s to the 1970s, millions of pounds of DDT and PCBs were discharged from industrial sources into the ocean near Los Angeles. Almost all of the DDT originated from the Montrose Chemical Corporation's manufacturing plant in Torrance, CA. Montrose also dumped hundreds of tons of DDT-contaminated waste into the ocean near Santa Catalina Island. DDT decimated bald eagle populations in California's Channel Islands.*

Recently, state and federal agencies settled legal claims against Montrose and several other companies for the release of these contaminants. A total of \$30 million in settlement funds will be used to restore injured natural resources.

Three federal and three state agencies acting as natural resource trustees on behalf of the public are collectively known as the Montrose Settlements Restoration Program or MSRP. MSRP trustee agencies will use a portion of the settlement funds to restore bald eagles to the Northern Channel Islands. The MSRP includes:

- The U.S. National Park Service,
- National Oceanic and Atmospheric Administration,
- U.S. Fish and Wildlife Service
- California Department of Fish and Game,
- California State Lands Commission, and
- California Department of Parks and Recreation

### A Declining Bald Eagle Population

DDT is a mixture of similar chemicals that were widely used as pesticides in the United States, starting in the 1940s. When DDT was used in the U.S., many bird populations declined. In 1973, Congress banned the use of DDT and bald eagle populations then

rebounded almost everywhere except in the Southern California Bight.

In the past, the eagles were a resident breeding species on all eight of the California Channel Islands, with roughly 35 eagle nest sites existing earlier in this century.

DDT bioaccumulates and is slow to break down, becoming more concentrated in animals at higher levels in the food web. When feeding on food contaminated with DDT, animals at the top of the food web, like bald eagles, can accumulate high concentrations of these chemicals. DDT in the food of bald eagles has caused them to lay defective eggs.

### Restoring Bald Eagles

Trustees are undertaking a study to determine the feasibility, given the continued presence of contaminants in the marine environment, of recolonizing the Northern Channel Islands with bald eagles. The study will involve releasing juvenile eagles on Santa Cruz Island and monitoring their exposure to DDT over a five-year period.

Beginning in 2002, up to 12 juvenile eagles will be transported to a "hack tower" on Santa Cruz Island each year. The birds will reside in the tower for a month to acclimate and gain fly on their own. The eagles will then be released from the hack towers. Seven of the birds introduced in 2002 are flying free on the northern islands. An eighth bird is on the mainland.

The trustees will monitor the birds to determine whether a full-scale program reintroducing bald eagles to the northern Channel Islands is viable.



### A Threatened Species

The American Bald Eagle (*Haliaeetus leucocephalus*) historically ranged throughout North America, except in extreme northern Alaska and Canada and central and southern Mexico

The bald eagle was adopted as America's national symbol in 1782 and revered by Native American cultures. In 1782 there were between 25,000 and 75,000 birds in the lower 48 states. By the early 1900s, the bald eagle population had dropped to 834 birds.

In 1967, the bird was officially designated as an endangered species. The Bald Eagle Protection Act of 1940 was the first legal protection for the bird. In 1972, DDT was banned for most users in the United States. This single regulation enormously helped the bald eagle's recovery. Following the enactment of the Endangered Species Act in 1973, the U.S. Fish and Wildlife Service listed the species as endangered throughout most of the lower 48 states. The Service down listed the species from endangered to threatened in 1995.



The hack tower on Santa Cruz Island where the eagles reside before attempting flight.

## What Bald Eagles Eat

Bald eagles are predators that eat fish, carrion, small mammals and birds. Eagles can fly with eight pounds of food. Eagles also have great eyesight that help them see food roughly a mile away (thus the term “eagle eye”) and can dive at 100 miles per hour. Both of these adaptations help them catch food in the wild.

## The Life and Look of a Bald Eagle

The Bald eagle is also known as the American eagle, the white headed eagle, and the white-headed sea eagle. Bald is a synonym for white and does not mean featherless. A bald eagle is from 30 to 31 inches in length and weighs about eight to fourteen pounds. Wingspan for the birds varies between six to eight feet and female birds are slightly larger than males.

Adult birds have the familiar blackish brown plumage with feathers covering the upper part of the bald eagle legs. The tail and head are white and the hooked beak a bright yellow. Feathers cover the upper part of the bald eagle legs. Young eagles have longer tails and white feathers on their underbody. By the fourth or fifth year, they will have adult plumage and coloration and have about 7,000 feathers.

The eagle becomes sexually mature between four to five years, remaining with the same mate for life. A typical nesting area ranges between one and two miles in diameter and pairs of eagles will defend their territory, chasing away intruders. Their nests, called aeries, are often built in big trees but in non-wooded areas such as Santa Cruz Island, they will also nest on the ground or on the sides of cliffs.

Eagle nests vary greatly in size and shape, but average five feet across. When the same nest is used year after year, it can become as large as nine feet across and weigh as much as two tons.

Nesting season is from November to April and bald eagles lay between one and three cream colored eggs. Although the male helps incubate the eggs, the female does the majority of the incubating. Once eggs are laid chicks will hatch in 34 to 37 days. Depending on the availability of food, often only one chick lives, but occasionally all three will survive. The chicks leave the nest at 12 weeks old, but stay with parent birds for another month learning hunting and survival techniques. Bald eagles can live for about 30 years in the wild and captive eagles have lived to be 50 years old.