

CONSERVATION

Wildlife Refuges Increasing

Lake Merritt in Oakland, Calif., first official wildlife refuge in the United States, is only one of hundreds of refuges, Ann Ewing reports.

► SWOOPING OUT of gray fog, skirting tall office and apartment buildings in the heart of Oakland, Calif., thousands of wild birds each year drop to a small lake they claim their home—Lake Merritt, the first wildlife refuge officially established in North America.

Now there are literally hundreds of wildlife refuges run by the Federal, state and local governments, as well as private organizations.

But there are also many hundreds of thousands of persons who furnish food, cover and water for birds at least during the winter months if not year-long. In effect each is operating his own private wildlife refuge.

These small homesite refuges contribute much to the welfare of small birds and also furnish pleasure to their owners. Artificial feeding of grains, fruit, suet or bread crumbs, among other things, attract many kinds of birds.

However, this practice, once started, should be continued as long as the birds need food. Feeding only part way through the winter could attract birds away from their natural food supply, then leave them stranded. If feeding is stopped in this way, many birds may die, so it is best not to start unless continuity can be maintained.

Conservation experts have defined wildlife refuges as areas of land or land and water set aside and managed definitely for the protection and preservation of native plants and animals. They may be, and often are, correlated with other uses that do not conflict with this primary objective.

Yellowstone Is First National Park

Within two years of 1870, when the State of California established Lake Merritt as a wildlife refuge, Congress created the first national park in the world, Yellowstone Park in Wyoming. Twenty-two years after 1872, Yellowstone Park became in effect a wildlife sanctuary when the killing of wildlife was prohibited, although its primary purpose remains as a recreational area.

The birth date of the official Federal wildlife refuge system was March 14, 1903, when Pelican Island National Wildlife Refuge, a five-acre area on the east coast of Florida, was established by President Theodore Roosevelt's executive order, to protect a then-favorite nesting site of the brown pelican.

This legislation was of major importance because it symbolized national recognition, for the first time, of the desirability of wildlife reservations on an equal basis with those for scenic values, forest resources and historic shrines.

Today the Government runs 284 wildlife

refuges covering a total of some 28 million acres. State governments run several hundred refuges having many millions of acres. Many private organizations, particularly the National Audubon Society, also operate refuges.

Refuges can be of any size from the small back yard to hundreds of thousands of acres. Many were established to protect a particular species, but even these contribute to the welfare of other creatures. As Dr. Ira N. Gabrielson, president of the Wildlife Management Institute and former director of the U.S. Fish and Wildlife Service, has said:

"Wild creatures cannot read man's laws nor his signs, but they can recognize suitable food and cover and will use them regardless of the purpose for which these facilities were provided."

Refuges are usually classified into four types: special purpose for nongame birds, big game, migratory waterfowl and general wildlife.

Special purpose refuges are created to protect a single colony or group of colonies, often to save them from extinction. Most are run by the Federal Government, but many are operated by such private groups as the National Audubon Society, whose most important sanctuaries are in Florida and Texas. In both states, the birds chiefly

protected are the herons and ibises, but many other species also benefit.

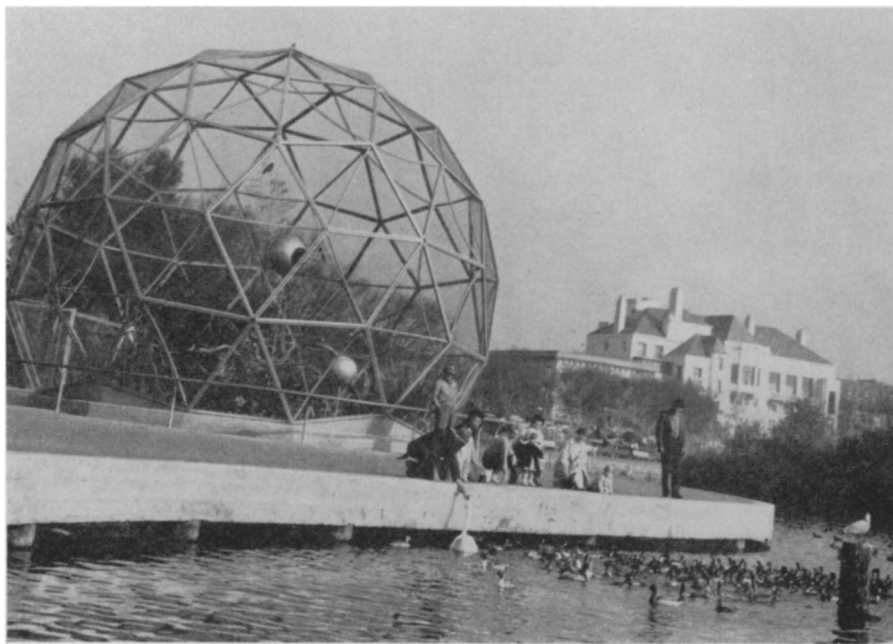
Among the big game refuges is the National Bison Range in Montana, set aside in 1908 after conservation groups waged a crusade for the preservation of buffalo, large herds of which once roamed the Great Plains. Also protected on large Federal ranges are the antelope, deer, elk and mountain sheep. There are many more state than Federal refuges in this category.

However, refuges for migratory waterfowl are mostly Federally owned. This is because the Migratory Bird Treaty Act makes conservation of such birds a Government obligation, and because funds for the development and maintenance of sanctuaries for them result from the "Duck Stamp Act," as it is popularly known. The Act requires every duck and goose hunter over 16 years of age to buy a stamp each year. Ninety percent of the funds must be used for the refuges. The areas that have been set aside for the benefit of waterfowl include breeding, flyway and wintering refuges.

Refuges for General Wildlife

There are comparatively few Federal refuges for general wildlife, but they are numerous in the state system and also frequently maintained by private individuals who enjoy the presence of wild things around them.

All that is necessary to provide such a refuge is to close the area to hunting, post the boundaries thoroughly and furnish enough patrol to insure compliance with



SANCTUARY AMID SKYSCRAPERS—Paul F. Covel, park naturalist of Oakland, feeds a mute swan and other birds near geodesic dome at the Lake Merritt Wildlife Refuge in the heart of Oakland, Calif.

the trespass warnings, according to Dr. Gabrielson. No extensive plantings are necessary, although the variety of life attracted may be increased by making the vegetation more varied or by constructing a pond that would eventually draw water-loving animals and birds.

There are also many Federal refuges on land primarily used for other purposes, such as Tennessee Valley Authority land, reclamation reservoirs, national forests, national parks and national monuments. Killing is prohibited in these areas except as needed for management purposes.

Refuges operated by states are quite numerous. They are of all types and sizes and are often used for a variety of purposes.

However, refuges alone, no matter what the type, cannot solve the problem of restoring wildlife populations. The areas must also be carefully managed. Browsing and grazing animals, for instance, could increase to such numbers that they destroy their own food supply.

There are uncounted numbers of wildlife refuges maintained by individuals, conservation associations and local governments. Among the most noted of the small wildlife sanctuaries maintained by a local government is Lake Merritt, which is supported by the City of Oakland, Calif., and which has attained fame as a wintering ground for wild ducks.

Lake Merritt attracts shy migratory birds in spite of civilization, concrete and mechanics. Indeed, men and machines have come to the aid of nature in creating islands that serve as oases of rest and feeding for birds.

The "Old Duck Island" was constructed of rock, soil and pampas grass in 1923 to provide shelter and nesting sites—and four new islands have since been created. The area between these islands and shore is permanently enclosed by log booms.

Lake Merritt is a natural salt water lake in the center of the city. It covers approximately 155 acres and is controlled by flood gates at the outlet to the Estuary, part of San Francisco Bay. Californians used to ship lumber, meat and hides from here to San Francisco and other ports. As the City of Oakland grew, gradually it acquired more land around the lake for boulevards and public parks.

The lake was named for an early mayor, Dr. Samuel Merritt, who made the first dam to change this tidal slough to a controlled lake. Today the northern side of the lake is a realistic dream of many city naturalists—with wildlife feeding stations, homes for small native mammals, carefully nurtured herb and flower gardens, and the Rotary Natural Science Center, which offers attractive exhibits of live snakes, bee hives, and other zoological and botanical specimens the year around.

Chief attraction for visitors—human and ornithological—is the daily feeding of ducks, pelicans, diving birds and other wild birds.

About 75 native species, including 25 species of ducks, have been observed on the lake during the last quarter century. Many mallard ducks have made permanent homes on the lake and have set up their own colonies.

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