Foreword

Anthony Netboy

There has long been a need for a comprehensive and readable book on the unhappy fate of California's salmon and steelhead trout. Alan Lufkin and his associates have provided it, and we should be most grateful to them.

A lecture I gave many years ago in England is entitled "Man and the Salmon: A Problem of Coexistence." The story of the salmon in California is typical of what the title implies. The salmon were probably distinct species over a million years ago, when the advanced anthropoid apes were on their way to becoming humanoids. Man and the salmon had a harmonious relationship until recent centuries. Now the salmon are being increasingly harassed by man the world over and coexistence is becoming more difficult, especially in industrial countries. And, I may add, nowhere is the existence of the anadromous fishes more difficult than in California.

There is a difference in the way these fishes were treated by the aborigines and the white man. Coastal Indians and those living in the Sacramento/San Joaquin valleys treasured the abundant salmon that lived in the streams almost the year round. "No stream was too small to host populations of these hardy fishes, and the supply seemed endless," says Lufkin. The Indians were keenly aware of the importance of salmon for their survival. They did not take the bounty for granted. With their mystic sense they developed rituals and myths that they believed would assure abundant runs. Moreover, they became conservationists and did not waste them.

This became clear to me from an interview with a Tlingit Indian in Alaska, descendant of chiefs. He said, "The Great Creator, my father told me, sees everything. The undying Creator created the fish for the benefit of human beings, but we must not take them except for food. In Sitka," he added, "they used to destroy three scows of salmon at a time because the canneries could not handle them. We were taught it was a sin to kill off the seed stock, but the white man killed the seed stock and depleted the rivers."

The story unfolded in this book is part of what the California ecologist Raymond Dasmann calls "the destruction of California," the title of his book. The fate of California's salmon mirrors the state's use of its environment and natural resources, especially water, which is vital to the existence of both fish and men.

In the past century a land of infinitely varied landscapes, endowed with an abundance of fertile soils, forests and grasslands, mountains and deserts, and countless rivers, was invaded by millions of people from the four corners of America, seeking a better life in a milder climate. In the process rivers and watersheds were turned topsy-turvy; farmland was bulldozed to make way for human habitations. Forests containing trees hundreds of years old were reduced to lumber and other forest products; desert lands were trampled to dust; foothills and lowlands were occupied by housing developments; rivers were dammed to generate power, and in the process prevented the migration of anadromous fish to their spawning grounds. Tremendous amounts of water were diverted to irrigate semidesert land to grow needed crops and also to grow cotton that became a drug on the market.

Most of California's salmon and steelhead were, so to speak, evicted from their native habitats, and the runs declined or disappeared. Only a fraction of the original cornucopia remains.

This book documents the story and pinpoints the way Californians have mistreated and exterminated most of the state's salmon and steelhead runs. The engineers who ran the Bureau of Reclamation that built the great Central Valley water projects and others had little interest in saving the fishes. "Bureau policies made fisheries expendable," says Lufkin. "While national emergency restrictions could partly explain the bureau's earlier neglect of fishery

values, that excuse was invalid. Had the bureau genuinely acknowledged fish and wildlife values, fish protection planning could have begun with preliminary engineering studies and been realistically paced throughout the planning process. That did not happen."

What stopped some projects that would have been harmful to the fisheries was due largely to citizens' agitation resulting in action taken by the state legislature to establish citizen advisory committees. The California Department of Fish and Game had little power and less money. It could offer only technical help in planning mitigation facilities.

"The Bureau of Reclamation," says Lufkin, "is widely blamed for subsequent fishery declines traceable to the Central Valley Project, and with reason. The agency gave lip service to fishery conservation causes, but its action belied its words." The Shasta Salvage Plan failed, and the San Joaquin fishery died. Trinity River salmonid stocks were decimated. The bureau's primary policy was to provide water for agricultural irrigation, and this aim precluded improvement of fisheries. In brief, the value of fisheries was downplayed in favor of benefiting the agribusiness interests.

I cannot help contrasting the dismal failure in California to protect the fisheries with the success attained in the Pacific Northwest to force the dam builders, mainly the powerful and arrogant Corps of Engineers, to build fish ladders, bypasses, and other facilities to protect the salmon. This victory was not attained without a struggle. It is hard to believe that the original plans to build Bonneville Dam, the corps' first project on the Columbia, excluded facilities for protecting the fish. When fishery people protested, the chief of the corps reportedly said, "We don't intend to play nursemaid to the fish." Had this policy prevailed, the entire cornucopia of salmon and steelhead in the vast Columbia River watershed would have been doomed. Strong public opposition, however, forced the corps to add fish-saving facilities at each of the many dams built on the Columbia. On the Snake River, the largest tributary of the Columbia, no workable facilities were provided at the Idaho Power Company's three dams, and the salmon and steelhead were exterminated.

Having visited most of the countries in the Northern Hemisphere that have seagoing salmon, and written four books about them, I have concluded that man and the salmon are indeed on a

collision course. Salmon are the world's most harassed fish, the title of one of my books. The story of their fate in every industrial country is the same: downbeat. In other words, man and the salmon cannot live harmoniously together in such countries. Where the citizens have enough interest to protect the fisheries at dams and other impoundments there is a good chance most of them will be saved, as on the Columbia River. Where the people are lax, or dominated by water and similar interests, the fishes will largely go down the drain, as in California.