

The two books are welcome additions to the continuing and changing Chinese phase in social science and history. They both add to our knowledge. But more important, they add to our consciousness. No reader can come away from these works uninformed or uninspired. The North American continent was not a true gold mountain to the Chinese who named it such. But the golden people who settled along the eastern Pacific and moved inland have given it their own ethno-cultural richness despite its lack of a generous spirit or warm welcome.

*New School for Social Research*

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*Waterfowl on a Pacific Estuary. A Natural History of Man and Waterfowl on the Lower Fraser River*, by Barry Leach. British Columbia Provincial Museum Special Publication No. 5. Victoria: British Columbia Provincial Museum, 1982. Pp. 211, \$7.00.

Barry Leach is well known to scholars in the field of German history for his *German Strategy Against Russia 1939-1941* (Oxford, 1973) and his more popular *German General Staff* (New York, 1973), but in B.C. we have also known him for years for his talks on television and the radio, his letters to and articles in the newspapers about ecological questions and his leadership of the Institute of Environmental Studies at Douglas College. He has published a number of articles on ecology and ornithology, one of them in this journal in 1979. The fruition of these concerns is in the volume under review, which reveals that Leach's talents extend to delightful line drawings and two pages of sensitive verse.

In a first part Leach establishes the abundance of waterfowl in this area from early records, accounts for the creation of the marshes, explains the patterns of migration of the Fraser Waterfowl, describes the sequences of glaciation and their effects, tells of the native peoples and their modes of hunting, introduces the white man and recounts his early experiences of the wilderness, and summarizes the environmental changes that resulted in "The Decline of the Waterfowl."

Part Two is composed of eight chapters about "The Waterfowl": one on swans, four on geese (Snow Geese; Canada Geese; Brant; three other rarer kinds), a second on the dabbling ducks (Shoveller, Widgeon, Mallard, Pintail), another on the Wood Duck, and a final chapter on the diving ducks (Scoters, Scaups, Goldeneyes, Bufflehead, Oldsquaw, Harle-

quin, Ruddy Duck, Mergansers, etc.). There is much lore here familiar to ornithologists from other books about the characteristics of these birds, but also piquant and unusual detail or observation as well as description that situates them in the Vancouver region, whether in migration, nesting or resident.

The third part contains chapters about "Places and Projects"; that is, capsule histories of the establishment of sanctuaries by devoted conservationists, with the reluctant consent of governments, at Reifel Island, the Serpentine Fen, Mud Bay and Pitt Meadow, with revealing description of their characteristics and wild residents. A fifth chapter recounts how various groups have propagated waterfowl, some of them previously not indigenous, in a number of these areas.

The final part is composed of chapters on "Loss and Pollution of Habitat" (urban sprawl, sewage, insecticides, lead shot), "Disease and Predators" (cables, power lines, vehicles, predatory mammals), "Human Disturbance" (powerboats, aircraft, hunters). The conclusion, "Thoughts about the Future," argues that we have few and too small sanctuaries and refuges, and that they "are neither staffed nor operated to meet the recreational or educational needs of the wider public." Leach hopes to make his readers aware of the shocking decline of numbers of waterfowl on the Lower Fraser since the nineteenth century; of the disturbing effects of the human presence on the birds, especially through hunting and machines; of the way waterfowl management agencies have acted on behalf of hunters more than the recreational observer of waterfowl; of the lack of funds for maintenance of reserves and the relatively slight interest of the public.

There is something here for almost everyone, whether advanced ornithologist or beginner, hunter or not, historian or connoisseur of local rambles. It is a charming book, very readable, expressing well the delights and emotions of the author in contact with the environment he describes and captures in his own fine drawings, informative about a great range of factual matters, natural historical and human historical, many of which everyone may easily experience in this region, not just near this particular Pacific estuary. There is an excellent bibliography and index, and an end map showing the places mentioned in the book.