THE PACIFIC FLYWAY STUDY COMMITTEE AND COUNCIL: A HISTORY

James C. Bartonek, Pacific Flyway Representative (retired) U.S. Fish and Wildlife Service, Portland, Oregon

Active and organized participation by the States in managing our Nation's waterfowl resource had its beginning with the Pacific Flyway Study Committee-at least that's the way we westerners view it. At the Western Association of Fish and Game Commissioners' meeting in Santa Fe in June 1947, it was probably Oscar Johnson, Fish and Wildlife Service (FWS), Wiley Ben Williams, Western States Federated Sportsmen, and Emil J. N. Ott, Jr., California Division of Fish and Game, who unwittingly provided the catalyst. While not being specific themes of their papers, the state-federal relationship (or lack of it) in establishing waterfowl regulations and the concept of managing waterfowl by flyways were nonetheless recurrent topics throughout their presentations and the ensuing discussions. During an "evening session" over beers, a group of conferees continued on in this same vein discussing the "pros" and "cons" of their states acquiring basic information to be used in formulating regulations. While there were obvious reasons why each state should go its own way in collecting information about waterfowl, there seemed more to be gained if many states were to conduct somewhat similar investigations and pool their information. Ben Glading from California and J. Burton Lauckhart from Washington were among those that thought such a cooperative effort would provide better information upon which to manage waterfowl than that in use.

Getting that envisioned way of managing waterfowl into a working program was surprisingly difficult when considering the times. In those post-war years, state wildlife agencies having been bolstered by release of withheld Pittman-Robertson (P-R) funds were rapidly expanding their programs. Biologists, managers and enforcement officers, some recently schooled and some eager to apply to wildlife management certain skills acquired in the military, were readily available. Obstacles to this new program came from both state agencies and the FWS. The FWS had never encouraged and at best was lukewarm towards states initiating P-R projects related to waterfowl investigations. Some Service administrators perceived waterfowl management as being exclusively within their agency's purview. Some state directors did not overly object with this arrangement because they wanted their funds and manpower to go towards resident species and the necessities of habitat acquisition and development rather than the luxuries of "studying" ducks and geese. Only a few states through their own funds had modest waterfowl programs but not of the nature desired.

The California Division of Fish and Game gave the cooperative program the needed push by inviting representatives from agencies and colleges along the Pacific Coast to attend a 2-day "Waterfowl Conference" at the Oregon Fish and Game Commission's office in Portland on February 17-18, 1948. Participants included James F. Ashley, John E. Chattin and Robert N. Hart from California Division of Fish and Game; Frank B. Wire, Phillip W. Schneider, Melvin Cummings, A. V. Meyers, and William B. Morse from Oregon Fish and Game Commission; J. Burton Lauckhart, Carl N. Crouse, and Robert G. Jeffrey from Washington Game Department; Commissioner James G. Cunningham of British Columbia; Jay Long from Oregon State College; Charles F. Yocom from State College of Washington; and Stanley G. Jewett, Leonard M.

Springer, Kenneth F. MacDonald, Ralph H. Imler, and Robert P. Boone from the FWS. James Ashley was elected chairman of the conference and directed the group in discussions about accomplishments and proposed waterfowl management programs. The group concluded that certain basic information was urgently needed, including: (1) inventories of resident (i.e., locally breeding) and migratory waterfowl, (2) estimates of harvests, (3) estimates of production within states, provinces or regions, and (4) banding programs that would identify migration routes and relationships between production, harvest and wintering areas.

Chattin, Cunningham, Meyers, Lauckhart and Boone were appointed to a standing committee to prepare a preliminary work plan detailing the kinds of information needed and how it should be obtained. John Chattin, Assistant Chief of Game for California Division of Fish and Game, presented the committee's plan to the other agencies at the Western's meeting in Salt Lake City June 2-4, 1948. In a paper titled "Outline of Pacific Flyway Studies" he described the values and inevitability of waterfowl management by flyways. (Later that same year, federal waterfowl regulations for the states were segregated for the first time by flyways.) The program called for obtaining the four basic types of information identified in the Portland conference and for an inventory and evaluation of waterfowl areas. The virtue of this program was that the surveys and investigations would be conducted and reported in a similar manner, with information being sent to a clearinghouse, i.e., Federal Aid Division, FWS, for compilation and redistribution to all contributors.

Response to John's presentation was mixed. Most biologists and administrators thought that the approach was desirable and possibly even necessary, but a few thought it too costly in light of other ongoing or proposed projects. Montana, Idaho, and Utah, however, thought the program was worth the effort; and their representatives and those from the five Pacific Coast agencies met in Portland in August 1948 to work out details of the program and to standardize methods.

While most States had an interest in participating in the Pacific Flyway waterfowl program, the wherewithall was sometimes lacking. For this reason I believe that a portion of credit for the cooperative program's success should go to Bob Boone who, as Regional Supervisor for the Federal Aid Program, broke the Service's long-standing but unwritten taboo by allowing and even encouraging states to have P-R-funded projects on waterfowl investigations. Importantly, these new P-R projects followed the outline recommended by the committee and allowed project personnel to travel to meetings of the Flyway Committee.

The Pacific Waterfowl Flyway Committee (in 1952, whether purposeful or not, the Council called the group the Pacific Flyway Study Committee by which it is known today) held its third meeting in Portland on February 23-24, 1949. Its ranks were growing with Nevada, Colorado, and Arizona expressing interest but unable to participate in that particular meeting. Policies and procedures for conducting the investigations were dominant topics. The format and schedule for reporting information were finalized, and with some changes, manifest themselves even yet in the Pacific Flyway Waterfowl Reports, with 88 volumes being compiled between 1948 and 1982.

The Committee formally requested that the Service assign a man to handle the workload of compiling, analyzing and reporting the data being collected and to coordinate the interstate

activities. Up to that time those tasks had been undertaken as an additional workload by Bob Boone. In response to the Committee's request. Director Al Day announced in June 1949 that Leo K. Couch would be the Service's coordinator for the cooperative waterfowl studies in the Pacific Flyway. Couch served in that capacity until mid-1951. With a hiatus in the position of more than a year, both the newly-formed Council and the Study Committee urged the Service to fill the vacancy. John E. Chattin was hired to the position in September 1952. While John's title was variously Assistant Regional Supervisor of Game Management (Law Enforcement), Waterfowl Management Biologist, Flyway Manager, Migratory Bird Coordinator, etc., his duties were always as the most enduring title implies, the Pacific Flyway Representative. John served well the Service, the Council, the Study Committee, the waterfowl resource and waterfowlers during his 25 years (1952-77) in that capacity.

Administrators from a few of the western states and from the Service met informally in Milwaukee, Wisconsin, in March 1951 at the request of Al Day. Although they discussed cooperative waterfowl management within the Pacific Flyway, the notion of a Pacific Flyway Council did not materialize until that September when the International Association of State Game, Fish and Conservation Commissioners passed a resolution calling for the establishment of four flyway councils and a national council. The Western Association of State Game and Fish Commissioners had theretofore served as a forum for states to discuss the various waterfowl management issues, but it was not particularly effective at influencing decisions about waterfowl hunting regulations.

At the urging of the International's President, George W. Davis, the first Pacific Flyway Council meeting was convened on January 16, 1952, in Pendleton, Oregon. Ben Glading was elected both President and Secretary of that meeting. Arizona was represented by O. N. Arrington who was proxy for Director Thomas Kimball. In addition to Glading, was E. L. Macualay from California. Others present were Bob Salter from Idaho; Phil Schneider, William Morse and Delbert Gildersleeve from Oregon; R. L. Turpin from Utah; and John Biggs, Burton Lauckhart and Raleigh Moreland from Washington. Frank Groves, Director from Nevada, could not attend because of a storm but telephoned the group. Robert Lambeth, Montana's Director, and Robert Cooney expressed that State's continued interest in the Pacific Flyway Study Committee but said that where policy matters were concerned they wished to be part of the Central Flyway. (From 1948 through 1959 for Montana and through 1961 for Wyoming, Colorado, and New Mexico, the Service regarded those States as being wholly within the Central Flyway. Therefore, Montana's voting membership in the Pacific Flyway Council was of little consequence to them until 1960 when the western portion of the State was placed in the Pacific Flyway.)

At that first meeting, there was a discussion of the relationship of the existing Study Committee to the newly-organized Council. It was the Council's consensus that the two groups were to remain separate. The Study Committee was a fact-finding organization and should remain such. The Council would be a policy-making organization that would rely heavily on factual information furnished by the Study Committee.

Membership and governing rules of the Council and Study Committee are different. The Study Committee, in 1950, had representation from the states of Arizona, California, Idaho, Montana, Nevada, Oregon, Utah and Washington, the Territory of Alaska, the Province of British

Columbia, and the Service through the Flyway Representative. It has functioned with a relatively simple and flexible organizational structure and without by-laws since its inception. [*bylaws were adopted in 2001*.] Wyoming and the Canadian Wildlife Service are now regular participants in the Committee meetings, with Colorado, New Mexico, Alberta, Yukon Territory and Mexico being irregular participants. Virtually anyone who could contribute to the understanding and management of the Flyway's waterfowl has been welcomed and even encouraged to attend and to participate to varying degrees in the Committee's meetings.

The Council's membership is more limited than that of the Committee's, and its activities are governed by by-laws. Only the seven States within the flyway boundaries delineated in 1948 by the Service for administrative purposes were members (i.e., Arizona, California, Idaho, Nevada, Oregon, Utah and Washington). Usually the Director, a Commissioner, or both represented the state; and, therefore, decisions made by the Council were made without delays for consultation and carried clout. British Columbia chose not to participate because most issues dealt with by the Council were more pertinent to the U.S. and not Canada, and besides, participation by the Province in other waterfowl matters was still possible because of its membership in both the Western Association of State Game and Fish Commissioners and the Pacific Flyway Study Committee. Alaska, upon gaining statehood, was admitted to the Council in 1959. Montana, which repeatedly sought representation after being placed partially within the administrative boundaries of the Pacific Flyway, was finally granted membership in 1980. Wyoming became a member in 1982 without debate. [*Colorado was granted membership in 1987.*] Hawaii, where mourning doves are the only hunted migratory birds, had no need for the affiliation.

Ben Glading found the activities of the Council during his 13-year affiliation to be, for the most part, an annual tug-of-war between the States and the Service over regulations, with both sides doing a lot of preening and posturing. Carl Crouse characterized the process for establishing the annual waterfowl hunting regulations as following the adversary system whereby regulations were arrived at as a compromise between two unrealistic positions, instead of by joint efforts towards realistic objectives. What must be a major accomplishment and a credit to both was the agreement between the Council and the Service to stabilize duck hunting regulations at 93-day seasons and seven-duck bag limits for a 5-year period. Except for minor changes, frameworks for duck hunting regulations were stable from 1975 through 1979 and uniform throughout the Flyway. For Alaska, Dan Timm developed new regulations, covering all waterfowl and cranes, which were acceptable to both the Council and the Service and which were stabilized in a 5-year evaluation beginning in 1977. The Study Committee, which proposed the standardized and stabilized regulations, sought to determine hunting's effect under fixed regulations upon duck populations that were subject to the uncontrolled vagaries of nature. Frank Kozlik, Al Regenthal and John Chattin designed the evaluation for the 11 lower states. In 1980, the Committee reported to the Council that, under the prevailing conditions and duck populations, these particular regulations had no apparent adverse impact upon ducks. Concurring with the Committee's recommendations, the Council and the Service agreed to continue with these same regulations for another 5-year period of evaluation. Stabilizing regulations has lessened the number of "spirited discussions" and "warm debates" of past meetings and enables both the Council and the Service to devote more attention to other deserving issues.

The Study Committee's coordinated banding program paid dividends early when it could be demonstrated that the Pacific Flyway mallards and canvasbacks were not part of those more easterly populations that were undergoing periodic declines. These two species, therefore, could be managed by flyways rather than over their range. J. Burton Lauckhart, Chester E. Kebbe, Elwood Bizeau and John Chattin summarized the information on the build-up of mallards in the Columbia Basin and concluded that more liberal regulations were warranted both to alleviate present and future problems with crop depredations and to increase hunting opportunities. The Study Committee's report, which was endorsed by the Council in 1961, must have been convincing because the Service permitted bonus limits of mallards that year and allowed for further increases in bonus limits, season length and shooting hours in 1964. The Columbia Basin still retains a 1-week-longer season than the rest of the Flyway, but bag limits and shooting hours are now the same. Increasing acreage of circle-irrigation farming and expanding populations of geese in the Basin will continue to provide management challenges in the years ahead.

California's problem of crop depredation by waterfowl was a recurring topic discussed at Council meetings during the early 1950's, and was the reason for some of the innovative bag limits within the Flyway. Most states were opposed to California's use of depredation orders to kill the marauding waterfowl and preferred to see those birds taken by hunters in all states of the Flyway. John Biggs was early to suggest that Washington hunters could help California farmers by having a season on pintails in September. The Study Committee, at the Council's request, evaluated the proposed pintail hunt and concluded that the disadvantages outweighed the advantages. Among the disadvantages, Washington-banded pintails were local and would not go to California and, therefore, were an important component of the regular season harvest. Miffed by the report, Biggs scolded the Committee because it had "far exceeded its duties in this matter by reporting conclusions, and that it should only report findings." Bonus limits on both pintails and wigeon from 1952 through 1958 and progressively longer seasons did much to placate sportsmen and California farmers. However, other simultaneously employed management practices and changes in farming were also important in reducing depredation losses.

John Biggs, Washington, and Phillip Schneider, Oregon, regularly did verbal battle with William J. Silva, Seth Gordon and Ben Glading, California, and the Service (whomever was there from Washington, D.C.) over what was perceived by them to be a preferential treatment of a few California hunters who could "feed" waterfowl, whereas other hunters "baited." The Service was further castigated for what was viewed as poorly-defined regulations on and policy towards baiting. California's regulations on the waterfowl feeding program and the Service's anti-baiting regulations have been the subject of controversy for nearly 30 years. After early skirmishes in court, which were won by Californians, the Commission tightened up their feeding regulations and limited the program to nine southern counties. Upon advising clubs that feeding would not be allowed after the 1974 season, the Service was taken to court by California's Department, its Commission, a farmer whose crops would allegedly be in jeopardy, and the newly-formed Waterfowl Habitat Owners Alliance (WHOA). Conditions for a settlement included a study of the role of feeding in waterfowl management and its relationship to depredations. Leigh H. Fredrickson, Director of the University of Missouri's Gaylord Memorial Laboratory, conducted the study. His findings were reviewed by a blue-ribbon panel of experts, who in turn gave their recommendations to the Service. The next episode in this continuing story is yet to be written. [*After years of additional debate in the 1990s, the FWS issued overhauled regulations on baiting in 1999, but some issues persist.*]

As the Pacific Flyway Council knows and the Atlantic Flyway Council will learn, hunting the regal swan is far easier than gaining the authority to do so. At the request of J. Perry Egan, Utah, and Frank Groves, Nevada, in 1955 the Council asked the Study Committee to give consideration to limited hunting of whistling swans within the Flyway. Noland Nelson took the lead in gathering and evaluating information on the status, distribution and migration of swans. In later years, Don Smith and then John Nagel, all of the Utah Department of Fish and Game, continued to report the status. Not all states wanted seasons for themselves-public sentiment against shooting swans and the mingling of whistling swans with trumpeter swans were principal reasons. Glen Sherwood, in a Utah Cooperative Wildlife Research Unit-sponsored study of swans in the Great Salt Lake Valley, concluded that even a limited hunt was not warranted. However, because of the Study Committee's persuasive evidence and the Council's persistent requests, the Service allowed permit hunts in Utah in 1962; in Churchill County, Nevada in 1969; and in Teton County, Montana in 1981. During the period 1970-81, when the three States were annually authorized a total of 3,500 permits, hunters bagged an average of 1,266 swans per season and, importantly, the population still increased by about 1,200 birds per year. Alaska's one-time bid in 1973 to join the three States which hunt swans had not been endorsed by the Council and was not approved by the Service, and subsequent efforts in the early 1980's failed to garner support from within the state for such a hunt [Alaska's first swan season was authorized in 1988.]

Home-grown honkers usually attract the attention of biologists long before geese nesting in distant arctic lands become of interest. Such was the case with the Great Basin Canada goose in our Flyway. The Study Committee recognized the honkers' importance to sportsmen, particularly those of the inland states, and implemented cooperative management programs to increase their numbers. Honkers were easily captured and banded, lent themselves to being transplanted into vacant habitat, and responded well to habitat improvements. These big geese were subjects of many university and agency studies with a resulting plethora of theses, reports and publications. It was one such study by William B. Krohn and Elwood Bizeau that identified the Great Basin Canada geese as being composed of two populations by which they are now called, i.e., Rocky Mountain and Pacific Populations of Western Canada geese. With the improved information on rates and location of harvest, migration routes, and habitat requirements, the Study Committee has sought since 1955 various restrictive regulations that would best benefit particular flocks. While never developing a formal written management plan until recently [1983], the Subcommittee on these geese would meet each July in Jackson, Wyoming, to work out the needed regulations over the flocks' ranges. The years of restrictions and intensive flock management are now reaping the benefits of increased limits and seasons with the 1981 midwinter inventory of these birds being the highest recorded.

Management plans, the Flyway is now up to its collective ears in them. Beginning in 1978, biologists from State and Federal wildlife- and land-managing agencies, university students and faculty, and others gathered in a series of workshops to develop 20 management plans on Pacific Flyway geese, swans, and cranes. Biologists from the Central Flyway, Canada, Mexico and

U.S.S.R. have contributed to them. For all participants the effort was educational and, for many, it was the first opportunity they had been given to consider the management needs of a particular group of birds over its range. While there may be delays in official endorsement of the plans, managers of state programs, managers of FWS regional and refuge programs, and university researchers have already begun to implement those aspects deemed of greatest importance.

The Flyway has had management plans before, but not as many. The Study Committee prepared for the Council and the Service in 1954 the Pacific Flyway Waterfowl Management Plan, which was in 1959 revised to the Pacific Flyway Waterfowl Management Guide. The guide calls for maintaining widely distributed populations of waterfowl at levels that could be enjoyed and used by both hunters and nonhunters. A program of habitat preservation, surveys and investigations, management of harvest, and evaluation of management functions and programs was outlined.

The dusky Canada goose, in 1973, became the first group of birds to be bestowed with its own management plan. There was concern for the race's status. The goose's restricted nesting grounds on the Copper River Delta in Alaska had undergone marked successional changes as a result of the 1964 earthquake; it wintered only in the Willamette Valley of Oregon; and it was among the smallest populations of geese that were hunted, numbering less than 10,000 in the early 1950's. The plan was the product of State, Service and university biologists in Oregon and Alaska, and called for cooperative efforts that would allow the population to achieve and be maintained at not less than 20,000 nor more than 25,000 geese as measured by the Midwinter Waterfowl Inventory. The plan and its implementation have been unqualified successes. With the advent of ever increasing numbers of lesser Canada geese into the wintering range of the duskys and dynamic changes in the breeding habitat on the Copper River Delta, new approaches to managing both races must be considered.

Other early management plans include those for black brant, the Aleutian Canada goose and Mexican-like ducks. The brant plan calls for restoring numbers of brant wintering in the three coastal states to levels comparable to those prior to their abrupt decline in the late 1950's. The Aleutian Canada goose recovery plan seeks to remove the race from the endangered status and return it to a hunted population by re-establishing breeding populations to certain former nesting sites in the Aleutian Islands. California hunters, because of curtailed hunting since 1970, have borne much of the burden of the recovery efforts. Oregon instigated closures to all goose hunting in certain coastal areas in 1982 to protect these birds. The plan for Mexican-like ducks, prepared by Arizona, New Mexico, Texas and the Service, recognizes that these birds are hybrids with mallards and that Mexican ducks in the principal part of their range in Mexico are not endangered.

Lead poisoning of waterfowl and the required use of steel shot in certain areas are topics that have livened meetings of both the Council and the Study Committee since much of the hassle over annual regulations was put aside. Noted for its adamant opposition towards aspects of the Service's non-toxic shot program, the Flyway has some notable "firsts" in solving the problem. Oregon was among the first states in the nation when, in 1974, it required the use of steel shot on its Sauvie Island Wildlife Management Area where poisoning was a serious problem. The Council, in March 1980, adopted the nation's first flyway-wide criteria for monitoring and reducing lead poisoning in waterfowl. Red Hunt and Bob LeDonne deserve the credit for bringing together the Study Committee's diverse views into an acceptable solution.

Not since 1935 could states split their seasons, but in 1947 they were again allowed this option. However, if a split rather than a straight season were chosen, there was to be a 20% reduction in number of hunting days. This penalty was a bitter pill for some of the large western states where climates and periods of duck abundance varied markedly between regions, and splitting seasons helped to overcome these differences. By contrast, New York, which is one-third the size of California, was in 1980 divided into five zones with all but one having split season. The Study Committee in 1952 asked Chattin to evaluate the validity of the 20% penalty. Acknowledging differences among and within states, he concluded from examining dates of band recoveries that penalties of about 5% were more in order. Based on this evaluation, the Council recommended to the Service that the penalty for splitting seasons be approximately 5%. The Service compromised with 10% penalty, which remained through the 1969 season. Thereafter, splits could be taken without penalty.

For many years, certain areas along state boundaries were sore spots during seasons which were not simultaneous and where boundaries were in dispute or ill-defined. Such problem areas included the Klamath Basin, Columbia River, Snake River and the Colorado River, both at Lake Meade and further downstream between Arizona and California. While varying in size and shape, a Colorado River Zone of California has existed most years since 1942, with seasons being set by Arizona. Portions of Clark County, Nevada, beginning in 1953, were similarly zoned to have seasons the same as Arizona. Both California and Nevada endorsed these measures to alleviate enforcement problems.

Enforcement problems, but mainly disgruntled hunters, were the reasons for establishing in 1960 the Lower Klamath Zone in California where seasons and limits would be the same as those of Oregon. The Lower Klamath National Wildlife Refuge, a popular hunting area, was bisected by the Oregon-California boundary; and Oregon's season was generally earlier than California's statewide season, which was usually set to accommodate both northern and southern hunters. Chet Kebbe observed that Californians viewed with envy Oregon's earlier seasons but that Oregonians were of the opinion that their earlier seasons pushed the birds across the border where they remained. This zone was gradually expanded to include all of the "Great Basin" area and is now known as the Northeastern Zone. California hunters have benefited from the early openings in this zone because the later statewide opening would result in more lost hunting days due to freeze-up.

California, with assistance from the Study Committee, argued for and got the Southern or "Tehachapi" Zone in 1969. Ironically, because of increased season lengths, the only use of that zone during recent years has been for goose regulations and not the duck seasons for which it was intended. The Columbia Basin portions of Washington, Oregon and Idaho have undergone several boundary changes since being designated in 1961 as "special mallard areas." *De facto* zoning of Montana, Wyoming, Colorado and New Mexico occurred when they were placed partially within the Pacific Flyway. The Council, in 1980, reaffirmed its earlier position that new zoning for the flyway should be considered only if the season is 55 days or less.

Members of the Study Committee, perhaps more than those of the Council, have felt budgetary constraints on travel to their meetings. Nevada, either Reno or Las Vegas, became a traditional meeting place because some participants could travel to an adjacent state without special travel authorization. When the meeting was in Reno the California contingent could "stay" in nearby Truckee, California, without traveling out-of-state. None of the members' travel requests, however, quite got as much attention as Al Regenthal's whose proposed travel to Reno was reviewed at a very, very high level and even reported in the Salt Lake Tribune. It seems that Utah's Governor and Secretary of State were split in their decision as to allow Al to travel, but the Attorney General broke the tie in favor of the trip by the toss of a coin.

Hugh Boyd, that barb-tongued observer and skilled practitioner of waterfowl management in North America, noted that waterfowl management is a very conservative activity, with any concept less than 20 years old being too novel to merit consideration. Such may seem the case to those biologists and administrators, both state and federal, whose suggestions for providing new or increased hunting opportunities, hastening recruitment of depleted populations, and reducing wastage of waterfowl are either dismissed or put into limbo. Hugh might have added, but did not, that also in waterfowl management quite a few hare-brained schemes are proposed and some even initiated with haste and little forethought. The interaction and open debate on issues among the Council, Study Committee, Service and public is necessary and desirable if the better concepts are to survive and the poorer ones are to be rejected. The Pacific Flyway Council and Pacific Flyway Study Committee have each in their different ways fostered truly cooperative management of all migratory birds that know no political boundaries. If it was to be done over again, I would not suggest a different approach.

Upon being assigned the task of writing this chapter, I gained empathy with those paleontologists who must visualize and then characterize the habits of a 30-ton brontosaurus, based upon examining a few of its bones. Hopefully in this characterization of the Pacific Flyway Council and Study Committee I did not mistake a caudal for a cervical vertebrae. The minutes of the various Council and Study Committee meetings and the periodic and special reports suggest to me that there were easily 30 "stars," 100 "regulars," 50 "substitutes," and a host of others participating in Flyway activities during the past three decades. Not all issues and participants have been or could be given the recognition due them-for that and to them I apologize. I thank the three Secretaries to the Pacific Flyway Council who collectively served that group for 31 years—Ben Glading, 1952-65; J. Burton Lauckhart, 1965-74; and Albert F. Regenthal, 1974 to1982-for sharing with me some of their recollections. Robert P. Boone, John E. Chattin, Carl N. Crouse, Frank M. Kozlik, John R. LeDonne, and William Morse provided me with perspectives of certain issues that were not obvious or well stated in the minutes of meetings. I especially thank John Chattin, my predecessor, and Henry M. Reeves, our boss and long-time participant in Flyway affairs, for reviewing and commenting on this manuscript.

Jim Bartonek served as Pacific Flyway Representative from 1978 through 1995. This 1981 paper formed the basis for the chapter on the Pacific Flyway in the book "Flyways" edited by A.S. Hawkins, R.C. Hanson, H.K. Nelson and H.M Reeves, published by the U.S. Fish and Wildlife Service in 1984.

[Notations have been added in brackets to provide readers updated information on subjects in the original account.]