Also please see the Art Whitney Interview which includes limited discussions with George Holton.

A Written Contribution to the Fisheries Division's Oral History Series George D. Holton

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I was born in 1920 in Chicago, Illinois but spent a considerable portion of my growing-up years away from the city.

For two months almost every summer from age six or seven to thirteen I went to a boys' camp. About half the summers were at a camp in Wisconsin where the main activities were swimming, canoeing and fishing. The rest were at a camp in Rocky Mountain National Park, Colorado, where the emphasis was horses, mountain climbing, and to a lesser extent backpacking.

All four high school years were in boarding schools. My freshman year was in Wisconsin at a military school based on the West Point tradition. My sophomore, junior and senior years were at a semi-naval academy on the Massachusetts coast just west of Cape Cod. We wore the conventional sailor uniform, but did little marching. There was emphasis on sailing and seamanship and on two spring breaks I served as a non-paid Merchant Marine cadet on banana boats to the Caribbean.

On September 1, 1939 I was milking cows on an Indiana dairy farm, where I had a summer job, when I heard on the radio that Hitler had invaded Poland.

I was in the Army four years during World War II. My high school military training, plus an evening and weekend military training course just prior to induction, put me in good stead. After Air Corps basic training and airplane mechanics school, I was accepted in an aviation cadet program (non-flying) and commissioned a second lieutenant upon graduation.

I spent two years with the Army Air Forces Air Transport Command in the China-Burma-India Theater where I attained the rank of captain.

After the war I answered an ad and became a theater manager trainee with the Fox Wisconsin Theater Corporation. But this wasn't my "cup of tea." I went to the library, found a government manual on careers, and discovered, to my amazement, that there were career opportunities in fish and wildlife management.

To be a naturalist, even as an avocation, had been my dream since childhood. So, with the G. I. Bill to back me up, I enrolled at the University of Wisconsin majoring in zoology, emphasis on fisheries.

In 1949 with one semester left in my senior year, I obtained a summer job with the Missouri River Basin Studies of the Fish and Wildlife Service. The first half summer I was in Nebraska and then transferred to the Gallatin River creel census in Montana. Leroy Ellig and Bob Eng,

both subsequently Montana Fish and Game Department employees, were on the same creel census crew.

This was a landmark summer. After conferring with Dr. C. J. D. Brown, Montana State College fisheries professor, I decided on a fisheries career at the state level rather than with a federal agency or in teaching. In turn, I chose to pursue a masters' degree in fisheries at Montana State. And most important I met Virginia, now my wife of 46 years.

I completed my master's degree in fish and wildlife management at Montana State College in winter-quarter 1952.

Funds from the Federal Aid to Sport Fisheries (D-J) Act became available in 1951, when I was still in school. It was a major impetus for sport fisheries management, and luckily for me, created a demand for fisheries biologists.

Upon graduation, Virginia and I wanted to work in the west, but West Virginia was as far west as I could find a suitable job.

In Spring 1952 I accepted a fisheries research project leader position with the Conservation Commission of West Virginia and was stationed in the state's eastern panhandle on a study involving fish population estimates and fish population control. Woody Seaman (subsequently Executive Secretary and then President of the American Fisheries Society) was the state fisheries chief and Carl Sullivan (later Executive Director of the society) was a member of my field crew.

After two years in West Virginia, Virginia and I were able return west when I was hired by the Wyoming Game and Fish Commission as Supervisor of Fisheries Field and Research Operations. Wyoming at that time had five district fisheries management crews that were responsible for both management and research, and one reservoir management crew. In all, fourteen field fisheries biologists.

Then in late 1956 Walt Allen, Montana's Chief of Fisheries, offered me Montana's Chief Fisheries Management Biologist position when Chuck Phenicie resigned to accept a position with the Pacific Marine Fisheries Commission.

What a dilemma. we liked Wyoming, I was happy with my job, we had just built a house, and were expecting our second child. But Helena, for people who like the out-of-doors, is vastly better then Cheyenne. Having taken my formal training at Montana State College, I was more familiar with Montana's fauna and flora. Then, too, Virginia is a native of Twin Bridges, MT so she was coming home.

I arrived in Helena on a mid-February afternoon in 1957. Feeling it was the right thing to do, I phoned Walt from the bus station and had my first encounter with his sense of humor. "Hello Walt, I am calling to let you know I'm in Helena." Instead of the expected, "Good," or "Happy to know you are here," He responded, "ARE YOU DRUNK?"

State employment was a bit more stringent in those days. When hired we were issued an army cot and a "three-star" sleeping bag and expected to sleep in Fish and Game Department district headquarters when traveling. As I recall, per diem was, either \$7.00 or \$9.00 a day for room and meals, and you had to turn in a receipt for the room. The work week was 5-1/2 days including Saturday morning.

When I "came on board," Montana already had an unsurpassed fisheries biological program built on the combined talents of Chuck Phenicie, the department's chief fisheries biologist, and Dr. C. J. D. Brown, fisheries professor at Montana State College. They made a terrific team. Phenicie was an excellent manager as well as a competent biologist. And Dr. Brown, a management-oriented researcher, cooperated with great interest in the department's fisheries program. With department-supported graduate-student thesis projects, the college served as the fisheries research section.

Phenicie established the lake and stream survey system. Data was recorded on 6" x 9" cards with a different colored card for each attribute, i.e., physical characteristics of the water, fishes present and abundance, chemical characteristics, etc. He also designed the statewide system for numbering state waters and initiated the fisherman log program.

Clint Bishop, one of the department's first fisheries biologists, was particularly valuable in these efforts. A biologist in his own right, he had the knowledge and patience for grinding out the myriad of details involved in assigning a code number to each fish species and to each of the thousands of waters in the state. Then too, he coded the information in each of the fisherman logs so the data could be processed in the primordial IBM data processing system.

I credit myself for knowing a good thing when I saw it. My approach was to build on the structure Phenicie, Brown and Bishop had established, not change it.

Here, are some remembrances of fisheries management during my 30 years (1957 to 1987) with the Department (additional subjects are mentioned in Alvord's A History of Montana's Fisheries Division...):

- A. Opposing The Forest Service's aerial spraying of DDT in its effort to control spruce budworm.
- B. Battling to minimize stream alterations as the massive Federal Interstate and Primary Highway construction programs rolled across Montana.
- C. The era of dam building and water development projects by the U. S. Bureau of Reclamation and the U. S. Army Corps of Engineers. Our efforts to protect important sport fisheries.
- D. The era of rehabilitation projects by the Fisheries Division (use of fish toxicants to eliminate unwanted fish and restocking with desirable species).
- E. Stream rating maps: 1959, 1965 and 1980; and rating streams in 1987 without creating a map.

- F. Our part in the enactment of legislation protecting stream banks and channels, and involvement in obtaining water rights for 12 blue-ribbon streams.
- G. Establishment of the Montana Cooperative Fisheries Research Unit at Bozeman in 1966 with Dr. Richard Graham, Leader, and Dr. William Gould, Assistant Leader.
- H. Building a computer-based interagency stream and lake fishery database--a modernizing of the lake and stream survey system developed by Phenicie.
- I. The emergence of genetics as an important tool in fisheries management.
- J. Books on Montana Fishes. Dr. Brown's *Fishes of Montana* (1971) was the first to cover all fishes in the state. I and other department personnel assisted with fish collections, distribution records, and photographs. Late in my career, with help from department people, fisheries personnel of other organizations, and artist Glenn West, I started compiling *A Field Guide to Montana Fishes*. I finished it three years after retiring. Six years later Dr. Howard Johnson and I co-authored a revision. Both editions are department publications.

In conclusion, I came to the department when the Quonset-type district headquarters were new and went out when they were being replaced with more permanent buildings. Special days marked the boundaries of my years of employment. I started Valentine's Day 1957, loved my job, and my first day of retirement was April Fool's Day 1987.

This period in fisheries was one of pioneering, dedication and camaraderie. I was privileged to have a career in a department that has been an acknowledged leader in fish and wildlife management.