

31:74-88; 1906, *Third Biennial Report, Montana State Game and Fish Warden*, pp. 158-68; 1907, *Bur. Fish. Doc. No. 628*, 7 pp.) believed that Elk Lake, Montana, was the only locality where lake trout was found west of the Great Lakes and south of Canada. Elk Lake, Beaverhead County, is a 285-acre, 80-foot-deep lake at the headwaters of the Jefferson Fork of the Missouri River. It has an outlet only a few days each year during spring run-off. Although previously aware of a different fish in this lake, Henshall was unable to identify it as the lake trout until 1898 (Letter, Files, Bozeman Fish Cultural Station, Bozeman, Montana, 27 May 1898). In a second letter (28 May 1898) he wrote that Mr. Sherwood of Henrys Lake, Idaho, informed him that lake trout had always existed in Elk Lake and that during the fall large numbers were caught and sold to mining camps.

Mr. S. Bean of Monida, Montana (personal interview), said his father caught many lake trout from Elk Lake around 1885. The U. S. National Museum received three trout from a Mr. Sawtelle who mailed them from Henrys Lake, Idaho, which Bean (1888, *Am. Angler* 13[4]:59-60) listed as the specimen locality. Dunham (1897, *Recreation* 7[5]:384-95), who had accompanied Sawtelle when collecting the specimens, corrected the locality data. The trout definitely came from Elk Lake. Blair (1897, *Recreation* 7[1]:54-5) and Cummins (1897, *Recreation* 6[3]:192) had both caught lake trout in Elk Lake before 1890.

Blair (*op. cit.*), Dunham (*op. cit.*), and Clarence Helming of Wisdom, Montana (personal interview), reported lake trout as native to Twin Lake in the Big Hole River drainage. Blair visited Twin Lake in 1888 and Dunham made several trips there between 1880 and 1896. Helming first caught lake trout from Twin Lake in 1905. There is little reason to question the validity of these reports.

Coues, on 18 August 1874, found lake trout plentiful in Chief Mountain Lake of the upper Saskatchewan River drainage in what is now Glacier National Park. His collection of a head and a caudal fin were used by Jordan (1878, *Bull. U.S.G.S.* 4:777-99) to verify identification. Lt. Beacom sent a skin and photograph of lake trout from St. Mary's Lake, also of the Saskatchewan River drainage, to the U. S. National

THE NATIVE RANGE OF LAKE TROUT, *SALVELINUS NAMAYCUSH*, IN MONTANA.—The southern indigenous extent of lake trout, *Salvelinus namaycush* (Walbaum), in the Rocky Mountains has not been well defined. The species' southern limit is generally considered as northern New England and New York, throughout the Great Lakes basin, and northwestward to the upper Fraser and Skeena rivers in British Columbia. Thus, the accounts recorded in this paper, of lake trout being endemic to waters of the Missouri River drainage, have been overlooked in recent distributional records.

Henshall (1902, *Trans. Am. Fish. Soc.*,

Museum (Bean, 1888, *Am. Angler* 13[5]:77).

The first report of lake trout introductions into this region were those in Shoshone and Lewis lakes of the Snake River drainage in Yellowstone National Park in 1890 (1898, *Rept. U. S. Comm. Fish and Fish.* [1889-91], p. 92). Even though these introductions did well they probably were not the accidental or unknown source of lake trout in either Elk Lake or Twin Lake. Subsequent introductions into these waters have been successful; therefore the relict stock is not pure. Thus, there are several indications that lake trout is indigenous to the upper Missouri and Saskatchewan river drainages in Montana.

Landform and geological conditions are such that both Elk and Twin lakes were presumably closely connected to a larger Pleistocene lake (Feth, 1961, *Geol. Sur. Prof. Pap.* 424-B, pp. B110-2). The geological history of Elk Lake also serves to illustrate that of Twin Lake.

Elk Lake lies in an outlet channel that at one time drained a large lake occupying the Centennial Valley. This valley is approximately 50 miles long and 8 miles wide. The bed of the former outlet channel is 300 feet above the valley, and on aerial photographs an old shoreline is distinctly visible at this same level. Erosion has since opened the west end of the valley, leaving only two shallow (less than 6 feet) lakes. It can be postulated that long after its absence from the remainder of the Missouri River drainage lake trout may have lingered in this large deep lake.—ROBERT L. VINCENT, *School of Natural Resources, University of Michigan, Ann Arbor, Michigan.* Present address: Cooperative Fishery Unit, Utah State University, Logan, Utah.