

HISTORICAL
RESEARCH
ASSOCIATES, INC.

Reply to: Missoula

October 24, 1990

Dennis Workman
Montana Department of Fish, Wildlife and Parks
3201 Spurgin Road
Missoula, MT

Dear Dennis:

The following letter report briefly details Historical Research Associates (HRA) attempts to locate contemporary information regarding bull trout (*Salvelinus confluentus*) spawning runs on the Clark Fork River, in the vicinity of Milltown Dam, in western Montana. HRA consulted the following sources during the course of our research:

- The *Missoulian* newspaper. HRA reviewed all copies of the weekly editions as well as all copies of the daily edition of this newspaper from 1870 to 1930. We concentrated our review on the spring and summer months for each year (May-August) since these were the most likely months that there might be a story about the spawning run of the bull trout.
- The journals of early non-Indian explorers that travelled through this region during the early part of the 19th century. These accounts included; the journals of the Lewis and Clark expedition through the region in 1806, and the journals kept by David Thompson, an employee of the North West Company in 1811.
- All extant issues of *Montana Wild Life*, a publication of the Montana State Fish and Game Department, the predecessor agency to the Montana Department of Fish, Wildlife and Parks.
- The annual reports of the Montana Fish and Game Commission from 1900-1932.

Branch Office:
301 Doyle Building
119 Pine Street
Seattle, Washington 98101
(206) 343-0226
(206) 343-0249 Fax

Home Office:
P.O. Box 7086
504 Glacier Building
111 N. Higgins Ave.
Missoula, Montana 59807-7086
(406) 721-1958
(406) 721-1964 Fax

Branch Office:
Sunshine Bldg., Suite 307
110 2nd Street SW
Albuquerque, New Mexico 87102
(505) 243-6299

- HRA also interviewed Dr. Carling Malouf, retired professor of Anthropology at the University of Montana, and a noted ethnologist who conducted extensive interviews, in the 1950s, with members of the Flathead Indian Tribe.

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HRA found virtually no information about bull trout on the middle or upper Clark Fork River in any of the contemporary sources that we reviewed. In fact, except for several brief articles in "Montana Wild Life", there was no mention of bull trout in any of the contemporary printed sources that we reviewed. HRA's interview with Dr. Carling Malouf produced the most important information regarding a spawning run of bull trout through the Missoula Valley and onto the headwaters of the Clark Fork River.

The following is an assessment of the information obtained from each source that HRA consulted.

- The *Missoulian*. HRA researchers did not locate any articles that referenced bull trout in our research of over fifty years of the local newspaper. There were several accounts of fishing trips to the Flathead Lake area but there was no information regarding fishing for any kind of species in the Missoula area.

- The journals of early explorers. Both David Thompson's and Lewis and Clark's journals contain information regarding the Indian populations, west of the continental divide, reliance on fish as part of their diet. Also, it is clear from a review of these journals that the Indian Tribes on the middle and upper Clark Fork were less reliant on fish than those tribes living nearer the Columbia River. Big game animals including deer, and elk were relatively abundant in this area and therefore the diet of the Indians living near Missoula was composed predominantly of these animals and bison that they procured east on hunting trips to the eastern plains of Montana. Although Thompson's journal contains information regarding specific locations of fish "weirs" along the Clark Fork, neither he nor Lewis and Clark referred specifically to bull trout or a spawning run on the Clark Fork River.¹

- *Montana Wild Life*. The Montana State Fish and Game Department, predecessor to the Montana Department of Fish Wildlife and Parks, began publishing this monthly magazine in June of 1928, and the last copy that the University of Montana Library had was for May 1930. The magazine was devoted to providing Montana sportsmen with information regarding

¹ Reuben Gold Thwaites, editor, *Original Journals of the Lewis And Clark Expedition: 1804-1806*, 8 vols., (New York: Arno Press, 1969); M. Catherine White, editor, *David Thompson's Journals Relating to Montana and Adjacent Regions: 1808-1812*, (Missoula: Montana State University Press, 1950).

the status of fish and wildlife in the state. We found two references to bull trout in our review of this publication.

The June 1929, issue contained an article that described the different fish species in Flathead Lake. The author described the bull trout in less than complimentary terms. According to the author, the bull trout's voracious appetite resulted in the destruction of thousands of other fish species. There was no reference in the article regarding the extent of the bull trout's spawning area.²

In that same issue there was an article entitled "The Cannibal of Montana's Streams." The author stated that "Montana sportsman have declared war on the Dolly Varden or bull trout, ... in the realization that the big fellows are devouring their daily toll of fingerlings and larger trout ..." ^{SEE ATTACHMENT I} ³ There was a photograph of a bull trout positioned above the article (Attachment 1) with a caption that indicated that the fish had been caught "... at the mouth of Rattlesnake Creek, near Missoula, ..." ⁴

The above cited articles contained the only references to bull trout in this publication of the Montana State Fish and Game Department.

- Annual Reports of the Montana Fish and Game Commission. HRA reviewed the annual reports from 1900 to 1932 and we found no information regarding the bull trout.

- Oral interview with Dr. Carling Malouf. HRA conducted an interview with Dr. Carling Malouf on October 22, 1990 (Attachment 2). Dr. Malouf, who taught in the Anthropology Department at the University of Montana for over 40 years, is a noted Anthropologist and Ethnographer. He interviewed numerous elder members of the Flathead Indian Tribe during the 1950s. Consequently, he obtained valuable information regarding the social, political and religious organization of these native people. Many of these interviews are on audio tapes. Dr. Malouf also kept extensive notes during the interviews.

One of Dr. Malouf's informants was Eneas Granjo. When Malouf talked to Mr. Granjo he asked him about the names of specific places in the Missoula area. Mr. Granjo, who had obtained his information from John Delaware, stated that the Flathead or Salish word for Missoula was "isai" which means bull trout. The area near the Milltown Dam was referred to

² *Montana Wild Life*, Montana State Fish and Game Commission, vol. 2, number 1, June 1929, p. 7 (see attached).

³ Ibid, p. 21.

⁴ Ibid.

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as "*ai ces te*", which also refers to bull trout except the phrase meant that there were more bull trout in this location than at Missoula (Attachment 3).

Dr. Malouf emphasized during the interview that the native people in this area were much less dependant on fish than the Indians living nearer the Columbia River.

- **Conclusion.** There is very little information in the historic record regarding the occurrence of a bull trout spawning run in the Missoula area. However this does not diminish the statements made to Dr. Malouf by his oral informants. The historic record contains numerous references that document that the Indians in this area depended on fish as a supplement to their diet of meat. Although these non-Indian informants did not provide specific information regarding the species of fish, it is obvious that Dr. Malouf's informants knew that the bigger fish that they caught in this area were what the non-Indians called bull trout.

If you have any questions regarding this report, please call me.

Sincerely,

A handwritten signature in cursive script that reads "Daniel Gallacher". The signature is written in dark ink and is positioned above the printed name and title.

Daniel Gallacher
HISTORICAL RESEARCH ASSOCIATES, INC.

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enclosures

with 596 out of 610. Gus L. Ogden, broke 590x610.

Razees of Denver led all professionals in the same field with 591. Professionals copped all for their class. Charlie won the singles with 194. Both won the doubles with 47, handicap with 94, and the all-time with 331 out of 350.

believed to be a world's record made in the three championships last year. Only two targets out of 350, one in the doubles in the handicap. High scores in state championship targets to those mentioned were G. 197; Roy Tisdale and Steve 196; Frank Knight, Joe Lattin, Hart, 194; R. H. Hill, 193; Jack Boehme, W. R. Wilcox, J. A. Poore, N. J. Birrer, Somers, Reynolds Prosser, 191.

handicap, E. W. Renfro, 97 yards, Ed Dickinson (Shreveyards, and Prosser, 20 yards, 95.

doubles, E. L. Ford, Ogden, Razees, 49; Otto Schulz, G. A. J. Birrer, J. J. Robinson, V. Rock, 47; Gus Becker, H. S. Knight, Sam Sharman, 46; Renfro, R. Tisdale, Guy Eg-

Homing Instinct in Fish

IT HAS long been recognized from casual observation that the different species of Pacific salmon resort to certain streams for spawning purposes. Proof of homing instinct of these fish is furnished by the U. S. Bureau of Fisheries as the result of tagging experiments on Chinook salmon in the Columbia River extending over a period from 1916 to 1927. During that period many thousands of young salmon were marked in the various tributaries of the Columbia and liberated. Many of these marked fish were taken in the sea off British Columbia and southeastern Alaska but it is a significant fact that none have ever been taken in any stream except the Columbia and its tributaries.

It has been an open question as to whether the homing instinct of these fish was a purely hereditary matter or whether it was determined largely by the early environment of the fish. Results of the experiments tend to discount the hereditary theory because only a small percentage of marked fish returned to the tributary where eggs

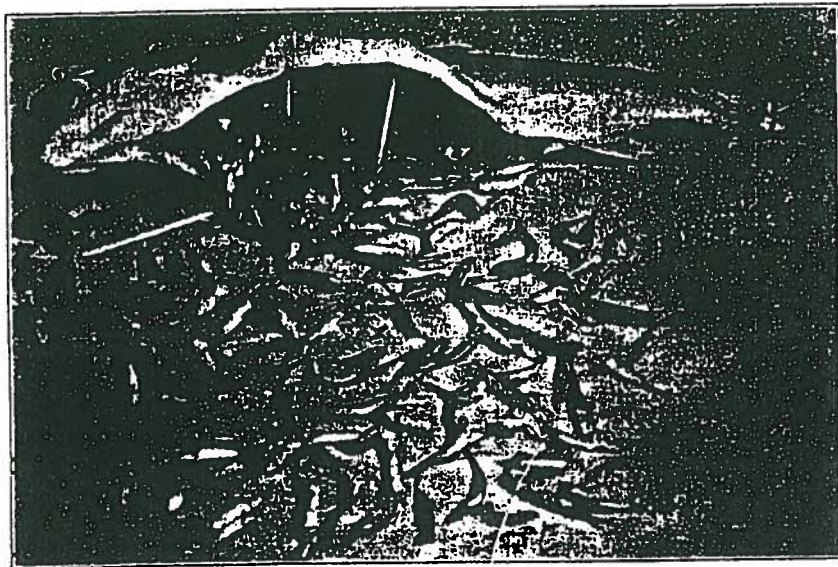
were taken but a large percentage were recovered in the tributaries where the fry had been liberated and where the young fish spent a portion of their early lives. It is not believed, however, that environment is the sole governing factor but hereditary instinct figures to a limited extent.

A striking instance of the return of the fish to the home stream has been found in a tributary called Spring Creek. This creek is so extremely small that it is difficult to see how the salmon could find it at all, yet 82 marked fish were recaptured therein as adults, while only four were taken elsewhere. This is taken as definite evidence of the validity of the home stream theory.

It has also been developed that the homing instinct is disturbed to some extent by transplanting the eggs from one tributary to another. This is a matter of considerable importance in fish cultural operations, particularly in cases where attempts are made to rehabilitate runs by transplantation from other streams.

So far as experiments have gone, they indicate that the better practice is to stock each stream with eggs native to that stream.

The Cannibal of Montana's Streams



Bull trout caught at the mouth of Rattlesnake Creek, near Missoula, with 103 small trout and other fish in its stomach.

Check Up On Quail

DER that it may be learned that methods it may be necessary to employ to maintain a maximum of quail throughout the state and other northern states, the U. S. Army and Ammunition Engineers' Institute, on recommendation of Aldo Leopold, in charge of the game survey, has decided on a series of quail demonstration areas in several states.

To encourage this undertaking, federal carrying a maximum stipend each are being established in colleges and universities. The Biological Survey has agreed to furnish the services of L. Stoddard to supervise Mr. Stoddard having completed his research work on quail in Georgia and Florida.

Leopold describes the survey in carrying on in an article in the MOUNTAIN GAME, the bulletin of the Game Protective Association. This article is accompanied by a photograph of the plans for carrying out the quail demonstration areas. Leopold's contention that the maintenance of a supply of quail in the central states depends less on open and closed seasons and cooperation with the farmer and quail must be raised. The establishment of quail demonstration areas and methods of winter feeding and protection from natural enemies are believed that any average quail supply will produce a considerable supply of quail without interference with its activity of crops and live-

MONTANA sportsmen have declared war on the Dolly Varden or bull trout, the cannibal of the trout family, in the realization that the big fellows are devouring their daily toll of fingerlings and larger trout planted and preserved through activities of the State Fish and Game Commission. The photograph above is a sample of the manner in which these cannibals of the creeks and lakes devour these little fish. These bull trout abound in Flathead Lake. When they are brought up in the seine the smaller fish are given a better chance to survive.

The great destruction of small fish by bull trout is easily understood when one considers the case of a fish caught in the Bitter Root River by Sergeant Thomas Cummings in the spring of 1922. A twelve-inch bull trout when examined had in its stomach the undigested bodies of 103 minnows. These may have been small native fish, or the young of game fish. The bull trout will take one as quickly as the other. Small fry, just planted from a hatchery, would be an easy prey for such a voracious enemy.

PLACE NAMES ACCORDING TO JOHN DELAWARE

These place names were collected by Eneas Granjo from John Delaware for use in their Lands Claims Commission case. John Delaware was about 20 years old and participated in the Nez Perce, being among the Salish who met Chief Joseph at Fort Fizzle (1877). John was killed by a train at or near Arlee during the 1950's. Here is the data -- essentially as Eneas Granjo collected it.

Perhaps 30 tipis went toward Butte where they shot fish with bows and arrows, hence their name for the place:

sintipkε

A small stream just west of Silver Bow, near Butte, was of particular note as a fishing spot to the Indians. The Butte and Anaconda areas were both very popular for hunting and trapping beaver. Indeed, the entire Deer Lodge Valley nearby was an important hunting, fishing, and trapping center. While the men trapped and hunted the women gathered plants such as the bitterroot or other plants in season. The flats east of Anaconda were particularly popular for their yield of bitterroot. Moreover, there was a quantity of kinnikinnick growing there too. Usually this grows in the mountain canyons, but here it could be more easily obtained, in quantity, in the flats. Today these flats are mostly covered with tailings from industrial operations in Anaconda, and the mountains have lost their verdure from smelter fumes.

Warm Springs was called:

(1)

naiyaik

while Deer Lodge was called:

cuεcuε

The deer were very plentiful in the draws in that vicinity. There was once a store at Deer Lodge operated by a man named Thomas Lavalle with whom the Indians traded. He is said to have later moved away from there.

Sometimes the Indians traveled by way of Missoula. They would move downstream on the Bitterroot passing by Lolo, or tumsumti (No Salmon) (2) From the Missoula Valley they either passed

(1) Pierre Pichette. John Delaware called it inhnhkwa

(2) The Flathead had a legend that coyote once tried to get salmon here, but failed hence the name, No Salmon. See Weisel, 1960, for Ellen Big Sam's story of the origin of this name.

ATTACHMENT 3

Photocopies from Dr. Carling Malouf's files.

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John Delaware

through the Hellgate, or they would go up Pattee Canyon, over the Farview hill, They emerged into the Clark Fork River valley near Bonner, especially near the present day Montana Power Dam, or just below, where there was a ford in the river. This ford is still there today. Passing through the Hellgate, especially during high water, was dangerous and difficult. Passing up and over Pattee canyon eliminated these difficulties. The trail passed on the high bench land to the south of the mouth of Pattee Canyon above what is presently called "Far Views," by a real estate promoter, or Whittaker Hill by others. River crossings were made by packing all belongings in tipi covers, and then horses towed them over to the other side pulling the load as best they could.

Missoula was called i s a i, (Bull Trout). Then they camped next at Bonner, which was called a i e s't e m (Bull Trout too except it means here there are more of them than at Missoula). Clinton was M kun e (Rock Creek). Here the canyon narrows between two outcroppings on each side. The trail followed the hillside as much as possible to avoid difficulties encountered along the river bottom, but where the canyon narrowed there was grave danger from enemies who might attack them from ambush. The next place they called cl m e s e (~~W. m. s. e.~~) Here there was a sort of flat where there was a lot of watery land. In s e n t c u e a i n e, the next stop, a woman had a child here and that is the reason they call it by this name. Drummond was t s u k w e. From here one could go towards Phillipsburg, or to the Deer Lodge Valley. Garrison was another junction, and was called s e n k o p o s a. This was where the Little Blackfoot and Clarks Fork rivers converge.

Beavertail Hill, just a little past Rock Creek, was t s s i s t k e.

From Garrison one road went toward Helena while the other went toward Butte, just as today.

There was another route over Skalkaho Pass. Camps were:

k w a l s u m m o

k w a l k w a l l o

n o m a m

etc.

Later, after 1891, the Flathead traveled out from Arlee, but mostly along traditional routes. Maybe a little more time was spent to the east now.