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Original: Fish Division
cc: Education-Game
Mr. Carbine
Institute for Fisheries Research

INSTITUTE FOR FISHERIES RESEARCH
DIVISION OF FISHERIES
MICHIGAN DEPARTMENT OF CONSERVATION
COOPERATING WITH THE
UNIVERSITY OF MICHIGAN

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RESULTS OF THE BEAVER-TROUT INVESTIGATION
IN THE UPPER PENINSULA

by

W. F. Carbine

Since the Conservation Commission acted to close the season for trapping beaver in the Upper Peninsula for 1944, it was decided by Messrs. Ruhl and Westerman that an investigation of existing beaver-trout problems was in order. Dr. Glenn W. Bradt of the Game Division and the writer were selected to conduct this investigation.

The primary purpose of the investigation was to determine where the most critical areas were in regards to the beaver-trout controversy and to contact the sportsmen who were especially convinced that beaver dams are an asset to trout. It is possible that some sportsmen may be right in their contention that beaver are an asset in some streams, and also likely that they may be wrong in others. If they were wrong, then we might be able to convince them of their errors.

Dr. Bradt has had considerable experience with beaver problems in the Upper Peninsula. Dr. Bradt worked with J. C. Salyer on a previous beaver-trout investigation in 1933 and 1934. He has also worked out the life history of the beaver and has done a great deal of nuisance beaver trapping. As Dr. Bradt could only spend a limited amount of time on this present investigation, it was decided that most of our time should be

devoted to an inspection of trout streams and beaver dams. For the most part the streams that were selected were those visited previously by Dr. Bradt. Other streams were visited only when recommended by sportsmen or conservation officers. Dr. Bradt and I also interviewed the two Conservation Commissioners in the Upper Peninsula, Mr. Peter Trudell, Jr., President of the Northern Michigan Sportsmen's Association, some sportsmen and various employees of the Field Administration, Fish and Game Division. We were therefore able to determine the areas where there seemed to be a decided interest in protecting beaver.

After Dr. Bradt left, my job consisted of contacting the key men in the sportsmen's clubs in the Upper Peninsula, and examining some trout streams and beaver dams. In all interviews an attempt was made to bring out and discuss the following points:

1. To obtain an expression of opinion of the personal feelings of the individual regarding the beaver-trout problem in his locality. Also, if possible, what the majority of the club members think about the beaver-trout problem. This would give us a better idea of the clubs that were for an open or closed season.

2. To explain the entire beaver-trout problem to the individual so that he would be better informed on the subject and would be in a better position to discuss this subject at future meetings of the club.

3. To attempt to sell beaver-trout management. It was pointed out in this connection that the objective in beaver management was to maintain as high a beaver population as possible without serious interference with trout. Also, that we wanted to maintain as high a population of trout as possible and that if beaver dams were instrumental in maintaining large numbers of trout without injury to the habitat (as they sometimes do), then we wanted to keep beaver dams in.

4. To determine whether or not beaver were plentiful in their particular locality.

5. To obtain the names and locations of all streams having beaver dams that produce good fishing. If possible, an attempt would be made to examine these areas accompanied by the interested sportsmen.

6. To stress our stream improvement program and to attempt to get the sportsman interested in trout habitat improvement instead of beaver dams. Many sportsmen, especially those favoring beaver dams, were asked to submit a list of streams that they felt would be improved by the construction of artificial dams. These would be the same streams that they probably figure would be improved by beaver dams.

7. To get the club to discuss the beaver-trout problem at their next meeting and to obtain an expression of opinion of the members as to whether they favor an open or closed beaver season for their particular locality, county, or some particular stream or streams.

The writer wishes to thank Dr. Bradt for the able assistance that he proffered and for the ideas and suggestions that he so freely offered. He is mainly responsible for my present knowledge of beaver. Many of the ideas incorporated in this report originated with Dr. Bradt. Thanks are also due to the many Department employees who so willingly helped in this investigation.

Interviews

It should be stressed at this point that the opinions given by the individuals contacted are largely personal and do not necessarily express the opinion of the sportsmen's club. At most interviews it was pointed out that all we wanted was their personal opinion, unless they knew how the majority of the club members felt about it. As a rule though, the club officers were fairly well informed on the sentiment of their members.

Occasionally individuals who claimed that they voiced the sentiment of the entire club were proven wrong after interviewing other members of the club.

The results of the interviews are briefly summarized below. It was thought best to outline the work by Field Administration Districts. Clubs and the club officers contacted are given first and are followed by the names of the Department personnel and other people contacted. The club affiliation (whether Michigan United Conservation Clubs or Northern Michigan Sportsmen's Association) and the location of the club and officers are also given.

Ewen District (Gogebic and Ontonagon Counties)

1. Ironwood Conservation Club (MUCC)

Joseph F. Cvengros, Secretary. Mr. Cvengros believes that the Department should handle the beaver-trout problem as they see fit. He favors an open beaver season and is certain that the club will vote for an open season at its next meeting.

2. Ramsay Sportsmen's Club (MUCC)

John Backman, President, Frank Pairolero, Vice President, and Raymond Rigoni, Secretary. They want to go on record to permit the Department to have an open or closed season as conditions arise. They will obtain an expression of opinion on this subject from the club members at the next meeting.

3. Northwoods Sportsmen's Club (NMSA)

Nick Lukkarila, President, Mass, Michigan. Mr. Lukkarila is in favor of an open beaver season and is certain that the majority of the club members are also in favor of an open season. This club failed to vote on the beaver question at the last N.M.S.A. meeting because the delegates had not been instructed as to how they should vote.

4. Ontonagon Sportsmen's Club (NMSA)

Allen Cane, President, Ontonagon, Michigan. Mr. Cane believes that trout fishing on all streams would be improved by beaver dams. He loves to see beaver and remembers the excellent trout fishing he had years ago in beaver ponds. He has not fished the local streams for several years now because fishing has been so poor, and does not know of any beaver dams providing good fishing at present. He now fishes the streams below Bond and Agate Falls, and in the backwaters of the dam itself. He favors a closed season on beaver.

Mr. Wilcox, Ontonagon County Engineer. Beaver are doing a great deal of damage in Ontonagon County by blocking road culverts. Would not commit himself on beaver-trout problem.

Another man with the WPB who was with Mr. Wilcox thought that beaver would improve fishing in any stream because they make pools.

Mr. Hecox, who operates a hardware store in Ontonagon, was in favor of closed beaver season. Can remember the good fishing he had in beaver ponds 20-30 years ago. He never fishes on local streams any more and for the past 15 to 20 years he has fished the Middle Branch of the Ontonagon River near Watersmeet. This stream he admits never has had any beaver but was ruined by the CCC and Conservation Department when they came in and removed all of the cover and placed stream improvement devices in the stream. He claims that he has not caught a trout in this stream for five years. He seems opposed to anything that the Department does. Although he never fishes local streams he knows that the beaver there are scarce.

Mr. Elmer Boyd, Vice President. Mr. Boyd favors a closed beaver season and claims that the club also wants a closed season. He does not care whether beaver are good or bad for trout streams; all they want to do is to stop the indiscriminate trapping of beaver. Thinks a

permit system may work and every trapper should produce a signed permit from the landowner stating that he be allowed to trap on their property. Feels that in this way only one person would be trapping in one particular area, and this one man would not be able to remove all of the beaver. I told him that I did not believe that a permit system could be worked out to the satisfaction of every trapper, but for his club to work out a reasonable system and present it to the Department. (He is also liable to present this idea at the next N.M.S.A. meeting.) He claims that there are very few beaver in Ontonagon County. Mr. Boyd is a very hard man to talk to and once his mind is made up it is impossible to reason with him. Messrs. Emblad, MacDonald and MacBeath all claim that Mr. Boyd runs the Ontonagon Sportsmen's Club and that everything that he says goes with the other club members.

Conservation Officer Archie MacDonald of Ontonagon thinks that there are not many beaver in the county except maybe near the headwaters of the larger streams. Claims there are only a few beaver on the Little Iron and none on the Union River. These are two of the best trout streams west of Ontonagon. Fishermen complain of the large numbers of small trout in the Union River.

Conservation Officer Jas. Soraruf of Ironwood claims that there are quite a few beaver in his area and that most of the people favor an open season.

Conservation Officer Kenneth Grant of Wakefield thinks that beaver are plentiful in his territory and believes most of the people favor an open season.

Florin Warren, District Supervisor of Fisheries Operations at Watersmeet, does not feel that he has been around his district enough to warrant a statement on the number of beaver in his district.

Donald MacBeath, the Game Area Manager, has done a good job in contacting the local clubs in regard to the beaver-trout controversy.

Baraga District (Baraga, Houghton and Keweenaw Counties)

1. Baraga County Conservation Club (NMSA)

Ivan Fuller, President, L'Anse. Mr. Fuller favors a closed season and believes most of the club members feel the same way about it because their streams are not spring fed and tend to dry up in late summer, and the fact that beaver dams used to provide good fishing. He thinks that it was a big mistake for the CCC to remove beaver dams, because they have had no fishing since the dams were removed. After explaining things to him for three hours, I found that Mr. Fuller still wanted a closed season on beaver regardless of whether beaver dams would improve fishing or ruin streams because he feels that beaver are not given a chance when trapped each year. Mr. Fuller stated that the beaver population was rather low in this particular area. He knew of no beaver dams that were producing fish at the present time.

Mr. R. J. Bishop of L'Anse came in while I was talking to Mr. Fuller. He said that he knew of plenty of beaver dams that were absolutely devoid of fish and other fresh dams that are beginning to provide good fishing. Mr. Bishop agreed to take me to these beaver dams but we were unable to get Mr. Fuller to join us. We looked over several dams on Silver Creek and Roubillard Creek. Although it was a fairly cool day, the temperatures of the various beaver ponds were around 70°F. After explaining things to Mr. Bishop, he expressed the opinion that beaver dams were a detriment to any trout stream.

Mr. Emil Haanpaa, Secretary, L'Anse. Mr. Haanpaa favors an open beaver season and Department control of hunting, fishing and trapping. Mr. Haanpaa is a very reasonable man and is willing to accept our explanation of various conservation measures. He will present the beaver-trout problem to the club at its next meeting.

Mr. William Beck, Director, Baraga. Mr. Beck is also a member of the Wolverine Sportsmen's Club of Baraga. Mr. Beck is in favor of an open beaver season and believes that the Department's experts are better qualified to handle various situations than the sportsmen.

2. Laird Township Conservation Club

Mr. Waino Pirhonen, President, Alston. Mr. Pirhonen is working for the Department at present as a fire warden and towerman. He is in favor of an open beaver season because beaver have ruined so many of their streams. He feels that his club will also vote for an open season. Mr. Pirhonen claims that there are plenty of beaver in his locality.

3. Wolverine Sportsmen's Club (NMSA)

This club was just organized recently. Most of the members live in Baraga and Pelkie. They are associated with the N.M.S.A. I was unable to contact Mr. George Maki, the president of this club.

Mr. O. (Arnie) Usitalo, Secretary, Pelkie. He is in favor of an open season on beaver and will present the beaver-trout problem to the club at its next meeting. Mr. Usitalo believes that the Department should be allowed a free hand in the management of our fish and game.

Mr. Ed Faucault, Director, Pelkie. Mr. Faucault had always believed that beaver help trout fishing but feels that the Department knows best. Therefore, he favors an open season on beaver and will present our arguments to the club at their next meeting.

4. Houghton Rod and Gun Club (NMSA)

I was unable to contact Messrs. Charles Beck and James Monette, President and Secretary of this club.

Mr. Earl R. Clark, Director, Houghton. In favor of an open beaver season and believes the club will also favor an open season.

Mr. Clark is decidedly in favor of conservation and realizes that the Department should be allowed to handle all matters pertaining to game and fish. This club did not vote on beaver proposal at the last N.M.S.A. meeting.

Dr. C. T. Ferries, Director, Houghton. In favor of leaving such matters up to the Department and will present this problem at the next club meeting.

5. Blue Lakes Sportsmen's Club (MUCC and NMSA)

U. J. Noblet, President, Houghton

Arnold A. Rautiola, Secretary, Hancock

Claude Fenton, Director, Houghton

Gene Siler, Director, Hancock

Joe Romano, Director, South Range

All of the above men except Rautiola are in favor of controlled beaver management and desire to go along with the Department in any recommendation made. They will bring this matter before the club at the next meeting and obtain an expression of opinion so that they will be prepared to vote at the next N.M.S.A. meeting.

All of the above men realize Rautiola's weaknesses but apparently desire to keep him in as the club secretary because of the great amount of work that he will do. In the past Rautiola has taken it upon himself to express an opinion for the entire club without any previous discussion among the club members or authority from the club. Mr. Noblet has tried to put a stop to this procedure and states that no letter from

the Blue Lakes Club is official unless signed by himself. In the future all letters signed by Rautiola should be returned to Noblet without reply. Apparently Rautiola has been very scheming and underhanded in his methods and Noblet is taking no chances.

I wasted seven hours of my time talking to Rautiola and did not get him to accept one thing that I said. Rautiola admitted that the Blue Lakes Club (meaning Rautiola) was responsible for the resolution to close the beaver season that was brought before the N.M.S.A. convention. He even wrote letters to other clubs and lobbied for this resolution. He cannot give any reasons for wanting a closed beaver season except that some conservation officer might be able to trap beaver or buy beaver pelts. Rautiola does very little fishing at the present time and does not know of any beaver dams that are now producing good fishing or any that have ever produced good fishing. He maintains that he is just expressing the opinion of the majority of the club members when he asks for a closed season. Yet, when it was pointed out to him that he did not voice the sentiment of the entire club (4 out of 5 members contacted favored an open season), he was very vociferous in maintaining that he did. I am inclined to doubt this. Rautiola has been responsible for giving the Blue Lakes Sportsmen's Club a very bad reputation throughout the Upper Peninsula. Many officers of other clubs pointed this out to me.

It is my opinion (and I have a promise from Messrs. Noblet, Siler and Romano) that the club will vote for an open beaver season this year. Mr. Noblet is a professor of forestry at the School of Mines and is well informed on the subject of beaver management.

6. Lake Linden Sportsmen's Club (NMSA)

Alden Drouin, President, Hubbell. In favor of the Department and any recommendations that they make.

Albert T. Hainault, Secretary. Will go along with the Department in any recommendations that are made. Mr. Hainault is a trout fisherman and is against beaver because they ruin so many streams. He believes the club is in favor of an open beaver season. He will take this problem up before the club at the next meeting. This man's father, who is a director of the club, agrees with his son.

Gaston Pichette, Director. He favors an open beaver season. His club voted for an open season at the last N.M.S.A. convention. (Mr. Trudell claims that there were no dissenting votes.) Mr. Pichette is in favor of letting the Department handle conservation affairs. He will see that the club votes on this problem at its next meeting.

7. Lake Superior Beagle Club (NMSA)

Stewart Hodges, President, Laurium. In favor of letting the Department handle the beaver-trout problem. His club did not vote on the resolution at the last N.M.S.A. convention. The club will vote on the matter at its next meeting.

Clifford Warren, Secretary, Hancock. Agrees with Mr. Hodges.

Mr. Joseph Enblad, Supervisor, District No. 2, believes that there are an abundance of beaver in his district. Mr. Enblad also believes that some sort of a permit system would be desirable in order to control beaver trappers.

John McGinty, Conservation Officer assigned to Headquarters, knows of several streams that have been ruined by beaver. Claims that beaver have really increased during the past year and are now found on streams that have never had beaver on before.

Conservation Officer Paul Challancin at Houghton states that beaver are plentiful in his area.

Clyde Lambert, Conservation Officer at Calumet, claims that beaver are none too plentiful in his territory.

Conservation Officers Robinson and Oust of L'Anse claim that beaver are abundant in their particular districts and that they receive many nuisance beaver complaints.

Marquette District (Marquette and Alger Counties)

1. Michigamme Rod and Gun Club.

This club has not been active for several years but may re-organize this autumn. I talked to several local people in Michigamme and they were all in favor of an open beaver season.

2. Champion Rod and Gun Club (NMSA)

Dr. Paul Van Riper, President. The doctor and the majority of the club members are in favor of an open beaver season. The Peshekie River problem was responsible for selling them on controlled beaver management.

3. Republic Sportsmen's Association (NMSA)

This club is being revived again and they plan on holding their first meeting in late August. Mr. Emil Ranguette is doing most of the work of organization. He is in favor of an open beaver season and claims that most of the old club members are also in favor of an open season because they feel that the beaver do more harm than good to trout streams. He will see that this matter is brought up for a vote at the first meeting.

4. Ishpeming Sportsmen's Club (NMSA)

Maurice G. Johnson, President. Mr. Johnson runs a sporting goods store in Ishpeming. He has not done much fishing or hunting in the past ten years. Mr. Johnson favors a closed season and is certain that the club feels the same way about it. After talking to him for three hours he still felt that beaver made good trout fishing and remembers the good

fishing he had in beaver ponds ten or more years ago. He showed me pictures of excellent catches of trout made in the old beaver ponds on Deer Creek, which was their favorite fishing stream, about 4 or 5 years ago. It happens that I had had a chance to look at that stream just a few days before and it was nothing but a series of beaver meadows, shallow water, no shade, wide stream bed, and temperatures ranging from 69° to 77°F. Springs entering the stream ran about 42°F. On hot days the water probably gets up to over 80°F. I explained this to Mr. Johnson and he admitted that there weren't any trout in the stream at present, but still felt that if beaver were to dam the stream that they would again have good fishing. (I believe he would be willing to haul the food into this stream for a colony of beaver even after I explained how much food they required.) Perhaps my mention of the stream improvement program may cause him to change his mind.

During the 4 or 5 hours that I spent in Mr. Johnson's store I was fortunate enough to meet Mr. Charles W. Pryor, the Secretary of the club, and about a dozen different club members. (Apparently Mr. Johnson has plenty of time to spout off on his pet theories because various club members visit the store every day.) Mr. Pryor and all but two or three of these men were very reasonable and appeared willing to listen to reason. They all gave me the idea that they favored an open beaver season. But it is rather difficult for them to forget the good fishing that they have had on beaver dams. Perhaps the only way that we will be able to win them over completely will be by putting in some dams of our own. These men seemed to feel that before the CCC came along and tore out the beaver dams they had good fishing and that they have had very poor fishing since. Maybe we missed the boat by not continuing on with our stream improvement work after the CCC program ended or better still, perhaps we should attempt to put in a few low dams here and there in the Lake Superior watershed at the present time.

5. Ishpeming Beagle Club (NMSA)

Mr. Sam Grenfell, President. He favors an open beaver season and has heard nothing from the 70 odd members which would indicate that they desire a closed season. Most of the club members do a lot of trout fishing in the summer. He will see that this matter is taken up with the club members at their next meeting.

Mr. John H. Bess, Secretary. Favors an open season and will see that the club votes on it at the next meeting.

6. Negaunee Rod and Gun Club (NMSA)

Joseph Holman, President. The club wants a closed season on beaver north of M-35. They believe that beaver are beneficial to trout to some extent although they do admit that beaver may not be an asset to the slow, warmer streams. They will admit that some trout streams have been completely ruined by beaver but before these streams were made unfit for trout they did produce good fishing. Since the CCC removed the beaver dams, fishing has been extremely poor. I pointed out that perhaps they should recommend certain streams to be closed to trapping and the rest of the streams open, but they feel that all beaver would then be removed from the streams. He believes that there are a great many beaver poachers in Marquette County who would remove the last beaver if possible. Thinks that law enforcement is quite a problem and that it is not being handled right. He felt that if the Department would prove to them that good trout fishing could be produced in pools created by artificial dams, the club may then be willing to vote for an open season. But until something is done to improve trout fishing, they want a closed beaver season. Mr. Holman admitted that his club and the Blue Lakes Club (with Mr. Rautiola) were responsible for getting the resolution passed to close the beaver season at the last N.M.S.A. meeting. Mr. Holman also claims that at the last

N.M.S.A. meeting that his club asked for the closing of all streams north of M-35.

Mr. Joseph Aminino, a member of the Negaunee club, also agrees with Mr. Holman.

Mr. Donald MacDonald, Secretary. Mr. MacDonald is willing to listen to reason and believes that the Department is trying to improve conditions and knows what is best. He is therefore willing to vote for an open season and will present our views at the next meeting of the Negaunee Club. He claims that Mr. Holman has quite a following among the members of the club who do as he says.

7. Huron Mountain Club (N.M.S.A.)

Mr. H. E. Perkins, Director of the club, will go along with the Department and vote for an open beaver season at the next N.M.S.A. meeting. The Huron Mountain Club has been controlling the beaver on their streams by removing the dams as soon as they are completed and by trapping the beaver out of certain streams during the regular beaver season.

8. Marquette Rod and Gun Club (NMSA)

Otto Schwenke, Secretary. Mr. Schwenke does not know how the club feels about beaver but believes that they voted for a closed season at the last NMSA meeting. He feels that beaver would be an asset to any trout stream, especially the streams flowing into Lake Superior--some need slowing up and others that get low in the summer need dams to hold back the water. He believes that the beaver population is low at present. He will present our views at the next club meeting.

Also talked to a Mr. Jenks, a member of the Marquette Club. He feels that the Department should be allowed to manage our waters as they see fit.

I was unable to contact any of the other officers of the Marquette Club on any of my several trips to Marquette.

9. Forsythe Township Sportsmen's Club (NMSA)

Mr. Henry Sarasin, President, Princeton. He favors an open beaver season and believes that the majority of the club members are for an open season.

Ernest Hendrickson, Secretary, Gwinn. In favor of an open beaver season and believes club feels the same way about it. Beaver are numerous and are doing a great deal of damage.

10. Munising Conservation Club (NMSA)

Verne Beattie, President

W. H. Hildebrand, Secretary

John Hebert, Treasurer

These men were all in favor of a closed beaver season until I finished talking to them; then they agreed to string along with the Department. They claimed that beaver ponds had always produced good fishing until the CCC removed all of the dams. Since then fishing (for brook trout) has been practically non-existent in Alger County and the northern part of Schoolcraft County. They did not like the idea of the wholesale removal of beaver dams and believed this to be a part of the policy of the Department at the present time. They felt that until something better was offered they would stick to a closed beaver season. When I had explained our stream improvement program, they felt that the Department seemed to be willing to do something to improve fishing. I believe that at least one small dam should be built in this area as soon as possible because I am certain that these sportsmen would admit then that artificial dams are much better than beaver dams.

Lew Merwin, Director. Believes that beaver are beneficial to trout streams but appears willing to string along with the Department in favoring an open season.

Ernest Libby, Supervisor, District No. 3. Mr. Libby claims that beaver are extremely numerous in his District and that they could keep a four-man crew busy full time just handling nuisance complaints. Mr. Libby said that he knew of only two streams in his district that could not be harmed by beaver because of the clear, cold water and the hard gravel bottom. I looked at both of these streams. Deer Creek has already been ruined by beaver. The dams have been washed out on this stream and while the stream is now unfit for trout, the old beaver dams did create trout fishing on this stream probably because of the springs. Perhaps a few low dams would again produce fishing on this stream. Foster Creek, the second stream mentioned by Libby, has no dams on it at the present time. Beaver would definitely harm this stream, but artificial dams could probably be used to create good trout ponds.

Ernest Ruecker, the Conservation Officer assigned to headquarters, is definitely against a closed beaver season.

Conservation Officers Charles Vanderstar and Donald Claus took me to several streams that beaver have been working on recently. Trout are not present in the majority of the dams.

I also talked to Game Area Managers Roy Semeyn and Al Reynolds, and Mr. Fred Owens, who is in charge of the Marquette Hatchery.

I also talked to Mr. Dave Nason, a former conservation officer. Mr. Nason believes that beaver are an asset to trout fishing.

Crystal Falls District (Iron and Dickinson Counties)

1. Iron River Sportsmen's Club (NMSA)

Albert E. Tegge, President

Sam Bastianaila, Secretary

Greg Argentotti, Director

These men and the club are in favor of a closed beaver season because they used to be able to get some wonderful trout out of

beavers ponds. Fishing has been extremely poor in this locality ever since the dams were removed by the CCC. They were extremely interested in the stream improvement program when it was explained to them and wish that the Department could put in several small dams this year. I believe that this club will vote for an open beaver season at its next meeting because they now feel that the Department should be allowed to handle all conservation affairs.

2. Amasa Conservation Club (NMSA)

Ralph Premo, President. He is in favor of an open season and is positive that his club desires an open beaver season. Believes that the Department is doing their best to improve hunting and fishing and is therefore anxious to cooperate with them. He claims that the Blue Lakes Sportsmen's Club put something over on the rest of the clubs when they had the resolution passed to close the beaver season at the last N.M.S.A. meeting. He thinks it is a shame that all of the Upper Peninsula had to be penalized because one or two clubs wanted a closed beaver season.

3. Channing Rod and Gun Club (NMSA)

I did not attempt to contact anyone from this club because Ford Kellum, Game Area Manager, located at Crystal Falls, told me that this club would vote for an open beaver season.

4. Sagola Sportsmen's Club (NMSA)

I did not call on any of the officers of this club which held their first meeting on July 17. Ford Kellum attended this meeting and saw to it that the members voted on the beaver question. They voted for an open season. Mr. Trudell also attended this meeting.

5. Iron Mountain Sportsmen's Club (NMSA)

Mr. Don Smith, President. This is a new club. Mr. Smith is in favor of an open season and knew all about the damage that beaver

do to trout streams. He will see that this problem is brought before the club for a vote and assured me that the club would vote for an open season.

6. Norway Restoration Association (NMSA)

William A. Asselin, Secretary. He and his club are in favor of an open beaver season. He claims that the Department was in the wrong last year by recommending that the entire Upper Peninsula be open, thus going against the wishes of the sportsmen who wanted a few counties closed to beaver trapping. It was because of this that the sportsmen asked that the entire Upper Peninsula be closed. He believes that the majority of the sportsmen desire management but that the enforcement division is against a management program that would open or close certain streams.

Claude Smith, District Supervisor, and Oscar Sundquist, of District No. 4, claim that they have received many nuisance beaver complaints and could keep several men busy full time live trapping beaver.

Conservation Officer Walter Nelms of Stambaugh favors a closed beaver season in order to save the beaver for the boys in the armed forces. He also realizes that beaver do plenty of damage to trout streams and should be controlled.

Conservation Officer John Shemky of Crystal Falls declares that beaver are doing untold damage in the area under his jurisdiction.

Game Area Manager Ford Kellum is doing a splendid job in contacting the local sportsmen.

Escanaba District (Menominee and Delta Counties)

1. Menominee Conservation Club (NMSA)

I was unable to contact any of the officers of this club. All of them were either out of town or on vacation and I did not believe that it would be worth while to wait several days in order to contact them.

2. Normenco Sportsmen's Club (NMSA)

Julius Hansen, President, Powers. He favors an open beaver season and is quite certain that the club will vote for one. Apparently they feel that beaver are a detriment to their slow moving streams.

I was unable to contact Mr. D. H. Raess on any of my trips to Escanaba.

Conservation Officer Clarence Lienna of Stephanson claims that they have plenty of beaver in his district and that they are receiving plenty of nuisance complaints. He believes that the Menominee Club favors an open season.

I also talked to Howard H. Eldred, Game Area Manager stationed at Escanaba.

Newberry District (Luce and Schoolcraft Counties)

1. Germfask Sportsmen's Club (NMSA)

Dave Morrison, President

Harold Gilman, Vice President

These men and the club want an open season. They know that beaver do not improve trout fishing in their streams. Also, they have so many non-trout streams. Beaver trapping brings in as much as \$5,000 to this little town and this means quite a bit to the economy of the town. This club certainly fought for an open beaver season last year and sent petitions to Trudell and Lansing and formed a committee to talk to Mr. Rahilly. They did not believe that it was fair to close the entire Upper Peninsula because several clubs wanted a closed season.

2. Tahquamenon Sportsmen's Club (NMSA)

I did not call on any of the officers of this club because Messrs. Rahilly, Furlong and Beach assured me that this club would string along with the Department in any recommendations that were made and that they favor the system of having a few streams closed to beaver trapping and the rest of the streams open. I did talk to Hugo Kilpela and

Charles Honkonen, members of the Tahquamenon Club. They favor an open season on most streams and certain desirable streams closed.

Mr. F. P. Furlong, Supervisor of District 6, his assistant Carl Makel, and the following officers were contacted: Julius Thorson, Ernest Derwin, Thomas Mellon, R. W. Beach, and Frank Generou. All of these men are in favor of closing certain streams to all beaver trapping and leaving the rest of the streams open. This has been the district policy for about ten years. During this time they have had a minimum of complaints from anglers and trappers. Mr. Furlong claims that this system has not increased the work of himself and his men. I had the opportunity to look over some of the streams that have been closed to trapping for years. Although few if any beaver are on these streams at present, the streams have good cold water and clean bottoms and would not be harmed to any great extent by a few beaver dams. But these men realize that beaver cannot be allowed to take over a stream without control because they also showed me streams that should not be dammed by beaver and streams that have been ruined as trout streams by beaver. This method of controlling beaver has worked out satisfactorily as far as the sportsmen and trappers are concerned. Nevertheless, these men would prefer to see artificial dams in place of beaver dams on these good streams.

I also called on Otto DeWaard, the Game Area Manager stationed at Newberry.

Sault Ste. Marie District (Chippewa and Mackinac Counties)

1. Izaak Walton League (NMSA)

John Zabelki, President, Sault Ste. Marie. Mr. Zabelki and his club were in favor of an open season except for the streams that flow into Lake Superior. I believe that they will be willing to vote for an open season with the exception of certain streams. Some streams in this

district have been closed to beaver trapping for a number of years.

I did not have time to call on the Detour Sportsmen's Club or the Mackinac Conservation Club (St. Ignace), but the district office informed me that these clubs would probably vote for an open season.

Alex McLean, Conservation Officer attached to headquarters, told me that District 7 had favored an open beaver season with certain reservations. This system was inaugurated by Mr. Furlong when he was District Supervisor. They have been receiving numerous nuisance beaver complaints this summer.

Conservation Officers John Speck and Roosevelt Haken were also contacted in regards to the beaver sentiment in their areas. Both thought the people favored an open season.

Regional Supervisors D. J. Curry and Stanley Shust were also contacted several times as well as Mr. Curry's assistant Bernard Stephansky.

We stopped at the Seney Migratory Wildfowl Refuge and saw Mr. Clarence Johnson. They have quite a beaver problem. They estimate that they have about 1,200 beaver on the refuge and in many places the beaver have used up all available food. Mr. Johnson said that many beaver have left the refuge and that all streams bordering the refuge are well stocked with beaver at the present time.

I also met Mr. Charles Burton of the Timber Production Board (T.P.W.P.). Mr. Burton has had a great deal of experience with beaver and favors an open season.

The Hon. H. J. Richards was visited. He claims that the beaver season was closed last year because the sportsmen were in favor of it but that he was sure the Commission would see fit to open the season next year.

The Hon. Joseph P. Rahilly of Newberry said that the Commission would have approved a plan whereby some streams were open and others closed to beaver trapping.

Mr. Rahilly is in favor of building small artificial dams on streams. He believes that they should be simple structures--sheet piling, earthen dykes, and plank spillway. He said that we could afford to make a few mistakes by putting in dams at present before adequate surveys were made. He did not seem to figure that a great deal of harm would be done if a dam did go out after two or three years. It would have served its purpose by then and we could go ahead and build another dam. He also believes that some maintenance would be required on all dams. He feels that artificial dams are superior to beaver dams and that people would probably forget about beaver dams if we were to go ahead and build artificial dams. By building dams we would avoid plenty of criticism from those sportsmen who believe that beaver will build a dam in their favorite stream.

Mr. Peter Trudell, Jr., President of the Northern Michigan Sportsmen's Association, suggested that we call on all of the clubs in the Upper Peninsula and explain the beaver-trout problem to them. Mr. Trudell has no love for the beaver because they have ruined so many trout streams, but as president of the N.M.S.A. he has to carry out the wishes of the majority of the members. I do not believe that the majority of the sportsmen in the Upper Peninsula desire a closed season on beaver trapping. I also believe that Mr. Trudell was misinformed when he stated that the majority of the sportsmen desired a closed season. It became apparent as my trip around the Upper Peninsula progressed that the delegates to the last N.M.S.A. convention were not instructed by their clubs on just how they should vote on the beaver resolution. Therefore, I asked Mr. Trudell if he would write to each club and ask that each club obtain an expression of opinion of their members regarding the beaver-trout problem at their next meeting.

In this way all delegates coming to the convention this year would be prepared to vote and the results would better represent the majority of the sportsmen than when the delegates themselves took it upon themselves to express the opinion of the club.

Discussion

As near as I can determine as a result of the interviews, the majority of the sportsmen's clubs in the Upper Peninsula favor an open beaver season, as follows:

Open season - 21 clubs

Closed season - 3 clubs (Ontonagon, Negaunee and Marquette)

Partial open-closed season - 2 clubs (Newberry and the Soo)

Questionable - 4 clubs (Ishpeming, Baraga, Iron River and Munising)

Clubs not contacted or not functioning - 4

The above listing represents my own idea of how I believe the clubs will vote at the next N.M.S.A. convention. There is no means of telling at present just how much was accomplished by my interviews. Some of the clubs that I think will favor an open season may vote for a partially open-closed season, or even a closed season. But the above listing of the sentiment of the various clubs is the best that I can do.

It was interesting to note the difference of opinion that existed between various officers of the same club and between clubs in the same locality. This indicates that the different sportsmen are basing their conclusions on different things. It may also reflect that a club might have as a member or as an officer one dominating individual who can swing the majority of the club members at will, either because of his power, influence, oratory or arguments. Some members may differ in opinion with this individual but are unable to do anything about it. In the same manner it is possible for a smooth talker to sway a crowd and to get resolutions

passed at a convention that are really not wanted by the majority of the people.

Mr. Trudell told me that there was no opposition to close the beaver season when the resolution was passed at the last N.M.S.A. convention. He also stated that the majority of the sportsmen were in favor of a closed season. The results of this investigation indicate that there was some opposition to the resolution to close the beaver season and that the resolution possibly did not represent the views of the majority of the sportsmen. Several officers of different clubs told me that the resolution to close the beaver season was forced upon the delegates at the last N.M.S.A. convention by several clubs who wanted a closed season. As the delegates from most of the clubs were not informed on the sentiment of their club in this respect, they failed to vote or if they did vote, they voted as individuals and did not represent the feelings of the majority of the club members. It is my personal conviction that Mr. Trudell wanted to impress some of the Upper Peninsula clubs by showing how powerful the Northern Michigan Sportsmen are and therefore put on the pressure for a closed beaver season.

The sportsmen's chief interest in seeking protection for beaver appears to lie in the hope and desire that better trout fishing will follow. They base most of their theories on a mixture of memory and sentiment-- the wonderful fishing they had years ago on beaver dams. We admit that beaver dams will produce good fishing temporarily. The vast majority of the sportsmen contacted during this investigation could not name one beaver dam that was producing good fishing at the present time nor any beaver dams that they fished at present. They are asking for a closed beaver season in the hope that some good trout fishing may develop and are citing the lack of beaver to account for poor trout fishing.

Some sportsmen had certain definite streams that they felt would be improved by beaver, while others thought that beaver dams on any stream would improve trout fishing. I did not have time to look over all of the streams recommended by sportsmen, but undoubtedly some would not be harmed by beaver to any extent in the next few years. On the other hand, some of the streams recommended should not have any beaver on them because they would be ruined in a short time by beaver. Because it was impossible to look over all streams that were recommended to me by sportsmen, I suggested that some of the clubs (especially those favoring a closed beaver season) submit a list of the streams that they think should be closed to beaver trapping. After all, a system of open and closed streams would be the preferable way to handle the situation until such time as competent district fishery biologists are available to determine with the Game Area men the proper management for individual waters.

Some sportsmen believed that beaver dams on any small tributary or feeder stream would create fishing where there had been none before. This point was stressed in Salyer's report, copies of which are in the hands of all sportsmen's clubs. However, from the standpoint of trout stream management, beaver dams are not desirable in the small tributary streams because the beaver dam would block the upstream migration of spawners and would warm up the water of the small stream to such an extent that the main stream might no longer be suitable for trout.

Most of the clubs located in the Lake Superior watershed believe that beaver are an asset to their streams (not any particular streams, but all of them). This was recommended by Mr. Salyer in his Preliminary Report on the Beaver-Trout Investigation (mimeographed by the Department in November, 1934). The following is quoted from this report (page 6):

"The beaver pond is indispensable in maintaining continuous trout fishing in the rocky, short, down-plunging streams which flow into Lake Superior, because:

- a. These streams are much subject to local drouth.
- b. The excessive exposed rock surface warms up the water dangerously in summer unless covered by water backed up by a dam.
- c. Wintering pools, such as furnished by beaver dams are needed here."

In the case of the Lake Superior watershed, Salyer was mistaken and he never should have recommended that this area be closed to beaver trapping. Apparently Salyer did not have the opportunity to inspect many of the streams in the Lake Superior drainage. It became apparent during this investigation that Mr. Salyer paid too much attention to the advice given him by local sportsmen. (Dr. Bradt also found that Mr. Salyer put too much stock in the advice given him by local sportsmen.) Apparently Mr. Salyer (whose training was mainly in game and not fish) was not too familiar with the habits and requirements of trout. According to Dr. Bradt, Salyer had him transplant about 50 live-trapped beaver to several streams west of Ontonagon that are not trout streams and even the Ontonagon Sportsmen claim that they are non-trout streams. Bradt knew that these streams were not suitable for trout because the water was too warm and the streams dried up every year during late summer. The reason that Salyer wanted these beaver planted on these streams was to make better trout fishing. (Beaver did not become established on these streams.) It is rather unfortunate that we have over-sold the sportsmen on certain of Salyer's recommendations. Sportsmen in the Upper Peninsula are always stating that Salyer made this recommendation or that recommendation when we are really attempting to sell them beaver management. I therefore told all sportsmen who mentioned Salyer's recommendations that we had agreed with Salyer's findings when he made his investigation in 1933-1934, but that investigations that have

been made since that time have proven that certain recommendations that Salyer made were wrong. It is my belief that the recommendations that Salyer made are responsible for most of our beaver-trout controversies in the northern part of the Upper Peninsula. I therefore recommend that no further copies of Salyer's preliminary report be distributed to sportsmen in the future.

The following points should be kept in mind regarding the Lake Superior watershed and beaver-trout management.

1. In the western end of the Upper Peninsula mid-summer water temperatures approach the maximum for trout on many streams. This is due to a paucity of springs, and the extensive openings which allow the temperature to fluctuate almost as rapidly as the air.
2. In some of the swift streams of the Lake Superior watershed flooding is common due to the abrupt spring breakup. Many streams have scoured out wide beds which allow the summer flow to spread out in extensive shallows where exposure to direct sunlight results in warmer water.
3. Beaver dams and a sluggish flow of water due to low stream gradient in portions of certain streams combine to produce high water temperatures.
4. Many streams do not have sufficient food to maintain beaver, while other streams are completely lacking in poplar trees, which is the main constituent of the diet of beaver.

Streams that dry up in the summer would not be improved by beaver, unless the water in the streams were cold or unless good cold springs enter the pond. Most of the streams of this type that I examined were already too warm to support trout.

Very few of the sportsmen contacted expressed concern for the beaver themselves. Beaver are of great commercial interest and a great tourist attraction and it would be a calamity if they were exterminated. There is plenty of room for beaver and for trout. Our objective in beaver

management should be to maintain as high a beaver population as possible without serious interference with trout. In some areas the value of the fur crop may be more important than the trout. Such areas can be determined by a survey and managed as such. But beaver should be controlled on the more important trout streams. If the beaver are of greater value than the trout, the beaver can be prevented from doing too much damage to the trout stream by removal of dams and by trapping. Closed beaver trapping seasons endanger streams and also eliminate the revenue from the harvest of beaver pelts. By having a closed season over all of the Upper Peninsula beaver are not removed from certain areas where beaver are plentiful, and from the non-trout streams. After all, beaver trappers should receive some consideration and why should they be penalized for the beliefs of the organized sportsmen. The short trapping season provides a method of harvesting the crop and at the same time keeps beaver under reasonable control. The only fault I find with the present trapping laws is that it is possible to over trap an area because sometimes there are too many trappers on one pond.

Probably the biggest single factor responsible for the present beaver-trout controversy in the Upper Peninsula was the removal of beaver dams and general "stream cleaning" by the CCC. There is no use denying that it was a sad day when that program was started. But it would have been impossible to have made an intensive study of the age and condition of the thousands of beaver dams on Michigan trout streams before extensive removal operations were started. It is just another example of not having experienced personnel to do the job. (The same thing occurred in our stream improvement program.) The thing to consider here is that the removal of dams was not of consequence to the beaver because they would rebuild them again. But the removal of certain beaver dams warranted complaint. Some of these dams,

usually old dams that had already passed through a period of non-productiveness, could have been left in at least for a time or until interested parties could have been consulted. The reason why stream cleaning and brushing was attempted is not known to anyone except the particular foreman who supervised the work. The local conservation officer now has the authority to remove beaver dams. As he is close to the situation, he should know what the local interests may be. But it should be stressed that the removal of beaver dams by dynamite (as recommended in Salyer's report) is not now an approved method.

It must be borne in mind that after the wholesale destruction of beaver dams by the CCC there was a great decrease in the amount of productive trout water and a general let down in fishing. Some localities have not since recovered from this blow according to the sportsmen. We cannot remedy this matter by planting more fish or by opening or closing the beaver trapping season. The fishermen want productive waters. It is beyond our power to force beaver to build dams wherever we may want them and it is against accepted beaver-trout management to encourage beaver on certain streams. But we could have and still can build low artificial dams that will take the place of the beaver dams. These artificial dams should make the angler forget the good fishing he used to have in beaver ponds in the good old days. I believe that it is imperative that this program be started as soon as possible. Mr. Rahilly and Mr. Furlong both agree that this should be done. If there is such a great shortage of help, they suggest that fire wardens and other fire personnel could be used during slack periods during the fire season or during the winter when these men are not employed by the Department. In my opinion, about a dozen dams installed in various streams across the whole Lake Superior watershed this year would do a great deal to stave off criticism against the Department and to relieve the tension on the beaver-trout controversy.

Our beaver-trout policy until after the war should be:

1. If public sentiment will permit, all streams should be open to beaver trapping. (This is from standpoint of benefiting fishing only. The Game Division may wish to close certain areas.) But as it is possible that some sportsmen may feel that their particular area should be closed to trapping, it would probably be unwise to ignore the sportsmen and create a general open season. In this case it would be best if the sportsmen in these areas would agree to opening up the trapping on the non-trout streams and marginal trout streams. I realize that this presents a rather difficult enforcement problem but I am sure that the Field Administration Division would cooperate. (District Supervisors Furlong and Anguilm have found that the enforcement problems are not increased to any extent and they adopted this system of open-closed streams several years ago.) The streams that should be left closed to trapping are those that have good cold water, or where beaver dams are producing good fishing. The sportsmen and conservation officer should select the streams and if possible these streams should be checked by a competent fishery biologist.

2. Construct a few artificial dams as soon as possible on at least one or two streams in each county bordering on Lake Superior.

3. Start an educational program to inform the people about the beaver-trout program.

4. Instruct all Department personnel in regards to the beaver-trout policy. Many Department employees contacted during the investigation were advocating a closed beaver season. If it is Department policy to have an open beaver season and controlled beaver management, why aren't employees so informed?

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