

MEMORANDUM

State of Alaska

Art Schmidt
Sport Fish
Sitchka
Dept. of Fish and Game

DATE: June 10, 1975

FILE NO:

TELEPHONE NO:

SUBJECT: Marten River Foot Survey, April 23, 1975

FROM: Donald L. Siedel
Sport Fish
Ketchikan
Dept. of Fish and Game

Surveyed this stream from the air via Chopper and then set-down about one mile down stream from the falls to continue the survey on foot. The falls is about 4' - 6' high, but looks to me that coho, steelhead and perhaps king salmon could jump this barrier. I did not go on the ground to check this out as did F.R.E.D. and Commercial Fish who were also conducting surveys on this stream (F.R.E.D. was looking at the barriers). There is a good sized pool below the falls. The terrain in the area was steep and snow was right next to the bank which made this area almost impassable. There is a slide area on the left side (looking upstream).

I did set-down with the Chopper in an area above the falls and tried to catch a fish, but no luck. The area above the falls isn't all bad, but could be somewhat marginal in area due to bottom gravel 6" - 12". There were some good looking areas for spawning and a good pool riffle ratio. Commercial Fish did get flows, etc. for the entire river. I feel that there is adequate spawning and rearing area available for fish above the falls. Might be a good one for F.R.E.D. to enhance in the near future.

In the area below the falls for about one mile, the stream is rapid flowing and flows amongst large boulders and over a bottom of 6" - 12" rock. Appears to be quite a bit of sand in this area also amongst the rocks. This rock and sand situation lasts until just before the South Fork Stream.

The South Fork Stream is very sandy and spawning could be marginal. There is a stream block about $\frac{1}{2}$ mile up this fork. Water was semi-milky probably due to snow melt and 36° F. at 1100 hours. I would assume that coho would spawn and rear in this stream, however.

Just at the mouth of the stream and down a little, there were 5-10 steelhead lying in a riffle area. I hooked five and landed two of which one was a male at 835 mm and one a female at 8.9 mm. Both fish appeared to have been in freshwater for 2-3 weeks at least. Figured I had hit the jack-pot.

Continued on down stream almost to salt water hook and line sampling alternating between a lure and eggs. The remainder of the way produced no fish. None were observed except a few little fish of salmonid origin. This stream has excellent riffles with huge pools that are very deep. All side tributaries probably would support rearing fish up to their barriers.

Art Schmidt

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June 10, 1975

I cannot figure out why there were no further steelhead activity in the river unless that was the entire population or the fish were further upstream at the falls. It doesn't appear to have a large population from the information I gathered.

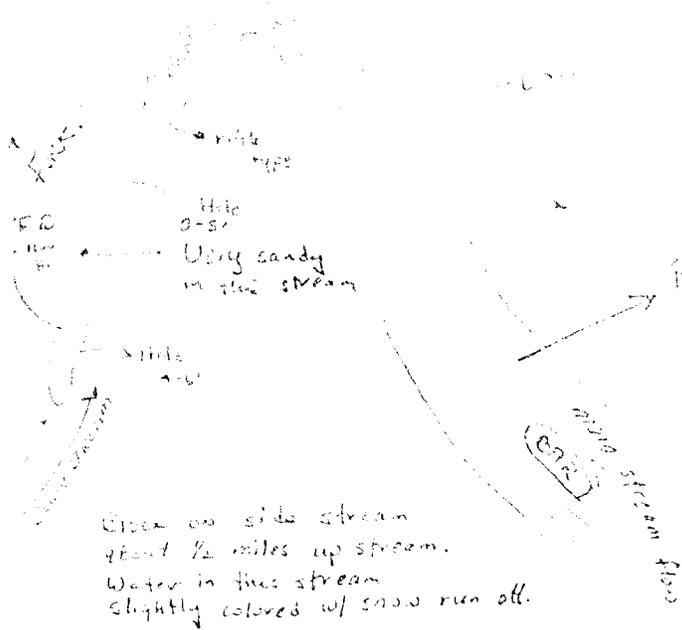
There were no other species of fish caught. Evidently, the cutthroat trout and Dolly Varden are not in there this early.

This river certainly has some good looking riffle areas and pool/riffle ratios. These pools were the biggest I have seen on all my surveys which were the Wilson, Keta, Karta, Naha Rivers and Humpback Creek.

Looking at the SSR #305 (attached) I see that there are no real large populations of salmon in this system.

I sent the two scale samples from the steelhead to Jones for aging in his spare time. 7

CC:Bob Armstrong
Ed Jones

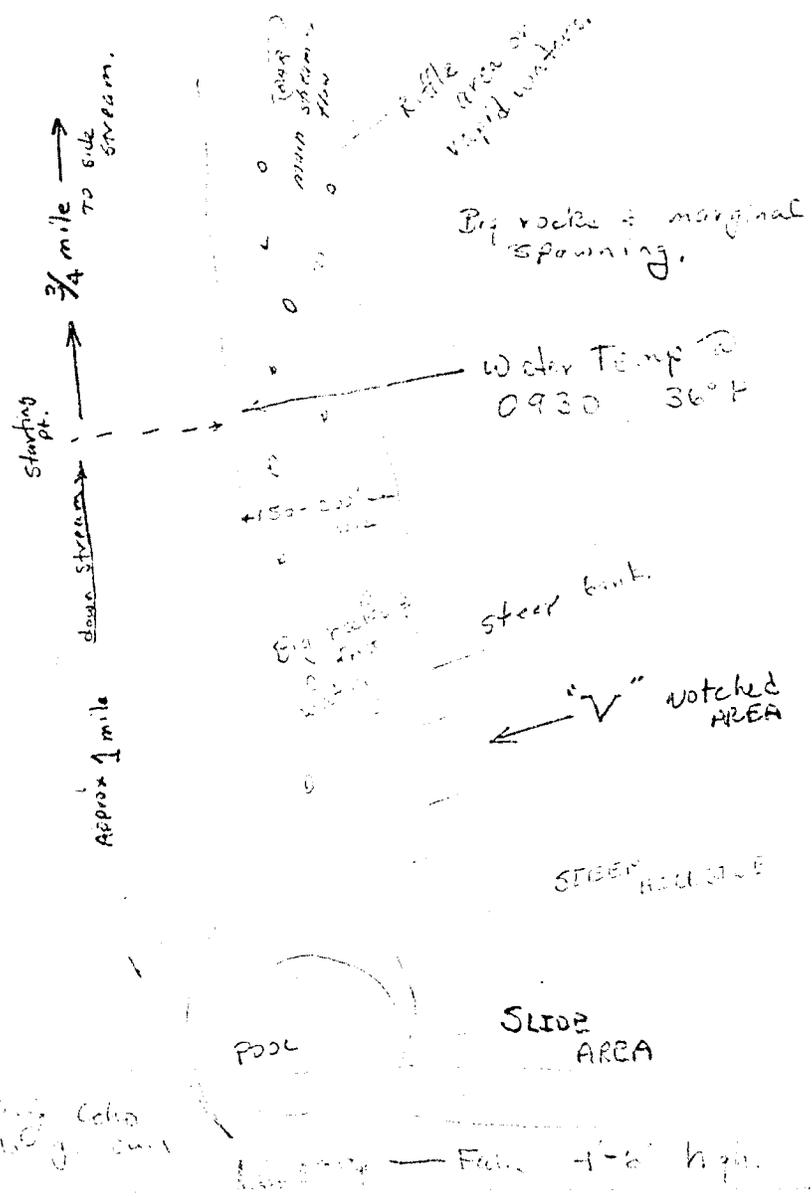


MARTIN RIVER
 Foot Survey
 4-23-75

By D.L. Siedelman

Quite a bit of sand along shore in rocks.

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Seems that this falls is a steelhead holding area.

Fall 4'-6' high.

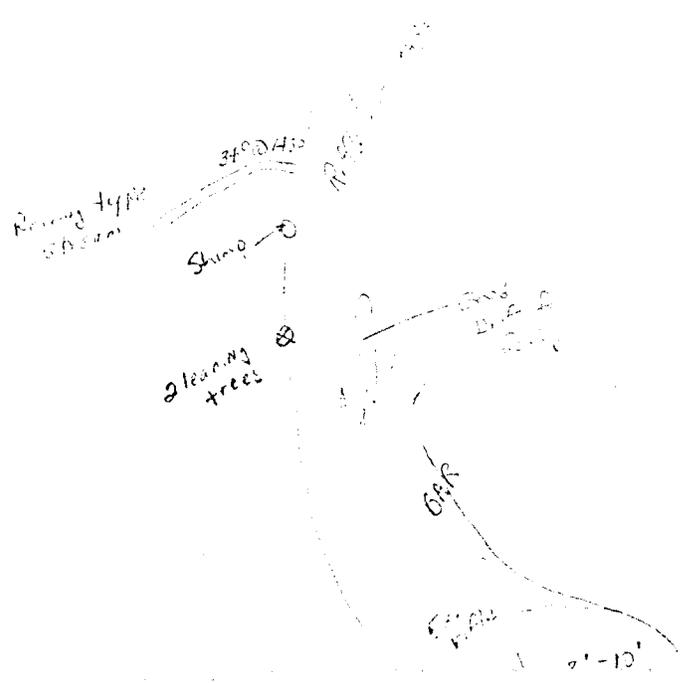
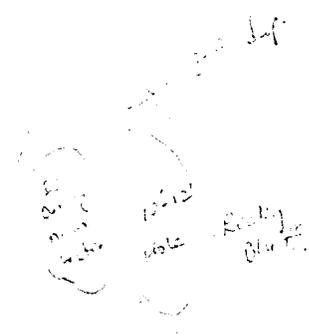
SALT WATER



MARTIN RIVER
 foot survey
 1-23-75

By D.L. Stedman

Page is about
 1 mile



1-42
 15° S. 5 W 133° 32.5

WETCHIKAN, BOCA DE QUADRA, MARTEN ARM, N. head

MAJOR SPECIES Pink, chum
 ESCAPEMENT TIMING Early. July-Aug.

OTHER SPECIES Coho, king, trout
 ESCAPEMENT MAGNITUDE 10-100,000

SPAWNING FACILITIES Excellent. Based on the facilities available for spawning, this river has a potential greater than 99% of the streams in Southeastern Alaska. However, actual escapements observed in the past indicate that factors other than available facilities may be limiting its production.

STREAM TEMPERATURES Cold range. 45°F., 8/14/49; 50°F., 8/29/49; 47°F., 9/24/49; 46°F., 7/16/50; 46.5°F., 7/28/50; 47°F., 8/7/50; 50.5°F., 8/17/50; 48°F., 8/28/50; 50°F., 9/9/50; 48°F., 7/21/51; 49°F., 7/29/51; 50°F., 8/6/51; 49°F., 8/17/51; 50°F., 8/20/51; 44°F., 7/21/52; 48.5°F., 7/28/52; 52°F., 8/7/52; 47°F., 7/22/53; 51°F., 7/29/53; 55°F., 8/7/53; 51°F., 8/17/53.

VALLEY DESCRIPTION Glacial. A broad flat valley in the lower stream and delta becoming narrow above the forks about 5 miles upstream. Above this point, the valley again widens into a typical Glacial U shape and continues to the head cirques. A cirque lake just below the 2,000 foot level is at the head 18 miles from the mouth.

DRAINAGE Snow fields, and a few small glaciers. Precipitation. This is one of the larger streams in this area. The main stream forks 4.3 miles above high tide. The smaller S. fork rises into a glacial valley with snow fields. The main E. fork continues eastward up the main valley to the headwaters at the divide.

STREAM MOUTH IDENTIFICATION The stream mouth is on the N. side of the delta at the head of Marten Arm. The delta is .4 miles across and is common with the Red River (K 23A, Previous No. 20A) which enters the main river .4 miles above the low tide point on the S. side.

ANCHORAGE Good anchorage is found near the S. shore at the drop-off. A small stream dropping from the steep S. bank forms a small falls that will lie just down the shore from the drop-off.

TRAILS AND SURVEY ROUTES The Marten River is navigable by small skiff for the full survey distance of 4.3 miles. Though the banks of the river can be hiked during low to normal water levels, the visibility from the banks is not suitable for good fish counts. During low water stages the few riffles that offer difficult skiff and out-board passage can be passed by pulling the skiff above to deeper water.

AERIAL SURVEY NOTES This stream is excellent for aerial survey. The valley is broad enough for turns. The river is clear during the spawning runs, except for flooding periods. The river bottom is light and offers ideal contrast for fish counts. There is no low pass up above the terminal for crossing to Keta River (K 24, Pre. No. 21) and the best route is to return to Marten Arm lake on the N. side of the arm and cross through the low pass N. of the head of the larger lake.

INTERTIDAL ZONE

LENGTH 2 miles

AVERAGE WIDTH/DEPTH 200'/50"

GRADIENT AND VELOCITIES Less than 1" at 1-2' per second

BOTTOM Sand and gravel, silt in lower delta. Excellent gravel conditions.

LOW TIDE LOCATION .4 miles below Red River on N. side (in upper intertidal zone).

HIGH TIDE LOCATION At head of riffle area above large rock on S. bank. A large pool lies above, deepest on the N. shore side. Several stumps usually are found in the vicinity of high tide, subject to washing out during flood.

SCHOOLING AREAS Two major schooling areas are found above the confluence with the Red River. A long deep hole lies along the N. shore below the large rock prominence on the S. shore. Fish school in the upper part. The second hole is at the base of the rock prominence below the riffle area.

SPAWNING AREAS The major intertidal spawning area is above the rock prominence to the high tide point. The river splits into several channels through gravel. The gradient is about 1" with velocities about 2' per second. A less important intertidal spawning riffle is found at the bend above the confluence with the Red River.

GENERAL NOTES Both brown and black bears are seen frequently in the large flats S. of the intertidal area during the salmon runs. Caution is advised if on foot. A gravel excavation site is located in the S. flats above the Red River.

UPSTREAM

LENGTH ACCESSIBLE >10 miles

AVERAGE WIDTH/DEPTH 200'/50"

GRADIENT AND VELOCITIES 1-2' per second, less than 1"

BOTTOM Sand, gravel, and some large rocks. Most riffles are suitable for spawning.

MARKER DISTANCE 4.3 miles.

MARKER IDENTIFICATION The forks is the termination point, marked by a metal plate on a tree at the forks.

BARRIERS None observed in over 6 miles on the main fork. None in 1 mile observed on the S. fork.

TRIBUTARIES Small streams enter the main river at intervals from the steep valley slopes and are not large enough for more than a small number of salmon.

SCHOOLING AREAS The salmon school at the lower ends of every large pool from high tide to the forks. The largest concentrations have been observed schooled in the first four large pools above high tide.

SPAWNING AREAS The major spawning areas observed during the recent years of small runs have been in the first mile of the lower stream. However, in the better years every riffle has been occupied, including the first mile of the S. fork and a mile above the forks of the main stream.

GENERAL NOTES The Marten River is classified as an early run pink salmon stream. However, during the small escapements, the peak of the runs has been observed to be later than usual, falling toward the latter part of Aug.