Traps and Nets in the Columbia River Gorge

by Leola Ernestine Broughton Baumgartner

Acknowledgements:

I would like to thank the following people who helped me preserve this history:

My son, John Blackman
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And many other.
Thank you,
Leola Baumgartner

Columbia River Gorge, look west from Oregon. Wind Mountain and Dog Mountain are seen across the river in Washington. Sepsican Point sticks our slightly at the base of Dog Mountain.

In 1910, my grandparents, Mr. and Mrs. Clarence Ernest Broughton, Sr., with four sons and three daughters — Clarence, Tracy, John, Earl, Alma, Leola and Virginia — moved from Savannah, Georgia to Portland, Oregon. Grandpa worked with his cousin, Harold Broughton, whose logging company's flume sent logs from Willard, Washington down along the mountain side to the mill beside the Columbia River at Bingen, Washington. The flume is still standing.

During the summers after 1910, they lived in a small town called Chenowith, Washington, near the mill at Willard. However, while they lived in Portland, Clarence Ernest Jr., my father, joined the Portland baseball team. When the team played against Ilwaco, Washington he met and later married my mother, HIlda Patana. Her family knew fishing, especially on the Columbia.

From 1913 to 1928, the Patana Family schooled Dad in fishing on the lower Columbia River. In 1917 he put a fish trap of his own in Pacific County, Washington, near the Naselle River Bridge.

During this time Dad and Uncle Jim Bailey, the husband of mother's sister Lula, ran Dad's standard double-ended gillnet boat up the Columbia River, through the Cascade Rapids to Drano Lake, Washington. It was here that they moored the boat and stayed with Dad's parents at Chenowith while gillnetting at night off Cooks Point, Washington, where Native Americans were living and fishing.

In the spring of 1915, when Mother

Dad in his standard four-horsepower gillnet boat.

and one month old Barbara came upriver with him, Dad rented a cabin at Cooks Point. Uncle Jim and Aunt Lula drove from Ilwaco and rented a cabin at Home Valley, Washington. Dad and Uncle Jim began gillnetting nights on either Cooks or Home Valley drifts during the muddy spring floods when fish were less able to see the nets. The families returned to Ilwaco for the rest of the year.

New gillnet boat at Government Island.

During these trips Dad drove and walked along the river bank, seeking promising places where fish might swim. Whenever he found a likely spot, he sat or stood on the river's edge and threw sticks into the water to check its flow. This tactic enabled him to find where fish might swim with relation to the flow of the water. Thus, Dad became known as "the man who thought like a fish".

From these trips, Dad determined the best places for traps, set nets and gill nets. He believed Sepsican, Wash., at the bottom of Dog Mountain on the Columbia River, was an ideal place to live and catch fish.

Dad was not alone in thinking that Sepsican was an ideal place for a trap. Native Americans had first lived and fished at Sepsican. Later came building crews of the S.P.&S. Railroad, then Highway 14 workers and the loggers who used the "shoot" on Dog Mountain to bring logs to the river to be rafted and sent to the mill at Home Valley, Wash.

Next, in 1928, our family rented three remaining cabins that had belonged to Mr. Jackson from Cooks, Washington. Thus began our families' fishing life at Sepsican and along the upper Columbia River.

Gillnet and set net season began the first of May. Dad's first set net — a small mesh linen knit net floating between the cork and lead-lines — was attached to the rock at the upper head of Sepsican eddy. This eddy was a perfect place to catch blueback and shad that had traveled from the Pacific Ocean up the Columbia River. They had fought their way through the Cascade Rapids, then tiredly made their way along the slower moving water near the sand banks.

All at once they found themselves going around and around this nice, easy moving eddy. Keeping their noses pointed upstream, the fish relaxed and floated until they were ready to make a dash around jutting rocks back into the full force of the current. Dad's set net was there to catch them.

Dad's second set net was placed across the river, a mile down on the Oregon side at Shell Rock, Oregon.

Blueback salmon are faily small, 3 to 5 pounds, similar to the sockeye in Canada's Frazer River. However, the blueback has firm meat and tastes much better.

Shad, caught on all coastal rivers, are flat with white scales. Shad also has good meat but lots and lots of bones. Some people like eat shad, but not many like to spit out the bones. Therefore, they are mostly used for roe, fertilizer, and crab bait. Our fishing continues until the end of the season when it was time to go back to Ilwaco.

For fishing, Dad's new gear consisted of rope, small kegs — buoys with kerosene lanterns — linen twine and knitting needles. Knitting new net had taken time and space during the fall and winter of 1928 while the family was in Ilwaco. Dad placed a six foot pole along the upper bedroom wall. The family filled needles with linen twine as he mended old nets and knitted new. He also make plans for new traps.

There are three types of nets: the set net, the floater net, and the diver net.

A set net has a line attached to the bank and has corks on the top and lead on the bottom.

A floater net is a net where the corks float on the surface of the water and the lead lines at the bottom. The leads are so placed on the lead lines as not to sink the cord line and to keep the net in a vertical position while it floats down the river with the current.

The diver net is made the same way as a floater net, but it is weighed at the bottom with lead lines such that the net scrapes along the bottom of the river. The corks are placed at the top to keep the net in a vertical position.

There are three commom construc-

tion elements for all fish nets: the net, the corks and the lead lines.

The first item of gear, the net, is knit with linen. Dad had various kinds and mesh sizes of nets for drift nets. Nets could be 200 or 300 feet long, hanging to a depth of 14 to 20 feet. Some nets tied to the boat only drifted down rivers with the buoy floating free on the outer end. The others, with buoys attached to both ends, went freely up and down with the tidal flows. Dad's diver gillnet went down river with one end attached to the boat. It consisted of four leaded nets tied on the buoy line; two large mesh nets, called front and back wall, with a small mesh net between them. A smaller mesh lightly leaded net, called an apron, was attached only on the cork line's upper river side with the buoy being laid out first.

The second item of gear was net corks. Net corks were made of many types of material: cork, glass, wood, or plastic of many shapes and colors. The prize net corks, or floats, most known then are the Japanese colored glass balls, now rarely found on ocean beaches. Dad's rope went through wood corks 6 inches long and about 9 inches wide in the middle. The corks were dipped in wax for their protection. He used large corks for his floater nets to make them sink so that they hovered like submarines.

The third item of gear was placing the lead on a rope to make the nets sink. In Dad's day, the lead line was made by heating lead in an iron pot, pouring it into a mold, letting it cool and pinching it on tight to the rope with lead pinchers. Now lead line can be bought with the lead already molded on.

When the nets are assembled, the net is hung on the cork and lead lines and the buoys are placed at the ends of the cork lines. Finally, lights were attached to the buoys.

In February of 1929, Dad and Uncle Tracey bought two houseboats, a pile driver, and a skiff from the lumber company at Home Valley, Washington. He anchored the rigs in an eddy at Sepsican, drove pilings, and moored the houseboats and skiff to them.

Mother, Dad, Barbara, and I moved into the larger of the two houseboats, a cook and bunk house on sizeable logs. Its kitchen end consisted of a large wood stove, sink, pantry and dining area. On the other end, with a fifty gallon oil drum heating stove, was a large lounge and bedroom for friends, family, or crew. The hall extended between the rooms to doors of the porch which surrounded the house. Across the hall were two smaller

Leola and Rex with the boathouse in the background.

bedrooms.

Uncle Tracey, Aunt Isobel and Grandpa Broughton moved into the smaller houseboat — a tool house on a barge — and changed it into a bedroom kitchen and living room with an enclosed front porch for Grandpa.

A scow and skiff, both of which Uncle Tracey built, provided transportation between the shore and our houses.

One time, driving the piling for the boat houses caused a bad accident. When helping to hold the piling under the hammer, Grandpa lost two middle fingers. He was rushed to the doctor in Stevenson, Washington. After his hand healed, he kept on singing and cooking the breakfasts for Uncle Tracey and Aunt Isobel.

Isobel Broughton and catch of the day at Home Valley.

In 1929, with housing established and set nets in place, Dad was ready to put the first trap in on Sepsican's sand beach down-river from the eddy.

Dad was the go-getter, and I went along for the ride. He carefully selected trees needed for piling, shove-down and rim pole. I say, "carefully" because of the depth of the water and how and where they were used and placed. After delivery, the logs he had selected were peeled and separated by size.

The rest of the gear was assembled:

net wedding, tar, tar barrels, rock from Wind Mountain, knitting needles, twins, pulleys, rings for the piling, rope and nails. A 6' by 8' scow was built with a dividing board down the middle to keep fish from sliding and being bruised when they were lifted out of the spiller. The scow also carried gear and an anchor to hold the boat in place while working on the river. Dad's 25' Sterling engine gillnet boat towed the scow and the pile-driver.

Dad bought the netting for the first trap. The net was cut to fit from the rim poles to the lead lines, pulled in and out of the tar barrel, and finally laid out on the grass to dry.

When Dad and the crew began putting in traps, the crew consisted of Uncle Tracey, who was very good with figures, did the measuring and also ran the pile-driver, uncles John and Earl Broughton, and Jim Bailey. The other crew members included Grandpa Broughton, who still loved to help his boys, Ikey Llamp, a happy, blond fisherman friend from Ilwaco, and local men hired on occasion.

In the summer of 1929 all went well until the Chinook wind rose to its full fury in the night and caused our boathouses to rise, fall, plunge, moan and groan. Mother, my sister Barbara, and I were terrified. We imagined being hurled down the river and demolished by the Cascade Rapids. However, Dad and Tracey started the Sterling's engine, put extra ropes with anchors out, kept the boat tied to the boat housed, and calmly waited for the storm to pass.

The Sepsican trap was driven that summer, the gear put on and left hanging on the piling, awaiting "opening day" when the season began in September.

The second trap at Collins, Washington, one mile down-river, was driven the following year. Eventually all traps, except the spiller and tunnels, were made as now described.

Dad bought and made up the new tarred gear into the heart, tunnels, pot and spiller with wire for the lead. I now this as Dad kept my friends and me busy hog-ringing the wire together.

The pilings were placed the same on all the traps. Uncle Tracey did all the measuring. Starting from the shore line about eight or ten feet out, the crew drove the first piling of the lead. The law specified that there had to be an escape left for the fish on the shoreline. Depending on the depth of the water, the rest of the pilings were driven in a line about every eight to twelve feet, to whatever distance was required to reach the proper depth for the heart, pot and spoiler, typically 150 to 250

feet.

One extra piling, or wing, was driven downstream, about eight feet below where the first medium sized heart piling was driven to catch any fish that might miss the entrance. The heart was like a medium sized box.

Then the pilings for a large pot and the spiller, which had to be slightly larger than the scow, were driven. The tunnels between the heart, pot and spiller were made smaller on the entrance side to keep the fish from finding their way into the spiller faster than they could be taken out.

After the piling had been driven, the gear was assembled. The wire was rolled out on the convenient, grassy space above the boat house. The water had been carefully measured where the trap was to be built. The chicken wire was 16 gauge, four feet wide and five feet long. The rolls were placed on top of each other, cut and hog-ringed together with cord in such a way that later the cord could be cut and the folds dropped and pushed down with the shove-down pole and rings later. The wire was rolled up on a pole and the next sections were made.

The tunnels and spiller web were next cut and sewn. The tunnels were made bigger on the down-river side. The upper top and bottom opening were attached to ropes and pulleys which allowed the tunnels to be opened and closed. All the traps were designed the same.

The wire had been rolled onto a pole and cut and tied together with cord in order to have the deeper outer end of the wire hung onto the first inside lead piling first. The wire was carried to the scow and all the lead wire was hung on the up-river side of the piling, allowing the force of the current to help the rings, bent nails, and rope hold the net on the poles. Rocks were tied to the bottom of the wire. The rest of the sections were hog-ringed together and secured until all the wire was hung on the piling and the rim poles and was ready to be dropped to the bottom of the river.

The wire was made to fit the size of the heart, pot and spiller which were then tied snugly to the rim poles. Rings had been placed on the piling when they were driven with holes drilled and chiseled for smoothness around the bottoms of the shove-down poles. The poles were pushed through the rings, and the ropes were threaded through the holes and tied to the bottoms of the pot, heart and spiller. Ropes were put through the pulleys and rings and gear strung up, about three feet above the water. Eventually, all the gear was

dropped and shoved down for inspection.

It was now time to call Fred Divine, the diver who lived in Portland and was just starting his diving business, which grew to be a very large enterprise. Fred would come with this assistant who helped him put on his massive diving suit and helmet. He looked like the outer space people do now in cartoons. After all the hoses and ropes had been attached to Fred, over he went, down to the bottom of the trap. His helper would work the pump which gave Fred air as he inspected the gear and wire to make sure everything was in place.

Then back up he would come. After returning his equipment to his car it was time for Mother to serve one of her delicious meals cooked in the large wood burning stove. I liked her stew, powder biscuits and lemon pie menu the best. Fred would be called any time a leak was suspected in the trap. He was a jolly, smiling guy. I would go along to watch every chance I had.

Fall fishing opened on the 10th of September and the traps had to be "hung up" until then. Between the lead and the heart, a wire apron, which was like a gate, was placed with rings, shove-down poles, ropes and pulleys. The tunnels to the pot and spiller were pulled up and tied high up on the rim poles.

Other rules to follow besides the opening date of the trap were as follows: There had to be a light placed on the far end of the trap piling. The first lights were carefully checked kerosene lanterns to be sure the freight and private boats, which ran at night, wouldn't hit them. The second rule was that the trap had to be closed from six o'clock Saturday night until six o'clock Sunday night. "Come hell or high water" those aprons had to be down tight and the tunnels in the air. Fish caught in the spiller just had to wait to be taken out until Monday morning.

After a night of suspense, it was time to lift the trap. The scow was towed out, placed on the up-river side of the spiller, the ropes were pulled and the tunnel closed. The scow moved to the beach side of the spiller, and the spiller was pulled into the scow with the fish. When all the fish were in, the spiller was let back down and the scow moved back, and the tunnels reset.

Now the fish were transferred to the McGowan's cannery boat and sent on their way to their cannery in Dodson, Oregon.

Sometimes the fish would be sold, traded, or given away, s during the depression of 1933. That year, the Broughton brothers gave away one ton

of fish to the people of Stevenson. Barbara and I sometimes sold blueback at Stevenson and Carson, Washington from the back trunk of our car for $1.00 for large, 75 cents for medium and 50 cents for small. When the cannery boat wasn't taking the fish, Dad delivered to the Portland Fish Company in Portland via the old winding Columbia highway on the Oregon side. When I was 16, I was allowed to deliver the fish to Portland.

The river flooded in the spring freshet of 1930. Our boathouses floated around in the eddy with the dirftwood until they were beached on the flat between the highway, railroad track, and the river's eddy.

Our boathouse surrounded by driftwood.

My sister Barbara at the eddy at Sepsican. Uncle Tracey's cabin is seen faintly in the background.

The next year a forest fire came down Dog Mountain's flume, chasing the rattle snakes before it. I remember moving to the bow of our Sterling fish boat for one night.

Dad bought a house in Vancouver, Washington in the fall of 1931 for the winter and our schooling. He also bought two boat houses located below the steep rocks of the eddy where the ferry crossed the Columbia at Lyle, Washington for the first of May fishing season.

One boathouse was the cook house with a bedroom on a scow for Mother and Dad. The older boathouse was on old soggy logs, with a bedroom, sleeping porch and net wrack on a large deck for the rest of us. When the Stern-wheeler riverboat went by, the waves

would come partly in under the beds in the bedroom. Clothes were hung up and a wash tub kept shoes and extra things from getting wet.

Once Barbara brought three girl friends from Vancouver with her, and when they were sleeping the waves came in. I hadn't told them about the waves, but had put all their shoes and stuff safely in a tub after they went to sleep. I still remember the screaming and hollering.

The pile-driver was brought up and a trap placed on the sand beach down-river below the rocks. Gillnetting was also pursued on the Lyle drift by all the family men except Uncle Tracey's family and the crew who remained at Sepsican after putting in the Lyle trap.

In the summer of 1932 we moved from Sepsican to Collins into a house left after the hotel, hot springs and most of the steamboat landing dock had been destroyed years before. In the winter, while we lived in Vancouver, Washington, tramps burned the house down and we lost all our furniture.

New cabins were built for Uncle John and our family. Uncle Tracey, Aunt Florence — his new wife and my school teacher — and Grandpa moved five miles further to Carson.

From 1933 the Broughton Brothers had traps on the Oregon side at

A crew member poses in front of the boat house. Note the size of the logs used as floats.

Oneonta Falls, Blue Lake Park and Government Island. The Blue Lake trap was shut down due to the pollution from the Camas Paper Mill. They paid for our loss and had to clean up their waste.

The fishing enterprise became known as "Broughton Brothers Fishing". My other uncles, Richard Patana and Jim Bailey, also gillnetted and helped on the traps some years.

The Broughton Brothers had traps from 1928 until 1934 when the traps and seines were voted out of the State of Washington. At various times, they

had trap locations at Lyle, Sepsican, Collins, Home Valley, Stevenson, and Uncle John had one in Rainier, Oregon.

While living in Stevenson, Washington in 1935, Dad had some fish from the set and gillnets put into North Western Cold Storage in Portland, Oregon. It was the first time freezing fish was tried there. In following winters, while in Stevenson, Dad and brothers sold or traded the frozen fish to farmers in eastern Oregon and Idaho. He also fished for sturgeon at Lyle in the winters.

In 1937 the Broughton Brothers, under the direction of Dr. Thompson, the Director of The Pacific Salmon Fish Commission, and also Director of the school of Fisheries at the University of Washington, put in the first fish trap on the Frazer River, located between Harrison Hot Springs and New West Minster, Canada, to count and tag the sockeye salmon run for the first time.

Dad died in Ilwaco, Washington of pneumonia on July 4, 1943, thirty years after he arrived. Mother and "The Boys" continued fishing the traps in Oregon until traps were made illegal in 1950. However, they continued fishing with gillnets for a number of years thereafter.

Appendix A. Fish Trap Mechanics

By Robert Lowell Broughton

Note: Bob is my cousin, Uncle John's son. Our fathers devoted their lives to fishing, and Bob and I grew up on the river. When I asked for his input he sent back the following helpful comments.

A. Location

Look for a **location** with a sandy bottom and beach, where there is a slack current. This is a place where fish can rest after fighting their way upstream from the ocean and through the strong currents. After resting, they proceed up steam to their spawning streams.

B. Traps — Logs

- **Pilings** are approximately 12 to 24 inches at the butt and 30 to 50 feet in height. The pilings are driven into the sandy river bottom in a straight line approximately 8 to 12 feet apart from the river bank in the river to the depth that your need for your pot heart and spills.

- The **length** of the trap will be approximately 150 to 250 yards. This will be the lead of the trap. At the river end of these pilings there will be two pilings driven approximately 10 feet downstream of the last two lead pilings. These will be the **heart.**

- At the river's end of the piling, the lead, there will be six pilings driven upstream from the last two lead pilings. These will be your **pot** and **spiller** pilings.

- The **heart** is an area where the fish enter the trap after following the lead, which is like a fence leading the fish into the box-like area where they mill around trying to find an escape route. They can swim back out of this area, but most do not, as their instinct is to swim upstream. After milling about they find a tunnel which leads from the heart to the pot. The heart has no bottom and is enclosed on three sides from four to six feet above the water line to the bottom.

- The **pot** is a box-like area 10 to 15 feet square, having four sides and a bottom and a funnel leading from the heart. It has no top and is attached to rim poles approximately four to five feet above the water line. The fish can mill around in the pot until they find the tunnel from the pot to the spiller. The pot is approximately 20 feet deep

- The **spiller** is a box-like area approximately 10 feet long, 8 feet wide, and 10 feet deep, having four sides and a bottom and attached to the rim poles above the water line. A tunnel attaches it to the pot. The fish enter the spiller from the pot through the tunnel. This is where the spiller can be raised by a series of ropes and pulleys and the fish are removed into a flat-bottom scow, which is a specific fishing boat. From the

scow they are loaded on the cannery boat and into tin cans.

- A **floater net** is a net where the corks float on the surface of the water and there is a lead line at the bottom of the net. The leads are so placed on the lead line as not to sink the cork line and to keep the net in a vertical position while it floats down the river with the current.

- A **diver net** is made the same way as a floater net, but is so weighted that the bottom of the net, the lead line, scrapes along the bottom of the river and the corks are so placed to keep the net in a vertical position as it scrapes along the river bed with the current.

APPENDIX B. BROUGHTON BROTHERS

Town of Stevenson

CLERK'S OFFICE

Stevenson, Wash., SEP. 15, 1931. 192

THROUGH THE COURTESY OF BROUGHTON BROS, WHO FROM THEIR TRAP AT COLLINS, ARE DONATING (1) ONE TON OF SALMON, TO BE GIVEN TO THE PEOPLE OF STEVENSON AND VICINITY.

JOHN POTTS IS DONATING THE USE OF HIS TRUCK TO HAUL THE FISH, AND IT IS THE INTENTION TO HAVE THE TRUCK PARKED OPPOSITE THE POST OFFICE, WEDNESDAY AFTERNOON, SEPT. 16th. AT 2;30, AND THIS IS YOUR OPPORTUNITY TO GET FRESH SALMON TO CAN OR SALT FOR YOUR OWN USE. YOURS FOR THE COMING AFTER.

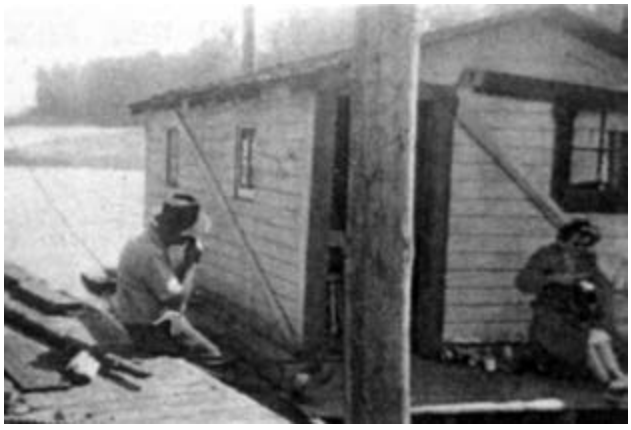
W. S. Hufford

MAYOR.

Appendix C: Life on the River

My cousin Robert (Bob) and Arlene Broughton.

Scenes from the fish traps.



Diving at the traps.

My uncle Richard Patana

Fred Devine diving at the traps.

Fishing scenes.

THEY THROW this size back today. Oregon game laws require that all sturgeon under 3 feet and over 6 feet be returned to water, but fishermen still can thrill to getting a monster such as this 9-foot 3-inch, 353-pound monster on their line.

My uncle John Broughton, right.

Pile driver at Lyle, Washington.

Cannery pick up boat.

Several scenes of me and my family.

In Ilwaco.

Ed Blackman, my first husband.

That's Dad on the left and Mother on the right.

**At the Drano Lake boathouse with my children,
Jon and Gary.**