

50 Tanner Street
Haddonfield,
New Jersey 08033
October 31st 1972

Callahan Mining Corporation
41 Union Wharf
Portland, Maine 04111

Mr. Frederick Beck
Dist. Exploration Mgr.
Sec. G.P.R.S.

Dear Fred:

One item I failed to ask you about when we met earlier this month was concerning the minutes of the meeting held this past July. I assume the minutes were corrected and amended at the meeting on October 5th.

If the approved and amended minutes are available I would like to have a copy at your earliest convenience, as well as those taken at the October 5th session.

I imagine you have had a chance to study the core test results submitted by the U.S. Army Corps of Engineers NEDOD-WQ 2/10/72 and would like to know what conclusions you have come to on the confirmed contamination in the Goose Cove area?

I would appreciate hearing from you on this matter to avoid a misunderstanding of Callahan's position concerning the sediment in Goose Cove.

Sincerely,

Albert E. Sandeckl

cc: CMP

'Bureaucratic Nightmare' Stalls Refuse Act

WASHINGTON, D.C. — Litigation — the great resource of industrial polluters, who regard the Refuse Act of 1899 as a Communist plot — has sent the Environmental Protection Agency to the Justice Dept. in search of a way to get its stalled enforcement program going again.

Briefly, according to John R. Quarles Jr., EPA's assistant administrator for enforcement and general counsel, the problem is that one court decision says Corps of Engineers can't issue permits yet under the Refuse Act, and another says the EPA can't prosecute until the Corps can issue permits.

The result has become a "bureaucratic nightmare" with industrial discharges into navigable waterways going on unrestricted meanwhile, he said.

Quarles asked Kent Frizzell, assistant attorney general in the land and natural resources division of the Dept. of Justice, to try to resolve the problem.

"Something must be done or the Refuse Act — our principal legal weapon against industrial

water polluters — may become a dead letter," he said.

The problem was set up in a ruling last December by Judge Aubrey E. Robinson Jr. of the District of Columbia court forbidding issuance of discharge permits by the Corps of Engineers until the corps had prepared environmental impact statements for major permits. With 20,000 permit applications pending, the Corps found itself suddenly loaded with a great burden of paperwork, and declared a moratorium on issuance.

The new permit program, replacing old practices by which permits were issued with little or no investigation and no enforcement later, was established in December 1970 as part of President Nixon's effort to step up pollution control. It required the Corps of Engineers to issue permits only following advice from the EPA that proposed discharges were acceptable as far as water quality was concerned.

Then, on May 30, the U.S. Court of Appeals in Philadelphia ruled in a case involving the

Pennsylvania Industrial Chemical Corp. that industrial polluters could not be prosecuted under the Refuse Act unless permits were available.

"That case could stop us dead in our tracks," Quarles said.

The Justice Dept. was asked to petition for a rehearing in the Philadelphia case and to expedite the EPA appeal of the District of Columbia case so that the permit program could be revived.

Quarles also urged congressional action on a bill by Rep. John D. Dingell of Michigan and Thomas M. Pelly of Washington which he said would relieve the permit program from the effects of the District of Columbia injunction.

The latter, ironically, was set off not by a great industry seeking to avoid ending its discharges, but by a couple of canoe enthusiasts who wanted a non-navigable stream, the Grand River flowing into Lake Erie, kept clean from northern Ohio's industry.

The suit was filed by Jerome S. Kaluz and Donald Large as a

(Continued from page 19-A)

"class action" for all recreational and conservational users of the Grand River, against the Engineers and the EPA.

Judge Robinson not only declared all waste discharges into non-navigable waters illegal and barred the federal government from issuing permits there but in addition ordered environmental impact statements for permits for navigable waters.

— John Frye

THE ACADEMY OF NATURAL SCIENCES

NINETEENTH AND THE PARKWAY, PHILADELPHIA, PENNSYLVANIA 19103

Phone LO 4-3921 Area Code 215

October 20, 1972

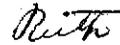
Mr. Albert E. Sandecki
50 Tanner Street
Haddonfield, New Jersey 08033

Dear Mr. Sandecki:

Thank you for your letter and the enclosures in September. I will always be interested in Goose Cove and the Callahan mine-site at Harborside. Thank you for keeping me informed.

It was a pleasure to see you the other evening.

Sincerely,



Ruth Patrick
Chairman
Department of Limnology

RP:bs

Goose Pond Society Approves 1,004-Foot Depth At Callahan Pit

The Goose Pond Reclamation Society, which met Thursday evening, voted to approve a request by Callahan Mining Inc. to allow fresh water to fill the abandoned open pit mine to a depth of 1,004 feet, which is mean low tide in adjoining Goose Cove.

The Society, a quasi-official body whose directors include representatives from the mining company, the community, and the State, also heard results of testing for base metals in pond waters and it was advised of progress in Callahan's aquacultural experiments.

At the previous meeting, it

had been decided to remove the fresh water dam eventually and to return the pond to its original condition as a tidal estuary. The reasons, according to Fred Beck of Callahan, are that if fresh water is allowed to fill behind the present dam it will cover such a large area that it will flood a good deal of land in the adjacent sanctuary, the rights to which would be in question. Moreover, the high level would make the pond useless as a duck nesting area. For that reason it had been decided to return the pond to salt water.

The dam is presently at 1,007 feet, but the State Highway

Commission has requested that the top three feet be removed so that ice piles won't damage the road in winter.

Beck said the sixteen-foot pipeline to the cove, which formerly kept the pit drained, will be removed "at the appropriate time".

Beck said that the 1,004 foot level will probably be reached naturally within a month. The water had been kept at the 990 foot level until turbidity improved.

In order of business:

- 1) Treasurer Paul Venno re-

Continued On Page 5

Soci



Florence Black and Bob Mant of the Goose Cove Restoration Society inspect a commercially reared salmon of the size that Callahan expects to put on the market in a week or two.

Goose Cove Sediments Contain High Metal Pollution Levels

Extraordinarily high levels of heavy metal pollution in the bottom sediments of Goose Cove near Callahan Mine have been disclosed by trace metal analysis by the U. S. Corps of Engineers Water Quality Laboratory.

Results of the tests were furnished to Albert Sandecki, vice chairman of the Goose Pond Reclamation Society, on Oct. 6. The specimens examined were collected by John Hurst of the Maine Sea & Shore Fisheries.

Copper in samples collected at six different sites ranged from 1,820 parts per million to 3,050 ppm; Lead from 550 ppm to 810 ppm; Zinc from 1,270 ppm to 2,450 ppm. Cadmium appeared in only one sample and in that at 5.33 ppm.

Analysis of sea water showed lead at 0.5 ppm, zinc at 0.04 to 0.06 ppm. There were no detectable amounts of copper or cadmium in any of the samples.

concentration can be had from comparison with bottom sediment samples taken in the series of First, Second and Third Pond area last September by Environmental Engineering Services of Orono. The highest copper concentration they found there was 3.25 parts per million. The highest zinc concentration they found was 430 parts per million. The highest lead concentration they found was 11 parts per million.

The relation of metal traces in sediment and water to levels of metal in shellfish and other fish is not well understood. Some species concentrate the metal of their environment thousands of times, with the level of concentration varying in animal tissue. The Sea & Shore Fisheries Department have sampled shellfish from Cape Rosier and have found 27 percent of the specimens with levels of heavy metals in

1969. There was an increase of 230 percent since mining started.

The relation between the level of metals in the sediment and the health of the clams and mussels themselves and their toxicity to human beings is not fully understood.

The usual concentration of lead in sea water is about 0.00003 ppm, as compared with the Cape Rosier analysis of 0.5 ppm. The usual concentration of zinc in sea water is 0.01 ppm, compared with a concentration of 0.04 ppm to 0.06 ppm off Cape Rosier.

West Penobscot

Mr. and Mrs. Vincent Healy of Connecticut have been at their home here.

Several from here attended Grand Family Night at Primrose Chapter O.E.S. in Bath.

ported that Callahan donated \$1,000, \$337 disbursed to vice chair Sandecki as expensing Dr. Patrick to conservation and a spring, \$613 remains at Liberty National.

2) Bob Mant, Ocala culturalist, said that copper content average parts per million, 16 ppm, iron was 227, zinc was 930 ppm about what we get from raft in Penobscot in Bluehill Bay, sea.

Regarding salinification, the top is relatively fresh. The salinity at five feet per thousand, at 10, 17.5 ppt; at 15 feet 20 at 20 feet 24 ppt. In Cove the August average 27.4 ppt.

"The copper is O is good, and there is with iron. The zinc is mainly twice as high as at Goose Cove Bay."

Chairman John G. zinc level acceptable.

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Beck: "It could be where the tailings go into the cove at the dam. If we raise the 1,004 feet, salt water areas now exposed a stop the oxidation a further solubility."

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Beck: "The State gave us permission to look the riparian."

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Analysis of sea water showed lead at 0.5 ppm, zinc at 0.04 to 0.06 ppm. There were no detectable amounts of copper or cadmium in sea water samples.

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concentration can be had from comparison with bottom sediment samples taken in the series of First, Second and Third Pond area last September by Environmental Engineering Services of Orono. The highest copper concentration they found there was 3.25 parts per million. The highest zinc concentration they found was 430 parts per million. The highest lead concentration they found was 11 parts per million.

The relation of metal traces in sediment and water to levels of metal in shellfish and other fish is not well understood. Some species concentrate the metals of their environment thousands of times, with the level of concentration varying in animal tissue. The Sea & Shore Fisheries Department have sampled shellfish from Cape Rosier and have found 25 percent of the specimens with levels of heavy metals in excess of suggestion made thus by the Food and Drug Administration at the time the samples were taken in 1969. In a statement made at the Kerr American mine hearings in Blue Hill last October, Robert Dow, of Sea & Shore Fisheries said that before ore separation started at Cape Rosier heavy metals were found in soft clams taken at Goose Cove with analysis value of 5,754 parts per million. After mining started, this rose to a level of 18,962 ppm in December

1969. There was an increase of 230 percent since mining started.

The relation between the level of metals in the sediment and the health of the clams and mussels themselves and their toxicity to human beings is not fully understood.

The usual concentration of lead in sea water is about 0.00003 ppm, as compared with the Cape Rosier analysis of 0.5 ppm. The usual concentration of zinc in sea water is 0.01 ppm, compared with a concentration of 0.04 ppm to 0.06 ppm off Cape Rosier.

West Penobscot

Mr. and Mrs. Vincent Healy of Connecticut have been at their home here.

Several from here attended Grand Family Night at Priamose Chapter O.E.S. in Belfast Sept. 20.

Betty Chaffield and Harriet Heath attended Hancock Pomona at Deer Isle Oct. 2.

Mrs. Edmund Maventus and children, Belinda and David of Bath, visited her mother, Mrs. Carrie Clement and Basil last week.

Mr. and Mrs. Warner Hill and family of Auburn, Mass. visited her parents, Mr. and Mrs. Colin Darrell and her sister, Mr. and Mrs. Russell Devereux last week.

Miss Vera M. Leach of Bangor visited her sister, Mrs. Christie Heath and Harriet for a week.

Mr. and Mrs. Ashley Webster of Lincoln were at the camp at Morses Cove last week.

Mr. and Mrs. Lawrence Aysenault and family and Mr. Aysenault's mother of Bethel visited Mr. and Mrs. Alvin Heath over the weekend.

Mrs. Mervyn Clement and Mr. and Mrs. Marion Leach called on Miss Mary Leach and Mrs. Elizabeth Geaghan in Bangor recently.

Mrs. Hartford Grindell has been a patient at the EMMC in Bangor.

Bay... ters at... not as toxic as... mium. Animals and peo stand higher doses of a guideline for oysters a parts per million.

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Malcolm Richards of Shore Fisheries, "Don need permission?"

Beck: "The State Leg gave us permission wher took the riparian rights from the sanctuary. All bling, all carried, and return water to the po are hoping in a year to whole dam out."

Beck quoted a letter f US Bureau of Mines stat there is no instability i in the tailings disposa especially if vegetation i lished.

After some comment heard about possible from the tailings pom said they will test the t near it to see if leakage cernible.

When no other accord regarding raising the level of the Goose Pond expressed, Beck formally to raise the pond level feet. It passed.

4) Beck said that 21 have been fertilized and with grasses and crown including Mount Callaha ramp, and one acre in ings area. The seed ar lizer mix that was use developed by the U. of costs about \$700 per ac cost has been \$14,800. T adding extra doses of i to a test plot on top Mc han and will compare rates. "We hope the str

SHAMROCK TREE SERVICE, INC.
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Society Approves Filling Pit

From Page 1

ported that Callahan had donated \$1,000. \$397 was disbursed to vice chairman Albert Sandeck as expenses for bringing Dr. Patrick to the pond for conservation analysis. Last spring, \$613 remains in account at Liberty National.

2) Bob Mant, Callahan's aquaculturalist, said that in August, copper content averaged 700 parts per million, lead was 80 ppm, iron was 227 ppm, and zinc was 930 ppm. That's about what we get at the salmon raft in Penobscot Bay and in Bluehill Bay," said Mant.

Regarding salinity and stratification, the top ten feet are relatively fresh. Thursday, the salinity at five feet was 6 parts per thousand, at 10 feet it was 17.5 ppt, at 15 feet 20.2 ppt, and at 20 feet 24 ppt. In Goose Cove the August average was 27.4 ppt.

"The copper is OK, the lead is good, and there is no problem with iron. The zinc is approximately twice as high in the pond as at Goose Cove or Bluehill Bay."

Chairman John Gray: "Is the zinc level acceptable?"

"The oysters are growing. It's twice as high as Bluehill Bay, but I'm not sure it matters at that low level. Zinc is not as toxic as copper or cadmium. Animals and people can stand higher doses of it. The guideline for oysters is 2,000 parts per million."

Beck: "It could come from where the tailings have spilled into the cove at the fresh water dam. If we raise the level to 1,004 feet, salt water will cover areas now exposed and it might stop the oxidation and prevent further solubility."

3) There was discussion of raising the level to 1,004, as had been recommended at the last meeting.

Beck: "That's four feet above the level of the old ledge at the falls. It will be at the tidal high tide level. Fresh water will spill over the top, and the inflowing saltwater will remain." He requested the Society's approval.

Malcolm Richards of Sea & Shore Fisheries: "Don't you need permission?"

Beck: "The State Board of Fisheries gave us permission when we raised the Librarian dam."

may we put on will provide some nitrogen."

He said another 40 acres remain to be seeded. "So far it is growing like hair on a bald head."

"We sold all the mine equipment except what will be used for aquaculture. We are cleaning up the junk left. The gate is locked at the tailing pond and we have a permanent watchman at the Goose Falls entrance. The mill is still there. We are looking for a buyer to buy it intact. When sold, it will be removed entirely with a condition that the buyer get rid of junk and cover the foundation."

5) Mant, reporting on the aquaculture program, said the oysters are doing quite well. In three months they have grown to a size of two inches. "There is not enough meat in them to test them for heavy metals yet."

"The salmon look good. They have increased their appetites tenfold. About one-half are marketable size, from eight ounces to one pound. We will start giving them to restaurants, such as Jed Prouty's, in the next few weeks, to see if people like them." Callahan has 3,500 salmon.

Mant showed a Coho salmon of comparable size that is gutted, packaged, frozen, and marketed by Union Carbide. It is 12 inches long and costs \$1.65 per pound.

"We will purchase 100,000 Coho eggs from the State of Washington and will have our own hatchery this winter. We are thinking of growing rainbow trout as well. They do well in saltwater. It takes one and a half pounds of food to produce one pound of fish."

"We haven't tested the fish for metals, but we will. Fish don't concentrate toxic metals like shellfish do, and anyway their organs are gutted for market. We are pleased with the growth. Only 350 have died, and 90 of those died on being put into the salt water when they arrived."

"The fish are being grown in falls in the bay. We put some of them in the pit, too. They are doing as nicely as any place else. They are seven feet below

the surface. We feed them three times per day."

6) The directors voted to open memberships in the society to anyone at an annual fee of \$5 per calendar year, payable on the annual meeting date in July. Current memberships will be billed retroactively.

7) Venno raised the issue of the silt in Goose Cove that came from pit drainage. "Does anyone have plans for removing it?"

Beck: "It is a definite problem at the head of the cove." He said that a couple of meetings ago, it was decided by the society to collect samples from the cove in cores and have them analyzed before attempting to remove the silt. Callahan's equipment would have been available to use in removing the silt had the action been agreed upon then. Beck just received the analyses of the samplings and has not yet had time to study them. "I think we will have to sit down with Sea & Shore and decide if there is a problem in mucking this silt out and decide who does the job and who pays."

Venno remarked that it should be removed for the sake of restoring the cove as a decent harbor.

Bill Hunter said there is now up to two feet of silt in places. He thought that when the dam is removed, currents will flush much of it out to sea.

Beck said that the drain pump that used to empty the pit into the cove isn't strong enough to do the reverse and pump the silt back into the pit. "Anyway, I'm not sure we want it in there."

Richards said the silt extends toward the bay in pockets to a distance of 150 feet.

Beck: "I will look into the cost of dredging or dragline buckets."

8) It was agreed to have future meetings in the evening. Those attending included Selectmen John Gray, Kim each and Shannon Blodgett; Paul Venno and Malcolm Richards of Sea & Shore; Fred Beck and Bob Mant of Callahan; Bill Barthelmann of Portland; Bill Hunter of Waterport; Bob Howard; Seth Blodgett; and Florine Black.



Society inspect a commodity in a week

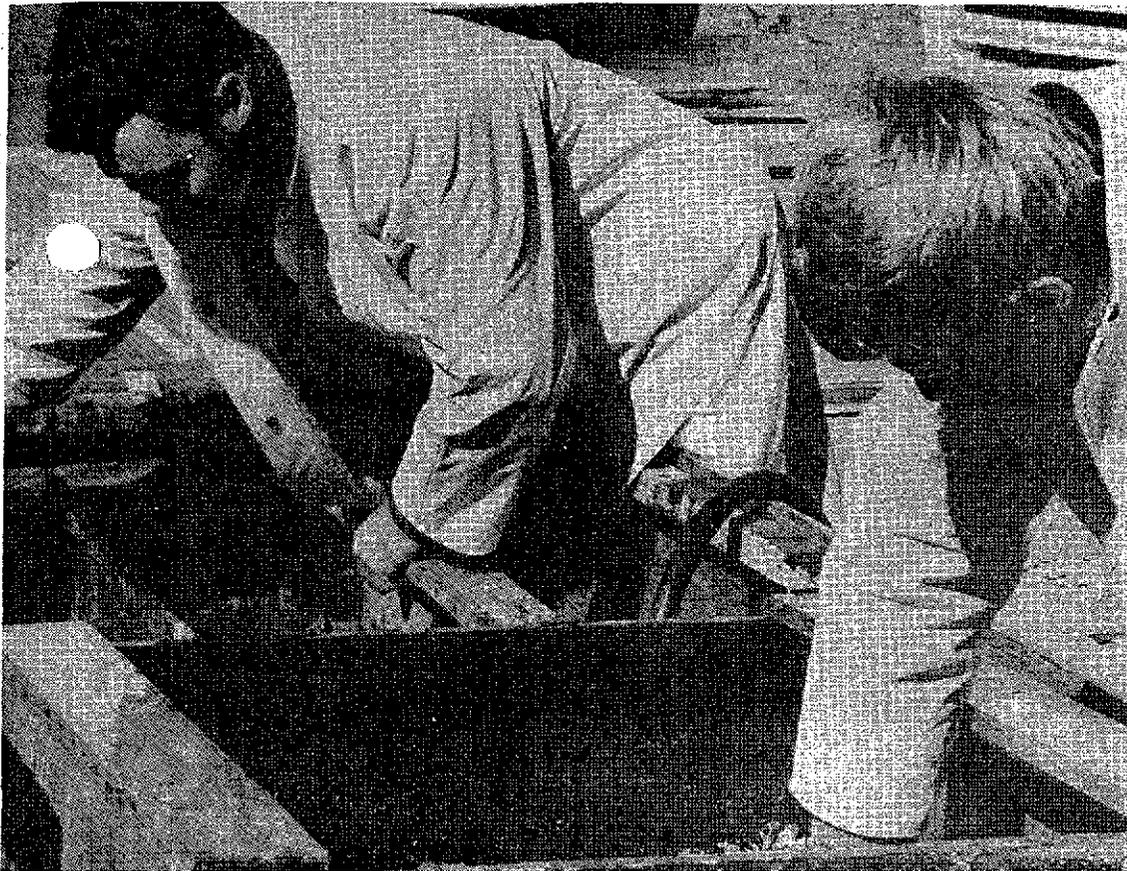
Contain levels

There was an increase of percent since mining started. relation between the level of the sediment and health of the clams, and themselves and their to human beings is not understood.

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Penobscot

and Mrs. Vincent Healy... family night at... Penobscot



Checking the oysters

Steve Snow (left) and Robert Mant check some of the 350,000 oysters being raised in screens at Brooksville as part of Callahan Mining Corporation's experimental aquaculture project. Most of

the oysters are in trays and have been suspended in the open water around Goose Cove.—Packet photo.



Callahan salmon doing well in Brooksville aquaculture project

BROOKSVILLE--Will salmon from Washington state and Lake Erie survive and grow in the ocean waters of Penobscot Bay? The answer is a definite "yes," according to Robert Mant, biologist in charge of Callahan Mining Corporation's experimental aquaculture project at Brooksville.

About 4,200 such small salmon were obtained by Callahan this summer and suspended in reinforced nets from a raft near the mouth of Goose Cove.

Since that time, Mant and his assistants, Steve Snow and David McGraw, have fed the salmon daily and watched them increase in size to the point where they have reached what is considered to be a marketable size--10 to 12 ounces.

Mant said between 300 and 400 of the 4,200 salmon failed to survive but attributed much of the loss to the newness of the project and the fact that the salmon were a mixed lot. "We had no choice over the salmon we got," he said.

RESEARCH since the project began has also indicated that the nets used in the Callahan project could have accommodated a larger number of salmon.

The fish were actually undercrowded, Mant said, and would grow more uniformly when stocked at the proper density.

He said that, while the fish have done well, the water temperature recently dropped to the levels considered ideal for raising salmon--44 to 55 degrees Fahrenheit.

Present plans are to leave the salmon suspended until the water temperature drops below the desired level, Mant said, but efforts will begin this week to distribute the fish to individuals and restaurants to determine marketing potential.

The project will continue next year on a larger scale, according to Mant. About 100,000 Coho salmon eggs will be obtained this winter for hatching in the spring. The baby fish will remain in fresh water until the following spring when they will be introduced to salt water, he said.

Other small salmon will also be obtained for raising to market size during next summer, Mant said, noting that Callahan officials are "quite pleased" with the project so far.

SALMON are not the only seafood being grown in the pilot project. About 350,000 oysters--American, European and Japanese--are being raised in wire screens and trays in the waters of Goose Cove and Horseshoe Cove.

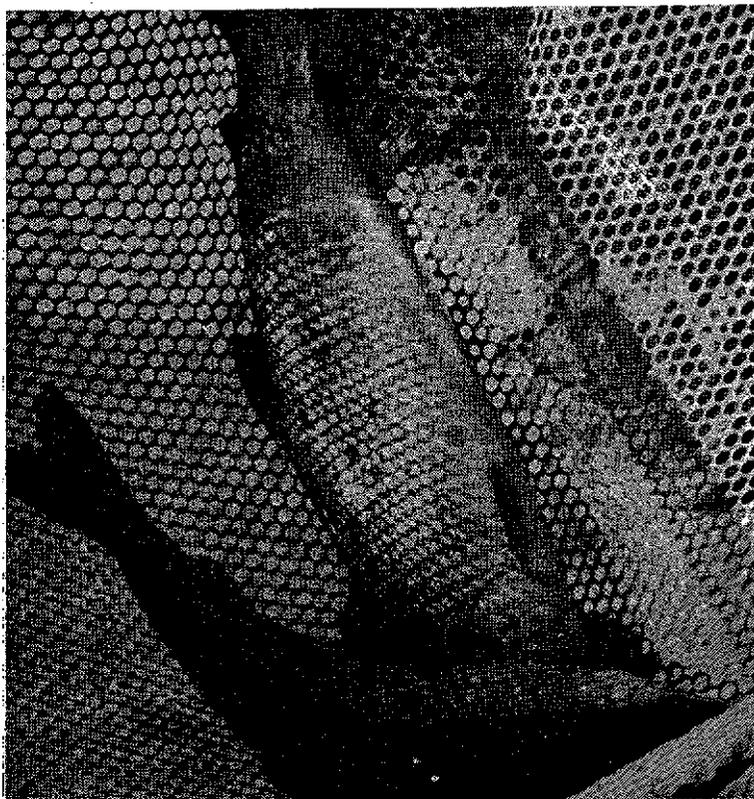
After a slow period this summer, the oysters are now doing nicely, Mant said, particularly the Japanese variety, some of which

have already reached about two inches in size.

The large open pit used in Callahan's mining operation is within four feet of being filled to the high water level and is being monitored to determine metal concentration levels.

Recent tests showed .050 parts per million copper in the water at the salmon raft outside the cove and .065 parts per million copper at the surface of the pit center, Mant said.

Zinc levels in the same test were .391 parts per million at the raft and .930 parts per million in the pit.



Locally grown

Many of the salmon being raised in nets as part of the aquaculture project at Brooksville have reached marketable size, about 10 ounces, according to Robert Mant, Callahan biologist. The salmon will be distributed to individuals and restaurants to determine the market potential.—Packet photo.