Herring management study begins

The booming herring roe fishery is now under study by the Alaska Department of Fish and Game, which has commissioned the University of Alaska, Juneau to conduct a major study in order to improve the state's management of the fishery. The UAJ study, to be conducted by Dr. Mike Stekoll of the fisheries department, will look into productivity, survival and growth rates.

Although most Americans have never tasted herring roe, the Japanese consider it a delicacy. "Komochi kombu," as the Japanese call it, is eaten raw and served with the brown seaweed on which the fishermen find it.

Stekoll said most of the herring roe fishing in Alaska is done in the Togiak area of Bristol Bay where the herring grow to one and a half pounds and up to 16 inches long. Most of the research will be conducted there, along with some comparative research in southeastern. The cost of the project is estimated at $93,000 over the next four years and will be funded by the Department of Fish and Game.

There are two kinds of herring roe fisheries—sac roe, collected by purse seiners and gill netters in commercial boats, and roe-on-kelp, collected by people using a bucket and a small skiff.

The sac roe fishery, by far the larger of the two, produced $6.7 million in sales in 1979, according to the Bristol Bay Native Association. In the Togiak area, the first large harvest took place in 1977. In 1979, a total of 10,115 metric tons of herring was harvested, falling short of the 12,000 metric ton limit.

The roe-on-kelp fishing is done in the intertidal area, and is an important part-time income for many people in the Bristol Bay area each spring.

It requires no major investment in fishing gear. The rake and bucket fishermen earned a total of $269,000 in 1979 by collecting 415,000 pounds of roe, about 4 percent of the total value of the sac roe fishery.

The key to the roe-on-kelp fishery is the rockweed, a brown algae, on which the herring deposit layer upon layer of clear eggs during the spawning season. Both the kelp and the roe are harvested by the fishermen.

Stekoll's study will gain important information about the growth rate, life cycle and recolonization rates of the seaweed in Alaska waters. "For instance, if kelp is able to recover completely in one year after a 50 percent harvest, the quota could be raised, resulting in thousands of dollars of additional income for the fishermen," Stekoll said. The present quota is set at 10 percent of the estimated kelp available in the area.

To help conduct the study, Stekoll will employ two graduate students in fisheries. Marshal Kendziorek and John McConnaughy will begin working this spring in three areas of Metervik Bay, which will be off limits to commercial fishing.

The students will stay at a Fish and Game camp at the bay from May 1 to July 15. The camp consists of a few wall tents and food supplies will be flown in weekly from Dillingham.