

UA Embarking on Unique Sea Grant Research Program

COLLEGE—The University of Alaska has embarked on a project to close a gap of understanding between researchers and the public while concentrating on marine development throughout the State's coastal region.

Nearly every facet of the university's statewide activities concerned with marine matters will be involved with a new Sea Grant Program supported by almost \$500,000 in federal and state funds.

It is directed by David M. Hickok, who has been associated four years with the Federal Field Committee for Development Planning in Alaska, created after the 1964 earthquake.

Mr. Hickok said today in an interview that investigations, research and extension activities stemming from the new program would be pursued from the Arctic Coast to Southeastern Alaska and from Prince William Sound, Kodiak and Cook Inlet to the Aleutians and the Bering Sea.

"We will seek to bring advisory services to coastal towns and villages," he related, "in shoreline protection, harbor facility planning and means for the avoidance of pollution problems.

"Investigations will include marine mammal, fisheries and plant research, as well as physical and biological examination of critical estuaries such as the Arctic's Colville River Delta. And effort is also underway to develop a cooperative fisheries extension program with Oregon, Washington, California, and British Columbia."

Moreover, the program envisions the attraction of capital to develop latent resources and economic opportunities so that the resident population will not have to rely wholly upon the fishery for a livelihood.

"It doesn't have to be all fish and oil," Mr. Hickok observed.

One such industry, he said, might be "the raising of kelp and other algae for food in Japan."

"Alaska is harvesting some algae, but not much," he went on. "But seaweed-porphyrin has been cultured in Japan since 1671

and its annual value is \$17 million. You just put some seaweed plants on scaffolding in the water. In harvesting them you pull tumbleweeds off a fence."

Alaska's aquaculture at present is limited chiefly to eel, or marsh, grass in salt water, according to the Sea Grant Program Director.

"We want to find ways to harvest and pelletize it to make it into feed for ducks, reindeer and possibly for domestic livestock," he related. "It is high in protein and abundant."

With marine resources now including salmon, crab, shrimp, halibut and clams, Mr. Hickok voiced a hope of interesting industry in cooperative research with the university "to see whether claims can become a viable industry."

The Sea Grant Program will concern itself with four general areas. One is marine research, surveys of the physical structure of the coast itself, with its islands and harbors, and with population and physiological studies of marine mammals such as the walrus and several kinds of seal, principally the harbor and ribbon seal.

On the academic side of the program new instructors have been added to the university faculty in fisheries biology and ocean engineering. Possible further additions are foreseen in resource law, economics and marine geology.

Marine extension activities include what Mr. Hickok called "the particularly important development of exchange programs in fisheries extensions between Alaska, British Columbia, Washington, Oregon and California, and a pilot effort in marine museum display development."

"Basically," he said, "we will try to serve as a link between academic research and the public by interpreting collections of resources such as plankton and marine plants and fish. We want to explain what marine research is doing and why it is doing it."

In the fourth place the Sea Grant Program is aimed at evaluating "unutilized marine resources and suggest solutions to

specific resource and environmental problems of Alaska's coastal zone which demand priority public attention."

"A 'think group,'" Mr. Hickok said, "will point out such things as where the hazards are in coastal development. One part of the coast may be suitable for oil development but the fishery resource might be put in jeopardy, so that the zoning of the coast may be the answer."

He added:

"The object of this group project is to develop a legislative approach, based upon scientific criteria, for zoning the coastal waters of Alaska in order to further benefit marine resource development without undue environmental or user conflict."

One result of the research on coastal problems, Mr. Hickok said, should be "more research dollars for investigations in the four coastal ecosystem types of the nation uniquely Alaskan."

He explained that these four environmental systems included two kinds of fjords and two kinds of ice-stressed Arctic coastal systems "different from anywhere else in the country."

The Sea Grant University concept developed out of a conference held in October, 1965 at the University of Rhode Island.

Congress passed the National Sea Grant College and program Act a year later and last April the National Science Foundation made a grant to the University of Alaska to begin such a program.

It is funded by the foundation's \$309,000 grant, \$112,000 in state appropriations and \$59,000 from the Alaska Commission for Ocean Advancement through Science and Technology (COAST), for a total budget of \$48,000.

Mr. Hickok announced that the program would sponsor this Fall and Winter several seminars in marine and resource law, marine geology and basic ecology of coastal systems.

"We want to try to synthesize findings," he said, "with the structure of Alaska and United States law and see that users don't conflict with the environmental situation."