



HERMANN EINARSSON

1913–1966

It is difficult to realize that we are not going to meet HERMAN EINARSSON again. His premature death in a car accident in Aden on a distant outpost of the frontier of fisheries research is a great loss to his many friends and no less to the work to which he had dedicated his life.

HERMANN EINARSSON was born in Reykjavik. As native of a country which depends to such a high degree on the resources of the surrounding sea his interest in marine biology was acquired early. After graduation in Reykjavik in 1934, he went to the University of Copenhagen and took up the study of natural history, with the direct intention of obtaining a knowledge which could become useful in the development of the Icelandic fisheries. During this period he also worked in the Marine Biological Laboratory (under the Commission for Danish Fisheries and Marine Research) which was directed by Dr. VEDEL TÅNING, and in 1938 and 1939 he participated in research cruises to Faroese and Icelandic waters onboard the "Dana". For

his Master's Degree in 1941 he published his first scientific paper: "Survey of the Benthonic Animal Communities of Faxa Bay", which was a contribution to the detailed study carried out by the ICES Sub-Committee on Faxa Bay for consideration of the proposal to close this important nursery area. Several years later he used part of the results from this study when writing "Echinodermata" for the Zoology of Iceland (1948).

The war delayed EINARSSON's return to Iceland. He continued work at the Marine Biological Laboratory in Charlottenlund and took up study of the huge collections of euphausiids brought home from the North Atlantic by Danish research vessels. It was typical of EINARSSON that among the many tempting materials of oceanic animals available from the "Dana" expeditions he chose the family which was of especially great importance to the economy of the northern seas. The publication (Dana Report No. 27), for which he in 1945 was awarded the Doctor's Degree at the University of Copenhagen, is a most valuable monograph of the North Atlantic euphausiids with numerous new data on their larval development, biology, distribution, and ecology.

Immediately after the liberation of Denmark, EINARSSON returned to Iceland ready to help with fisheries research in his country. At the institute in Reykjavik he started as a hydrographer, and at the same time took up studies on plankton and larval stages of fishes. He planned a series of publications on the larval fishes in Icelandic waters and made extensive collections supplementing the existing material from Danish surveys in the area. He completed papers on two of the genera, *Ammodytes* (in 1951 and 1955) and *Sebastes* (in 1959 and 1960), and it is to be hoped that this valuable work will be continued.

In North Atlantic fisheries research EINARSSON's name is especially linked to the studies of the herring stocks spawning in Icelandic waters. He started this work in 1947 and published from 1949 to 1958 a series of contributions to this study. The most important of these are "Racial analysis of Icelandic herrings by means of otoliths" (1951), "On parallelism in the year-class strength of seasonal races of Icelandic herring and its significance" (1952), and in "The Icelandic herring and racial problems" (1958) (all in Rapp. P.-v. Réun. Cons. perm. int. Explor. Mer, **128**, **131**, and **143**). This is not the place to repeat and participate in the discussions which some of EINARSSON's boldest conclusions and theories raised, but their value as inspiration for further research is obvious. EINARSSON's introduction of otolith studies in the distinction between herring populations is one of his greatest contributions to herring research, his methods being now used in all modern fisheries laboratories.

During these productive years EINARSSON found time to teach (1954-56 and 1958-59) at Reykjavik Junior College, to edit the Icelandic magazine on natural history "Náttúrufræðingurinn" (1950-55) and to spend much of his time at sea on research as well as on com-

mercial fishing surveys. In 1946 he was elected a member of the "Societas Scientiarum Islandica".

When in 1945 ICES had its first meeting after the war, EINARSSON participated as the Icelandic member of the Hydrographic Committee, later (from 1951) he became a member of the Plankton Committee and also (from 1954) of the Herring Committee. Until 1959 he attended most meetings as an extremely active participant in the work of all three committees.

No wonder that EINARSSON's qualifications as an all-round fishery scientist combined with his practical skill and unusual enthusiasm and energy attracted the attentions of FAO. His first engagement with that organization was in 1956 and 1957. He returned to Iceland in January 1958 and continued his work in the plankton and herring researches until, in 1960, he again joined FAO.

Having been able to follow HERMANN EINARSSON's career in FAO only from some distance I may quote the following from a letter by Dr. S. J. HOLT, Director of the Fishery Resources and Exploitation Division of FAO:

"Hermann began working with FAO in October 1956. He went to Turkey under the UN Expanded Technical Assistance Programme as a marine fishery biologist, stationed in Istanbul, and advised the Government of Turkey on the development of their fishery research activities. He was there until January 1958. Hermann continued the work that had been begun by GEORGE ROUNSEFELL and OLAF AASEN. He was responsible for important studies of the distribution and abundance of anchovy in the Black Sea, as well as for the initiation, with his Turkish counterpart Mr. ERDOGAN AKYÜZ, of a survey of trawl resources in the Sea of Marmora, and other research activities. Hermann re-joined us in July 1960, and from then on until January 1966, he was the Chief Fishery Biologist in our project in Peru. This project was one executed by FAO on behalf of the UN Special Fund, and under it a Marine Resources Institute was established at Callao near Lima. The work was concentrated on the assessment of the anchoveta resources off Peru, and associated physical and biological oceanographic investigations. Hermann's plankton studies in that area were particularly significant. During this time he advised the Government of Peru on the biological aspects of the management of the fishery resources, and within the terms of reference of his section of the project were studies of the guano bird population, and of the whales.

"In January 1966 he moved to Aden as the Project Manager of the Special Fund Project for Fishery Development in the Gulf of Aden. Under this project Hermann's first task was to arrange, through a contract with the Scripps Institution, for an analysis of the oceanographic data coming from the International Indian Ocean expedition from the point of view of providing background for the effective orientation of the study of fish stocks in the area. He had also been no-

minated, through the machinery of FAO's Advisory Committee on Marine Resources Research and the Inter-Governmental Oceanographic Commission under UNESCO, as the Editor of the Fishery Atlases to come from the IIOE. This was particularly appropriate as one of his last activities in Peru has been to arrange for publication of a series of atlases, summarizing data from the Peru project. Throughout his work with FAO, Hermann had paid particular attention to securing the cooperation of scientists from various institutions in other countries with the scientists in the developing countries to which he was assigned. He was also exceptionally energetic in encouraging the establishment of scientific periodicals in the countries where he worked, as vehicles for the publications of fishery results in those countries, and to help communication of their scientists with those in other countries through exchange of publications.

"Hermann was an exceptionally good field worker within the UN projects. He had patience and tolerance with respect to the difficulties of developing research activities and trying to ensure the practical application of their results and a general public understanding of the purposes and methods of fishery research. At the same time he followed up very energetically the various lines of activity that he initiated with considerable success, in spite of difficult situations in some cases, and his death is a considerable loss to FAO, and we think to the world of fisheries science, especially in its international aspects."

I was together with HERMANN EINARSSON from the time he joined the work in Charlottenlund, on cruises with the "Dana" and during many meetings in foreign cities as well as on research vessels in the field. Especially enjoyable were the times in Iceland spent with him on horseback, or in a jeep, in his wonderful country and in his, and his friends, hospitable homes. Common to all the memories – whether from laboratories floating with diagrams and tables, ship decks covered with fish, crowded gatherings in meeting rooms or at parties or from a lonely hut in the lava deserts – is the strong impression of his vitality, his sparkling humour, and keen engrossment in whatever he was doing or discussing. His greatest strength – but sometimes his weakness as well – was probably the fact that he rarely managed to be a cold neutral observer but nearly always engaged himself with heart and soul in the job he was doing and the ideas in which he believed.

Although EINARSSON had no difficulty in turning himself into a cosmopolitan and was strongly devoted to his work in the developing countries, he remained an Icelander in his heart. His many friends feel deprived of their hope to see him return once again to his home country, and apply his wide experiences into a continuation of his scientific work under more peaceful circumstances, and to meet again his sparkling vitality and warm friendship.

E. Bertelsen.