

Reuben Lasker
1930–1988

Reuben Lasker has left us, and it will not be easy to fill the gap in our lives or in our science. Born 58 years ago in New York, and proud of it, he came a long way in a tragically short life. The drive and single-mindedness he brought to his research in no way diminished him as a warm colleague and friend. He spoke ill of nobody, and where others might have seen the work of colleagues as competition, he delighted in their success and took every opportunity to assist their careers and research.

From postgraduate studies at Stanford, Reuben Lasker followed a consistent search for generalization in the energy balance of small organisms. Starting with studies of the nitrogen balance of insects (*Lepisma*) whose diet is dominated by cellulose, he transferred his interest rapidly to the metabolism of marine invertebrates after his recruitment to the Bureau of Commercial Fisheries laboratories on Point Loma in 1958. His studies of the energy budgets of clupeids in relation to their potential planktonic food supply have deservedly become classics, and they soon led him on to what was to occupy him until his death: the physiological and ecological factors determining year-class strength in pelagic fish. Reuben Lasker most unusually combined the skills of an experimental physiologist with those of a biological oceanographer, and it was this combination that led him in 1975 to formulate the first comprehensive hypothesis for what might determine year-class strength.

He was the first to point out what should have been obvious long before: that larval fish food is not uniformly distributed in the sea and is only likely to be in abundance higher than some critical threshold if it is aggregated in layers in a stratified water column. He was also among the first—together with his colleague of many years, John Hunter—to realize that there was another side to the same coin. There are situations when predation



on larvae is likely to be more critical than lack of food, and his studies with Kurt Lillelund broke new ground in this field.

Undoubtedly, “Lasker events,” quiet periods when the coastal sea stratifies and the food organisms of larval fish are concentrated in layers sufficiently abundant to support the growth of larval anchovies, will gain wide currency in the literature of the coming decades, just as Hjort’s “critical period” dominated the literature for the previous half century. Reuben Lasker was always the first to point out that the general problem of recruitment had not, in fact, been solved by his model and indeed might not be susceptible to a general solution. Nevertheless, his concept is now the basis of several models that successfully predict recruit-

ment in various clupeid stocks. A paper sent to him for comment by ORSTOM friends in Senegal in the last weeks of his life built on his concept to propose a "recruitment window" for sardines at times when coastal wind stress produced a critical balance between upwelling and stability. Apparently such a model can predict recruitment in several stocks off Morocco, Mauretania, and the Ivory Coast.

The small team of experimental biologists (Hunter, Theilacker, Leong, Metoyer, and others) who grouped themselves around Reuben Lasker from the late sixties onwards became a powerhouse of research on the behavior, physiology, and ecology of larval fish, and rapidly became appreciated worldwide, attracting a stream of visiting workers to La Jolla. Reuben Lasker had, of course, close involvement not only with his home laboratory—which became the Southwest Fisheries Center of the National Marine Fisheries Service—but also with the Scripps Institution of Oceanography, where he held an adjunct professorship, and where he taught, supported graduate students, and participated in faculty committee work. He was an enthusiast for the potential offered to both laboratories by their close association. He played a crucial part in fostering creative collaboration between Scripps and the federal laboratory on the hill just above it; we can be confident that the spirit he engendered will survive his passing.

Reuben Lasker had a gusto for life and wide enthusiasms that were endearing. Though never a country boy, and always more at home in the city,

he delighted in his travels wherever they took him, and always wanted to see how people really lived, whether in rural England or in the Far East. But he was always glad to return to his family and the home that he loved so much on his hillside overlooking San Diego and the ocean; he often said how lucky he was to have that to come back to. In recent years, his work in planning international research on larval fish made him known to scientists from many countries; all spoke of him with affection and respect, and he will be widely missed both as a man and a scientist.

Along the way, his qualities were recognized not only informally by all he met, but also formally by the awards and grants he received; his distinguished service to his laboratory earned him silver and gold medals from the departments of the Interior and Commerce, respectively. From Canada came the Huntsman Medal for excellence in biological oceanography, and from Scripps the Lalor Faculty Fellowship. His research, and that of his many students and associates, was supported not only by his home laboratory, but also by many other federal and state agencies.

Reuben Lasker's last task, a few days before his death, was typical of the man. Weak and suffering severe lung disfunction, he introduced a thesis defense at Scripps, speaking wittily and to the point, but with the greatest difficulty. We have lost a dear friend and an exceptional colleague, and we are the poorer for his going.

Alan Longhurst