Harold H. Haskin 1915 - 2002

Hal "Doc" Haskin died on June 23 at his cottage on Delaware Bay, near Cape May. He had lived 87 years, most of it devoted to research and teaching on marine molluscs and helping to initiate research in two fields that occupy the attention of many National Shellfisheries Association members today: disease and genetics.

Hal was born Harold Haley in Niagra Falls, NY, but was orphaned at the age of three in the 1918 flu pandemic. His older brother and younger sister were quickly adopted, but Hal, who had somewhat of a wild disposition, was slated for an orphanage. Fortunately, a family friend, Frederick Haskin, adopted the child and moved with him to southern New Jer-

sey where they lodged with a farm family while Fred Haskin worked at the nearby Dupont Corporation. Hal flourished in this new environment and became a serious student. As an undergraduate at Rutgers, he came under the wing of zoology professor Thurlow C. Nelson (for whom the T. C. Nelson Award is named). T.C. was also director of the Oyster Investigation Laboratory, which had been founded in 1888 by his father, Julius Nelson, the first biologist of the New Jersey Agricultural Experiment Station. Julius, in turn, had received his Ph.D. at Johns Hopkins University studying with William K. Brooks - a noted biologist with a special interest in oysters.

Under T.C.'s supervision, Hal spent the summer between his

sophomore and junior years alone on the laboratory house-boat "Cynthia" studying the effect of salinity on the activity of the predatory oyster drill *Urosalpinx cinerea*. The Cynthia was anchored in Cedar Creek, a tributary of Barnegat Bay. Hal rowed from there to sites along the salinity gradient in the creek to check cages, in which he had experimentally placed drills and oysters. During this study, he described for the first time the preferential attraction of drills to juvenile oysters. Once a week he rowed to the nearest store for supplies. He often remarked that he was in the best shape of his life that summer - a statement later doubted by many of his students as they struggled to keep up with the physically demanding activities that engaged him throughout most of the rest of his life.

From Rutgers, Hal headed to Harvard for a Ph.D.. There he studied under Alfred C. Redfield and developed some of the

first methods for determining chlorophyll concentrations spectrophotometrically - the precursors to the commonly used "Strickland and Parsons" methods. It was at Harvard that Hal met his future wife, Peg, with whom he celebrated a 50th wedding anniversary earlier this year. Hal's academic career was put on hold when he joined the army just before the outbreak of World War II. After discharge with the rank of major in 1946, Hal returned to the Rutger's Zoology Department as an assistant professor. He taught mainly undergraduate courses - general biology, limnology, animal physiology, and invertebrate zoology at the start, but then developed graduate courses in coastal oceanography, estuarine ecology, and malacology. These three courses - all taught on Satur-

days over a period of about 30 years - were taken by hundreds of students, many of them who held fulltime jobs during the week. The classes were real "tours de force", lasting from 8 am to early evening and often much longer if a field trip were involved.

Molluses continued to play the dominate role in Hal's research. A project examining culture and growth characteristics of hard clams in various environments occupied his first few years at Rutgers, but oysters once again commanded his attention after he spent two years at the Oyster Investigation Laboratory at Bivalve in the early 1950s. The oyster beds were in trouble after years of overharvesting and poor setting. Hal instituted a long-term program to document the condition of the beds, and to determine the factors

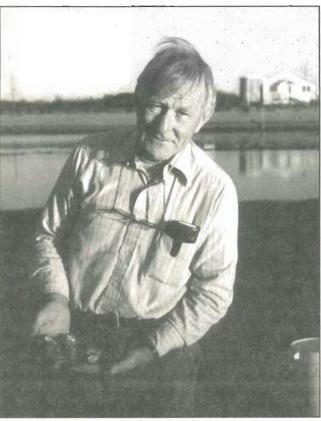
that influenced the abundance of oysters on them. He used the data to advise the resource managers. Later, he became a leader in oyster disease research after the MSX (Haplosporidium nelsoni) epizootic began devastating oyster populations in the late 1950s. By the early 1960s, he had began to selectively breed the survivors in a program that has produced strains highly resistant to MSX disease and that has now evolved into a project to breed resistance to the Dermo disease parasite, Perkinsus marinus, into the strains. Most of Hal's research involved support to the shellfish industry. He was as comfortable chatting with oystermen as he was with one of his academic colleagues. Despite his desire to see a practical outcome to his research, he always insisted that there should be no divide between basic and applied research because a fundamental understanding of scientific principles was essential to any applied project.

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Having grown up during the Depression, Hal was a great believer in making do with very little. He said that he preferred spending research funds on people rather than equipment - a practice that didn't always lead to efficiency. While this caused some grumbling among his students and technicians, Hal never asked anyone to do anything that he wouldn't - and didn't - do himself. Learning how to repair pumps, do salinity and oxygen titrations, and to tar the trays in which the selectively bred oysters were maintained was par for the course. Hal was a stoic, too. He was extremely prone to seasickness, yet his courses as well as his research involved days aboard boats. When the sea became rough, Hal would



"Doc" Haskin in his element...

clamp his jaws and look very determined, then turn green, then disappear to the back of the boat where he could be seen hanging over the side. He'd return shortly and go right back to work as if nothing had happened. Despite the almost certainty that he would become sick, he never turned down an opportunity to go out on the bay or the ocean, particularly if the trip were to collect clams or oysters. In fact, Hal loved sailing and kept a 17 ft Thistle anchored in front of his summer cottage. A special treat for the students working just down the beach at the Cape Shore Laboratory was an invitation for an evening sail as the sum was setting.

Working with Hal was sometimes frustrating, often exhausting, but always rewarding. He instilled in those around him a sense that what they were doing was extremely important and highly valued. Those of us who studied with him have another memory of working with him - it was fun.

Susan Ford Haskin Shellfish Research Laboratory August 1, 2002

Pacific Coast Section Report

The annual meeting of the Pacific Coast Section of the National Shellfisheries Association was held September 20-22, 2001 in Silverdale, Washington. As always, the meeting was held in conjunction with the Pacific Coast Shellfish Growers Association. There were 39 presentations, and theme sessions included Invasive Species, Oil Spills and Shellfish Farms, Applied Genetics in Shellfish, Shellfish Production and Growth, Estuarine Shellfish Restoration Ecology and Environmental Effects of Shellfish Aquaculture, Use of High Hydrostatic Pressure in Oysters, Oyster Consumer Trends and Marketing Strategies, and Marketing Shellfish: Trends, Tips and Funding.

Seven student presentations were made, an increase from 4 in 2000. The NSA-PCS presented their Best Student Paper Award to Hakan Calik for his paper "Effects of high pressure processing on Vibrio parahaemolyticus strains in pure culture and Pacific oysters", co-written with Michael Morrissey, Paul Reno and Haejung An. The PCSGA presented their Best Student Paper Applied to Aquaculture Award to Robin Estes for her paper "Characterisation of pathogenic and non-pathogenic bacteria associated with bivalve larvae and shellfish hatcheries", co-written with Russell Herwig and Ralph Elston. The runner-up was Elyse Cronin for her paper "Age determination in geoduck clams (Panopea abrupta) utilizing pattern in shell annuli", co-written with Brent Vadopalas.

Increasing student interest and participation in the NSA continues to be a major focus for the Pacific Coast Section. Factors identified as encouragement to student participation included support funding, faculty pressure to contribute, and the identification of session themes and chairs in advance of the call for abstracts. Support funding is currently available through the Ken Chew Endowment Fund, which provides conference registration, hotel rooms, publishing costs for abstracts in the *Journal of Shellfish Research*, and banquet tickets for student presenters, and the annual Best Student Paper Award. The endowment fund is supported by fund-raising activities, including

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