

## CHAPTER 15

### ACADEMIC AWARDS: ARE THEY EVER TOO LATE?

In late January 2001, Bill Lewis, then President of the American Society for Limnology and Oceanography, informed me that I would be receiving the Society's Ruth Patrick Award on February 12, 2001, at the Society's annual meeting. Receiving an award from a prestigious professional society is always a highly emotional experience. Furthermore, to receive an award established to honor one's mentor is the ultimate such experience!

As I tried to sort out my feelings, I suddenly remembered a remark made by a younger colleague when I was elected to the U.S. National Academy of Sciences a decade earlier. I was then already 67 years old, two years past the date when I was eligible for full retirement benefits in the Commonwealth of Virginia's system for state employees, including faculty. The colleague remarked, "Too bad they didn't elect you to National Academy membership while you are still young enough for it to do you some good." Another colleague present at that time immediately remarked, "I would be delighted to be elected to the National Academy at any age!" My feeling precisely! When told that I was to receive the Ruth Patrick Award, I was rapidly approaching my 78<sup>th</sup> birthday and the news did me a world of good! So did the Sustained Achievement Award from the Renewable Natural Resources Foundation in November 2001 and election to Honorary Membership (the highest honor) in the World Innovation Foundation in July 2004. These three awards have special meaning to me.

Membership in the National Academy of Sciences and the American Philosophical Society were the most gratifying because these two, elite, professional societies had just begun to recognize environmental studies as a component of science and philosophy. In addition, although I have always felt joy in my chosen profession, I was comforted to know that these two organizations, which I have always revered, felt that my research and publications had value.

Since I had witnessed the problems faced by a woman scientist in the 1940s and 1950s on a daily basis, becoming a Fellow in the Association for Women in Science "for having demonstrated exemplary commitment to the achievement of equity for women in science and technology" brought tears to my eyes—I had made a small repayment on the huge indebtedness to my mentor.

Many of the honors and awards I have received are memorable because of the high regard I have had for colleagues who had already received the honor: (1) Research Associate, Academy of Natural Sciences, (2) Fellow, American Association for the Advancement of Science, (3) University Distinguished Professor of Environmental Biology, Virginia Polytechnic Institute and State University, (4) Superior Achievement Award, U.S. Environmental Protection Agency, (5) President, American Microscopical Society, (6) Founders' Award, Society for Environmental Toxicology and Chemistry, (7) Icko Iben Award for Interdisciplinary Research, American Water Resources Association, (8) Fellow, American Academy of Arts and Sciences, (9) Award of Excellence, American Fisheries Society, (10) Foreign Member, The Linnean Society of London, (11) Distinguished Service Award, American Institute of Biological Sciences, (12) Fellow and Founding Member, Eco-Ethics International Union, (13) Sustained Achievement Award, Renewable Natural Resources Foundation, (14) Member, International Ecology Institute, (15) Morrison Medal for Outstanding Accomplishments in the Environmental Sciences, (16) United Nations Environmental Programme Medal for unique and significant contributions to Environmental Restoration and Sustainability, (17) Life Achievement Award in Science from the Commonwealth of Virginia and the Science Museum of Virginia, (18) Charles B. Dudley Award for outstanding publication, American Society for Testing and Materials, (19) Fellow, Virginia Academy of Sciences, and (20) Twentieth Century Distinguished Service Award, International Statistical Institute.

One of the most heartwarming events of my life was the Festschrift arranged by my graduate students in honor of my 70<sup>th</sup> birthday in May 1993. Many graduate students contributed academic papers or reminiscences to the book and attended the Festschrift. Over a decade later, I still feel great joy when I think of that event.

When I retired in 1995, the Department of Biology honored me with a reception, which many of my former graduate students also attended. Colleague Bruce Parker was the master-of-ceremonies and organizer. This event was also a memorable experience.

Another heartwarming experience was being inducted as a member of the Morrill Chapter of Alpha Zeta fraternity on 13 March 2002. I had been a pledge at Penn State when the United States entered World War II. I met my spouse and companion Jean at Penn State, and we spent many happy weekends at the AZ house. Although I was not a member, I contributed over the years to the fraternity for sentimental reasons. I was touched when a group of AZ brothers from Penn State joined with the Virginia Tech chapter of AZ to induct me as a member; I had theoretically been a pledge for approximately 60 years—possibly a world record. The best thing about this induction was that I was connected to the past in a delightful way.

Various honors reassured me about the direction of my research. Although I have always felt my research was focused on the effects of anthropogenic stress upon natural systems and the rehabilitation of damaged ecosystems, many scientists felt that ecological restoration and ecotoxicology were different fields. The invitation to be the 1980 Nieuwland Lecturer at the University of Notre Dame reassured me that my research on computer interfaced biological monitoring systems was becoming accepted by mainstream science. Earlier invitations to be a discussion leader at the Gordon Research Conferences (Stream Sanitation, 1956; Environmental Sciences: Water, 1964; Hazardous Material, 1973) and to be Session Chairman of the 1966 conference on Environmental Sciences: Water persuaded me that the endpoints selected for the computer interfaced monitoring had merit. The invitation from the U.S. National Academy of Sciences to present the 1994 Abel Wolman Distinguished Lecture (“Eco-societal Restoration: Re-examining Human Society’s Relationship with Natural Systems”) confirmed both the importance of ecological restoration and humankind’s ethical relationship with natural systems. Becoming a Fellow and Founding Member of the Eco-ethics International Union in 1998 convinced me that I should devote my retirement years to this important area.

Frequently, when I am attempting to determine what a thing is, I start by listing what it is not. An academic honor definitely should not be an opportunity to parade before one’s colleagues and bask in the limelight! Although the Ruth Patrick Award was a major milestone in my professional career, I could not attend the ceremony because for some years my spouse Jean had suffered from Alzheimers and I was then her primary caregiver. Her sense of time was not good even then and, if I had been away for the time it would take to get to Albuquerque, New Mexico, for the awards ceremony, she could easily have assumed that I had disappeared permanently. Once, while our daughter Karen was visiting, I left Jean in her care for several hours while I went into my office at the university to complete a manuscript. Even in that short time, Jean was concerned that something had happened to me. I simply could not risk the emotional impact this absence might have on her. President Lewis was extremely understanding and sympathetic when I explained the situation, and a colleague of many years, Rex Lowe, accepted the award on my behalf. Naturally, I would have treasured being present at the award ceremony because it would have given me yet another opportunity to express publicly how much Ruth’s mentoring has meant to my professional career and because not many people are still alive who worked with her during the early stages of her career. I was able to do this to some extent by writing a short statement on how much Ruth has meant to my career, including the fact that she probably saved my life when we were studying the upper Amazon River basin and I came down with appendicitis. Ruth found the best physician in Iquitos, Peru, and then arranged for the doctor and me to be at the operating room at the Hospital Santa Rosa simultaneously.

Receiving an academic honor is definitely not an excuse for resting on one’s laurels, whatever they may be! One should do one’s best in one’s chosen profession or life’s work without expectation of honors, awards, or recognition. The joy and zest of academic life is itself a great reward. I often marveled that I was paid a salary for doing something so pleasurable. Additionally, my awards and honors came late in life, as did Ruth’s; and accidents of fate, such as the appendicitis attack in Peru,

could easily have ended my life before acquiring any honors and awards, but the pleasures of research and teaching would not have been diminished.

Almost certainly, the response to receiving honors and awards varies from one individual to another and I can only write about what it means to me personally. First of all, being awarded recognition is an indirect tribute to those persons who had faith in me. The presentations provide yet another opportunity to remember all of the people who have helped, and are still helping, and reminds me to thank again those still living.

Even when an honor was bestowed upon me, I had always been commonly supported by a team. Darla Donald, my editorial assistant at present and for over three decades, edits all my writing, checks galley proofs, and prepares final drafts of manuscripts to adhere to publisher's requirements. She has been indispensable to me by assuming multiple tasks previously handled by an executive secretary, production typists, and a bookkeeper. Even though she has continued the task of her editor's job, she keeps track of all administrative aspects of my campus office and professorship. Senior Technician B. R. (Bobbie) Niederlehner has always assisted me with locating references and has always been indispensable in my laboratory. She was also critical in training my graduate students during the closure period and in the period before that as the Aquatic Ecology Group faculty and their graduate students moved to individual research. During the closure period, she was essential in keeping the University Center for Environmental and Hazardous Materials Studies functioning. One of my former graduate students related that Bobbie was a more important teacher than many faculty members. Finally, it would not have been possible to maintain research in community-level toxicity testing and protozoan ecology without her assistance. In addition to these two very important people, many other colleagues also have read various drafts of my manuscripts critically and did not hesitate to point out deficiencies. Of course, I always remember former students who chose me as their major professor, faculty advisor, or independent research advisor, or who took one of my courses.

One aspect of an honor or award is that the people who receive them were generally contrarians for most of their careers—that is, they were engaged in activities that were not the norm in their discipline at that time. Honors and awards are one way of validating that these ideas and activities, once regarded as odd or even outrageous, either have become or are becoming part of mainstream science. For me, this recognition is by far the most pleasurable part, not primarily because I feel vindicated in taking the approaches that I did, but rather that the theories, hypotheses, and ideas I espoused have been validated to some degree. My pleasure is not diminished by the realization that probably all the ideas will be regarded as anachronistic in the not too distant future because science progresses. In the meantime, I can contemplate the awards and honors hanging on the walls of my den in Warm Hearth Retirement Village and take satisfaction in the fact that I played a brief role on the stage of the planetary theater.