It's a Great Time to be a Horticulturist

Presidential Address¹

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ASHS President, 1996–97

Fellow horticulturists, special guests, and award recipients: thank you for the opportunity to serve as the 88th president of the American Society for Horticultural Science. It has been a high honor and the pinnacle of my 41-year career as a professional horticulturist.

Our Society is recognized around the world as the most influential of the many national and international horticultural organizations. This is a tribute to every member who contributes to the well-being of the Society by reviewing manuscripts, submitting articles for publication, serving on committees, contributing to the Society's Endowment Fund, and all of the many activities that make our Society what it is today.

Before proceeding to the theme of my presentation, I want to review the areas of special attention that were outlined in my comments at the Lexington ASHS '96 business meeting and in my October 1996 "Reflections" column in the *ASHS Newsletter*.

***Continue timely publication of quality journals.** The quality of our journals has never been higher. The *Journal of the American Society for Horticultural Science* and *HortTechnology* have been published and distributed according to schedule. Because of a series of difficulties, the December, February, and April issues of *HortScience* were late. I apologize for that; however, I am pleased to report that a new editor has been appointed and that *HortScience* is back on schedule, and will remain so. The success of our journals is a result of well-prepared manuscripts, timely reviewer appraisal, diligent assessment of scientific merit by Associate Editors and Science Editors, and final assembly by our professional publications staff. My appreciation and thanks to all who contributed to the quality and timeliness of our journals this year.

***Plan for an outstanding 1997 annual conference in Salt Lake City.** Your officers and staff received many suggestions from members for improvements in the annual conference. Insofar as possible, those suggestions have been incorporated into these meetings. We will continue to modify the annual conference as feasible to make it a satisfying professional and personal experience within budgetary and time constraints. We are very grateful to our hosts from Utah, the Headquarters Staff, and others who have helped to make ASHS

'97 a truly enjoyable and memorable conference.

***Increase member awareness of the Endowment Fund, and possibilities for enhancement of the fund.** My "Reflections" column for January was devoted to the Endowment Fund challenge—A New Century, A Centennial, A Challenge—to members to increase the corpus of the fund to \$500,000 by 2003. In addition to the traditional ways of giving, two new opportunities are being provided this year, viz. the Silent Auction and gratis Emeritus Membership with a \$2500 Endowment Fund contribution. I am pleased to report that the Fund has grown by \$23,641, including \$4590 from the Silent Auction since our last annual conference. This represents an average contribution per member of just over \$5.00. In order to reach our goal of \$500,000 in 2003, it will be necessary to increase annual contributions per member to about \$12.00. I hope that every member will consider regular contributions to the Endowment Fund so that the centennial goal can be achieved.

***Inform practicing horticulturists of the benefits of Society membership.** Much more needs to be done in this area. *HortTechnology* continues to evolve and should be our principal medium to encourage horticultural practitioners to become members. The Southern Region ASHS is reaching out to extension agents and others to participate in their annual meeting which is the first step toward Society membership. Overall, our membership has shown a slight reduction in this administrative year, which emphasizes the need to recruit new members from outside of our traditional membership base.

***Enhance horticultural outreach through educational seminars and special publications.** A few educational seminars were held this year while the Board was assessing their impact. At the April BOD meeting, their importance was reaffirmed. So, members are urged to bring their ideas for educational seminars to the Executive Director or any officer. ASHS Press has completed a number of publications this year: *The Brooks and Olmo Register of Fruit and Nut Varieties*, 3rd Edition; *Progress in New Crops*; *Winning the Organics Game*; *The Proceedings of the First International Conference on the Processing Tomato and the First International Symposium on Tropical Tomato Diseases*, and the *ASHS International Consultants Directory*. As one of many benefits of membership, ASHS Press books are available to members at a discounted price.

Educational seminars and publications can be an important income source for the Society

that may result in stabilizing member fees. So, bring your ideas for seminars or publications to any Society officer or to the Executive Director.

***Maintain the fiscal stability of the Society.** Although the Society experienced a negative deviation from budget expectations in fiscal 1996, it remains in sound financial condition. Your BOD has taken steps to insure that our year-end balance in the Reserve Fund remains intact.

So, many of the goals that were established have been accomplished, but there is much more that can be done to make our Society an increasing force in national affairs and to better serve present and future members.

On a personal note, I am pleased to report that I am a survivor of prostate cancer and that I have attained full senior citizen status since the last annual conference.

Like most recent ASHS presidents, I must admit that I turned to Jules Janick's (1994) compilation of Presidential Addresses that were presented from 1905 through 1993 and to *HortScience* for the addresses of my more recent predecessors Benton Storey (1994), Dan Cantliffe (1995), and Adel Kader (1997) to read again the messages that they brought to the Society. Each past president has had a unique perspective on the current state and future outlook for the Society and for horticulture in general. Some predicted doom in the immediate or indefinite future and others foresaw a rosy future. Some presidential messages were sprinkled with humorous stories and others were repositories of scholarly wisdom. Despite the varying messages, each address is unequivocal in its support for our Society and for horticulture. I will continue that theme today.

Let's turn our attention now to the focus of these remarks—It's a Great Time to be a Horticulturist. When and where did organized horticulture begin? Some of us have suspected that horticulture is one of the very oldest professions and that practicing horticulturists have been a major force in the course of civilization. This has been confirmed by Bruce D. Smith (1997) in his article on domestication of squash (*Cucurbita pepo* L.), which was published in *Science* in May of this year. He found seed, fruit, and peduncle remains from the Guila Naquitz cave in Oaxaca, Mexico, to be between 7000 and 10,000 years old based on accelerator mass spectrometry ¹⁴C dating. This is 3000 to 5000 years earlier than organized horticulture previously was thought to have occurred. Furthermore, domestication of two other premier New World vegetables—corn (*Zea mays* L.) and bean (*Phaseolus vul-*

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garis L.)—occurred much later than with squash. So, the transition period from hunter/gatherer to agriculture lasted for a very long time. Nonetheless, our history as horticulturists is a continuum that has extended over the last 10,000 years.

Many of us would subscribe to a concept of horticulture as being the science and art of cultivating flowers, fruits, vegetables, and ornamental plants. A horticulturist is one who pursues such endeavors. But, what is a horticultural scientist? Defining what we do and who we are is more difficult. Many of you might agree that a horticultural scientist is one who by virtue of academic training and experience is able to conduct research on the plants of garden, orchard, greenhouse, and vineyard; to convey the principles derived therefrom in a classroom and laboratory setting; and to provide valid information to practitioners. All of this ultimately is aimed at providing useful and practical information to recipients.

Some of the key indicators that lead me to the conclusion that this is a great time for horticulturists follow:

***Student numbers.** In talking with colleagues around the country, it is apparent that student numbers—both undergraduate and graduate—in horticulture are increasing in most universities. There is a great need for well-trained undergraduate and technical school graduates in the horticultural workplace. To be sure, there is still a place for the self-taught plants person, but there is no place in the horticultural trades for unskilled individuals lacking basic horticultural knowledge. This enforces the need for professional certification for horticultural practitioners. ASHS should commit to be the leader in professional horticultural certification.

Student participation in ASHS through the Association of Collegiate Branches (ACB) is at a high level. Large and enthusiastic groups met at the Southern Region meeting in Birmingham, Ala., and at the Mid-America Collegiate Horticultural Society conference in Manhattan, Kans. We have 45 undergraduate and 208 graduate students who have registered for ASHS '97. So, it is a great time to be a horticulturist.

***Human health.** Vegetables and fruits are the cornerstones of health. As Hippocrates told his patients over 2000 years ago, "Let your food be your medicine and your medicine be your food." That theme continues today with governmental and private agencies promoting the "Five-A-Day" concept that urges everyone to consume at least five servings of vegetables and fruit daily. Particular health benefits accrue and life-threatening diseases are restricted by consumption of foods called nutraceuticals that have constituents that specifically restrict or inhibit a disease entity.

Evidence is accumulating that other constituents of vegetables and fruits may be equally important as the well-known vitamins and essential elements. For example, lycopene has been identified as being related to risk reduction of prostate cancer in men who consume tomato (*Lycopersicon esculentum* Mill.) products regularly (Gerster, 1997). Likewise, the

anthocyanins and related flavonoids of blueberry (*Vaccinium* sp. L.) are recognized for their anticarcinogenic properties and for their efficacy in treating urinary tract infections (Kolt and Dufour, 1997). Finally, a host of compounds in grapes (*Vitis* sp. L.) and wine (Blevins and Morris, 1997), cantaloupe (*Cucumis melo* L.) (Lester, 1997), and citrus (*Citrus* sp. L.) (Montanari et al., 1997) provide risk reduction for many ailments and enhance the general health of those who consume these products. Ongoing research will undoubtedly confirm other associations between consumption of vegetables and fruits and general health as well as specific interactions with disease. So, it is a great time to be a horticulturist.

***New products.** Supermarket produce departments contain an enormous array of exotic products that consumers are buying and learning to use. Recently, I counted an astonishing 178 distinct vegetable and fruit items in the average-size supermarket where we usually shop. I am told that large stores may stock many more items in the produce section. Artichoke (*Cynara scolymus* L.) crowns and 'Dutch Guilder' ready to serve whole baby potatoes (*Solanum tuberosum* L.) that have been treated with citric acid to restrict browning are two new specialty products making their way to some produce departments (Unrein, 1997). Portabella mushrooms [*Agaricus bisporus* (Lhr.) Sing.] and mesclun mix and other exotics are not specialties any longer according to a recent article in *The Packer* (Jungmeyer, 1997), but are now considered staples in the produce department. Our local cable system carries the Food Channel that provides 24-hour information on use of new and exotic horticultural products in cookery. So, it is a great time to be a horticulturist.

***New presentations.** Produce departments are bulging with displays of ready to eat salad mixes, snack mixes, and precut vegetables and fruits. Products that coincide with life-styles of the single parent family or the family with both parents in the work force are in demand. Fresh fruits and vegetables are being sold in convenience stores and super stores as well as in the traditional supermarket. Green grocers are flourishing in our major cities. The space and featured location for fresh flower sales in the produce section of supermarkets is ever increasing. And, the quality is superior considering the modest cost of supermarket purchased flowers and plants. So, it is a great time to be a horticulturist.

***Amenity horticulture.** Interest and demand for ornamental plants in the home and landscape have never been higher. New species and improved varieties are available each year to add to the already awesome number on the market. As Book Review Editor for *HortScience*, I see the amazing number of books being printed on gardening practices and individual species of ornamental plants to satisfy the informational needs of amateur and advanced amateur horticulturists.

The widespread interest in aromatics and aromatherapy offers the potential of new and exciting market opportunities. The possibility of combining scents from various species to

provide unique experiences has not been fully exploited as yet, but may serve to further enhance this new horticultural enterprise. So, it is a great time to be a horticulturist.

***Collegiality.** Horticultural departments have experienced staff reductions and consolidation over the years. Faculty involved in the initial consolidations were very much like traditional horticulturists in background and in professional objectives; they might have been agronomists, soil scientists, or plant pathologists. About 20 years ago, some newcomers first appeared in our horticultural departments; they called themselves biotechnologists or molecular biologists. Many lacked horticultural background and some were unaware of the land grant tradition. Certainly, there was a mixed reaction among departments and professional societies like ASHS that extended from isolation and professional mistrust on the one extreme to complete acceptance on the opposite extreme.

Fortunately for us, I believe that ASHS reacted positively for the most part to this dramatic shift in faculty composition. We could no longer simply expect horticultural faculty to be active members of ASHS, but we had to provide a setting for the expanse of interests that are included in modern horticulture. Our working group concept was ideally suited to the new avenues for horticultural advancements.

At the department level I sense that the separatism of traditional and molecular horticulturists has disappeared for the most part. The traditional horticulturist has come to accommodate and appreciate the advances in horticultural technology that can be achieved by a molecular/horticultural partnership. Commercial products from this partnership are now making their way into the marketplace. So, it is a great time to be a horticulturist.

In closing, I would like to remind you of the ASHS Vision Statement for 2003. The Society has embraced this statement, and I ask each of you to contribute to the realization of each of the articles of the statement whenever you can in your professional and personal lives.

*ASHS will be the premier professional society for people who create, integrate, teach, and apply horticultural science. The Society will build up a foundation of scientific integrity and strive for mutual respect among its diverse membership.

*ASHS will provide opportunities for members to develop excellence in their chosen specialization.

*ASHS is committed to helping develop and educate the next generation of horticulturists.

*ASHS will listen to the public about horticultural, environmental, and health concerns and respond to those concerns in a spirit of activism.

*Through these actions, ASHS will be sought out as the leading scientific resource that provides the direction, research, education, and applications necessary to protect the environment, achieve agricultural sustainability, and enhance the quality of life for all people.

As we approach our centennial, we can celebrate yesterday's successes or we can capture tomorrow's opportunities. I believe that we must look forward while being mindful of the accomplishments of the past. This will necessitate change, and change is not always fun or easy because we generally feel comfortable with the way we have been doing business. Nonetheless, we must embrace the challenge of change because we will succeed and prosper only as long as our programs are meaningful to all horticulturists.

Yes, it is a great time to be a horticulturist, and the future for this Society and for horticulture is even brighter.

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