

For Immediate Release

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Blazing Trails: Dr. Ellery Knake Remembered for His Contributions to Weed Science

Thousands of students have followed in his footsteps

LAWRENCE, Kansas — June 1, 2009 – As a graduate student and instructor at the University of Illinois, Ellery Knake was fascinated with weeds. He was determined to understand their impact on crops and to explore new control techniques to benefit farmers.

When he died recently at age 81, Dr. Knake left behind a body of work that has made a lasting impact on both agriculture and weed science around the globe.

"At the time Ellery began his research, farmers typically tried to control weeds with tillage," said Aaron Hager, associate professor and weed science extension specialist with the University of Illinois, Urbana-Champaign. "But by doing so, they fueled a significant soil erosion problem. Ellery was one of the first scientists to spearhead sustainable agriculture by finding ways to reduce the need to till. As a result, he soon became an internationally recognized authority in weed science and conservation tillage."

Knake demonstrated an unrivaled passion for innovation during his 37 years as a professor of weed science and agronomy (the study of field crop production and soil management). Much of his early research centered on how to evaluate the impact of weeds on crop yields and the use of soil residual herbicides that would prevent new weed establishment without tillage. Knake's work involving crop yields, economics, the environment and the measurement of weed populations was an early precursor to integrated pest management (IPM) techniques that have become a mainstay of modern agriculture.

"Ellery's enthusiasm for teaching and research was surpassed only by his commitment to farmers," said Don Kuhlman, professor emeritus of agricultural entomology, University of Illinois. "He spent countless hours conducting experiments to find solutions to the weed problems they faced, and he shared his results broadly through newsletters, farm journals, workshops, conferences, radio and TV." To nurture the emerging field of weed science, Knake became active in both the North Central Weed Science Society and the Weed Science Society of America (WSSA), which he led as its president. WSSA presented Knake with its very first "Outstanding Extension Award" and named him a Fellow for his significant contributions to both the organization and weed science.

Though Knake spent his career in academia and extension work, he paved the way for a new generation of weed scientists who today work in a broad range of organizations – including universities, regulatory agencies, land management and conservation groups, consulting firms, and companies that specialize in weed management.

"Ellery was the consummate professional who blazed the trail for thousands of students who have since studied weeds and their impact on the environment," said Lee Van Wychen, WSSA science policy director. "This next wave of weed scientists is poised to explore some of the most important issues facing our modern world – from the interactions among climate change, soil conservation and weed management techniques to how we can continue to feed a growing population as we lose cropland to urbanization."

About the Weed Science Society of America

The Weed Science Society of America, a nonprofit professional society, was founded in 1956 to encourage and promote the development of knowledge concerning weeds and their impact on the environment. The Weed Science Society of America promotes research, education and extension outreach activities related to weeds, provides science-based information to the public and policy makers, and fosters awareness of weeds and their impacts on managed and natural ecosystems. For more information, visit www.wssa.net.

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Side Bar:

Pursuing a Career in Weed Science: Ten Ways to Make a Difference

Weeds and invasive plants impact the world around us in significant ways – reducing crop yields, choking waterways, triggering allergies and disrupting natural habitats. But scientists are tilting the balance with new research and best practices.

Here are ten of the *many* ways today's weed scientists hope to make a difference:

- 1. Maximizing crop yields to feed a growing population with less cropland.
- 2. Eliminating aquatic weeds that clog our waterways and impact water quality.
- 3. Controlling invasive weeds that destroy biodiversity in our rangelands and wild areas.
- 4. Developing weed management techniques for organic farming.
- 5. Reducing the impact of weeds on human health and allergies.

- 6. Researching new and improved weed management techniques in response to climate change.
- 7. Minimizing the development of resistance of weeds to herbicides.
- 8. Preventing soil erosion by minimizing the role of tillage in weed control.
- 9. Managing weeds that can fuel devastating fires.
- 10. Training future weed scientists.

To prepare for a career in weed science, you typically need a bachelor's degree in agronomy, biochemistry, biology, chemistry, ecology, horticulture, plant physiology, soil science or a related field. For a research position in academia or industry, you most likely will need an advanced degree.

To explore current job openings for weed scientists, visit www.wssa.net/WSSA/Jobs/.