## 'Mr. Alfalfa' Officially Retires, but Still Has a Passion for Forage

## Lori Bocher, U.S. Dairy Forage Research Center

fter 25 years as an Extension and research agronomist/forages at the University of Minnesota, and 13 years as the director of the U.S. Dairy Forage Research Center in Madison, WI, Neal Martin has officially retired from public service. But his impact on the dairy forage industry will be long remembered, and he might just continue promoting forage in an unofficial capacity for a few more years.

The son of Reland and Phyllis Martin and oldest of six children, Neal was born in northeast Ohio in 1944. "I was fortunate to grow up on a dairy farm in Medina County, Ohio," Neal says. "Mom and Dad taught me the value of hard work and exposed me to the complexities of family-run dairy operations."



Neal and Mary Ann Martin (seated) surrounded by their family at Neal's retirement reception.

His parents firmly believed in education and helped all six of their children receive a college degree. Neal received a B.S. in agronomy from The Ohio State University in 1966, then spent two years in the military before marrying Mary Ann in 1969. The next stop was Iowa State University where he earned an M.S. in agronomy in 1971 and a Ph.D. in agronomy and animal science in 1973. His major professor at Iowa State was Walt Wedin, the man he credits with having the biggest impact on his career.

"When deciding what crop to focus on for my advanced degrees, Walt encouraged me to think about what crop I was most interested in, and that happened to be forage crops grown on dairy farms, an interest I developed on our home dairy farm," Neal explains. In 1974, the Martins moved to St. Paul, MN, where Neal began a 25-year run as an Extension and research agronomist/forages at the University of Minnesota. As a brand new Extension specialist, Neal appreciated being able to learn from two experienced colleagues. "John Baylor (Penn State) was the first American Forage and Grassland Council president, and he had a model Extension program," Neal says. "Warren Thompson (University of Kentucky) also had a model forage Extension program as well as a model forage product manager program."

During his 25 years in Minnesota, Neal partnered with Jim Linn, the Extension dairy specialist, for numerous Extension meetings across the state. Jim recalls, "It was an honor and always a fun and educational experience to travel Minnesota conducting forage and dairy Extension programs with 'Mr. Alfalfa.' Neal is known for his passion and enthusiasm for alfalfa production and improving forage quality for livestock producers. The forage and livestock industry is indebted to Neal for his leadership. One example is his work in developing NIRS forage testing from the beginning to the multi-analysis forage characterization capabilities of today."

Neal was a co-organizer for the NIRS Forage and Feed Testing Consortium (NIRSC), and he cites the success of this organization as one of his career highlights. "This group of commercial forage testing labs, public forage testing labs, and private industry alfalfa plant breeding companies has set standards for accurate use of NIRS in testing forage crops and feed," Neal explains. In 2012, he was honored by the NIRSC with its first-ever John S. Shenk Memorial Award for his 20 years of service to the organization. This is a fitting award since Neal names John Shenk as someone who has had a great influence on his career. "He was a model NIRS teacher and researcher," Neal relates.

Neal's impact as a forage Extension educator can be seen in the many awards he received during his tenure at Minnesota. And he enjoyed working with people as much as they enjoyed working with him. "My favorite career pursuit was working with innovative producers, dedicated county Extension staff, specialists from other disciplines, and industry representatives to solve problems for producers," he says.

It was this desire to solve problems that led Neal to apply for the position as director of the U.S. Dairy Forage Research Center (USDFRC), USDA Agricultural Research Service (ARS), Madison, WI. "My decision to join ARS was not a major career change for me, just a shift," Neal says. "ARS enabled me to spread my passion for increasing forage crop utilization to innovative producers and to innovative scientists, both public and private, as we formed partnerships to increase research capabilities. The opportunity to establish a research agenda focused on solving producer problems of national scope has been extremely rewarding."

Neal supervised the creation of the Environmentally Integrated Dairy Management Research Unit in Marshfield and Stratford, WI, and incorporated this new unit into the USDFRC – a project he names as one of his greatest career accomplishments. "With strong stakeholder advice, we increased the research capability to analyze dairy manure utilization through the construction of a new laboratory in Marshfield and the hiring of three scientists," Neal explains. "We also partnered with the University of Wisconsin College

of Agricultural and Life Sciences to build state-of-the-art dairy replacement research facilities at Stratford."

Bill Tucker, a Virginia beef producer and volunteer political advocate for agriculture, has worked with Neal for many years as a USDFRC stakeholder and a member and past president of the American Forage and Grassland Council. As someone who walks the halls of Congress on a regular basis, he has worked with a wide variety of people. "Bar none, Neal Martin is best at finding the 'sweet spot' in the curvy road of maneuvering between producers, scientists, industry professionals, and senior administrators to make all partners in a mutual effort feel valued and have ownership of a mutual path forward," he says.



"Neal's unique blend of candor, awareness, and ability to recognize people's talents make him a central force in any room where multiple partners must come together on a topic," he continues. "His dogmatic insistence that we will move forward is contagious."

Many people in the forage industry know Neal as an instructor at the Alfalfa Intensive Training Seminars, a program begun in 1992 to share the latest in forage research trends with alfalfa product managers, educators, and others. The seminars originated when Neal was still a Minnesota Extension educator. When he applied for the USDFRC director's job, one of Neal's conditions for employment was that he still be able to conduct these valuable seminars.

The career accomplishment most near and dear to Neal is his co-founding of the Consortium for Alfalfa Improvement (CAI) between the USDFRC, Forage Genetics International, the Noble Research Foundation, and joining a few years later, Pioneer. Mark McCaslin, president of Forage Genetics and the other co-founder of the CAI, relates, "I believe one of Neal's enduring legacies will be the successful application of his vision for a unique inter-institutional, inter-disciplinary, long-term collaboration to 'redesign' alfalfa for improved forage quality for high producing dairy cows.

"Eleven years after the formation of the CAI, alfalfa with modified lignin content and composition is in the process of U.S. regulatory review," he continues. "And novel alfalfa plants with the potential for improved efficiency of protein utilization are in the early stages of proof-of-concept testing. Neal has always brought insight, energy, and focus to any project he's been involved in, and for that he has earned the deep gratitude and respect of the dairy forage industry."

As stated earlier, Neal's upbringing on a dairy farm greatly influenced his career, especially by keeping him tuned in to current producer challenges. When he became director of the USDFRC, this included supervising the research farm at Prairie du Sac. At his retirement party in January, Neal's sister, Linda Miller, shared their mother's reaction when she learned her son had a new job. "Neal finally has his dairy farm," she was reported to say.

Neal had a vision for bringing that farm, and the type of research conducted there, into the 21st century. But federal budget challenges kept this vision from becoming a reality on Neal's watch. "Not being able to build and staff a new Intensive Animal Nutrition Research Facility at Prairie du Sac was my greatest career disappointment," Neal relates. "Virtually every need for new science in dairy forage nutrition requires total tract digestion research using high producing dairy cows to help develop new, diverse forage crop choices. This research is needed as dairy and other livestock producers face climate change and strive to reduce their carbon, water, and energy footprints under state-of-the-art animal care management practices."

Since officially retiring on January 12, Neal and Mary Ann have sold their condo in Madison and moved to the northeastern Ohio blueberry farm that they've been operating since 2005. He no longer has to worry about USDFRC budgets, staffing, paperwork, and other challenges; but he's still hoping to be involved in furthering the cause of dairy forage research as a private citizen. There's a good chance that you haven't seen the last of 'Mr. Alfalfa.'