**Sustainable Agriculture and Food Systems**

**An Integrated Network of Research, Teaching and Engagement Facilities**

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TheUniversity of New Hampshire through its College of Life Sciences and Agriculture (COLSA) and the New Hampshire Agricultural Experiment Station (NHAES) operate five sustainable agriculture research and teaching facilities including the Organic Dairy Research Farm, Fairchild Dairy, Woodman Horticultural Farm, Kingman Farm, and Macfarlane Greenhouses. Each of these is within easy access to the campus and surrounding community, being located on the fringes of campus or within 7 miles distance. Each provides a critical cog in a coherent network committed to developing new sustainable agriculture and foods knowledge, management options, and technologies, and thereby to a sustainable vision for New Hampshire’s agricultural future.

Following foundational principles of environmental stewardship, economic viability, and social responsibility, the facilities serve as models of discovery and learning for sustainable food and fiber production practices, and for provision of environmental services, in New England and beyond. Each of the facilities provides a unique contribution to the overall network. The majority of the associated lands are maintained in certified organic management, with compliance oversight by the State of New Hampshire. Among the many contributions of this outstanding network of field facilities to the broader UNH culture of sustainability is the distinction of operating the first organic dairy at a land grant university. The farms host many visitors each year, and are frequent sites of outreach programs for our agricultural initiatives. In 2010, the facilities provided educational programming for more than 750 UNH students and were host to a similar number of visitors, including many public school field trips where youngsters learned about sustainable approaches to agriculture and food systems. Hundreds of campus and community members use the lands for healthy outdoor activities including hiking, biking, and skiing.

These facilities are well positioned and heavily utilized to support the brand new Sustainable Agriculture and Food Systems undergraduate major (both BS and BA) offered in COLSA. Importantly, they serve as the locus for multiple experiential courses that provide hands-on opportunities for students in the cultural, economic, management, and sustainable facets of viable food/fiber/service enterprises. More broadly they are critical links in supporting the college’s core mission of sustainable agriculture and food systems through multidisciplinary research, teaching and engagement.

The network of facilities is closely tied to sustainable aspects of campus life in a variety of ways. Vegetables and fruits from the Woodman and Kingman farms are consistently provided to the UNH Dining services for inclusion in student, staff and faculty meals. Faculty working in our greenhouses provide micro- and mesclun greens that are also routed to campus dining. The UNH Organic Garden Club student organization has its garden on one of the Fairchild Dairy pastures, and is provided direct support through use of greenhouse and other facilities, tractors and cultivation equipment, and staff expertise and time. We are currently working to evaluate feasibility of building a dairy processing facility that would route organic milk to the dining facilities, provide organic ice cream to the campus Dairy Bar where it would be available to campus and community members, and provide organic cheese for the Dairy Bar and potentially for direct sales to alumni.

While the individual facilities have existed for periods of a few years to multiple decades, their aggregation and renewed common focus on sustainable approaches represents an exciting innovation. The provision of substantial campus and community open spaces under active agricultural management along with the leading contributions to an exceptional institution-wide culture of sustainability are invaluable assets to this very modern land grant university.