



CALL OF THE LAND

The roots of *UMass Extension’s Center for Beginning Farmers* run deep in the rich New England soil, sprouted from a mix of heritage seeds from far away and from long ago.

You can see those roots, of course, in the community-based traditions of Massachusetts farming, where, four centuries ago, indigenous people helped newcomers learn to farm the rich but rocky soil — soil that continues to draw people of all ages back to the land, and to a new life in farming.

Lately, however, you might also find those elements in the mountains of northern Laos, in the fertile Amazon delta of Brazil, on the windswept fields of the Azores, and in the tropical villages of El Salvador and Ghana.

For the past twelve years, UMass Extension’s Frank Mangan, a professor in the Plant, Soil and Insect Sciences Department at UMass Amherst, and his colleague Maria Moreira have spearheaded a program aimed in part at training and mentoring new Massachusetts farmers from Southeast Asia, Africa and Latin America, among other places.

Just as important, however, their program has introduced Massachusetts consumers to entirely new vegetable crops

*UMass Center for
Beginning Farmers:
Connecting
Beginning Farmers
with the Land in
Massachusetts*

from those far-flung regions — meeting the demand of thriving immigrant communities, and attracting a broader target market simply interested in fresh, healthful food and new cuisine. Their efforts have demonstrated the viability of these crops in New England soil, and pioneered mechanisms for marketing them profitably through farmers markets, supermarkets, specialty stores and restaurants throughout the region.

At the same time, UMass Amherst undergraduates — many with no previous background in farming — are working and studying year-round at the UMass Crops Research and Education Farm, South Deerfield, fueled by a homegrown commitment to healthy eating, a healthy environment, and a healthy local economy that includes locally grown food.

Photo: Flats Mentor Farm, Lancaster



ABOVE: Supermarket, Ashland

TOP RIGHT: UMass Crops Research and Education Farm, South Deerfield

BOTTOM RIGHT: Flats Mentor Farm, Lancaster

THE SOIL

If you are looking for the United Nations of beginning farming, you need look no further than Maria Moreira's Flats Mentor Farm in the central Massachusetts town of Lancaster. On a Beginning Farmer Field Day, a Flats Mentor visitor can be excused for being disoriented at first by the exotic range of dress and language, and by the enticing but unfamiliar smells coming from the fields and the cooking tents. There are the traditional farming hats of the Hmong people of northern Laos, the bright wraps of Ghanaian women, and the lilt of Brazilian Portuguese.

It was nearly 30 years ago that UMass Extension's Maria Moreira and her husband began a long, and ultimately successful, struggle as beginning dairy farmers in Massachusetts. Both were natives of the Portuguese-speaking Azores, at home among the many Portuguese-speaking people of Massachusetts, but unfamiliar with the state's agriculture.

The Moreiras succeeded in much the same way that Maria now teaches other new farmers to succeed — by turning to their roots, and nurturing those roots in new soil by finding unique market niches. For Maria and Manny Moreira, that turned out to involve cheese — Manny's Dairy Farm Queijo Açoreano, to be exact. It proved to be a hit, especially in the area's burgeoning Portuguese community.

For Hmong farmers in Massachusetts, the niche involves an assortment of exotic and sometimes spicy Southeast Asian vegetables at Flats Mentor Farm. That's where Maria has teamed UMass Amherst and UMass Extension up with the USDA's Cooperative State Research, Education and Extension Services (CSREES), Heifer International and the Massachusetts Society for the Promotion of Agriculture — a group started by founding-farmers Samuel Adams and John Hancock — to provide an incubator and springboard

for new farmers and their crops. The project is also boosting sales to restaurants, at farmers markets, and in retail and wholesale markets in eastern Massachusetts. The number of farmers markets where Flats Mentor farmers are represented has increased from just three in 2004 to 32 in 2008.

"The Hmong come with an inner connection to the land, and they find it wherever they go. They are fully committed to it," notes Maria Moreira, still familiar with a newcomer's hopes, uncertainties and longing for land.

In addition to the work ethic, desire and tenacity of the Hmong farmers, their success is directly attributed to the technical skills and services provided by Maria Moreira, Frank Mangan, Ruth Hazzard, and Rich Bonanno of the UMass Extension Vegetable Team. This includes fertility recommendations based on soil analysis by the UMass Soil and Plant Tissue Testing Lab, culturally-appropriate and research-based recommendations for crop, pest and weed management strategies, and training and assistance on all aspects of marketing for both retail and wholesale markets. Many of the crops being sold at farmers markets and wholesale markets by the Hmong, and pest management strategies for these crops, were evaluated at the UMass Crops Research and Education Farm, South Deerfield.

THE SEEDS

Meanwhile, back at UMass Amherst, Frank Mangan examines some new squash seeds from Brazil. Frank provides the key research and technical support that has led to the introduction and successful adoption of vegetables that have never before seen New England soil: Jiló, maxixe and abóbora from Brazil; ayote, chipilín, and pipián from El Salvador; calabaza and ají dulce from Puerto Rico.

TOP RIGHT: *Farmer's market, Dorchester*

BOTTOM RIGHT: *Whippoorwill Farm, Martha's Vineyard*

BELOW: *UMass Crops Research and Education Farm, South Deerfield*



And that's just for starters.

Massachusetts is home to burgeoning Latino and Brazilian communities. Vegetables grown in places like Whately and Dracut, as well as on urban farms in places like Holyoke and Brookline, serve not only those nearby communities, but also supermarkets and restaurants across the region.

"We have been able to identify what varieties will grow where and when, and how to get them to market most effectively," notes Frank. "It's especially gratifying to be able to provide fresh, healthy local produce to ethnic communities, and introduce others to wonderful vegetables that they might otherwise never sample."

There are even broader implications to Frank Mangan's fascination with helping start-up farmers grow exotic vegetables for diverse local communities. Fluent in Portuguese and Spanish, Frank and Maria regularly travel to Brazil and El Salvador to learn more about growing techniques there and establish closer research and marketing ties. Often they come back with new seeds, and sometimes with new graduate students who will contribute to the Beginning Farmer Initiative as part of their degree work in the UMass Amherst Department of Plant, Soil and Insect Sciences.

Ties with overseas trade and farming organizations have even led to a formal agreement between Massachusetts and Brazil whereby fruit will be imported from Brazil to complement Brazilian vegetables grown in Massachusetts for markets on the Eastern seaboard.

Frank Mangan is not alone in this commitment to new farmers and new crops. Extension is also reaching out to beginning farmers in areas as varied as livestock and fruit growing. Extension's Sonia Schloemann is working with aspiring vintners to cultivate new grape varieties that have

the character necessary for fine wine production, and to reintroduce full-bodied table grapes to the region. "Some folks are adding to or switching from other crops," she notes. "But many are coming from a non-agricultural background and are doing this as a second or third 'career' or retirement activity."

Also, Extension Weed Scientist Rich Bonanno works with new vegetable and fruit farmers throughout the area, helping them with their efforts to reduce or eliminate weeds in their fields. Rich holds indoor classroom discussions during the winter as well as on-farm demonstrations of various weed management strategies during the growing season.

THE HARVEST

Very early on a fall morning, a dense fog hangs low over the fertile fields of the UMass Crops Research and Education Farm along the Connecticut River in South Deerfield. Students in UMass Extension specialist Ruth Hazzard's Student Farming Enterprise course pull long carrots from the ground, and shed their jackets as a brilliant fall sun begins to burn through the mist.

The carrots, along with kale, broccoli, cabbage, and potatoes, will be delivered immediately to EarthFoods, a student-run natural foods restaurant collective at UMass Amherst. For many of the students, this two-semester course and summer internship means a lot more than earning a few academic credits. For most, like Clarence Dow of Marblehead, this is a mission and an evolving lifestyle.

"That broccoli is going into an incredible Peanut Broccoli Tofu Stir-fry," said Dow, pointing down a long row of plants. "We always say you can taste the difference," echoed student Emily French.



◀ *Nuestras Raíces Farm, Holyoke*

Department of Veterinary and Animal Sciences, works directly with the community to make the dream of urban farming a reality. Through Extension's Nurturing Our Roots Program, she helps recruit teachers, community members, master gardeners, student interns, carpenters, farmers, 4-H clubs, and church groups — and empowers them to work together effectively on the land and for the land.

"Young people from the community have asked for more science-oriented workshops," says Chickering-Sears. "They are clearly eager to engage the larger issues involved in the work they are doing on the farm."

Ruth Hazzard's crew of students is diverse: some are enrolled in the two- or four-year academic degree programs in UMass Amherst Department of Plant, Soil, and Insect Sciences, while others are interested non-majors. Many — though not all — are drawn by an interest in organic cultivation. Six acres of the UMass Crops Research and Education Farm, South Deerfield, have recently been certified organic.

"Sustainability is a big part of our consciousness," said Pauline Badamo of Queens, N.Y, explaining that they hope to set up a way for EarthFoods' waste to be brought back to the farm for composting.

THE CHALLENGE

Ruth Hazzard is eager to keep that door to farming open for people of all backgrounds and ages. In the works is a similar course to be taught through University Without Walls (UWW), UMass Amherst's adult degree-completion program.

Initiatives like that, however, will require a good deal of additional curriculum development, especially to match the need for practical training with a strong academic foundation in plant and soil sciences.

Some area projects, like the Nuestras Raíces Farm and community gardens in urban Holyoke, represent valuable opportunities for student training, but like many new farms, need ongoing assistance. UMass Extension has a longstanding collaboration with Nuestras Raíces under which UMass Extension continues to provide technical assistance and formal training in soil, nutrient and pest management, as well as animal care.

Carrie Chickering-Sears, who leads UMass Extension's 4-H youth development training initiatives in the university's

Carrie Chickering-Sears, like Frank Mangan, Maria Moreira, Sonia Schloemann, Rich Bonanno and Ruth Hazzard, remains excited by that challenge and committed to its aims. It is the challenge that has meant a lot in Massachusetts since 1620, when a group of beginning farmers from England got critical technical assistance and mentoring from Native Americans near a tiny outpost on Cape Cod Bay.

CENTER FOR BEGINNING FARMERS

UMass Amherst is forming the Center for Beginning Farmers to bring together these diverse programs under one umbrella, to focus resources on the needs of beginning farmers, and to build partnerships with other organizations that do similar work. As the state's land-grant institution, the University of Massachusetts Amherst has the technical resources, faculty, and professional staff to provide the research-based assistance needed by farmers of all backgrounds. This includes diagnostic services for pest and soil management, technical guides on all aspects of sustainable production and marketing of food crops, and two research farms where new crops and production practices are constantly evaluated and refined. We draw upon our Extension history, a body of experience with a wide range of educational approaches to adult learning, from one-on-one training on the farm, to interactive workshops, and academic coursework. The Center for Beginning Farmers will focus on providing services and learning opportunities to people who are interested in becoming commercial farmers.

Agriculture in the Commonwealth is a substantial economic driver. Statewide, agricultural enterprises generate over \$499 million in cash sales, employ over 13,500 workers, and pay nearly \$100 million in wages. Massachusetts has over 120 farmers' markets, up from approximately 85 in 1990, and more than any other New England state.

