Growing People

Community-based Career Development Opportunities Working with Plants

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For quite some time now, politicians and educators in Hawaii have been calling for a stronger effort in the local private sector to provide more job-related training in the community. The National Tropical Botanical Garden is leading by example in this area with not one, but four job-related programmes at its headquarters and in its Hawaii gardens, aimed at showing local youth that preserving, studying or growing tropical plants can be rewarding careers. In a state often called "the endangered species capital of the world" and with new regulations in place requiring increased use of native plants in commercial landscaping, the unique combination of expertise at NTBG can be tapped to help fill genuine needs in the local job market.

Well before the age when most children start thinking about employment, NTBG starts by fostering in local school children, through its Garden As Classroom programme, appreciation for plants and their critical importance to all phases of their lives. Students gain, in a series of educational exercises, knowledge about identifying, propagating and caring for plants, as well as a deeper appreciation for the roles of plants in local culture and history.

Our job-training initiatives actually begin at the middle school and high school levels. We have now fully implemented a very successful service-learning opportunity – the Junior Restoration Team. Each high school on the island of Kauai now offers this extra-curricular activity. Student members assist ecological restoration projects in the Lawai Valley, at Limahuli Garden and Preserve, and at the Makauwahi Cave Reserve. They participate in four to five sessions throughout the school year, doing real hands-on work in our Conservation programme restoration projects that teach skills in mapping, soil-and water-testing, plant identification, nursery propagation, and landscaping with native plants, while allowing students to earn community service credits. Students learn about ecology, local history and land stewardship, while participating in such fun activities as fossil hunting, using a Global Positioning System, stream sampling and cave exploration.

Meanwhile, the Garden has a lot to gain from this programme too, as these energetic young people are making a genuine contribution to projects aimed at protecting and restoring precious natural and cultural resources on NTBG lands and those of collaborating landowners. These school groups have accomplished a lot of critically needed work on the projects, pulling up invasive weeds, planting native plants, and helping to plan and monitor the whole enterprise.

It is hoped that some of these youngsters will eventually move up to the next step in our job-training offerings, becoming participants in our Horticultural Internship Program for college-age students. This programme has been offered since 1973 and is currently poised for major growth, as it shifts from being offered one semester per year to two. Over the years, it has produced some outstanding graduates who have gone on to exemplary careers in horticulture, botany and plant conservation, including Hawaii-born Chipper Wiclan, NTBG’s Director and CEO. Through the Junior Restoration Team and local outreach efforts, the Garden will recruit more interns from the local community.

A very promising new job-training initiative is the Apprentice Program, which focuses squarely on career development at the local level. Apprentices work two days per week, or the equivalent in half-days, as an assistant to one of our highly skilled employees. The apprentice is expected to use the balance of his/her time to take college or technical courses, or to work at other employment that could provide additional career skills and support.

Our first two apprentices are Chandler Forrest ("Atta") and Alvin Costello ("Bino"). Both are local residents who have worked for several years as Conservation Technicians in the Limahuli Preserve restoration projects. By becoming an apprentice, Atta can now learn the finer points of native plant propagation by assisting Bob Nishiwaki, our accomplished Nursery Manager in

\[\text{[Image]: A fascination with plants begins at an early age through the Garden As Classroom programme.}\]
Restoring a coastal habitat on their home island is rewarding work for these high school students participating as a Junior Restoration Team.

Lawai, while also taking relevant courses at the local community college. Atta hopes to attend college full-time next year. Bino is learning by assisting our Collections Manager at Limahuli, the highly respected native plant horticulturist, Michael DeVitta.

Ever more opportunities are also being created for full-time employment in our programmes and gardens. By advertising on local list-servers and bulletin boards, and through word of mouth, the organization strives to hire members of the community whenever possible. It is hoped that our high school programmes and the apprenticeships will also help by creating a virtually seamless ‘pipeline’ for attracting and training young people in the neighbourhood.

In our entry-level Conservation Technician positions, and indeed in all our Conservation and Horticulture positions, every effort is made to provide not just valuable on-the-job training, but also high-quality educational opportunities, in the form of training workshops in topics such as Horticultural Techniques, Worker and Helicopter Safety, Employee Management and Mapping Techniques, taught by NTBG professionals or outside instructors. Staff are encouraged and supported to attend symposia in basic and applied Plant Science and Conservation. Recently NTBG sponsored an educational symposium on Conservation and another on Horticulture that brought other top professionals to the Garden to provide advice and guidance to our staff.

We are fortunate to have many programmes, projects and individuals with broad and deep research involvements. Our herbarium contains over 40,000 pressed plant specimens, and our library has not only a diverse collection of contemporary publications on botanical subjects, but also a world-class collection of rare and historical books and artwork. A new facility, the planned Botanical Research Center, will greatly improve access to these remarkable educational materials. These resources, and the prodigious research and publication efforts of our science staff, create the perfect opportunity for expanded professional-level training.

We hope in the near future to offer more college training programmes and postdoctoral opportunities. Planning is underway to create one or more college and graduate-level field courses in the Garden, in collaboration with the University of Hawaii. These summer courses would capitalize on the existing strengths among Garden scientists in Ethnobotany, Paleo-

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Horticultural instruction for college-age students includes learning propagation methods in the nursery.