

## Department of Environmental Horticulture • University of California, Davis

# GROWING Points

## National Floriculture Forum Tours California Pack Trials and Flower Farms *by Linda Dodge*



<http://envhort.ucdavis.edu>

If you're idea of fun is spending four days on a bus with 40 horticulture professors talking plants nonstop, then you would have enjoyed this year's gathering of the National Floriculture Forum (NFF). This group of academics and extension personnel from all over the US meets annually to collaborate on current issues in floriculture education and research. Their activities are sponsored by the American Floral Endowment and the American Society for Horticultural Science.

Organized by Dr. Heiner Lieth of UC Davis, this year's meeting took the form of a whirlwind tour of seed companies, plant propagators and flower growers from San Diego to Half Moon Bay. The event coincided with the California Pack Trials, the

annual April showcase of new plant varieties put on by seed and plant producers around the state. NFF participants from New Hampshire and Florida to Alaska and Hawaii (and all points in between) gathered in San Diego on April 9th in preparation for the four-day trek up the California coast. The group of around 40 boarded the tour bus the next day, cameras in hand, eager to document a unique horticultural experience as well as enjoy the company of other floriculture fanatics.

The first day's itinerary included several stops in San Diego County. Pack Trials participant, EuroAmerican Propagators in Bonsall, got things off to a colorful start. This producer of "young plants" (liners and pre-finished 4-inch plants) had their entire catalog on display as blooming container plants and in a beautifully-designed display garden. The Plug Connection in Vista was the first ornamental plug producer on the West Coast when they began operation in 1987. This year, they offered a truly independent pack trial with varieties of bedding plants from several companies grown under identical conditions so visitors were able to evaluate varieties based on side-

by-side production comparisons.

The fifty acres of Tecolote Giant Ranunculus were in full bloom at The Flower Fields in Carlsbad and presented a brilliant display of color that has become a tourist attraction and part of the local heritage since 1958. Now owned by the Paul Ecke Jr. family, this working ranch produces 6-8 million ranunculus tubers annually. NFF tour members rode through the fields on wagons pulled by old tractors and tried in vain to capture the beauty through their camera lenses. The last stop of the day was the Paul Ecke Ranch in Encinitas, primarily known as the producer of vegetative cuttings for over 80% of the flowering poinsettias grown worldwide each year. In addition, Ecke has formed a marketing alliance with Goldsmith Plants and Seeds, Fischer USA and Yoder Brothers under the brand name *The Flower Fields*® that represents 1400 bedding plant varieties. Many of them were on display at the Paul Ecke Ranch and dazzled the NFF visitors as they were treated to a wine reception and catered dinner graciously provided by the Ecke family. Paul Ecke III welcomed the group and emphasized his organization's support for the mission of the NFF and continued participation in student internship and research programs.

Day two of the tour began at Pyramid Flowers in Oxnard, a leading grower of specialty cut flowers with 20 acres of greenhouses and 100 acres of field produc-



*Tecolote Giant Ranunculus in full bloom "as far as the eye can see" at The Flower Fields in Carlsbad.*

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*Pack trials at the Plug Connection in Vista. This is a truly independent trial with varieties from several seed companies grown under identical conditions for side-by-side comparisons.*

tion. Owner Fred Van Wingerden escorted the NFF group through plantings of asiatic and oriental lilies, fields of *Moluccella* (Bells of Ireland) and four acres of greenhouse-grown *Bouvardia*. At PanAmerican Seed in Santa Paula, Perennial Business Development Manager Brian Corr introduced the group to this affiliate of Ball Horticultural Company. Their pack trials featured bedding, cut flower and potted flowering crops in spectacular greenhouse and field displays representing species from *Abutilon* to *Zinnia*. Anna Ball, leader of the Ball organization, reiterated her commitment to the goals of the NFF and encouraged future opportunities for student interns and research collaborators.

The tour bus then wound through the

scenic rolling hills of the central California coast to visit Ocean View Flowers in Lompoc. This company produces field-grown cut flowers, especially stock, larkspur and delphinium. Vice President of Sales and Marketing Dan Vordale escorted the group through their bustling pre-cooling, packing and shipping facilities. Proceeding north to Nipomo, the intrepid NFF group stopped in at the Royal Van Zanten open house. This company, with headquarters in The Netherlands, produces vegetative propagation material and their extensive catalog of chry-

santhemum varieties was well-represented in their colorful display. In nearby Arroyo Grande, Brian Corr once again greeted the group and prepared them for a tour of Ball FloraPlant, another Ball Horticultural Company affiliate specializing in vegetatively propagated plants. Their pack trial displays of annuals, perennials and flowering potted plants were combined in dazzling arrangements and tour members were falling all over each other to capture the best digital images. The Ball organization provided a wonderful barbeque dinner with appropriate adult beverages and several participants from the eastern US had their first taste of tri-tip steak.

The tour was off to an early start on the



*NFF tour route from San Diego north to Half Moon Bay.*



*Spectacular pack trial display of bedding plant and container varieties at PanAmerican Seed in Santa Paula.*

third day to make the trek north to Salinas where several more pack trial stops were planned. Representatives of Yoder Brothers gave the group a comprehensive tour of their facilities and led them through displays of asters, dahlias, azaleas, pot mums, garden mums and miniature roses. Many of *The Flower Fields*® bedding plant varieties were also on display, as Yoder Brothers is a member of this marketing alliance. American Takii, a subsidiary of Takii & Co. of Japan, showed off their seed varieties of garden and container flowers including *Cheiranthus* (wallflower), *Primula*, *Dianthus* and *Osteospermum*. This company also offers many vegetable seed varieties.



*Dazzling container plant displays at Ball FloraPlant in Arroyo Grande.*

The displays at Sakata Seed America included cut flower and bedding plant varieties including outstanding *Ranunculus*, *Gomphrena*, *Celosia* and *Campanula* (bell-flower).

Next stop was Gilroy for a visit to Goldsmith Seeds and Plants, another partner in *The Flower Fields*<sup>®</sup> group. Included in their outstanding display was an arrangement of flowering plants in the form of a rainbow, representing every hue. In addition to the familiar geraniums, impatiens and marigolds, varieties of *Aquilegia*, *Cleome*, *Nicotiana* and *Torenia* were also on display. Long known as a seed company, Goldsmith has recently begun producing vegetatively propagated flower varieties. Founders Glenn Goldsmith (a UC Davis grad) and his wife, Jane, were on hand to greet visitors as was son and CEO, Joel. After a winding trek over Hecker Pass weaving through stately redwood forests, the NFF tour bus stopped for the day in Santa Cruz and the group enjoyed a banquet featuring, you guessed it, tri-tip steak.

As a change of pace for the last day of the tour, the group made a morning visit to the exotic arboretum at the University of California, Santa Cruz. This arboretum's collections of South African and Australian plants are unmatched in the Northern Hemisphere and many species were in bloom to the delight of tour members. Staff and docents escorted them through the grounds, pointing out features of the *Proteas*, *Leucospermums*, *Ericas* and *Bankias* as if they were old friends. Next stop was Watsonville to visit Rose Gene Technology, a company specializing in breeding and production of roses for cut flowers. The group received a thorough tour of the facilities and learned



*Pack trial displays at Goldsmith Plants and Seeds, Gilroy, featuring dahlias and cleome.*

about the company's methods for producing rose miniplants and the objectives of their breeding programs.

The trusty NFF tour bus then hit the road for the scenic drive north along the rugged California coast on Highway One to Half Moon Bay for the final stop at Nurserymen's Exchange. This family-owned company has been in business for over 60 years and is one of the country's largest producers of potted flowering and foliage plants. After being treated to a hearty barbecue lunch, owner Jack Pearlstein personally escorted the group through the extensive greenhouse facilities containing miniature roses, kalanchoes and orchids of

every description. He also showed the group fields of potted pine seedlings being grown for the coming Christmas season. Mr. Pearlstein and long-time consultant, Harold Wilkins, voiced their continued support for the activities of the NFF and renewed contacts for their internship and research programs.

As the tour members departed the bus for the last time at their hotel near the San Francisco International Airport, they thanked Heiner Lieth for a well-planned itinerary. Their thoughts then turned to how best to relay the information gleaned over the last four days to their students and colleagues back home. They also looked forward to beginning new research collaborations formed during the trip and to participation in next year's meeting of the National Floriculture Forum. **GP**



*Colorful field trial displays and container plantings at American Takii Seed Company in Salinas.*



## Notes From the Chair... by Heiner Lieth

If you are living in California, then you have probably already heard about the dire budget situation facing the State's public institutions. At this point budget cuts are inevitable. Supposedly the University is to be affected in a relatively minor way, but there is more to this than meets the eye. As this goes to press, "university research" is to absorb significant cuts beyond those for the rest of the University. Basically "university research" means "the **Agricultural Experiment Station**". The same approach was taken in the early 1990s with both the Agricultural Experiment Station (AES) and Cooperative Extension (CE) suffering major budget cuts. Neither AES nor CE ever recovered from the cuts a decade ago and the cuts which are proposed now will inevitably be in areas that are core to all departments in the **College of Agricultural and Environmental Sciences** and our academic programs. I'm sure you are aware of the many excellent programs we have in agricultural and environmental sciences addressing many of the most important problems facing California: Sudden Oak Death, Pierce's Disease, environmental issues facing home owners and agricultural producers, watersheds and water issues, 4-H, youth-at-risk, nutritional programs, to mention just a few.

In a letter which **Dean van Alfen** sent to the **Advisory Council** of the College of Agricultural and Environmental Sciences, he explains the situation: "The proposed 10% cut to state-funded research will disproportionately affect our college, particularly the Agricultural Experiment Station budget. Approximately 55% of the state research funding that comes to the Davis campus is within our college which, coincidentally, represents about 55% of our total state-funded base budget. This funding provides faculty and staff salary and state-funded operating support for our core departmental programs. It is not flexible, discretionary dollars." As you can see, all departments and academic programs in the

College of Agricultural and Environmental Sciences will be dealt a devastating blow by the proposed cuts.

We in the University are not trying to hide from cuts that all public institutions must obviously face, but all versions of the current budget proposals deal a crippling blow to us at a time when the intention is to have a relatively minor impact on the University. For Environmental Horticulture virtually half of our funds used for daily operations (excluding the salary of essential personnel) would have to be cut. We are hopeful that the decision-makers will be provided with an accurate analysis and that they then implement budgetary decisions which coincide with the intentions of the folks they represent.

If, however, no solution is forthcoming, then we will want to ask our friends to intercede on our behalf. Thus, as chair of the Environmental Horticulture Department, I am asking you whether you might be willing to contact state legislators on our behalf (when the time comes; if needed). If so, then please send me an e-mail message (jhlieth@ucdavis.edu) or drop me a letter. Please provide your full name, address, phone numbers, e-mail address and indicate the names of legislators that represent you (if you know). If you have contacts in the legislature or Governor's office, then please indicate that as well.

In other news around the department, we have been very active in trying to develop public support for programs within the Department. I am currently working on two endowed chairs. We will begin fundraising for these this summer. If you would like to be involved in these efforts, then please contact me. We are also negotiating with the USDA to bring scientists working in environmental horticulture to California.

In the last *Growing Points* we appealed to you to provide some support for the **Harry Kohl Scholarship Fund**. For such a fund to begin paying out scholarships, a minimum balance of \$10,000 must be reached. We would like to thank **Dave Fujino & Sarah Schrupp**, **Steven & Melinda Thigpen**, and **Ray Hasek** for their generous donations which have put the fund over the top and enabled us to begin planning awards for deserving students.

### *Student Accomplishments*

Congratulations to undergraduates **Kate Keck**, **Carolyn Norris**, **Rose Pearl** and **Melissa Rathje** who will be graduating this June. We wish them the best in the next stage of their lives. Six graduate students in Environmental Horticulture were awarded Kubota Scholarships, ranging from \$750 to \$1,000. This year's recipients were **Fabrice De Clerck**, **Kimberley Hunter**, **Mikaela Huntzinger**, **Erin McDermott**, **Kathren Murrell**, and **Tom Rambo**. The **John and Terry Kubota Scholarship** is funded primarily through gifts from **Yoneo John Kubota**, who worked in the Department of Environmental Horticulture from 1968 until his retirement in 1984. The scholarship is dedicated in memory of his late wife "in recognition of the encouragement scholarship can provide to outstanding students." **Melody Meyer**, a graduate student in Environmental Horticulture, received a Monrovia Nursery/R. Fred Damm scholarship from the California Association of Nurserymen (CAN). **Jackie Bergquist** has also received a CAN scholarship. **Steve Wathen**, a Ph. D. candidate working with **Michael Barbour**, has received another \$2000 grant from the Geological Society of America (GSA) to fund his research on the long-term vegetative, fire and geomorphological history of a high Sierra Nevada watershed. In addition, his work was recognized by the GSA as having "exceptional merit in conception and presentation", a distinction given to only 5% of annual grant applicants. **Jeffrey Clary**, a Ph.D. student with **Truman Young**, has obtained a Fulbright Grant. Jeffrey's research is entitled "Plant Succession and Restoration after Wildfire in Xeric Mediterranean Forests". He will be collaborating with **Dr. Robert Save** of the Catalan Horticultural Institute, Institut de Recerca i Tecnologia Agroalimentaries (IRTA), and **Dr. Josep Maria Espelta** of the Universitat Autònoma de Barcelona. Congratulations, one and all!

### *Visiting Scholars*

**Don Hunter**, who had been working with **Michael Reid** as a postdoc for the last four years, recently returned to New Zealand to take a position as Research Biochemist at the New Zealand Institute for Crop and

# Michael Reid to Chair Gordon Research Conference on Postharvest Physiology by Dorothy Ross

Professor Michael Reid has the honor of serving as chair of the 10<sup>th</sup> Gordon Research Conference on Postharvest Physiology, scheduled for August 4-9, 2002.

Postharvest Physiology, the study of factors affecting the marketing life of fresh fruit, vegetables and flowers, is vital to the health of the nation and the survival of our producers. Postharvest biologists are excited about the wide array of possible applications in the new fields of genomics and proteomics to the genetic modification of crops to render them more healthful and longer lasting. All indications are that tomorrow's foods and plants will not only look better, but they will be more nutritious and will require fewer chemicals and less energy to maintain in their fresh and prime state – the very definition of quality produce.

In prior decades, postharvest technologists relied on chemical applications, temperature regulation, and safe and careful handling practices to lengthen the useful life of harvested produce. Today's science foretells a new era in postharvest technology and biology. The investment in research regarding ripening and senescence is proving its value, for example with recent discoveries providing genetic and chemical technologies for ethylene control.

It would be naive to ignore the American public's seemingly contradictory concerns regarding chemical use in food production, as opposed to their demand that foods be as safe and nutritious as possible. Accordingly, the conference program includes sessions on non-chemical approaches to postharvest quality; food safety and microbiology; a keynote lecture on manipulating plant metabolism to benefit human health; as well as a session addressing which of these emerging technologies are appropriate for the developing world.

The Gordon Research Conferences were founded to explore emerging frontiers and to foster a collegial atmosphere among researchers in the scientific disciplines. Since there are no abstracts or proceedings from the meeting, and since all discussion is "off the record," researchers are uniquely free to discourse and share knowledge regarding

*The program for the 10<sup>th</sup> Gordon Research Conference on Postharvest Physiology consists of the following sessions addressing both fundamental and applied aspects of science as it applies to postharvest physiology. The topics and discussion leaders include:*

- *Genomics and proteomics in postharvest biology*  
Donald Grierson, University of Nottingham, UK
- *Regulation of ripening and senescence*  
Jean-Claude Pech, ENSAT, Toulouse, France
- *Genetic and chemical technologies for ethylene control*  
Margrethe Serek, Royal Veterinary and Agricultural University, Denmark
- *Genetic approaches to improving postharvest performance*  
Ian Ferguson, Horticultural and Food Research Institute, New Zealand
- *Non-chemical tools in postharvest technology*  
John Fellman, Washington State University
- *Critical issues in postharvest technology*  
John Faragher, Natural Resources & Environment, Victoria, Australia
- *Postharvest challenges around the world*  
Marita Cantwell, University of California, Davis
- *Crop postharvest physiology*  
Robert Paull, University of Hawaii
- *Nutritional genomics and postharvest physiology*  
Angelos Kanellis, Aristotle University of Thessaloniki, Greece

their work in process and nearing completion.

"Important emerging science was presented at each of the past nine Postharvest Gordon conferences," said Reid, "and we anticipate that this year's meeting will again address the frontiers of our field. In just the last few years, the pace of research in several areas of postharvest physiology has accelerated rapidly. The conference program reflects these advances by featuring, for instance, recent discoveries in genomics and proteomics related to postharvest research. Vice chair Chris Watkins (Cornell University) and I believe that our organizing committee has developed an exceptional program balancing the broad perspective of senior investigators with cutting-edge research by others who have more recently entered the field."

Although the conference program emphasizes conceptual developments in un-

derstanding how new discoveries in genomics and proteomics are applicable to postharvest biology and nutrition, it also addresses important developments in molecular genetics aimed toward commercial goals.

In addition to the session discussion leaders listed above, the program will include thirty speakers from universities, government, and industry. Because postharvest problems and markets are global, the organizing committee has made a concerted effort to attract international speakers and participants.

This campus has already benefited from Dr. Reid's involvement with this year's Gordon Research conference on Postharvest Physiology because it has provided the basis for a graduate seminar on the conference topics, featuring members of the Plant Biology Graduate Group whose work will be presented at the meeting. **GP**

## Slosson Endowment Supports New Research in 2002-2003

The Elvenia J. Slosson Foundation has been funding UC research in ornamental horticulture since 1970. The Foundation awards nearly \$250,000 annually to UC academic and extension personnel for projects in keeping with Mrs. Slosson's wishes "for the advancement and promotion of the science and practice of horticulture". The projects recently awarded funding for the 2002-2003 academic year address current problems and issues facing California horticulturists. This is part one of a two-part series. Look for another article on Slosson-sponsored research in the summer issue of *Growing Points*.

### *New Garden Cultivars*

Ryan Deering and Ellen Zagory of the UC Davis Arboretum, along with emeritus professors Wes Hackett and John Tucker, are continuing the second year of their project to develop superior cultivars of oaks for Western gardens. The Arboretum has an extensive collection of oaks and many individual specimens possess desirable characteristics such as small size, columnar form and heat and drought tolerance that make them suitable for urban landscapes and gardens. The only way to capture these desirable traits is to produce clonal material from cuttings of individuals. This has proven difficult because the selected trees are over 30 years old and therefore difficult to root by stem cuttings. The focus of this research project is to develop coppiced oak stock plants to serve as a source of juvenile growth for cuttings with improved rootability. Techniques for rooting of cuttings suitable for use in commercial nurseries will also be devised in order to introduce new oak selections to the nursery trade. These techniques may also prove useful for development of oak cultivars resistant to Sudden Oak Death.

Blueberries in southern California gardens? That's the objective of the research project developed by Extension Specialist Don Merhaut of UC Riverside. Wild blueberry species can be found from Maine to Florida. In the past 50 years, plant breeders have incorporated traits from the southern wild species to create many low-chill cultivars that also show increased tolerance to a variety of soil types. In addition, these

varieties exhibit a range of flowering and foliage characteristics that give them merit as woody ornamentals for the garden. Merhaut has chosen 20 varieties of high-bush and rabbiteye blueberries for evaluation in two Southern California locations, Riverside and Irvine. He plans to rate their performance based on foliage quality, autumn color and fruit yield and quality. Merhaut hopes to find varieties that will add ornamental interest as well as fruit production to home gardens.

### *Landscape Plant Management*

Tall fescue is now the most widely planted turfgrass in California yet little research has been done on this species regarding the potential for nitrate ( $\text{NO}_3^-$ ) leaching and groundwater contamination under typical home lawn fertilization practices. Dave Burger of UC Davis plans to evaluate the factors of propagation technique (seed or sod), fertilizer source (soluble or slow release), fertilizer application rate and mowing height on the performance of tall fescue plots. These plots will be established in lysimeters and irrigated regularly enabling the collection of drainage water to simulate the leaching of water through a home lawn soil profile. The leachate will then be analyzed for nitrate content. The results of this experiment will be used to develop Best Management Practices for tall fescue lawns that maximize turf quality and performance while minimizing the potential for nitrate contamination of groundwater.

Homeowners and municipalities suffer considerable physical and financial damage each year due to limb breakage or uprooting of trees during storms with high winds. Pruning is an important cultural practice used to reduce leaf area and aerodynamic drag on trees thereby lessening the potential for wind damage. The relationship of selective pruning to wind damage reduction, however, is not well understood. Ed Perry and John Karlik of UC Cooperative Extension will conduct experiments to evaluate the force exerted by moving air on trees subjected to different levels of leaf and branch removal. They will develop mathematical models based on these data to better understand the phenomenon and propose more precise pruning recommendations to reduce tree dam-



*Current recommendations for control of eucalyptus longhorned borers may make trees more vulnerable to other pests.*

age during high winds.

### *Disease and Pest Control*

Australian eucalyptus trees have become a significant component of the California landscape since their introduction 150 years ago, in part because of a lack of damaging pests and diseases. Since 1984, however, an average of one insect pest per year has made its way to California from Australia to wreak havoc on its favorite food source. Entomologists Timothy Paine and Jocelyn Millar of UC Riverside have been instrumental in developing biological, chemical and cultural controls for each pest as it appeared, funded in part by the Slosson Endowment over the years. Now that eucalyptus trees are under attack by a whole complex of pests including borers, sap feeders and defoliators, control recommendations for one pest may foster an outbreak of another. For example, recommendations to water and fertilize to enhance vigor and resistance to the eucalyptus longhorned borer may create trees that are more susceptible to red gum lerp psyllid and eucalyptus tortoise beetle. For this study, Paine and Millar will conduct experiments to determine interactions and unintended consequences of control tactics for individual pest species. They will then revise eucalyptus pest management guidelines to reflect a more integrated approach to controlling the entire complex of pests.

Visit the Slosson Endowment web site (<http://slosson.ucdavis.edu>) to view reports on projects supported for the advancement of California horticulture. **GP**

## New Guide Demonstrates Cost-Effectiveness of Community Trees

The Center for Urban Forest Research recently unveiled its newest Tree Guide at the Oregon Community Tree's Urban Forestry Summit 2002, in Wilsonville, Oregon on March 8, 2002. This latest Tree Guide is titled *Western Washington and Oregon Community Tree Guide: Benefits, Costs and Strategic Planting*. The guide was designed for the "rainy northwest" climate region and is the fourth in a series of Tree Guides for the Western United States.

Results for Western Washington and Oregon are reported for a typical large, medium and small tree – red oak, Norway maple and purple plum respectively, both public and private. Data from these typical species were collected in Longview, WA and analyzed by computer models to determine the magnitude of benefits throughout the region. The benefits analyzed were kWh and BTUs of energy saved through direct shading or wind reduction, tons of CO<sub>2</sub> sequestered, tons of air pollutants removed by dry deposition or through avoided emissions at power plants, gallons of water intercepted and property value increase.

The value of each benefit was calculated using regional market values for electricity and gas, social costs for CO<sub>2</sub> based on loss of arable land associated with increased global warming, regional cost of control for air pollutants, treatment and control costs for stormwater, and effect of trees on sales price of residential

properties.

Results reveal a significant benefit for each of the three typical species, returning as much as \$3.12 per year for every dollar spent for a 20 year old red oak, planted on public property. The largest single benefit for all trees was the property value increase from \$9.38 per year for the small tree to over \$37 for the large tree. Stormwater interception was the next largest benefit with larger trees intercepting nearly 450 gallons of water per year.

Future guides are planned for the "cold and snowy" climate region and the San Francisco Bay Area in 2003, and the western portion of the "Midwest" climate region in 2004. Other Western climate regions are currently under negotiation. The Inland

Empire, South Coast, and San Joaquin Valley climate regions of California have already been completed.

Partners in the development of the Western Washington and Oregon Community Tree Guide were Cooperative Extension, Oregon State University; and the Department of Land, Air and Water Resources, University of California, Davis. The publication was sponsored by the Western Forestry Leadership Coalition, Oregon State Department of Forestry, Portland General Electric, Pacific Power, Washington Department of Natural Resources, and Puget Sound Energy. The International Society of Arboriculture, Pacific Northwest Chapter, is the publisher.

### *Estimated annual benefits for a small-, medium- and large-sized public tree 20 years after planting.*

	<i>Small tree</i>	<i>Medium tree</i>	<i>Large tree</i>
<i>Mean height (ft)</i>	28	38	46
<i>Mean canopy spread (ft)</i>	25	31	41
<i>Mean leaf surface area (ft<sup>2</sup>)</i>	1891	4770	6911
<i>Total benefits</i>	\$18.12	\$37.24	\$68.92
<i>Total cost</i>	\$12.90	\$13.94	\$22.10
<i>Net benefits</i>	\$5.22	\$23.30	\$46.82

*Annual costs include: planting, pruning, removal/disposal, infrastructure, irrigation, cleanup, liability/legal, and administration.*

### Continued from page 4

Food Research Ltd. in Palmerston. We wish him the best in his new career. **Felicity Johnson**, originally from Adelaide, Australia, has now joined Reid's lab group as a postdoc working on the molecular aspects of flower senescence in *Mirabilis* (four-o'clock). Welcome, Felicity!

### *Staff Activities*

**Loren Oki**, now a postdoc in my lab, will be teaching a two-day course entitled "Plant Propagation Basics" for UC Davis Extension. The class is designed for both professionals and gardening enthusiasts and will be held on June 25 and 26. For more information, visit the Extension website:

www.extension.ucdavis.edu. **Linda Dodge**, Staff Research Associate, won a College Achievement Award for her help in coordinating the National Floriculture Forum tour of California in April. **Jan Allen**, EH's Personnel/Budget Assistant, welcomed grandson, **Taylor James**, into the world on May 14<sup>th</sup> and, at nearly 8 pounds, her family has had their hands full ever since.

### *OHECC 2002*

The Ornamental Horticulture Extension Coordinating Conference (OHECC) held its annual meeting in late March at the Doral Resort in Palm Springs. Organizers **Dave Burger** and **Janet Hartin** wanted to give the group a change of pace from the usual meeting places on the Davis and Riverside cam-

pus. The four DANR workgroups under the umbrella of OHECC (floriculture/nursery, landscape, turfgrass and urban horticulture) consist of faculty, extension specialists and farm advisors working on similar research issues. They held separate meetings during the conference to share information on current projects and plan future collaborations. The highlight of the conference was a day-long bus tour of Coachella Valley horticulture guided by **Jim Cornett**, curator of the Palm Springs Desert Museum. Stops included a sod farm, a date palm orchard and specimen tree nursery, the beautifully maintained City of Palm Desert Civic Center Park and the spectacular indoor landscape at the Marriot Desert Springs Resort and Spa. **GP**

## ***EH Faculty Host Conference on Restoration Issues at UCD***

### ***By Samantha Smith and Truman Young***

On March 21, 2002 the Environmental Horticulture Department at UC Davis hosted its first-ever Restoration Nursery Conference at Putah Creek Lodge in the campus Arboretum. Dr. Richard Evans and Dr. Truman Young organized the one-day conference, which focused on issues relevant to nursery producers of plants for ecological restoration. Representatives of restoration nurseries and organizations throughout northern California dominated the participant list, though there was ample participation from academia as well.

Over sixty attendees from more than a dozen California restoration nurseries participated in a morning series of lectures and an afternoon of participant-led discussion. Each of the morning speakers relayed current research information and helped to draw connections between research and practical application.

Kevin Rice of UC Davis focused on concerns about genetics and plant provenance in restoration. Keli Kuykendall of the Institute of Applied Ecology (Oregon) relayed information about a native seed network she and fellow colleagues are currently developing for Oregon natives. Betsy Peterson, also of UC Davis, discussed the

*Many California nurseries specialize in growing native plants for restoration of disturbed sites.*



new wildland seed certification program, which has not yet become mainstream in restoration. Steve Tjosvold, a UC farm advisor, discussed Sudden Oak Death in container-grown species, reminding us of the concern that nurseries can host and foster the spread of the disease. Andy Suarez of UC Berkeley kept listeners intrigued with his talk on argentine ants, and Vic Claassen of UC Davis successfully drew attention to the issues surrounding use of native versus non-native mycorrhizae and other soil microbes in restoration.

The attendees were active participants

in the question and answer sessions following each talk. Truman Young and Richard Evans facilitated the afternoon discussion session on topics primarily chosen and led by the attendees. Participants discussed practical issues such as cost-effectiveness, limits of genetic matching, and propagation problems and solutions. All were excited about developing closer relationships with the university. The meeting ended with a call for future conferences on this topic, and consideration of the possibility of greater formal and informal links among the nurseries.



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