Chapter General Meeting

Bruce Arthur

When It Rains — It Stores

November 10, 2008
7:30 P.M.

• UCSC Arboretum Horticulture Building •

The rainy season is here, but it will take some time to recover from the low rainfall totals of the last few years. This summer your editor realized that his annual home water usage was less than the amount which naturally fell on his rooftop! (The heavy rainfall in our mountains help.) However, storing that much water is tricky.

Our speaker this month is Bruce Arthur, Manager of Environmental Education at Rainsource Water, which markets underground rain harvesting cistern products. Bruce has studied, and is passionate about, the quality of the water that is generated from the development of our urban living spaces. He is a board member of the Coastal Watershed Council, and a board member and chair of the Education Committee for the Watsonville Wetlands Watch. Bruce is the former Mayor and council member for Capitola. He designed and championed a subsurface flow constructed stormwater wetland Best Management Practice for the Soquel Creek Lagoon.

Large developers are required to reduce to predevelopment quantities and rates the stormwater that leaves the property. By installing a rainwater retention device you can help with this requirement and also have better water quality for your plants, deal with water restrictions for landscape irrigation, provide supplemental water for rural fire fighting, and help prepare for disasters.

Rain matrix boxes can be a cistern to capture and retain rain water for future use. The matrix boxes allow you to build an underground vault to hold the water and still save the area above for other uses. They assemble easily on site so you don’t need any heavy lifting equipment to place them. They are also engineered to be used under parking lots, streets and driveways.

At the meeting we’ll see how to calculate the amount of rain you can capture from roofs and hardscape, dig and prepare the excavation, assemble the matrix boxes, and install an underground cistern. Join us this evening for an exciting talk on rainwater harvesting .. just in time for the wet season!

Conferences on Conservation of Native Plants

10th Annual Central California Invasive Weed Symposium
Monterey County Weed Management Area and CSUMB’s Watershed Institute

November 13-15 at CSUMB University Center
Sixth Avenue and B Street, Bldg. 29, Seaside

Formerly called “War on Weeds”, this symposium will discuss the local research, techniques, and rules on controlling invasive weeds in the Monterey Bay area. CEU credits are available. For details and signup see http://invasiveweedsymposium2008.eventbrite.com

CNPS 2009 Conservation Conference: Strategies and Solutions

January 17-19, 2009 at Sacramento Convention Center and Sheraton Grand Hotel

The conference will focus on
• finding and promoting solutions to the environmental challenges confronting California’s flora
• integrating the best science with the most effective public policies to meet these challenges
• pressing forward more and better regional and statewide landscape-level conservation initiatives.

Sign up before Nov 15 to get the early discount rates: http://cnps.org/cnps/conservation/conference/2009
Patrick Elvander Scholarship Coming Soon

The Chapter is restarting its scholarship program for students studying regional native plant issues. While the details are still being worked out, we though this would be a good time to present Past President Janell Maella Hillman’s profile of the late Professor Elvander.

I was a student of Patrick’s in 1996 and 1997. Although I had been interested in botany for a long time, the classes that I took from him: Plant Anatomy, Systematic Botany, and an independent study on grass taxonomy, formed the basis of my knowledge of plants. I think I probably learned more from Patrick than from any other professor at UCSC. Who I am and the work that I do today: with the local chapter of CNPS and as a botanist in the Santa Cruz mountains and the Santa Clara Valley Water District, has been due in large part to what I learned from Patrick. He has been an incredible inspiration to me.

My impressions of Patrick are that he was an incredibly focused, articulate, and passionate man. He was proud of his profession, his life’s work: botany was his passion, and it came across in the way he taught. We are all lucky if we find something that we love to do; that touches our soul, and can (spend every day doing it) actually get paid to do it!

When I think of Patrick, what I remember most is his incredible teaching ability. Each of his lectures was a work of art. Sometimes at the end of a topic, before a test, we would be behind, or running out of time for him to explain a concept, and Patrick would somehow find a way to clearly and expressively convey the most complicated topics. He was so articulate: sometimes at the end of a lecture I would just sit back and take a deep breath ... then scurry straight for the library to review my notes. Somehow, in roughly 12 weeks of systematic botany, we learned 10 sub-classes and 54 families of plants.

He was never too busy to answer my detailed questions. And when I came to him with three other students wanting to set up an independent study, he found the time to key grasses with us and coordinate our discoveries into the campus herbarium.

He had a way with words and conveying concepts which has really stayed with me. For example, I will never forget that the family Rosaceae can be characterized not by thorns but by “prickles”, or “superficial venations of the stem”. Or, take your ordinary pear. What makes pears so gritty when you bite into them? The presence of sclereids, cells with thick secondary walls. This same type of tissue (sclerenchyma) is often found as a protective layer around stems, seeds, and unripe fruits. The shiny, hard, layers of “skin” surrounding an onion? They’re actually modified leaves.

Patrick had a truly rare gift for teaching. We call illustrators, musicians, designers “artists”. Yet teaching well is also an art.

Patrick once said that “It’s hard to be both a good teacher and a good researcher”. Well, he did both well. I remember that he told me he traveled all over the US to various herbaria to research his treatment of Saxifragaceae in The Jepson Manual. He testified as an expert witness in a trial on the subject of “prickles” mentioned earlier. And he cared a great deal about educating young people in the field of organismal biology. He and I talked about the decline of support for field biology in the rising tide of molecular biology. His kind of knowledge is becoming increasingly rare as we shift our focus to studying intricate pieces of the whole, but often without the balancing perspective of how these pieces fit back into the larger, ecological picture. Patrick believed very strongly in the continued funding and support of organismal biology.

He took his classes on field trips to Big Creek Preserve in Big Sur, and to Pinnacles National Monument. It was an invaluable way to see examples of the plant families we were learning; to understand visually why species are found in particular ecological niches, and how their morphological adaptations are a result of this habitat preference. For Patrick didn’t just teach us plant names and their ordered “place” in a hierarchical structure: he taught us the **how** and **why** of evolutionary relationships.

And of course, wherever we went, whether to the greenhouse at the top of Thieman Hall or to the chaparral and woodland areas of Pinnacles, we saw examples of the most wonderful and important plant family of all: Saxifragaceae.

**Sandhill News: The Randy Morgan Preserve**

The Land Trust of Santa Cruz County honored longtime CNPS Santa Cruz volunteer and board member R. Morgan by naming some recently purchased sandhills habitat the Randy Morgan Preserve. The area was formerly known as the Geyer Quarry. The primary interest in this preserve is the rare sandhills habitat and the several rare and endangered species of plants and insects found there. Despite motorbike damage and past quarrying, it is a valuable remnant of a remarkable habitat. After having Randy take me first out to look at this particular site in about 1985 to talk up the need for its conservation and show me the Dudleya, and watching many long conservation battles, it is very satisfying to see the results of his efforts finally coming through on this one. Many could relate similar stories. He would frequently take botanists, officials, neighbors, entomologists, and others out to...
various sandhills habitats over the years to try to drum up interest in the preservation of the habitat. He was successful in bringing many people on board to help.

Over a few decades R. tirelessly documented the plants, insects, and birds of Santa Cruz County with particular focus on the sandhills. Randy is co-author and/or discoverer of several new species of plants and insects over the years. His more recent research has been on terrestrial orchids, and now clovers. The careful scientific documentation and personal enthusiasm have paved the way for many conservation victories in Santa Cruz County.

He was honored by the statewide CNPS as a CNPS Fellow for his long-term work on botany and successful conservation of rare and endangered plants in Santa Cruz County. He works locally as a consultant and with the Chapter has written a book on the local flora, “An Annotated Checklist of the Vascular Plants of Santa Cruz County, California.” Let us join in congratulating R. on this new honor.

Stephen McCabe, Conservation Committee

Fall Plant Sale Success

A good crowd showed up on the bright and windy October day to help our local chapter come very close to selling out all the plants shortly after lunchtime. This created a good conversation among the volunteers: Are people really getting the message that fall is the best time to put in many of our native plants? Local conditions may have contributed more that usual to gardeners needing more plants. Heat and drought caused stress that resulted in plant loss in both gardens and our propagation stock. The three wild fires in Santa Cruz County in early summer may also have been factors. For whatever reasons, fall seems to be gaining ground as the time to plant.

What does it take to put on the semiannual plant sales? As always, the UCSC Arboretum welcomed us to share the eucalyptus grove on campus as the venue. Steve McCabe wrote publicity to include both organizations. Propagation chairs Denise Polk and Mike Luther readied the plants, had the inspection for the Light Brown Apple Moth performed so that we had the inspection form in hand, and arranged for additional plants to fill in for some of our losses. Members also helped load the truck on Friday afternoon. I prepared the flyer, and the crew at propagation folded, stamped and labeled these for mailing.

It took 16 volunteers at the sale to unload the truck, set up our sale area, check members, advise about plants and make the sales. At the great risk of forgetting someone, the following people spent from 2 to 8 hours working at the sale: Maureen Fitzpatrick, Angel Guerzon, Karen Hildebrand, Kris Houser, Tim Hyland, MaryEllen Irons, Charles Koester, Mike Luther, Fred McPherson, Jackie Pasco, Denise Polk, Darien Rice, Suzanne Schettler, Casey Stewman, Ernie Wasson, and Linda Willis.

Karen Hildebrand, Plan Sales

A Different Kind of Election

The January Public Meeting will include the election for next year’s Chapter Board of Directors. If you are interested in running for an office please contact a current board member or Brett. We promise that there will be no annoying radio or television commercials!

Special Restoration Event: Big Basin & Castle Rock State Parks

November 12 – 16, 2008

High Sierra Trail Crew is organizing a project to clean up “busted” marijuana plantations. Part of this project will include a one- or two-day excursion to Big Basin for another project. This event is scheduled for Nov 12 – 16, and includes camping and great food in exchange for hard work. They would like 30 – 50 volunteers. Go to www.trailcrew.org for details and registration.

Habitat Restoration Team

We are a volunteer group working to restore native habitat in the parks and protected lands in Santa Cruz County. Our program provides an opportunity for people to learn about the natural systems that surround them while helping to restore special and wild places. No prior work experience is necessary, just show up at the park. We welcome individual volunteers from 8 to 80 years, as well as special group projects. Wear comfortable layered clothing, bring something to drink, and lots of enthusiasm! We work rain or shine, but if things get particularly unpleasant, we call it a day. Tools are provided; bring gloves.

Linda Brodman 831.462.4041, redwdrn@pacbell.net

November 8, 2008 10 am to 1 pm
Sunset Beach State Park

November 22, 2008 10 am to 1 pm
Quail Hollow Ranch County Park

December 6, 2008 10 am to 1 pm
Twin Lakes State Park
Join the California Native Plant Society!

Name:___________________________________
Address:_________________________________
City:_________________ State:___ Zip:____
Phone:___________________________________
Email:___________________________________

Chapter (County) Affiliation: ____________________________

Please make your check payable to CNPS and send to: Membership Chair, CNPS, 2707 K Street, Suite 1, Sacramento, CA 95816

☐ Student/Limited Income $25
☐ Individual $45
☐ Family, Group or Library $75
☐ Plant Lover $100
☐ Patron $300
☐ Benefactor $600
☐ Mariposa Lily $1500

All dues and gifts to CNPS are tax deductible.

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