



University of California, Irvine

Arboretum Quarterly

For members of the Friends of the UCI Arboretum
Spring 2011

Spring is for the Birds – Especially Endangered Ones at the UC Natural Reserve System's San Joaquin Marsh Reserve!

By Dr. Peter Bowler, Director, UCI Arboretum

Nesting is underway as spring eases into summer at the University of California Natural Reserve System's San Joaquin Marsh Reserve. Young Mallard ducklings and tiny, puff-ball American Coots are appearing throughout the Marsh. Black-Necked Stilts, Avocets and Killdeer are in the process of incubation in their many nests. One of the ancillary benefits of removing over 3,000 lineal feet of un-needed roads last spring is that it has rendered a large area of the Middle Marsh inaccessible – effectively isolating an area of more than 50 acres of wetland habitat. This part of the Reserve provides prime nesting habitat that cannot be easily approached, and it is vibrant with undisturbed avian activity.

We were astonished and overjoyed to have confirmation of two nesting pairs and three solitary male individuals of Light-Footed Clapper Rails this year. The last record of nesting for this highly Endangered Species at our Marsh was in the 1982–1987 period (see Zembal, Hoffman and Konecny, 2007 and an older Clapper Rail study by Zembal, Hoffman and Bradley, 1995). This may be a new record of the Light-Footed Clapper Rail using coastal bulrush (*Schoenoplectus robustus*) as a nest substrate. At least one pair of Least Bell's Vireo, also an Endangered Species, is nesting in black willows along the Marsh periphery – another first, though vireos have been recorded in the Reserve many times. A pair of Black-Shouldered kites also nested in back willows at the wetland's edge.

California gnatcatchers (Threatened) are reproducing in the coastal sage scrub restorations surrounding the wetlands. A resident pair of Canada geese fledged three goslings this spring, a new nesting record

for this usually migratory species in the Marsh. Thus, it is a busy time in the ornithological world of the wetland. Other sensitive species that visit the Marsh in the spring are an occasional Burrowing Owl and the usual anthology of migrants like the White-Faced Ibis.

The Sea and Sage Audubon Society (<http://www.seaandsageaudubon.org/>) has commenced surveying our Reserve on a monthly basis, and has superb web-based resources and information, including a bird checklist for the wetlands at <http://www.seaandsageaudubon.org/SJWS/sjwsbirdlist.htm>, and its newsletter (the Tattler) at <http://www.seaandsageaudubon.org/Tattler/tattler.htm>, among others. Monthly bird counts at the San Joaquin Wildlife Sanctuary at the Irvine Ranch Water District may be accessed

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A Black-Necked Stilt nest in the Marsh this spring.

Photo by Peter Bowler



Notes from the Nursery – July 2011

by Laura Lyons, Nursery Manager

Spring is finally here – spring weather, that is. The calendar says June, but the weather reminds me of April and early May.

Warmer weather means a whole new crop of plants blooming in the Nursery. We have some great new items, and some very nice plants are back in stock. Let me share a sample of them with you!

New plants

Beaumontia grandiflora – Easter Lily Vine. This is the stunning vine with white trumpet flowers that grows on the corner of the Arboretum's lath house.

When it's blooming everyone wants it. We were recently able to obtain some very nice 5 gallon pots of this showstopper for our sales.



Beaumontia has large, dark green leaves that are a vivid contrast to the large white flowers it carries in profusion each spring. It can get quite large – over 20 feet - but grows slowly. Full sun is ideal for best flowering. It needs a trellis or some other type of support.

Heuchera "Venus" – Coral Bells. *Heuchera* is prized for its foliage color and this selection is no exception, being a silvery white with dark green and burgundy veining. Like all *Heucheras*,

it requires shade and prefers regular water. It grows 1-2 ft. tall and broad, and flowers in late spring and summer. Cold weather makes it sulk but it



always comes back strong when the weather warms.

Aloe "Hercules" – This remarkable hybrid of *Aloe barbarae* and *Aloe dictotoma* has inherited traits from both parents. It has the deeply ridged bark and heavy trunk of *A. dichotoma*, foliage that is intermediate between the two plants and flowers that are highly variable, ranging from yellow to orange (*A. dichotoma* has yellow flowers, *A. barbarae* coral orange). The result is a remarkable plant that has been getting a lot of attention from fanciers.

It can grow quite large, to 30 to 40 feet, but like most tree aloes grows slowly. Full sun is ideal.

Polygala myrtifolia "Grandiflora" – Sweet Pea Shrub. This South African perennial forms a small, compact shrub

4-6 ft tall and wide with lush green foliage and large, vibrant rose pink flowers with white highlights. The flowers are sometimes compared to orchids but like



all *Polygalas* they are closely related to the pea family (Fabaceae). Full sun is ideal.

Protea "Pink Ice." *Proteas* are justly prized in the garden and as cut flowers, with their large, showy blossoms. *Protea "Pink Ice,"* is 6-8 ft tall and 4-6 ft wide. Full sun and good drainage are a must – keep it in a large tub or try a raised mound or raised bed. The large showy flowers are a medium rose pink and it typically blooms 2-3 times a year.

Leucospermum "Yellow Bird." – Nodding Pincushion. This *Protea* relative features showy yellow flowers in springtime. Growing conditions are identical to *Protea "Pink Ice."* 4-5 ft tall, 6-8 ft wide.

Kalanchoe orgyalis – Copper spoons. Rounding out our new introductions is this curious succulent that features large, copper leaves cupped like the bowl of a spoon – hence the common name. Usually reaches 2-3 ft tall, sometimes higher if it's in the perfect spot. It has yellow flowers in springtime, but the foliage is the real attraction on this plant.



Back in stock

Besides all of the new introductions, we have a number of choice items back in stock.

Scilla natalensis – Natal Fairy Lily. This charming plant features large spikes of powder blue flowers in springtime. The flower spike elongates as it opens and I've seen spikes reach 2-3 ft tall.

The bulb is very easy to grow and naturalizes beautifully in the garden. Our crop of seed-grown *S. natalensis* reached blooming size this year, so plant it now and you'll have a show next spring. The bulb multiplies over time enhancing the show – last spring the *Scilla natalensis* in my home



garden had six spikes. Grows in full sun to part shade - the further inland you are, the more shade it needs.

Pelargonium cordifolium – Heart Leaf Geranium. Our crop of this popular perennial was very slow to mature this spring, but we finally have it back in stock. This easy to grow perennial reaches 2-3 ft tall and broad, with dark green, heart shaped leaves. The plant has showy purple flowers, heavy in springtime, lightly the rest of warm weather. Cut this plant back severely every 1-3 years to keep it from getting leggy. Otherwise, like most *Pelargoniums*, it is an unfussy plant.

Eucomis "Pole-evansii" – Giant Pineapple Lily. This remarkable summer bulb features the largest flower spikes in the genus, sometimes reaching 5 ft tall! The plant provides a show all summer – the actual flowers only last a few weeks, but the bright green bracts that form the structure of the flower last for months. The flowers are followed by seed pods that range from burgundy to white when ripe – I have had visitors exclaim over the "flowers" when the plant is

actually in seed! Full sun to part shade, naturalizes beautifully, tolerates a wide variety of soil conditions and can thrive on very little water – though the foliage will be more lush with regular irrigation.

Leonotis leonorus – Lion's tail. A small shrub from South Africa. Sports curious orange flowers in clusters, set off vividly by the dark green foliage. 4-6 ft tall, 2-3 ft across, full sun to part shade, tolerates nearly any soil. Tends to stay compact, but benefits from being cut back severely every few years. Otherwise, this plant is not fussy and easy to grow.



As always, this is only a sampling of the plants available at our sales, and there are new varieties coming in each month. I always show our sales staff the "latest and greatest" before we open for each sale, so they are always ready to show you what's new and cool in the sales area.

Fountain of Youth Found in Arboretum Fernery

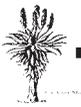
By George and Marilyn Long

Keeping yourself in shape while keeping our fern garden neat and tidy is a "win-win" situation for both you and our attractive fernery, located just to the left of the main garden entrance. This garden was installed over eleven years ago by members of the Los Angeles International Fern Society. The main keepers of the garden have been Herb Wilkinson, Kurt and Lois Rossten, and George and Marilyn Long. They have faithfully kept this special corner of the Arboretum attractive, neat and tidy. We are looking for additional volunteers to help in keeping up the garden.

The once a month routine will require only a few hours of your time. Duties consist of raking leaves, pulling a few weeds, trimming spent leaves, checking the watering system, replacing plants and plant name tags, when necessary. All of this activity will keep you in shape and you will surely meet some friendly folks to share your morning or afternoon workout. You may want to catch a cup of coffee or burger afterward at the local Starbucks or Burger King.

Please call Laura Lyons at her office (949) 824-5833 to see what time works for you.

We look forward to meeting you in the Garden.



Spring Nesting at the San Joaquin Marsh

at <http://www.seaandsageaudubon.org/BirdInfo/BirdCounts/SJWScensus/SJWScensus.htm> and at Upper Newport Bay: <http://www.seaandsageaudubon.org/BirdInfo/BirdCounts/UNBcensus/UNBcensus.html>



Above, Killdeer eggs in a nest at the Marsh.

Right, a Black-Necked Stilt sitting on a nest built of coastal bulrush stems.

Photos by Dr. Peter Bowler

Zemba, R., S. Hoffman and J. Konecny. July 2007. Status and Distribution of The Light-footed Clapper rail in California, 2007. Submitted to California Department of Fish and Game and the U.S. Fish and Wildlife Service on behalf of the Clapper Rail Recovery Fund. Unpublished, 19 pages.

Zemba, R., S.M. Hoffman, and J.R. Bradley. 1995. Light-footed Clapper Rail Management and Population Assessment, 1995. State of California



UCI Arboretum presents our next

Saturday Plant Sale

Saturday, July 9 9 a.m. to noon

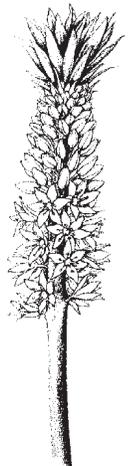
Choose from summer perennials, succulents, and blooming bulbs
from our nursery

Many unique and easy to grow items for your garden

Expert advice on selection and care

Free admission and parking

For more information please call (949) 824-5833 or visit
arboretum.bio.uci.edu





The UCI Arboretum and UC NRS Marsh Reserve Work Together in Providing UCI Undergraduates with Field Experiences

By Dr. Peter A. Bowler, UCI Arboretum Director and Faculty Manager of the UCNRS San Joaquin Marsh Reserve

The UCI Arboretum and the UC Natural Reserve System sit side by side, linking the UCI Main Campus with North Campus. They are two of UCI's premier natural resources and are unified in providing joint and complementary field experiences for classes and many different opportunities for UCI researchers.

Though the two facilities complement each other as a rich source of teaching and research opportunities, they



operate under different management and administration. The Arboretum is a facility supported by the UCI School of Biological Sciences, and the Marsh Reserve is a

part of the UC Natural Reserve System that is managed here by the UCI Office of Research Administration. These two adjacent UC resources are the most heavily used University sites for easy to reach field trips – and they work well together as forums for classes to see very different kinds of outdoor settings.

The Arboretum was created for public enjoyment, teaching and research and it is a site where the origins of its plants are documented. The Marsh is in part “natural” and not manipulated, but has a created eleven pond area that is heavily managed and available for water level manipulation and use.

Besides being an experiential arena for human-created botanical beauty as well as a research and teaching facility, the Arboretum is the launch-point for classes that enter the UC Natural Reserve System's San Joaquin Marsh Reserve. Classes going to Marsh congregate at the Arboretum gates

on North Campus, do a quick walking tour of the Arboretum, and then begin their trip into the Natural Reserve.

Students in classes that used the Arboretum either directly as a focal site for a field trip or as a passageway to the Marsh during the past quarter include Field Freshwater Ecology (Bio. E179L), Earth System Sciences Field Methods (ESS 114), Studio Art 81 A (Video Production), Human CORE 1C, Global Sustainability (Bio. 191CW), and Limnology and Freshwater Biology (Bio. E179). Horticultural Practices (Bio. 197) is a new class this academic year that provides students with training about the Arboretum and allows students to earn credit while familiarizing themselves with the hands-on aspects of horticulture. We had fourteen students in this special class this quarter, and another twenty-three students doing Independent Study (Bio. 199) work at the Arboretum as part of their research experience under my supervision.

An amazing 344 students in the six separate classes of Field Freshwater Ecology (Bio. E179L) used the Marsh and Arboretum for four weeks this spring – constituting an exciting level of class time spent enjoying these habitats. The Limnology lecture class and the Global Sustainability course contributed an additional 200+ students who used both sites – not to mention the more modest course utilization





Marsh, Arboretum Provide Unique Classroom

by non-biologically focused classes. And, of course, the Arboretum’s capstone course - Horticultural Science (Bio. 9E – the lab component of which is taught at the Arboretum during Winter Quarters) continues to be extremely popular. Having wireless internet capability at the Arboretum is a much-appreciated amenity that attracts students wanting a place outdoors to study.

In short, the Arboretum presents a fabulous anthology of South African and California Floristic Province biome exhibits - from the Athalie-Clarke Wildflower and Grassland knoll to the coastal sage scrub, maritime bluff scrub, oak woodland, Otay Mesa endemic display, Baja California, the Channel Islands and South African *Aloe* displays – as well as being a restorative place to relax and enjoy the beauty of the natural botanical world. The Arboretum is a gateway to the Marsh Reserve, where one can see superb examples of large cattail wetlands, vernal pools, restored coastal sage scrub, the eleven created experimental ponds – and the abundance of wildlife they sustain.

Together these adjacent University of California resources annually host thousands of students in field experiences and opportunities for class use and research – and the Arboretum provides the added benefit of hosting a large volunteer base and a chance for the University community to get its hands in soil! You are invited to

participate, and we welcome new volunteers and plant enthusiasts with open arms!

The mission of the UC Natural Reserve System and information about specific NRS Reserves are available at <http://nrs.ucop.edu/mission.htm> (for the Marsh Reserve, see http://nrs.ucop.edu/reserves/san_joaquin_marsh/san_joaquin_marsh.htm). The role and function of botanic gardens and arboreta are well portrayed in H. Bruce Rinker’s short article, “The Weight of a Petal: The Value of Botanical Gardens” at <http://www.actionbioscience.org/biodiversity/rinker2.html>



Arboretum Calendar – Summer 2011

Tuesday, July 5 – Arboretum Closed, Independence Day

Saturday, July 9 - Saturday Plant Sale, 9 a.m. to noon

Saturday, July 23 – Volunteer Workday, bulb repotting – 8:30 a.m. to 11:30 a.m.

Saturday, August 13 – Saturday Plant Sale, 9 a.m. to noon

Tuesday, September 6 – Arboretum closed, Labor Day

Saturday, September 24 - Saturday Plant Sale, 9 a.m. to noon

Looking ahead
Fall Art and Perennial Sale
Saturday, October 15

Fall Clearance Sale Saturday
November 12, 9 a.m. to 3 p.m.