FRIENDS of FAMOSA SLOUGH

A California Non-Profit Corporation

Box 87280, San Diego, CA 92138-7280

NOVEMBER 2008 NEWSLETTER

General Meeting and Program

" UPDATES ON FAMOSA SLOUGH AND THE SAN DIEGO RIVER "

Wednesday, November 19th, 7:00 PM

PRESENTATIONS

• What improvements have been made, and what can we expect to see along the San Diego River in the coming years? Why is it such a big issue now, when the River had been ignored for many decades? **Robert Hutsel**, **Executive Director of the San Diego River Park Foundation**, will answer these and other questions.

• The City is planning to replace many of the aged water and wastewater mains around the Slough in the near future, to avoid future serious damage that water and soil from broken pipes has caused to the Slough in the past. **Chris Gascon, Project Manager for the City's Engineering and Capital Improvements Department,** will describe the replacement project and wants to hear our comments and concerns.

ART SHOW

Local artists are invited to show some of their paintings and photographs of the Slough and its inhabitants.

The public is invited.

Light refreshments will be provided.

Location — Loma Riviera Condominium Clubhouse, 3115 Loma Riviera Drive

(Directions are on the back page.)

A Macro View—Famosa Slough Yesterday, Today and Tomorrow, by Jim Prine

To "widen the picture" and obtain a holistic (macro) perspective of a natural environment, a wise ecology professor I know asks students to understand: what was it? what is it now? and what will (or can) it become? The interactive processes of geology, soil, climate, hydrology, plants and animals, and human effects – results in an ecological expression that naturally changes over time as the influencing factors change.

Picture 3,000+ years ago when the Slough was a finger canyon where freshwater runoff probably supported species such as willow and sycamore. (*continued on page 2*)

New Trail Opens at Famosa Slough

The long awaited trail along the south side of West Point Loma Blvd. has been opened to the public this summer. The trail was constructed as part of the marsh restoration project in late 2005 that restored 2 acres of wetland and created an island. The gates were kept closed so that the vegetation could get established. With the help of many volunteers and the **Rotary Clubs of Shelter Island and Downtown** in 2007, a bench and posts were installed for fencing. The Friends have also installed a bench in memory of past Board member, **Bill Bartleman**.

Ken Goldman, a widely known Ocean Beach artist, has done at least 4 paintings from the recently opened trail, an area which gives the best possible view of the newly-restored marsh in the project, a very popular place for both resident and migratory birds. Ken was a frequent visitor to the new trail after it opened this summer, with his easel on the trail at different locations for different perspectives on the main slough.

Black and white picture of a Ken Goldman painting and Slough view

A Micro View—Crabs at Famosa Slough

by David Kimball

Famosa Slough is home for several species of crab. By far the most abundant are the lined shore crab and fiddler crab. The mature adults range in size from one to two inches across. They are an important food source for many of our Slough birds. Their feeding and courtship are easily observed from many points along the Slough trails with a pair a binoculars.

The lined shore crab is the *Pachygrapsus crassipes*, a semi-terrestrial crab that lives high in the intertidal zone. They forage in and out of the water during the day. They spend at least half their time out of water but return periodically to pools to moisten their gills. (*continued on page 2*).

A Macro View (*continued from page 1)*

Then, a natural, gradual sea-level rise introduced an estuarine tidal regime that brought ocean salt water and finer organics that formed peat soil and rich marsh soil deposits (14 to 22 feet deep), and transformed the small canyon to a broad marsh plain. As part of this dynamic and "moving picture," freshwater flooding along the San Diego River has also historically influenced physical and biological conditions in the Slough. The 1825 flood caused the river to shift its outlet from Mission Bay to San Diego Bay. The river mouth was returned to Mission Bay in 1876, when the U.S. Army Corps built a dike for shipping to prevent the San Diego River from continuing to flow into San Diego Bay. Other significant physical changes that have affected the Slough include: construction of a railroad line across the Slough in 1924 (pilings still visible today); construction of West Point Loma Blvd. sometime between 1930 and 1937; channelizing the San Diego River and installation of tide gates in the 1950s; and construction of Interstate 8 in 1969.

Today, as a result of natural processes and human effects, including many positive hydrology and habitat restoration efforts over the last 20+ years (e.g., new tidal gates and increased culvert capacity for improved water circulation, creation of treatment wetland ponds, and salt marsh habitat restoration) – the Slough is a diverse complex of habitats including saltwater pond/open water, coastal salt marsh, intertidal mudflat, coastal salt panne, coastal brackish and freshwater marsh, riparian and scrub, and disturbed habitat that support a diverse assemblage of flora, vertebrates and invertebrates. Picturing tomorrow over the next 100+ years includes continued exciting opportunities for hydrology and habitat restoration projects and also an understanding that global warming and rising sea-level will alter the composition and proportion of habitat types (and flora and fauna) that occur at the Slough. Picturing 3,000 to 10,000+ years into the future the earth may be experiencing the next mini ice-age, followed by climatic cycles, influences and changes in plant and wildlife species we can only partially predict and imagine today.

Reddish Egret, photo by Jim Pea

A Micro View (*continued from page 1)*

Shore crabs feed on films of algae and diatoms, which they scrape off the rocks with their claws, and occasionally eat dead animals or small intertidal invertebrates.

Female shore crabs ready to mate release a chemical that attracts males. They then molt and become soft-shelled. A courtship dance is followed by mating and the laying of thousands of eggs.

Fiddler crab *(Uca pugnax)*

The fiddler crab at the Slough is *Uca crenulata* or Mexican fiddler crab—one of over 100 species of fiddler crab named for the one enlarged claw. The male fiddler crabs dig deep burrows in the mud. When the ebb tide approaches, they pull a lid over their burrow. As the water recedes, they emerge to feed and attract the much smaller (and symmetrical) females. When they see a female, they wave their large claw in an attempt to attract a female into their burrows and to intimidate male competitors.

A female attracted to a male's burrow remains there during the 2-week incubation period and then comes out to release her eggs (hundreds to thousands), which are swept out to sea by neap tides. After hatching, larvae go through six or so developmental stages over the two-week period that they are adrift in the ocean. They are then transported back to the Slough by tides.

Adult fiddler crabs feed on organic material extracted from mud. Pellets formed during burrow excavation can be seen around the entrances to the male's burrows.

Plant Diversity at the Slough, by Ian Cain

Total plant diversity known at the Slough is currently 172 species. Sometimes questions come up like: What's the most important plant? What's the most dominant? What's the rarest? The answer to all these is the same: it depends where you look and if you mean only the Slough or the Slough's contribution to the flora of San Diego County. In a broad sense, the Slough has two vegetation types, marine and coastal.

For the marine environment the most important is a three-way tie between Cattail, California Bulrush, and Batis. The first two are reeds and are found in the treatment ponds and along the channel. They are important because they provide not only habitat and intrinsic beauty to the Slough, but they also help to filter the water of pollutants that come from neighborhood toward the San Diego River. The California Bulrush is most likely the dominant species based on number of individuals and total biomass. Thinking outside the Slough, however, Batis, a ground crawling pale green succulent right at the margin of the water, is the single most important species in the entire Slough. This is because the Batis in the Slough represents one of six populations in San Diego County known from records going back into the 1880's, and is the one furthest north in the county. This also makes Batis the rarest plant in the Slough in terms of contributing to the flora of San Diego County. In terms of only in the Slough, Olney's Bulrush with one population of several dozen individuals in the treatment ponds at the south end of the Slough is the rarest. This can easily be distinguished from California Bulrush in that the stem is concave in Olney's, and convex in California Bulrush. *(continued on Page 3)*

Plant Diversity *(continued from Page 2)*

On the coastal environment, since so many of the species seen were planted in the past few decades, nothing can be considered rare in a large scale, but in terms of only the Slough, one population of South Coast Morning Glory with 3 individuals found beyond the mound in the east part of the new trail is the rarest. And since this was discovered before the new channel was cut making a new island, these plants might not even be there anymore. The dominant plant is most likely a three-way tie between Big Saltbush which dwarfs the fence along West Point Loma Blvd. in many places, California Sagebrush and Lemonadeberry which have been planted extensively in the past. The most important is, well, all of them. They all play equally important roles in habitat formation, keeping out invasive species, food for pollinators, and intrinsic beauty.

The Friends of Famosa Slough (FFS) is a 501(c)(3) nonprofit organization established to protect and restore the Slough as a natural wetland preserve and to promote public awareness of the importance of wetlands. The Slough was purchased by the City of San Diego in September 1990 and is managed by the City's Park and Recreation Department.

FFS Board of Directors

Chairman:	Jim Peugh	619/224-4591
Vice-Chairman:	David Kimball	619/224-4975
Secretary:	Chet Nelson	619/222-7006
Treasurer:	Barbara Peugh	619/224-4591
Directors:	Ian Cain	619/223-4939
	Cliff Hewitt	619/222-9849
	Jim Pea	619/291-6612
	Jim Prine	619/224-3446

For more information about the Friends, see the FFS web site: **http://www.FamosaSlough.org** .

The City's contact is the **Mission Bay Senior Park Ranger, phone 858/581-7602**.

Culvert Extension Update, by Jim Peugh

As we mentioned in our last newsletter, the Culvert Extension Project was completed at the beginning of this year. It restored and extended a large abandoned pipe under West Point Loma Boulevard to allow better tidal flushing. The project was managed by the Friends with the cooperation of the **City Park Department and the Street Department** and funded by a grant from the **California Wildlife Conservation Board**. We contracted with **Merkel and Associates** for the project. They contracted the construction work to **Arrieta Construction**.

The project has worked out very well. The extreme tidal flows are able to pass under West Point Loma Blvd. with no visible obstruction, in sharp contrast with the obvious restriction before the project. This means that the wetland vegetation should gradually expand its range. The fish, crabs, and invertebrates will benefit from the improved tidal flushing causing better moderation of water temperature, better infusion of oxygen from the ocean, and other benefits. It brings the Slough a little closer to its historical close connection to the San Diego River and the Pacific Ocean.

Culvert Extension at Slough

KGTV 10 News Leadership Award

In late breaking news, **Jim Peugh** was awarded a **2008 10 News Leadership Award** in honor of his work for the environment. There was a presentation at the Slough with **Geni Cavitt of KGTV Channel 10** on November 4th that will be broadcast Nov. 13th.

MEMBERSHIP IN FRIENDS OF FAMOSA SLOUGH

_____ FULL MEMBERSHIP. Yes! I/We support the goals of FFS and submit $10.00 annual dues. $_____

_____ ASSOCIATE MEMBERSHIP. Yes! I/We support the goals of FFS and wish to be counted.

(Contributions are tax deductible to a 501(c)(3) organization.) ADDITIONAL CONTRIBUTION: $_____

TOTAL AMOUNT ENCLOSED: $_____

NAME(S) _____ PHONE _____

ADDRESS _____ E-MAIL _____

CITY_____STATE _____ZIP _____

I/We volunteer to: _____ assist with administrative tasks, ____ clean up around Slough, ____ help with educational activities, ___distribute flyers, ___assist in park planning, ___collect environmental data/do research, ___assist in special events, ___anything.

Other pertinent skills:

MAIL TO: PO Box 87280, San Diego, CA 92138-7280

UPCOMING EVENTS

Wednesday, November 19th, 7:00 PM — FFS General Meeting

"Updates on Famosa Slough and the San Diego River"

Loma Riviera Condominium Clubhouse (see page 1 and below)

WORK PARTIES

2nd Saturday of odd-numbered months — November 8, January 10, March 14, etc.

Meet at 9:00 AM at the intersection of West Point Loma and Famosa Boulevards - **Volunteers needed!**

BIRD WALKS

3rd Saturday of every month — November 15, December 20, January 17, etc.

Meet at 1:00 PM near the kiosk on Famosa Blvd., south of West Point Loma Blvd. - **Beginners welcome!**

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" UPDATES ON FAMOSA SLOUGH AND THE SAN DIEGO RIVER "

Speakers

Rob Hutsel, San Diego River Park Foundation and Chris Gascon, City of San Diego

Art Show

Display of Famosa Slough Art work

Loma Riviera Condominium Clubhouse
3115 Loma Riviera Drive

Directions: From West Point Loma Boulevard, one long block west of Midway Drive and Sports Arena Drive, turn north at Loma Riviera Drive (at the Riviera Liquor House), and proceed a couple short blocks to the clubhouse on the right. Park on street.

Osprey at Slough, photo by Jim Pea

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ADDRESS SERVICE REQUESTED