

Focus on Water Conservation



The City of Sacramento's Stormwater Quality Improvement Program recently awarded the Discovery Museum a grant to improve Owl Creek. A portion of this grant is also devoted to the presentation of water education programs to summer camp participants and to the general public. Owl Creek flows across the museum grounds and empties into Arcade Creek, an important watershed for Northern California. The grant funds enabled the Museum to purchase rocks to stabilize the banks of the creek and to reduce erosion, especially at the Eastern edge of the parking lot. On May 14th, twenty Junior Girl

Scouts placed the first two yards of rock in the erosion control area. On Saturday, June 25th, ten AmeriCorps volunteers placed the last two yards of rock in the eroded area. These volunteers were chosen to participate in the AmeriCorps "Summer of Service" program and ranged from 14 to 17 years old. Both youth groups were hard working and enthusiastic; and without their much needed assistance, staff would have taken weeks to place all the rocks. Campers attending the IBM Science camp received the first water education summer camp lab last week. Four more labs are to follow in July and August. For Museum visitors, education staff will set up Stereoscopes, microscopes and water samples to observe on September 17th & 18th. We invite you to join us for a peek at the flora and fauna of Owl Creek.

IBM Sends Kids to Camp

IBM Global Technology Services supported a Children's Receiving Home Summer Science Camp. The camp which was held last week, benefitted 25 children who attended science camp at the museum. They used microscopes, studied geology & nature, performed chemistry experiments, saw Planetarium shows and met the animals, up close. Craft times and snack times were popular as well! This service project also marked the 100th year anniversary of IBM. Staff members from IBM, assisted with the camp by providing a much needed helping hand. Laurie Caillot, IBM Deputy Project Executive, related how much fun the IBM staff had helping youngsters from the Sacramento Children's Receiving Home with their science lessons. The campers didn't leave empty handed but were given back packs, notebooks, pens and a T-shirt, all donated by IBM.



Volunteer Appreciation Luau

On Monday, June 13th, the Discovery Museum honored its volunteers with an Appreciation Luau. The guests were treated to Hawaiian dishes like, pork, chicken and veggie kabobs, rice, fruit skewers, tropical fruit whip and to top it all off, pineapple upside-down cake. Lovely Polynesian dancers from the Aloha Dancers school in



Cameron Park mesmerized the guests with their graceful movements. Some volunteers and staff even joined them for a dance! Our honored guests agreed, it was a fun and memorable night. The Discovery Museum would like to thank the following individuals for their contributions to the event...

Sponsoring a Table:
 Supervisor Jimmie Yee
 Councilmember Steve Cohn
 Otto Construction
 Big Hairy Dog
 Judy D'Amico (Project Lead the Way)
 Bernice Woo- In memory of Jack Woo
Providing Food & Refreshment:
 Tim Ferry & Byron Holmes - Dinner
 Celeste Chin - Wine
 Gil Benavidez - Coca Cola
 King's Hawaiian Rolls - Bread

Ariadne's Crown

Finding constellations is an enjoyable pastime on a clear Sacramento night. Orion the Hunter, Scorpio the Scorpion, Pegasus the Winged Horse - these and more are easily viewed from our area. Other star patterns, with few or no bright stars, are more of a challenge. Among these is a constellation representing the crown worn by a legendary princess. The princess' name was Ariadne, and her starry diadem is Corona Borealis, the Northern Crown. Ariadne was the daughter of King Minos, ruler of the island of Crete. In the twisting tunnels beneath her father's castle lived Ariadne's half-brother, the Minotaur. The Minotaur was a savage creature, part man and part bull. When the hero Theseus arrived to destroy the Minotaur, Ariadne helped the young adventurer. After the Minotaur had been killed, Ariadne mar-

ried Theseus and sailed with him away from Crete. On her head she wore a jeweled crown, a gift from her new husband. Unfortunately, Ariadne's happiness was short-lived. Theseus soon abandoned her, leaving her behind on the island of Naxos. There she was discovered by the Wine God Dionysus, who fell in love with her. They were married, and stayed so until Ariadne died. Upon her death, Dionysus placed her crown in the sky, where the glittering jewels turned into stars. To find Corona Borealis in the night sky takes a bit of practice. Look high in the South as soon as the sky is dark. Ariadne's crown will look like a backward "C". Although none of the stars are particularly bright, the star Gemma is slightly brighter than the others. With a little luck, you will see Ariadne's shining crown.

Fun on the Fourth

Lookin' for fireworks this Fourth of July? We've got 'em! For its second year in a row, The Discovery Museum Science & Space Center is running a TNT- safe & sane Fireworks booth. The stand is located just inside the Museum parking lot, so you can enjoy a day at the museum with your family and pick up your fireworks on the way home. Firework sales begin on June 28th from 10am-10pm and run until the evening of July 4th. So celebrate America's Independence while supporting fun, hands-on science education!



I WANT YOU...
 To purchase your Independence Day Fireworks at the Discovery Museum!

Challenger Learning Center 2011 Community Mission Schedule

(For ages 9 and above!)
 Select Fridays 5:30pm-8:30pm

- Pre-registration is required:
- \$20 non-members
 - \$15 for members

2011 Mission Dates:

- ✓ Oct 28th (Mars)
- ✓ Dec 16th (Comet)
- ✓ Feb 17th, 2012 (Mars)
- ✓ April 13th, 2012 (Moon)

For more information, please visit www.thediscovery.org or call (916) 808-3942 to make a reservation!



For a complete listing of participating Merchant Club business locations, please visit our website at www.TheDiscovery.org.



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Printed thanks to a grant from



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Inside This Issue

Atlantis' Last Flight	1
Focus on Water Conservation	2
IBM Sends Kids to Camp	2
Volunteer Appreciation Luau	2
Ariadne's Crown	3
Fun On The Fourth	3
Merchant Club Members	3
Challenger Mission Schedule	3
Weekend Activities	4

A Discovery Museum Science & Space Center Newsletter

July 2011
Volume 3, Issue 7

Discoveries

Atlantis' Last Flight

The very last space shuttle flight before NASA retires the 30-year program is targeted to launch on July 8, space agency officials announced Friday.

The shuttle Atlantis is slated to carry four veteran astronauts to the International Space Station to deliver supplies and spare parts for the orbiting outpost. NASA is targeting to launch Atlantis from the Kennedy Space Center in Florida on July 8 at around 11:40 a.m. EDT.

During the final shuttle flight, Atlantis also will deliver an experiment "to demonstrate and test the tools, technologies and techniques needed to robotically refuel satellites in space - even satellites not designed to be serviced," NASA officials said in an announcement.

The four-astronaut crew will return an ammonia pump that failed on the space station in July 2010. Engineers want to understand why the pump failed and hope to use the knowledge to improve designs for future spacecraft.

STS-135 will be Atlantis' 33rd and final mission before it is retired, along with the rest of the agency's orbiter fleet. The historic flight will be the 135th and final mission of NASA's space shuttle program.

The space shuttles are retiring in order to make way for a new space exploration program aimed at sending astronauts on deep space missions to visit an asteroid by 2025, and then aim for Mars.



Chris Ferguson, a veteran of two previous shuttle missions, will command the flight with Doug Hurley as the pilot. Astronauts Sandy Magnus and Rex Walheim will be the flight's mission specialists. No spacewalks are planned. In the weeks leading up to the launch, NASA will conduct several non-standard activities, including tests and close inspections of Atlantis' external fuel tank. Mission managers want to X-ray aluminum support beams, known as stringers, located near the midsection of the fuel tank.

Cracks were detected in some of the metal ribs on the shuttle Discovery's fuel tank during the orbiter's first launch attempt in November.

Repairs forced a lengthy delay for that flight, which ultimately launched earlier this year.

An X-ray inspection of the similar metal ribs on Atlantis' fuel tank will provide extra confidence that there are no cracks, NASA officials said. Some of the ribs were already modified with extra material to add strength and do not require inspection, they added.

After Atlantis' final flight, the shuttle will be sent to the Kennedy Space Center Visitor's Complex for public display. NASA's two other space flown shuttles, Endeavour and Discovery, will also be sent to museums.

The shuttle Endeavour which flew its final mission (STS-134) on Monday, May 16th, will be on display at the California Science Center in Los Angeles, 60 miles from Palmdale where the shuttle was assembled. Shuttle Discovery's new home will be the Smithsonian Institution's Branch in northern Virginia near Washington Dulles International Airport.

From the International Space Station, American Astronaut Catherine Coleman shared her outlook. The retirement of the space shuttle program should not be viewed as an end, "It represents the next step in extending humanity's reach further into space."

Science Discovery Weekends

Saturday & Sunday 12:30pm to 4pm

THIS MONTH: CELEBRATING SCIENCE MILESTONES OF THE 1980'S

JULY 2ND & 3RD - FOURTH OF JULY FUN

Three cheers for the red, white and blue! Enjoy a visit to the Discovery Museum this holiday weekend with a self-guided tour of our *Space Quest* exhibit. Kids show patriotic pride by crafting an old favorite, a star-spangled waver.

Don't forget to purchase your fireworks from the booth at the Museum!

JULY 9TH & 10TH - SHUTTLES PAST & PRESENT

The final shuttle launch is scheduled for July 8, 2011. Learn about Atlantis and the other shuttles used for the past 30 years. Don't miss this opportunity to teach children about the historical importance of NASA's shuttle program, beginning in 1981. Kids make and take a shuttle craft.

JULY 16TH & 17TH - VOLCANO BLAST!

As we celebrate 60 years of science milestones, we remember the momentous volcanic eruption of

Mount St. Helen's in 1980. Learn about volcanoes and their impact on earth. Kids complete a paper volcano craft. Each family can collect a set of volcano postcards (as supplies last). Volcano demonstrations will take place in our classroom.

JULY 23RD & 24TH - DINOSAUR DAYS

Continuing our observance of science milestones through the decades, we recollect the 1980 Alvarez hypothesis which proposed that dinosaur extinction was caused by a giant asteroid hitting Earth. A small dinosaur display and craft will be available in our classroom.

JULY 30TH & 31ST - THEY'RE'S A HOLE IN MY OZONE

Another science milestone was the announcement of the ozone hole in 1985. Learn about ozone and methods to reduce ozone pollution. Kids craft a UV bracelet to test ozone health. The film, *The Next Frontier: Engineering the Golden Age of Green*, will be showing in our classroom and available for purchase.