

Winter 2014 Volume 37 Issue 4

First Saturday
of the Month Tour:
Free tours on the
first Saturday of
each month from

9:00 a.m. to 10:30 a.m.

Last Saturday
of the Month Tour:
FREE bird talk and
nature walk at the
Bolsa Chica
Ecological Reserve.
Led by Amigos docents.
9:00 am.

Carpooling is encouraged as parking at the Bolsa Chica Ecological Reserve is limited.

Published quarterly by Amigos de Bolsa Chica P. O. Box 1563 Huntington Beach, CA 92647 (714) 840-1575 (Phone/Fax) www.amigosdebolsachica.org info@amigosdebolsachica.org Editor: Tom Anderson Graphic Designer: Carol Rice

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FLOW – Follow and Learn about the Ocean and the Wetlands

By Jennifer Robins

The Amigos de Bolsa Chica FLOW program has been in existence since March of this year. There have been 26 volunteers who have become Citizen Scientists through FLOW. These 26 individuals are Amigos docents, Community College students, University students and graduates. They have been led by Joana Tavares-Reager, an Oceanographer & Environmental Communication Specialist, to learn about small microscopic creatures we never knew existed. Joana's knowledge and enthusiasm has brought out the best in everyone to also get excited about the world of phytoplankton.

An average of 8 Citizen Scientists have come out every Friday to sample water using a plankton net at the Tidal Inlet and more recently also at the south walkbridge in the Inner Bay. They measure and record water quality variables, such as temperature, salinity, nutrients, dissolved oxygen, turbidity, pH, and other environmental data, such as weather and wind conditions and tidal flow, in support of the analysis of the plankton. The samples are brought back to the Bolsa Chica State Beach's Visitor Center for chemical analysis and microscopy. This may sound too scientific for you, but believe me many of us with little science background have witnessed a new world within the ocean that has

extreme importance to marine life and the communities surrounding the ocean. Plankton are the basis of the food chain in the ocean and the source of half the oxygen

on Earth, and yet some of the plankton are harmful and can wreak havoc on marine life if they get too plentiful. Our results are shared with the California Department of Public Health.

We have had three community college class visits this past fall and await 4 middle school and

fall and await 4 middle school and high school classes during the winter and spring of 2014. The FLOW program is open for new volunteers who can work with or

Modeling the new FLOW t-shirts, left to right: Sandy Mattson, Justin Rayson, Brian Westcott, Joana Tavares-Reager, Jim Robins, Jerry Donohue and Judy Huck.

Photos by Dennis Pope

program is open for new volunteers who can work with other Citizen Scientists on Fridays and mentor the students who will be visiting to share in this exciting opportunity on other days of the week. Please consider coming out for a visit on a Friday morning or afternoon. Email Jennifer Robins, jjrobins@dslextreme.com, for the exact times on Fridays, because it changes depending on the tide. You, too, can become a Citizen Scientist.

Amigos Docent Recognition and Holiday Party

By Tom Anderson

The Carlberg's relocation to Santa Barbara marked the end to the long-time tradition of holding Amigos' annual holiday docent party at their home. This year, the party was held on December 11 at a new venue, the Harbor View Clubhouse. 36 docents, spouses, board members and Citizen Scientists enjoyed a tasty potluck and good company. Amigos President, Tom Livengood, welcomed docents and guests and introduced the Board officers and directors. Tom introduced Vice President Jerry Donohue who spoke about the Amigos' award-winning new publication, The Coastal Wetlander Activity Book, and the program being built around it. Jerry also gave an overview of the FLOW program and how its citizen scientists are contributing to the California Department of Public Health's knowledge of harmful algae at the tidal inlet and in the muted tidal wetlands at Bolsa Chica. He encouraged more volunteers to join the enthusiastic team. Four schools are scheduled for involvement in the FLOW program for 2014.

Office Coordinator Laura Holdenwhite announced that during 2013 a total of 58 docents and citizen scientists donated 1,474 hours to Amigos de Bolsa Chica. There were 47 private tours with 1,549 visitors; of those, 1,202 were students and included 12 Scout tours. There were 43 public tours and booth events with 444 visitors on the tours (we don't count visitors at booth events; the numbers would be much higher if we did). 1,741 visitors were asked questions before taking a docent led wetland tour. 360 people knew the correct answer before the tour, and 1,448 visitors could answer the question correctly after the tour. Dennis Pope and Barbara Stewart presented 58 docents and citizen scientists with a certificate for their service in 2013. Jerry presented Docent of the Year Dennis Pope (see article on page 5) with a special framed photo of a Black-crowned night heron by Patti Cacho-Negrette.

Tom Livengood also introduced Kelly O'Reilly who is



David Casey, Dawn and Dennis Pope. Photo by Tom Anderson

one of the Department of Fish and Wildlife managers at the Bolsa Chica Ecological Reserve (BCER). She was excited to report that 4-years-in-the-making of phase 1 of the new interpretive signage for the Reserve would begin installation the following day. Phase 1 signage includes 3 signs for each parking lot. These signs will replace the existing "billboard" type of signage. The new signs are designed to be lower to the ground and sit at a 45 degree angle so the viewer can read the information and see the reserve at the same time. Phase 2 signage, which will be installed at the overlooks, requires a permit from the California Coastal Commission and will be installed when the permit is approved.

David Casey, chair of Amigos' fund development committee, presented Dawn and Dennis Pope with a special restaurant gift certificate for their extraordinary efforts in creating the pumpkin-succulent centerpieces which have become a wildly popular fundraiser for the Amigos. Many volunteers helped over the last few months with the pumpkin-succulent assemblage, but it was the Pope's vision and generosity to turn their home into a pumpkin factory that made the idea so successful.

Thank you to all the dedicated Amigos docents, Citizen Scientists, volunteers and board members who make Amigos de Bolsa Chica such a fun and successful group to be a part of!

Pumpkin Project Fundraiser Success

By Dawn Pope

Our 2013 Pumpkin Project had some pretty fabulous results! While enjoying each other's company, making new friends and producing some beautiful centerpieces we exceeded our goal of raising \$7,000.00!

A very special thank you to Pumpkin Project supporter Connie Mandic, and super sales by Patti Cacho-Negrete, Jennifer Robins, Margaret Carlberg and Betty Murphy. They helped push our total this year to over 400 pumpkins, including 100 pumpkins sold at the two day Huntington Harbor Philharmonic 7th Annual October Holiday Boutique. Our booth was one of the busiest and we have been asked to participate again next year.

All our pumpkins were decorated by dedicated volunteers at 21 workshops over a seven week period. Our returning decorating team from last year, Maria Buhbe, Jeanne Hayward, Barbara Banaski, Betty Murphy, Dave & Margaret Carlberg and Laura Holdenwhite were joined this year by Dianne Livengood, Nancy Phillps, Kay Goddard, Barbara Sentovich, Patti Cacho-Negrete, Jennifer Robins, Shirley Dettloff, Charlene Bauer, Dorothy Rutters, Tami Olson, Judi Smith, Shirley Kerins, Laura and Ross Yu and Barbara and Tim Reyes. Our pumpkin project attracted folks who were not ABCmembers, but were excited about working with succulents. We recurited them and are very happy to say we now have three new Amigos' – Connie Smith, Susanna Newton-Nolan and Sue Pollack.

Our succulent cuttings and nursery stock contributions kept coming in from volunteers who maintain flats until needed. A big thank you to Chuck Drescher for a great



Wrap Party left to right Maria Buhbe, Jennifer Robins and Barbara Binaski

Standing, Mary Cason; seated from left to right Barbara Sentovich, Connie Smith and Betty Murphy. Photo by Dawn Hooper

variety of flats and 1 gallon of healthy succulents that were used throughout the project.

This project could not have happened without the capable management skills of Margaret Carlberg, Mary Cason and Patti Cacho-Negrete. Their hours of work behind-the-scenes ensured we reached our goals and finished on time. On November 21st volunteers sipped champagne and soup to celebrate a job well done.

We have accumulated a wonderful selection of succulent stock which is in the process of re-generating in the nursery right now. By late January we'll be looking for volunteer homes to tend them until next September! Our mid-summer "Pumpkin Camp" Workshop was a big success this year so we'll schedule another for 2014 – See you there!

Remembering Amigos

By Laura Holdenwhite

When the Carlberg family migrated north many Amigos artifacts migrated to my house. One of the items was a box of index cards with information about people who once were members of the Amigos. I pulled out one of the cards at random and got the answer to a mystery that has been bugging me for years.

About three years ago I was contacted by an Attorney in Newport Beach alerting us that his client, JW, had left the Amigos something in her will. He sent a copy of her will and the expected value of her estate. There were about twenty or thirty people and groups so I didn't expect much but was pleasantly surprised when she left us \$10,000. A gift like that really helps a lot with the mission of the Amigos.

After hearing from the Attorney, I asked all the Board Members and long-time Amigos if they knew who JW was. No one knew who she was. Now I have an answer. She joined the Amigos in 1984 and made small yearly donations every year for over twenty years. And she remembered us in her will. When doing your estate planning, please consider the Amigos de Bolsa Chica as part of your plan.

2013 Breeding Season Results for California Least Tern at the BCER

By Kelly O'Reilly & Peter Knapp

South Tern Island: Least Terns were active on South Tern Island (STI) from early May until the first week of July, 2013. Based on daily observations from the levee next to the island, we know that the first nest was initiated on 8 May. Weekly monitoring visits to the island occurred between 14 May when 17 nests were found, and 9 July when the final 23 nests were determined to be either abandoned or depredated.



California least tern with juvenile rock fish prey.

Photo by S. Smith.

During the season, a total of 84 nests were initiated on STI. Monitors confirmed 25 nests hatched, producing 40 chicks. Seven nests were recorded as probable hatches, hypothetically producing an additional 10 chicks for a grand total of 50 chicks for the site. Nearly 100% of these chicks were taken during the first week of life by predators that did not leave tracks. Only 4 dead chicks were found on STI during the season; all were less than a week old and apparently died of natural causes.

Despite daily, and sometimes twice daily, observations of the STI least tern colony from the levee, direct take of a chick was never observed. However, due to numerous sightings of a red-tailed hawk seen perched near STI and a male northern harrier flying over it, we strongly suspect that these two raptors were responsible for most chick mortality there. For example, on 9 May, a large red-tailed hawk was seen perched on the levee next to STI, being stooped by Least Terns from the colony. Further, we assume that continuous pressure from avian predators was the reason for nest abandonment. The abandoned eggs were later scavenged by ravens. On 16 June, the remains of adult Least Terns were found on the island.

Over the season, 56% of the nests on STI were abandoned, 13 nests with eggs were depredated, and the fate of two nests was recorded as unknown. Only one fledgling was observed on STI. In contrast, 15 fledglings were produced on STI last year, and that was with 33% fewer nests.

Nest Site 1: Weekly monitoring visits to Nest Site 1 (NS1) began 21 May and concluded on 6 June. During this brief period, only 20 nests were found with a total of 29 eggs. All nests were lost to depredation attributed to gulls, based on gull tracks over a large area of the site. The complete reproductive failure of Least Terns on NS1 was quite unexpected for two reasons: First, the site had been resurfaced with beach sand and was free of weeds and therefore in excellent condition for the birds. Second, high numbers of Least Terns had nested on this site in the past (176 nests in 2012). Apparently, Least Terns were driven off NS1 by flocks of gulls that used the site for loafing. The gulls also impacted western snowy plover productivity on NS1 this year. All but 2 of the 14 western snowy plover nests on NS1 failed to produce fledglings and gulls were suspected in most of the mortality there.

Nest Site 2: Weekly monitoring visits to Nest Site 2 (NS2) began 16 May and concluded on 23 July. During this period, 50 nests were found on the site and 23 nests were confirmed hatches that produced 37 live chicks. Twenty-two nests were recorded as probable hatches, hypothetically producing an additional 32 chicks for a grand total of 69 chicks for the site. Only four dead chicks were found on the site during the monitoring period and only one egg was depredated: nest #49 found pecked on 9 July with a Corvid track near it.

In addition to the low mortality observed, we consistently saw live chicks ("runners") on the site during repeated monitoring visits and we observed fledglings from this site June through August. It is worth noting that NS2 is within sight of the CDFW office; thus, CDFW staff and volunteers would know if predators were near the sight. Given all of these facts, we believe 34 fledglings from NS2 is a reasonable and conservative minimum estimate (1 confirmed fledgling + 37 confirmed live chicks - 4 dead chicks); especially since there were potentially more chicks born than we were able to confirm. The maximum fledgling estimate from NS2 is 66.

With respect to productivity, 2013 was the second best year on record for NS2. Last year (2012), 46 Least Terns nests were initiated on this site; however, due to coyote predation, none of the 53 chicks produced survived to fledge. In 2011, we estimated 51 to 72 Least Terns fledged from NS2; that is the highest productivity since Least Terns began using the site in 2010.

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Nest Site 3: Due to exceptionally low Least Terns activity on Nest Site 3 (NS3), this site was only monitored for three weeks: 30 May – 13 June. During that period, only three 1-egg nests were found and they were subsequently depredated (Corvids suspected). On 30 May, a partially eaten adult least tern was found on the site; its head and chest cavity were missing. During the brief period that Least Terns were seen courting on NS3, a male northern harrier was observed in the vicinity on numerous occasions. Corvids were also often seen on NS3 but attempts to trap them were unsuccessful. Although we knew Corvids would continue to be a problem on NS3, we had hoped for higher Least Terns productivity on the site during 2013 since it is now protected from coyote and other mammals.

During 2012, a total of 27 Least Terns nests were initiated on NS3 but 100% of them were depredated by coyote and raven. Coyote predation was also problematic during 2011, so funding was sought to construct a fence around NS3. During the winter of 2012, two non-profit organizations donated the funds needed to construct a fence around NS3 as well as increase fencing at NS1.

Bolsa Chica Overall: The reserve-wide nest total was 157; a 48% decrease from last year when we had 305 nests. Despite the small number of nests, our fledgling estimate of 35- represents a 53%-76% increase over 2012 when only 16 Least Terns fledged from BCER. Because we saw no evidence of a second wave or re-nesting, we estimate the number of breeding pair was 157.

The breeding success we saw in 2013 is owed to the fact that predators mostly ignored NS2 which produced all but 1 of this year's fledglings. Black-crowned night heron were removed from the base of NS2 by predator management; however. NS2 had the second highest number of nests versus STI which had 84 nests but fewer chicks.

LOCATION	NESTS	EGGS	NESTS (hatched)	NESTS (probably hatched)	CHICKS	NESTS (Predated)	NESTS (Abandoned)	FLEDGLINGS
South Tern Isl. (ST1)*	84	124	25	7	50	13	37	1
Nest Site 1 (NS1)	20	29	0	0	0	20	0	0
Nest Site 2 (NS2)	50	80	23	22	69	1	4	34-66
Nest Site 3 (NS3)	3	3	0	0	0	3	0	0
BCER All	157	236	48	29	119	3 7	41	35-67

*Note: ST1 also had two nests with an unknown fate.

Docent of the Year

By Jerry Donohue

Our docent of the year has spent much of his time at Bolsa Chica State Beach. He has been instrumental in keeping the FLOW program flowing. As with most new programs, FLOW has many moving parts which are easy to overlook and which need constant supervision to maintain. Dennis Pope has kept our wide array of Citizen Scientists on task and excited with the discoveries that are made each week. His calm demeanor and adaptability has enabled FLOW volunteers to collect scientific data while enjoying each others company. This past summer, Dennis assisted in the Junior Ranger program where students ages 6-14, used microscopes and water quality chemicals to model procedures carried out by our FLOW volunteers. Dennis also played a major role at Pumpkin Central as



Jerry Donohue and Dennis Pope. Photo by Tom Anderson

nearly 300 pumpkins moved through his house. Dennis has consented to become our Vice President in the new year. Amigos thanks Dennis for his many contributions in 2013 and look forward to utilizing his many gifts in 2014. Congratulations.

President's Tern

By Tom Livengood

My two year term as Amigos president comes to an end January 2014. Thanks to a dedicated Board of Directors, active committees, docents and Citizen Scientists the two years have been very productive. Goals have been completed supporting the Amigos mission. The Docents and Citizen Scientists volunteered a total of 1,474 hours for Amigos education programs.

After several years of planning, research, and finally approval, new interpretive signs are installed in the two parking lots. Oxy Petroleum provided matching funds for three interpretive signs. All three Bolsa Chica organizations have raised funds to complete three additional signs. The cost of each sign is approximately \$6,000. The tall signs have been removed. The new low signs provide a wonderful open view of the Ecological Reserve and are more accessible to children.

Two successful Bolsa Brunches and two successful sales

of succulent decorated pumpkins, (170 pumpkins in 2012 and 300 in 2013), kept the fund development Committee busy! Fundraisers at local restaurants every other month was – will continue to be – a fun fundraiser.

The Outreach Committee continued to work closely with elected officials and Federal and State agencies keeping them informed on the needs of the Bolsa Chica. The Membership Committee projects increased membership. The Community Education committee's first Saturday tours, docent led tours, implementation of the new FLOW program and participating in community events informed the public about the importance of maintaining the Bolsa Chica Ecological Reserve. The Grant committee was successful in receiving several grants, and the Science Committee continued to review and comment on projects. The Tern Tide (now in color!), Current Tide and Facebook Committees have done a great job keeping members and the public informed. Again, special thanks to all the volunteers that made the two years successful.

Plastics and Your Lifestyle!

By Shirley Dettloff

The Huntington Beach City Council recently placed a ban on plastic bags being used in the markets of Huntington Beach and asked we consumers to use cloth bags to carry home our groceries. This was an excellent decision, although there have been many opponents to this very important step in ridding our oceans of plastics. Plastics remain alive in our oceans and evidence has been found as to the great harm they do to those animals and fish who must survive in a clean ocean environment. Also to anyone living in Huntington Beach we should realize how much our economy depends on tourism which depends on having a clean ocean. Thousands of visitors come to Huntington Beach for one reason, our clean beaches and clean ocean. Think what would happen if these people who spend thousands of dollars in our restaurants, stores and hotels, if they decided to take their business to other cities or towns. We would lose needed resources to maintain our parks, libraries, Police and Fire, and all of those very basic needs which make our lifestyle one of the best in the Nation. Just think how little we are being asked to do to help protect our environment...buy a few cloth bags to carry home our groceries! What a small price to pay for the beauty and safety we so love in Huntington Beach.

The City Council is now considering banning Styrofoam being used in restaurants and being sold in stores. Many restaurants have already turned to other materials for their cups and utensils and they are to be congratulated and most important, we should visit them. Again opponents have voiced their opposition. This is a decision that we all should support if for no other reason than our economy. Our knowledge of the damage plastics do to our oceans was first brought to our attention by Robert Moore, an early and very important financial supporter of the Amigos. Robert was sailing home after a race between L.A. and Honolulu when he and his crew saw acres and acres of plastics floating in an area of the Pacific Ocean. He of course was disturbed by what he saw and upon returning home got in touch with scientists here in the U.S. who were studying this vast area of the ocean which looked like an enormous floating garbage site. They saw and studied the damage being done to the marine animals ingesting this plastic and the damage to the marine environment. Robert joined them in their efforts and has become a leading voice for eliminating plastics. He has continued this study and what can be done about it. He has made many presentations to scientific organizations and the California State Coastal Commission. It may be a small step, but the banning of plastics in our community is a step every citizen who cares about our environment can make. Let's do our part and support the actions of the City Council. For the complete picture of what is happening to our oceans, there is a wealth of information available on the internet about the toxic soup of Styrofoam and plastics drifting in our oceans.

Carlberg's Migrating North

By Shirley Dettloff

On October 27, 2013, the Amigos said a sad good-bye to long-time friends and long-time members of the Amigos de Bolsa Chica, Dave and Margaret Carlberg. The Bauer's beautiful water front home provided a lovely setting for a party filled with love and remembrances. Over 100 guests attended the party. As far back as anyone can remember, the Carlbergs have been a part of the successful effort to save the Bolsa Chica. They worked tirelessly to achieve a goal no one thought was possible, but because of their efforts, a dream did become a reality.

The party got off to a good start when we tried to prevent them from moving by turning the party into an intervention. Several of the party planners decided that this town could not get along without the Carlbergs, so instead of bidding farewell they tried to intervene, but were



Photo by Tom Andersen

stopped from continuing their efforts. All of the details for the Carlbergs to remain were in place. All of us said that we would host the Carlbergs in our homes for two weeks every year, the Gourmet Group would provide the food, the Amigos would take them on outings to the Bolsa Chica, and others volunteered to take them to concerts and plays. A real plan was in place until someone shouted "you cannot do this, this is a Democracy and they have the right to do whatever they want, and if you pursue this, the police will be called"!!!! So a wonderful plan for keeping the Carlbergs in Huntington Beach fell apart, leaving us with only fond remembrances.

Remembering that Dave was President of Amigos twice, that he wrote and taught at California StateUniversity, Long Beach, was an actor and consultant in the film ET, while Margaret taught and was named Southern California, Teacher of the Year by NBC, was the first Chairperson of the city's first Environmental Board, was named one of the outstanding women of Orange County by Senator Lou Correa and both Dave and Margaret were named Conservators of the Year in 2012 by the Bolsa Chica Conservancy. Quite a record and there were still other honors and recognitions.

So we may not have wanted them to leave but their heritage and their dedication to Huntington Beach will always remain. We can only wish them the very best in their new home, and hope that they will visit Huntington Beach on a regular basis or keep the guest room available for everyone who will want to visit them in Santa Barbara.

"The party was an enormous thrill that we shall never forget. Heartfelt thanks to all those who organized it, those who attended, and to the Bauers for hosting it. We are grateful for all the wonderful messages, cards and gifts. And the cake was a work of art that everyone will remember!" – Dave Carlberg.

Docent Training – Sign Up Today

If you are interested in teaching others about history, ecology, birds and other amazing facts of the Bolsa Chica Wetlands, sign up today for Amigos Docent Training Program. For 2014 there will be 6 Classes, Wednesday evenings, 7:00 pm, January 8, 15, 22, 29, February 5 and 12. Program includes 2 field trips on weekends with expert teachers. Cost: \$50.00 materials fee, plus Amigos membership. A Certificate of Completion is available for students. Location: Bolsa Chica State Beach Visitor Center at the entrance to Bolsa Chica State Beach, Pacific Coast Highway, 1.5 miles south of Warner Avenue. The docent manual is an exhaustive, one-of-a-kind manual covering all aspects of Bolsa Chica, particularly early history, ecology, birds, endangered species and restoration.

Space is limited, so call the Amigos office at 714-840-1575 with your name, phone and/or e-mail contact to REGISTER NOW. Becoming a docent means you make a difference, meet new people, use your skills, help others and connect with your community. If you are already a docent, consider taking one or more of this year's docent training classes to refresh your memory and find out about something that may be new and different.



THE TERN TIDE

Volume 37, Issue 4 www.amigosdebolsachica.org info@amigosdebolsachica.org (714) 840-1575 (Phone/Fax)

FLOW
Amigos Docent
Holiday Party
Pumpkin Fundraiser
California Least Tern
2013 Breeding Results
Docent of the Year
President's Tern
Carlberg's Migrating
North

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AMIGOS DE BOLSA CHICA MEMBERSHIP APPLICATION

I support the specific and primary purpose of Amigos de Bolsa Chica, which is to advocate the preservation, restoration and maintenance of the Bolsa Chica, to encourage the public acquisition of all the wetlands and sufficient surrounding open space to create a viable ecosystem, and to provide education about the importance of wetlands.

ANNUAL DUES	Name:					
\$ 10 Student	A 1 1					
\$ 25 Individual	Address:					
\$ 40 Family	City:	State:	Zip:			
\$100 Sustaining						
\$1000 Life Member	Email:					
	Phone:					
Additional Contribution:						
\$ Fund operational expens	ses \$ Fund education projects \$_		Total enclosed			
Please check if you are interested in	volunteering for:					
Education outreach Grantwriti	ng Social media Wetlands cleanup	Leading to	ırs Fundraising			
All contributions to Amigos de Bo	olsa Chica are tax-deductible as allowed by la	w under IRS	Code Section 501(c)3.			

Return application to: Amigos de Bolsa Chica, P.O. Box 1563, Huntington Beach, CA 92647

No goods or services were provided in consideration of this gift.