On January 3, 1603, while leading an expedition to locate safe harbors in California, the Spanish explorer Sebastian Vizcaino found and named Punta de Año Nuevo (New Year in English), today known as Año Nuevo Point. I discovered this wonderful place when a friend invited me out for a walk to see the northern elephant seals. I fell in love with the raw vitality of the place, and that following September I took the training and became a docent in December.

In 1955 the first of many northern elephant seals returned to Año Nuevo Island after being absent from this area for many years. Several years later the first pups were born and now the site is an established breeding ground for the colony. Today Año Nuevo is a California State Reserve and thousands of people from all over the world visit every year to see these amazing creatures.

There are two distinct seasons at Año Nuevo—mating and birth, and molting. The mating season is from December to March, when docents take out groups of up to 25 guests twice a shift (reservations required). Molting season, March through November (no reservations required), is my favorite, when docents spend the day at the Point and have a chance to visit with many guests on a one-to-one basis. Many of them want to learn as much as possible and stay as long as they can, while others just want to see the animals and then leave.

...a group of fourth graders and I were talking with a ranger and were charged by a very large male elephant seal. Fortunately the seals cannot move fast or go far on land. We ran for our lives. No one was hurt.

You can see by the relative sizes of the male and pup in this photo that one of the worst dangers the pups face is being crushed! Males are often oblivious to their much smaller offspring.
Editors' Note

Two new editors take on the enormous job of putting the newsletter together.

A year ago Bill Kennedy stepped into the role of editing Between the Tides so that former editor Jenna Kinghorn could focus on revising our FFMR web site. With new professional demands on his horizon, Bill has reluctantly decided to step down as editor. Beginning with this issue, Jan Pelinka and Sasha Greenawalt, who were major contributors to the September issue, have taken up the challenge of keeping Between the Tides rolling out on a quarterly basis. You'll learn more about Jan and Sasha in volunteer profiles in future issues of the newsletter.

And don't forget to visit our web site, http://fitzgeraldreserve.org, where you can check on upcoming events, read Between the Tides with photos in full color, read our weekly blog, and find resources to help you explore the ocean without getting wet!

How You Can Help

To keep this newsletter coming to you on a quarterly basis, WE NEED YOUR HELP! Do you have photos of FFMR people and current events? Have you read a great book that other Friends might be interested in? Why not write a review of it? How about getting to know your fellow volunteers by interviewing a few of them and writing profiles for the newsletter? Write about something special that happened on a tour you led, or submit a Creature Feature about one of your favorite tidepool animals. If you love to write but don't know what to write about, or you have great ideas but think you lack the time or skills to write about them, email Sasha or Jan for help at newsletter@fitzgeraldreserve.org. Articles should be in the hands of the editors by Jan. 31 for the March issue, and Apr. 30 for the June issue.

The graph displayed across the page bottom shows tides for 12/13/2011 to 4/30/12. Where the date appears is midnight. The reefs are accessible for exploring during low tides—at least 0 or below. See: http://fitzgeraldreserve.org/resources and click on “Tides” for a more detailed tide chart.

Good fall–winter tides are in the late afternoon. Be aware of sunset times and don't get caught out on the reef after dark! There's a terrific low tide Christmas Eve day. Come early since sunset is at 4:55 pm!

The lowest tides this period are:

-1.55 12/24 4:20 pm
(-sunset 4:55 pm)

-.76 1/9 4:47 pm

-1.02 1/21 3:23 pm

-.50 2/7 4:20 pm

-.44 2/18 2:22 pm

-.23 3/12 8:30 am

-1.18 4/09 7:17 am

-.35 4/23 6:39 am
Año Nuevo continued from page 1

A few experiences stand out. I remember an ornithologist from Spain who was astonished that a place like Año Nuevo could exist so close to a large city like San Francisco. He was ecstatic and spent most of the day with us, with a constant, broad smile on his face.

There are two distinct seasons at Año Nuevo
– mating and birth, and molting.

Then there was a couple, both doctors, from Germany. They listened to a short description of what they were seeing and then sat down on the ledge, held hands, and literally breathed in the view of the beach, the animals, and the ocean beyond. They had come to America, rented an RV, and traveled across the country. In Arizona they were married by a Native American shaman. They were still sitting on that ledge, holding hands, when my shift ended.

Another outstanding experience happened when a group of fourth graders and I were talking with a ranger and were charged by a very large male elephant seal. Fortunately the seals cannot move fast or go far on land. We ran for our lives. No one was hurt.

...there was a couple, both doctors, from Germany. They listened to a short description of what they were seeing and then sat down on the ledge, held hands, and literally breathed in the view of the beach, the animals, and the ocean beyond.

Año Nuevo gave me a place to watch the world change. The cliffs there are constantly eroding and have crumbled back many feet during the years I’ve gone there. There is a large sand dune that has shifted at least 100 feet across what used to be a path and is now an impassable mountain of sand. Eventually the sand from that dune will move into the sea and make its way across the bottom of the ocean, to emerge from the water somewhere south along the coast.

Elephant seals tend to be noisy at times. Perhaps these photos could be captioned: Gossiping, Don’t do that! and Ow!
Año Nuevo continued from page 3

It is a place of endless change and beauty. The walk out goes by the barn, a reminder of a time when the property was a dairy farm, then down the hill, past the pond, and over the dunes to the area where the animals can be seen. It is about three miles round trip. I have seen parents carrying infants and people in their nineties willing to make the hike.

Año Nuevo is a wild place only an hour from civilization where one can experience nature at its finest. Sometimes I go out to the point before the guests arrive. I sit and look out at the island, listen to the many sounds, breathe in the aroma of the animals and the ocean, and am filled with a sense of thankfulness for this place. I feel I have received much more than I have given during my ten years as a docent at Año Nuevo.

The Amazing Rescue of Green Tie

In November, eight workers at the Marine Mammal Center's San Luis Obispo operation were notified that a large elephant seal was seen on a nearby beach with a green packing strap wrapped tightly around its neck. Knowing a low tide would occur November 10, veterinary intern Dr. Michelle Barbieri drove down from Sausalito and began rescue plans. Netting this 700 lb. pinniped proved challenging, but eventually he was sedated and the entanglement cut away. Twenty minutes later the seal woke up and returned to the water. He will sport a nasty scar but escaped the fate of other marine mammals that have evaded rescue attempts. Many eventually die because as they continue to grow their entanglements tighten and prevent them from swallowing or hunting. Nicknamed “Green Tie” (after the green plastic around his neck) this seal was spotted snoozing with other elephant seals days later. You can read about the Marine Mammal Center and its work at http://www.marinemammalcenter.org/.
Creature Feature

The Northern Elephant Seal
by Sasha Greenawalt and Janet Pelinka

While encountered only occasionally at FMR, the largest pinniped on the California coast can be observed in the hundreds at certain times of year by those willing to venture a few miles south to Año Nuevo State Park. The northern elephant seal (Mirounga angustirostris) of the family Phocidae (“true seal”) can be seen there molting, mating, birthing and waging war.

These giants are believed to have been in California around 130,000 years ago, about the time of the last glaciation. They were hunted for their blubber during the 1800s and thought to be extinct until a rookery of 100 was discovered around 1910 on Guadalupe Island off Baja California, Mexico. Protected by the Mexican government, the seals began their long process of recovery, expanding continuously northward. The Año Nuevo rookery, one of several along our coast, was established in 1965. Today the seals number approximately 150,000 in California, and the population grows at an annual rate of 20-30%—one of the great conservation success stories. Elephant seals are protected under the national Marine Mammal Protection Act and have “fully protected” status under California law.

The northern elephant seal is distinguished by the male’s large blubbery nose and its enormous size. Males are 2 to 7 times larger than females, measuring as long as 16 feet and weighing as much as 5000 pounds.

Females nurse their pups for about one month before abandoning them. During this time the greatest danger to the newborns is being crushed by the heavy males who appear oblivious to the pups’ presence. Pups remain beach for 12 more weeks living on stored blubber while they learn to swim and forage for food.

Adult seals return from their first migration for their annual molt between the months of March and November. This process takes around 2-3 weeks and is called a “radical” or “catastrophic” molt because the seals shed the upper layer of skin in addition to their fur. During this time they are joined for two months by pups that were born during the previous mating season.

juveniles and subadults use beaches at FMR to haul out for a rest while on their migration routes. “We had one stand-out elephant seal visitor two years ago,” says Ranger Sarah Lenz. “It was a very large male that chose to haul out on Ross Cove Beach for over a month. He would occasionally raise his head and bellow at the passing surfers and beach goers, but mostly he just slept and flipped sand on his back…one morning I found nothing but his path to the ocean left in the sand. Hopefully he made his way to one of the nearby rookeries and found a mate!”

continued on page 9
Volunteers Thanked at Annual Barbeque

About 50 people attended the annual barbeque that Ranger Sarah Lenz and her county parks coworkers hosted at San Pedro Valley Park in Pacifica. The lunchtime party, which this year featured chicken, sausages, veggie burgers, numerous side dishes, and several pumpkin pies, is a joint effort put on by the San Mateo County Department of Parks and the board of the Friends of Fitzgerald Marine Reserve. “It’s our way to say thank you for all the great work you’ve done over the past year,” Sarah said in her remarks to volunteers as we sat down to the sumptuous lunch.

Sarah pointed out that over the past year volunteers donated 2200 hours of time to the reserve and gave tours to 4470 park visitors.

Ranger Scott Lombardi, who now is Superintendent of the San Mateo County Department of Parks, also spoke during the event. “We couldn’t do our work without your dedication and support, and I want you all to know how much we value each and every one of you,” Scott said. He introduced new Ranger Kevin Scott, the Ranger IV in charge of our area, who echoed Scott’s appreciation of the Friends’ volunteer work and said he was looking forward to meeting everyone in the months to come. Volunteer Programs Coordinator Carla Schoof added that she appreciated the ways in which FFMR volunteers have helped with county parks missions beyond the boundaries of FMR, from stuffing envelopes and staffing county fair booths to leading hikes organized by the San Mateo County Parks and Recreation Foundation.

Sarah handed out raffle tickets to all attendees and held drawings as the lunch progressed. She gave away water bottles and mugs bearing the San Mateo County Parks Foundation logo, a small shoulder bag, and several sea glass necklaces created by FFMR Treasurer Hope Suchsland. A slideshow of some of Sarah’s photos featuring marine life and volunteer naturalists in action played in the background as volunteers and park staff ate, mingled, and chatted. In her remarks Sarah pointed out that over the past ➤
year volunteers donated 2200 hours of time to the reserve and gave tours to 4470 park visitors.

FFMR board president Ellen Gartside recapped the year’s activities and introduced the board members who were present.

Board member Linda Ciotti talked about the new committee in charge of our annual training class, which will begin in January. She also introduced Joseph Carr Ritchie, a coastsider who didn’t want to wait for the annual training to become involved at FMR. Joseph drew on his background working as an interpretive specialist for national parks and undertook to create a self-guided tour brochure of the reserve. The lavishly-illustrated pamphlet (now available at the Visitor Center) gives some insight about FMR and its inhabitants to visitors who arrive while volunteers and staff are not available to answer questions. Linda gave Joseph and his son Jack FFMR sweatshirts to welcome them to our corps of volunteers.

Finally, board member Mary DeLong gave out FFFMR’s two annual awards. The Sea Star award goes to the graduate of the current year’s training class who has gotten most enthusiastically involved at the reserve. This year’s recipient was Ron Olson, who has spent many hours giving tidepool tours of the reefs to school groups and sharing his enthusiasm for the ocean and its inhabitants. Ron received a certificate of appreciation, a framed photo of him interacting with a group of students on the reef, and a book about marine animals.

The Ginny Welsh award, named after FFFMR’s founder and first president, goes to a long-term volunteer in recognition of services performed over the years. This year’s recipient was Jenna Kinghorn, who has been volunteering at FMR for about twelve years. A current board member, Jenna was the editor of Between the Tides from 2006-2010. At the end of 2010 she turned her attention to revamping the FFFMR web site, and she now maintains the site and posts weekly blog updates. In the past she has worked as a camp counselor for FFFMR’s Junior Ranger summer program. More recently she has partnered with Ranger Sarah Lenz to develop and conduct Family Fun Days, beach cleanups, Breakfast at the Reserve and other community outreach events.
Volunteer Mentoring Program Pays Off During Busy Thanksgiving Low Tides

by Linda Ciotti
photos by Linda Theroff and Jenna Kinghorn

About two dozen volunteer naturalists logged almost 110 hours answering questions and interacting with droves of visitors who made Fitzgerald Marine Reserve part of their Thanksgiving weekend this year. Extreme low tides and nice weather brought an estimated 1000 people on Friday and twice that number on Saturday. That’s a huge volume of people, considering that in an average year, FFMR volunteer naturalists provide guided tours for approximately 5,000 students!

Although 40 hours of classroom learning equips our volunteers to identify organisms and explain tidal cycles, interacting with visitors is more of an art than a science. In addition to mastering scientific nomenclature, our volunteers need to learn how to show visitors to touch living things gently (or not at all); how to explain that FMR is home to hundreds of shy harbor seals who don’t want to be approached closely; and how to share the wonders of the intertidal ecosystem without overloading visitors with lists of rules.

About 6 years ago, we decided that it would be very helpful to our volunteer naturalist trainees to have time out on the reef with experienced volunteers on a one-on-one basis.

During the classroom experience, FFMR trainees are given a tide chart and a contact list of naturalists who have agreed to be mentors. Trainees must arrange outings with at least 3 different mentors. That exposes them to the various styles that naturalists have developed over time.

Mentoring has proven to be a valuable training tool, and in 2012 a new group of trainees will have the opportunity to interact with our experienced and dedicated volunteer naturalists.

Editors’ note: There will be another very low tide on December 24 (see tide chart on pg. 2)—a great way to entertain your holiday visitors!

Photos top-bottom: Holiday crowds and a good number of photographers found a lot to explore and photograph in the tidepools. Volunteer Carol Davies let a harbor seal hand puppet do the talking to explain the importance of letting the seals have their space. A gorgeous purple and red sunflower star showed off for the camera. Visitors experienced a beautiful sunset, the cliff behind them glowing gold in the brilliant light. (Check these photos out in full color in the web version of our newsletter, http://fitzgeraldreserve.org/resources-our-newsletter-archives)
Coastal Cleanup Day

On September 17, the relentless fog that had covered the coast for a number of days rolled back and the sun appeared at Surfer’s Beach just as tables were being set up for the 27th Annual California Coastal Cleanup Day, part of the International Coastal Cleanup organized by Ocean Conservancy (http://www.oceanconservancy.org/). Participants were greeted by San Mateo County Park Ranger Sarah Lenz and FFMR docents Kim Ferguson, Jenna Kinghorn, Kim Evans and Kumi Ishida who guided them in sign-in procedures. They were offered bottled water, gloves, garbage bags, pinching pick-up tools and brightly marked safety vests. They were also given a checklist and asked to track items they collected for later input into an international database.

There were over 70 volunteers. They came in all sizes and ages, in groups, couples and individually, all eager to do their part in cleaning bluffs and beaches of discarded debris. A large group of very young cheerleaders dressed in official Coastside Cougars tees enthusiastically headed out towards the harbor and returned two hours later with heavy bags of trash and recyclables. “Playing on the rocks was the most fun,” said one of the group, but all felt they had done something really important. Sierra, 5 ½ and possibly the youngest volunteer, was out with her father. She said she “felt good” about what she had done because she comes to play on the beach with her family.

Final count showed that a whopping 445 pounds of trash and 160 pounds of recyclables were removed from a 3.5-mile stretch. Some very unusual items were discovered in the rocks adjacent to the harbor—a chainsaw, and approximately 30 pounds of steak and 20 pounds of butter. Cigarettes as usual were found in great abundance.

Coastal cleanup is one of the largest volunteer events in the world. In California alone thousands of participants have collected millions of pounds of trash from creeks and coastal areas. This year’s data were especially important because they will be used as a benchmark for comparison with data collected in the next two years. That is when debris from Japan’s tsunami is expected to reach California’s shores.

Elephant Seals continued from page 5

Electronic tagging devices and more recent satellite tracking have begun to unravel the mysteries of elephant seal migrations, and also provide information on the seals’ second unique behavior. They are known to dive deeper and stay down longer than any other marine mammal except the sperm whale. The male usually dives to depths of about 1700 feet, taking up to 30 minutes to complete the dive. The seals remain submerged 80-90% of their time at sea, taking only a brief 3 minutes on the surface between dives. The deepest dive recorded was at 5,015 feet for 1.5-2 hours. Recent research has shown that elephant seals can tolerate much lower oxygen levels than humans (down to nearly zero), enabling them to remain submerged for such long periods of time. The dives provide not only food, but safety from predators and possibly a little rest. Some researchers think the seals nap while descending. Deep diving allows them to elude their main predators—great white sharks and orcas.

Those who travel to Año Nuevo State Park at the right time of year can join a docent-led tour on a 2.5-mile walk to and around the rookery. Reservations are required and can be made by calling the park office, 650/879-2032.
When The Killing’s Done  by T.C. Boyle
reviewed by Mary DeLong

T.C. Boyle’s new novel "When the Killing’s Done" pits two passionate characters against each other with gut-wrenching intensity. Set in the Channel Islands off Santa Barbara, known as “the Galapagos of North America,” Boyle investigates man’s relationship with nature. What is the natural balance of the islands? What is an invasive species? What are the cascading effects of an artificial removal of one species in favor of another? At what point in time is an ecosystem meant to be preserved?

Anna Boyd Takesue is an impassioned biologist employed by the National Parks Service. The Service has implemented a plan to eradicate rats off Anacapa and wild pigs off Santa Cruz Island in order to restore the islands’ habitat to the state it was in before the first Europeans arrived with these species. Takesue’s argument is “killing, that is, the killing of innocent animals, however regrettable—there is no alternative because the health and welfare, the very existence of the island’s ground-nesting birds, will depend on it. The entire breeding range of Xantus’s murrelet lies between Baja and Point Conception. There are fewer than two thousand breeding pairs. Rats, on the other hand, are ubiquitous. And rats eat murrelet eggs.”

There is a bitter outcry from the public led by Dave LaJoy who has formed the FPA (For the Protection of Animals). LaJoy, an avid animal rights activist, believes killing is killing no matter what the species... Does a novel about a scientific issue bring the public to a better understanding of the issue? Boyle does a good job of telling a riveting tale while sometimes his characters sound a bit too preachy. The National Park Service really did this eradication on the Channel Islands dur-
Docents Sign On to Protect
Montara State Marine Reserve
by Sasha Greenawalt and Janet Pelinka

On September 10, five FFMR volunteer naturalists attended a training to implement the Marine Protection Area (MPA) Watch program. The program was developed earlier this year by the FFMR Board of Directors to monitor uses and activities occurring within the Montara State Marine Reserve (MSMR) in order to determine the effectiveness of the MSMR MPA.

Spearheaded by FFMR Board Member Bob Breen, former ranger at FMR and stakeholder in the North Central Coast process, a program was developed for MSMR. A pilot program, begun in May, involved modifications to protocols and data collection sheets developed for the Central Coast program. These efforts determined that an MPA Watch program could be effective for MSMR.

The training began with presentations given by Bob Breen; Gary Strachen, Program Manager for the Monterey Bay Sanctuary Foundation; and James Ober, a California Department of Fish and Game Warden.

Bob Breen spoke of the history of the legal measures enacted to protect California’s marine life. In 1999 the California Legislature passed the Marine Life Protection Act (MLPA), the first law of its kind in the United States, with the intention of creating a managed network of MPAs by 2011. At that time, the MPAs were a patchwork that “created the illusion of protection.” The MLPA called for using the best available science and the advice of resource managers, stakeholders, and members of the public to increase coherence of protection as well as to improve educational and recreational opportunities provided by the marine ecosystems. The first MPAs established under this act were located on the Central Coast and in 2009 the MPA process came to the North Central Coast, from Pillar Point to Point Arena. After extensive public and stakeholder meetings, the design and implementation of the MPAs were completed in 2010.

Gary Strachen described the educational resources developed by the Sanctuary Foundation, including brochures, films, slide shows and trainings. The foundation is working to promote understanding of the importance of the MPA program and its future. It also hopes to create an advocacy group that will partner with all affected agencies. Locally, Strachen’s organization will provide brochures, signing and interpretive panels at Montara and Pillar Point Harbor. For more information, go to www.CaliforniaMPAs.org.

Warden James Ober explained the CalTIP process, whereby an anonymous report of poaching or polluting can be filed with the Department of Fish and Game. He distributed maps, materials, and forms that will aid the docents in performing their duties. To help them determine if suspected culprits are in fact within the MPA boundaries, he explained the process of triangulation and guided them in the use of compasses. He discussed identification of boats and how to read their registry nomenclature.

After a brief lunch break, Linda Ciotti led the docents through the routine of a monitoring activity. She explained how to fill out the survey compilation sheets. They monitored 8 MSMR sites designated during the pilot program mentioned above; they used binoculars to scan the areas, looking for violators and recording recreational beach and ocean activities. The program now has 10 trained volunteers to monitor the designated sites and record all information on the data collection sheets, each survey taking approximately one hour to complete. If you would like to join them in this effort, contact Linda Ciotti, at L8428@aol.com.

By establishing a network of MPAs, the hope is that declining populations of fish and habitats will recover, and our coast will be safeguarded for the use of future generations.

Gary Strachen, Program Manager for the Monterey Bay Sanctuary Foundation described the ways the foundation is working to promote the understanding of the MPA program and its future.

Warden James Ober explained the process of triangulation using a compass.

FMR Volunteers use binoculars to look for violators as well as to record recreational beach and ocean activities.
Pumpkin Parade Excitement

The clouds overhead could not dampen the enthusiasm of the nearly 20 participants representing FFMR in this year’s Pumpkin Day Parade. An abundance of jellies led the float, swishing and swaying to the sounds of the middle school marching band that preceded them. The float carried a variety of marine animals presided over by a giant purple sea star; a shark floated overhead.

The morning of the parade, costumes were donned and everyone began the long march to the parade grounds in high spirits. In addition to the float and the jellies, FFMR was proudly represented by a bright orange octopus, a beguiling sea witch, mother and daughter mermaids, a black oystercatcher and several naturalists wearing crab hats. As they walked they tossed salt water taffy to the outstretched hands of those watching.

All agreed that it was great fun. Why not join in the excitement at next year’s Pumpkin Day parade? ☼