

THE VIP VOICE

WINTER 2001
THE NEWSLETTER OF
CABRILLO VOLUNTEERS

Dear Volunteers:

Since the last **VIP Voice**, our nation and the world have suffered a devastating attack that has touched virtually everyone. We were all desperately hurt and we struggled with how to help our families, our friends, and ourselves deal with what we had always imagined to be unthinkable. People we all know and care about at Cabrillo lost special friends in the 9-11 disaster and, like all of us, will never quite recover from the loss. Personally, I spent two days feeling absolutely numb in front of the television watching as the World Trade Center Twin Towers crumbled into a gray ash pile. I spent a summer of my youth working in the Pentagon and could only imagine the incredible confusion and terror that must have occurred there. I soon realized that the only way I could get through the nightmare was to concentrate on the wonderful and quite incredible acts of kindness that were springing up everywhere as well as attempting to do thoughtful things for others.

We had a friend who was returning from England during the terrorist attacks and his aircraft was diverted to Gander, Newfoundland. Suddenly, this town of approximately 5,000 souls found themselves with 42+ airliners filled with people from every nation on their runway and they needed to feed, house, support and care for all the people aboard. Their kindness, strength, warmth and even love could never have been measured. Schools were let out so people had a place to sleep. Individuals and organizations opened their doors and their hearts for the travelers. A bus strike was called off, at least temporarily, in order to transport people to small towns close by. Townspeople stayed up night after night to cook for everyone while store owners opened their doors and simply allowed the town citizens to take whatever they needed to feed the many. Since passengers were not allowed to take their luggage off the aircraft, the town folks also furnished everything they could round up such as warm blankets, pillows, clean socks and underwear, towels and the like. Our friend suggested a religious service for those who would find strength in such an endeavor, and it was an immense success—amazing since many of the people didn't speak English. Tables were bussed and dishes washed by passengers, lifelong friends were made, considerable amounts of money were collected for the victims, e-mail addresses were exchanged, and many agreed to meet again in a year to be sure that the victims of 9-11 would never be forgotten. A tragedy had turned into an odyssey of the heart for many. Many people rose to the occasion in ways even they would never have imagined. I realize this was only one of millions of kind and thoughtful things people did and continue to do, but can you imagine what these things must have meant to people

who were away from their own families during a most tragic time for our country?

As I got ready to prepare this newsletter for publication, I found myself thinking, "What can I write at this moment that will be

meaningful to volunteers at our unique and quite wonderful Cabrillo National Monument?" It seemed to me that we have to choose our battles and determine where we will put our caring efforts since we can't do everything. Brian Williams has said, "I pledge allegiance to the Earth and all the Life it supports. One planet, in our care, irreplaceable, with sustenance and respect for all." Then it occurred to me that the one thing we all have in common is a desire to preserve and care for this special natural and historical site. Most of us are also concerned about our environment everywhere, but helping where we live is a tangible thing we can do.

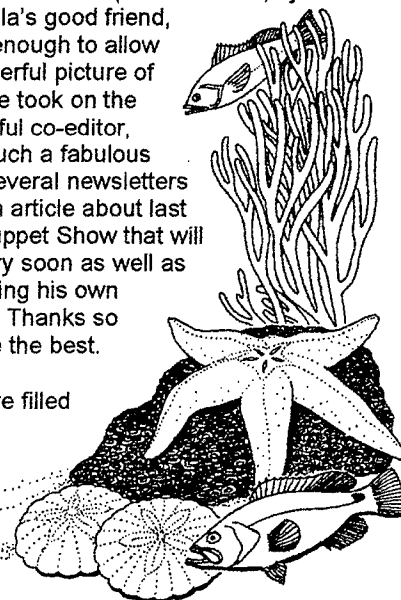
John D. Rockefeller, Jr. said, "I believe that every right implies a responsibility, every opportunity an obligation, every possession a duty."

I think this is a good expression of what we must do and who we must be in order to enjoy all the privileges we share. All the volunteers need to know that the Cabrillo National Monument would find it difficult, if not impossible, to do everything that gets done without the VIPs. The time graciously given and the concern shared with visitors and others are priceless gifts, and you do it every time you come through the entry to the Monument. So, I personally, celebrate each and every one of you. I'm not alone! All the staff is grateful for your efforts, and look forward with pleasure to working with you in 2002.

Finally, I'd like to thank the folks who made my life so easy by taking the time to research and write an article for this edition of the **VIP Voice**. Kim Fahlen, one of our lighthouse lens experts, took time to write an article on lenses. Larry Peery, a professional writer and multi-talented VIP, wrote a fun article on finding Juan Rodriguez Cabrillo during his trip to Paris for Thanksgiving. Claude Edwards has given us some of his incredible drawings of birds and the descriptions to go with them so we can all learn to recognize them as we go about our lives. Ulla Kordel, our longtime volunteer who with her husband, Bo, has returned to their home in Redmond, WA, kept a diary and wrote an article about their trip to Scammons Lagoon in Baja to see the Pacific (not California, I just learned) gray whales calving. Ulla's good friend, Jan Umlauf, was kind enough to allow us to use a really wonderful picture of spy hopping whales she took on the same trip. Our wonderful co-editor, Mike Nelson who did such a fabulous job of putting the last several newsletters together, has written an article about last year's Whale Watch Puppet Show that will be coming up again very soon as well as doing a puzzle and writing his own article, *The Last Word*. Thanks so much to you all! You're the best.

Hope your holidays were filled with joy and love.
Rock on!

Lynn

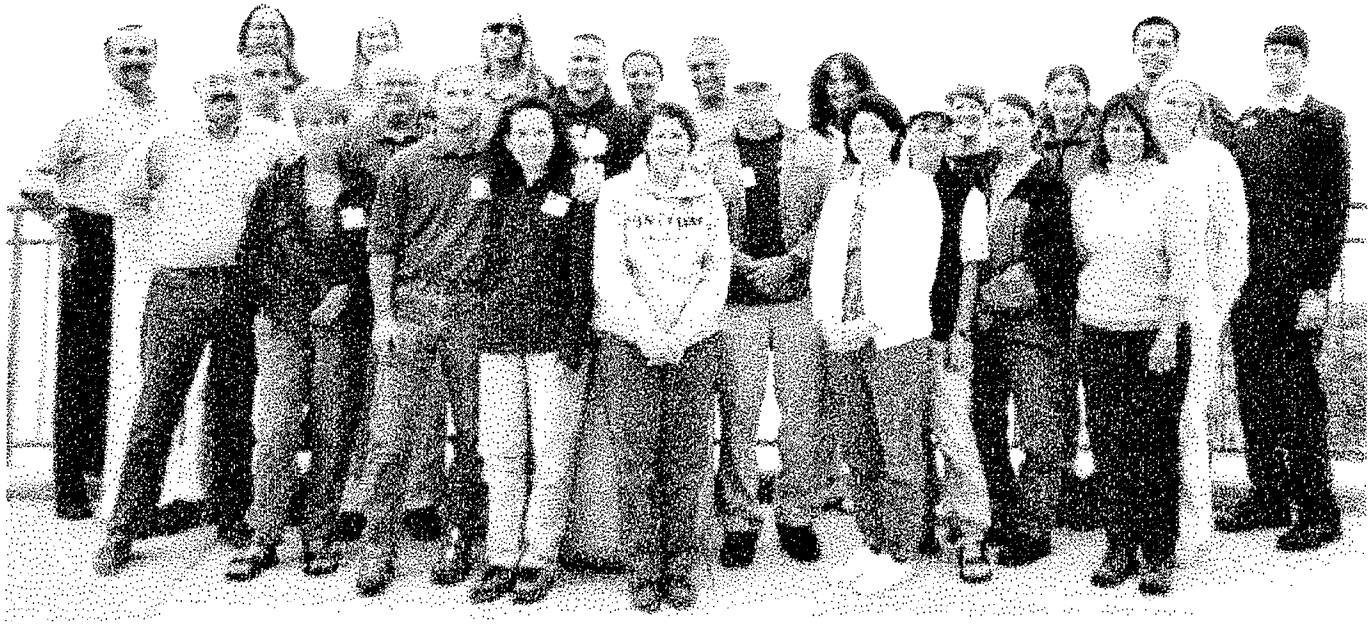


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NEWS AND NOTES FROM ALL OVER

—Compiled by Lynn Moss



Volunteer Tidepool Training, October, 2001

From left to right: Claude Edwards, Garth Graves, Lenny Daigle, Ranger Bonnie Becker, Ursula Weston, Emily Jones, Larry Peery, Michael Bruch, Ranger Samantha Weber, Kim Bruch, Zach Mellor, Lilliana Fajardo, Karen Hoekstra, Chuck Peters, Jim Stewart, Beth Gramoy, Tina Friedman, Stephanie Owens, Sue Slaughter, Amy Salinas, Cindy Miller, Carol Martin, Keith May, Emily Lawlor, & Ranger Carol Knipper

In late October, Ranger Chris Anderson held the annual Tidepool Training session for all tidepool volunteers. Our new tidepool folks are Carol Martin, Karen Hoekstra, Cindy Miller, Amy Salinas, Lenny Daigle, Stephanie Owens, Ilaria Marcyan, Chuck Peters, Larry Peery, Garth Graves and Karen Sisco. About 25 volunteers, the majority of them new to the tidepool program, attended the all day session to listen to speakers, eat, participate in mini-training dramas (how would you handle this situation?, when do you ask for ranger backup?, etc.), eat again, meet each other and some of the Cabrillo National Monument staff, be welcomed by Superintendent DiMaggio and others, eat some more, learn the CNM and tidepool rules and, above all, have fun. Bonnie Becker, our marine biologist, and Ranger Samantha Weber, our Chief of Natural Resources, were there with Bonnie giving two sessions for VIPs. Ranger Carol Knipper was there to make us feel welcome and be sure that Ranger Chris was doing his usual bang-up job, and of course she was concerned that everyone understood the rules of safety, both for volunteers and visitors. As you can see from the picture of the volunteers and some of the rangers, almost everyone was there to enjoy and learn during the interesting and fun day that Chris had so carefully planned. Thanks Chris!

In mentioning some of the Cabrillo National Monument staff, it should be noted that some of those people we have come to know and appreciate have or will soon be leaving us. Fred Andrews has become a permanent status California State Park Ranger and will be serving in the Whittier area at Pico State Park. His duties have begun. He began working in the Mission Bay area for a while and then some training in Monterey. He soon will begin preparing for the renovation of

the Park for its opening later this year. I should note that Fred was the very first featured Special VIP written up in this newsletter. We wish him well in his new and challenging adventure and hope he comes back to visit us often. Samantha Weber transferred to Yosemite National Park in January to do much of what she has done here as well as to help plan the Park's future as a member of a special planning team. She has a great deal of knowledge and amazing energy to bring to this new position (many of us call her the Energizer Bunny) and, on the personal side, she will be joining her nice husband who is already working at Yosemite. Finally, at the end of January, Ranger George Herring and his terrific wife and a very active part of the CNM, Anita, travelled to Europe. They will be gone until July. We know this historian and his wife will learn about and take in every possible thing there is to learn, see and do on their adventure. I wonder if Anita and George would consider putting on a slide show and talking about their trip (all or any part of it) for us upon their return. We do know that George will continue to pursue his graduate studies when they return. All of us wish them the best of everything in the future as well as a trip that is as memorable as it will be safe and wonderful.

In the November 28th issue of the *San Diego Union-Tribune*, there was an article written by Lanna Cheng, a research biologist in the Marine Biology Research Division at Scripps Institution of Oceanography, UCSD. The newspaper's "Ocean Watch" article is about marine insects. Most of us don't think of insects as animal life in and around the oceans of the world. There are thousands of insect species and 3% of these insects live in watery habitats. Few, however, are found in seacoast and ocean environments, and only very recently has any

attention been paid to marine and intertidal insect species and the diversity of their habitats (from saturated salt ponds to the open ocean). Lanna Cheng, the researcher, pays particular attention in the article to "insects that walk on water" or sea skaters (Halobates) that can "skate" on ocean water at a speed as fast as one meter per second. These critters feed on zooplankton, and the ocean variety lay their eggs on just about anything that floats (empty seashells, wood, feathers, seeds and lumps of tar). They "skate" with tiny water-repellent hairs on their legs and feet, and the surface tension of the "air-sea interface" lets them move across the water. If there are pollutants or detergents in the water, the insects eventually sink, but the tiny hairs all over the body tends to trap them in a bubble of air which allows them to breathe and eventually pop up when they have been pushed underwater. If you're interested, do look at the Ocean Watch section of the Nov. 28th *San Diego Union-Tribune*.

New volunteers are being welcomed all the time. Besides the new tidepool volunteers mentioned above, we want to welcome Ron Valenzuela (Visitor Center desk), Neota Bradley (Library), Paul Champlin (Lighthouse Interpretation) and Larry Peery (who, besides working the tidepools will be found at the Visitor Center Desk as well as writing articles during his internship here – see his article in this VIPVoice). There is

always a need for folks to work at the Visitor Center desk, do bird identification, tell the story of the old Point Loma Lighthouse as well as clean it up from time to time, clean and plant on Monument grounds, do scientific monitoring and identification work with Bonnie Becker, be trained to help with curatorial duties, library cataloging, computer work, and the tidepools. If you know anyone that might be interested in any of these areas or have other ideas of things they might like to do, please have them contact Ranger Mary Beth Vygrala at (619) 523-4573 right away. This is in no way a comprehensive list since volunteers need only be limited by their imaginations.

Finally, I'd like to especially thank VIP Claude Edwards who jumped into the breach when my quilt guild was preparing an Opportunity Quilt for 2002 in order to sell raffle tickets for charity. The quilt is called "Shore Leave in San Diego," and many of us put the background (beach, cliff, sea, sky) together so other quilters could appliqué local sea birds onto the background. We had a silhouette of every bird we wanted except for a godwit. I didn't hesitate, and it was our own Claude to the rescue. The quilt is now complete and ready to raffle. Our folks do so many more things than volunteering. It's usually the busiest people that manage to find the time to help others.

Featured VIP—Emily Lawlor

—Lynn Moss

When I first began volunteering in the tidepools, I met Becky Lawlor who was beginning her second year as a volunteer with her daughter, Emily. It was felt by Monument officials that Emily was too young, at 15, to become a volunteer by herself. She actually learned about the tidepool program at Cabrillo National Monument from her mother, so she called Ranger Mary Beth Vygrala and took the training in the fall of 1998. In 1999, my first year, I rarely spoke with or even saw Emily because she was out in Zone II talking to and learning about the critters. She claims that she learned most of the information about the critters and the tidepools from the volunteer program itself with strong doses of the tidepool bible, Life Between the Tides.

In the 2000 tidepool season, I noticed this very pretty young volunteer with blond hair and a shy smile becoming a real presence in Zone I, and Becky, her mom, had stepped back to let Emily "do her thing." Like so many others, I was drawn to Emily because of her knowledge, her gentle way of explaining life in the intertidal and her energy. Further, as the newsletter editor, I was ecstatic when Emily stepped forward and offered to write an article on the sea anemone. Not long after that there was an article on the California Grey Whale and in the last issue of the VIPVoice, she wrote an article on the Grey Fox. I had only to ask and there was another article. One of the first things everyone noticed about the excellent articles was how extremely well written and interesting they were.

I came to learn that Emily is home-schooled and wondered how her mom decided to take this on. Through the fifth grade it had become evident that Emily loved school, studying, learning, researching and everything about the acquisition of knowledge. What could the public schools offer that a program designed for her couldn't? There was concern that



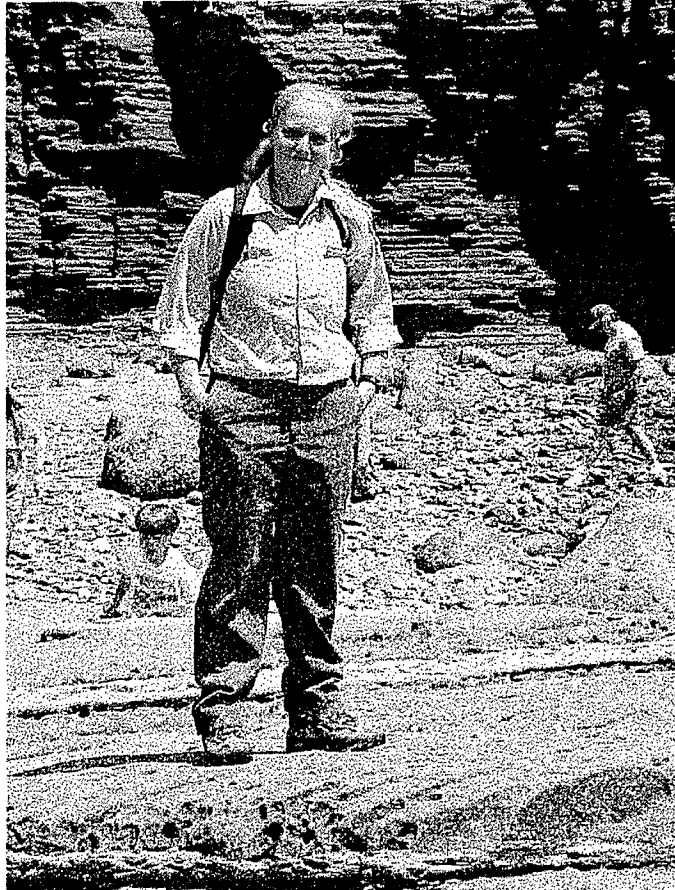
this bright, educationally excited child might get lost in the largeness of the public system. Becky began to home-school her "with trepidation" in the 6th grade. That fall, she and her family went to the Grand Canyon (a genuinely life-changing experience for her) and then to Yosemite. She fell head over heels in love with nature and the National Park system that protected it. The next summer her family went to about 15 national parks, and she and her younger brother worked for a Junior Ranger badge in each park. "It gave me something to look forward to, a goal, on the way to each park," Emily says.

So, from 6th grade through her senior year, Emily has been a very self-motivated student who studies at home and is tested regularly by a sanctioned organization to be sure she is properly educated. When I say "self-motivated," I can say that for a fact. I asked her if the three articles she wrote for the newsletter were written for school credit and she replied, "No, I just like to learn about stuff. You have to want to learn things and not just have to do them as an assignment." What a concept!

Besides school, Emily loves volleyball and plays with the Balboa Community Church as well as coaching her younger sister's team. She belongs to the Pro Kids Golf Academy, where her younger brother, Dillon, began his golfing career.

Her passion, besides school, is as a student leader in an organization called ACTION Ministry at her church. This very active group mimes, dances, does sign language and drama to contemporary music for other churches and for other places like shopping center malls. She spent 3 weeks in Alaska this past summer as a team leader, and hopes with all her heart that she will be able to form a group like ACTION Ministry when she goes to college next year.

Emily thought she'd major in biology (especially since she felt she wanted to be a National Park Ranger one day), but she has since decided she wants to "follow her passion" and study literature, communications and perhaps even print media with a possible minor in biology. She's open to the future but still feels she wants to use her talents in a national park. She loves the setting and the solitude, and she has a real desire to live a simple life (certainly not the city life). For the park system, the environment and the public, I sincerely hope she does spend time as a ranger, at least for a while. As she looks at different colleges, it's clear that The Master's College in Santa Clarita is the frontrunner with the information she has to date. It is a private college with 1,000 students and, when she visited, she loved the atmosphere and really felt good about being there. Emily has also used her talents in other areas of the park. Besides the tidepools she has worked at the visitor center information desk greeting visitors, introducing movies, and answering questions of all sorts. She is also one of the first volunteers to sign up for special events such as the Cabrillo Festival and Lighthouse Tower Openings. She is a veteran at working the puppets for the children's program during whale watch weekend.



This last summer Emily divided her time between Cabrillo and Yosemite working in the YCC program. She got a taste working labor removing exotic plants but at the same time getting paid for something she loves to do.

Since this will probably be Emily's last year as a tidepool volunteer, at least for some time. I asked what advice she would give other new volunteers. She said, "I would tell them to be really friendly, explore what's interesting to you and other people and make the public feel welcome."

For Emily, "family" means her terrific mom, Becky, brother, Dillon (who will be 16 in January), her sister, Kathy (10), her dog, Molly and her two cats, Sparky and Ping. They are sure to miss her terribly when she goes to college next fall, and I know that the Cabrillo National Monument team will miss her almost as much.

This has been a valuable experience for me since most all the people I have interviewed as Special VIPs have had a significant past to recount. Emily has the future, and a very promising one to look forward to since she is so young and special. She is as "real" as a person can be, and talking and just being with someone who is completely relaxed with whom and what they are is a unique and wonderful experience.

We wish Emily the best tidepool season yet in 2001 and hope she will return to the National Park system either as a professional or a volunteer when she has time. I, personally, thank Emily for writing wonderful articles that we all learned from and enjoyed as well as making my newsletter life happier and easier. Take advantage of this tidepool season to meet Emily if you haven't already done so.

The best of everything for you, Emily! We all wish you well.

THANKSGIVING IN PARIS WITH JUAN RODRÍGUEZ CABRILLO

—Larry Peery

I arrived in Paris on Thanksgiving Day morning. It was a typical fall day on the Left Bank. Some trees still had leaves on them, but most of the leaves were on the ground or in one of those large wire enclosures the French use to temporarily hold leaves. The enclosures are worthless, of course, but I think they are part of the French universal employment scheme. The sky had been a clear blue earlier, but a cold wind was blowing in from somewhere. The night air was positively chilly. I'd had dinner (turkey croquettes, of all things) with some French friends in a little place off the Rue de la Seine. It was one of those delightful places that the Parisians seem to know about but visitors never find on their own.

I was walking back to my hotel along the Blvd. San Germain, a few blocks from the Cluny Museum, if you know Paris. I was rambling along, looking in the shop windows, avoiding the happy drunks and the not-so-happy homeless on the streets, when my eye spied a bookstore across the street, down the Blvd. from the Indiana Brasserie that serves Tex-Mex cuisine; and around the corner from Hugo Boss (Do Parisians really pay USD 350 for a pair of shoes?). It was closed but I crossed over anyway to check it out. A bookstore in the Latin Quarter of Paris is irresistible to me. It had the usual stuff you'd expect for such a shop: a big coffee table art book on Piaf, a dozen volumes on philosophy and psychology with lots of Sartre and self-analysis, and a half dozen books on the glories of Paris.

But what caught my eye was the display in the center of the window. A simple rack, draped in black, held three small paperback volumes, each one perhaps 5 by 8 inches. They were obviously part of a set or series from the same publisher. The covers all looked alike with a title in large letters, a facial photo in the center on a black background, and the author's name at the bottom. At first the pictures didn't capture my attention. Neither did the authors' names. I'd never heard of any of them. What did capture my attention were the titles in big gold letters. Cortez, de Soto, and, lo and behold, on the right, Cabrillo! There they were, right in the middle of the Left Bank!

The Cabrillo portrait looked good, but I have no idea who'd posed for the picture, because everybody knows no real image of Cabrillo exists. I was intrigued to find this link to San Diego in the middle of Paris. Well, I decided to return to the shop the next day and check the book out. And with that I made my way back to the hotel.

The next day, after making the rounds of Notre Dame, St. Denis, Sanmartaine (What's a trip to Paris without a little shopping?), and the Cluny, I found myself back in front of the book shop. Everything looked the same at first, as I peered in the window. Then I stopped and stared. Cortez and de Soto were in their places but Cabrillo was gone! In his place was a volume on Pizarro!! I couldn't believe a book on such an esoteric subject had disappeared in less than a day. Perhaps I'd imagined seeing the Cabrillo book the night before, I thought to myself. After all, it was late and the nouveau

beaujolais had flowed pretty freely. Curious, I decided to go inside the shop and see what I could discover.

I entered the shop, filled with students and a few older people mostly rummaging on the used book tables, and finally spotted the owner. You can always spot the owner of a shop in Paris. They're the ones giving you a beady eye and trying to decide if you're a "lookie loo" or a serious buyer; and, if you're a serious buyer, are you a knowledgeable one or willing to buy anything they say is a bargain? I walked over to the window display and looked down at the featured display. Pizarro was still there. I looked around and the owner was looking back at me. She didn't make a move. I nodded my head, smiled, and

pointed at the display. She looked at me. I tried a different tack, raised an eyebrow, shrugged my shoulders, and moved toward the door. At that she moved swiftly to get between me and the door. She smiled—sort of like a crocodile would, I think. I pointed at the Pizarro book and said, "Cabrillo?" She looked at the book and then looked at me and replied, "Pizarro." I pointed at each book in turn and said, "Cortez.... de Soto.... Pizarro" and then in my best questioning tone asked "Cabrillo???" She looked at the books and then at me and repeated, "Cortez.... de Soto.... Pizarro.... Cabrillo?????" I felt like a

third level French student.

What to do next? Well, perhaps a different tack would work better. I reached into my wallet while she stared at me. I pulled out my wallet, opened it up, and pulled out a Visa card. Holding it so she could see it, I repeated "Cabrillo?" She looked at the window display, looked at the Visa card, looked at me, looked at the card, and stated flatly, "Pizarro." I started to put my card away, ready to give up. At that she headed back to her desk and pulled a box out of a drawer. I could tell it was filled with credit card transaction slips. She began to go through them, back to front, and looked at each one. She must have looked at sixty slips. Finally she got to the first one at the front of the box. She looked at it. She took it out of the box. She looked at it again. She turned it over and looked at the back. Then she looked at me. I knew the routine by now. I followed her eyes as she looked back toward the window, at the Visa card in my hand, and finally back at me. I think it was the first time she looked directly into my eyes. She opened her mouth and out came, "Cabrillo." I looked at the slip, wondering who had bought the book that should have belonged to me. Obviously she didn't have another copy on hand. I thought about trying to order a copy but I only had two days left in Paris and I didn't want to spend them in her shop. As I murmured, "merci," and headed for the door I realized that I had solved one mystery and created another. I now know the book existed and that I hadn't been hallucinating the previous night. What I don't know is who bought it and why? I'm sure Cabrillo, who created a few mysteries himself, was watching all this happen and laughing the whole time. I'm going to try and find a copy of that book here, of course. If not, well, there's always that bookstore on the Blvd. St. Germain. We'll always have Thanksgiving...and Paris...and Cabrillo's mysteries.



ENCOUNTER WITH GENTLE GIANTS

—Ulla Kordel



Spy Hopping Photo by Jan Umlauf

One of the highlights each winter season at Cabrillo National Monument is watching the Pacific Gray Whale migration. Now this exciting time has come once again and people are flocking to our great Monument to get a glimpse of these incredible animals. Last winter in our **VIP Voice** newsletter, we could read and learn about the gray whales. Emily Lawlor wrote a very comprehensive and interesting article about these gentle giants.

We learned about their long journey starting in the nutrition-rich waters in the Bering Sea, off the coast of Alaska and ending in one of the warm lagoons off Baja California in Mexico, where female gray whales give birth to their calves. These waters are protected and provide a safe environment for the birth and early nurturing process. It's truly amazing that the whales cover more than 10,000 miles in their journey from Alaska to Mexico and back again each year.

Each October, pregnant females depart the Alaskan feeding grounds and head south. Breeding adults, immature whales, and yearlings follow these mothers-to-be as they journey the 5,000 miles south. Females who are impregnated during the migration will give birth to a single calf the following year.

At Cabrillo, we usually see the first whales around mid-December and from then on we'll have sightings mostly every day for several weeks. It is always exciting to see the misty blow that may rise as high as 10 feet in the air. Sometimes the blow appears heart shaped since the Pacific Gray is the only whale with two blowholes. You can usually follow the whale for several minutes, as it comes up to breathe once every 3 to 5 minutes. Last spring in March, my husband Bo and I had an opportunity to go on a whale-watching trip to Baja

California. We traveled by bus along with 26 other people and had a great time!

The first night was spent in Ensenada. We then traveled on to Guerrero Negro just south of the Baja Sur border where we spent the next night. From there we drove out to Scammons Lagoon in small vans. This is the lagoon where half of all gray whales go to give birth. Other lagoons favored by the whales are San Ignacio and Magdalena Bay. We had a wonderful guide, who added to our knowledge about plant and animal life. She also touched a little on Mexican History.

Guerrero Negro is named after a whaling ship which capsized in the Lagoon in 1858. Guerrero Negro is also famous for having the world's largest salt manufacturing plant. The Mexican government owns 51% and 49% is owned by Mitsubishi of Japan. The salt business has helped the local economy but there is still considerable controversy about the environmental impact on the whales and other sealife in the lagoon.

The lagoon is very strictly monitored and only a few boats can go out at a time in order not to disturb the whales. We were brought to the lagoon in vans and, on the way out, we stopped to watch migrating birds like ospreys, geese, herons, and egrets.

Then came the time to go Whale Watching! We were loaded into 3 different boats, each with a guide. Everybody had a camera or a pair of binoculars ready for the adventure. After about a 20-minute boat ride, we began to look for whales. One after another, misty spouts started to appear and it seemed the whales were as curious as we were. Some were

spy hopping (lifting the head out of the water to look around) and others would breach with a great splash. The whales started to come closer and they dove under the boats just like shadows. We could not believe how close they were and we had to trust them completely. It was an intense feeling and almost humbling the way nature can make you feel.

The mothers and calves were always together. The little calves were curious enough to lift their heads out of the water to be petted. Some of us were fortunate enough to touch the soft rubbery skin of the whales and the cameras were clicking to save the special moment. We must have seen over 50 whales that day!

All good things must come to an end, however, and we headed north to a desert town called Catavina. The next day we had a wonderfully educational nature walk and received a

lecture about desert plants. We also visited a cave with old paintings to make the trip completely perfect.

When we all returned home to San Diego, we were tired but very happy. This trip had been so special and we made friends with others who appreciate and love wildlife. I hope that you will also have a chance to encounter this experience one day.

Editor's Note:

Ulla Kordel was one of our tidepool volunteers for several years and she also was one of the lighthouse ladies who lovingly interpreted the history of the lighthouse to our visitors. Her husband retired in September and they returned to their home in Redmond, Washington, but not before they took their dream bus trip to Scammons Lagoon that is offered yearly by the Birch Aquarium to get "up close and personal" with Pacific (we have often called them California) Gray Whales. She was willing to write an article for the **VIP Voice** about their trip, and we most gratefully accepted.

MUSINGS FROM MARY BETH

—Mary Beth Vygrala

A few reminders for all volunteers!

Please remember to check your mailboxes every time you are at the park. Newsletters, notes, etc., are piling up in the boxes and mail slots making it difficult to put other stuff in.

Also, if you are unable to work your scheduled shifts, please call the main park number at (619) 557-5450 and dial "0" for the operator. It is better to talk to a live person rather than leaving a message since supervisors and I may be gone when you call and the message may be left on the answering machine for days. It would be very helpful if tidepool volunteers would find another tidepool VIP to cover their shift if they are unable to work. Chris will mail out a list of other tidepool volunteers and their numbers to make it easier. I know that emergencies and illnesses can arise suddenly, but if you have any lead-time at all, it will help us find a replacement for you.

The radios are a vital and important tool—especially when you are in the tidepools. In order to assure that the radio you have used is ready for the next volunteer, please leave the belt clip and set the radio properly in the battery charger. Check to make sure that the charge light is on so that the battery will have a full-charge for next time.

I appreciate all your hard work.

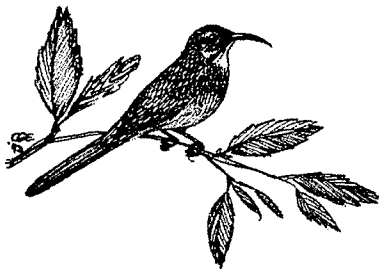
Editor's Note:

The annual VIP appreciation dinner is coming very soon. If we don't already have your photo for the Powerpoint presentation and the VIP photo gallery in the administration offices, please be sure to stop by and see Mary Beth so that she can take your photo. If you normally don't get out to the Park when she is in, check in with Ranger Chris Anderson. He'll be happy to "click your pic." We want to get EVERYONE this year. Last year, we missed about 8 people and we really missed having your picture in the "rogue's gallery." ☺

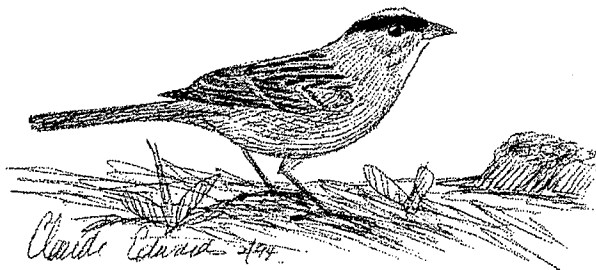
THE WORLD OF BIRDS

—Claude Edwards

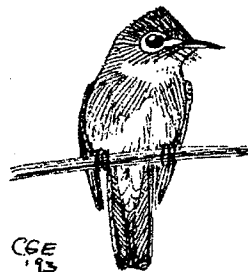
Golden-crowned Sparrow—This winter-season visitor usually arrives with a less pronounced head pattern, acquiring its distinctive black-and-yellow coloration before it departs in early spring. Preferring dense brush and undergrowth, they can be observed around the patio below the bus stop, in the grove of myoporum beside the ocean view lot and around the Old Lighthouse at CNM. Its scientific name '*atricapilla*' means "black-capped."



Hammond's Ash-throated Flycatcher—This perky and attractive bird is a migratory species that occurs in our region during the summertime. The traditional method for acquiring its food is the basis for its family name and a whitish throat is one of this species' main field marks. It also has a pale yellow belly and touches of rufous in its tail and flight feathers.



California Thrasher—Most casual observers and Monument visitors would not notice nor appreciate this species' varied and interesting song which includes borrowed phrases from other birds. Its modest plumage of grays and browns helps it to blend into its surroundings, which consist of native chaparral and sage scrub vegetation. The long and decurved bill is used for seeking food. When they run across the ground, they often hold their tails up.



Brown-headed Cowbird—This is one of several members of the diverse family of birds that includes grackles, orioles, and yikes, meadowlarks. They are 'dimorphic,' which means that the males and females are dressed in different plumages. The single most distinctive quality about this species is its unique behavior. It is known as a "brood parasite." Anybody know what that means?

Editor's Note:

All four birds have been generously drawn and described by Claude Edwards for our newsletter. He is a genuine bird and, I have recently found, butterfly expert who has been either participating in or coordinating the Point Loma Cabrillo Team for the Annual San Diego Christmas Bird Count for the last 20 years. Currently he surveys the birds in the Imperial Beach area. Last year he was able to convince Fred Andrews, Samantha Weber, Susie Qashu and Mike Barbie of Cabrillo National Monument that they wanted to participate as well. The immense variety of the entire count included 194 species totaling 69,078 individual birds overall, and 102 official participants in 36 teams served as observers.

As a reminder, be sure to attend at least one of Claude's bird walks and talks on the 3rd Saturday of each month at 9:30 A.M. You won't be sorry!

Whale of a Tail

—Mike Nelson

How do you get an audience excited, yelling and jumping out of their seats? What do "yum-yum," "squish-squish," "dum-da-dum-dum," "Hi, Mom," and "Save the Whales" all have in common? These are all reactions to the Cabrillo program called "A Whale of a Tail." During whale-watch weekend, Mary Beth Vygrala and a group of volunteers present this puppet show on Saturday and Sunday in the auditorium. It's hard to figure out who enjoys it most—the kids, the adults or the volunteers.

I had the opportunity to watch one of the 2001 performances and had a blast!! It was a kick watching all these sensible adults in the audience trying to out-yell the kids in responding to the cues from the narrator—and, sometimes, they caught cues that the narrator overlooked! It was a 15 to 20 minute presentation that just flew by. Even the volunteers got so caught up in the show that they nearly tipped the stage over on themselves! It's hard to believe that there were at least 4 people working behind that stage to make it work.

Each year, the show picks up more details and props—and, in my opinion, the highlight was when, in scene 3, mama whale reaches Mexico and dons her sombrero.

But it's not all fun and games. There is also a lot of information about the Pacific gray whale that sticks after the laughing stops. Between the jokes, the gags, the puns and the slapstick, you can learn a lot about the whales. If you don't think so, just stop and talk with a couple of the kids after the show like I did. You would be surprised to find out what they learned about whales during the show—and I'll bet a lot of it sticks around for a long time.

Do you have what it takes to be a puppeteer? It doesn't take much—just some enthusiasm, some bravado, a little time and great expectations. Hook up with Mary Beth to see how you can be a part of this year's "Whale of a Tail."

These photos are from the 2001 presentation. Watch for the next issue of the **VIP Voice** for photos of the 2002 presenters.



Ryan Barr & Beth Gramoy



From left to right: Susan Dagwell, Peggie Forte, Beth Gramoy, Megan from Seaworld, Ryan Barr as the Whale & Kevin O'Leary in front.

FRESNEL AND THE OTHERS

—Kim Fahlen

Surely I am not a writer. Yet, when Lynn asked me to write on the topic of Fresnel lenses, I agreed. Now, as I begin, I'm overwhelmed with how best to present Fresnel and his lenses to you. It's actually an accumulation of notes that I have. So I've determined to 'write' as though I were speaking to you from the lighthouse kitchen and from my notes whose sources can easily (well, fairly easily) be recovered and cited (dare you ask!). Actually, when perusing the bibliographies of my sources and seeing nearly the same book titles that my notes came from, I wonder if writers (at least of non-fiction kinds of subjects) aren't just re-arrangers of the information from the same books!

Rightfully and absolutely, honor and merit become the genius of Frenchman Augustin Fresnel. It was on the system of his theory and design that the science of lighthouse optics was revolutionized and lenses manufactured for worldwide use for the next century and a half.

Augustin Fresnel, born in 1788, showed little aptitude for his primary education but, by secondary school, demonstrated remarkable abilities in mathematics, geometry, and graphic arts. Because of the Napoleonic era of his time, his final courses dealt with artillery and military matters while those unsuited for the military were designated civil servants. Augustin's health had never been strong so, as a graduate engineer, he was assigned to the department of roadways and bridges ("*ponts et chaussee*" *en francais*) and sent to Brittany, France. He worked hard and was regularly promoted even though he disliked having to "lead men."

Meanwhile, he privately pursued scientific research and corresponded with his uncle, Leonor Merimee. They discussed formulas of India ink, glue, and Fresnel's own process for manufacturing soda. The point of mentioning this is that his uncle was quick to recognize Fresnel's abilities and was the first to contact the scientific community with regard to them.

In addition, Fresnel experimented with light and optics. His only light source was the sun and his sole instrument was a micrometer (a device to measure light distance, angles, etc.) made from wires and cardboard. He fashioned a lens by placing a drop of honey over a small hole in the cardboard!

Isaac Newton's vague theories — that light consisted of "corpuscles" swarming through "ether" (the substance that Aristotle determined filled space) of light were so entrenched in the scientific minds of his day that they proved to be an obstacle to Fresnel's differing concepts. Fresnel's "quest for the truth" finally caught the attention and then the

encouragement of Andree Marie Ampere (yes, the Ampere for whom today's unit of electrical current strength is named). With the publication of his scientific papers, Fresnel also impressed the French scientist, M. Arago, who helped convince Fresnel's skeptics that his theories did not come from an "illusionistic renegade."

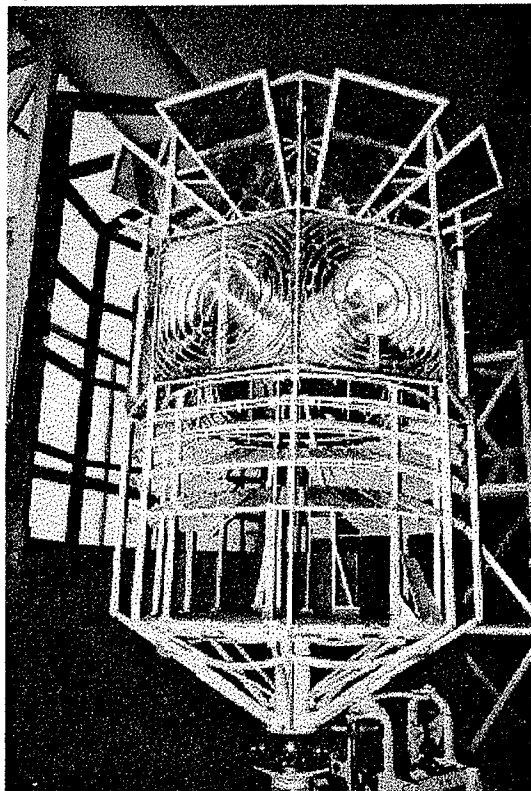
Fresnel was appointed to the French Lighthouse Commission in 1811. However, he lost his government employment because he opposed Napoleon's return from exile in 1815. His time away actually benefited the applications of his

theories that led to the development of his lenses. Fresnel's immediate concern was the feebleness of the light emitted by the parabolic reflector system in use at the time (concentrating light rays into parallel beams by reflection of the light from a mirror or polished surface). He also recognized, with equal importance, the limited ability of one light to be distinguished differently from other lighthouses in the area.

Fresnel was not only person to consider ways to improve lighthouse illumination; others were challenged before him. The French naturalist, Georges Louis Leclerc Buffon (1707-88), had proposed a spherical lens ground out of a solid piece of glass into steps of concentric 'zones' but he seemed to have in mind only a reduction in the thickness of the glass. The merit of having first suggested the building of a lens in *separate* pieces went to Marie Jean Condorcet (1743-94), a French mathematician and philosopher. He recognized that it was imperative for light rays to follow a particular path

through the center of each piece or zone of glass. Sir Edward Brewster, an Englishman, considered engraving a lens "echelon" but, again, of a single piece of glass. Interestingly, Brewster is credited with the invention of the kaleidoscope! It is recognized that Fresnel was unaware of the studies of the others. The discriminating difference between Fresnel and the other scientists was that none of the other men put their theories into practice.

Fresnel ascertained that the method of concentrating light rays by reflection alone was doomed. He hit upon using lenticular (convex) glass to produce by refraction the same effect that the parabolic reflector generated by reflection. He is quoted as saying that "it couldn't be a new idea because it came too easily to the mind or thought." He knew if the dimension of a single lens were cut to be spherical, it would be too thick and too weighty. In addition, absorption of light energy would be turned into heat energy — and it wasn't heat energy that was wanted but light energy. The deviation of the light due to bubbles, streaks (*strie*), or varying densities in the mass of



glass would be a critical issue to overcome. He positioned a central piece of glass around a number of concentric rings of glass that projected one beyond another. Each had a different radius owing to its position but was in the same focus with regard to the light source. The prisms were united by fish glue and the whole was mounted in a metal frame. Fresnel's initial first-order lens was put to the test on top of *L'Arc de Triomphe* in Paris, France. Imagine the citizens of Paris in 1822 witnessing this illumination! In 1823, it was submitted to its first practical application in the *Tour de Cordouan, le phare roi*—the lighthouse tower with apartments and a chapel for the King of France at the mouth of the Gironde River. Today, this remarkable 'first' is displayed in the national lighthouse museum on *Ile d'Ouessant*.

Mathematical calculations—it was here where Fresnel's genius was manifest—had to be studied and determined for light to pass through the glass and be bent (refracted) and thrown in the required direction to the horizon. Frightful sounding things such as tangent, normal, index of refraction, angle of incidence, and divergence were all required elements. They determined the accurate placement of each annular prism within each panel of prisms that made up the lens.

With the success of his first trials, Fresnel began to modify his system to adapt to varying conditions. He added prisms and mirrors above the apparatus (and later, below) to collect and

redirect the light rays sent vertically from the illuminant. He sought to use every available photon. And, speaking of illuminants, the immense importance of ever-improving lamp technology and lamp fuels critical to the success of the optics must be noted. Fresnel also began to devise ways to rotate his optics to vary their characteristics or signals, though I have yet to learn how. I like to think this is discussed in French books that I can't yet translate!

Fresnel's lens 'orders,' the later classifications given to lighthouse optics and the beginning of their use in America must be discussed in another newsletter. Our very own Cabrillo National Monument holds some of the finest lighthouse optics in the country and I'm anxious to tell you about them.

Augustin Fresnel died at age 39 of consumption on Bastille Day, 1827. His brother, Leonor, continued his scientific work. The Scottish lighthouse engineer, Alan Stevenson (1807-65), who had worked with Fresnel, carried Fresnel's ideas even further. Stevenson's own achievements in lighthouse illumination are little recognized by today's acquaintance with 'Fresnel' lenses. Nonetheless, my favorite lighthouse quote is credited to him. "Nothing can be more beautiful than an entire apparatus for a fixed light of the first order... I know of no work of art more beautiful or creditable to the boldness, ardor, intelligence and zeal of the artist."

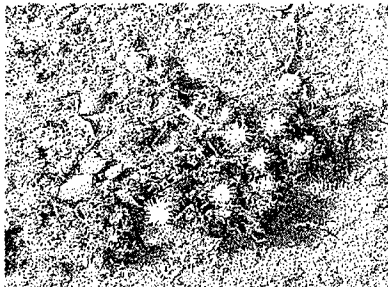
The Bayside Trail Puzzle

—Mike Nelson

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Visitors taking self-guide hike



Crystalline Iceplant



Wild Cucumber

One of the best kept secrets of Cabrillo National Monument (CNM) is the Bayside Trail. It is one of the best ways to get a good close-up look at the flora and fauna that lives in the Pacific Coastal Sage Scrub Preserve. A casual walk down the trail and back up takes about an hour and is 2.2 miles long. The trail is in best bloom from about the middle of February until early April. However, it is well worth your time to take a hike during other parts of the year. It may not be as pretty in the traditional sense; however, it will have a stark beauty of its own. Among the plants, you will find a plethora of animal life: Mammals, reptiles, birds, insects and spiders abound.

Last March, Bonnie Becker gave a guided tour through the tidepools to members of the Cabrillo National Monument Foundation. She told us that the tidepools are a great example of various species of plants and animals vying for a very limited amount of real estate and resources. As I spent several afternoons on the bayside trail, I realized that it was also true on the trail.

It was amazing to notice how different species of plants cluster in various places on the hillside depending upon availability of sunlight or shade, the type of soil and moisture. Even in the driest season, there are nooks and crannies on the north-facing surfaces that are covered with healthy moss and lichen. Just a few feet away, you will see plants that appear to have died of drought. Some have but others are dormant and waiting for the next rain when they will spring back to life.

Just as it takes a few visits to the tidepools to discover its secrets, you need to spend some time visiting the trail to find its treasures as well. It's easy to find things like an agave such as Our Lord's Candle (yucca whipplei), the California encelia (Encelia californica), and various cacti. You can

almost trip over the chaparral broom or run into the lemonadeberry (Rhus integrifolia), California buckwheat (Eriogonum fasciculatum), Indian paintbrush (Castilleja affinis) and black sage (Salvia mellifera).

Other species take a bit of looking or hunting before you find them. In my opinion, one of the sneakiest is the Cucamonga manroot or wild cucumber (Marah macrocarpus). It is a vine that actually grows among the limbs of a larger shrub. The easiest thing to find on it is the seed pod. In late summer and fall, you can find the golden tan pods on the ground after they have dropped their seeds. The large black seeds will lie in wait for winter rains to germinate.

The exotic crystalline ice plant (mesembryanthemum crystallinum L.), a native of South Africa, is also easy to overlook. This little lacy plant can be found on sandy barren slopes exposed to full sunlight. The remarkable thing about this plant is that the leaves can be nearly maroon and look like they are covered by the morning dew—even in midday.

I could go on but I'll stop for now. The list of plants could go on and on but here are a few that I found over a period of 3 Sunday afternoons: Blue dicks (Dichelostemma capitatum), chalk live forever (Dudleya pulverulenta), California everlasting (Gnaphalium californicum), golden yarrow (Eriophyllum confertiflorum), sea dahlia (Coreopsis gigantea), bladderpod (Isomeris arborea), and southern California locoweed (Astragalus trichopodus). All these species and a lot more await your visits to the bayside trail!

References & Resources:

- Flowering Plants of the Santa Monica Mountains, Nancy Dale, California Native Plant Society, 1985 & 2000.
- Ranger Marty Lane (He is a walking encyclopedia on the plants located in the Monument).

The Last Word

—Mike Nelson

I have to take a minute to talk about the quality of the articles in this issue of the VIP Voice. It's truly extraordinary. The level of expertise that appears in some of the stories makes me feel like I'm in college again. What a wealth of information you guys have! It is a veritable treasure trove. Kim's article on Augustin Fresnel is incredible. Larry's story about Cabrillo and Thanksgiving in Paris painted such a picture that I felt as though I were in Paris with him! Claude's articles and drawings on birds always stimulates me to take a little more time to look for the birds as I wander around the park. Ulla's recounting of her trip to Scammons Bay added a touch to our whale watching theme here at the Park that I just don't get when I watch the video in the auditorium.

Nearly early three years ago while doing living history in the lighthouse, Sandra Turner challenged me to become a volunteer here at the Park. As I've talked with a lot of volunteers, I've discovered that many of us joined in because

we were encouraged by other volunteers. The contribution that each one of us makes to the Park is very valuable and very much appreciated. The Park can always use a lot more of us. There are all kinds of things that can be done by volunteers. We tend to think most about working in the tidepools but there are all kinds of opportunities: The visitors' desk, living history, curatorial work, working with plants, surveys and counts, writing stories for the VIP Voice (hint, hint) or other publications, and lots more. If you know of anyone who you think would love to volunteer, encourage them to join us so that they can "Experience Your America" from the inside.

Since I have been on an extended vacation, this issue of the VIP Voice is a bit late in getting out. We would like to have all submissions for the spring edition in hand by March 31, 2002, and we plan to have it to press by April 15, 2002—Tax Day (Ugh!!). Thanks!