



TORREYANA

A NEWSLETTER PUBLISHED
BY THE TORREY PINES
DOCENT SOCIETY

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Torrey Pines' red tide

text and illustration by Maryruth Cox

In late summer, as the red tide spread through our coastal waters, we had a glimpse into a world that is usually hidden from us: the realm of phytoplankton called *dinoflagellates*.

Dinoflagellates are single-celled organisms that swim freely in the ocean, propelled by two whip-like flagella. They can live at latitudes from the Arctic to the Antarctic, from the open ocean to salt marshes. In San Diego waters, the *dinoflagellate* *Lingulodinium* multiplied by the millions and became visible to us by day as a rusty stain in the seawater: by night, as exuberant displays of blue-green bioluminescence in the breaking waves. When we walked on the Torrey Pines beach at night in mid-August, the mysterious ocean stretched into the dark and suddenly a wave tumbled with flashes of blue-green light. What was happening?



For unknown reasons, perhaps an increased supply of nutrients caused by pollution run-off; upwelling; or warm temperatures; the dinoflagellates had a reproductive surge. They continued to reproduce vegetatively until the food supply ran out (at the end of September) and were so dense that the water looked red-brown. When the nutrient level drops, the dinoflagellates go into a sexual phase and make *gametes*, *zygotes* and eventually, *cysts*, that sink to the bottom of the sea to await the right conditions for another "bloom."

At night, the dinoflagellates flashed with a blue-green light if they were disturbed by the motion of a wave, fish, dolphins, or by human activity. When we walked on the wet sand, sparkles leapt under our feet. Once we sailed to Catalina on a summer night. The stars were bright but the sea was a bioluminescent light show as dolphins played in our bow wave, creating fountains of aquamarine light.

The luminescence may protect the dinoflagellate. When alarmed by a copepod predator, the tiny dinoflagellate sparks, which attracts a fish which promptly eats the copepod! The light is a

result of a chemical reaction between *luciferin* and oxygen in the dinoflagellate.

In September, curious brown foam appeared on the Torrey Pines beach. Piles of bubbles were strewn along the shore. They coalesced in stately structures that glided up and down with the water flow. The sea gulls spurned the foam and stood well out of reach. The foam was sturdy and clung to our skin. It is believed this is a product of the red tide. Dinoflagellates, crushed by strong waves, release proteins, fats and sugars that float on the water surface where they are whipped into foam by wind and waves.

At this writing (October 2003), the water is clear and the foam has gone from the beach. The red tide of 2003 was "off the charts" in intensity and duration. Fortunately, the dominant dinoflagellate here is non-toxic. In some parts of the world, a red tide brings danger of paralytic shellfish disease, as toxins from the dinoflagellates are concentrated in mollusks such as scallops. If humans consume these shellfish, the poison can cause paralysis and death. At Torrey Pines, however, we took delight in a (benign) spectacle of iridescence.

Notes from the President

The *Torreyana* is published bi-monthly by the Torrey Pines Docent Society. Print copies of this newsletter are mailed to members of the Docent Society, members of Torrey Pines Association, and some elected officials of San Diego City and County, and the city of Del Mar. Contact the Torrey Pines Docent Society at PO Box 2414, Del Mar, CA 92014, or phone (858) 755-2063.

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The next meeting of our docent society is important because it is time to elect our leaders for next year. Don Orahod led a committee to solicit volunteers to serve as our officers and board members. Only one position is not currently filled. That is the position that assists in coordinating and leading the Children's Program. We owe Barbara Wallach and Margaret Fillius a world of thanks for their years in organizing, coordinating, and insuring that this program functions well, but their administrative tenure is over. (They assure us they will continue to lead walks.) Now we need someone to serve on the Board of Directors and represent the coordination needs of this program.

The Children's Program is one of the most important services we support here at Torrey Pines State Reserve. Every year, more than 3,400 elementary-school-aged children participate in this well-organized program. Many would never have the opportunity to see Torrey Pines if it were not for this program. Several teachers have told me that the memory and joy of our program has lingered for many months with their classes and has served as a source of inspiration and appreciation for all things in nature. Participating teachers have commented on the excellent teacher's guide and pre-visit workbook exercises provided. This is a program worth preserving and continuing. With the state park staff helping in the scheduling and administration, the time required could be somewhat less than in the past. If you have any questions or interest, please contact Don Orahod before the next meeting.

And, many thanks to Don Grine for his continued support of our programs. Don arranged for a visit and lecture to the San Diego Natural History Museum on the migration and habits of the California Gray Whale. WHALE DONE!! The next week, Don coordinated our behind-the-scene tour of the Scripps Institute of Oceanography. Many of our docents found it fascinating to see the "lab at work." I'm sure Ellen Browning Scripps would be proud to see her legacy at work today. Thanks, Don, for all you do for Torrey Pines docents.

On a final note, if you happen to have a Wednesday or Friday morning free, please consider signing up to assist in a Children's Program walk. The sign-up sheet is on the door in the library and your presence alone can be a great help. You may also find it a most rewarding way to start your day.

See you at the November meeting!

Jim Bedinger
Torrey Pines Docent Society

**Birds of Torrey Pines:
The Wanderer**
story & photo by David Blue

Although focused on his task of digging clams from the cool, shallow waters of the lagoon, upon hearing the alarm calls of the flushing shorebirds, the bronze-skinned Kumeyaay boy looked up, thrilled to see the large gray falcon streaking by, aimed at the middle of the large scattering flock. Despite the frantic and chaotic flight of the shorebirds, the falcon unerringly picked out the weakest flyer in the flock, then pursued it with strong deep wing beats, turning rapidly left and right as its prey tried to escape.

A fast flyer, the little shorebird was still no match for the falcon, who started his dive from an altitude of eight hundred feet, and, assisted by gravity, quickly accelerated to over 200 MPH. The boy watched in awe as the falcon caught the shorebird, then turned and flew south along the beach cliffs to its nest. The boy's father told him that falcons had nested on the cliffs below the pines for as long as he, or his own father, the boy's grandfather, could remember.

Fast-forward to the 20th century. Although there were at least ten active Peregrine Falcon nests in San Diego County during the first half of the century, including one at Torrey Pines, the last known nesting in the county was in 1950. By 1970 there were hardly any Peregrines breeding anywhere in the lower forty-eight states. The "white man" who displaced the Kumeyaay had poured his poisons into the food chain, and the noble predators were driven to the brink of extinction. Our overuse of the pesticide DDT caused their eggshells to become too thin and break.

Fortunately, the U.S. banned the



use of DDT in 1972. By 1999, two of the three North American subspecies had recovered and were removed from the endangered-species list. Slowly, the Peregrine has wandered back to the San Diego area. Twelve birds were released at Point Loma in the 1980s, and in 1989, a released female mated with a wild male. Since 1995, four additional wild bird nest sites have been discovered in San Diego County.

The Peregrine's scientific species name is *peregrinus*, which means "wandering," and they have wandered world wide, colonizing all the continents except Antarctica. Fortunately, they are now wandering back to Torrey Pines each winter from their breeding grounds to the north.

For the last four years, Peregrine Falcons have wintered in the Torrey Pines area between October and March (and in two years, I have early arrival dates of September 28 and 30). In the winters of 2000-2001 and 2001-2002, there were often two seen perched on the cliffs, but only one was seen last winter, and so far only one has been seen this winter. Although they have been seen in other months, they are extremely rare outside the wintering months. (Cont. on Pg. 5)

Birds of Torrey

- Pied-billed Grebe 13
- Horned Grebe 4
- Brown Pelican 86
- Double-crested Cormorant 16
- Great Blue Heron 5
- Black-crowned Night Heron 6
- Great Egret 7
- Snowy Egret 9
- Cattle Egret 1
- Mallard 18
- American Wigeon 12
- Gadwall 16
- Osprey 2
- White-tailed Kite 5
- Red-shouldered Hawk 2
- Red-tailed Hawk 3
- Cooper's Hawk 1
- American Kestrel 6
- Black-bellied Plover 20
- Semipalmated Plover 4
- Killdeer 9
- Greater Yellowlegs 1

- Willet 45
- Whimbrel 1
- Long-billed Curlew 52
- Marbled Godwit 14
- Sanderling 6
- Dunlin 6
- Least Sandpiper 20
- Short-billed Dowitcher 1
- Dowitcher sp. 12
- Heermann's Gull 260
- Ring-billed Gull 12
- California Gull 8
- Western Gull 77
- Royal Tern 1
- Elegant Tern 12
- Forster's Tern 2
- Rock Dove 8
- Mourning Dove 8
- Vaux's Swift 11

- Anna's Hummingbird 10
- Belted Kingfisher 2
- Pacific slope Flycatcher 1
- Say's Phoebe 7
- Black Phoebe 7
- Barn Swallow 14
- Swallow sp. 4
- Scrub Jay 1
- American Crow 1
- Common Raven 33
- Bushtit 60
- House Wren 3
- California Gnatcatcher 2
- Wrentit 7
- California Thrasher 1
- Northern Mockingbird 1
- Loggerhead Shrike 1
- European Starling 1
- Orange-crowned Warbler 1

Pines – October 2003

- White-throated Swift 9
- Common Yellowthroat 10
- Spotted Towhee 1
- White-crowned Sparrow 2
- Savannah Sparrow 2
- Song Sparrow 13
- Red-winged Blackbird 12
- Brewer's Blackbird 64
- Western Meadowlark 1

Unusual species:
Rock Wren
Lagoon: Open



Docent Chronicles - November 2003

Nov. 15th membership meeting

9 AM – Election of TPDS Board

9:15 Program – Geoffrey Smith

10:00 Social/refreshment break

10:30 Business meeting

Nearly 7 million acres of “wilderness quality” public lands remain in California. These precious lands are not currently protected by federal law.

These public lands, owned by us, the taxpayers, are “managed” by the US Forest Service and Bureau of Land Management. “Management” does not necessarily translate to “protection” from such destructive practices as logging, mining, road building and damaging recreational vehicle use. Geoffrey Smith, regional organizer for the California Wild Heritage Campaign will present a multi-media program and discuss the importance of these public lands to California and her residents. Smith will discuss continuing efforts to educate the public and government agencies about the need to better manage these lands, including the current effort to designate federal Wilderness protection for 2.4 million acres and federal Wild and Scenic River protection for 22 rivers in California. Learn about the 45,000 acres of proposed Wilderness and three proposed Wild and Scenic River segments located right here in San Diego County!

See www.californiawild.org for more information.

Attention all docents: At 9 AM, we're holding a very important election. We will all be voting on a slate of officers and board members who will help us meet the challenges of supporting TPSR and the staff in 2004. Please come and demonstrate your personal commitment to helping us achieve the shared goals of the Docent Society and DPR.. Bring a brunch-type snack to share, please

carpool and park on the west side of the Lodge Road, south of the restrooms. And, don't forget to bring a re-usable beverage cup. See you there! Ed.

SNAKES... by Rick Vogel

Alicia Berg, a rescuer of injured or abused snakes, brought some of her recovered patients to the October meeting of the TPDS. She restores the health of these reptiles, paying the costs from her own pocket and through small donations. A volunteer at Mission Trails Park, Berg regularly leads walks and discussions about reptiles and their behavior. Berg's talk focused on the many misconceptions we have about snakes and provided everyone in the audience a chance to see her snakes up close. She even encouraged us to pet them! (See Berg with a tentative docent pictured below.)



Berg explained that snakes, having no external ears, cannot hear airborne sounds. They only feel vibrations. The flute-playing snake charmer achieves his control over the snake with rhythmic movements and eye contact. Berg contends that snakes will not attack people without provocation. Snakes will, almost without exception, run away from humans, unless they are cornered, harassed or threatened.

Snakes perform all their bodily functions through a single anal vent, the cloaca, including elimination and mating. Once a female snake has mated, she remains fertile for up to one year and can store the sperm that long.

Snakes have a well-developed directional sense of smell. The fork in the tongue helps this by collecting more scent particles from the side from which the odor is coming. This helps the snake to locate both prey and potential predators. Snakes grow by shedding their skins and are especially vulnerable during this process. Shedding begins when a liquid is secreted between the old and new skins. At this time, the skin takes on a milky color and the snake cannot see well. They rarely eat during the one to three week shedding period and generally try to hide from predators. Babies shed their skin every three months or so to accommodate their rapid growth. Adults usually shed about one or two times a year, depending on how much they eat and whether they are injured or have parasites.

Berg brought her Western Red Diamond Back Rattlesnake, the only venomous snake in her collection. This snake had been severely abused and almost died before she found it. She explained that rattlesnakes do not adapt well when relocated. They are territorial, and if relocated, have to fight the resident for the new territory. If removed, they will often become disoriented and try to return. Since rattlesnakes often den in the same area year after year, removing the snake from around your house may not work. The snake will try to return to its den.

Don't try to capture and keep a rattlesnake. Unless you have a license, it's illegal to keep poisonous snakes in a residential area. When Berg picked up this particular abused snake, she contacted the Fish and Game Dept. to find out what she needed in order to keep and care for an injured rattlesnake. She needed a Fishing License!



Don't forget the Docent Lodge decorating party & Holiday Potluck. Look for details in the December Pinecone!

Bobbie finds a new home!

by Stuart Resor

Last October, while Bonnie and I were traveling toward the Banner Grade with friends, we spotted a lifeless bobcat in the center of Highway 78. I approached “Bobbie” carefully, looking for, hoping for, some sign of life. I touched her with my boot. She’d been dead a few hours, but she looked pristine! We decided to save her for a higher cause.

She may have been forced off the eastern slopes of the Vulcan Mountains, which are still badly blackened by the huge “pines” fire of last year. She was furry and soft. On our way home, we called some taxidermist shops to see what the costs were. Bobbie was starting to “ripen” so we knew we had to act fast. Shortly after calling Allyn Kaye at Torrey Pines, she showed up at our home in Cardiff and took Bobbie for a possible display in Torrey Pines State Reserve.

Now Bobbie’s sad story has a happier ending. “She” is currently on display at the Park where she arrived in time for the Lodge’s 80th birthday party.



Your Docent Society picked up the considerable tab for extending Bobbie’s useful life. Stuart Resor, an architect in Cardiff, followed up with Lawrence Deering at Lyons and O’Haver, Inc.(taxidermists hired to do the work),and discovered that Bobbie is a young male, 27” tall, who would possibly have grown another two inches. Although his specialty is bobcats, “Bobbie” may be his last. Deering plans to retire soon. Ed.

Trail-builder extraordinaire!

Mike Gonzalez, one of Torrey Pines most dedicated park aides, has been awfully busy these past 18 months. In addition to pitching in wherever the Reserve needs work, he has been helping to build a 140 mile, safe and traffic-free trail between Torrey Pines North Beach and the Salton Sea. The “Sea to Sea Foundation” nominated Mike to receive REI’s \$20,000 “Steward of the Environment” award, saying, “Without our many valued volunteers, we couldn’t make this Trail happen, and in the last 18 months, we’ve achieved even more than could be imagined. Much of the success is due to the time, energy and commitment of one person, Mike Gonzalez, Jr.”

According to Docent Barbara Wallach, “Mike has been one of the hardest working and most conscientious park aides TPSR has had on staff.” His dedication to improving trails at Torrey Pines and his determination to complete the Sea-to-Sea trail is inspired, in part, by his desire to take his 14-year old son into the backcountry. Jamie has cerebral palsy and must be pushed in a “special needs” stroller.

REI hosts a BBQ and YOU are invited!

REI will celebrate Mike’s contribution to volunteerism and this financial award, which will help the Foundation complete the trail, at a barbecue on Saturday, November 8. TPDS docents and fellow-staffers are invited to attend. The event will be held at **REI San Diego, 5556 Copley Drive, beginning at 7:30 PM. REI asks that you RSVP by Nov. 1st to Todd Smith – Tosmith@rei.com or (858) 279-4400.**

Due to DPR’s standard seasonal staffing rotation practices, Mike’s time with us is ending, but Torrey Pines docents thank him for all his hard work. Mike says he will continue to work on our trails -- as a volunteer. **Yea, Mike!** And congratulations for showing San Diego what volunteerism is all about!



Circumtropical critters on our beaches...

Last February, while the Laguna Mountains were covered with snow, Docent Wes Farmer found “circumtropical” species washing up on our beach near Flat Rock. His find was published in “The Festivus,” along with the stunning photo (above) of the purple *Janthina exigua*, the most exotic of the winter beach visitors.

“Wanderer” (continued)

While these magnificent birds can sometimes be seen sitting on Torrey Pine snags in the reserve, their favorite perch is on either side of the large arch just below the southwest overlook on the Guy Fleming trail. The next time you wander south along the beach, look up at the cliffs. If you’re lucky and he’s not out foraging, you may see him there.

(Special thanks to Phil Unitt who gave me an advance copy of the Peregrine Falcon entry from his upcoming publication on the results of the San Diego County Bird Atlas.)

*Although I’m still only a “fledgling” birder myself, I was greatly honored to see a pair of (presumably) mated Peregrine Falcons with their recently fledged offspring earlier this year. They were perched on a fence near the parking circle at the end of Mira Montana Drive, overlooking the TPSR Extension. It was my **first** sighting, but a neighbor who is in that area throughout the day reports that she’d been watching the pair all spring and summer. One of these days, I’ll get my act together and keep a diary of these events. Linda Martin.*

Tidings from Torrey Pines Association

by Ann Gardner, TPA Counselor

Sorrento Valley Road Reuse Plan: Bolstered by the Coastal Commission's approval to close Sorrento Valley Road between Carmel Valley Road at the northeastern end of the Reserve and Carmel Mountain Road to the south, the Torrey Pines Association (TPA) wants to bring together a community coalition to keep the approved Sorrento Valley Road Reuse Plan alive.

The Plan (*see map below for project location*) to reuse the closed road as a pedestrian path and bicycle trail next to the Reserve is the result of extensive work by the Sorrento Valley Road Reuse Task Force. Reuse also includes rehabilitation of the Reserve's only remaining wildlife corridor and restoration of adjacent natural habitat. "Wildlife agencies are also supportive as several endangered species have established territories in this eastern portion of the Lagoon, some in very close proximity to the closed road," the Commission noted in its report.

TPA Board members are now emphasizing the importance of keeping the Reuse vision before the San Diego City Council to make sure they find funding for implementation. Last February 3, the Council voted to shift \$826,000 in funding for the project to help pay for traffic improvements elsewhere in the District. Now the City has indicated that funding for the Reuse Plan may be years away. TPA is concerned about the timeliness of critical habitat restoration and the regional demand for pedestrian and bicycle access in open space areas, and wants the City to identify funding sooner.

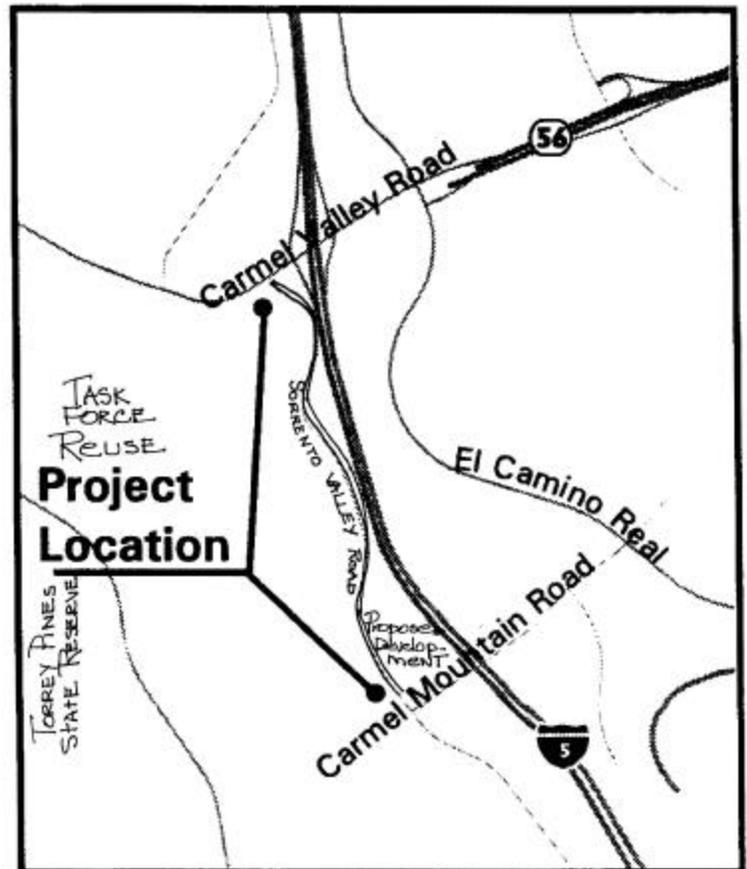
TPA is also concerned about proposed development on adjacent land, west of I-5, putting the visual integrity of the eastern end of the Reserve in jeopardy. Even though the property has an Open Space Land Use designation in the Local Coastal Plan, owners are going ahead with plans to build a 120,000 square foot office park on 11 acres between I-5 and the Reserve. The project was stopped in 1999 when TPA and other environmental groups objected to City staff's recommendation that an EIR was not required. "We need to keep the community involved in making sure this project does not squeak through without appropriate review. The community should not support any change in the Open Space designation," said President Diana Bergen at the TPA's October Board meeting.

Finally, TPA is monitoring plans for construction of a bridge or bridges over Carmel Creek, just south of Carmel Valley Road. We want separate smaller bridges for pedestrians and bicyclists, not a large urban scale bridge designed for motorized traffic that would degrade the natural setting of the lagoon, President Bergen noted.

High voltage on lagoon? In other action, TPA voted unanimously to join with the Torrey Pines Community Planning Board to minimize the impact of new lighting along Carmel Valley Road at the northern edge of the Lagoon.

San Diego City staff is proposing new 30-foot high streetlights with high-pressure sodium, 250-watt elements at each intersection along Carmel Valley Road, as part of the Carmel Valley Road Enhancement Project. "This will result in higher light levels and additional light pollution in the sensitive open space area of the Los Penasquitos Lagoon," said Adam Gevanthor, TPA Counselor. He urged TPA to reiterate their position that no additional light fixtures be added. He also reported that the City had adopted a number of TPA's recommendations for the Road Project, including the addition of planting pockets to soften the visual impact of urban engineering standards and the elimination of parking spaces in wetland areas.

The Association's Board of Counselors meets monthly to encourage public interest in and support for the Reserve. Board members are particularly active in educating public officials and staff on the impact of development on the rare Torrey pines and their ecosystem. Persons interested in joining their efforts are encouraged to contact membership chair Tom James at tdjames@san.rr.com.



Reflections...

Saying farewell affords me the opportunity to contemplate a career that began here at Torrey Pines in 1978. In a reflective mood, I tend to ask, "What worked?" What didn't?

The first question is readily answered. It was a glorious career of adventure through forests, mountains, deserts, rivers, lakes, the Pacific coastline and the varied natural, cultural and recreational landscapes entwined.

My two children were born and raised along the way. Many friendships were born and have grown to maturity. Priscilla and I have forged a true partnership. We celebrate our 30th wedding anniversary on October 27, 2003.

Professionally, I accomplished a few things here and there. I climbed the organizational ladder through positions of increasing responsibility and arrived back here at the San Diego Coast to conclude the journey. The circle is complete.

Now, what didn't work?

Here in San Diego, the task faced by those of us involved in the preservation and appreciation of cultural, natural and recreational resources is daunting. Upon assuming my present position I quickly realized that "accomplishing a few things" would be insufficient to the task, even if possible. I saw then, as I do now, that *here* it takes many individuals, and individual organizations, working together to accomplish the few things I had been accustomed to doing *alone*. Realizing this I dedicated myself to being a part of this collective effort.

To some degree this has worked. However, as I review my writings of the last two decades I am dismayed. Revealed is a common theme of imploring the choir to preach beyond themselves. The message and methods change but the frustration is constant. This hasn't worked as well as I would have liked.

It is not for lack of individual efforts. Those fortunate enough to earn their living in this line of work are the most dedicated, and zealous, employees anywhere. If their jobs were terminated today, tomorrow people would step in and volunteer to fill the void. Many do already. That is how important this work is to our collective lives.

For whatever reasons, our individual organizations and agencies have not coalesced sufficiently to truly succeed. In the public sector, we have become distracted by the values of



Chief Ranger John Quirk, with Supervising Ranger Allyn Kaye and TPA Counselor, Courtney Coyle.

the private sector. Bottom line, profit margin, cost/benefit analysis, strategic objectives, critical paths and endless project lists deter us from our task.

What is our task? Simply stated it is to preserve our quality of life. And how do we do this? In part, we do it by saving Torrey Pines, Old Town, the estuaries, and the coastline.

Private sector values and fiscal restraint are not as important as our task. Most people elected to positions of power, and those who place them there (our friends and neighbors) do not have a clue about what we do. They open their doors, go outside and appreciate to some degree what they find. Mostly, they have no idea what it takes to provide these quality outdoor experiences, or who, if anyone, manages what is out there.

Preserving the quality of life here means saving this part of the world, teaching, and guiding. And for rangers and lifeguards it means saving lives. Here each day is as unique as the sunrise and sunset. Each day the winds and tides change. Literally and figuratively, we deal with whatever blows in and washes up. People should know that. But they don't.

Never give up. Never give in. Work together and let everyone know it. There is no other way.

John Quirk
October 21, 2003