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Mission Trails Regional Park News

Volume 16 Number 3

Summer/Fall 2005

Early Warning Systems in Animals

From Trail Talk

Earthquakes, tsunamis, volcanic eruptions, avalanches.... do animals really have the ability to detect an approaching disaster?

We've all heard stories of animals' prescience to warn of impending disasters. Before the devastating tsunami in Thailand in December, elephants saved their passengers by running for a nearby hill. Tales were told in many countries of elephants, buffalo, dogs, cats and deer disappearing, thus ensuring their survival or of antelopes racing from the coast ten minutes prior to the wall of water hitting the beach. Teams from the Humane Society International had no idea where they were, but they returned a few weeks later in bad shape since they hadn't eaten or drunk properly. Even our own Visitor Center cat, Kwaay Paay, exhibited peculiar behavior just before the last earthquake started

by Ranger Luanne Barrett

shaking the building, warning a staff member by uncharacteristically staring in his face and meowing at him. Isolated coincidence, wishful thinking, or are animals better able to survive disasters than humans?

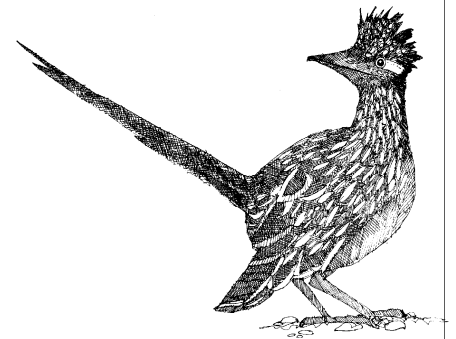
Powerful events produce infrasonic sound waves that humans can't hear, but many animals can. Some predators may have evolved infrasound detectors to hear the sound of a prey's heartbeat. Mammals sense ground vibrations through special detectors in their joints and feet called pacinian corpuscles. Not really a "sixth sense" about major earth events, but perhaps allowing them to detect an earthquake from long distances.

We humans have these receptors but are not generally conscious of them. We stand on two feet, not four, so are less exposed and we

Warning, continued p. 6

Roadrunner

The Roadrunner, made famous by the Warner Brothers cartoon, is truly an amazing bird, and not just because he is fast and able to escape those "wily" coyotes. With two toes in front and two toes in back, Roadrunners are members of the Cuckoo Family (Cuculidae) and belong to the subfamily, Neomorphinae (the ground cuckoos). Since they can only keep their large bodies airborne for a few seconds at a time, they prefer to walk or run (with a funny wobble) and can reach speeds up to 17 mph. This great speed enables roadrunners to



prey upon rattlesnakes! With its wings spread out to distract the rattlesnake, the roadrunner will quickly snatch it up by its tail and repeatedly bash its head on the ground until it is dead. The roadrunner then swallows as much of the snake as it can at once and goes about its business, while the rest of the snake's body, which remains dangling out of its mouth, is slowly swallowed as it is digested.

Roadrunners are, for the most part, strictly carnivorous, feeding on lizards, snakes, rodents,

Roadrunner, continued on p. 4

Nature Strolls at Old Mission Dam Beginning Sept 6

Join Trail Guides at the Old Mission Dam parking lot on the first Tuesday of every month at 10:00 a.m. for a NATURE STROLL! This adventure is designed for those with limited mobility and for nature enthusiasts who want to take time to immerse themselves in the natural ambience of Mission Trails. This hour-long walk will focus on the history of the dam, the ecology of

the park, and the close interaction of the local plants, animals, and the elements. The stroll is surrounded by lush stream side (riparian) and planted transition zone habitat.

The distance covered will be less than 1/4 mile of flat terrain on an excellent trail, except for a 30-foot slope (max. 12% grade) to and from the parking lot. This event is wheelchair friendly.



A Message From Councilmember Jim Madaffer

July is National Park and Recreation Month and that's a good reason to focus on our favorite park. It is such a treasure that provides such enjoyment and I'm sure you feel the same way. I'm reminded of this every time my family and I climb Cowles Mountain or visit other areas in the park.

We're making steady progress on our goal to expand the park. I'm extremely happy that we recently gained an additional 86 acres of land in the East Elliott area along the park's boundary. That brings the total to date to 645 acres conserved in East Elliott in order to expand the park's boundaries. Two years ago I told you in this newsletter about our goal to expand the park and my quest to achieve that goal. We're now seeing results of those efforts. Next year we will hold a special dedication for the land we've acquired in East Elliott and in Mission Trails North.

Another pledge was to begin restoring the Old Mission Dam which over the years, has deteriorated badly. It is a National Historic site and a vital part of our City's history that needs to be saved. Constructed of cobblestone and cement, the Old Mission Dam was the first major irrigation engineering project on the Pacific Coast of the United States. The dam was completed in 1817 and is credited by many California water resources professionals as an engineering marvel that made it possible for San Diego to be established and grow. The preservation project is estimated to cost \$869,500. At the June 21st City Council meeting my colleagues and I approved using \$700,000 of Proposition 40 state funding for this much needed repair work. In addition, I set aside \$100,000 of the 2002 Resources

Bonds that will close the gap of needed funds and enables us to move forward on this vital project. I thank Mayor Dick Murphy, a longtime and ardent supporter of MTRP, for the contributions he made.

Improvements are taking place at another part of the park. At the corner of Lake Murray Boulevard and Kiowa Drive, the City of San Diego Water Department is installing two new Mission Trails Regional Park signs to help direct traffic into the park. The signs, which are consistent with the distinctive rustic look of other MTRP signs, are part of the community improvements included in the Alvarado Water Treatment Plant construction project. Keep an eye out for the new landscaping, fencing and additional street lights on Kiowa Drive; they're next on the construction schedule!

Our City's FY 2006 budget that was just approved greatly impacts our Park and Recreation Department and that of course affects MTRP. I encourage you to visit the City's web site at www.sandiego.gov for more detailed information. How sadly ironic that at a time when we're expanding the park boundaries and adding facilities we're forced to cut Park & Rec budgets and reduce services. The point I want to make is this: the end result is that we'll be relying all the more on our wonderful volunteers at MTRP. We are so indebted to their commitment and service and I want to thank them for it.

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Recycle your glass, plastic and aluminum at Kumeyaay Lake Campground. Containers are located in the day-use parking lot.

Proceeds go to MTRP Foundation.

First Place - Color (People, Flora & Fauna)



Stuart Allison - Reeds and Sunrise Reflection



August 1st to September 17th

The Full Palate Group
 Betsy Brown
 Georgina Clemens
 Rosemary Ford
 Terry Harvey
 Bob Rhodes
 June Shilling

September 17th to October 29th

Roger Heglar - Oil/Pastel
 Shandel Gaimer - Pastel

Why Mycorrhizae?

Mycorrhizae are formed by certain soil fungi that colonize living roots of plants and establish a symbiotic relationship between mycorrhizal fungi and the roots. The word mycorrhizae means fungus-roots. These specialized fungi colonize plant roots and extend far into the soil. Mycorrhizal fungal filaments in the soil are truly extensions of root systems. Over 90% of the world's plant species form mycorrhizae in nature.

The benefits of mycorrhizal fungi to plants are numerous. The fungi increase the surface absorbing area of roots 10 to 100 times thereby greatly improving the ability of the plants to utilize the soil resources. It is estimated that a thimbleful of soil contains several miles of mycorrhizal filaments! The fungi assist in the breakdown of hard to capture nutrients such as phosphorous, nitrogen and iron so that the

plant can use them. The same extensive network of fungal filaments important to nutrient uptake are also important in water uptake and storage. In non-irrigated conditions, mycorrhizal plants are under far less drought stress compared to non mycorrhizal plants. Disease and pathogen suppression is another benefit.

Mycorrhizal fungi attack pathogen or disease organisms entering the root zone. Excretions of specific antibiotics produced by mycorrhizal fungi immobilize and kill disease organisms. In addition mycorrhizal roots develop a tight, interwoven sock like mantle that acts as a physical barrier against the invasion of root diseases.

Mycorrhizal fungi also improve soil structure. Mycorrhizal filaments produce compounds and organic "glues" that bind soils into small clumps and improves soil porosity. This results in better soil aeration, water movement into soil, root growth, and distribution. In sandy or compacted soils the ability of mycorrhizal fungi to pro-

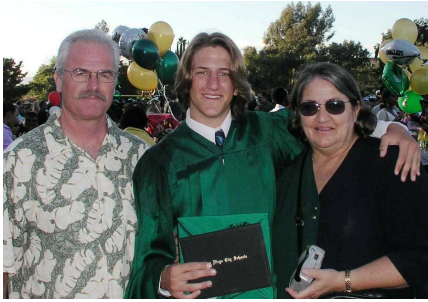
mote soil structure may be more important than seeking out of nutrients.

Don't forget the fact that the relationship between the plant and the fungi is a symbiotic one. Fungi can not produce their own food and must find a host plant into which it can tap for food. The benefit to mycorrhizal fungi in this case is that the fungi has a place to anchor itself and at the same time obtains food (sugars) from the host plant.

Trail Guide George Varga

In Memorium Lyle Cunningham

A loving husband, father, grandfather and great-grandfather passed away on June 3, 2005 at the age of 82. Lyle was a flier, sailor, world traveler, entrepreneur, and avid tennis player. He was also an enthusiastic volunteer at Mission Trails and will be missed by all.



Charlie Eglin and his parents Chuck and Mary

Congratulations And Best of Luck To Volunteer Charlie Eglin

Congratulations are in order to Trail Guide Charlie Eglin who recently

graduated from Patrick Henry High School. Charlie plans to continue his education in the fall at Grossmont College studying Administration of Justice for Law Enforcement. As a senior, Charlie received his school's Triple E award for a second time for 200 service hours at Mission Trails Regional Park doing various projects, mostly with the Patrick Henry High School / Mission Trails Regional Park Service Club, which he founded in September 2004. Charlie held the position of President of the club for two school years.

Beside being a Trail Guide he has also been a part-time Volunteer Patrol member and involved with the Bird Box Program. Charlie is currently doing photographic documentation of the ongoing work being done in MTRP by the California Conservation Corps for erosion control after the Cedar fire.

People's Choice



Nancy K. Varga - Dew Drops on Web

First Place - Youth Division



Heather Bardin - Purple Veins

Roadrunner, continued from p. 1

insects, scorpions and birds. During the winter, when prey is scarce, they will resort to subsidizing their diet with plant material. To ensure there is enough food to raise young, Roadrunners nest after the rains increase their food supply. Since there is only one rainy season in the Mojave and Sonoran deserts of California, they nest only once, in spring. In the Sonoran desert of Arizona, they will breed again in August or September, after the summer rains. When mating season arrives, the male Roadrunner will dance around the female and offer food to entice her. Both the male and female gather sticks to make the nest, but only the female actually builds it (in a bush, small tree, or cactus). Both parents also incubate the eggs, but especially the male. Up to 12 eggs are laid over a few days, which hatch after about 18 to 20 days, but only 3 or 4 of the young are usually fledged from the nest.

Roadrunners inhabit areas with scattered cover of desert scrub, dry brush, or chaparral. They are extremely well adapted for living in these environments in a variety of ways. For example, water in their feces is reabsorbed before it is excreted, and during the hottest part of the day, the Roadrunner is half as active as usual. Also, instead of eliminating excess salt in its urine, like most other birds do, the Roadrunner loses its surplus salt through a nasal gland. And, being carnivorous, much moisture is obtained from its food.

The Roadrunner is New Mexico's state bird and is also called the "Chaparral Cock." A good place to catch a glimpse of this amazing bird is along the trail out to the Grasslands, from the East Fortuna Staging Area. You may also hear their descending dove-like coos, or the sound of their mandibles clattering together. Next time you're out here hiking, keep your eyes and ears open, and you just might be treated to a Roadrunner sighting!

Ranger Heidi Gutknecht

MTRP Events and Activities

For activities at the campground, park at the day use parking lot.

For outdoor activities, bring water and wear sturdy shoes

Outdoor activities canceled if raining.

AT THE VISITOR CENTER

Insane About Insects

Hairy Tarantulas, Stink bugs, and house spiders are all going to join for this crawly camp. Bring your imaginations to create a large scale insect habitat. For ages 5-10.

Cost \$50 per child.

This five day camp runs from August 8 to 12, 9 am - 12 pm.

Arts and Crafts

Would you like to take a snake home; a creepy crawly critter, or a four legged animal? This camp will show you how to make your own.

August 13th, 10 am - 12 pm

Birding Basics

A ninety minute class to learn five simple techniques for indentifying birds at a glance. Learn how to use a field guide. If you have one, you may bring it with you.

Fourth Saturday of the month, 1 - 2:30 pm

AT THE CAMPGROUND

Kooking for Kids

Kids ages 8-12 can learn the joys of cooking.

Cost \$2 per child

Every 3rd Saturday, 11 am - 12 pm

Dragon's Den

An informative lecture on Australia's Bearded Dragon.

Every 1st Saturday of the month, from 11 am - 12 pm.

Campfire Programs

Bring the whole family out for a fun filled program.

Last Saturday of the month, 7 pm - 8 pm, weather permitting.

This is only a partial list of events and activities in the park. For current, additional and updated information visit mtrp.org or call the Visitor Center at 619-668-3275.

Summer Twilight Walks from Kumeyaay Lake Campground

Join MTRP Trail Guides for free special interpretive walks at twilight this summer. Walks start from the Kumeyaay Lake Campground entry station and last approximately one and a half hours.

Come and enjoy an evening walk in the park and learn about the changes that occur during dusk and evenings.

Participation in these very popular walks will be limited to maximize your enjoyment, so sign up by phone or in person at the Kumeyaay Lake Campground Entry Station, 619-668-2748.

Saturdays:

August 20, 7:00 PM

September 17, 6:15 PM



Wildlife Tracking Walk

Join members of the Mission Trails Tracking Team for a nature walk focusing on the discovery and identification of tracks and signs from some of the many animals that inhabit Mission Trails.

Meet at the Visitor Center front kiosk on the second Sunday of every month at 8:30 am.

Canceled if raining.

See related article by Tracking Team leader Ranger Luanne Barrett on page one.

Warning, continued from p. 1

tend to use vision, followed by sound as the first line of interpreting our world. Could we be trained to heighten our awareness of vibratory signals? All 250 members of the ancient Jarawa tribe emerged from the forest safe after the tsunami, as did others living on small, low-lying islands. These stories reinforce scientists' views that all humans have the capacity to detect devastating events, but we override the alarm signals as less important than ones coming in from other senses and have perhaps become too distanced from our own sensory abilities because of modern lifestyles. The Chinese developed a nationwide network to observe animal behavior in the event of natural disasters following a 1975 earthquake where citizens who paid attention to unusual animal behavior ran outside, surviving an earthquake that flattened their homes.

So what does this have to do with tracking? A large part of becoming an expert tracker is being acutely aware of your surroundings, getting in touch with these "latent" abilities and focusing on animal behaviors; almost becoming the animal you are tracking. Who knows...it could save your life.

See page 5 for information on attending a Wildlife Tracking Walk.

Photo, continued from back page

Color – Scenic Views: Rick Wiley, 1st place; Rick Wiley, 2nd place; Debbie Haeussinger, 3rd place; Brian Wright, Honorable Mention.

The photography contest, reception and awards ceremony are an annual event sponsored by Mission Trails Regional Park Foundation in cooperation with the City of San Diego Park & Recreation Department. Thank you to our Photography Contest Committee members: Betty Ogilvie, chair; Gene Hatton, Richard Johnson, Johnnie Perkins, Bill Sperling, Rick Wylie and Roland Roberge.

All contest entries will be on display at the Visitor & Interpretive Center through July. This year's winning photographs as well as those of previous contests can be viewed by going to mtrp.org/photo_contest.asp.

First Place - Black & White

Michael Lnaci - The Power of Light

Notable Donations

April – June 2005

Sponsor – \$10,000 – \$25,000

Family and Friends

In memory of Dominick Marelli

Steward – \$5,000 – \$10,000

City of San Diego Special

Promotional Programs

Founder - \$1,000 - \$2,500

Starbucks *Make Your Mark*

Volunteer Program

Sudberry Properties, Inc.

Trailblazer - \$500 - \$1,000

Citigroup Foundation

Path Finder - \$100-\$500

Joe and Nancy Acevedo

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Lawrence & Suzanne Hess

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Terry Hurst

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Harry and Mary Mathis

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Jacqueline Roisman

Jodi Roisman

San Carlos Area Council

Harold Stone

Mr. and Mrs. Arthur Savage

Bill and Barbara Sperling

Support Mission Trails Regional Park

Volunteer Opportunities

There are numerous volunteer opportunities available. No prior experience needed. We provide any training necessary.

At the Visitor Center
Front Desk
Gift Shop

Within the park
Trail Guide
Park Patrol
Work Crews



The easiest way yet to support Mission Trails*

Simply go to www.escrip.com access the "sign up" link near the top of the page and follow the simple instructions. All it takes is five minutes.

Ways you can donate to Mission Trails Regional Park Foundation

The Mission Trails Regional Park Foundation Board of Directors extends sincere thanks to our many donors. It is because of your continuing support that we are able to fulfill our Mission - *In partnership with the City of San Diego, to preserve and protect the natural environment of Mission Trails Regional Park and to provide and promote educational and recreational opportunities.*

In addition to traditional cash donations, there are other ways you can provide short and long-term financial support for park programs and projects.

Memorial or In Honor Of gifts
Honor a friend or family member with a donation.

Matching Funds
Identify Mission Trails Regional Park Foundation for a matching funds contribution if your employer

has a policy of matching charitable gifts.

Wills

Remember Mission Trails Regional Park Foundation in your will.

Gifts of Securities

In order to allow donors to realize full tax deductions for appreciated stock, Mission Trails Regional Park Foundation accepts gifts of stock. Please call (619) 668-3280 for further details.

Charitable Remainder Trusts

With a CRT, highly appreciated assets are placed in an irrevocable trust. Those asset proceeds provide income to the donor and/or to his/her beneficiaries for life. Contact your financial advisor for information.

The Foundation's Special Funds include education and library funds, trail and tree/habitat maintenance funds, education and library endowment funds. Call (619) 668-3280 for further information. - MTRP Foundation Federal Tax ID * 33-028509.

Mission Trails Regional Park Donor Opportunities

Mission Trails Regional Park Foundation provides opportunities for individuals, businesses, community organizations and foundations to support a variety of programs and projects within Mission Trails Regional Park. Thank you to our many friends who make annual contributions to Friends of Mission Trails Regional Park. A variety of donor opportunities are available as indicated below. All contributions are tax deductible. Persons donating \$100 or more will be given a certificate of contribution. Names of contributors of \$1,000 or more will be engraved on a plaque permanently displayed at the park Visitor and Interpretive Center. Donations of \$100 and above will accumulate from year-to-year for contributor recognition purposes.

Name _____
Address _____
City _____ State _____ Zip Code _____
Home Phone _____ E-mail _____

Donor Levels

\$25 Individual _____	\$1,000 Founder _____	\$25,000 Benefactor _____
\$50 Family _____	\$2,500 Patron _____	\$50,000 Trustee _____
\$100 Path Finder _____	\$5,000 Steward _____	\$100,000 Director _____
\$500 Trailblazer _____	\$10,000 Sponsor _____	Other _____

Special Funds

Please check fund(s) for which you wish your donation to be used.

General Park Support	_____
Library Fund	_____
Library Endowment	_____
Education Program Fund	_____
Education Program Endowment	_____
Tree & Habitat Maintenance	_____
Trail Maintenance	_____
Lake Murray	_____

Make check payable to MTRP Foundation and send to:
Mission Trails Regional Park Foundation, Attention Secretary/Treasurer
One Father Junipero Serra Trail, San Diego, CA 92119-1008

Charge my donation to VISA _____ MC _____
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**Summer/Fall 2005 Issue
Mission Trails Regional Park News**

Mission Trails Regional Park Foundation, Inc., established in January 1988, is a non-profit public benefit corporation organized for the purpose of preserving, improving and maintaining Mission Trails Regional Park.

Mission Trails Regional Park News is a publication of Mission Trails Regional Park Foundation, Inc., published four times a year.

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Distribution: Marjorie Ferrante*

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Thirteenth Annual Photo Contest Winners

Awards for the Thirteenth Annual Mission Trails Regional Park Photography contest were presented at a reception held at the park's Visitor & Interpretive Center on Sunday, June 26th. The Leonard Butterman Best of Show Award was presented to Rick Wiley for his "Kumeyaay Lake at Dawn" photograph. Nancy K. Varga received the People's Choice Award for "Dew Drops on Web."

Other winners include -
Black and White: Michael Lanci, 1st place; Bill Howell, 2nd place; Rebecca Bradley, 3rd place; David M. Darnell, Honorable Mention.
Youth Division: Heather Bardin, 1st place; Rachel Webb, 2nd place; Heidi Seifert, 3rd place; Aaron Muller, Honorable Mention.
Color – People, Flora & Fauna: Stuart Allison, 1st place; Nancy K. Varga, 2nd Place; Bill Howell, 3rd place; Nancy K. Varga, Honorable Mention.

Best of Show and First Place - Color (Scenic Views)



Rick Wiley - Kumeyaay Lake at Dawn

Photo, continued on p.6