

(Palo Verde continued from page 3)

What has been its annual production of flowers and seeds, and how many of its offspring are alive today, anchored in the unpromising soil of the ridge, facing the uncompromising sun with the confidence of survivors?

John Alcock, Regents' Professor of Biology at Arizona State University, will lead a hike, entitled "Sonoran Desert Spring," in this year's Spring in the Mountains celebration.

EVENTS
CALENDAR

- February 2004
 - Feb. 1: Trail Work Day, 7:45 a.m., North Mountains. Call Scott Frische (602) 395-9566.
 - Feb. 2: PMPC Members' Meeting, 7-9 p.m., Los Olivos Senior Center.
- March 2004
 - March 1: PMPC Members' Meeting, 7-9 p.m., location to be determined.
 - March 6: Spring in the Mountains Celebration, 7-11 a.m., South Mountain Preserve. For more information, call (480) 753-3240 or (480) 706-0172.
 - March 21: Trail Work Day, 7 a.m., North Mountains. Call Scott Frische (602) 395-9566.

- April 2004
 - April 5: PMPC Members' Meeting, 7-9 p.m., Los Olivos Senior Center.
- May 2004
 - May 3: PMPC Annual Meeting and Dinner, 6-9 p.m., Sheriff's Posse Clubhouse. To register, call (602) 861-9256.

Unless otherwise noted, all PMPC members' meetings are held at Los Olivos Senior Center, 2802 E. Devonshire Av., Phoenix (one block north of Indian School Rd., on the northeast corner of 28th St. and Devonshire). PMPC members and the public are welcome.

Lookout

Phoenix Mountains Preservation Council
P.O. Box 26121, Phoenix, Arizona 85068-6121
www.phoenixmountains.org

The Phoenix Mountains Preservation Council is dedicated to protecting our Phoenix Mountains Preserves for the future.

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Adelheid Fischer, *Editor*

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Attention Members! It's that time of year again!

Beat the February deadline for renewal of your PMPC dues. Use the enclosed envelope for mailing in your membership renewal. And while you're at it, attach your registration for Spring in the Mountains on March 6!

Name _____
 Address _____
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MAIL TO:
PMPC Membership
P.O. Box 26121
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85068-6121

Check here if you wish to receive the PMPC newsletter via e-mail.

MEMBERSHIP CATEGORY *(please circle)*

- Family/Individual \$20
- Organization \$30

AREAS OF INTEREST/EXPERTISE

(please circle)

- Communications
- Special Events
- Trail Maintenance
- Membership
- Research/Archives
- Legislative Action

ADDITIONAL FINANCIAL SUPPORT *(please circle)*

- Slope Protector \$50 - \$100
- Cliff Protector \$100 - \$500
- Peak Protector \$500+

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PMPC Meets With New Phoenix Mayor

On November 17, 2003, the PMPC board met with Mayor-Elect Phil Gordon to discuss concerns relating to the Phoenix Mountain Preserves. During the meeting, the PMPC presented the mayor-elect with position papers on five key issues (see right).

Gordon, a former land-use attorney, city council representative and chief of staff to Mayor Skip Rimsza, demonstrated a thorough understanding of the preserves' contribution to the city's quality of life and economic vitality. He promised to meet with the PMPC's board for further discussions following his formal inauguration as mayor on Jan. 5, 2004.

"The PMPC's reaction to its meeting with Mayor-Elect Gordon was most positive," observes long-time PMPC board member Ruth Hamilton. "His long history of dealing with city problems will enable him to understand the issues affecting Phoenix's beloved mountain preserves."

For more background on the PMPC's position statements, visit www.phoenixmountains.org.

PMPC Key Issues

The PMPC calls for stringent review of properties along the Phoenix Mountain Preserves.

The PMPC urges the city to fully fund the stewardship needs of the Phoenix Mountain Preserves and new Sonoran Preserve.

The PMPC urges the City of Phoenix to step up law enforcement within the Phoenix Mountain Preserves as well as to clarify jurisdictional responsibilities among city, county and federal agencies.

The PMPC rejects any plan to locate a highway through South Mountain Preserve, including the alignment along Pecos Road that is currently being considered by the Arizona Department of Transportation for the South Mountain Corridor Loop 202.

The PMPC calls for a rewriting of key provisions of the Sonoran Preserve Edge Treatment Guidelines in order to ensure fair public access to the new Sonoran Preserve, maintain a more open preserve edge and protect the hillsides of the preserve's mountains above the 10-percent slope line.

TO:

No News on the South Mountain Freeway Alignment

In 1985 the citizens of Maricopa County approved funding for a regional freeway plan that included a connection between Interstate 10 to the south of Phoenix with Interstate 10 to the west of the city. Three years later the State Transportation Board identified an alignment for the connection, known as the South Mountain Corridor Loop 202. Plans called for building a six-lane highway heading east along Pecos Road in Ahwatukee and then veering north between 55th and 63rd Avenues to connect with I-10 in the West Valley.

Officials didn't revisit the plan in earnest until 2001 when the Arizona Department of Transportation (ADOT) began work on a study to examine the environmental, social and economic impacts of several potential alignments for the freeway, including Pecos Road.

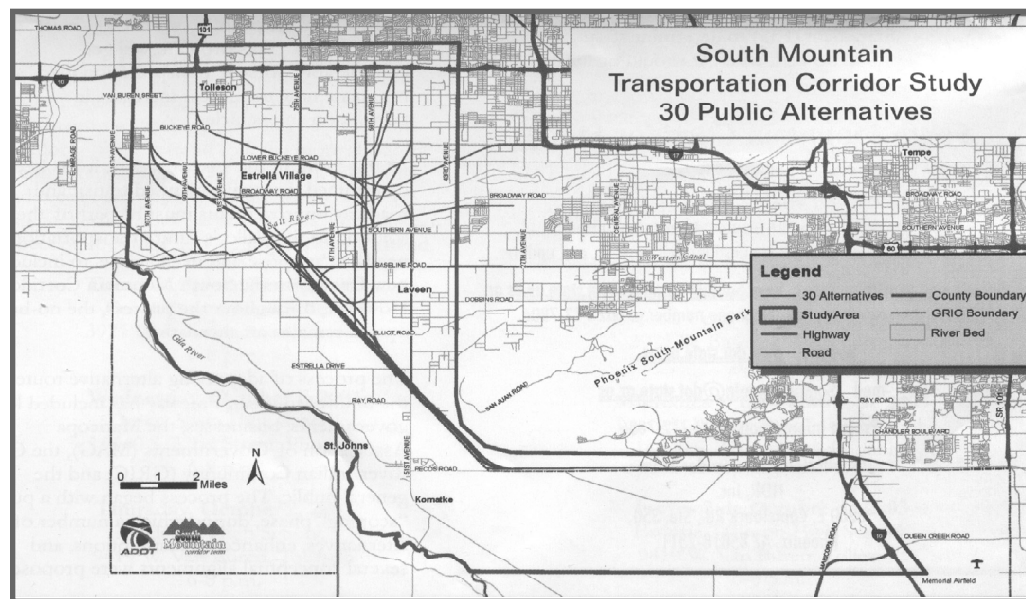
At the PMPC's monthly meeting in November, John Godec of Godec, Randall & Associates, updated board members on the most recent developments in the South Mountain Corridor Study. Godec, whose firm specializes in conflict

prevention, resolution and public involvement, has been contracted by ADOT to facilitate the study. According to Godec, to date ADOT has identified no alternative to Pecos Road for the South Mountain Freeway alignment. Discussions are still ongoing with the Gila River Indian Community about potential alignments further south on tribal land.

The PMPC has gone on record adamantly opposing the Pecos Road alignment. Not only would portions of South Mountain Preserve be taken for freeway construction, but freeway noise, pollution and traffic would seriously harm the ecological and aesthetic values of this extraordinary public asset.

The PMPC urges those concerned with the health and welfare of our Phoenix Mountain Preserves to contact their local, state and federal representatives and voice their opposition to constructing any freeway project through South Mountain Preserve.

For more information about the South Mountain Corridor Loop 202 study, see www.dot.state.az.us/ROADS/SouthMtn/index.htm.



ADOT map showing 30 potential alignments for the South Mountain Freeway. To date, no alternative to the Pecos Road alignment has been identified.

Palo Verde

By John Alcock



This essay is excerpted from John Alcock's 1985 book Sonoran Desert Spring. Reprinted with permission from the University of Chicago Press.

The palo verdes on the ridge have begun to flower, a signal of the conclusion of spring. First the poppies, small but flamboyantly orange, then the shrubby brittlebush, brilliantly yellow, and last the foothills palo verde, with its more subdued yellow flowers whose paleness anticipates the austerity of summer. Like the poppies and brittlebush, palo verdes regulate the production of flowers and seeds in accordance with the pattern of winter rains. In dry years the trees hold back and at most produce scattered patches of blossoms here and there at the tips of their prickly branches, creating a mosaic of green and yellow. In good years, like the spring of 1982, flowers completely cover entire trees, and the desert plains and ridges drown deliciously beneath a sea of yellow that extends to the horizon. Despite ample rainfall during the past winter, for unknown reasons the bloom of 1983 will not equal the performance of the preceding spring.

In preparation for flowering, palo verdes discard the minute, water-conserving leaves that grow on their outer twigs, which in turn are supported by an undisciplined mass of green branches and limbs radiating from the short trunk of the tree. The leaves, once green, first turn reddish or yellowish brown and then fall, carrying with them a small amount of nitrogen. Palo verdes are legumes, and the roots of legumes contain certain species of bacteria that have the unusual and valuable capacity to capture nitrogen from the air and fix it in a form usable by the plant. Baked desert soils contain little organic material and less nitrogen. The myriad fallen leaflets, blown

by the wind, gather in stony pockets on the desert floor like sea wrack trapped in tide pools. There they decay, creating conditions that may once in a long, long while permit the establishment of a plant colonist—a little thick-skinned fern, or a tuft of resilient moss, or a palo verde seedling.

This year the palo verdes shed only some of their leaves, beginning in early April. On the twigs without leaves small, hemispheric blue-green buds appeared on thin stalks by the end of the month. By today most of the buds have opened, and the modest yellow flowers announce their supplies of nectar and pollen to the insect world. Beetles, flies, and bees, social and solitary, respond to the announcement. Here and there yellow ambush bugs lurk hidden among the petals, their stiletto beaks poised to pierce a pollinator. Crab spiders in near perfect yellow camouflage also await an unsuspecting meal. A lifeless honeybee sways in the breeze, dangling from the jaws of a spider whose all but invisible body blends with the color of the flower in which it rests.

Like so many desert plants, palo verdes are advertisements for adaptation. On a mere six inches of rain a year, they grow slowly but steadily to small tree size, capturing the energy of the sun with little leaves that first appear in late May or early June and are retained until next spring, unless severe drought causes the tree to jettison its leaves. Even leafless palo verdes can photosynthesize with their green-barked trunks and limbs. During a prolonged dry spell, a palo verde may even permit some of its limbs to die, dropping the autotomized branches to the ground where they will no longer demand scarce nutrients and water of the tree. But when conditions are favorable, the trees produce a spring profusion of flowers, which in due course give rise to thin green seedpods that look rather like the pods of another legume, garden string beans. Within each pod—and there are often tens of thousands on a single palo verde—one to four small beans form, at first milky green and later, when the pods are mature, dark brown. The quantity of beans produced more or less synchronously

by the diffuse forest of palo verdes in the plain below the ridge would surely be uncountable in a good year.

Why are the palo verdes so extravagant in the production of future offspring? Perhaps the circumstances suitable for establishment of a seedling are so rarely met that individual trees gain by producing vast numbers of propagules on the off chance that eventually one or two may accidentally, almost miraculously, reach the microenvironment they need for survival and growth. Only in one year in five have I seen any appreciable number of palo verde seedlings. That year was blessed with several late spring storms, each a statistically improbable event, spaced conveniently at intervals of several weeks. Palo verde seeds from the previous year sprouted everywhere in little depressions, no doubt fertilized by the dead leaves of the mature trees nearby. Seedlings quickly grew to a height of three to four inches. But within a few weeks of the last rains, only a handful survived where once there had been thousands. Most simply disappeared, but here and there the neatly clipped remains of a seedling lay withered in the sun. The young palo verdes apparently made tasty snacks for the many local rodents and rabbits. The odds that a seed will encounter conditions suitable for germination and also live long enough to grow to a reasonable size, one that a jackrabbit cannot demolish in a few bites, must be infinitesimally small. Forest Shreve, working in 1911 with a stand of palo verdes near Tucson, Arizona, reached a similar conclusion. Of the many seedlings he marked, almost none lived to their third year...

Each palo verde is a miracle. It would be wonderful to know the complete life story of even one tree on the ridge, to know what coincidences, accidents and bits of good fortune kept the bruchids, wood rats, and jackrabbits away. How long did the tree take to grow to its present dimensions? What droughts and winds has it experienced? How many wood-boring cerambycid and buprestid beetles have lived within its limbs without killing it? *(continued on page 5)*

Spring in the Mountains

Bring your boots, binoculars, backpacks or bikes and celebrate our city's extraordinary natural legacy in the 28th annual Spring in the Mountains festivities held on March 6 in South Mountain Preserve.

Over-the-Top Hike 7:15 a.m. Archeologist Todd Bostwick leads a tour of petroglyphs on a hike up Telegraph Pass.

Plant Lovers' Long Trail Hike 7:30 a.m. Wendy Hodgson, curator of the plant collection at the Desert Botanical Garden, leads a 3-5 mile hike into the canyons and ridges of South Mountain.

Bring-Your-Own-Horse Ride 7:30 a.m. Meet fellow equestrians for 2-hour ride. Rent-a-Horse Ride 8:15 a.m. Meet at Ponderosa Stables for a 1-hour guided ride in the preserve.

New! Sonoran Desert Spring Hike 8 a.m. The desert awakens into spring on this hiking tour with biologist John Alcock. Wheelchair accessible.

Mountain Run 8 a.m. Ranger Sean Peters leads runners on a 4.5-mile trail run.

Mountain Bike Ride 8:30 a.m. Enjoy a group ride into the preserve.

Bird Hike 8:30 a.m. Catch a glimpse of South Mountain's native birds on this tour led by Tice Supplee of the Sonoran Chapter of the National Audubon Society.

Plus children's activities, a reading by local children's author Conrad Storad and brunch by Spring in the Mountains sponsor Robert's Catering of Chandler.

For registration, fill out the form on the enclosed flyer in this newsletter or call (480) 753-3240 or (480) 706-0172.