



# Friends of the Desert

A project of the Coalition for Sonoran Desert Protection in Pima County, Arizona  
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Photos above by Bob Wenrick

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- Arizona Center for Law in the Public Interest
- Arizona League of Conservation Voters Education Fund
- Arizona Native Plant Society
- Bat Conservation International
- Center for Biological Diversity
- Center for Environmental Connections
- Center for Environmental Ethics
- Defenders of Wildlife
- Desert Watch
- Drylands Institute
- Environmental and Cultural Conservation Organization
- Environmental Law Society
- Friends of Cabeza Prieta
- Friends of Ironwood Forest
- Friends of Tortolita
- Friends of Saguaro National Park
- Gates Pass Area Neighborhood Association
- Neighborhood Coalition of Greater Tucson
- Northwest Neighborhoods Alliance
- Oro Valley Neighborhood Coalition
- Protect Land and Neighborhoods
- Safford Peak Watershed Education Team
- Save the Scenic Santa Ritas
- Sierra Club—Grand Canyon Chapter
- Sierra Club—Rincon Group
- Silverbell Mountain Alliance
- Sky Island Alliance
- Sky Island Watch
- Society of Ecological Restoration
- Sonoran Arthropod Studies Institute
- Sonoran Permaculture Guild
- Southwestern Biological Institute
- Tortolita Homeowners Association
- Tucson Audubon Society
- Tucson Herpetological Society
- Tucson Mountains Association
- Wildlands Network
- Women for Sustainable Technologies

## Voters Overwhelmingly Reject Sweep of Land Conservation Fund! *Plus Other Election Results* by CSDP Staff

*This fall, the Coalition for Sonoran Desert Protection took positions on three of the state-wide propositions. We actively campaigned for the defeat of Props 301 and 109, and for voter approval of Prop 110.*

### Proposition 301

On Election Day, Arizona voters once again demonstrated their strong support for land conservation by overwhelmingly rejecting Proposition 301. Prop 301 would have allowed the legislature to raid the Land Conservation Fund and sweep it into the General Fund, where the Arizona Legislature would have determined how it would be used. During the previous two legislative sessions, the Legislature had tried to sweep these funds without voter approval but a judge ruled that voter approval was necessary. The proposition was defeated with 74% of the vote, representing the strongest opinion of voters across all ballot issues.

The Land Conservation Fund was created by voters in 1998 as an amendment to the Arizona Preserve Initiative (see page 6 for more information) and is the only state fund dedicated to helping communities protect State Trust land. The dollars in this fund provide a matching grant for communities to acquire State Trust lands for conservation, including critical lands in Pima County's Sonoran Desert Conservation Plan (such as recently-acquired Tumamoc Hill near downtown Tucson, see page 7). Thus, once utilized, the Land Conservation Fund dollars actually go twice as far in their benefit to Arizona schools and other beneficiaries of the State Trust. The defeat of Prop 301 not only ensures that important habitat is protected but also that the land conservation dollars will continue to benefit our local communities.

### Proposition 109

This proposition sought to undermine the current system of wildlife management in Arizona by granting the state legislature "exclusive" authority over wildlife issues. This change to the state constitution would have had a negative impact on wildlife and wildlife management in Arizona by making it difficult for wildlife managers to regulate the take of wildlife. The proposition also aimed to designate hunting as the "preferred method" of management, irrespective of the

impacts on wildlife or wildlife habitat. Voters rejected this proposition and stood up for the rights of all citizens to enjoy wildlife as they choose. This result will also ensure that science-based wildlife management remains in place.

### Proposition 110

Proposition 110 sought to provide a means to conserve Arizona lands and create open space buffers around military bases. It included an amendment to the state constitution to allow land exchanges of State Trust land with the federal government in order to protect military facilities and properly manage, protect, and use State Trust lands. The proposition provided an avenue for accountability and transparency to the exchange process, a condition that was applauded by the conservation community. Unfortunately, this proposition failed by the slimmest of margins.

*The Coalition for Sonoran Desert Protection hopes to continue to leverage this strong voter support for land conservation into long-lasting positive change for the Sonoran Desert.*

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## Who We Are

The Coalition for Sonoran Desert Protection's work aims to protect the Sonoran Desert's natural resources and biological diversity through our participation in the development of the Sonoran Desert Conservation Plan (SDCP). The Southwest

is one of the most biologically diverse and fragile regions in the United States; once this visionary plan is completed and fully implemented, it can serve as a model for communities embarking on similar habitat conservation plans for other biologically important and sensitive areas across the west and the country.

In 1997, the cactus ferruginous pygmy-owl received protection under the federal Endangered Species Act (ESA). This spurred dozens of conservation and neighborhood groups to come together to form the Coalition for Sonoran Desert Protection (Coalition) in February of 1998. The Coalition remains committed to bringing sound science and planning into the equation as Pima County develops and implements the Sonoran Desert Conservation Plan. The Coalition continues to be a leader in the planning process of Pima County's SDCP and other conservation efforts in the area, such as the Town of Marana and the City of Tucson Habitat Conservation Plans.

The Coalition is comprised of 38 member groups. These groups represent over 30,000 members. The Coalition staff works on a grass roots level with thousands of direct supporters.

The Coalition has non-profit (501(c)3) status through a fiscal agreement with Coalition member group Sky Island Alliance, and is able to operate through donations from individuals and support from a variety of foundations. The Coalition employs a full-time Executive Director and part-time Program and Administrative Associates. In addition, several member organizations donate staff who dedicate a portion of their time to Coalition work, and many individuals from the community donate their time and energy to make the numerous and ambitious projects of the Coalition successful.

## Some of Our Successes

Thanks to our member groups and the Coalition's regular supporters, we have made tremendous strides towards the goal of creating lasting protection for the Sonoran Desert. Thus far, the Coalition has had many successes, including:

- ⑥ Successfully persuaded Pima County to adopt the far-reaching Sonoran Desert Conservation Plan.
- ⑥ Worked to amend Pima County's Comprehensive Land Use Plan to adopt a *Conservation Lands System* map and guidelines that protect the most biologically important areas in unincorporated Pima County.
- ⑥ Successfully led the movement for the conception, promotion, and designation of the Ironwood Forest National Monument (IFNM).
- ⑥ Through efforts on the Sonoran Desert Conservation Plan Steering Committee, achieved common ground with various stakeholder groups traditionally at odds with conservationists, including Realtors®, developers, homebuilders, property rights advocates, and ranchers.
- ⑥ Facilitated a grassroots campaign that persuaded voters to support a \$174.3 million Open Space Bond which has since funded the protection of over 200,000 acres of land in Pima County.
- ⑥ Secured \$45 million for wildlife linkages projects within the 2006 Regional Transportation Authority (RTA) package.
- ⑥ Coordinated a joint proposal to the RTA for the construction of three wildlife crossing structures over and under Oracle Road. This \$8.2

# Thinking out Loud

by Carolyn Campbell

The end of the year is always a time of reflection for me. This year, I have been reflecting on my great luck: I am especially thankful for my friends and family, my colleagues, my old Schwinn, my four-legged pals, and the sheer accident of discovering this most beautiful place over 30 years ago. To live in and love this desert is truly a wonderful thing, and to play a role in protecting it is an honor for which I am forever grateful.



I want to encourage all of you, our faithful *Champions of the Desert*, to take time to experience the wilderness, whether by yourself or with friends and family. Life is too precious to waste. Get out – enjoy and appreciate!

On the work front, I reflect on what have we accomplished. What successes can we celebrate, and where have we fallen short? What lessons have we learned? What new challenges and opportunities lie ahead in the new year?

The conservation outlook is encouraging here in Pima County, as we continue to work on finalizing the County's Multi-Species Conservation Plan and restoring connectivity between the Sky Islands and vast preserves of upland desert and grasslands.

While the conservation outlook statewide is less encouraging, Arizona voters have been consistent both in their support of conservation measures and their opposition to measures which threaten conservation. Arizona citizens treasure the parks, open space, and recreational opportunities that abound in our natural resource areas.

Over the next two years, the Coalition will be working to convince Pima County citizens to tax themselves another \$1.35 or so per month to buy tens of thousands of acres of new park lands and wildlife linkages. We believe this is a small investment that will reap huge rewards in the longterm. We will also be counting on Arizonans to support the conservation of State Trust lands as we move ahead once again with a citizens' initiative addressing State Trust Land reform. Our hands are certainly not idle here at the Coalition!

Thanks once again to all of you for your on-going support of the Coalition's work! We look forward to sharing our many projects and successes with you in the new year!

## Coalition Staff

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Office line: 520.388.9925 Friends of the Desert Design & Layout: Julie St. John

million project was approved in December 2009 with construction scheduled to begin in 2012.

The Coalition's wide array of outreach, education, advocacy, grassroots activism, and conservation planning activities are focused on achieving consensus between all stakeholder groups, and demonstrating overwhelming community support for regional conservation planning to ensure that our Sonoran Desert remains whole and viable for current and many future generations to enjoy.

***Together we have a chance  
to leave a natural legacy.***

Learn more about the Coalition and how you can help support our efforts at [www.sonorandesert.org](http://www.sonorandesert.org)

# Pinal Partnership Kicks Off Open Space Planning Initiative at First in a Series of Public Workshops

by June Hussey and Liz Petterson

It doesn't take reams of studies by land planning experts from the renowned Morrison Institute at Arizona State University to convince average Arizonans that continued growth is inevitable. It's universally accepted that one day in the not so distant future, the Phoenix and Tucson metropolitan areas will be interconnected as a "Megapolitan Area" that also spreads east and west, eclipsing rural areas and open space. Strategically preserving and protecting open space in Pinal County is a top priority for citizens both within and outside of Pinal County, Arizona, according to Morrison Institute polls.

So, it's not the questions of 'if' or 'when,' but rather 'how' will such growth take place that prompted concerned conservation community leaders like the Coalition for Sonoran Desert Protection and Arizona Land and Water Trust to spearhead the **Pinal Partnership Open Space Initiative Workshop**. The event, conceived by the Partnership's Parks, Trails, Open Space and Public Lands Committee, was held Friday, September 24, 2010 at the Signal Peak Campus of Central Arizona College in Coolidge.

At the day-long workshop, participants received an overview about the importance of open space by Keynote Speaker Grady Gammage, Jr., a Senior Fellow at ASU's Morrison Institute. Mr. Gammage referred to recent polling which showed a majority of Pinal County residents feel that open space adds to their overall quality of life and added "if the outdoors are what bind us together, it's what we ought to have consensus to protect."

Participants also learned about the existing Pinal County Open Space and Trails Master Plan (adopted in 2007 by the Pinal County Board of

Supervisors) during a presentation from Pinal County Planning & Development Director Jerry Stabley. In addition, a series of speakers discussed the economic benefits of open space, along with the many conservation tools available for land protection such as conservation easements, bond initiatives, and various funding sources. Pima County staff presented the many successes of the Sonoran Desert Conservation Plan as part of the speaker series. The workshop concluded with breakout sessions that focused on open space issues in specific areas of Pinal County.

Pinal County's existing treasures were highlighted by speakers and participants throughout the workshop, including the San Pedro River, Superstition Mountains, Boyce Thompson Arboretum, White Canyon, Casa Grande Ruins National Monument, the San Tan Mountains, Table Top Wilderness and Picacho Peak.

Initiatives like this don't happen overnight, and they don't succeed without individual stakeholders first taking an interest and then taking action. Concerned citizens have a prime opportunity to learn more and get involved in the planning process to help preserve the treasures of Pinal County right now. **The next workshop will take place January 21, 2011 from 8:00am to 11:00am at Central Arizona College.** It is free and open to the public. Please come, and bring a friend. To learn more and register for the conference, visit [www.pinalpartnership.com](http://www.pinalpartnership.com) or contact Liz Petterson at Arizona Land and Water Trust ([lpetterson@alwt.org](mailto:lpetterson@alwt.org)).

## Masked Bob-white (*Colinus virginianus ridgwayi*)

"One of the rare, if not the rarest, native birds in Arizona today is the Masked Bob-white (*Colinus ridgwayi*). It is not only rare in Arizona but also in the Mexican state of Sonora, the original habitat of the bird. For the past several years it has been safeguarded by law in this Territory, but unfortunately there are none left to protect." — Herbert Brown, April 1904. *The Auk*, Vol. XXI, No. 2, pg. 209.



As dire as the situation sounded in 1904, it is encouraging to hear that the situation has improved for the masked bobwhite. Listed as an endangered species, the masked bobwhite's home range lies almost entirely within the protected Buenos Aires National Wildlife Refuge in southern Pima County. There, a captive breeding program is underway to restore the masked bobwhite's population. This example demonstrates the importance of protecting habitat for the conservation of our native species. Thanks to Ray Goodwin for the images. To see more of his work, please visit [sonoranconnection.blogspot.com](http://sonoranconnection.blogspot.com).



## Captured Critters

Do you have a photo of Sonoran Desert wildlife?

Please send your photos to [gabe.wigtil@sonorandesert.org](mailto:gabe.wigtil@sonorandesert.org) for publication in *Friends of the Desert!*

Masked bobwhites in Buenos Aires National Wildlife Refuge. Photos by Ray Goodwin

# Updates

## Pima County

### ***Multi-Species Conservation Plan***

After over 10 years of development, Pima County submitted an application for a Section 10 Incidental Take Permit from the U.S. Fish and Wildlife Service in December 2010. The application was accompanied by an “Administrative Draft Multi-Species Conservation Plan” (MSCP) along with a Draft Implementing Agreement.

Now that the permit application has been submitted, the USFWS will prepare a Draft Environmental Impact Statement (DEIS). The DEIS and Draft MSCP will then be released for public review. Finally, the USFWS will prepare a biological opinion and make a decision on whether to grant the permit. Assuming everything goes according to schedule and the permit is approved, the County will enter into an Implementing Agreement with the USFWS within the next 12-18 months.

The Coalition expects to continue our role as an important stakeholder as the MSCP is finalized. As the component of the broader Sonoran Desert Conservation Plan that addresses Endangered Species Act compliance, the MSCP is vital for successful habitat conservation planning in Pima County.

### ***Riparian Habitat Mitigation Guidelines***

As a member of Pima County’s Mitigation Working Group, the Coalition provided detailed recommendations from 2007-2009 on the recent revisions of Pima County’s Riparian Habitat On-Site Mitigation Guidelines. While these guidelines have not been formally approved by the Board of Supervisors, they are currently in effect through a temporary Technical Policy. Staff feedback indicates they are working well and applicants appreciate the level of detail and additional transparency generated by the recent revisions.

The Coalition is now providing feedback on new revisions to Pima County’s Riparian Habitat *Off-site* Mitigation Guidelines. Topics under discussion include how to structure an in-lieu fee program and what the in-lieu fees should be used for (such as acquisition, restoration, and/or the purchase of water rights). Once the Off-site Mitigation Guidelines are finalized, both sets of guidelines will be presented to the Board of Supervisors for adoption.

### ***Open Space Bond***

As a member of the Pima County Bond Advisory Committee, the Coalition continues to advocate for a robust Open Space component in a new bond election. While the Conservation Acquisition Commission recommended \$285 million for open space, the Bond Advisory Committee voted to support only \$120 million. In winter and spring of 2011, we will continue to advocate for additional open space dollars in the next bond election.

### ***Oracle Road Wildlife Crossings***

In October 2010, the Oracle Road wildlife crossings reached another important milestone when the Regional Transportation Authority (who is funding the crossings) and the Arizona Department of Transportation (who is constructing the crossings) agreed to a funding plan. During the summer and fall of 2010, this funding plan was in doubt due a difference of opinions about how and when funding will be disbursed. The crossings were temporarily left out of broader plans for the widening of Oracle Road; with the newly agreed-upon funding plan, the crossings will be reinstated. The RTA and ADOT are currently finalizing an Intergovernmental Agreement that will memorialize further details on the funding plan.

## City of Tucson

### ***Riparian Area Protection Ordinance***

In October 2010, the Coalition submitted detailed comments to the City of Tucson on a new Riparian Area Protection Ordinance. As a member of the City’s Resource Planning Advisory Committee, the Coalition has been providing feedback on this new ordinance for quite some time. Our comments centered on what types of development will be required to mitigate for impacts to riparian habitat; further clarity on the definition of certain terms; and expansion of the off-site mitigation section. Due to budget and staffing cuts, the Resource Planning Advisory Committee is on an indefinite hiatus. It is unknown when the new Riparian Area Protection Ordinance will be finished.

## Oro Valley

### ***Environmentally-Sensitive Lands Ordinance***

The Town of Oro Valley has finalized a new Environmentally-Sensitive Lands Ordinance with the Town Council expected to vote on its adoption in early 2011. This Ordinance seeks to “implement the Oro Valley General Plan by conserving natural, scenic, hillside, and cultural resources.” The Coalition served on Oro Valley’s Technical Advisory Committee as this Ordinance was developed over the last several years.

## Marana

### ***General Plan Update***

The Marana Town Council approved a new General Plan in December 2010 that will be placed on the ballot for voter approval in May 2011. As a member of Marana’s Stakeholder Working Group, the Coalition submitted detailed comments on the draft General Plan in October 2010. Our concerns centered on thoroughly integrating the conservation measures of Marana’s draft Habitat Conservation Plan with the General Plan; prohibiting the construction of new roads in regional wildlife corridors; and including Site Disturbance guidelines for the Tortolita Fan.



**Volunteers pulling buffelgrass at Saguaro National Park. Photo by Friends of Saguaro National Park**

## ***Friends of Saguaro National Park***

*by Robert Newton, Executive Director*

**Friends of Saguaro National Park** is the 501(c)3 not-for-profit fundraising partner of the National Park Service, created to help preserve, protect and enhance the fragile environment and unique cultural heritage of the Sonoran Desert at Saguaro National Park. We promote citizen and corporate stewardship through philanthropy, education, volunteerism and public awareness.

Since its founding in 1996, FOSNP has grown to include more than 1,500 members and has raised more than \$1 million to assist the Park with interpretive displays, scientific research, visitor amenities, trail construction and maintenance, and environmental education programs. Each year nearly 200 volunteers provide an estimated 30,000 hours of volunteer service at the Park, time valued by the National Park Service at more than \$500,000 annually.

While raising money is essential to the success of FOSNP, it's also important for us to raise public awareness of who we are and what we seek to accomplish. We strive to create a greater public understanding of the natural and cultural heritage preserved at Saguaro National Park and believe that the stewardship of these resources is everyone's responsibility. Accordingly, we participate in dozens of community outreach activities during the year to help foster the development of a greater environmental stewardship ethic among park visitors, park neighbors, and the greater Tucson community.

One challenge faced by FOSNP is redefining the role of stewardship for our public lands since most citizens assume that caring for these places is solely the responsibility of government. We seek to increase public awareness in the Tucson community about the compelling needs at Saguaro National Park – such as essential funding for resource protection, visitor services, facility operations, and park support programs – and promote the message that environmental stewardship is the responsibility of every citizen.

**Contact: 520.733.8610 [www.friendsofsaguaro.org](http://www.friendsofsaguaro.org)**

*The Coalition for Sonoran Desert Protection is pleased to announce the addition of a new member group, Friends of Saguaro National Park. With this latest addition, the Coalition now represents 38 international, national, and local environmental and community organizations. Our member groups contribute expertise and experience and strengthen our ability to advocate for the Sonoran Desert Conservation Plan and habitat conservation planning efforts across the region.*

## *Support the Coalition by Becoming a Monthly Donor*

One of the easiest ways to show your support for conserving the Sonoran Desert is to become a monthly donor to the Coalition for Sonoran Desert Protection. Becoming a monthly donor will allow you to provide a steady stream of support for local conservation efforts. Now more than ever, we need support from people like you!

### **Top 5 Reasons to Support the Coalition for Sonoran Desert Protection**

- Ⓞ We create tangible, long-lasting positive change for the preservation of the Sonoran Desert.
- Ⓞ We are recognized leaders, from the local to the national level.
- Ⓞ We leverage our member groups' scientific expertise in our work.
- Ⓞ We embrace collaboration with a broad cross-section of stakeholders.
- Ⓞ We work tirelessly on a wide variety of local conservation initiatives.

Contact the Coalition office at 520.388.9925 to become a monthly donor or simply visit [www.sonorandesert.org](http://www.sonorandesert.org) and click on Donate Now. This paperless giving option reduces fundraising costs by eliminating the need to mail supporter renewals. Your support ensures that our work will continue to protect the unique and diverse plant and wildlife found within our Sonoran Desert home.

**Join us on Facebook!**



# The Arizona Preserve Initiative

The Arizona Preserve Initiative (API) was created by the Arizona state legislature in 1996 and was designed to preserve select State Trust land parcels around urban areas for conservation and for the benefit of future generations. The API established a process whereby communities could purchase State Trust lands for conservation purposes without going to auction. It set up a process for specific lands to be designated as eligible for conservation and then sold to a state agency or local jurisdiction. However, this process was later amended due to a lawsuit threat alleging that the API was unconstitutional since lands would not be sold to the highest bidder. Now, all State Trust lands must go through an official auction to the highest bidder prior to sale. The Land Conservation Fund, established by voters in 1998, was created to provide matching funds to jurisdictions that want to purchase State Trust Lands for conservation. Jurisdictions apply for the money (a 50/50 match) and request an auction, taking a calculated risk that they will be the highest (and typically only) bidder on the targeted parcels.

## Arizona Preserve Initiative Timeline

### 1996

The Arizona Preserve Initiative (API) was passed by the legislature and signed into law by the Governor. State Trust lands within 1 to 3 miles of municipalities, dependent on population, were eligible for preservation under API. Lands must be sold at appraised market value.

### 1997-1999

Amendments to API were passed by the Legislature which expanded eligible lands in Maricopa and Pima County to a 13 mile radius surrounding incorporated areas and added the Tortolita Mountains area in Pinal County.

### 1998

Voters approved a proposition which authorized the creation of the Land Conservation Fund to finance the API program from 2000 to 2011. Voters authorized the state to appropriate \$20 million to the Land Conservation Fund every year, to be used as matching funds for the purchase of State Trust Lands for conservation.

### 2003

Just before Tumamoc Hill was scheduled to be sold to Pima County for preservation, a group known as People for the West filed a legal challenge to the constitutionality of API. They stated that the land must be sold through a public auction to the highest bidder. The case never went to court, but as a result of the filing the State does not now allow any land to be sold without going to public auction.

### 2009

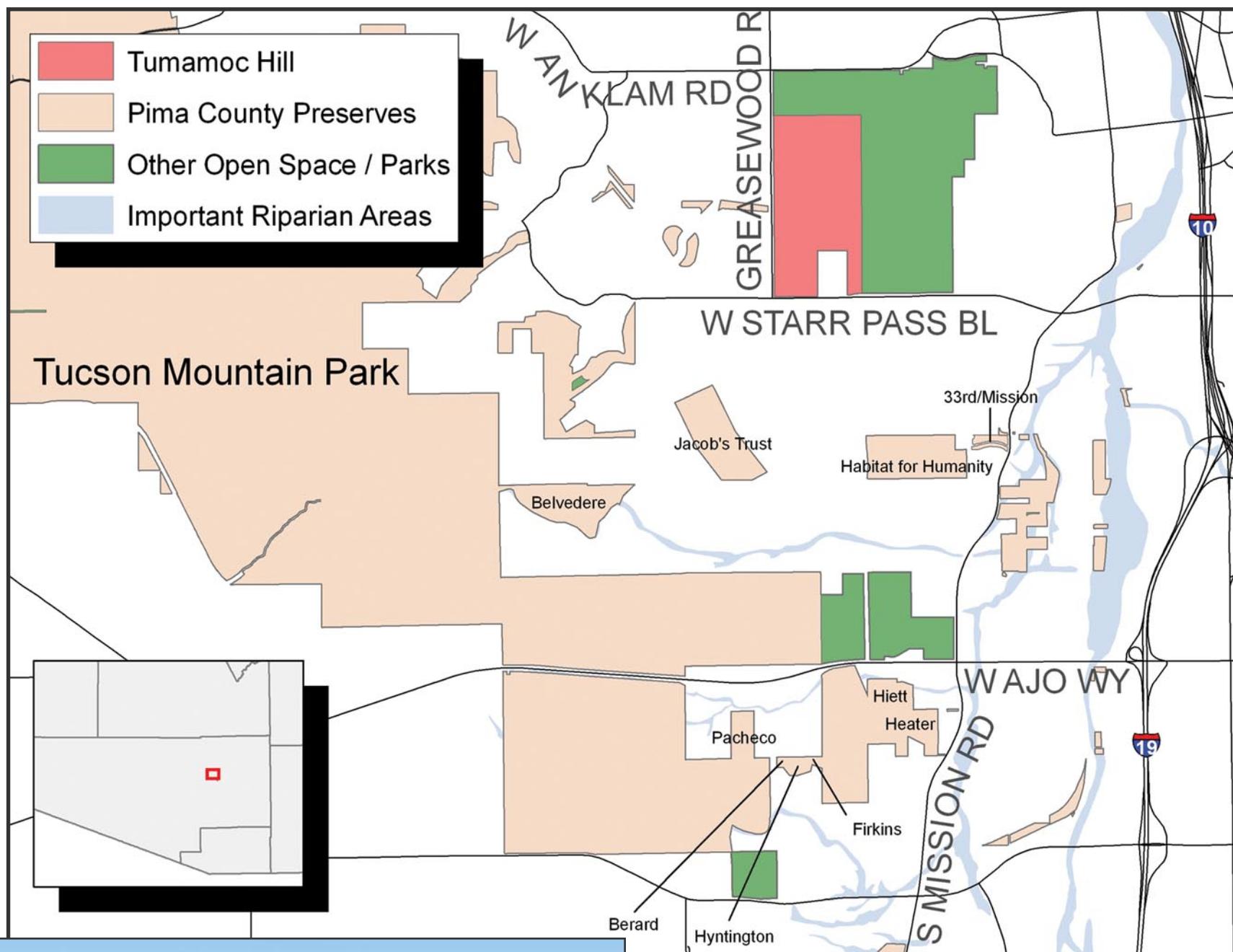
With the assistance of a "Growing Smart Grant" from the Land Conservation Fund, Pima County purchased 320 acres of State Trust land on Tumamoc Hill for \$4.7 million at public auction. Also in 2009, Pima County purchased 67.17 acres at the Valencia Site for \$940,000. Pima County was the only bidder at both of these auctions.

### 2010

To date, there have been 18 land sales through the API. Totaling 11,021 acres, this land has added approximately \$281 million to the permanent Trust funds. There are 8 pending sale applications, totaling approximately 10,000 acres. In November, voters overwhelmingly defeated Proposition 301 which would have swept the remaining \$71.5 million in the Land Conservation Fund into the state's General Fund. This money will remain available to jurisdictions until the Fund is completely depleted.

*In 2011, the Coalition for Sonoran Desert Protection will continue to work for successful State Trust land reform, including another citizens' initiative campaign. This citizens' initiative will ask voters to change the Arizona State Constitution to allow specific biologically-rich State Trust Lands to be sold to jurisdictions for conservation without a public auction. If you are interested in volunteering to help with this campaign, please contact the Coalition office!*

# Conservation Acquisition Highlight

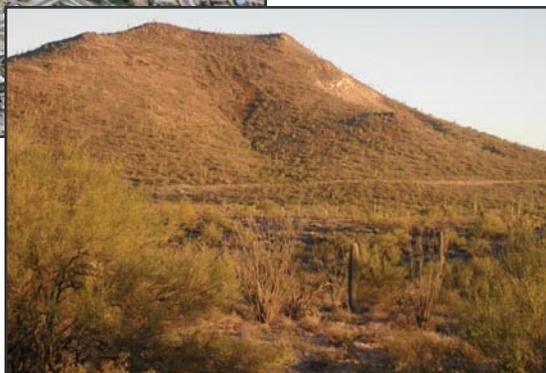


above: Image © 2010 DigitalGlobe, Image USDA Farm Service Agency, © 2010 Google

## Tumamoc Hill

Tumamoc Hill was the first State Trust land to be reclassified for conservation under the Arizona Preserve Initiative program in 1997. It was purchased at auction by Pima County in 2009 for \$4.7 million using matching money from the Land Conservation Fund's "Growing Smarter" grant program. This parcel is important as a scientific research area as part of Arizona's Desert Laboratory. For over 100 years, this outdoor research laboratory has provided insights into the ecology of the Sonoran Desert. Tumamoc Hill is also an important buffer to the Tucson Mountains — San Xavier wildlife linkage. This wildlife linkage is home to bobcat, mountain lion, desert tortoise, western burrowing owl, and other important species.

right: Views of Tumamoc Hill



# Jaguar Heavens

by Jessica Lamberton, Wildlife Linkages Program Coordinator,  
Sky Island Alliance

Cats continue to stalk our imaginations, from the thumping sound under the oaks to the night-reflecting eyes of our own house cats. Throughout history, wild cats have been a part of culture, mythology, art, even spiritual belief, locally, and throughout the world.

Where we live in the Sky Island region of the southwestern United States and northwestern Mexico, we are situated at the confluence of the Rocky Mountains, the Sierra Madre Occidental and the Sonoran and Chihuahuan deserts. This vast area, where deserts and grasslands surround isolated mountain ranges, is known for its unique biodiversity and natural beauty, and is incredibly important for its connective characteristics at a continental level. As many as four species of wild cats are found here — jaguar, mountain lion, bobcat and ocelot.

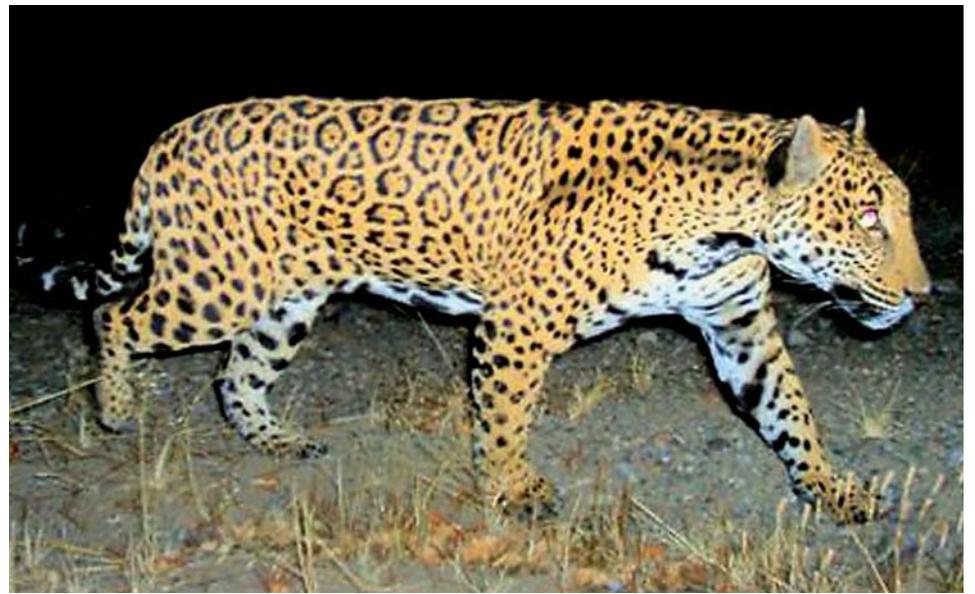
The southwest is known for its sunsets and dark night skies — further south, the Maya would say that to spread the jaguar's skin is to spread the heavens of the starry night. The jaguar is the largest cat in the western hemisphere, and the only one that roars. The voice of the jaguar is a huffing cough, a rapid, punctuated staccato that grows in volume and depth until the hair on the back of your neck rises with the sound of it. Jaguars usually weigh between 100 to 300 pounds, with strong jaws capable of crushing the skull of a deer or the shell of a sea turtle. Their black rosette-like spots against tan fur offer nature's best camouflage. In the tropical rainforests of South America, melanistic, or black jaguars, will sometimes occur, but this recessive trait is more commonly found in zoos than in the wild.

Predator control measures in the west were so successful that we almost lost a legacy — in 1973, with the passing of the Endangered Species Act, jaguars were not listed in the U.S. because it was thought they were all gone from this country. Then, in 1996, two hunters in separate mountain ranges discovered jaguars in southern Arizona — putting down their guns and picking up their cameras, they made history. The jaguar was listed as a U.S. Endangered Species in 1997. Jaguars continue to be studied both north and south of the international border. It is a story of success and struggle as the jaguar seeks to reclaim its historical territory and faces impermeable border walls, the threat of poaching and increasing development, and habitat loss. But hope is not lost. Sky Island Alliance continues to photograph, by remote camera, the life of a young male jaguar whose territory is only thirty miles south of the international border.

Ocelots, another tropical cat listed as a U.S. Endangered Species, are small to medium-sized cats weighing around 35 pounds. Ocelots prey upon small to medium-sized mammals, birds, reptiles, frogs, fish, and crabs. They have been known to be picky eaters — de-feathering their catch before breakfast. In November 2009, Sky Island Alliance documented on remote camera the first living record of an ocelot in Arizona.

Like the jaguar and ocelot, mountain lions and bobcats are solitary creatures, keeping company with each other only briefly for mating and raising young. All cats are carnivores, with forward facing eyes that assist with depth perception in pursuing prey. They are usually nocturnal, hunting at night. They are also territorial and will mark their territory with urine and other scent markings. This allows cats, like other territorial animals, to display their health and wellbeing, sexual readiness, and to stake a claim of ownership — updating their status as if signing onto Facebook.

Bobcats, also called wildcats, have short tails from which they get their name, up to nine inches long. They are increasingly found in suburban areas, taking



Remote camera captures jaguar. Photo ©2010 Sky Island Alliance / El Aribabi

advantage of bird feeders, water baths and pools, and shelter from their natural predators — other bobcats, coyotes and mountain lions. Mountain lions, known also as cougars, pumas, panthers, and ghost cats, have a long tail nearly touching the ground which is used for balance during short sprints in pursuit of prey, such as their favorite choice — white-tailed deer. Their kittens are spotted, fading to golden brown or light tan as they become adults.

So why are these cats so important? They are fascinating, yes, whether we choose to fear, revere or simply study them. But why do we need these silent hunters? Is it merely because, as carnivores, they play an integral role in our ecosystem, or does it go beyond the balance of nature? I believe these all to be true. Without wild predators, and the wild cats that live quietly among us, life would lose its sense of adventure. “*The choice is not between wild places and people; it is between a rich or impoverished existence for man,*” said Thomas Lovejoy — and what a wonderful turn of phrase. I cannot imagine hiking in the Tucson Mountains, or the wilderness of Mexico, without touching the delicate four-toed tracks of a bobcat or mountain lion, and knowing yesterday, or today, a cat walked by on padded feet where I now step. We sometimes take these more common carnivores for granted. How long before the mountain lion and bobcat go the way of the jaguar and ocelot?

For wild cats, and the vast diversity of other wildlife in the region, protected habitat blocks and corridors are essential to their survival. As a biologist, I feel the urgent need for connected landscapes for our wildlife and wild places. Through education, science and advocacy, we will continue to achieve conservation action — to protect and restore the movement and dispersal of native plants and animals and reduce threats and barriers on the landscape. Your effort will help make this happen, through volunteer work, membership, and the active support of organizations like the Coalition for Sonoran Desert Protection and Sky Island Alliance.

In the face of increasing threats to our Sky Islands' wild lands, from new transmission lines, politically charged borderlands, border infrastructure, rapid urbanization, and increasing irresponsible off-road vehicle use, we have a challenge ahead of us. And yet, as the Maya once did, tonight I will look up to watch the bright constellations in the sky, and know they are mirrored out there, somewhere, by relaxing of muscles beneath spotted fur.

*Jessica Lamberton is a wildlife biologist and Wildlife Linkages Program Coordinator with Sky Island Alliance, a grassroots organization dedicated to the protection and restoration of the rich natural heritage of native species and habitats in the Sky Island region of the southwestern United States and northwestern Mexico.*

# Mountain Lions in the Tucson Mountains: Can they Survive in an Ocean of Sprawl? The Results

by Lisa Haynes and Camera Project Team, Wild Cat Research and Conservation Program, School of Natural Resources and the Environment, University of Arizona

In a two-year study we monitored mountain lions roaming the Tucson Mountains by deploying “trail” cameras, which are activated by a passing animal triggering a motion sensor. We confirmed that lions in at least two age groups — adults and almost-grown kittens — use the Tucson Mountains as either their home range or as “transients.” While our team was able to identify specific bobcats in the snapshots based on their unique pattern of fur spots, the 36 mountain lion photographs did not allow for the identification of individual mountain lions. The lions almost all look alike, so in most cases, we probably photographed the same individuals walking in front of the camera multiple times. Although the cameras were distributed at 65 sites throughout the Tucson Mountains, mountain lions were only photographed in the backcountry, not near residential areas, and most of the lion photographs were triggered at night, exemplifying the mountain lions’ natural tendency to avoid humans.

## Urban sprawl threatens habitat

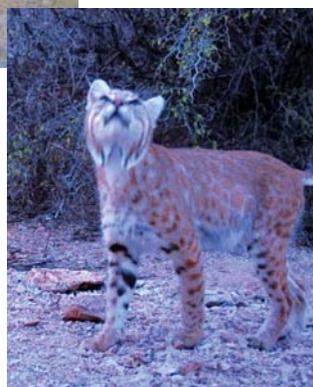
An important goal of the study was to assess the status of lions within the Tucson Mountains and determine whether they move into or out of the range via specific wildlife corridors. To detect migrating lions, our group monitored potential wildlife corridors surrounding the Tucson Mountains, including the designated wildlife crossings of the Central Arizona Project (CAP) canal (where the canal goes underground). None of the corridor cameras photographed mountain lions, but they did document bobcats and a variety of other wildlife. Although we were not able to detect mountain lions moving in or out of the Tucson Mountains, the fact that the two wild cat species (mountain lions and bobcats) still exist in the Tucson Mountains is testament to its ecological value in this remarkable and diverse bioregion. The Tucson Mountains are a template for what will happen to larger mountain ranges and habitat patches in the future as sprawl increases.

## Why this is important

Urban sprawl, road construction, Interstate highways, and other infrastructure developments such as the CAP Canal threaten to cut the mountain lions’ habitat into smaller and smaller fragments. Trapped in a shrinking habitat and with migratory routes cut off, the animals are at high



Remote cameras capture mountain lion and bobcat. Photos by UA Wild Cat Research and Conservation



risk from inbreeding and eventually local extinction. In an ideal situation, you have resident adults and genetic interchange with juvenile animals coming through from outside areas. The mountain lion population in this area is already facing greater geographic constriction than other lion populations deemed genetically isolated and ultimately unlikely to survive. If a top carnivore such as the mountain lion becomes locally extinct, it can have detrimental effects on the larger ecosystem. Overpopulation of deer and other prey species is a likely result, in turn leading to overbrowsing and negative impacts to native vegetation as well as other detrimental effects.

Mountain lions depend on large swaths of land to survive and form healthy populations. Typically in the Southwest, a resident adult male has a home range anywhere from 30 to 120 square miles, or even up to 400-600 square miles if the cats need to ‘island-hop’ between mountain ranges, which is common in the Sonoran Desert. Mountain lions are a remarkably resilient species that have managed to endure from Alaska all the way to the tip of South America, despite facing relentless persecution in the first half of the 1900s (which caused the extinction of the Mexican grizzly bear and loss of Mexican grey wolves in the wild). However, in modern times, local populations of mountain lions are at risk from urbanization, landscape fragmentation, and habitat loss.

## Human barriers prevent migration

The Sonoran Desert Conservation Plan calls for the conservation of critical wildlife linkages throughout Pima County. In many instances linkages set aside for large wide-ranging species, such as the mountain lion, serve many other species as well. Although this was an intensive camera study, we were unable to answer the basic questions, such as how many mountain lions live in the Tucson Mountains, and if or how they are connected to other populations in surrounding habitats. The only way to truly define linkages for the mountain lion, one of the most critically important species, is through radio telemetry. However, radio collaring mountain lions is a sensitive issue, and if initiated, should be carefully and thoughtfully undertaken. We recommend facilitating a community discussion with respect to the risks and benefits of telemetry, as well establishing processes for veterinary, technical, and ethical oversight if the collective decision is made to conduct telemetry-based research in Pima County.

## Remarkable diversity of other wildlife

Our group obtained more than 12,000 photos during the project, most of which were taken in the interior of the Tucson Mountains. Our team of co-workers and dedicated volunteers took on the task of checking the cameras and processing the thousands of photos. The study, which was funded primarily by Pima County’s Starr Pass Wildlife Enhancement Fund and augmented by the National Park Service, documented, among other species: raccoon, spotted skunk, hog-nosed skunk, hooded skunk, ringtail, badger, Virginia opossum, gray fox, gila monster, mule deer, bobcat, coyote, javelina, packrat, jackrabbit and cottontail rabbit and a variety of birds. However, humans were photographed the most!

The University of Arizona’s Wild Cat Research and Conservation Program combines research on Tucson’s native bobcats and mountain lions with conservation of the world’s 36 species of wild cats. More information can be found at the websites for the UA Wild Cat Program:

[www.uawildcatresearch.org](http://www.uawildcatresearch.org) and the Arizona Game and Fish Department: [www.azgfd.gov/w\\_c/urban\\_lions.html](http://www.azgfd.gov/w_c/urban_lions.html)

# Event Wrap-Up

## Saguaro National Park Labor Day Race

The Coalition was honored to be a beneficiary of the 41st annual Saguaro National Park Labor Day Run, held on September 6th. Nearly 1000 people participated in this yearly tradition and had a great time while enjoying 8-mile and 5k courses looping through a cactus forest in the foothills of the scenic Rincon Mountains at Saguaro National Park East. This was the Coalition's second year as a beneficiary of the run and we appreciate everyone who took part in this fun event. Mark your calendars now for Labor Day 2011 and we hope to see you out there!

## Wild & Scenic Environmental Film Festival

On September 15th, the Coalition hosted the Wild & Scenic Environmental Film Festival at the Loft Cinema. Over 200 people joined us for a wonderful evening of entertainment and education. Our feature film was **Division Street**, which highlights the environmental challenges presented by North America's vast system of roads. This film looks at the promise of wildlife linkages, the potential for "greening" our highway system, and the fusion of high-tech engineering with the best and brightest environmental research happening today. We shared information about our campaign to protect wildlife linkages across southern Arizona, including our significant role in the recently approved wildlife crossings along Oracle Road.

Several other great films were shown at the festival, including: **Edge of the Sea**, a story about a Puerto Rican fisherman's quest to protect his land from urban sprawl and development; **Greenhorns**, which showcased the efforts of young farmers across the US to create a new sustainable culture; and **A Year in the Desert: Anza Borrego**, a beautiful collection of images displaying the wonders of the yearly cycle in one of California's state parks. To see trailers from all of these films and more, check out [www.wildandscenicfilmfestival.org/category/films/on-tour](http://www.wildandscenicfilmfestival.org/category/films/on-tour).

A huge "Thank You!" goes out to all of our local event sponsors and partners: Summit Hut, Betts Printing, Brooklyn Pizza, Sky Bar, Nicole Brulé-Fisher, Antigone Books, Tucson Audubon Society and all who donated items for the prize raffle. If you missed the event this year, make sure to check it out next fall and get involved in "conserving the wild and scenic places close to home."

## Furnace Creek 508

As a fundraising effort for the Coalition for Sonoran Desert Protection and the *Bring Back the Cats* campaign of Coalition member group Sky Island Alliance, our long-time supporter and friend Bruce Gungle recently competed in the Furnace Creek 508 ultra-endurance bike race. This 48-hour, 508-mile race took place from October 2-4 and winds from Valencia, California, northeast to Death Valley, and then southeast to finish at Twenty-nine Palms. Over the course of the race, riders face 10 major mountain climbs, including two over 3,000 feet.

Dubbed Team Coonhound, Bruce set off with Sky Island Alliance staff member Sergio Avila and long-time bike enthusiast Juan Rascon as crew. Bruce fought hard throughout the weekend and completed 382.62 miles in 37.5 hours. Events during the race conspired to keep Bruce from completing the course, and here he shares about the last few miles of the race:

"With 20 miles to go, thunderstorm downdrafts directly ahead of us created a ferocious headwind and eventually a brief 60-second downpour. I jumped off the bike and went to put it in the back of the truck, under the shell to keep it dry, and then jumped in the truck. Sergio and Juan thought I meant that I'd had it, and put the truck in gear to drive off. "No, no, no. I'm just staying dry. We have to finish the ride to Baker at least!" I told them, and we all had a laugh."

We applaud Bruce's tremendous effort and contribution! He originally had a \$4,000 fundraising goal, but thanks to the generous support of supporters like you he was able to raise nearly \$6,000 for the Coalition and the Bring Back the Cats campaign. Thank you Bruce and Team Coonhound for a job well done!



Above, from the Wild & Scenic Film Festival  
top: Carolyn Campbell, CSDP Executive Director, chats with raffle winners.  
middle: A scene from *Anza Borrego: A Year in the Desert*. Image courtesy WSEFF

below: Bruce Gungle on his quest to complete the Furnace Creek 508. Photo by Sergio Avila

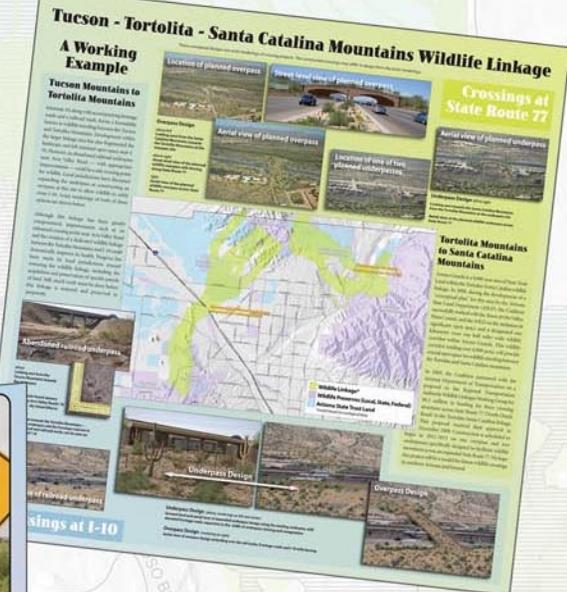


# A New Publication from the Coalition for Sonoran Desert Protection!



**Creating Safe Passages**  
Protecting and Restoring the Sonoran Desert's Wildlife Linkages

Want to learn more about why we need to protect the Sonoran Desert's wildlife linkages? This brochure is a clear and concise primer on the what, where, and why of wildlife linkages, including detailed maps, compelling photos, and FAQs. Pick one up today at the Coalition office or at other locations around southern Arizona!



**Tucson - Tortolita - Santa Catalina Mountains Wildlife Linkage**  
A Working Example



**Maintaining Healthy Ecosystems**



**Protecting wildlife linkages in southern Arizona is one of the goals of the Coalition for Sonoran Desert Protection.**

**Packs of brochures are also available for wider distribution at events and meetings.**

## Coalition T-Shirts Make Great Gifts and Support Our Work!



**Long-sleeve: back**

**Send order form and check to:**

**CSDP**  
300 E. University Blvd.,  
Suite 120  
Tucson, AZ 85705



**Short-sleeve: front**

Order Form	quantity		total
<b>Short Sleeve — While supplies last! Last of Stock!</b>			
Small	_____ x	<b>\$5 each</b>	= _____
X-Large	_____ x	<b>\$5 each</b>	= _____
<b>Long Sleeve — Please indicate color choice (Forest Green or Maroon) and with or without a front pocket</b>			
Small	_____ x	\$20 each	= _____
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Large	_____ x	\$20 each	= _____
X-Large	_____ x	\$20 each	= _____
<b>Total \$ Enclosed =</b>			_____



## I would like to make a contribution to the Coalition for Sonoran Desert Protection of:

\$50    \$75    \$100    \$250    \$500

**Make a credit card donation at [www.sonorandesert.org](http://www.sonorandesert.org) by clicking on the red "Donate Now" button. All donations will be processed by Groundspring.org.**

**Make checks out to CSDP and send to 300 E. University Blvd., Suite 120, Tucson AZ 85705**

*The Coalition for Sonoran Desert Protection is a tax-exempt nonprofit organization operating under a 501(c)(3) umbrella. All donations to the Coalition are tax-deductible to the maximum extent allowed by law. Your contribution will help us continue our innovative environmental campaigns that are helping to preserve our irreplaceable natural treasures, save endangered and threatened wildlife, and protect this fragile desert environment we call home.*



A fiscally-sponsored project of Sky Island Alliance

**Coalition for  
Sonoran Desert  
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Foreword by Richard T. T. Forman

# SAFE PASSAGES



**Highways, Wildlife, and Habitat Connectivity**

Edited by Jon P. Beckmann, Anthony P. Clevenger,  
Marcel P. Huijser, and Jodi A. Hilty

## **If you are interested in wildlife linkages, *Safe Passages* will make a great addition to your library!**

“*Safe Passages* is an important contribution to our growing awareness that roadways have significant and long-lasting impacts to wildlife habitat and native species. As transportation networks continue to expand, we must find creative solutions that mitigate the impacts to wildlife habitat. Pima County is a leader in this area, as shown in this book. The voters, elected officials and transportation professionals throughout the region demonstrate that it is possible to integrate wildlife-friendly crossings into roadway projects and create protected wildlife linkages through smart land-use planning.” — Carolyn Campbell

Coalition staff members, Executive Director Carolyn Campbell and Program Associate Kathleen Kennedy, contributed a chapter entitled “The Sonoran Desert Conservation Plan and Regional Transportation Authority: Citizen Support for Habitat Connectivity and Highway Mitigation” to this exciting new book on road ecology.

Copies of *Safe Passages* are available locally from  
the Tucson Audubon Nature Store, 300 E. University Blvd.  
or Antigone Books, 411 N. 4th Avenue.

For more information on Sonoran Desert wildlife linkages, visit:  
[www.sonorandesert.org/learning-more/wildlife-linkages](http://www.sonorandesert.org/learning-more/wildlife-linkages)