



# Friends of Ironwood Forest

## Looking back ...

In the 19th and early 20th centuries, the Southwest frontier was viewed as a great resource for mining, grazing, and agriculture. Gradually attention was given to preservation of the Sonoran Desert landscape.

So when President Bill Clinton created the Ironwood Forest National Monument (IFNM) in 2000, this signaled a monumental change and represented a great victory for those working at the Arizona-Sonora Desert Museum and many other organizations. Nearly two decades of work by the Desert Museum were recognized by this important designation.

### The Beginnings

Previous study of the area that is now the IFNM was sparse, with only a few plant collections identified between 1905 and 1970. In the early 1970s, as part of his PhD dissertation, Thomas R. Van Devender studied pack-rat middens in the Waterman Mountains and Wolcott Peak (part of Ragged Top, a cliff-riddled mountain northwest of Tucson). In that fossil study he also collected modern flora. By May of 1983 Tom was working at the Desert Museum as Senior Research Scientist and continued his study of the interesting biology on the limestone of the Waterman range.

In 1985 I began my work for the Desert Museum in the Plant (Botany) Department and soon I began exploring Ragged Top on my own. With Tom's encouragement, I began studying and collecting plants there. Soon I became totally focused on learning more about the area including Pan Quemado, the Samaniego Hills,

## Establishment of the Ironwood Forest National Monument

by John F. Wiens  
Nursery Horticulturist, ASDM

and the Silver Bell and Waterman Mountains. In my first five years studying the area, I logged hundreds of hikes; however, my focus tended to stay with Ragged Top. It was during my studied focus that I discovered two plant species found nowhere else in the U.S. (false grama: *Cathetecum brevifolium*, and garambullo: *Pisonia capitata*) and numerous grassland and woodland species isolated there since the last ice age.



In 1991 I published my first flora (a list of plants occurring within a study area that includes both annotated scientific and common names)—that of the Silver Bell Mountains, followed by Pan Quemado in 1996 and Ragged Top in 2000. I learned even more about rare and endangered species in that area in 1991 when I worked on a Bureau of Land Management (BLM) grant mapping the endangered Turk's head cactus (*Echinocactus horizonthalonius* var. *nicholii*) in the Waterman Mountains.

A couple of years later Tom and I and another botanist nearly simultaneously found an uncommon plant species, Parish Indian mallow (*Abutilon parishii*), in the Tucson Mountains, on Ragged Top, and in Finger Rock Canyon. A US Fish and Wildlife contract kept us busy surveying for this species throughout Arizona and Sonora, and ultimately it was determined to be too common for protection status.

Tom's expertise on packrat midden fossils kept me interested in what he had found on Wolcott Peak in the early 1970s. We reviewed all his fossil samples, re-carbon dated them, and were able to publish an expanded study in 1993, comparing them to the modern flora.

### The Team Grows

In 1998 the Desert Museum was fortunate to hire Gary Nabhan as Director of Conservation and Science who was studying ethnobotanical uses, animal interactions, and plant associations with the desert ironwood tree (*Olneya tesota*). Dr. Mark A. Dimmitt, the Desert Museum's Director of Natural History, Tom, and I helped Gary by providing him with information, especially on our observations throughout the ironwood's range (in the Silver Bell and Tucson Mountains and around Ragged Top). In the late 1990s, Pima County had been looking at the western watershed of the Avra Valley with regard to their Sonoran Desert Conservation Plan. In 1999, the Pima County Board of Supervisors passed a resolution to pursue the establishment of a Ragged Top and Silver Bell Mountains Ironwood Preserve county park. When Gary Nabhan published his book, *Desert Ironwood Primer* in 2000, Pima County Administrator Chuck Huckleberry made the connection with the Desert Museum as a means to make this resolution happen.

### Connections are Made

At the same time, President Clinton's last term in office was winding down. His love and appreciation for our nation's natural resources led him



*False grama*

to task Secretary of the Interior Bruce Babbitt (former Governor of Arizona) with finding areas worthy of preservation with the powers given to him under the Federal Antiquities Act of 1906.

Very quickly things revved up. Secretary Babbitt's office contacted Administrator Huckleberry who immediately thought of the proposed Ironwood Preserve area as much of the acreage was BLM land. Pima County set up a study to look at hydrology and water resources, geology, flora, fauna, cultural and historic resources, and current land uses including mining, ranching, recreation, adjacent land owners, ranchers, and mining companies. The Coalition for Sonoran Desert Protection had input and proposed boundaries were drawn and redrawn.

The Desert Museum's two-plus decades of study positioned us to be a great resource of knowledge regarding the western Avra Valley watershed. The Museum's Executive Director at the time, Rick Daley, was contacted to lend our assistance and expertise in many areas of site inventory and analysis. In addition to Mark Dimmitt, Tom Van Devender, Gary Nabhan, and me, the Desert Museum enlisted help from other Museum staff members; Assistant to Systems Administrator-Records Kim Buck, Conservation Biologist Yajaira Gray, and Geologist Robert Scarborough. In an amazingly short time we were





able to create a master inventory of geological and ecological diversity for that area. Our team compiled the flora, created a vegetation map, compiled existing geological maps, and filled in missing soils data.

### The Designation Happens

In March of 2000 this information was incorporated into a huge document of the Sonoran Desert Conservation Plan called Resources of the Avra Valley Subarea. That document was sent to Secretary Babbitt's office and by May of that year things were finalized. Secretary Babbitt attended a special Pima County Board meeting announcing the designation of the area to be called "Ironwood Forest National Monument" under Presidential Proclamation 7320, dated June 9, 2000. After the meeting I accompanied Secretary Babbitt and Administrator Huckleberry (followed by cars full of reporters) to Ragged Top, where we climbed a steep slope to a spectacular viewpoint at the base of the sheer cliffs. Secretary Babbitt and I marveled at the scenery while panting reporters pulled cactus spines from their shoes! What seemed to be a wonderful finale and success turned out to be just the end of a chapter, not the end of the story.

The Desert Museum's contribution in making this happen identified us as experts about the area, and in 2001 the Desert Museum received a contract from the BLM to do a vegetation and flora survey of the entire area. Our efforts were headed by Mark Dimmitt and included Tom Van Devender and me. Dozens of journeys into the area were made and more than 100 transects were made to quantify the vegetation. In

addition, saguaros (*Carnegiea gigantea*), foothill (*Parkinsonia microphylla*) and blue (*Parkinsonia florida*) palo verde, velvet mesquite (*Prosopis velutina*), and desert ironwood (*Olneya tesota*) trees were counted, measured and rated for health in these plots. We noted that the invasive buffelgrass (*Cenchrus ciliaris*) was making inroads in some areas. We mapped and studied the buffelgrass and made recommendations for its control. We also surveyed four wildlife species (lesser long-nosed bat, desert tortoise, chuck-walla, and desert iguana). Buffelgrass has turned out to be a pernicious and persistent pest in the Sonoran Desert and the IFNM was no exception. In 2009 the Desert Museum won another contract from the BLM to re-survey the entire monument for the invasive grass. We found range and density expansions in some areas and dieback in others. Discussion of impact and recommendations were again made for control.

### A Powerful Legacy

So, what did we (the public) get for everyone's efforts? Fragile archaeological sites throughout the area provided the legality for this designation, while the preserved and protected geology, flora, and fauna are truly a legacy. Within an hour's drive of downtown Tucson we now have 189,712 acres (78,807 hectares) of varied, protected Sonoran Desert habitat stretching from the Roskrige Mountains north



Golden Hedgehog

of Kitt Peak to nearly Casa Grande. This national monument encompasses parts of all seven desert ranges (Pan Quemado, Ragged Top, Samaniego Hills, West Silver Bell Hills, and the Silver Bell, Roskrige, Waterman, and Sawtooth Mountains) and parts of Avra, Santa Cruz, Tat Momoli, and Aguirre Valleys. Elevations range from 1,575' (480 m) in the Aguirre Valley to 4,261' (1,299 m) at the summit of Silver Bell Peak. It is managed by the BLM, but there are also State Trust and private holdings within. At this time, we have identified nearly 600 taxa of plants in 82 families. We have a very thorough baseline of the flora and vegetation which will help us to monitor changes in the future. There exists within this area a healthy population of desert bighorn sheep (*Ovis canadensis nelsonii*)

and chuckwallas (*Sauromalus obesus*) near the limits of their ranges. There are abandoned mines creating homes for colonies of bats. And last but not least there is an incredible mix of geology, topography, and microhabitats.

The Ironwood Forest National Monument has brought Southern Arizona a great, rugged recreational resource to cherish. Today our local community continues the work with trash cleanup, buffelgrass removal, revegetation, and ongoing public education. In the end, this is something for Desert Museum members and our community to be proud of. It is a powerful reminder of how the collaborative efforts of many individuals, organizations, and government entities came together for the good of all.



*Editor's note: This article is reprinted with the permission of the Arizona-Sonora Desert Museum. It was featured in the ASDM News, spring 2017.*



## Facing today ...

It is an understatement to report that this has been a very unusual, and extremely busy, summer for the Friends of the Ironwood Forest, along with supporters of all the other national monuments subject to the executive order for their status to be reviewed.

Thanks go to our entire board of directors for the way they have vigorously jumped into the fight to protect the Ironwood Forest National Monument (IFNM) from this unexpected and unwelcome threat. And, **thanks to all of our members who have sent in comments** to the Department of the Interior (DOI) regarding their “review” of the monuments and for the calls and letters you have sent to our federal senators and representatives.

**These actions by all of us have had an impact.** Over 2.7 million public comments were sent in nationwide to the DOI, with over 98% asking for the protection of our monuments to remain in place. And that does not begin to include the messages of concern and support sent to elected federal office holders.

In addition to filing substantive comments with the DOI, your board members have attended meetings, rallies, and press briefings and gone to the offices of officials in Washington DC and in Arizona to express our displeasure with the review process, the implied threat to the protected status of the IFNM, and the threat to the Antiquities Act of 1906, which is the basis for establishing public lands as monuments.

We have asked for the support of elected officials to counter the DOI process and to protect the monuments from a legislative perspective. We have also worked with several other major conservation organizations such as The Wilderness Society, the Sierra Club, the National Parks Conservation Association, the Coalition for Sonoran Desert Protection, and Conservation Lands Foundation, in the fight to protect the monuments during the review period and to prepare

## President's Update

by Tom Hanagan  
President, Friends of Ironwood Forest

for legal challenges to any effort by the administration to diminish them.

We believe our calls for continued protection have been heard. The Pima County Board of Supervisors passed a resolution of continued support of the IFNM's status as a national monument. Representative Raul Grijalva held a press briefing on August 2nd, near Ragged Top, that included speakers stating the case for the IFNM.

Three congressional representatives from southern Arizona—Raul Grijalva, Martha McSally, and Tom O'Halloran— sent letters of support for IFNM. Copies of those letters are available on our website.

The fight for the primacy of the Antiquities Act and the ability of the public to enjoy protected natural treasures like the IFNM will continue as long as there are parties in power that want to minimize parks and monuments in favor of private development.

The IFNM's cultural and natural sites, and indeed the status of all protected monuments, are not “safe” as long as any one legally designated monument is allowed to be diminished. And **the future of national parks and monuments is threatened** further by any proposal to limit the federal government's ability to designate and protect special sites.

Please continue to help in this effort. Check the Mission-Advocacy page on our website to view the position we have taken and other letters we find supportive. And continue to take action yourself by putting your senators and representative onto your phone's speed dial. **Tell them where you stand and why—often.**

We are grateful for the growth in our membership. Because of your dedication to the Ironwood and financial contributions to the Friends group, we remain able to protect this local national treasure. If you are already a member of Friends of Ironwood Forest, please accept our gratitude for sharing our passion to protect the Monument. If you are not yet a member of the Friends, please join us at:

[www.ironwoodforest.org](http://www.ironwoodforest.org)

## Facing today ...

The Department of the Interior is preparing an analysis of the economic values and contributions of Ironwood Forest National Monument (IFNM). I would like to write a few lines about some other values that the Monument also brings to local communities.

The Monument is managed with a local focus. Rather than investing a large amount of money and effort to develop a global tourism market or to build and maintain infrastructure similar to other public lands in the area, we are working to improve safe public access for locals and for tourists already drawn to Tucson/Marana and its vicinity.

IFNM was proclaimed a national monument because of resources and values related to its unique combination of natural features and associated human history.

This is where the strength of the mission of

## In the Backyard

with Claire Crow  
Monument Manager

the Bureau of Land Management (BLM) becomes apparent: the only way to provide for all of the public values and uses, some of which are mutually exclusive, is to manage different units of public land differently. Thus, IFNM provides opportunities for you and your family and friends to connect with nature and recharge, to find your own way by challenging yourself in an outdoor adventure, and to be inspired and express yourself creatively.

Friends of the Ironwood Forest works with the BLM to provide opportunities to learn about IFNM's resources and ways to enjoy them, as well as to engage in stewardship through volunteer projects.

Hikers, adventurers, ranchers, scientists, artists, teachers, and all our other neighbors benefit, be it economically or otherwise, from the monument in our backyard.

## Hoping for the future ...



Photo by Osha Gray Davidson. To enjoy more of his outstanding landscapes, visit [Desert Sky Images](http://DesertSkyImages.com) online.

HAVE A BEER FOR A BIGHORN

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Snacks

## BIGHORN BREW

Join us ...

for a rally and fundraiser in support of Friends of Ironwood Forest's efforts to protect Ironwood Forest National Monument.

Where: Dragoon Brewing Company, 1849 W. Grant Rd.

When: Saturday, Nov. 18, 2017 from 3 p.m. to 7 p.m.

Learn about our ongoing efforts to protect our natural heritage.

Supporters include:

Sierra Club

The Wilderness Society



Coalition for  
Sonoran Desert  
Protection

and ...





# Upcoming Events



For more information visit our  
website at  
[www.ironwoodforest.org](http://www.ironwoodforest.org)

## Ironwood Forest Work Days

8 a.m. to 12 p.m., Wednesdays, 10/25, 11/1,  
11/8, 11/15, 11/22

Join other volunteers working to improve IFNM. Activities include weed mitigation, trail work, restoration efforts, and other maintenance needs. Find out more on our Events page online.

## Hike the Monument Day

7:30 a.m. to 3 p.m., Saturday, 11/4

Enjoy a nature walk or hike to explore and experience the wonders of IFNM. This annual event is conducted in partnership with the Bureau of Land Management, Arizona Native Plant Society, University of Arizona faculty, and Old Pueblo Archaeology Center.

Registration for these activities is required, and space is limited for some hikes. Visit our website for more information. Submit your email address through the "Get Connected" link for notification of when registration for these events opens.

Meet at the Marana Regional Airport, 11700 W. Avra Valley Rd. at 7:30 a.m. Carpool from there.

## Waterman Restoration Work Day

8 a.m. to 12 p.m., Saturday, 12/2

John Scheuring of the Arizona Native Plant Society leads this annual restoration effort. Join him in working to improve the habitat in IFNM.



## New IFNM Book

We are pleased to announce publication of *Natural History of the Ironwood Forest National Monument: A Sonoran Desert Primer* by Dr. Royce Ballinger and Young Cage. Both are former FIF board members.

Dr. Ballinger is a retired University of Nebraska professor of herpetology and current resident of Marana. The book features stunning photography by Young Cage and others.

The book is available from Rusty Lizard Press, an FIF supporting business. The cost is \$35 plus \$5 shipping. Contact them at

[rustylizardpress@comcast.net](mailto:rustylizardpress@comcast.net)