



Friends of Ironwood Forest

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Ironwood Forest National Monument Featured in Arizona Highways

IRONWOOD FOREST This scenic drive through Ironwood Forest National Monument offers a look at some of the hardest trees in the world, along with an up-close view of one of Southern Arizona's most distinctive peaks.

BY NOAH AUSTIN / PHOTOS BY JEFF MALTZMAN

Desert ironwoods aren't as iconic as saguaros, but the trees—officially known as *Olneya tesota*—are the unsung heroes of much of the Sonoran Desert. They can live for centuries in the scorching heat, they provide valuable shade for young saguaros and other desert flora, and their wood is among the hardest and densest in the world—hence the name. A drive through 190,000-acre Ironwood Forest National Monument offers plenty of these desert stalwarts, along with an up-close view of one of Southern Arizona's most distinctive peaks.

From Marana along Interstate 10, head west on Marana Road. After passing through farmland and crossing the Santa Cruz River, you'll turn right onto Silverbell Road and begin winding into the monument. The road eventually turns from pavement to dirt, but it's well maintained and easy to navigate in most cars.

In addition to ironwoods—identified by their blue-green leaves, grayish bark and purple spring blooms—you'll see



Ragged Top is IFNM's defining geological feature.

Editor's note: The iconic Arizona Highways magazine selected IFNM as its Scenic Drive for the January 2017 issue. The article is reprinted here with permission.

paloverdes, saguaros, ocotillos and prickly pear cactuses, many of which are “nursed” by ironwoods. It’s an impressive contribution to the desert ecosystem, but ironwoods are impressive even after they die. Because their wood is so dense, it’s essentially immune to decay, so a dead ironwood might be around for several hundred years before it erodes away.

The plant life isn’t the only draw of this drive. The saguaros attract lesser long-nosed bats (a threatened species), and desert bighorn sheep live in the monument’s Silver Bell Mountains. Keep an eye out for hawks, roadrunners and turkey vultures, too. And the area’s human history is on display at more than 200 Hohokam rock art sites.

Soon, you’ll approach a mountain whose strange profile you’ve probably noticed while driving on I-10. Ragged Top, like ironwoods, is appropriately named. The rhyolite peak is a textbook example of a volcanic plug, which

occurs when magma hardens in a vent on an active volcano. That’s what happened here about 22 million years ago. Today, Ragged Top is a popular climbing destination, but there’s no established trail to the summit. If you’re not in the mood for scrambling, just enjoy the views of the craggy peak from the road.

A couple of miles past Ragged Top, around Mile 20 of the drive, you’ll reach an intersection with Sasco Road. If you’re driving a passenger car or don’t feel like having your teeth rattled, turn around and head back to Marana the way you came. But if you have a high-clearance, four-wheel-drive vehicle, you can turn right and navigate a rocky, rutted dirt road to return to I-10 in Red Rock. The payoff on that road is views of Picacho Peak, the ghost town of Sasco and more ironwoods. But if you can’t do the whole drive, don’t worry. The ironwoods will be there the next time you visit—and a few hundred years after that, too.



Desert ironwoods mingle with ocotillos, saguaros and other desert plants in the monument.



TOUR GUIDE

Note: Mileages .are approximate.
LENGTH: 33 miles one way (from Interstate 10)
DIRECTIONS: From Tucson, go northwest on Interstate 10 for 22 miles to Marana Road (Exit 236). Turn left (southwest) at the stop sign and continue 0.1 miles to Marana Road. Turn right onto Marana Road and continue 6 miles to Silverbell Road. Turn right onto Silverbell Road and continue 13.9 miles to Sasco Road. Turn right onto Sasco Road and continue 13 miles to Red Rock and I-10.
VEHICLE REQUIREMENTS: None for Silverbell Road, but a high-clearance, four-wheel-drive vehicle is required for Sasco Road. Don't attempt either portion of the drive if rain is in the forecast.
WARNING: Back-road travel can be hazardous, so be aware of weather and road conditions. Carry plenty of water. Don't travel alone, and let someone know where you are going and when you plan to return.
INFORMATION: Ironwood Forest National Monument, 520-258-7200 or www.blm.gov/az
 Travelers in Arizona can visit www.az511.gov or dial 511 to get information on road closures, construction, delays, weather and more.

For more about the magazine, visit www.arizonahighways.com.

**Meet the Monument
 March 18, 2017**



Become a Member of Friends of Ironwood Forest Today

We care about IFNM. We hope you do, too. We rely on the financial support of members to help us with our mission of protecting the resources of IFNM, enhancing the visitor experience there, and creating awareness.

Basic membership is \$35, but additional contributions help us with our efforts.
 Contribute with a credit card or PayPal at:

www.ironwoodforest.org

From the President

The past year was another outstanding one for both the Friends of Ironwood Forest (FIF) and the Ironwood Forest National Monument (IFNM) itself. We are very grateful for the continued and growing support of our members and sponsors. Because of your interest and encouragement, the Friends group continues to work closely with the Bureau of Land Management (BLM) to implement plans that will protect and preserve this national treasure.

The Friends had a very successful Hike the Monument event in November. This annual recreational effort involved 75 participants, a record number, on five different excursions. We had naturalists leading the hikes and nature walks, which are educational for the participants and also help build local awareness of the Monument's existence and its wide range of natural and cultural features. And, as a bonus, everyone got some great outdoor exercise.

Also, last fall we assisted the BLM with the completion and dedication of the former Titan missile interpretative site as a historical memorial. This site is now open to the public, and more information can be found on our website www.ironwoodforest.org. The Titan site provides a great view of the Waterman mountain area and is also near a major Monument restoration success that was led by the Arizona Native Plant Society.

Another interesting and somewhat surprising activity was the Friends working with volunteer naturalists to locate and measure several very old and large ironwood trees. We are pursuing the ability to measure the age of one ironwood with an unusually large diameter trunk.

The Friends continues to sponsor twice-monthly volunteer workdays from October through April, as well as useful projects on National Public Lands Day and Beat Back Buffelgrass Day. Our volunteers work with the BLM to restore disturbed sites, repair signage, scout potential hiking trails, pick up non-

biodegradable trash, geo-code plants and geology of special interest, post border markers, and fight invasive plants, among other activities.

Meet the Monument, our 6th annual public event, was held March 18th. Attendees enjoyed hikes, naturalist walkabouts, and lessons in nature photography. They also had the opportunity to learn from experts about IFNM's incredible biological and cultural resources. Speakers discussed geology, the botany of the saguaro, the status of the big horn sheep herd, and an update on the BLM status, plans, and issues. We hope to see you at MTM next year.

I would like to thank each of the FIF board members for their generous contribution of time and effort during the year to make our various projects and activities the successes that they have been. IFNM is the better for their thoughts and action. They are a pleasure to work with.

Of course, FIF activities are only possible at all because of generous financial contributions from caring individuals. If you are already a member of the Friends of Ironwood Forest, please accept our continued gratitude for sharing our passion to protect this national treasure in Tucson's backyard. If you are not yet a member, please join us at www.ironwoodforest.org.

Tom Hannagan, president

FIF board members also include Jim Avramis, Dave Barker, Gaile James, Leona Lansing, William Thornton, and Kelsey Yule.

Our Mission: *Friends of Ironwood Forest is a local non-profit organization that works for the permanent protection of the biological, geological, archaeological, and historical resources and values for which the Ironwood Forest National Monument was established. The Friends provides critical volunteer labor for projects on the Monument, works with the Bureau of Land Management and many other partners, and strives to increase community awareness through education, public outreach, and advocacy.*

Elephants in the Ironwood

By Bill Thornton

They have trunks but no tusks or legs. They're trees not pachyderms. The elephant tree (*Bursera microphylla*) is another botanical treasure that makes the Ironwood Forest National Monument a special place. A rocky south-facing slope in the Waterman mountains retains enough warmth on cold winter nights to enable this semi-tropical tree to survive far from the nearest of its kind in southwestern Arizona, where freezing temperatures are less frequent.

Botanists refer to small isolated populations as outliers. When an outlier is discovered, it begs the question: How did the plants get here? Were seeds dispersed by birds or animals or were other factors involved?

Pollen studies by paleoecologists Anderson and Van Devender indicate that the small Waterman colony is a remnant population from a time (ca. 5,000 BCE) when elephant trees were more abundant and widespread throughout the region.

What caused the decline? Our mostly mild Sonoran desert winters are occasionally punctuated with hard freezes that can inflict serious damage to saguaros, ironwoods, and other species. The Waterman colony of elephant trees was heavily damaged by hard freezes in 2011 and 2013. They have recovered but a series of previous hard freeze events may have reduced the population to the one small remaining colony.

To describe the Waterman colony as "trees" is something of a stretch. In Arizona the plants rarely exceed ten feet in height, more shrub than tree. In the milder climates of Sonora and Baja California 30 foot specimens are not uncommon.

Disproportionately large trunks store water and probably inspired the name elephant tree. The bark contains tannin and, in Mexico, has been gathered for export.

Indigenous peoples used the plant for fuel, medicine, shampoo, and paint.

The elephant tree's unique appearance would seem to make it an ideal accent plant for desert gardens; but the high mortality rate of seedlings and lack of cold tolerance make it unsuitable for commercial propagation.

References:

- Anderson, R.F. and Van Devender, T.R., "Comparison of pollen and macrofossils in packrat middens." 1987
Turner, R.M, Bowers, J.E., and Burgess, T.L. "Sonoran Desert Plants" 1995
Tucson Cactus and Succulent Society, "Field Guide to Cacti and other Succulents of Arizona" 2015



Photo by Tom Hannagan

Bison in the Ironwood

From Arizona Wildlife News



Unusual Roundup

An American bison recently turned up on the Ironwood Forest National Monument, which caused some concern at the Arizona Game and Fish Department in Tucson, because bison are not native to the region. The wayward animal was spotted by hikers near the Sawtooth Mountains. Some detective work by the U.S. Bureau of Land Management, which manages the monument, determined that the bison had escaped from the Auza Ranches feedlot in Casa Grande. Owner Joe Auza said this bison and two others are among those he accepted to settle an old debt for hay he sold. Cowboys rounded up the bison and trailered him back to Auza Ranches. It's legal to own bison in Arizona. -Mark Hart

*Reprinted with permission from Arizona Wildlife News, January-February 2017,
a publication of Arizona Game and Fish Department.*

Big Trees in the Ironwood

A Champion is Crowned



Big tree hunters responded to our challenge to find the biggest desert ironwood in Ironwood Forest National Monument, and we now have a champion.

The team of Jim Avramis, Tom Hannagan, Bill Peachy, and Bill Thornton nominated the champion, a big ironwood they found growing beside a wash north of Silverbell Road.

Like many mature ironwoods, this tree has a massive trunk, measuring 10' in circumference near ground level. And like most ironwoods, the trunk split below the measurement point of 4.5'. The bigger of the two stems still measured 80", giving it a diameter of 2.13'.

The height was also impressive at 40'. Most mature ironwoods in IFNM are 25' to 35'. The average crown spread was 42.5'.

The total score of 131 points makes this great tree the current IFNM champion!

Dennis LeBlond nominated another big ironwood in a wash off Pipeline Rd. This tree's circumference was even bigger, but it split into three stems, rather than two.

The circumference was 54", the height 34', and the average crown spread 38'. The total point score for our second biggest ironwood is 98.

This is a tough tree, living in the middle of a major wash. Debris is piled on the upstream side and the trunk is undercut on the other side.

There might be a bigger ironwood out there. If you think you've found a new champ, let us know.

—Scott Roederer



Measuring Champion Trees

Big tree hunters follow the measurement protocol of the National Register of Champion Trees.

Circumference is measured at 4.5' above the ground, with rules for trunks with multiple stems. The height and average crown spread are determined.

Add the circumference in inches, the height in feet, and one quarter of the spread in feet to get the total.

The national champion ironwood (from AZ, of course) has a circumference of 191", a height of 44.5', and an average spread of 58'. Total points: 250.

Although the specific location of that tree is not given, it is on private land. It may be an irrigated tree on someone's property, but it certainly has a trunk that did not split below the 4.5' level!