

Tree Of Life

Interior Secretary Bruce Babbitt Has Asked The White House To Establish A Monument To Protect Ironwood Trees

By Gary Paul Nabhan

JUNE 12, 2000: IT'S BEEN A long time comin' for ironwood trees, in terms of getting some respect in the Sonoran Desert. Until recently, it seemed as though only saguaros, organ pipes and Pima pineapple cacti could get the attention of desert plant conservationists. Other declining members of Arizona's flora suffered from vague feelings of "saguaro envy." Even though some ironwood trees standing within Tucson's city limits germinated before the first Europeans arrived in the Old Pueblo, six-week-old desert wildflowers were more likely to grab our attention than this ancient legume.

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Flip through any desert manifesto from the last half-century, and you're lucky if you even find ironwoods mentioned, let alone treated as a conservation priority. It's been hard for a thorny tree to raise its voice above all the howling of Mexican wolves, hissing of Gila Monsters, croaking of Tarahumara Frogs, and gulping of Little Rillito River Sand

Trout.

But last week, this slow-growing tree sped past all the other contenders to become the front-running candidate for its own National Monument in Arizona, when Interior Secretary Bruce Babbitt recommended that President Bill Clinton use the 1906 Antiquities Act to set aside some 200,000 acres of ironwood habitat for federal protection. Babbitt's proposal has much to do with a certain cactus owl, which flew to the edge of town and lodged itself in the upper branches of an old ironwood, much to the chagrin of would-be developers owning land nearby. Perhaps the cactus ferruginous pygmy owl's legal standing as an endangered species has forced Pima County residents to finally take a look at ironwood habitat as a whole, to see the diverse forest there as prime wildlife habitat instead of merely scrawny trees.

Arizonans have somewhat belatedly realized that they have been responsible for this tree's removal from tens of thousands of Sonoran acres. Unbeknownst to most Zonie consumers, ironwood has been chain-sawed down and burnt into black rubble to be sold in bags of "100 percent mesquite charcoal," destined for Tucson and Phoenix steakhouses.

There is a certain irony to the fact that Arizonans are now working to protect ironwood in their own state after 30 years of buying cheap charcoal from Mexico made from a mix of ironwood, mesquite and other legumes. Since 1970, Mexican charcoal production for export to the U.S. has increased twenty-fold. Much of it comes from the Sonoran Desert, where trees grow as slowly as anywhere in the Americas. Nevertheless, the gourmands who developed an appetite for mesquite-smoked meats and fish in the early 1980s were not initially paying attention to what lay beneath all that flavorful smoke. It was not until a decade later that conservationists in Sonora and Baja California first confirmed that bags of charcoal boasting "100 percent mesquite" were leaving diverse legume forests clear-cut in their wake. Mesquite was not the only legume failing to regenerate in these cut-over areas.

Before long, Arizona and Sonora conservationists launched a binational campaign successful in suspending all charcoal production permits to woodcutters in areas of Sonora where ironwood grew alongside mesquite. When we "ground-truthed" areas where the 100 percent mesquite charcoal bags were being filled, we found that just as many ironwood and acacia trees were being cut as mesquite. The Sonoran government then formally banned all use of ironwood for charcoal, and the Mexican government listed the ironwood as a species subject to special protection on a republic-wide basis the following year.

When the *Tucson Weekly* first covered these ironwood protection efforts in 1994, it helped bring the issue of diminishing supplies of ironwood to consumers, not merely to charcoal producers. Former Tucson resident and environmental journalist Jane Kay then brought the same issue to California consumers. They responded immediately to a front-page *San Francisco Examiner* story which quoted the belle of nouvelle cuisine, Alice Waters, as saying that her Chez Panisse would not use desert legume charcoal again until she was sure that no ironwood was in it. Within a week of Kay's story running throughout northern California, *Newsweek* ran a short feature on the problem, and 40 newspapers in the Southwestern states followed suit. Within another month, one charcoal importer to the United States admitted that his sales had suddenly dropped by 15 percent. He requested that Tucson's Carlos

Nagel be enlisted to verify that his charcoal contractors were moving away from ironwood habitats, and shifting their extraction methods from clear-cutting to pruning.

At last, the binational Ironwood Alliance had the makings of a binational success story on their hands, and were ready to move from the issue of charcoal to ironwood carvings.

Take a look around homes, doctors' offices and reception areas in Tucson, and you find that many of them shelter polished wood knick-knacks in the shape of desert animals. These carvings promote desert wildlife conservation and are a Native American craft, right? That's what I had always been lead to believe until two seasoned buyers of Mexican arts and crafts, Jim Hills and Scott Ryerson, set me straight. They had begun to buy ironwood carvings from the Seri Indians in the early 1970s, but witnessed the take-over of that market by non-Indian imitators by 1980. The non-Indians, unlike the Seri, used machine tools, and killed live ironwood trees rather than simply pruning away dead branches from still-living trees. Hills and Ryerson came to realize that many of the carvings labeled as "authentic Seri Indian" were animal effigies produced from wood that reduced the wildlife habitat of the very fauna depicted in these cherished tourist souvenirs.

Once again, the Ironwood Alliance petitioned the Mexican government for a change in policy, this time on behalf of Seri Indian craftsmen and their sustainable harvesting tradition. This resulted in the Mexican government agency SECOFI awarding the Seri crafts guild collective trademark rights to all of their traditional animal designs elaborated in ironwood or stone. Unfortunately, the same agency chose to allow the workshops of non-Indian ironwood carvers to remain open, hoping that the Seri would regain their market advantage by the public relations the collective trademark provided them.

Although non-Indian carving is now declining for the first time in 20 years, the reason so many carvers are abandoning their craft is that ironwood is costly because it is now so scarce. Many of the 1,200 remaining carvers in Kino, Hermosillo, Rocky Point and Sonoyta must now clandestinely obtain wood from ironwood habitats an hour or more from their homes. If they buy wood from others, its price is five to 10 times higher than it was 15 years ago, and they can hardly make a good return on their carvings any more. The market has begun to take care of the problem in a way environmental laws alone could hardly do.

DESPITE LEARNING ABOUT ironwood's value the hard way, perhaps southern Arizonans are finally learning to do what we should have done all along: to respect our elders, or at least those as venerable as 500-year-old trees. By keeping ancient ironwoods alive, we also maintain the oldest medicine show, native wildlife menagerie and migratory pollinator bed-and-breakfast in town. Those hardy old trees provide ideal habitat for everything from night-blooming cacti to tree lizards, desert bighorn and cactus owls. The list of residents living under a 45-foot ironwood reads like the Who's Who of the Sonoran Desert.

Why does such a spindly old legume harbor such a remarkable diversity of animals in its crown, and plants beneath its shade? First off, ironwood grows taller than most trees in Sonoran desert scrub, so it serves as a great perch and roost for some 149 bird species. Add tall ironwoods to the scrubby vegetation on some desert bajadas, and you're likely to add 63 percent more birds than creosote, cactus and bursage alone could support. The ironwood's canopies are so dense that they reduce the probability of extreme heat exposure in the summer (as well as freezes in the winter) for any plant growing beneath them. More than 230 plant species have been recorded starting their growth within the protective microclimate under ironwood "nurse plants."

Toss in another 62 reptiles and amphibians, and 64 mammals that use ironwoods for forage, cover and birthing grounds, and the menagerie becomes mind-boggling. At just one site in the Silverbell Mountains, an ironwood-bursage habitat also shelters some 188 kinds of bees, 25 ant colonies, and 25 other types of insects. That adds up to an extraordinary level of biodiversity for an arid landscape often dismissed as a "big bunch of nothin' " by folks who see it only through their windshields as they speed by at 75 miles per hour between Tucson and Casa Grande. In short, the stubby old ironwood out there deserves its recently recognized status as "the desert tree of life."

As the Arizona-Sonora Desert Museum and its collaborators in the Ironwood Alliance began to compile such findings, we realized that we, like many others, had underestimated the ecological value of one of the most stunning landscapes at our very doorstep: the Arizona Upland desert scrub habitats on the skirts of the Silverbell, Waterman and Roskrige ranges. The washes draining these ranges contain some of the most dense ironwood stands, with the richest array of local species of any ancient cactus and legume forests sampled thus far in the four-state area in which ironwood grows.

Throw in the fact that the ironwood habitats in these three ranges harbor 20 species of imperiled plants and animals now under consideration for protection by Pima County, and the area suddenly emerges as one of the eight richest "conservation targets" in Arizona's stretch of the Sonoran Desert.

If President Bill Clinton takes Interior Secretary Bruce Babbitt's recent recommendation to heart, he'll soon place these ironwood habitats in the international spotlight, decreeing an Ironwood Forest National Monument to be safeguarded by the Bureau of Land Management. Compared to the National Park Service, the BLM has seldom gained much credit for innovative conservation management on lands in the West. But it appears that Babbitt is

trying to force its hand to play a far greater role, promoting the use of the American Antiquities Act as a means by which the President can simply decree other National Monuments on BLM lands as he did the Escalante-Grand Staircase--much to the chagrin of Republicans in Congress.

While the Presidential decree for Escalante sparked a firestorm in Utah (generating even more political heat than the recent burn at Los Alamos), local and county officials in southern Arizona are not pitting themselves against Babbitt as they have elsewhere. Pima County initiated the National Monument discussion, and to everyone's surprise, supervisors in Pinal County have recently responded in writing to the Coalition for the Sonoran Desert Protection Plan, stating they want to be involved in extending the Monument northward as well.

Babbitt has recommended the monument include reaches of the Silverbell, Waterman, Sawtooth and Roskrige ranges on the eastern edge of Avra Valley, covering around 200,000 acres. When that happens, the Monument will most surely become one of the cornerstones of Pima County's Sonoran Desert Conservation Plan.

The Pima County Board of Supervisors has already endorsed the idea of designing a corridor of stepping-stone reserves within ironwood habitats for the benefit of owls, migratory pollinators and desert bighorn. This leaves those who lease federal lands containing other ironwood stands wondering whether their allotments will also end up in protected areas, or whether the pressure is temporarily taken off them.

This effort to protect ironwood habitat serves as more solid evidence that the Sonoran Desert Conservation Plan is working. It is already reducing the vagaries which historically allowed wildcat developers to fragment Pima County's wildlands at the expense of flood protection, recreation, wildlife and other elements of environmental quality.

If Pima County is successful, the plan will not only protect imperiled owls with legal status under the Endangered Species Act; it will give all citizens a road map to future controlled growth, and how it can be balanced with the protection and restoration of wildlife habitats. To make this plan operable, the county has involved hundreds of planners, scientists, developers, ranchers, neighborhood associations and activist groups in discussions of what that balance should be.

Unlike the citizen involvement efforts for Multi-Species Habitat Conservation Plans in San Diego and Austin, the partnerships formed by Pima County are not yet fracturing into a million pieces. Instead, our plan is already demonstrating that community involvement matters. The county staff has worked hard to involve ranchers, miners, grassroots activists, developers and scientists in drafting the plan, rather than alienating any of these groups.

While those of us at the Arizona-Sonora Desert Museum have been given much credit for producing the two reports providing the scientific justification for an ironwood preserve network, we were aided in these efforts by dozens of interns and volunteers from the Tucson Audubon Society, the Arizona Native Plant Society, the University of Arizona, and the Seri Indian community.

The Coalition for Sonoran Desert Protection has broadened the context of ironwood protection by proposing Pinal County additions to the original Pima County proposal. Such additions will be vital to the completion of a network of stepping-stone reserves running 80 miles northward from Buenos Aires National Wildlife Refuge almost to the Gila River, a corridor essential to the future of migratory wildlife.

The Sonoran Institute, IMADES and the Nature Conservancy provided further technical justification for protecting the Silverbells and Sawtooths. Even local poets, musicians and artists got into the act, celebrating together at the Rally Around the Ironwood Tree, hosted by the UA English Department and the Orion Society on May 3, 2000, followed by their involvement at an Ironwood Festival at the Mason Audubon Center on May 13.

There are few communities in North America capable of generating such an outpouring of support for a conservation initiative from so many sectors of their citizenry, within such a short period of time. As Tohono O'odham leader Daniel Preston explained to Pima County Supervisors a few weeks ago, ironwood itself is a Native American symbol of strong alliances, a means of binding together spirits (the root meaning of the word religion). For centuries, when O'odham couples wanted to marry, they were asked to hold an ironwood staff between them, to forge a partnership exemplifying the power and strength of the densest, most durable wood found anywhere on Turtle Island.

Let our community finally come together as one through the enduring spirit of ironwood.