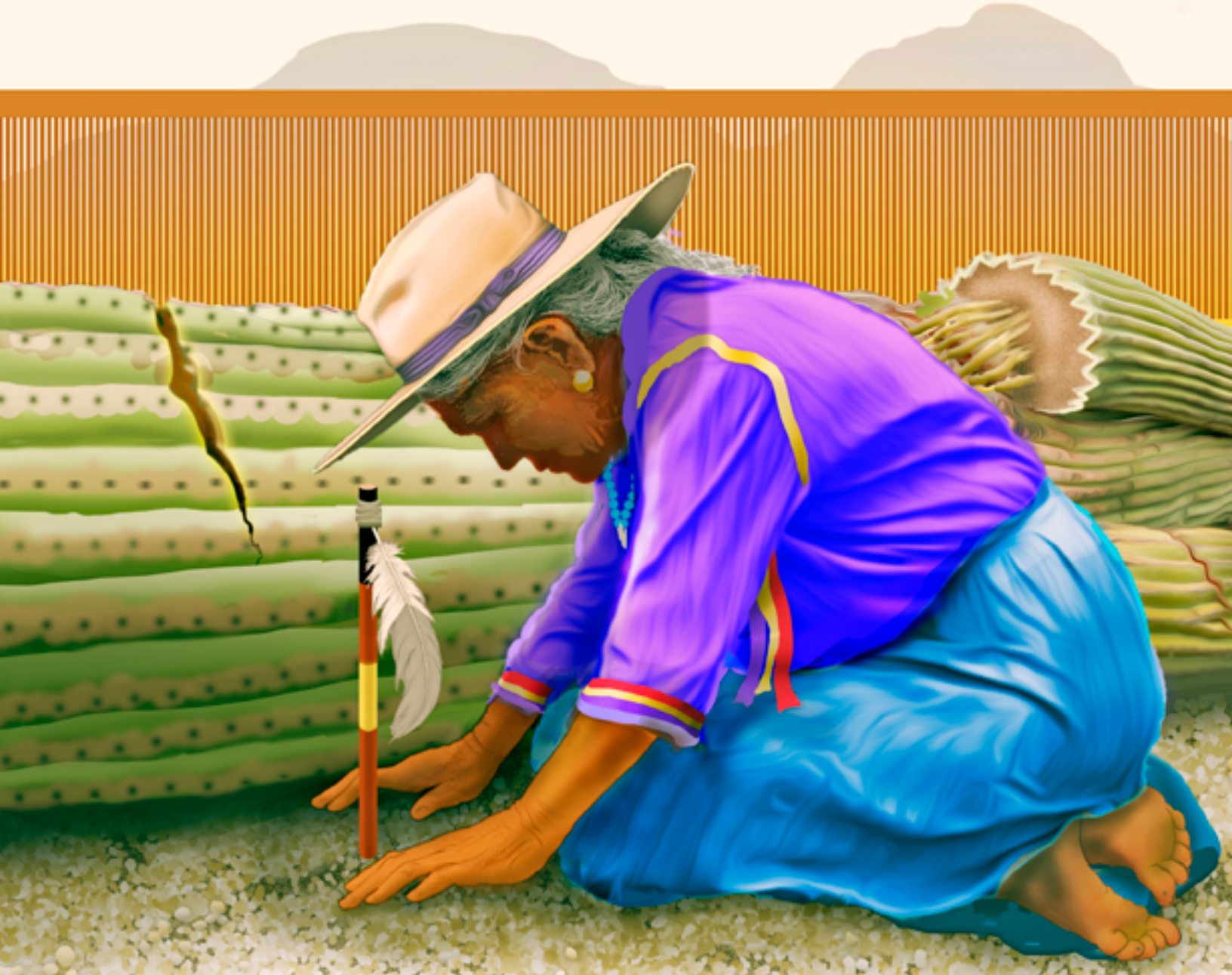
Sacred and Ceremonial Plants on Public Lands

Strategies for

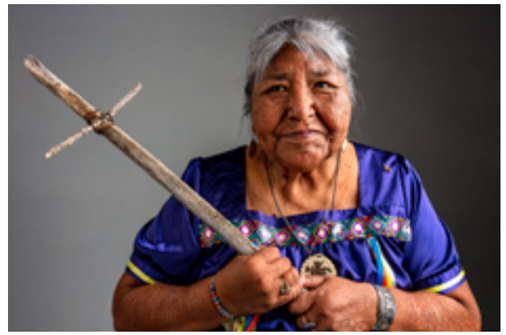
- Advancing Stronger Protection
- Assuring Access for Indigenous Spiritual Practitioners
- Reducing the Risks of Cultural Appropriation of Sacred and Ceremonial Plants



Publication No.1 of the Sacred Plant Biocultural Recovery Initiative

Introduction

To date, there is no integrated, overarching set of policy guidelines, special plant status designations, or acts of Congress that tangibly protect sacred and ceremonial plants required for the spiritual practices of Native American communities.



Stella Tucker, O'odham Elder and teacher of the saguaro harvest tradition. 1947-2019. (Photo by Steven Meckler)

The best we have is the statement of National Park Service (NPS) Director Charles F. Sams III, in Guidance for Implementing 36 CFR 2.6—Plant Gathering by Federally Recognized Tribes for Traditional Purposes. This nine-page memo provides context for the more general NPS plant gathering regulation 36-CFR 2.6. That regulation established a management framework that provides for designated members of federally recognized Tribes to gather plants or plant parts for traditional purposes from park lands under an agreement and permit. The regulation went into effect on August 11, 2016, but does not specifically refer to issues regarding sacred and ceremonial plants as opposed to those used for food, fiber, medicine or crafts.

Like all U.S. citizens, members of the Indigenous or Native Nations, the Native Hawaiian communities, and Indigenous Alaskans should enjoy the right to maintain their traditional religious expressions that are guaranteed by the U.S. Constitution. Their access to plants used in their spiritual expressions should be regarded as part of their rights to practice their religious traditions. While Mexico has given a special status designation to certain sacred plants used by its Indigenous peoples under its legal framework for protecting threatened and endangered plants, the U.S. has not yet done so.

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***Left page**: "Papago women harvesting saguaro fruit" (actually organpipe cactus). Report on the United States and Mexican Boundary Survey, by Major William H. Emory, 1857. **Cover**: "Don't they know these are people too?" based on personal communication from Gary Nabhan. Illustration by Paul Mirocha.*

That is ironic, for over the last two decades, Indigenous nations and federal land management agencies have made enormous and laudable strides in identifying and protecting vulnerable sacred sites of land and water. They have collectively devised innovative means of safeguarding them for use in ceremonies and seasonal rituals, sacred pilgrimages and cultural renewals. However, sacred, ceremonial and sacramental plants throughout the U.S.—some of them integral to Indigenous peoples' creation and origin narratives—remain much more vulnerable for several reasons.

Between the catastrophic effects of climate change, land and water development, and overharvesting by non-Indigenous users who are accidentally or intentionally cultural appropriating these plants, many species of trees, herbs, vines, cacti, succulents and grasses of spiritual significance may be more in peril than ever before.

> **For more than 200 culturally significant native plant genera found on public lands, we have only rudimentary knowledge of how many have populations that are being threatened or depleted. They include perhaps as many as 400 to 500 distinct native plant species that have sacred, ceremonial or "entheogenic" (divine or Creator manifesting) status among Indigenous peoples in the U.S.**

According to a United Nations Environment Program (2019) report, **one-third of all animal and plant species on the planet could face extinction by 2070 due to climate change interacting with other stressors**, if Paris Accord recommendations for reducing greenhouse gas emissions are not heeded. Based on data analysis from the University of Arizona, 28% of all plant species are predicted to be lost from their natural habitats by 2070, with an increasingly higher percentage occurring in arid subtropical and tropical climes than the global average (Román-Palacios and Wiens 2020).

Of the species potentially being lost, plants of utmost importance to the well-being of humankind will continue to be locally extirpated or globally extinguished. These include plants used as foods, drinks and medicines for our physical and nutritional health; those providing ecosystem services for our environmental health; and those sacred and ceremonial plants essential to the spiritual health and constitutionally guaranteed religious expression of the world's diverse cultures and faiths. These losses are tragic for us all, but especially so for the Indigenous people who have had direct contact and high regard for these plants.

In addition to suffering from the impacts of climate change as all other species on earth are, many plants important to Indigenous place-based spiritual traditions have become inaccessible to traditional foragers because their time-tried sources have been depleted through unethical cultural appropriation.

The Indigenous Medicine Conservation Fund (2024) has recently summarized threats to these sacred, ceremonial and medicinal plants. These include:

- loss of habitat due to agricultural, mining and energy production;
- overharvest, improper harvest, poaching and black market trade;
- dramatic increases in global demand;
- disconnection from biocultural knowledge and traditional caretakers;
- lack of Indigenous access to land where the plants grow;
- pressure on Indigenous sovereignty from those interested in psychotropic and medicinal plants.

Defining Sacred versus Ceremonial Plants: Continuum or Distinct Categories?

In Native American Ethnobotany Daniel Moerman (1998), wisely distinguished three different categories of plants of concern to us here:

Sacred items: plants or plant parts dedicated or set apart for the service or worship of deity;
Ceremonial items: Any item made from plant parts used for ceremonial purposes; and
Hallucinogens [a subset of drugs or medicines]: Substance that induces hallucinations.

Although Moerman concedes that these categories may be "fuzzy sets," with a few species overlaping into two or all three of the categories, he tallied 21 genera or "kinds" of sacred plants such as tobacco, elderberry, ironwood, maize and spruce; 173 kinds of ceremonial plants, including agaves cottonwood, firs, sage, saguaro cacti, wild sunflowers, and tobacco; and just 11 kinds of hallucinogens, including black drink or yaupon; Colorado four o'clock, datura or jimsonweed, and peyote.

In preliminary surveys from all ethnographic records of North America's Indigenous or "First" Nations, perhaps only 5 to 6 % of the plant genera historically described as sacred or ceremonial are hallucinogens, and even a smaller percentage of native wild species on public lands induce hallucinations.

Other categories are plants used as talismans and offerings to ward off evil; plants used in ceremonies or rituals to mark rites of passage or seasonal events; plants used as "magic" to assure good hunting; plants fermented into alcoholic or emetic drinks used to "bring rains," prophesize good harvests, or purge toxins or curses; and plants used to mark sites of spiritual power and primordial cultural significance.

If any one of us searched the internet for definitions and lists of sacred plants, what we might find today is far different than what we would have encountered two to three decades ago when Moerman did his study. Where older definitions might emphasize plants that are held in high regard because of their significance in a culture or faith's origin, creation, identity formation and migration narratives, today, many websites and books tend to use the term "sacred plants" synonymously with hallucinogenic," "psychedelic" "entheogenic," or "psychotropic" plants that might trigger an altered state of consciousness that may lead toward enlightenment, ecstasy, or psychic transformation.

While it is that clear peyote, tobacco and sacred datura found in North American landscapes have been used ceremonially for spiritual awakening or metanoia, it is unfortunate that many people now assume that the term "sacred plants" refers only to such mind-altering plants used in ecstatic ceremonies. In many cases, there is a continuum of uses and values that reflects the diversity of cultural contexts in which plants are given special significance in a culture's oral histories and rituals.

In this report, we will largely focus on the first two categories, and not on hallucinogens per se. We do not wish to usurp or constrain the rights or expressions of any traditional culture—Indigenous or otherwise—to determine what plants they themselves deem to be sacred or of ceremonial significance. Our goal is to remind readers that these terms and associated categories are highly currently contested. It is the role of Indigenous Nations and their traditional practitioners—not of state or federal governments—to take the lead roles in making such determinations.

Ceremonial plants and global plant conservation

Even though (in a perfect world) the protection of sacred and ceremonial plants might be granted a high priority among plant conservation efforts globally, there is no substantive list of threatened, endangered, or vulnerable culturally significant plants at the global or national levels. That may be due to four justifiable reasons:

Indigenous nations should be the rightful repositories of such lists, not international, national or even nonprofit data bases.

- The interpretation of "separation of church and state" as it relates to sacred and ceremonial plants is interpreted by some Americans to mean that the plants needed for religious or spiritual purposes by any faith or spiritual tradition in the U.S. should not be "privileged" or prioritized for protection, except as these concerns are already covered by the American Indian Religious Freedom Act and other Congressionally approved laws for cultural and archaeological preservation.
- No one that we know who is currently involved in protecting these plants wishes to see esoteric spiritual knowledge or locality information about these plants released to the public through Freedom of Information Act requests in a manner that might inadvertently imperil the plants further.
- A small percentage of all sacred and ceremonial plant and animals (5% to 6% at most) are deemed to be entheogenic, psychedelic or hallucinogenic, but the current legally, social and economic issues regarding these plants on public lands seem overwhelmingly complex to most land managers and conservation professionals.

> **Nevertheless, the spiritual elation, beauty, healing powers and cultural reaffirmation that most sacred and ceremonial plants can and do bring to Indigenous community members demand that we collectively explore a wider range of strategies to safeguard these plants on public lands and appropriate access to them by Indigenous practitioners through dialogue with public land managers.**

To the credit of all involved, Indigenous nations, nonprofits and federal land management agencies have made great strides over the last two decades in identifying vulnerable sacred sites. They have devised innovative means of safeguarding them for use in ceremonies and seasonal rituals, sacred pilgrimages and cultural renewals.

Compared to the status of sacred sites, the status of assured access to sacred, ceremonial and sacramental plants—some of them integral to Indigenous peoples' creation and origin narratives—remains even more problematic in the eyes of many Indigenous spiritual leaders. They have palpably felt and witnessed how the plants they deem to be sacred have suffered from the catastrophic effects of climate change, land and water development, and overharvesting by non-Indigenous users who are accidentally or intentionally cultural appropriating these plants. They are also alarmed to know that some harvesters do not offer spiritual respect to the plants by leaving offerings, talking to the plants, or avoiding damage to the plants themselves – a necessary gesture that the Yaqui (Yoemem) call *yo'oriwa* (Felger and Molina 2024).

Many herbalists and Indigenous spiritual leaders perceive that more vitally important kinds of trees, herbs, vines, cacti, succulents and grasses are in peril than ever before in their lifetimes. They also fear and lament that there may be greater legal, proprietary and physical obstacles

Do sacred plants always co-occur with sacred sites & cultural properties?

In many places and cases, sacred and ceremonial plants do occur at sites such as freshwater springs or mountain summits that are deemed sacred by Indigenous peoples, and legally managed as designated traditional cultural properties by public lands agencies working in collaboration with tribal governments.

For example, at least fourteen distinctive species of native plants considered to be sacred or ceremonially important by the Hia c-ed O'odham and Tohono O'odham grow in and near the sacred springs and riparian oasis of Quitobaquito in Organ Pipe Cactus National Monument.

And yet, many of the species, like the giant saguaro cactus, also grow beyond the recognized boundaries of this sacred site where no traditional cultural property designation has been developed. However, there are cases among the Diné (Navajo) where a widespread sacred or medicinal plant can only be harvested for cultural purposes at a few key locations mentioned in their creation and migration narratives. It cannot be used ceremonially unless it is prayerfully harvested in such a culturally recognized sacred site, and some practitioners would argue that it does not have the same potency if harvested elsewhere or could be dangerous to use if not harvested in the proper manner at a proper place.

At another level, patches, stands or populations of plants that lie outside federally recognized sacred sites and designated cultural properties may not enjoy the protection from some federal laws as those found within such sites on public lands. Because they are not necessarily protected on adjacent private or state lands, their populations may be inadvertently degraded or diminished over time compared to those on highly protected public lands.

Sacred Plant Profile A

Arizona Jumping Bean/Yerba de la Flecha (*Pleradenophora bilocularis*)

Limber bush/Torote Species (*Jatropha cordata*)

Host plants for silk moths (*Rothschildia cincta*) used for cocoon rattles in ceremonies

At least five Indigenous cultures of the Sonoran Desert and subtropical thornscrub habitats utilize the leathery white cocoons of rare saturnid moths as leg rattles in ceremonial dances. They are called tenevoim or tenebari that are essential to Pascola and deer dancing traditions that are part of sacred ceremonies in the springtime. As with other sacred and ceremonial plants of the Yaqui (Yoemem) the cocoons must be harvested with formal displays of yo'oriwa respect, demonstrated by leaving offerings to them, or talking to them.

The limber bush species *Jatropha cordata* is also featured in deer songs sung by the Yoemem at "Yaqui deer dance ceremonies" during Semana Santa on both sides of the U.S./Mexico border. While most of its range is in Mexico, the Arizona Jumping Bean species occurs in at least two National Monuments in Arizona but has become rare because of longer and more frequent droughts limiting moth reproduction. In Sonora, tens of thousands of acres of habitat for these plant species were sprayed with the toxic herbicide Paraquat by drug control programs attempting to eliminate marijuana production in Sonora, but they eliminated the host plants for these moths as well. Drought and desiccation associated with climate change have also had their toll on limber bush and jumping bean populations. Thankfully, the New Pascua Yaqui tribe has funded greenhouse projects to grow these host plants in high densities for the moths within their natural ranges, as means to assure that these ceremonial and sacred paraphernalia of natural projects remain accessible to spiritual practitioners.

In addition, the University of Sonora, Instituto Nacional de los Pueblos Indígenas (INPI) and seven Sonoran Indigenous nations have collaborated on a medicinal plant conservation garden that includes a large moth nursery under glass where the limber bush and jumping bean host plants along with transplanted moth populations are established to ensure harvests of the cocoons. These cocoons can be obtained for ceremonial use by any Indigenous tribal member, but transfer across the border for Yaqui ceremonies in Arizona still must be facilitated by New Pascua Yaqui administrators' relationships with the Consulate and USDA Agricultural Inspectors in Nogales.

to gaining access to critically important plant populations than their ancestors experienced over centuries of serving as caretakers for these plants at specific sites of spiritual significance.

Although the same plant species may grow elsewhere beyond their current reach, and might be cultivated in greenhouses or gardens, Indigenous peoples may not be inclined to use them for several important cultural reasons. Indigenous elders remind us that a ceremonial or medicinal plant may only be harvested at a certain time of the year, at a particular place linked to tribal history, or else it may not have spiritual power or healing potency.

There are other reasons that have triggered heightened concern over sacred plants on public lands during this last decade. As just one example, during the border wall construction er between 2017 to 2020 when 458 miles of border barriers were either erected or improved. National and intertribal concern was heightened over the destruction or removal of tens of thousands of saguaro cacti by wall construction in the sixty-foot strip of Roosevelt Reservation land along the border where Homeland Security and Army Corps of Engineers contractors caused considerable habitat destruction (Hennessey-Fiske 2020).

> **The destruction of sacred saguaros was justified by the Presidential Declaration of Emergency that waived the enforcement of 48 federal laws. The execution of this declaration ignored the fact that O'odham peoples of Arizona and Sonora deem saguaros to be sacred sentient beings worthy of legal personhood and protection, and that they are required to ensure their Congressionally guaranteed freedom of religious expression. Their spiritual rights cannot be waived by any President.**

Similar concerns were then raised by other transborder Indigenous communities regarding other sacred plants and sites being put at risk. In response to these concerns, an ad hoc alliance, Healing the Border, began to assess the damage and propose solutions to governmental land management agencies. They realized that this issue was not restricted to just one tribe, just the border region, nor to public lands managed by any one federal agency. They also realized that another "border emergency" might be declared by the President or Congress at any time in the future.

Sacred Plant Profile B

White (Sacred) sage, *Salvia apiana*

White sage is a fragrant shrub with whitish evergreen leaves that grows from nearly sea level to 4900 feet in elevation from the Pacific coast of California and Baja California, inland into the Mojave Desert.

In addition to widespread traditional uses as a toasted seed gruel and aromatic medicine by several Indigenous cultures on both sides of the border, it's herbage and sprigs have long been used in purification rituals by several Indigenous cultures, including the transborder Kumeyaay and Cucapá. Since 2010, however, demand by non-Indigenous users has led to its overharvesting and depletion to sell into commercial "new age" markets for smudging bundles, incense sticks, and compacted cones of leaves.

By some estimates, 95% of the white sage that enters the U.S. marketplace is illegally poached from public lands or sovereign tribal lands. As a result, the cultural appropriation and overharvesting of wild white sage in California has generated outrage among Native American communities, public land managers and plant conservationists, for this external use impacts the density, distribution, population health and sanctity of white sage populations on both public and private lands.

In June 2018, four people were apprehended and arrested for harvesting 400 pounds of white sage in North Etiwanda Preserve near Rancho Cucamonga, California, valued on the black market as $12,000 or more ($30/pound). This has prompted vigilance by park law enforcement to safeguard against illegal harvests in national and state parks and tribal reserves.

Due to the potential for overharvesting and the plant's sacredness to certain Indigenous tribes, many Native Americans have asked non-Natives to refrain from any usage of wild-harvested white sage. The "rage for sage" has become the focus of protection and education efforts of both the Tongva Taraxat Paxaavxa Conservancy—an Indigenous nonprofit land trust in the Los Angeles Basin—and the California Native Plant Society. The United Plant Savers Medicinal Plant Conservation (2024)coalition lists white sage as one of thirty "At-Risk" plants that should only be sourced from cultivated forms wherever possible.

Sacred and Ceremonial Plants Recovery Retreat

As a five-year follow-up to the Healing the Border workgroup that was funded by the Kalliopeia Foundation—a nonpolitical nonprofit philanthropic organization—members of the alliance requested support for a retreat and consensus publication from the same foundation. They were granted a gift to involve thought leaders from Native Nations, the National Park Service, university Indigenous Studies programs, and nonprofits in an exploratory gathering from October 20th to 22nd, 2024, in Ajo, Arizona.

The Borderlands Restoration Network (BRN) based in Patagonia, Arizona—a nonprofit that works collaboratively with five federal land management agencies—graciously served as the fiscal sponsor. The hosting organization was the International Sonoran Desert Alliance (ISDA) based in Ajo, Arizona.

Aaron Cooper, Director of ISDA, agreed to serve as a co-sponsor, and ISDA staff generously accommodated participants at its Sonoran Desert Inn and Conference Center twenty miles north of Organ Pipe Cactus National Monument. In addition to the retreat itself, ISDA also hosted a film screening of two dramatic documentaries on the status of sacred sites and pilgrimage trails in the western regions of the United Sates, inviting the public from Ajo and the Tohono O'odham Reservation to the viewing.

Through two phone calls with Dorothy Fire Cloud and Susan Johnson, GaryNabhan, Octaviana Trujillo, and Laura Monti sought guidance from the National Park Service Office of Native American Affairs on possible attendees, templates for possible policy documents that did not profess to be binding Memoranda of Understanding (MOUs) for the entire agency, and precedents for NPS interactions with Native Nations. Ms. Johnson and Ms. Fire Cloud also offered comments and guidance remotely during both days of the retreat.

Although the retreat convened close to the U.S-Mexico border and Organ Pipe Cactus National Monument, the focus of the retreat was policy and best collaborative practices that might meet Indigenous and federal land agency needs at any Department of the Interior (DOI) site in the Intermountain Region, while looking at case studies elsewhere that suggested other helpful strategies. It was not intended nor structured to evaluate past events with the border wall, nor to exclusively dwell on lessons learned from two site visits—one to Quitobaquito Springs, and one to the Darby Well cemetery of the Hia c-ed O'odham lands now deeded to the Tohono O'odham Nation.

These sites were visited by retreat participants as tangible, nearby examples of issues affecting sacred plants and sacred sites on and adjacent to public lands. The retreat participants

clearly recognized that not all sacred plants grow on or in formally recognized sacred sites or designated cultural properties, nor do all sacred sites harbor sacred and ceremonial plants. Legal mechanisms for protecting each of these entities may have some overlap, but do not necessarily work well for safeguarding both with equal weight.

Themes

The retreat group endeavored to find consensus among a number of themes, including the following five:

- Confidence-building and arrival at mutual respect and trust between Native Nations and federal land management agency professionals, noting that those two categories are no longer mutually exclusive.
- Sharing of best practices and strategies for preventing conflicts or reducing the possibility of harm to critical resources and neighboring communities. .
- Finding a wider range of mechanisms to fund, administratively support and collaboratively enact co-stewardship pilot projects for sacred plants that are in the best interests of all involved.
- Determining which strategies for protecting sacred sites on public lands incidentally protect sacred and ceremonial plants de facto.
- Suggesting means of safeguarding and bioculturally-restoring sacred and ceremonial plants from depletion and cultural appropriation other than those that are better designed for sacred sites protection on public lands (Nabhan, Walker and Mellado-Moreno 2010; Sena et al. 2022.)

After an encouraging greeting from Susan Johnson of the NPS Office of Native American Affairs and land acknowledgement/ local history brief by Lorraine Eiler, an Elder of Hia c-ed O'odham descent, the retreat participants initiated their discussion of both general principles and specific, tangible actions needed to advance sacred and ceremonial plant protection and biocultural recovery. The following topical sections highlight the issues that the group discussed as they proposed points that they believed could build toward a consensus statement. Each of the sessions was moderated by a different participant, and, in smaller work groups, participants took turns acting as scribes and reporters back to the larger group.

Sacred Plant Profile C

Yerba Mansa, *Anemopsis californica*

Yerba mansa is a hardy perennial vine that spreads across moist soil surfaces where there is either a high-water table or periodic surface stream flows in riverine sloughs or around Cienega wetlands.

It not only thrives with periodic flood or fires that disturb its root mass and surrounding soil, but because of this adaptation, side roots can be harvested and transplanted without reducing the vigor of the mother plant. Nevertheless, it grows mostly in island-like patches in riparian zones or desert oases, some of which were transplants from other localities in prehistoric or historic eras. Its cultural value—beyond its medicinal properties-is linked to its association with rewatering and resting camps along sacred pilgrimage routes like those that historically led to salt deposits and clam beds near the Colorado River delta and the Sea of Cortez.

One Hia c-ed O'odham elder once recounted that her semi-nomadic family would travel at least 150 miles over to yerba mansa patches near the Colorado River delta to find highly potent plants, rather than harvesting patches of the same species within 35 miles of their homes in Ajo, Arizona or Sonoita, Sonora. Although it occurs over a wide range in all the U.S./Mexico border states, the wetland patches where it thrives are particularly vulnerable to climate change, groundwater pumping, and land use changes that desiccate the landscape or restrict flood flows.

Overharvesting for new, non-Indigenous demands have exacerbated the effects of these underlying stresses. For example, a 1996 national market assessment of 98 commercial purchasers of Southwestern herbs documented that 44% of wholesalers and/retailers were already purchasing and selling yerba mansa. The retailers also noted that they were seeking additional suppliers because of strong demand. When attempts to meet this growing demand are met by harvesting yerba mansa from mesquite bosques, wetlands and other riparian habitats, there is a real threat of locally extirpating one patch after another on the highly altered stretches of Rio Grande and Rio Colorado, both of which seldom flow out the ocean anymore.

Fortunately, collectives like the Yerba Manza Project that began in 2014 in Albuquerque have brough together wild foragers, herbalists from Sandia Pueblo and other Indigenous communities and restoration ecologists to "seed" or transplant thousands of yerba mansa cuttings in the middle Rio Grande. Its co-founder Dara Saville has brought together a talented multicultural team to simultaneously integrate yerba mansa into land health restoration as well as human health restoration.

Nevertheless, the United Plant Savers Medicinal Plant Conservation coalition lists yerba mansa as one of thirty "At-Risk" plants that should only be sourced from cultivated forms wherever possible. Any wild harvest of these plants should align with rules established by federal, state and local governments that monitor plant population health from year to year and restrict habitat access and harvesting in years of severe drought.

SESSION ONE

Moving Collaborative Processes Forward by Building Greater Trust

In the first full-group brainstorming session, we sought to identify both principles and best practices for any kind of cross-cultural, cross-sector collaboration on natural and cultural resources. The following bullet points highlight points made by one or more participants:

- Efforts to prevent damage or conflict early on are always better than trying to repair damage after the fact, i.e., "preventive medicine" is always less costly than "urgent care."
- Indigenous nations and nonprofits can play a role in lobbying for "construction mitigation" funds to restore border habitats on public lands in a way that federal employees themselves cannot.
- "Tribal governments" of Native Nations' and nonprofits can become members of DOI Cooperative Ecosystem Studies Units (CESUs) in each region to allow fast-track, low-competition contracts for research, monitoring, and restoration of cultural and natural resources that agencies identify as priority needs.
- Public land managers and Native Nations' officials and spiritual leaders often need assistance or encouragement to tell the stories to the public of documented degradation or landscape change through time through visual or narrative means that then validate requests for new mitigation, species recovery or biocultural restoration projects.
- In some cases, use of already-authorized funds for larger topics like invasive weed control or climate change/wildfire mitigation can be acquired and targeted to deal with threats to cultural resources or sacred sites.
- Even when funds are found, all collaborators need to be cross trained in cultural sensitivity, adherence to agency regulations or Indigenous ethical protocols to ensure smoother communications and reciprocally respectful exchanges.
- Success stories of best practices and on-the-ground protection of recovery need to be told more widely, to inspire similar efforts elsewhere rather than "reinventing the wheel" in each landscape. Stories can speak to shared goals and complementary values.
- With biocultural recovery and restoration, Native voices should be placed at the forefront in their own words rather than being paraphrased or reduced to bland summaries.
- There is great potential for engaging in shared knowledge and reciprocal skills training with professionals on both sides of any border, as Big Bend has done to advance salt cedar and Carrizo river cane removal along the Rio Grande.
- In most cases of cross-cultural collaborations, "the work moves at the speed of trust."
- That most of us agree that various cultures have "different ways of knowing with certainty" how and what should be done, and at what pace, and these differences need to be respected and built upon.
- That many cultures seek change not through protests (alone), but also through praying for the world, and gathering leaders at sites of concern for ceremonial activism that transcends conflict.
- That few groups of stakeholders of any culture or profession accept being marginalized from decision-making processes and are eager to have a place at the table.
- That together we can approach problem-solving from a holistic 360-degree perspective, which helps smoke out any flaws or vulnerabilities in planning and implementation processes in advance.
- That participation of local communities and affiliated Native nations can not only foster longer-term protection of plant populations involving site stewards but can also alert agencies to potential spiritual or economic impacts on communities that might not otherwise be considered.
- That in the case of a binational effort to protect sacred ironwood trees on both sides of the border in the 1990s, an Ironwood Alliance of Native Nations, federal agencies and nonprofits assembled a toolkit for solving the problem far more varied and effective than any one player could have done alone (Nabhan and Carr 1994).

The working group at Quitobaquito spring (photo by Toby McLeod)

Barriers to Consensus Coordinated Action and Co-stewardship

Given the many success stories of collaborative efforts to protect and/or to provide legitimate access to natural and cultural resources, the group also felt it necessary to note what factors may limit success if not fully considered and dealt with. Our goal was not to reopen past grievances, but to establish the factors that may ensure that any consensus statement will have positive effects on the ground and in communities:

- Continuity in leadership from each set of stakeholders is essential, because it allows participants to share their values and create a common knowledge base, as well as to mentor incoming participants (particularly as some initial leaders must retire or move on). The frequent turnover of administrative leaders or elected officials can set back consensus agreements and co-stewardship efforts, if cross-training of their replacements is not initiated early on. The importance of women from local communities in providing a continuous "thread" of oral history and process is key.
- Allyship is also a key element to develop if cross-cultural collaborations are to be just AND successful. In many cases, non-Indian participants need to learn from Indigenous colleagues what "appropriate support" looks and feels like, to not generate power imbalances. There needs to be respect for each culture's sense of process, reflection and response time so that no one feels overwhelmed.
- The respectful participation or sideline support in Native-led ceremony and prayer can also be key. Stakeholders used to having command-and-control positions about public land management are often moved by ceremony to share leadership roles with others, so that greater equity and dialogue are ultimately fostered.
- It is important to develop litigation strategies that are explicitly sanctioned and that tangibly benefit all stakeholders. Because litigation often results in us-versus-them dualisms, many collaboratives sense it should be a "last-choice" option.
- Inclusive storytelling that involves Native voices is often more effective than a didactic fact sheet, because it can address underlying needs, capture the imaginations of the unacquainted, and bring attention to key issues in a memorable way.

Sacred Plant Profile D

Elephant Tree or Torote Colorado, *Bursera microphylla*

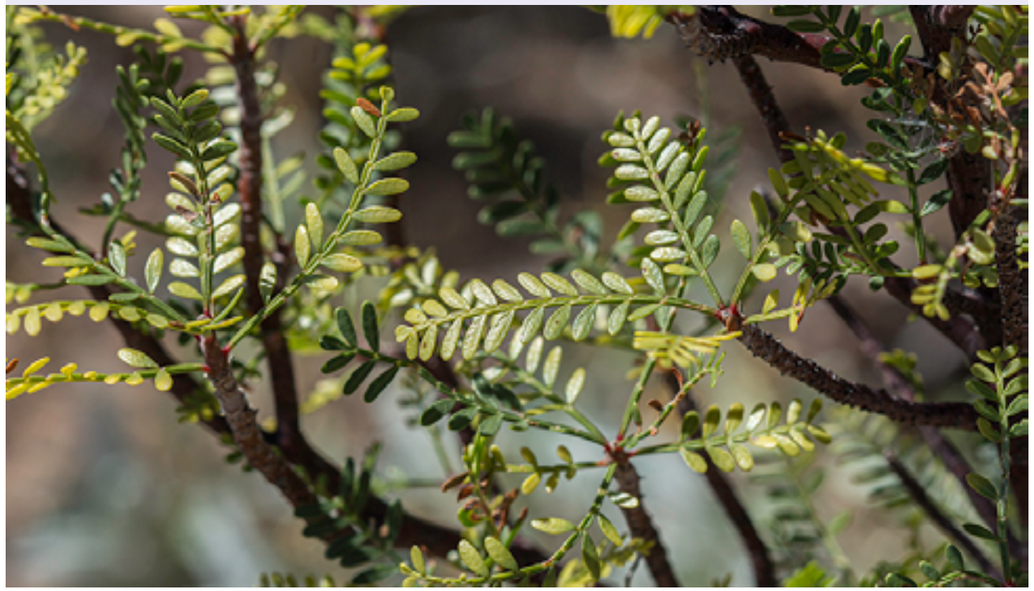
This dwarf tree or shrub produces a highly aromatic resin called copal that is the New World equivalent of frankincense and myrrh. It has been burnt for fragrant smoke and used ceremonially in offerings, purifications and spiritual cleansings known as *limpias* (cleansings) by many Indigenous nations residing in present-day Mexico, Arizona and California.

Elephant tree is an essential element in prayer vigils and contemplative practices in both Native American and Catholic traditions. Often, a single Elder is designated as the official harvester and keeper of copal for their community. Elephant trees reach their northern limits in the Americas in the Sonoran and Mojave deserts, where the small stature of these succulent perennials and their shallow roots that make it vulnerable to catastrophic freezes, droughts, and flooding from catastrophic hurricane fringe storms.

As Mexican plant conservationist Exequiel Ezcurra has noted in Becerra and Yetman (2024), despite the immense importance of Torotes and their potent copal resins in the evolution of human spirituality and medicine, "it is surprising how little is known about these extraordinary trees."

While not endangered throughout their entire range, they do occur in several national parks and wildlife refuges north of the Mexican border in both southern California and southwestern Arizona. Torote Colorado has a California Rare Plant Rank of 2.3, signifying that it is rare, threatened or endangered at the state level, but is not federally listed.

The United Plant Savers Medicinal Plant Conservation coalition lists Torote Colorado as one of eight species that is in critical need of additional protection and recommends that it should only be sourced from cultivated forms wherever possible.



Bursera microphylla *(Elephant tree), photo by Craig Martin, Wikimedia commons*

- Trust among individual participants—not just formal agreement among organizations and agencies—is critically important. Organizations are not the same as their representative people. An administration does not necessarily behave nor maintain memories or commitments as individual people do.
- Conflicting motives, policies and interests can undermine collaborations if not explicitly acknowledged, daylighted, or even challenged. This can disrupt any group in its efforts to move forward in steady, respectful relationships.
- The principles of the United Nations Declaration of Rights of Indigenous Peoples (UNDRIP)—which the US has reaffirmed its support for—should be considered regarding any actions that affect sacred lands, waters, or plants. While UNDRIP is not legally binding on states and does not impose legal obligations on governments, like all human rights instruments, it carries moral force.

SESSION THREE

Suggestions for Improving a Draft Consensus Statement on Sacred and Ceremonial Plants

Four work groups spent an hour each going over the wording of an earlier Sacred Lands MOU, further adapting it to Sacred Plants. We recognize that the ultimate document jumpstarted by our group may not become a legal MOU, but may take on one of several other forms that the NPS Office of Native American Affairs has found to be effective and operable in the recent past. *We also recognize that a Sacred Plants document derived from our work may become useful to tribal administrations willing to designate areas with sacred plants on their reservations, or on public lands where co-stewardship with the NPS, USFS, BLM or USFWS may be possible.*

Challenges that a consensus statement or MOU may need to address:

- There are challenges or concerns about using the current definitions of cultural property, cultural landscape and "use."
- Some managers have learned over the years that more policies result in more complex or contradictory constraints.
- Tribal governments, federal agencies and NGOs have different timelines and concerns for legitimate reasons (not just bureaucratic delays).
- The permit acquisition processes for tribal members to gather plants on public lands (including in national parks and monuments) remain complicated for many individuals, especially monolingual elders.
- While laws have been on the books for years, the NPS is now incorporating cultural sensitivity training into orientation for all staff and volunteers to more uniformly enforce or facilitate legal obligations. Other federal employees such as agricultural inspectors and border patrol agents need such training too. There is frequent turnover in leadership of Native Nations' administrations in tribes and NGOs, and the National Park Service frequently moves superintendents from one site to another.
- The definitions section of the draft consensus document remains problematic regarding legally defensible and on-the-ground operable definitions of indigeneity (e.g., tribal enrollment card, blood quantum, etc.)

SESSION FOUR

Opportunities a Consensus Document Needs to Address

Group One

- Many positive options are already possible under current policies that do not require that Indigenous practitioners reveal any traditional "esoteric" knowledge that should remain restricted to tribal members only.
- Good consultations can indeed result in great protection and/or fewer threats of cultural appropriation.
- The National Park Service, nonprofits and intertribal organizations can offer research that provides data and recommendations to validate actions (and their effectiveness).
- Partner groups (like ISDA and Friends of Parks) can help stabilize consultations because they have less staff turnover and can orient new agency or tribal leaders.

Group Two

- We should all familiarize ourselves with precedents or models of successful partnerships
- In the California range of redwoods, the Yurok Tribe, National Park Service and California Department of Parks and Recreation are already activating a co-management relationship at the ‘O Rew Redwoods Gateway to further conserve and restore sacred redwood trees (See *Save the Redwoods League, the Yurok Tribe, and Park Partners Sign Historic Agreement to Return Tribal Land* at www.yuroktribe.org.)
- Overall, Native Nations’ acknowledged capacities to negotiate and activate restoration of land, water, sacred plant and wildlife habitat is increasing and becoming more visible, as exemplified by a 30,000-acre transfer of land to the Penobscot Nation surrounding their sacred mountain, Katahdin (See “Penobscot Nation prepares to reacquire 30,000 acres” with the help of the Trust for Public Land and the National Park Service, as reported in www.themainemonitor.org/penobscot-nation-katahdin-landback/)
- International examples are inspiring similar efforts within U.S. boundaries. For example, hundreds of youths from Lebanon’s 18 religious sects are now engaged in transplanting redwoods from government nurseries into ancient cultural landscapes of stone-terraces slopes in the Shouf Cedars Reserve and other protected areas where Indigenous Druze communities protect 25% of all cedars remaining in the country (Cartier 2019). These mountainsides were historically terraced for mulberry tree production, a vital component of the silk industry, until a bacterial infection killed most of the trees in the late nineteenth century. Nevertheless, the abandoned terraces still have a cooler, more favorable microclimate for cedar survival than “natural” slopes; non-timber-forest products such as za’atar spices are grown in the shade of the cedars to provide income and livelihoods to Druze families participating in restoration.
- At Bears Ears National Monument in Utah, five tribes formed the Bears Ears Commission to collectively co-manage the National Forest Service and Bureau of Land Management, including traditional knowledge to assist in co-development of a management plan for this sacred landscape (www.bearsearscoalition.org/the-bears-ears-commission/).
- Guided by resource staff at Organ Pipe Cactus National Monument and Hia c-ed O’odham elders, Borderlands Restoration Network is co-developing plans for involving O’odham youth in further transplants and seeding of 14 sacred and other culturally important plants in a habitat restoration phase that is following its hydrological restoration and repair of reservoir lining.
- In Big Bend National Park, competition for access to peyote sites between legally protected American Indian Religious Freedom Act (AIRFA) Native American users of peyote and other potential users prompted staff to reevaluate the release any sensitive locality data in their requirement to mandate Freedom of Information Act (FOIA) requests.
- Just west of Big Bend, incorrect narratives about the indigeneity of long-time local residents in El Mulato, La Junta and Redford have generated a community sense of "erasure” or pain.
- In the area surrounding Organ Pipe Cactus National Monument (ORPI), the federally unrecognized Hia c-ed O’odham who are descendants of inhabitants of Quitobaquito Springs in ORPI feel similar erasure from Ajo southward into adjacent Mexico. See “The forgotten history of the Hia-Ced O’odham | ASU News”.
- On some public lands, much of the plant collection by Native Americans happens “in secret” at remote sites, in part to assure that the same sacred plants cannot be culturally appropriated by non-Indians. Some of this gathering may be done by young Indigenous activists who reject or resist the notion that they should ask the federal government for permission to do what their families have done for generations. See *How the Rage for Sage Threatens Native American Traditions and Recipes* at www.atlasobscura.com/articles/white-sage .
- In other areas near the U.S. border, the activities of drug cartels and of some ranchers who root-plow rangelands damage sacred plant populations and limiting access to gathering grounds (Hinojosa 2018).
- Procedurally, new National Park Service procedures require that formal Environmental Assessments of the sustainability of harvests and the rarity of the plants be done before permits are granted, and this process requires continuing collaboration.

White sage bundle, Salvia Apiana, *(photo by Eva-Bronzini, pexels.com)*

Group Three

Challenges to be addressed:

- It remains difficult to explain across cultures and language barriers the place-based, culture-specific interrelationships among land, plants, and peoples.
- There remain obstacles in bringing traditional ecological knowledge to youth because of intergenerational differences in values, communication styles, use of time and social media, and access to or attachment to traditional places.
- Many are resigned to the fact "that the world is not healthy" at this moment and divides in our society run deep.
- Many Indigenous visitors to the border are still suffering from post-traumatic stress from seeing the impacts of the border wall, including accelerated flooding and erosion, destruction of native plant species and invasion of exotic weeds, and slow death of some of the saguaro cacti that were transplanted (since they are regarded as sacred sentient beings).
- Unfortunately, the increased rates of retirement and turnover of "familiar faces" in the National Park Service and neighboring agencies has fostered further distrust among tribal members living nearby and their elected officials.
- The fear that government agencies and nonprofits like NatureServe are mapping and revealing on the internet the location of sacred plant populations that non-Indians may unethically exploit further confounds discussions.

Precedents, principles or models of successful partnerships:

- The National Park Service already offers excellent guidelines for partnerships in its January 21, 2021, *Memorandum on Tribal Consultation and Strengthening Nation-to-Nation Relationships*.
- All parties can benefit from patiently accepting different sense of time and urgency among different cultures and professions—and offering any group of stakeholders "pause time" can prevent or reduce conflicts
- A growing number of Native Americans are participating in storytelling about plants and the lands of value to them through film, podcasts, performance art, mural art, social media and writing signage that expresses native voices (Kimmerer 2013).
- Many more individuals and groups are telling stories of effective cross-cultural and cross-sectoral collaborations that demonstrate how diverse groups can come together, identifying shared values and concerns, taking time for intention, listening to others, and tangibly building trust by working together on the ground.
- Correctly and collaboratively defining the core problems to be solved should be done as early as possible in every cross-cultural effort.

Sacred Plant Profile E

Peyote, Hikuri, *Lophophora williamsii*

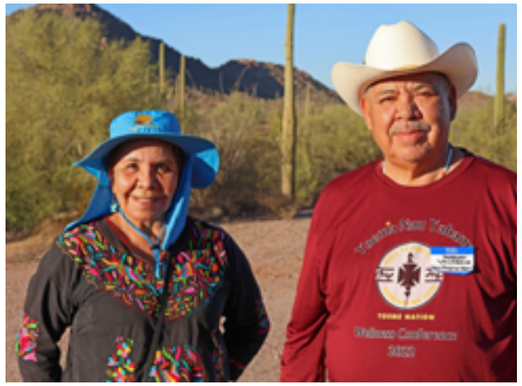
Peyote "buttons" (floral buds) have been used as a sacrament in Indigenous ceremonies in the Chihuahuan Desert and Altiplano region of Mexico for millennia, and well before the twentieth century, were being traded by the Huichol up through Tarahumara, Cahitan and Pima communities into the Sonoran Desert on both sides of the U.S./Mexico border.

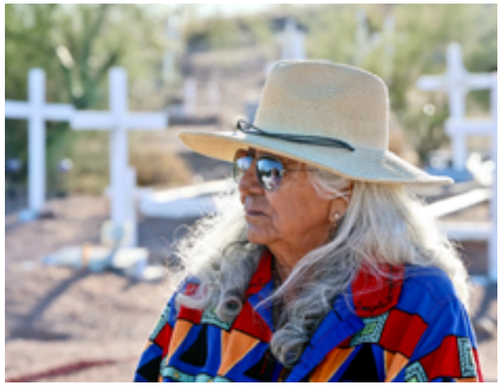
Today, both Mexico and the United States condone the use of peyote by Native Americans, but in Mexico, the plant itself also has special protection status as a sacred plant. For decades Indigenous card-carrying members of the Native American Church in the United States have made pilgrimages to harvest their own peyote from as far north as Lake Superior and as far south as the Real de Catorce on Mexico's central plateau, crossing the border back into the U.S. with peyote buttons. They are used in legally sanctioned ceremonies that incidentally help some tribal members break from drug addictions.

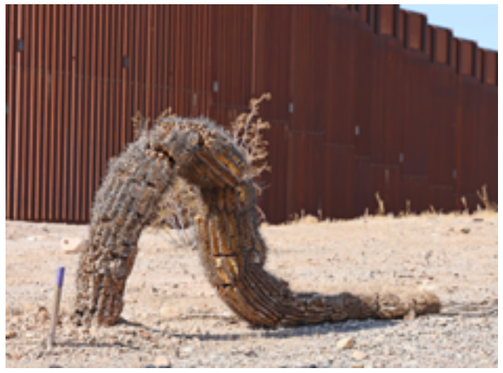
Within the last half century, however, peyote use and overharvesting by non-Indigenous recreational and therapeutic users -sometime involving drug cartels- has depleted some natural populations and reduced access by traditional indigenous users (Hinojosa 2018). Since 2017, the Indigenous Peyote Conservation Initiative (IPCI) has worked to address "the peyote crisis" in Mexico and Texas through a cross-cultural, multi-pronged approach. IPCI not only works to restore Indigenous community health, but also works on restoring imperiled peyote cactus populations by replanting them with the help of government agencies and peyote practitioners in both countries. ln some cases, peyote "seed" confiscated at the border is turned over to IPCI to reestablish populations in areas historically devastated by overharvesting.

Because this cactus species' distribution overlaps with lands in national parks and monuments in border states, there are complex ethical, legal and management problems in restricting both access and distributional data have plagued public land managers.

Numerous nonprofits—such as the IPCI and the Indigenous Medicine Conservation Fund (IMC Fund)—are now working with agencies to pioneer fresh legal and ethical guidelines for sustainable harvesting, biocultural restoration and use. The United Plant Savers Medicinal Plant Conservation coalition lists peyote as one of eight species that is in critical need of additional protection and recommends that it should only be sourced from cultivated forms wherever possible.

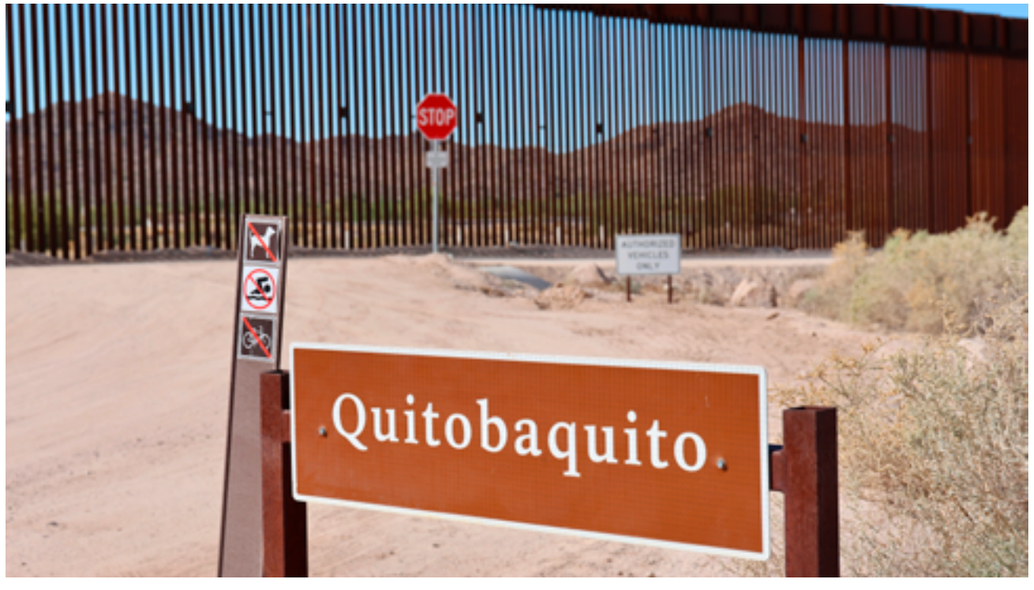






Above left: *Yaqui Elders Octaviana Trujillo and Robert Valencia of New Pascua village, Arizona*
Above right: *Hia C-ed O'odham Elder Lorraine Marquez Eiler of Ajo, Arizona*

Left: *"Weeping Saguaro"*
Below: *The border wall near Quitobaquito spring, Organ Pipe Cactus National Monument, Arizona*
(Photos by Toby McLeod)



Group Four

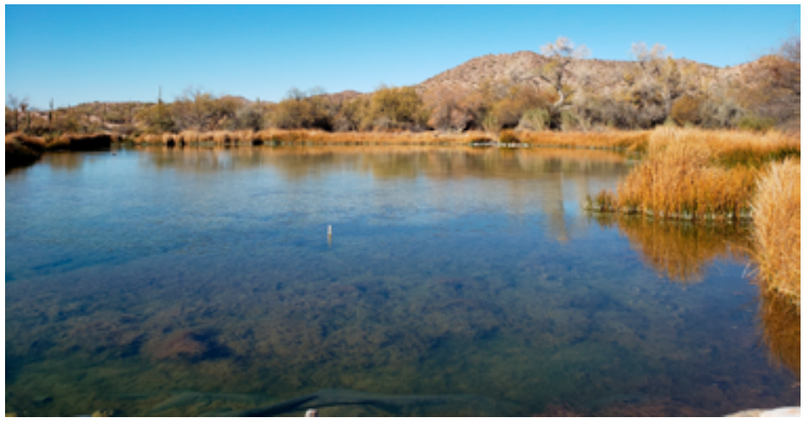
Precedents, principles or models of successful partnerships

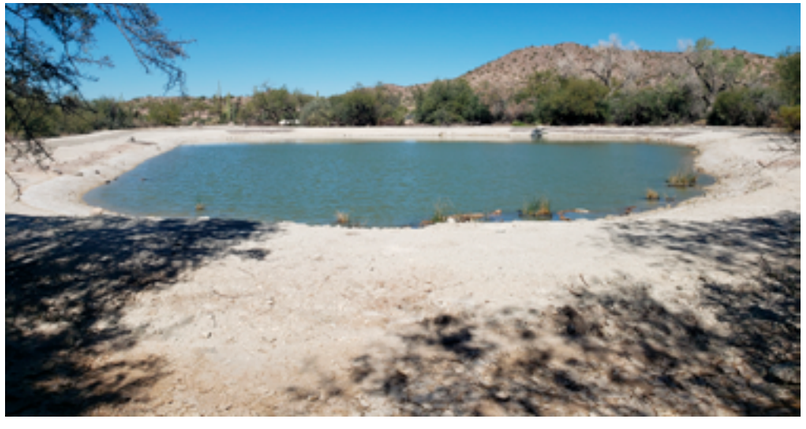
- Removing or reducing jargon or "legalese" in this and other documents to be shared cross-culturally and across sectors (like Section 2.7 in the Sacred Lands MOU) to everyone's benefit.
- Eliminating contradictory or contentious points from shared documents helps build consensus. For instance, there is no reason for government agencies to operationally or legally define what sacred plants are, because each Native Nation has the prerogative to do that in their own ways for themselves. Similarly, there could be some means where Native Nations provide to NPS staff the sacred plants that are culturally important to them without having to reveal any esoteric or traditional ecological knowledge about them.
- While there are requirements for Environmental Assessments of (commercial) plant collecting on public lands, some question the need (in most cases) for Native American plant practitioners to provide instructions or reasoning for going to specific locations for sacred plants, unless they are otherwise unusually vulnerable or federally protected as threatened or endangered.
- There should be means that land managers can use to manage and protect sacred plant populations that are under their normal range of management activities for an entire area or landscape, such that they need to publicly justify their actions in limiting access temporally or spatially to recreation users or other interest groups.
-

MOVING FORWARD

The Retreat's Recommendations

For future work on protecting, restoring and managing access to sacred and ceremonial plants—whether they are associated with sacred sites or not—we need to consider the following opportunities, emerging mechanisms and currently-debated concerns:





Quitobaquito spring pond. top: April 2023, middle: January 2021, bottom: November 2022. (*photos by* Teresa DeKoker)

- Take advantage of and dovetail our collective efforts with other National Park Service initiatives like Mosaics in Science (MIS) Diversity Internship Program that aim to build a diverse, science-literate workforce through internships (many of them for minorities) that can grapple with the creative tensions between academic science and Indigenous science(s), and with science and spirituality.
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- Create more opportunities to engage Indigenous youth from tribal colleges and from communities neighboring parks to be involved in hands-on biocultural restoration (like BRN's projects with Organ Pipe and the Commission for Environmental Cooperation), traditional knowledge sharing, and community engagement.
- Develop training modules for cultural sensitivity programs for new and returning NPS staff for understanding the issues surrounding sacred sites, sacred plants, and historic homeland stewardship of significance to Native Nations. One of the best to date is the *Best Practices Guide For Federal Agencies Regarding Tribal and Native Hawaiian Sacred Sites* (https://www.bia.gov/events/sacred-sites-best-practices-guide).
- Explore a variety of co-stewardship options for managing sacred plants, waters and landscapes on public lands, not just co-management agreements that require Congressional authorization.
- Spread the news of the growing evidence that the locations of sacred plant populations and sacred sites can be dynamic—not historically immutable or fixed—as climate change and Indigenous population movements trigger "new" localities of cultural significance to emerge.
- Recruit additional partners, such as the Center for Earth Ethics, hosted by the Union Theological Seminary, or the Association for Conflict Resolution, to help deal with stickier and more complex ethical and legal issues. Historically, the Congressionally appointed National Park System Advisory Board has been invited in by park superintendents, Native Nations or nonprofits to mediate conflicts that have emerged and to propose solutions for funding by the DOI Secretary and National Parks Director.
- Explore opportunities for an addendum to NPS Policy Memo 24-01, or its regulation on plant gathering 36-CFR-2.6 that can offer specific guidance on gathering of sacred or ceremonial plants.
- Engage "sister parks" on the Mexican side of the border such as the Sierra del Pinacate, Alto Golfo de California y Delta del Rio Colorado and Maderas del Carmen reserves in Mexico to exchange ideas on managing the same or similar sacred plants and cultural resources.

- Aid transborder tribes involved in sacred salt pilgrimages across borders, or ceremonies that involve elders from both sides of the border, to access sacred plants that may be on public lands on one side of the line or the other.
- Try not to reinvent the wheel—use existing guidelines and recommendations from Indigenous alliances such as the Indigenous Medicine Conservation Fund to deflect, halt or daylight cultural appropriation of sacred and ceremonial plants, and to vet potentially "good allies" to amplify the Native voices that are trying to safeguard sacred and ceremonial plants.
- Recognize that there are many existing laws, regulations and approved protocols that may potentially apply to safeguarding sacred plant populations and assuring access to them by traditional spiritual practitioners in Indigenous communities. It will be important to match the "problem" with the particular legal mechanism that best fits it and has legal precedents to back it.
- Recognize that "work parties" of diverse stakeholders that get in the trenches to restore sacred sites or replant sacred groves are not only healing wounds in the land and restoring habitats, but they are "re-story-ing" the possibilities for cross-cultural understanding and healing long-standing social wounds.
- Encourage NPS staff and Indigenous leaders to visit other projects endeavoring to conserve and protect access to sacred plant populations and ceremonial grounds, or to sponsor films that bring those stories home to their communities and other stakeholders for inspiration.

Silk moth, Rothschildia cincta
Its cocoons, found on Jatropha *and* Rothschildia *plants, are used for ceremonial leg rattles*

Right page: *Yoeme (Yaqui) Deer Dancer. Note* Rothschildia *moth cocoon rattles on the dancers's ankles. (photo by Alejandro Yanes, Wikimedia Commons)*

Summary

We respect and applaud those in Indigenous communities, federal agencies and nonprofits who have diligently worked together to better protect sacred sites on public lands. But now the same kind of concerted effort must occur to better safeguard sacred and ceremonial plants required to ensure for the rights and expressions of Indigenous spiritual expressions.

The National Park Service and four other federal agencies have—over many decades—drafted various guidelines, training manuals and memoranda of agreement with Native Nations regarding sacred sites on public lands or plant gathering by tribal members. These do not, however, necessarily cover all the complexities of protecting sacred and ceremonial plant populations and Indigenous access to them in our current society.

There is documented evidence of increased clandestine harvesting and even overharvesting of sacred and ceremonial plant populations on public lands, as well as cultural appropriation of these plants for smudging and other rituals. To deal with these emerging challenges, existing memos and guidelines could be amended with addenda or expanded to harmonize new guidelines for sacred and ceremonial plants with existing guidelines regarding sacred sites or plant gathering in general.

There is some urgency to addressing these issues. For instance, some legal mechanisms —that under ordinary circumstances give these MOUs "teeth" —were suspended during the extraordinary circumstances of a Presidential Declaration of a Border Emergency. Although this declaration did not affect parks and monuments away from the international border, and the Park Service personnel along the border valiantly negotiated with Homeland Security and the Army Corps of Engineers to do least harm to cultural resources, including some sacred plants such as saguaro cacti.

Notwithstanding, these suspensions of plant protection and religious rights protection laws resulted in traumatic stress, grief, anger and disillusionment among many young Native American activists, and among other constituencies. Some Indigenous individuals or families witnessed firsthand how sacred plants, lands and waters were being damaged despite tribal and NPS officials' efforts to protect them. We must do better in our planning and negotiations to ensure that such trauma is not experienced again, using the Constitutionally guaranteed religious freedom tenets that have already been given standing in higher courts.

To prevent such tragedies from ever happening again on public lands, there is a need for a clear understanding of what the U.S Constitution and cultural protection laws can and cannot prevent. The following table is a brief guide to the legal basis for protecting sacred lands, waters, plants and animals of ceremonial and spiritual importance. We leave it with you as a potential road map.

Laws for protecting sacred lands, waters, plants, and animals

Potential Tool for Protection	Its Relevance to Protecting Sacred Lands & Waters *	Its Relevance to Protecting Sacred Plants *	Its Relevance to Protecting Sacred Animals *	Perceived Flaws or Limitations in Its Use
Constitutionally Guaranteed Freedom of Religious Expression in 1791	Expression of Indigenous religious freedoms are covered, but with few court precedents to exemplify legal means	Questionable with little or no legal precedents	Questionable with little or no legal precedents	Bias to institutionalized Western "indoor" religions at the expense of Indigenous spirituality
American Antiquities Act	Protects archaeological sites that may include sacred sites & plants	Questionably applied to sacred plant presence	Questionably applied to sacred plant presence	Bias toward prehistoric & historic preservation of built environments
Native American Graves & Repatriation Act (NAGPRA)	Protects graves & items associated with them, but other tribal treasures as well	Questionably applied to sacred plant presence	Questionably applied to sacred plant presence	Bias toward tangible not intangible heritage
American Indian Religious Freedom Act (AIRFA)	Protects the rights of Native peoples to practice their religions & to also access sacred places & possess sacred object.	Protects the rights of Native peoples to practice their religions & to also access sacred places & possess sacred objects.	Dubiously applicable to protecting live plants off sacred sites that Indigenous spiritual practitioners require.	
42 U.S. Code § 1996 - Protection and preservation of traditional religions of Native Americans	Protect & preserve for American Indians their inherent right of freedom to believe, express, & exercise the traditional religions.	Includes access to sites, use & possession of sacred objects, including ceremonial plants.	Includes access to sites, use & possession of sacred objects, including animal parts (feathers) in ceremony.	While protected plant & animal paraphernalia used in ceremonies, it may not protect them as living, sentient beings.
Tohono O'odham Legislative Council Resolution Recognizing & Protecting Sacred *Ha:san* **(Saguaro Cactus) of 2021**	This resolution unanimously passed in every Tohono O'odham District before being ratified & passed by the Tohono O'odham Nation Legislative Council & signed by the Tribal Chair.	This resolution declared that saguaro fruit are essential to the religious practices of the O'odham, & therefore an unalienable cultural property that should not be damaged or destroyed.	This resolution tacitly protects the wildlife dependent upon & co-evolved with the saguaro, some of which are also engaged in rain-bringing rites.	This resolution applies to all aboriginal O'odham lands on & off reservations, but would be difficult to enforce off reservation.
DOI/NPS Policy Memorandum Providing Guidance for Implementing 36 CFR 2.6—Plant Gathering by Federally Recognized Tribes for Traditional Purposes of 2024	Signed off by NPS Director Sams to facilitate Tribal cultural practices on lands within areas of the System where those practices traditionally occurred.	Provides guidelines for Indigenous access for gathering of most traditionally used plants	Does not speak to gathering of wildlife or their (feathers)	Dubiously applicable to lived sacred plants or animals found off or away from sacred sites

* As Identified and used by native nations for ceremonial and sacramental purposes

AFTERWORD

About the Overall Global Initiative

The Sacred Plant Biocultural Recovery Initiative: Responding to the Need for Safeguarding and Restoring Sacred and Ceremonial Plants through Community-Based, Multicultural Alliances for Collaborative Conservation

If there is any group of plants in North America that may deserve special ethical and legal consideration, one might argue that the sacred plants of Indigenous Nations of this continent and the Hawaiian Islands deserve such a distinctive status, for they are required for the Constitutionally guaranteed spiritual expressions of Indigenous communities, just as other plants are required as sacraments in the rituals of formal Western and Eastern religions.

The only difference between Western religions and Indigenous spiritual traditions is that that Indigenous Nations often depend upon place-based and site-specific spiritual expressions and sacred plants (Deloria 1973, and his commentaries in the film *In Light of Reverence*). This distinction is accepted by Judaic scholar Heschel (1975), who concurred that formal institutionalized religions such as Judaism can take place anywhere, and therefore risk becoming "placeless." In addition, Judaism and Christianity can substitute other plants in rituals if the original plant source is not locally available, as in the case of the "bitter herbs" the Nile and Sinai in the Old Testament—Jew's mallow, chicory, dandelion, compass lettuce and thistles being replaced by horseradish in Europe and the U.S.

Regardless of whether you have training in botany, you probably recognize that we live by plants, because of plants, and in exchange with plants, some of them sacred and some profane. But our interactions with plants are by no means static; over the course of history, some sacred plant species have been subject to such demand that they have been overharvested, locally extirpated, or globally endangered, despite the reverence for them. In other cases, war, climate catastrophes, insects or diseases have diminished access to wild plants, so much so that they have become endangered, protected, or cultivated. One might speculate that when sacred and ceremonial plants suffer or become culturally appropriated, something in the human spirit is diminished as well. If global estimates are that a fifth of all plants are globally endangered, sacred plants are among them.

With few exceptions, plants regarded as sacred, holy or of ceremonial and ritual significance are seldom given special status in federal or international "red lists" of threatened and endangered species, which claim to be science-based, objective and secular. If they are given protection at all, it is because they are already rare, or in steep decline due to overharvesting or other pressures. However, many conservation professionals would agree with spiritual leaders, humanities scholars and ethicists that these rarities should deserve protection or recovery effects not only for their environmental, genetic, or potential economic value, but also for their intrinsic right to exist as "persons" and because they are part of the intangible heritage of cultures and faiths from around the planet.

If there is any hope that Indigenous spiritual leaders and conservation professionals can find common goals and synergies among their efforts, it may be in the service to rare or declining sacred and ceremonial plants. We need to promote more tangible, innovative collaborations between traditional spiritual leaders, natural resource managers and conservation scientists to do so. Why not use the "biocultural recovery" of culturally significant plants of the U/S. border states as a model for how to bridge the long-standing divide between ecological science and religion elsewhere in the world as well?

Remember that the etymological roots of both ecology—oikos, "the interactions with the earth household"—and religion, religio/religare, "to bind together or reconnect"—have uncanny similarities in their original sense of purpose, whether they are now called "caring for Mother Earth," "caring for creation," or "biodiversity conservation."

The task of reconnecting nature with culture is the goal of the Sacred Plant Biocultural Recovery Initiative, launched in April 2024 at an event at the Harvard Humanities Center in Cambridge and an the Takreem Foundation event in Boston the same week. It already involves as advisors two dozen spiritual leaders, conservation professionals and restoration practitioners from more than a half dozen Indigenous Nations, as well as practitioners of the Muslim, Druze, Buddhist, Jewish, Eastern Orthodox, Roman Catholic, and Protestant faiths in universities and nonprofits around the world. Together, we practice what it means to be good and respectful allies. See more at *Sacred Plant Biocultural Recovery Initiative Launched!* (www.garynabhan.com)

Devil's Tower National Monument, Wyoming. (photo by Toby McLeod)

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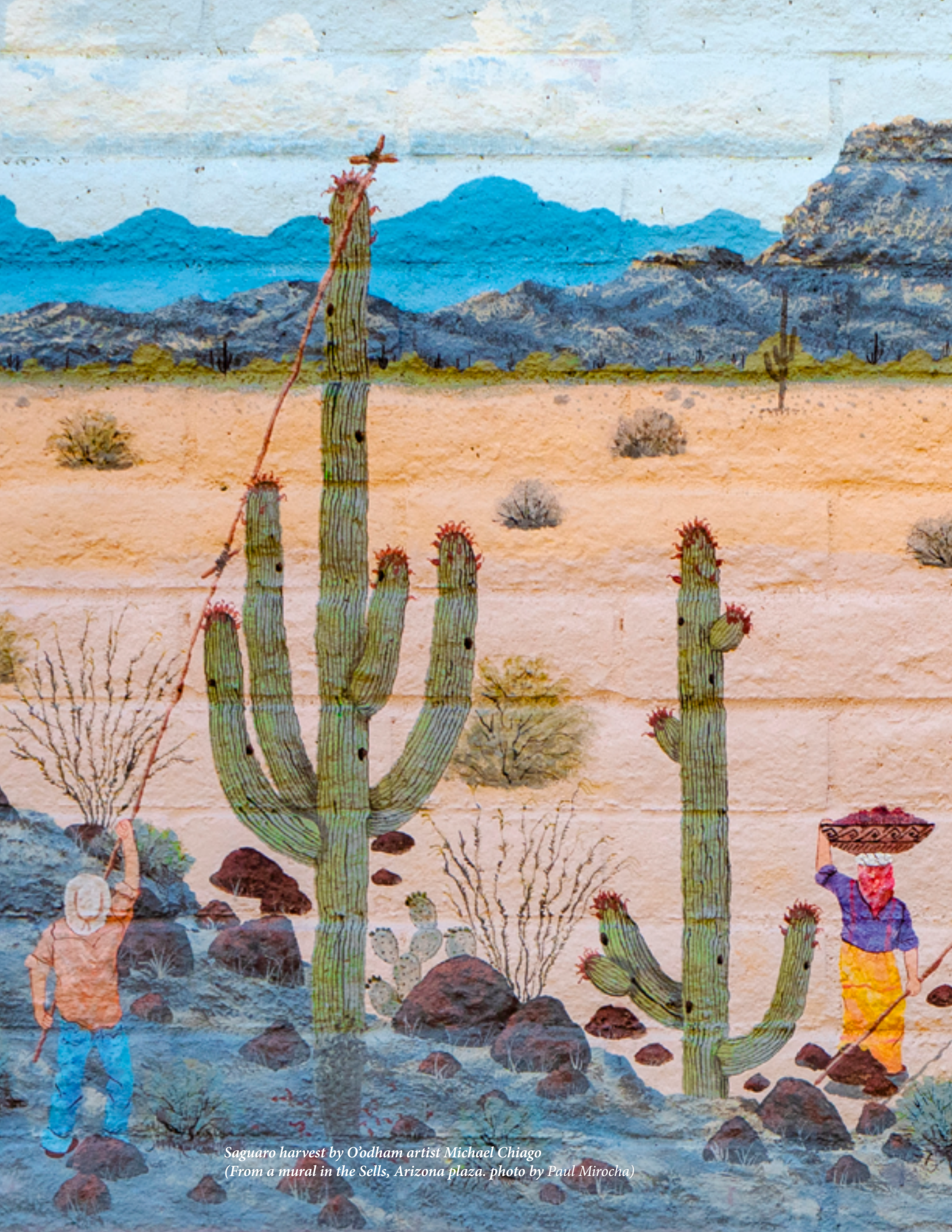
Sacred frankincense tree threatened by overharvesting and overgrazing by camels near Raysut, Oman (photo by Gary Nabhan)



Saguaro harvest by O'odham artist Michael Chiago
(From a mural in the Sells, Arizona plaza. photo by Paul Mirocha)