



Oak News & Notes

The Newsletter of the International Oak Society, Volume 20, No. 1, 2016

IOS Returns to the Morton for 8th Conference

The 8th Conference of the International Oak Society was a delightful event. In honor of the organization's 21st year, the Conference was held in Lisle, Illinois, at The Morton Arboretum – the host site of the first Conference in 1994. A total of 188 people were in attendance, representing 15 different countries. The event was graciously hosted by Dr. Gerard Donnelly, President and CEO of The Morton Arboretum, and Dr. Andrew Hipp, Senior Scientist in Systematics and Herbarium Curator of The Morton Arboretum.

This year's Conference boasted an impressive 26 presentations and 8 workshops on a myriad of topics, as well as 9 poster sessions. Presenters highlighted species from North America, Mexico, and China – discussing topics from phylogeny and genomics to evolution and maintenance. Horticultural researchers shared the latest in breeding, clonal reproduction, and cultivation techniques. The program also included presentations on the cultural and historical significance of oaks such as the legacy of Pathfinder (a sentinel oak), the art of oak-rod basketry, and an inquiry into the consumption of acorns by early humans.

The Conference officially opened on Sunday, October 18 with an address from keynote speaker Sara Oldfield, co-chair of the IUCN/SSN Global Tree



The Conference Committee (clockwise from top left): Henry "Weeds" Eilers, Nick Stoyloff, Andrew Hipp, Megan Dunning, Guy Sternberg, Jim Hitz, Nicole Cavender, Murphy Westwood, Alana McKean, Joe Rothleutner (not in photo: Matt Lobdell). Thank you all for a great job! Photo: ©Guy Sternberg.

Specialist Group. Addressing the issue of conservation, Sara's inspirational presentation echoed the sentiments of the International Oak Society's mission of preservation. The IUCN, or International Union for Conservation of Nature, is an organization dedicated to global conservation. The group is especially known for the creation of the Red List, which details the endangerment status for known species. Earlier that morning, Sara and Dr. Murphy Westwood led a workshop to discuss and update the Red List status for oak species. Many IOS members attended to contribute their knowledge of differ-

ent oaks species to help update the database. Future partnerships between the IUCN, The Morton Arboretum, and the IOS are anticipated.

The following morning, proceedings began at Thornhill Education Center with opening remarks from Dr. Donnelly and Béatrice Chassé, outgoing IOS President, followed by the first round of presentations. In between the intellectual morsels of talks on cutting-edge developments in our knowledge about oaks, attendees were treated to an excellent lunch buffet. Refreshments were also served in the Founder's Room, surrounded by a surfeit of



Quercus acerifolia in The Morton Arboretum. Photo: ©Charles Snyers.

oak souvenirs displayed for the silent auction. Additional information on the silent auction can be found on page 5 of this issue.

Presentations continued into the afternoon, followed by a series of open workshops. These workshops included a tour of the herbarium, a lecture and demonstration on grafting techniques, discussion of oak diseases, and even a botanical sketching class. In addition, a special video, *Quercophiles Abroad*, was shown. Created by Dan Keiser, this nostalgic film chronicled the adventures of the International Oak Society, reminding members of joyous times shared together. The day closed with a reception back in the Founder's Room where a series of poster sessions were set out. Nine presenters were on hand next to their posters to explain their research and answer questions about diverse oak-related topics, such as acorns in traditional food in Korea and tissue culture propagation of *Quercus*, among others.

On the second day, after another schedule of provocative presentations, guests were treated to a much-anticipated tour of the Arboretum itself. Shuttle buses and trams took groups to tour the Schulenberg Prairie, the Oak Collection, the East Woods oak woodlands, and oak forest restoration research sites. With warmth and humor,

foretaste of the coming beauty of spring.

That evening, attendees gathered for a Gala Banquet at the Ginkgo Restaurant at the Arboretum's Visitor Center. Overlooking the gardens, guests admired the landscape lit with the cheery neon glow of festive autumn lights. After a round of drinks and light refreshments the main course was served. During the meal, guest speaker Joel Greenburg delivered the somber but inspirational tale of the extinct passenger pigeon. Immediately following was the IOS Service Awards ceremony, which honored this year's recipients with plaques made from the historic Pathfinder oak. More details on the IOS Awards are on page 5.

The final day of the Conference presentations concluded with a special word from Murphy Westwood about The Morton Arboretum's campaign to complete the *Quercus* entry for the IUCN Red List and to promote future research in oak conservation through the Global Oak Conservation Initiative. Following the IOS business meeting and introduction of the slate of Officers and Board Members for the coming term, the Conference concluded in traditional fashion with a *polite* frenzy of exchanging acorns. Attendees swarmed a small tent outside of the conference hall, gathering both oak

and non-oak seeds as a parting gift.

A special thank you goes out to the Conference Committee of 2015, The Morton Arboretum, the individual and corporate conference sponsors (Diana Gardner, David Gooder, Michael Heathcoat Amory, Bartlett Tree Experts, and an anonymous donor), and all who were involved in making the Conference a big success. This year's Conference glowed with the same passion for research and conservation that united our group over 20 years ago. May the spirit of brotherhood continue to carry the IOS into the future. Here's to our next reunion at the 9th Triennial Conference in 2018, at the UC Davis Arboretum!

Rebecca Dellinger-Johnston

Note: The Conference's 26 presentations, the Keynote Address and the Gala Banquet Address can be viewed on The Morton Arboretum's YouTube channel, in the [Lectures and Symposia](#) feed.

Touring Illinois with the IOS The Pre-Conference Tour

The 2015 IOS Pre-Conference Tour highlighted an amazing diversity of trees and biomes across Southern and Central Illinois. Our wonderful tour guides, Guy Sternberg and Alana McKean, went out of their way to make this whirlwind trip awesome. The first day started out with some



Warren Chatwin poses next to a skull-like burl on National Champion *Quercus shumardii* in Ellis Farm. Below left, Anna Forester chats with owner Mrs. Ellis. Photo: ©Warren Chatwin.

amazing views off the sandstone escarpments at Cliff View Park in Alto Pass, followed by a visit to the gigantic National Champion *Quercus shumardii* at Ellis Farm. If you look closely at the large burl in the photo, you can see that it resembles a skull! Later that evening we enjoyed a stroll through the Pine Hills in Shawnee National Forest and watched a gorgeous sunset from the top of a cliff. That evening we were treated to a delicious Southern-style dinner at the rustic Giant City Lodge in Giant City State Park.

The next morning we hiked through the lush, beautiful Rocky Hollow at Ferne Clyffe State Park filled with rocky outcrops, beautiful fall colors, and lots of ferns (my favorite hike of the trip). Deciding to branch out and look at something other than oaks, we enjoyed a change of scenery at the northernmost ancient *Taxodium* swamp at Heron Pond. Walking the boardwalks through the quiet swamp was a stark change from the cushioned leaf-littered paths we had followed that morning. We eventually made our way back to the forests and visited the Illinois State Champion *Q. pagoda*. Later that night we had a delicious dinner hosted by our friends at Longshadow Gardens. They led us on a tour around their spectacular facilities and their beautiful property.

Our third day began with a shuttle ride across Lake Lou Yaeger so Henry

“Weeds” Eilers could lead us on a tour around the Shoal Creek Conservation Area. After a delicious lunch, we drove to see the ortet tree of *Q. ×deamii* ‘Champion Seedless’, then visited a cool gnarled *Catalpa speciosa* standing outside the homestead Power Farm. Not far from the tree we saw a courthouse built in 1829, where a young Abraham Lincoln pleaded his first case. Later we experienced a beautiful evening tour of the restored New Salem Historic Village, where Abraham Lincoln lived during his formative young adult years.

We spent our last two days around Petersburg, IL, soaking in all the beautiful things we had seen as the Tour came to a close. Most of our group stayed at the Riverbank Lodge, which has two oak trees growing through (planned) holes in the roof! Our guide Guy Sternberg took us to see Abraham Lincoln’s Tomb at Oak Ridge Cemetery, and then showed us around the beautiful and diverse collection outside his home at Starhill Forest Arboretum. On the last day of our trip, we made an exciting discovery while hiking around the Sand Prairie-Scrub Oak Nature Preserve: maybe the first known specimens of *Q. prinoides* in Illinois! We enjoyed our final meal of the Tour under the branches of a massive *Q. macrocarpa* in Bloomington, IL and made our way to The Morton Arboretum for the start of the 8th IOS Conference. It

was an exhilarating trip with many beautiful sights. We look forward to the next one in 2018!

Warren
Chatwin

Note: a detailed report of the Pre-Tour will be published in the next issue of International Oaks.



A probable specimen of *Quercus prinoides* found during the Pre-Tour in Sand Prairie-Scrub Oak Nature Preserve. Photo: ©Roderick Cameron.

Into Indiana with Jim Hitz The Post-Conference Tour

After assisting with the planning and organization for the Pre-Conference Tour, I was certainly looking forward to kicking back on the Post-Conference Tour with our knowledgeable guide Jim Hitz at the helm!

Setting off from the Conference hotel near The Morton Arboretum in Lisle, we traveled east along Lake Michigan’s southern shore, trading busy city streets for views of the spectacular fall colors and varied landscapes of the Indiana Dunes National Lakeshore. Given the diversity of habitats here, including dunes, oak savannas, swamps, bogs, marshes, prairies, rivers, and forest, the park ranks fourth in plant diversity out of all National Park sites in the U.S. with over 1,100 different documented species. The first stop of the day was Cowles Bog, one portion of the 15,000-acre unit. This bog, technically classified as a fen, featured an abundance of colorful red maples (*Acer rubrum*), yellow birch (*Betula alleghaniensis*), and paper birch (*Betula papyrifera*), as well as shrubs such as buttonbush (*Cephalanthus occidentalis*), spice bush (*Lindera benzoin*), poison sumac (*Toxicodendron vernix*), witch-hazel



Lunch with a view: Pre-Tourists admiring the Bloomington Bur Oak. Photo: ©Roderick Cameron.

(*Hamamelis virginiana*), and winter-berry (*Ilex verticillata*). Henry “Weeds” Eilers pointed out a great number of unusual ferns and other herbaceous plants to the tree-centric crowd. We hiked up and out of the fen through the rolling terrain of a woodland on the dunes. As someone who spends a lot of time fighting invasive species, I was impressed with the condition of this forest, where fire and other techniques were obviously used to maintain a fairly open understory and keep the intruders at bay. Eventually, the forest gave way to the views of the lake, stretching out to the horizon.

In the afternoon, at Pinhook Bog in another section of the Lakeshore, park rangers led us into a gated area to see the rare purple pitcher plant (*Sarracenia purpurea*) growing in the sphagnum, surrounded by tamarack (*Larix laricina*) and a handful of white pines (*Pinus strobus*) and red oaks (*Quercus rubra*) that manage to withstand the extreme acidity. We ended the day in New Buffalo, Michigan where we enjoyed a walk on the beach, a fabulous meal, and luxurious accommodations overlooking the harbor.

Day two brought us to Warren Woods, the sole surviving old growth beech-maple forest in Michigan. IOS member Doug Bidlack, who has spent extensive time studying the woods and taking measurements of some of the most impressive specimens of *Fagus grandifolia*, *Quercus rubra*, and *Liriodendron tulipifera*, led us on a hike. He took us past some ancient giants, through flood plain valleys, and across the placid creek that reflected the warm gold tones of the maples all around.

The afternoon was spent exploring Fernwood Botanical Garden and Nature Preserve. A stroll along a hillside stream, dotted with a variety of ferns and other plants tucked in with the native flora, led down to a scenic view of the St. Joseph River, reflecting the surrounding fall foliage. Many cultivated plants in the garden were at their autumn peak during our visit. I recall a particularly nice specimen of *Stewartia pseudocamellia* attracted much attention as Tour members remarked on the



The St. Joseph River at Fernwood Gardens, a highlight of the Post-Conference Tour. Photo: ©Guy Sternberg.

characteristic bark and dazzling foliage. We ended the day with a visit to a much debated large hybrid oak, most likely *Q. ×bebbiana*, a bit of entertainment from our host (Jim is quite the talented musician!), and an evening out in Valparaiso, Indiana.

The final day was bittersweet, exhausted as we were after our travels and sad to know that shortly we would be saying our goodbyes for another three years or maybe more. We headed off under cloudy skies, to walk the unique pin oak (*Q. palustris*) flats of Jasper-Pulaski Fish and Wildlife Area and to observe large numbers of migrating sandhill cranes (*Grus canadensis*) nearby. From there, it was time for the Central Illinois contingent (myself included), to head for home, but the Tour went on to visit Taltree Arboretum’s expanding oak collection as well as their ever-popular Japanese gardens and model railroad exhibits.

Now, reminiscing months later, looking through agendas and photos, remembering the trees and the landscapes, the hospitality and the company—it leaves me looking forward to our next gathering in 2018. Hope to see you all in California!

Alana McKean

Note: a detailed report of the Post-Tour will be published in next issue of International Oaks.



Post-Tourists by a putative *Quercus ×bebbiana* at the residence of Art Davis. Photo: ©Guy Sternberg.

2015 IOS Service Awards

At the Gala Dinner during the Conference at The Morton Arboretum, as is tradition, IOS Service Awards were presented to persons who have devoted significant efforts to the genus *Quercus* and/or the advancement of the goals of the IOS. The Lifetime Service Award is for individuals retired from professional life and the Special Service Award is for those who are not. These were the recipients of the 2015 Awards. A full account of the Awards ceremony, including a description of the services that merited each Award, can be [viewed on the IOS website](#).

Special Service Award

Allen Coombes (UK)

Antoine Kremer (France)

Dirk Benoit (Belgium)

Marcie Mayer (Greece)

Bob McCartney (USA)

Lifetime Service Award

Michel Duhart (France)

Francisco Garin (Spain)

Diana Gardener (USA)

The proceeds from the silent auction will go towards scholarships to attend the next Conference in 2018. I would like to thank those who donated, bid on items, and would like to extend a special thanks to Tammie and Bonnie Jean who helped set up and kept an eye on items throughout the auction. A big thanks also goes to The Morton Arboretum staff, especially Megan Dunning, for helping to organize the event and keeping the proceeds in order.

Corporate donors

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Ryan Russell

tensen of Concordia, Missouri. Concordia is the town where the hybrid was originally found, so it was a promising lead. I met with Jon and his brother Mark on their family farm just outside of Concordia. They showed me two trees growing together alongside the road that were planted by their father, Marvin, about 30 years prior. The brothers told me the story of their father, who worked at the Concordia rest stop where the trees were found. They told me that their dad dug these trees as seedlings from among the hybrid



Leaves of putative *Quercus* *xintrogressa*.
Photo: ©Ryan Russell.

swarm. These were the first trees I had laid eyes on that had direct ties to the original site. Looking these trees over, it was apparent that both had an affinity towards *Q. bicolor*, but neither fit within the morphological range of pure *Q. bicolor*. I collected herbarium specimens from each tree, cupules, and a few remaining acorns.

Mark mentioned that there was another one of these trees planted by their father on the property, and when Paul Thomson visited a couple of years ago, he thought that this tree was the most like the hybrid he described in the 1970s. We drove to that tree and it again showed an obvious affinity with *Q. bicolor*, but its leaves were smaller, and a bit narrower; more like the leaves Thomson showed on the plate in his original publication. I collected herbarium specimens from this tree

Silent Auction at the Morton

The first silent auction held at a Triennial Conference of the IOS was a great success. There were over 50 items to bid on and the selection included artwork, books, jewelry, and oak seedlings. The highlight of the auction was a first edition print of *International Oaks* Issue No. 1, 1992.



Seedlings lined up to be silently auctioned.
Photo: ©Ryan Russell.

Unraveling the Mystery of *Quercus* *xintrogressa* - Part 2

In the last issue of *Oak News & Notes*, I wrote of my crusade to find and preserve *Q. xintrogressa*. A quick recap: this hybrid was described from a single location in Missouri and soon after was destroyed for a building project. I suppose I felt the need to track this plant down as it was originally found only an hour away from my home, and the thought of losing it entirely was not something I could stand. Nearly five years of searching had led to only one questionable grafted tree and a score of undocumented seedlings that looked spot-on for *Q. bicolor*.

Following a tip from Phil Stark of Kansas, I made a phone call to Jon Pe-



A view up the trunk of a putative *Quercus xintrogressa*. Photo: ©Ryan Russell.

and found a few cupules and one remaining acorn. The Petersen brothers have collected acorns from these trees for several years and sent them to the Missouri Department of Conservation's State Nursery in Licking, MO to raise and sell to Missouri landowners. Unfortunately, this trip was too late in the season to find acorns still on the trees, and while the Petersens had picked up several gallons of acorns from these trees, I didn't take any as it would have been impossible to determine which tree they came from. I collected scion wood from each tree and plan to graft a number of each of these so I can grow them much closer to home to evaluate them more easily.

The most exciting part of this trip wasn't finding these trees, which may sound odd. Of course, this was very exciting, but it was the tree that I almost didn't see that was the best part. Many people have expressed a certain amount of doubt (myself included) about Thomson's theory that one half of this hybrid was a hybrid itself (*Q. prinoides* × *muehlenbergii*). These two species can be difficult enough to tell apart and nearly impossible in a three-way hybrid. So, even though I had

found trees that I could tie directly to the original collection site, there was no way to positively tell if the trees I had found were actually the three-way hybrid that Thomson named *Q. xintrogressa*. As I was leaving, Mark made an off-hand comment that his dad had also planted a chinkapin oak (*Q. muehlenbergii*) near the lake and wondered if I'd like to see it. It was on the way out so I said yes. As I casually looked at this "chinkapin" oak, it dawned on me that I was looking at a putative *Q. prinoides* × *muehlenbergii* hybrid, and better yet, the brothers think that their father took this tree from the original site. Admittedly, I am inferring some of this information as Marvin passed away in 2007 and I cannot ask him more specific details. However, if my suspicions check out, I believe it can be concluded with a certain amount of confidence that the three trees suspected as being *Q. xintrogressa* on the Petersen property are the real deal. I will await confirmation from real experts before I call this hunt a success. Andrew Hipp from The Morton Arboretum has agreed to analyze DNA of these specimens and report his findings. Perhaps this story will have a happy ending after all.

Ryan Russell

Note: you can view more photos in the [online version of this article](#) on the IOS website.

Plant Collecting Collaborative Expedition to the Southeastern United States

The Southeastern United States was largely spared from glaciation, explaining in part the much greater level of plant diversity of the region compared to the Northeastern and Midwest regions. For example, the state of Alabama boasts 40 native *Quercus* species alone, and the region overall is home to 5 rare oaks of conservation concern: *Q. acerifolia* (maple-leaf oak), *Q. arkansana* (Arkansas

oak), *Q. boyntonii* (Boynton sand post oak), *Q. georgiana* (Georgia oak), and *Q. oglethorpensis* (Oglethorpe oak). It was therefore a region of interest for the newly reformed Plant Collecting Collaborative (PCC), a group of United States Botanical Garden Professionals.

Following the 2015 IOS Conference, the PCC traveled to the Southeastern United States on a seed collection expedition with a goal of collecting as many *Quercus* taxa as possible, particularly focusing on species of conservation concern. This was the first PCC expedition to occur in the last five years and was led by Matt Lobdell (Head of Collections and Curator, The Morton Arboretum), with other participants at varying stages of the trip including Andrew Bunting (Chicago Botanic Garden), Ethan Kauffman (Moore Farms Botanical Garden), Greg Paige (Bartlett Tree Research Laboratories and Arboretum), Tim Boland (The Polly Hill Arboretum), Amy Highland, and Cat Meholic (both from Mt. Cuba Center).

The group began their journey near the city of Orange Beach, Alabama on the coast of the Gulf of Mexico, where they were guided by Patrick Thompson (Davis Arboretum of Auburn University) and local landscape architect Daniel Neil. Despite high winds and rain in the aftermath of Hurricane Pa-



Quercus arkansana in Gulf State Park, one of the southernmost populations of this species. Photo: ©Matt Lobdell.

tricia, the group was able to collect acorns of *Q. geminata*, *Q. hemisphaerica*, *Q. laevis*, *Q. minima*, and *Q. virginiana*. A small population of *Q. arkansana* in Gulf State Park (one of the southernmost populations of the species) was also visited, though it was not bearing fruit.

Next, the group traveled to central Alabama (mainly the Birmingham area) in hopes of collecting seed from several populations of *Q. boyntonii* and one of *Q. georgiana*. Led by Fred Spicer (Birmingham Botanical Gardens), the first stop was a residential neighborhood in the city of Mountain Brook, where Mr. Spicer had previously observed two large *Q. boyntonii* preserved in the lawns of residential properties. As Birmingham is a post-Reconstruction city dating from 1871 and Mountain Brook itself was developed as a residential community beginning in the 1920s, commercial availability of *Q. boyntonii* during the area's development, if any, would have been quite limited. Consequently, these trees are thought to be remnants of a previously existing, more extensive population. Though one of the two trees appeared in poor condition, the other was performing better and produced a quantity of acorns suitable for collection.

The next stop was the parking lot of an industrial facility, where Howard Hughes (Birmingham Botanical Gar-

dens) had previously noticed several plants he suspected to be *Q. boyntonii*. Further investigation confirmed his suspicions and seed collections were made from four fruiting plants.

After these forays in residential and industrial contexts, the group collected in a truly natural setting, the Moss Rock Preserve. Though evidence of human encroachment was still visible given spontaneous seedlings of *Camellia sasanqua* and *Nandina domestica*, the lands were of much greater quality the further the group hiked. One collection of *Q. boyntonii* was made, but none of the observed *Q. georgiana* in the shady area was fruiting. Finally, upon reaching an open, flat rock habitat, one solitary *Q. georgiana* revealed itself with a significant quantity of fruit for collection. Other *Quercus* taxa of interest collected here included *Q. coccinea* and *Q. montana*.

Western Alabama was the next area of exploration, where two days were spent under the guidance of Dr. Brian Keener (University of West Alabama) and Wayne K. Webb (Superior Trees). The group visited a variety of sites from the chalky outcrops of the Tombigbee River, the Swann Covered Bridge over the Locust Fork of the Black Warrior River, to the botanically famous Bibb County Glades. Highlights included two collections of *Q. arkansana* in Sumter County and a collection of *Q. boyntonii* in St. Clair County.

Before the journey was done, two more states were visited. First was Georgia, where the group was able to observe and collect from a large population of *Q. oglethorpensis* and *Q. shu-*



Brian Keener leading the group through the Bibb County Glades. From left to right: Amy Highland, Wayne K. Webb, Greg Paige, Ethan Kauffman, Brian Keener.

Photo: ©Matt Lobdell.

mardii in Oconee National Forest under the guidance of John Jensen and Tom Patrick (Georgia Department of Natural Resources). We then traveled south to the Fall Line Sandhills Wildlife Management Area where an additional four species were collected: *Q. hemisphaerica*, *Q. incana*, *Q. laevis*, and *Q. margarettae*. Finally, the last stop was made in western South Carolina, where one more collection of *Q. oglethorpensis* was made in McCormick County along with collections of *Q. coccinea* and *Q. marilandica*.

The expedition was by most accounts a success, with the collections of *Q. boyntonii* in both St. Clair and Jefferson Counties, Alabama, representing germplasm not currently in ex situ conservation in North American botanical gardens and arboreta, likely the most valuable. However, not all was good news: Mike Gibson (Huntsville Botanical Garden) guided an effort to locate a disjunct population of *Q. georgiana* in Limestone County (northern Alabama), only to find the site had been recently logged. Similarly, efforts to locate documented populations of the species in Chambers and Randolph Counties, Alabama (near the Georgia Border) were unsuccessful, though they could hopefully still be located given a more concerted scouting effort. Still, seed from the 28 collections of *Quercus* species are currently in pro-



From left to right: Cat Meholic, Greg Paige, Tim Boland, Tom Patrick collecting *Quercus oglethorpensis* in Oconee National Forest. Photo: ©Matt Lobdell.

duction at The Morton Arboretum, Chicago Botanic Garden, and several other institutions nationwide where the plants will be utilized for ex situ conservation, research purposes, and general appreciation by the oak enthusiast.

Matt Lobdell

Oak Red Listing Project Update

In January 2015 The Morton Arboretum launched a project in collaboration with BGCI and the IUCN/SSC Global Tree Specialist Group, which aims to complete IUCN Red List threat assessments for all of the world's oak species. Many oak species are known to be facing habitat destruction, climate change, invasive pests and pathogens, and competition from invasive plants. Therefore, it is important to have an up-to-date understanding of the threats facing this globally important tree genus.

To complete the Red List assessments, we have been gathering extensive data on oak distributions, threats, population trends, and human uses. Development of relationships with the global network of oak experts is a key step, and the International Oak Society network has been, and continues to be, a valuable resource for the oak red listing project. We thank all involved in-

dividuals for their help so far, and look forward to further input from IOS members as we continue to pursue our goal.

At this time, we would like to announce a new milestone in our project—the completion of a final list of the oaks of the Americas that will be used as the basis for our IUCN Red List assessments! (The list can be [downloaded on the IOS website.](#))

Since there is no single agreed upon global checklist for oak species, we have reviewed many sources and collaborated with a variety of experts to create a conservation-focused species list. We will be completing a final species list for the Old World oaks within the coming months.

For a year-end update on our assessment progress, 65 assessments were accepted by IUCN in 2015, 52 of which have been published on the Red List and are available to the public (www.iucnredlist.org). The next update to the Red List will be in summer 2016.

Please don't hesitate to share with us your new or changing insights regarding oak taxonomy or conservation issues. For further information on the oak red listing project or to contribute data, please contact Dr. Murphy Westwood, Tree Conservation Specialist at The Morton Arboretum: mwestwood@mortonarb.org

Emily Beckman and
Murphy Westwood



Young leaves on a *Quercus crassifolia* in Chevithorne Barton, Devon, UK. Photo: ©James MacEwen.

Species Spotlight

Quercus crassifolia Bonpl.

Quercus crassifolia is a tree ranging in height from 4 to 15 meters, and is usually easily recognized by its leaves: stiff and leathery, glossy blackish green above, covered with a layer of pale brown hairs beneath, and with bristle-tipped teeth above the widest part of the leaf. It was first collected by Alexander von Humboldt and Aimé Bonpland on their famous five-year journey to Latin America at the cusp of the 18th and 19th centuries; the name was published by Bonpland in 1809, thus making this species one of the first Mexican oaks to be described (several species were described by Luis Née in 1801). Amongst its numerous common names in Spanish, perhaps the most distinctive is *Encino chicharrón*, based on the similarity between the leaves and the fried pork rinds popular in Mexican cuisine and known as *chicharrones* (*encino* is one of the generic terms for *Quercus* in Mexican Spanish). The epithet *crassifolia* derives from the Latin *crassus*, meaning solid, thick, or coarse (it is the origin of the English word “crass”), and refers to the thickness of the leaves.



Quercus oglethorpensis, listed as endangered on the IUCN Red List, in Jasper County, Georgia, photographed by Andrew Bunting on the PCC seed collecting trip. ©Andrew Bunting.



The species is widely distributed in Central and Southern Mexico and in Guatemala, and is found in oak and pine-juniper forests at an elevation of 1,300 to 2,900 m in Mexico and at lower elevations in Guatemala. It is commonly associated with species such as *Pinus patula*, *P. leiophylla*, *Q. rugosa*, *Q. laurina*, *Q. affinis*, and *Q. crassipes*. It is in the category of Least Concern in the Red List of Threatened Species, and its wood is used for the manufacture of agricultural implements and tool handles, as structural posts in house building, and for firewood. Charcoal obtained from this species is long lasting and has good



Quercus crassifolia leaves and acorns.
Photo: ©James MacEwen.

weight. According to Romero et al.¹, the saplings are edible, after being cooked, ground, and mixed with corn; they are also an ingredient in a potion administered to women after giving birth. The bark is used to alleviate inflamed gums, to tan leather, and in the preparation of agave-based beverages.

One of the attractive features of this oak is its young leaves, which emerge densely covered in velvety red hairs and are silvery and tomentose beneath. As they mature they turn a glossy dark green, becoming coriaceous and rugose with impressed veins. The tree is

deciduous or semi-evergreen in the wild, losing its leaves just before the new ones are produced, but in cultivation it appears to be evergreen. It flowers in April and the acorns ripen in May to November, in the first or second year. The acorns are ovoid and 1-2 cm long and about 1 cm in diameter, light brown, glabrous, striated, and enclosed by a hemispherical cupule to about one third of their length. The interior of the acorn cup is wooly. The bark is smooth and grey on young trees and becomes dark and deeply fissured with rectangular scales and numerous lenticels about 3 mm long.

Q. crassifolia hybridizes with several other Section *Lobatae* species in the wild, especially *Q. crassipes* to form *Q. ×dysophylla* (this hybrid was originally regarded as a species and some authors still maintain that status). Other less frequent hybrids are found with *Q. affinis*, *Q. candicans*, and *Q. laurina*.

It was introduced to Europe in 1939 by G.B. Hinton and one of the original trees survives at Caerhays Estate in the United Kingdom. *Q. crassifolia* is also represented at Chevithorne Barton, Jardín Botánico de Iturraran, Arboretum des Pouyouleix, and some of the best trees in cultivation are found at Hackfalls Arboretum in New Zealand, which also holds a number of its hybrids, all collected by Bob Berry in several localities in Mexico.

¹ S. Romero Rangel, E.C. Rojas Zenteno, L.E. Rubio Licona, Encinos de México (*Quercus*, Fagaceae) 100 especies. Mexico City: Universidad Nacional Autónoma de México, 2015

This text is based on the entry for Quercus crassifolia in the book Encinos de Mexico by Silvia Romero Rangel, Ezequiel Carlos Rojas Zenteno and Liliana Elizabeth Rubio Licona, as well as other sources. A complete list of articles and books consulted can be found in the online version of this article on the [IOS website](#).

Roderick Cameron

Hybrid Highlight Ware Oak

Quercus ×warei T.L. Green & W.J. Hess is a hybrid between an Old world and a New World species (*Q. robur* and *Q. bicolor*), which has occurred several times in the United States. In most cases the female parent is *Q. robur* Fastigiata Group and the result is usually a fast-growing, columnar, hardy oak. The hybrid was named by Bill Hess and Tom Green in honor of George



Quercus ×warei 'Long' (Regal Prince™).
Photo: ©Ryan Russell.

Ware, the former research director at The Morton Arboretum in Lisle, IL. Mr. Ware was particularly interested in hardy oaks and selected this hardier form of the columnar *Q. robur* for landscaping purposes. *Q. ×warei* is usually a tree that can thrive in a much wider range of conditions than its parent species and tolerates drought, flooding, poor soils, and annual extreme temperatures as low as -34 °C. It is also particularly resistant to powdery mildew (a common problem for *Q. robur*). Many individuals of this hybrid have dark green leaves with brilliant silvery undersides that resemble the *Q. bicolor* parent. Both parents' influence is often seen in the numerous acorns suspended on unusually long peduncles, though as with all hybrids, these characteristics are variable. The attractive form and environmental resilience of *Q. ×warei* make it extremely popular and versatile as a landscape tree.

The two most readily available cultivars of *Quercus ×warei* are

‘Long’ (Regal Prince™) and ‘Nadler’ (Kindred Spirit™). These were selected by Earl Cully as F₁ hybrids from over 1,000 seedlings of a *Q. robur* Fastigiata Group pollinated by an unnamed *Quercus bicolor* in Columbia, MO. These two cultivars are fairly similar, but ‘Long’ (Regal Prince™) has a broader crown of ~ 4 m at 21 years whereas ‘Nadler’ (Kindred Spirit™) has a crown spread of ~ 2 m at 30 years.

Another cultivar, ‘Windcandle’, was selected by Guy Sternberg of Starhill Forest from the offspring of a putative F₋₁ *Q. ×warei* growing in Petersburg, IL (a selection soon to be registered as ‘Riverbank’). ‘Windcandle’, named after Elton John’s musical tribute to



Two specimens of *Quercus ×warei* × *alba* ‘Birthday Candle’. Photo: Ryan Russell.
Inset: *Quercus ×warei* leaves and acorns.
Photo: ©Warren Chatwin.

Princess Diana, is an F₂ hybrid with typical *Q. ×warei* characteristics and is believed to be a self-pollinated seedling of ‘Riverbank’. A further two cultivars selected from the same source, ‘Chimney Fire’ and ‘Birthday Candle’,

are not strictly speaking *Q. ×warei* as they were naturally outcrossed with *Q. alba*, which increased spring and fall color. ‘Chimney Fire’ has a more uniform crown than ‘Windcandle’ and its foliage emerges with a red color in spring and turns russet to maroon in late fall. ‘Birthday Candle’ is a little narrower and generally presents two-toned fall color, with colored (younger) and green (older) leaves occurring together at the same time. Unlike ‘Windcandle,’ both ‘Chimney Fire’ and ‘Birthday Candle’ tend to be marcescent (they hold on to their leaves during the winter). Overall, there is a beautiful diversity of resilient *Q. ×warei* cultivars that make it a great tree to consider for your landscape.

A complete list of *Q. ×warei* cultivars can be found in oaknames.org.

Warren Chatwin

Acorns - Eat Some, Plant Some

*M*ighty Wild Provides Funding for Planting Trees to Restore Blanco River After Devastating Floods in Wimberley, Texas.

If you look at a box of Mighty Wild Acorn Crackers, you will see “Acorns – Eat Some, Plant Some” emblazoned across the top, showing the company’s commitment to donating a portion of product sales to planting trees – oak trees. Fellow IOS member Mimi Brown started the company with a mission-based philosophy. She not only wanted to challenge the way people think about food but also sought to make food with a purpose. You can



“Team Mighty Wild!” with the Texas A&M Forest Service and a newly planted cedar elm (*Ulmus crassifolia*) at the RETREET event in Wimberley, Texas. Chinkapin oaks (*Quercus muehlenbergii*) were planted at other sites.

Photo: ©Mimi Brown.

read more about Mighty Wild on their website: www.mightywild.com.

On Sunday, January 17, Mighty Wild partnered with the Arbor Day Foundation, the Texas A&M Forest Service, and RETREET to plant over 200 trees along the Blanco River in Wimberley, Texas. Planters and supporters saw firsthand the devastation of the Memorial Day weekend floods eight months prior, which turned into a night of tragedy when the swollen Blanco River ripped through the Wimberley banks, carrying away trees, bridges, and homes. These floods caused 12 deaths, led to over 200 emergency rescues, and put an estimated 350 homes underwater. Mighty Wild’s founder, Mimi Brown, personally knew several of the Wimberley flood victims, including her seventh-grade teacher, Michelle Carey-Charba.

Although the human tragedy of the Blanco River flood must never be forgotten, the tree-planting will provide a sense of healing for residents of Wimberley. These trees also will help mitigate the destruction caused by future floods.

Mighty Wild plans to plant more trees in Bastrop, Texas in the fall of 2016 as part of a reforestation initiative after wildfires struck the area.

Roderick Cameron

Society News

From the Board

This is the first issue of *Oak News & Notes* since our 2015 Conference at The Morton Arboretum in Lisle, IL. The Conference was a great success. You can read about it in the cover article of this newsletter and you can look forward to the full Proceedings in the upcoming issue of *International Oaks*, the Journal of the IOS.

Board meetings and a general meeting of the members also took place at the Conference. Two board members had not wished to run for re-election. Allen Coombes did indeed leave the board on which he had served since 1994, including as President of the Society. Emily Griswold is also leaving the Board after one term during which she had taken responsibility of a key activity of our board: membership management. Allen remains a member of the Taxonomy Committee and co-editor of *International Oaks*. Emily took on the role of Conference organizer for the 2018 Conference in California. I thank them both heartily for the work they have done for the Society and the work they will continue to do in other capacities.

I remind you that the management of the Society is entirely conducted by volunteers from our membership and that we have a chronic lack of candidates to fill Board or Committee positions. Therefore, we have only one new Board Member joining for this term: Robert Routon succeeded Emily

Griswold as Membership Director (see more about Robert *infra*). I welcome Robert and thank him for volunteering for this critical task.

Incidentally, at its first meeting in Lisle, the new Board elected its Officers for the 2015-2018 term. Gert Fortgens was reelected as Secretary and Jim Hitz as Treasurer. Shaun Haddock was elected Vice-President and I was elected President. Further details on our current organization can be viewed on the next page.

But let us get back to membership management. We also held our triennial Meeting of Members on the last day of the Conference. The assembly approved an increase in membership fees and the Board voted it a month later. These new fees are applicable starting January 10. The new membership categories and associated dues are described below. (I sent a bulk e-mail to all of our members detailing the reasons for this increase. For about 5% of our membership, however, we do not have an e-mail address on file. Further, some SPAM filters also block our mails, notably AT&T that blocks e-mails sent to their customers or customers of some of the Baby Bells. If you have not received that email dated December 19, please get back to us by writing to

postmaster@internationaloaksociety.org).

Members who need to renew their membership now will find a membership form with this issue of *Oak News & Notes*. You can use that paper form to renew by sending it back to our treasurer, Jim Hitz, or

you can renew online. Our online payment system is PayPal which allows payment through a PayPal account or by credit card.

I leave it at this for now. I wish you an excellent year 2016. You can always contact me to make comments or ask questions by writing to

charles@internationaloaksociety.org.

Charles Snyers



New IOS Membership Director with a juvenile alligator (*Alligator mississippiensis*) he is training up to let loose on members who fail to renew on time. Photo: ©Robert Routon.

From Our New Board Member

As your new Membership Director, I wanted to briefly introduce myself and wish everyone a fruitful 2016. I also wanted to thank each of you for all of the interaction and support during the current membership renewal period. Emily Griswold and Charles Snyers have been very patient with me and extremely helpful as I learn the ropes.

I studied forestry and environmental engineering at Louisiana Tech University. I am currently employed by the State of Louisiana with the Coastal Protection and Restoration Authority where I manage large civil works projects designed to restore ecosystems from coastal land loss and protect areas from hurricane and flooding impacts. During my career, I have been active in several professional organizations and involved with multiple administrative committees. My interests have always revolved around various forms of horticulture, and I have devoted much of my free time to restoring private sections of agricultural land and pastureland back to hardwood forest. I continue to enjoy learning about the many different aspects of oak species and the keys to their field identification.

New Membership Types

Standard membership (1-2 persons in the same household): 1 issue of *International Oaks*, 2 issues of *Oak News and Notes* (print or email), access to

"members only" resources on website, ability to attend triennial conferences and seed exchanges

Student Membership: full standard membership benefits for 1 year (ON&N by email only).

Life Membership (1-2 persons in same household): full standard membership benefits for life

Supporting Membership (1-2 persons in the same household): full standard membership benefits, recognition in our Journal *International Oaks* (with possible opt-out)

Institutional Membership (3-year membership): full standard membership benefits for three years, unlimited number of staff members of the institution can attend IOS events, recognition in *International Oaks*.

New Membership Fees

Membership Category	Fee (USD)
Standard—One Year	40
Standard—Two Years	75
Standard—Three Years	110
Supporting—One Year	80
Supporting—Two Years	150
Supporting—Three Years	220
Student—One Year	20
Institutional—Three Years	500
Life Membership (valid for 1-2 pers.)	1,200

Board of Directors 2015—2018

Officers

President: Charles Snyers d'Attenhoven

Vice-President: Shaun Haddock

Secretary: Gert Fortgens

Treasurer: James Hitz

Functions

Membership Director: Robert Routon

Editor International Oaks: Béatrice Chassé

Co-Editor International Oaks:

Allen Coombes

Tour Director: Shaun Haddock

Editor Oak News & Notes:

Roderick Cameron

Co-Editor Oak News & Notes: Ryan Russell

Website Editor: Roderick Cameron

Website Administrator: Charles Snyers d'Attenhoven

As many of you are aware, our membership rate structure has recently been updated to better serve our organization and members (see previous page). If you have any questions on this or any other issue involving membership, please feel free to contact me at membership@internationaloaksociety.org and I will be more than happy to get the answers. Of course, we can also talk about oaks!

Robert Routon

Membership Director

2016 Tours and OODs

Except for the UK, 2015 was a low-key year for the Tour Committee in order not to detract from the Conference and its excellent associated tours. Now in 2016 we are organizing a fuller program, outlined below. A "Tours" e-mail will be sent out once dates and contacts become firm, and please also keep an eye on the IOS website for the latest information.

To deal with the USA first, staunch IOS member Mike Meléndrez is willing to share his encyclopaedic knowledge of the oaks of the Southwest with a double bill of tours, in both 2016 and 2017. In the last two weeks of October 2016 a tour will cover the Capitan, Guadalupe and Sacramento Mountains of southeast New Mexico, and then the Glass, Davis, and Chisos mountains of Trans-Pecos Texas. In late September and early October 2017, Mike

will cover southwest New Mexico and southeast Arizona. I can't do any better than to quote Mike regarding the 2016 tour:

"Trees that we could see on the 2016 trip would be... the large single-stem specimens of *Q. gambelii* of the Sacramento Mountains, *Acer saccharum* sub. *grandidentatum* of the high elevation White Mountains, and *Q. vaseyana*, *Q. pungens*, *Q. mohriana*, and *Q. muehlenbergii* of the Guadalupe Mountains. We could climb Guadalupe Peak, highest point in Texas, and see the isolated *Q. mohriana* and *Q. gravesii* on the Glass Mountains where they cannot hybridize with anything else. On the return trip back to the Albuquerque metropolitan area, we could stop and see La Sierra de los Organos, the Mountains of Solitude in Southern New Mexico. Also known as the Organ Mountains, they have more taxa than any other mountain range in the Southwest and they climb 5,000 feet above the surrounding desert floor. Here we can see pure *Q. arizonica* and good examples of *Q. turbinella* and once again *Q. gambelii*. This mountain can give us a beautiful and doable four-mile mountain hike from the desert up into the ponderosa pines, many oaks and huge *Juniperus deppeana* can also be seen..."

These tours will be unmissable: those lucky members who participated in Mike's first IOS tour in 2001 have been clamouring to return ever since!

Remaining on the same side of the Atlantic, Roderick Cameron is organizing a two-day Oak Open Day (OOD) event on April 22-23, 2016 to visit Argentina's two most notable oak arboreta: Grigadale, planted by his late father Duncan but continually added to by Roderick; and well-known IOS member Peter Laharrague's Estancia San Miguel, a large and comprehensive arboretum containing the largest oak collection in Argentina. Whilst designed to attract local participants, Roderick is hoping that some members may be able to travel from abroad: if you would like to attend, please contact the organizers at roderick@internationaloaksociety.org as soon as possible so they can arrange additional attractions to make the trip even more worthwhile.

This year's UK OOD event commences on

Sunday, July 17 with a visit to the young collection of David Gooder at Atherstone near Coventry. David has amassed a most interesting collection from many sources including sponsorship of collectors in the wild, and I hope this will be the first of many visits. The following day, July 18, is also a chance not to be missed to visit the important tree collection of Lord Heseltine on the 70-acre estate at Thenford House in Northamptonshire. Rarely open to the public, over 3,500 species have been planted, many collected in the wild, including a notable collection of oaks. In addition to the botanical interest, the estate is exceptionally beautiful, containing three large lakes, many sculptures, and a formal garden. Lord Heseltine will be there to welcome us personally. Please register your interest for either or both days via tours@internationaloaksociety.org. In addition we are planning to hold an arboretum visit in Belgium, most probably in August.

Finally, we have been invited to view the collections of two of our members in Ireland: that of Sir Brendan Parsons, the Earl of Rosse, at Birr Castle; and that of Johnny Couchman near Carlow. I would envisage that this tour would take place in May or June 2017 before the tourist season is fully in swing, and that these visits would form part of a longer tour: there are many splendid gardens and collections to visit, including Abbeyleigh, Powerscourt, Mount Usher, Mount Congreve, and the National Botanic Garden at Glasnevin and Kilmacurragh. If you would be interested in participating please contact tours@internationaloaksociety.org, as I would like to ascertain if we could run this as a low-cost car-sharing tour or whether we would need to make other transport arrangements.

Shaun Haddock
Tour Director

Points of Contact

Submissions for the Newsletter

Roderick Cameron - Ryan Russell

newsletter@internationaloaksociety.org

Submissions for the Journal

Béatrice Chassé - Allen Coombes

journal.editor@internationaloaksociety.org