



Oak News & Notes

The Newsletter of the International Oak Society, Volume 17, No. 2, 2013



Original artwork by Keiko Tokunaga of *Quercus aliena* Blume.

Why I Draw Oaks

I have been drawing *Fagaceae* species for twenty years and in 2004 I published *Pictorial Encyclopedia of Oaks in Japan*. You may ask why I draw *Fagaceae* exclusively, but I have no specific reason for this. I just happened to start drawing them and continued the work because it was a pleasure to do so.

I used to draw illustrations for children's books, but I wanted to draw real things as precisely as possible instead

of drawing simple images featuring what I was asked to show. I like animals, birds, and insects, but they are hard to catch. There are beautiful flowers like roses, orchids and cherry blossoms, but they are already very popular subjects for drawings. So I decided to pick some trees, because I like big trees.

Though I like trees, I have not studied botany. Therefore, I decided to pick some trees which could be found easily.

They would be those found in parks or in the natural forest.



Seedlings of *Quercus myrsinifolia* Blume.

Fagaceae drop fruit which can be good marks to locate the tree. So I chose them. Japanese children like acorns. They go to the park every autumn to pick acorns and colored leaves, and make toys or handcrafts in kindergarten or elementary school. There are many kinds of acorns, round, big or small, but we



Quercus myrsinifolia.

call all of them *donguri* in Japan. Even adult people call them *donguri*, not knowing the exact species name, and sometimes they tell me they do not know that oaks flower.

Japanese people ate acorns until a hundred years ago. Acorns are not tasty, but they were one of the available foods along with millet for the

majority of people in feudal times, when only upper class people could eat rice. So acorns helped save many people then and were a part of the culture of the time. However, as the first phonic character *don* means inferior or second grade, *don-guri* means not tasty as *guri*, which means chestnut. It is true, but I think it is an unfair name considering their contribution in the past.



Quercus serrata Murray.

I learned a lot while drawing, then I wanted to know more and it kept me drawing. Since publishing my book I travel internationally with my retired husband to find noteworthy acorns, like the largest or the smallest. It is really fun, but what is more important is that I have been able to meet many friendly people around the world through my drawing activity.

Keiko Tokunaga

IOS Member Receives Prestigious Fulbright Scholarship

Dr. Andrew Hipp of The Morton Arboretum has received a Fulbright Scholarship to continue his work in oak phylogenetics. Andrew's research program investigates the biodiversity of oaks which dominate many forested ecosystems in North America, Europe, and Asia. With over 400 species in a wide range of habitats, oaks play a critical role in global carbon sequestration and

community dynamics and the life cycles of fungi, insects, birds, and mammals.

The host for this collaborative project is another IOS member, Dr. Antoine Kremer. Antoine is Senior Scientist in the department of Ecology and Functional Genomics at INRA, the French National Institute for Agricultural Research EVOLTREE (www.evoltree.eu) is a consortium of 23 research groups in 13 European countries that investigates "the evolution of trees as drivers of terrestrial biodiversity." Andrew's home institution, The Morton Arboretum, is a leader in the global arboretum com-



Dr. Andrew Hipp from The Morton Arboretum. (Photo: The Morton Arboretum)

munity through ArbNet (www.arbnet.org) and through its Center for Tree Science, which houses a focused research program in the biology of trees and wooded ecosystems (www.mortonarb.org/research).

Along with the Morton, EVOLTREE is a natural partner in this project and forms an exciting group for future collaborations. Andrew and Antoine will be utilizing cutting-edge DNA sequencing and genome mapping methods to investigate how oak genomes have responded to past climate changes. Forests of the Temperate Zone worldwide face imminent and potentially rapid transitions in species composition and ecological dynamics as a consequence of

climate change, and studies such as this are essential to understanding how temperate forests will respond to climate change.



Dr. Antoine Kremer. (Photo: courtesy INRA)

This project will bring together a unique data set that Andrew, Antoine, and collaborators from the U.S. and Mexico have generated on the evolution of oak biodiversity with sophisticated genetic resources developed by Dr. Kremer and colleagues. They will be exchanging expertise and knowledge in bioinformatics, phylogenetics, and biodiversity to address questions that are key to understanding how oaks will evolve in response to climate change and that can only be answered in collaboration.

Ryan Russell

Stellenbosch City of Oaks

The Cape Winelands region to the northeast of Cape Town, South Africa, is to me synonymous with leisurely alfresco lunches (*bien arro-sés*, as the French would say, with one of the splendid wines of the area). During one such lunch, on the final day of my most recent visit in March, every gust of wind brought a renewed explosion of acorns bouncing from the overhead sunshade (acorns in March? – don't forget the 'reversed' seasons of the Southern Hemisphere). Our local companion quoted, "You're not a true Stellenboscher unless an acorn has fallen on

your head" and added, perhaps apocryphally, that many years ago Princess Elizabeth (now Queen Elizabeth II), traveling through the city in an open carriage with her sister Princess Margaret, became an acorn victim and thus an honored member of this select band. (And one can always blame one's after-lunch headache on an acorn...)

The above is all the more unexpected in that not only are there no oaks native to sub-Saharan Africa, but indeed there are very few trees at all in the flora of the fire-dominated Fynbos Biome in which much of the Winelands region lies. It was a practical consideration that brought about the first oak plantations on the Cape in the seventeenth century. Wear and tear often necessitated repairs on the sailing ships making the long and hazardous return journey round the Cape of Good Hope from Europe to the East Indies, and it was hoped that locally grown oaks could provide the strong timbers required. However, these hopes were soon dashed when it was found that *Quercus robur* L. and *Q. petraea* (Matt.) Liebl. grew too fast in the local climate, and produced weak timber overly prone to rot. Thus perhaps it was a mixture of European nostalgia, the need for shade, and even the provision of porcine pannage that ensured that oaks continued to be planted through the succeeding centuries.

So essential are introduced oaks to the aspect of the city of Stellenbosch, the 'center' of the Winelands, that it is known in the Dutch-derived Afrikaans language as 'Eikestad,' the City of Oaks. These plantations are limited to only a few species – in addition to *Q. robur* and *Q. petraea*, one finds *Q. cer-ris* L., *Q. suber* L., *Q. nigra* L., and



300-year-old *Quercus robur* L. at Vergelegen. (Photo: Shaun Haddock)

Q. palustris Münchh.; more occasionally *Q. ilex* L., and *Q. coccinea* Münchh. The European white oaks are used less now in street plantings due to their susceptibility to mildew, and *Q. nigra* is apparently the current landscapers' favorite. Although totally unsuited to this dry Mediterranean climate, *Q. palustris* copes surprisingly well, but it is clear that there are many species, as yet not introduced, which should thrive much better in the conditions.

Two estates in the 'Greater Stellenbosch' area are at present trying to extend the range of their oak plant-



Quercus leucotrichophora A. Camus. (Photo: Shaun Haddock)

ing: Vergelegen, owned by the mining conglomerate Anglo American; and the privately-owned estate of

Rustenberg. Both estates are open, at least in part, to the public. In addition, a 'quercetum' under the auspices of the municipality has been under discussion, but remains unconfirmed; there is also a possibility that a similar project may be created at another large estate. Hurdles still to be overcome include restrictions on the import of seed and plant material into the Republic.

In addition to several oaks planted by visiting royalty, Vergelegen claims to have the oldest surviving oak in Southern Africa (a venerable *Q. robur*, now hollow and thus undateable but allegedly 300 years of age), and has recently opened a new oak arboretum. Together with Anke Mattern, I was kindly invited to plant an oak at the official opening in November 2012 (with a gold-painted shovel!); the IOS subsequently gained some publicity in the local press (albeit slightly misquoted), see link:

www.wine.co.za/news/News.aspx?NEWSID=21866.

Should you visit the estate, a must-see is a row of elephantine camphor trees (*Cinnamomum camphora* [L.] J. Presl) near the manor house; it is also possible to picnic within a 'forest' of almost equally large trees of the same species (a snake once joined us for coffee...).

Rustenberg has some large specimens of the less-seen species, but a large *Q. coccinea*, ostensibly ideal for the region, seemed to be suffering in waterlogged ground after a particularly wet winter and spring in 2012 (which might equally explain why *Q. palustris* often does so well). However, the beautiful gardens alone are worth a visit, and the owners and head gardener are enthusiastic about oak planting. The flora of the Cape is so varied that it has been designated as (very much) the smallest of only six Floral Kingdoms in the world (by contrast, the whole of the non-tropical Northern Hemisphere lies within one Floral Kingdom). Justly

proud of this natural inheritance, a strong, even fanatical, native-plants-only movement has arisen, and in Cape Town many introduced trees have already been cut down, much to the chagrin of the general public who enjoyed their shade. However, the plantings of oaks within what is a World Heritage area in the Wine-lands has been, I hope successfully, defended as being part of the 'Cultural Heritage' of the region (as opposed to the 'Natural Heritage' of Fynbos). From our perspective, it is to be wished that this defense



An unusual adornment for a Stellenbosch oak: *Monstera deliciosa* Liebm. (Photo: Shaun Haddock)

remains adequate; and indeed I am sure that those 'true Stellenboschers' would commence an 'Acorn War' rather than let their oaks be cut down!

Shaun Haddock

Oak Open Days for 2013

I am probably stating the blindingly obvious, but a successful Oak Open Day requires three things: a

venue, an organizer or organizers and people to participate! The Tour Committee is always looking for volunteer organizers, so please feel free to send in any ideas or requests you may have regarding venues or preferred times of the year for participation, and please do your best to attend functions once arranged. I can guarantee you will enjoy them! All communications can be sent to: shaun.haddock@orange.fr. Non-members are welcome at Oak Open Days as well, so bring your friends along.

The Oak Open Day at the Sir Harold Hillier Gardens on July 29th was a great success (see "A Sunny Day in the UK," p. 11). Information about future OOD tours can be found below and on the IOS website.

Oak Open Day, Pavia Nurseries, Belgium

Sunday, September 22, 2013

Dirk Benoit, owner of Pavia Nurseries and retired IOS Board member, extends a kind invitation to an Oak Open Day at the Nurseries on 22nd September, starting at 10:00 a.m. The day will include a tour as well as a workshop on clonal oak propagation by grafting. To register contact Shaun Haddock at:

shaun.haddock@orange.fr.

Oak Open Days, Aiken Oak and Horticultural Tour Aiken, SC, USA

November 1-3, 2013

Bob McCartney of Woodlanders Inc. invites IOS members and non-members alike to tour a comprehensive oak collection in Aiken's city-wide arboretum. Bob's thirty plus years of hard work and donations to the city make Aiken a rare gem among US cities.

To register, contact Emily Harm at the City of Aiken at:

eharm@cityofaikensc.gov.

Shaun Haddock

The Anchorena Alcornoque

In Parque Anchorena, the country residence of the President of Uruguay, a gigantic cork oak (*Quercus suber* L.) holds sway over the wide lawn in front of the Tudor style house. In Spanish, the common name for *Q. suber* is *alcornoque*, which derives from Arabic (*al* is the definite article in that language) and in turn from the Latin *quernus* (oaken). The Anchorena Alcornoque has caught the attention of oak enthusiasts in the past: it is shown in the *Guide illustré de Chênes*, the quercophiles' vade mecum, and has been written about in an International Dendrology Society Yearbook. Here's an update on its current status and some background on how it came to stand where it does. It all started with a pioneering balloon flight.

Aarón de Anchorena was born in 1877 into one of the wealthiest families in Argentina. Following an education in Europe, his youth was spent in pursuit of adventure – particularly in the fields of hunting, car racing and ballooning. By the time he was thirty, his concerned mother insisted that he should settle down, quite literally in fact: she would buy him an *estancia* (large farm) as an advance on his inheritance if he kept both feet on the ground and gave up his new passion for balloon flying. Aarón agreed on the condition that he should be allowed one last flight and be able to choose the land in question from the air. The flight he proposed was an intrepid first crossing of the River Plate. Flying across a river sounds insignificant, but bear in mind this is the world's widest river and that opposite Buenos Aires, his chosen departure point, it is 50 km (30 mi) across. For this purpose he

had a silk balloon shipped out from France, together with a pilot. As hydrogen and helium were not readily available in Buenos Aires in those days, the balloon was filled with the coal gas used for street lighting. The French pilot explained that this gas would not provide the required lift and refused to take part in the flight. Aarón was not interested in the laws of physics. He asked for a volunteer from the crowd present to take the French expert's place and join him in the flight. A hand shot up: it belonged to the Director of Public Street Lighting of the city of Buenos Aires, Jorge Newbery; perhaps he felt responsible for the situation as his firm was supplying the coal gas

where they landed and true to her word his mother purchased it for him – all 11,000 ha (27,000 ac) of it.

His wings now clipped, Aarón focused on beautifying his estate, hiring German landscape architect Hermann Böttlich to lay out the park and importing exotic species to plant in it. Anchorena also introduced wild boar from Europe and axis deer from India to serve as cannon fodder for his hunting parties. The boar ran wild and are not exactly farmers' favorites, but the deer thrived in the park and are its picturesque denizens today. During mating season they gather under the large cork oak and the other oaks in Parque Anchorena.



The Anchorena Alcornoque, *Quercus suber* L. (Photo: Roderick Cameron)

that would hoist the craft aloft.

They set off, rising steadily to a height of 3,000 m (9,800 ft) as the southwesterly breeze carried them towards the coast of Uruguay. However, the French expert's reservations about the lack of required lift were not unfounded: while the coast was still far off, the balloon began to lose altitude. The adventurers started throwing off ballast and eventually had to release the basket in which they stood and hang on for dear life to the balloon's harness, and that is how they splashed into the shallow waters of the Uruguayan beach. Aarón liked the look of the land

It is assumed that these first plantings, which began in 1908, included a cork oak seedling that would over the following century grow into the colossus that dominates the wide expanse of lawn in Parque Anchorena, originally Aarón's golf course. When IOS members Peter Laharrague and Duncan Cameron came across it unexpectedly in January 2003 (see "Member Spotlight," p. 7), Peter estimated its dimensions as follows: height 23 m (75 ft), girth 5.2 m (17 ft) and

crown spread 30 m (98 ft). These figures bear comparison with Old World champions such the Portuguese giant 'Sobreiro de Pai Anes' (height 18 m [59 ft], girth 7.3 m [24 ft]), and the 'Alcornoque de la Corte del Romero' in Spain (height 17 m [55 ft], girth: 7.5 m [24 ft]).

In July 2013 I obtained permission to measure the Anchorena Alcornoque and noted the following dimensions: girth 5.6 m (18 ft), height 23.2 m (76 ft), crown spread 37 m (121 ft). Even allowing for margin of error in the 2003 and 2013 measurements, it appears that the oak is still growing steadily and is well on its way to

compete with and perhaps overtake its European brethren. The size of the crown spread is particularly noteworthy. A study of notable trees in Andalucía, Spain, *Arboles y Arboledas Singulares de Andalucía*, lists many outstanding cork oaks and their dimensions: the largest crown spread recorded is 35 m (114 ft), and the average is 22 m (72 ft). I have yet to find evidence of a cork oak with a larger crown spread than this Uruguayan specimen. Should any reader know of one, please let us know!

Aarón died in 1965 and he willed his *estancia* to the Uruguayan state, specifically for the purpose of serving as a residence for the head of state. (Incidentally, Aarón's volunteer companion on the fateful balloon flight, Jorge Newbery, who had never flown before, went on to become the founder of Argentine aviation – the domestic airport in Buenos Aires is named after him.) While we do not know the exact year the cork oak was planted, it is safe to say it is a century old, still in its salad days compared to the European champions that have been growing for three or four hundred years. It may well be the case that its speedy growth will lead to an early demise, but till then it will continue to be a joy to behold and an interesting case study of the behavior of this species outside its native habitat.

Roderick Cameron

With thanks to Michel Timacheff, Francisco Vázquez and Shaun Haddock for information on noteworthy cork oaks in Europe, and to Mario Vega and María José Colo for permission to measure the cork oak in Parque Anchorena. For a full account of Aarón de Anchorena's life (in Spanish): Aarón de Anchorena, una vida privilegiada, *Presidencia de la República, Montevideo, 1998*.



Durand's Oak of the Alabama and Mississippi Blackland Prairie

My first encounter with Durand oak (*Quercus sinuata* Walter var. *sinuata*) came during an impromptu dendrology pop quiz while helping my dendrology professor, Dr. David Evans, collect herbarium specimens along a rural road that cut through a Demopolis chalk bluff in the Blackland Prairie ecoregion of Oktibbeha County, Mississippi.



Quercus sinuata Walter var. *sinuata* foliage and fruit. (Photo: Dudley Phelps)

Luckily, I had heard and read about Durand oak and upon noticing the exposed chalk layer and prevalent Eastern Red-cedar (*Juniperus virginiana* L.) I hopefully asked Dr. Evans, "Is that a Durand oak?" and awaited his answer, which was: "That's correct." This was followed by a drawn out explanation, in mostly at the time over-my-head scientific lingo, concerning the key distinguishing characteristics I still struggle with today. What I did recognize were the layman's identifying features that still work so well for me such as, "water oak leaves, white oak bark," and his description of the site and surrounding vegetation this oddball oak species competes so well in. Since then I've come to better know and love the Durand oak, and can usually pick each individual out from a distance.

Regarding identifying features, Durand oak is characterized by decidu-

ous, relatively small, shiny to dull adaxial and pubescent abaxial surfaced leaves that are 7.5 cm (3 in) long, and roughly 2.5 cm (1 in) wide (shade leaves can be double this size). Leaf shape can vary considerably from leaf to leaf and tree to tree due to factors such as age, sunlight availability, and individual variation. I've seen shapes from elliptical to spatulate and everything in between. Leaf margins can vary even more, from completely entire to those with multiple, short lobes that can be rounded or pointed. The leaf base is usually acute. Twigs are slender, glabrous, and new vigorous growth matures to a light brown. The buds (small for an oak) harden to a chestnut brown and have ciliated margins.

A member of section *Quercus* (the white oaks), Durand oak acorns are borne and mature in the first year. Durand acorns favor the more familiar post oak (*Q. stellata* Wengenh.) in size (1.25-1.9 cm [0.50-0.75 in]) and color (light to dark brown), but the pericarp of a mature nut is outstanding and resembles the polished gemstone tiger's-eye and its chatoyancy. Acorn shape varies from almost perfectly round to slightly elongated and has a very shallow cupule that more or less appears to hover above the rest of the acorn when it's fully mature, allowing you to see where it is attached. The acorns mature and drop very late for a white oak (mid-November in Northern Mississippi) revealing a strikingly fluorescent orange cup scar. The freshly harvested acorns of several trees I collect from are so low in tannins I've witnessed dogs eating them!

From what I have read and personally experienced with Durand oak, there appears to be a bit of confusion on its status as a distinct species – sans current and former variants Bigelow oak (*Q. sinuata* var. *breviloba* [Torr.] C.H. Mull) and bluff oak (*Q. austrina* Small). In addition, I'm of



Author standing with a mature Durand oak in Clay County, MS. (Photo: Dudley Phelps)

the opinion the currently available maps (www.bonap.org and www.plantmaps.com) delineating Durand oak's range appear skewed with what may be Bigelow, bluff, and other species. Regardless, Durand oaks are said to occur from the Carolinas to Texas, with the largest populations in the separate, alkaline Blackland Prairie ecoregions of Mississippi and Alabama, and in Texas. Other occurrences in the Southeast are spotty, which makes me think Durand oaks may have once populated larger portions of the southeastern United States.

It has been 6 or 7 years since my first encounter with that younger, stunted specimen, and although I've become more familiar with Durand's oak, this species still confuses and entralls me at the same time. I once thought they only occupied poor, upland sites such as church parking lots, hilltops on overgrazed pastures, and exposed chalk banks along roadways. But then I began noticing even greater specimens on the edge of narrow timbered drainages in the Blackland Prairie proper. I have found pockets of large, timber-formed Durands in slightly acidic, pit and mound type, floodplain river-bottom clays meandering through the prairie ecoregion. Many of these con-

tain two or three practically taperless, clean sawlogs, obviously competing quite well with more commonly known bottomland species.

At Nativ Nurseries, in Mississippi, U.S.A., where I am nursery manager, our bread and butter is raising oaks from acorns to one-year-old containerized seedlings, so I've been able to witness tens of thousands of Durand oaks grown from seed. One of my favorite duties involves combing through a couple hundred thousand seedlings every year in search of variants and F_1 hybrids for inclusion into our seed orchards. This allows me to make note of which species are more apt to hybridize in the areas we collect seed. To this day I've never found a hybrid in the Durand oak seedlings, but I have found several hybrids where Durand may be the staminate parent, particularly amongst the *Q. alba* L., *Q. michauxii* Nutt., and *Q. virginiana* Mill. seedlings. These are just simple, personal observations I've made myself, so my hope is that in time their acorns and resulting offspring will provide



Timber form Durand oak (center), Clay County, MS. (Photo: Dudley Phelps)

more clues as to their parentage. As an oak aficionado, I'd be hard pressed not to recommend the inclusion of any oak species into the landscape, especially for other oak lovers. Yet because of their somewhat

spotty occurrence and the unique appearance and personality of the Durand oak, I'd especially love to see more of these oaks included in and around parks, yards, schools, and arboretums. Considering their tolerance of and ability to compete in both calcareous, upland soils, and poorly drained, acidic river bottoms in their natural range, I believe they'd be a good candidate for trial outside of their indigenous haunts – perhaps even into the warmer portions of USDA Planting Zone 6.

Thanks to my friends at the IOS for allowing me to share my thoughts on this perplexing yet extraordinary species. Feel free to contact me with your own thoughts and experiences with Durand oaks, or any oak for that matter via my e-mail:

dphelps@mossyoak.com.

Dudley Phelps

Member Spotlight: Peter Laharrague from Coronel Pringles, Argentina

Who are the members of the International Oak Society? From what walks – and interests – of life do they come? From Badajoz to Baton Rouge, from Tauranga to Toronto, we hope to be able to present at least some of them in Oak News & Notes. If you know someone you would like to see in the spotlight, please let us know!

In this edition of Member Spotlight we tilt our follow spot southwards to Coronel Pringles, in Argentina, at 38 degrees of latitude below the Equator – almost exactly as far south as when we highlighted Bob Berry in New Zealand – to focus our attention on Peter Laharrague, long-time IOS member and oak collector. Like



Peter Laharrague showing off his oak collection. (Photo: Roderick Cameron)

some other Southern Hemisphere members, Peter is engaged in the somewhat quixotic venture of collecting a genus of plants in a part of the world that lies a great distance from the plants' natural range. To reach the closest native oak from his arboretum, Peter would have to travel over 4,600 km (2,900 mi) as the crow flies, to the Colombian Andes, where he might find *Quercus humboldtii* Bonpl.

I visited Peter and his arboretum, San Miguel, in February, in the middle of the summer drought season, when he and his staff were busy providing essential water to his trees, both young and old. As we walked around the plantings of numerous genera of trees, I had the impression that the person I was following, wearing the Basque beret of his French ancestors and clucking with satisfaction or frustration as the case may be, was not so much a tree-collector as a shepherd tending for his flock, making sure that they were protected from the hares, ants or wind that threatened them, and that they had the water they required to keep them alive.

Peter inherited from his father a love of trees and from an early age began planting in his property in Argentina, also inherited from his father. This property came complete with an 80-hectare (200-acre) park planted with

trees that his father was able to obtain in nurseries in Argentina. As Peter puts it, "My father created his garden without being a landscape architect or a botanist; he just loved trees and began planting what was most popular or generally planted in the area: pines, cedars, cypresses, eucalyptus."

In the 1980s Peter developed an interest in collecting oaks, perhaps, he says, because of the connection to his Basque ancestors in France, in whose lives oaks would have played an important part, or simply because acorns are easy to germinate. "I began writing to nurseries, and to Kew Gardens, who very kindly used to send me acorns. I always had the problem of reversed seasons, the fact that in October, our spring, I had to sow the acorns or put them in pre-chilling, if they were red oaks, then sow them in January, and two months later I would have to put the small seedlings in a greenhouse, because if not they would not survive, being so tender." Soon he felt the need to get in contact with others who shared his passion: "One day I saw in a publication of the International Society of Arboriculture a little advertisement about the International Oak Society. I immediately got in contact. It was after their first Conference at The Morton Arboretum in 1994. I corresponded with Steve Roesch, one of the founders, and he began sending me a lot of seed."

Peter joined the IOS and later traveled to California for the second Conference: "The California tour was wonderful not only because it opened the scope about oaks, but also about all vegetation and trees of California. Then we had the seed exchange, which I have always had to accept as a seed gift, as we can't exchange anything, coming from the Southern Hemisphere." Later on Peter was able to participate in Oak Open Days in France and in the process visit arboretums such as the Arboretum national des Barres. He is particularly proud of having in his

collection an oak grown from an acorn produced by the original *Q. ×vilmoriniana* A. Camus that used to grow in that arboretum.

Through his interest in oaks he was able to meet two other oak collectors in Argentina. "I got acquainted with Duncan Cameron through an article I wrote for the Sociedad de Horticultura Argentina, about the oaks I was growing in this area. Duncan read the article then phoned me to get in contact and from then on we had a very deep friendship, he used to give me some plants and some of them are still here." An Italian member, Giuseppe Guazzone, planted oaks on his farm in Argentina, and together this trio of quercophiles were for many years the three musketeers of the Argentine oak scene. Sadly, Peter lost his two friends over the last few years, and I could not help noticing his eyes misting up when he talked about them.



A fine specimen of *Quercus crassipes* Bonpl. (Photo: Roderick Cameron)

Planting oaks in the southwestern section of the Argentine pampas presents several challenges. "The most important thing is water; water and wind. If we don't water the trees, we would lose them. If there is a fortnight without a good rain we go out and water, even in winter with the evergreen oaks. Water can be provided through a hose, from a moving tank, or you can leave the 5,000-liter (1,300-gallon) tank to empty in an

area of four or five big trees. Sometimes people say you only need to water small trees, but big trees are much more demanding and sometimes they don't give you any warning and next day they are dead." When planting his oaks, he prefers to avoid the risks involved in transplanting: "I try to plant if possible in the first year after germination, directly with the pot, then apply mulch and water and place stakes for support as well as protection against hares, which were a great concern (there are fewer of them now), as they would gnaw the bark or break the trees."

When I asked which part of the life cycle of an oak was his favorite, he chose that of the young tree, when it

Peter's favorite species of oak is Pyrenean oak, *Quercus pyrenaica* Willd. One of the reasons is of course that it remits to the area of the Pyrenees and the Basque country, the land of his ancestors, but another reason has more to do with its behavior in the area where Peter plants it: "It is an oak that begins leafing out very late in the season and here we have late frosts which have a terrible effect on other oaks such as *Q. robur* that begins leafing in September, at which stage we may have one of those terrible frosts that last all night and all the leaves are gone and the tree must make an effort to sprout again. But I have never had a *Q. pyrenaica* that was frosted because the late frosts are mid-November and they sprout later than that. And it is lovely to see

the new leaves, they are like little rabbits, covered in velvet, and the flowering is also very nice, with all the stamens."

Regarding the long-term behavior of oaks in Argentina, Peter explains that there is little experience to go on, as very few trees exist that

have been planted more than a century ago. "There are wonderful specimens of *Q. robur*, *Q. ilex*, *Q. imbricaria*, which grow almost at double the speed they do in the Northern Hemisphere. Will they last as long? Most likely not. With fellow IOS member Duncan Cameron we found a remarkable specimen of *Q. suber* in Uruguay, which is recorded in the *Guide illustré des Chênes*, and there are other trees here that, when compared with the champions in their native habitat, are doing very well for their age." Another aspect of oak behavior that Peter has noticed in his region is that oaks do not appear to

follow the typical masting pattern of northern climes: "Unlike what happens in Europe, where you have one good year of mast production and then a year that is not so good, here we have rather good production on a regular basis, particularly in *Q. robur*, *Q. rubra* and *Q. palustris*." He has also remarked that his oaks tend to start fruiting at a relatively early age, usually after 10 or 11 years.

Since he began planting at San Miguel in 1975, Peter has planted 5,548 trees (an impressive average rate of 150 a year), mostly grown from seed, including a large number of oaks, and in the process added on another 20 ha (50 ac) to the park, which currently covers 100 ha (250 ac). I asked him what it was that kept him going: "My objective is pleasure. One day a visitor congratulated me because I was fixing carbon. I said, 'Thank you very much, but that is not my purpose, I do it for pleasure, I love trees... just for pleasure.'"

Roderick Cameron

An Odyssey with Oaks

In 1978, Mallet Court Nursery, based in Taunton, UK, was reestablished as a nursery specializing in maples. The nursery's predecessor had been growing maples for a number of years and offered probably the widest selection available in Europe. After a few years, it was considered that the plants offered comprised too narrow a range – basically one genus.

What else should be grown? After some research, a decision was made to grow a collection of oaks. This determination was greeted with some incredulity. Could that many people be interested in oaks, a genus which included so many large trees?

Immediately, it became obvious there were some problems. Where and how was one to obtain stock and



Two nice young *Quercus xundulata* Torr. (Photo: Roderick Cameron)

is able to take an appealing shape through judicious pruning. But he is not obsessed with having all his trees grow perfectly straight: "In general I don't prune unless there is a completely asymmetrical or co-dominant stem. I am very concerned about this question of co-dominant stems because if they are left they can break and then both stems break and you lose the whole tree. I also try to leave low branches when they are not dead. For two reasons: one, because I consider they are still photosynthesizing and thus helping the tree grow; second, they are great protection against mowers, tractors and the like."

how did one grow oaks? It was one thing to propose, but quite another to put it into practice. Since the nursery only grew plants from seed, acorns had to be obtained and germinated. At that time, little information on oaks was available and few nurseries grew oaks. Little by little, by talking to people and reading books, knowledge was obtained. It is through conversation – especially customers who ask questions – that one learns. For example one frequently asked question – “do oaks flower?”

The soil in the nursery is alkaline, pH 7.6 to 7.8. There is a layer of about 15 cm (6 in) of fertile but heavy soil on top of limestone. It was recognized that this would not be ideal for many species of oaks. The nursery is situated in open country with fields all round so it is plagued by rabbits and mice. A lot of seed was lost to these pests at first. When visiting Westonbirt Arboretum one day, I talked to the propagator there who showed me his secret. By placing the acorns in a polythene bag with some old moist compost, and putting the bag into a box or hanging it from rafters, he could keep out mice. Once germination commences, which is when the radicle appears, he sows the acorns while carefully protecting them from mice. This is now common practice at Mallet Court. Acorns are sown in the autumn and covered with a net and guarded by innumerable mouse traps. Concerned that cultivation in the open ground as already described may not be successful, we decided to grow the oaks in pots. However, another problem arose: what pots should be used and what medium? Commercial compost composed of peat, forest bark and grit with some manganese and fertilizer made to our specification is used. Insecticide is added to the mix to protect against

vine weevil. Only a small portion of fertilizer is used as we find too much can have the opposite effect and burn the roots. The acorns are first sown individually into 9 cm (3.5 in) pots, long ones being preferred. In June or July the young oaks are repotted into 2 ltr (2 qt) pots. Excellent growth is achieved in the first season with some species. For example: *Quercus phellos* L. and *Q. shumardii* Buckley attain 90 cm (3 ft) or more, while others are slower, like *Q. velutina* Lam. Great care also has to be taken to be sure the tap root does not wind itself around the inside of the pot and girdle itself.

The tap root in a seedling oak is a food store and helps to stabilize the young plant. An excellent practice is



Fine looking oaks at Mallet Court Nursery. (Photo: James Harris)

to air prune the roots, which can be done by placing the oaks on a bench with a wire frame top. Air pots are now becoming available and these will be trialed next season. All the young oaks are placed in a poly-tunnel for winter protection. At first, they were protected with a covering fleece. This is no longer practiced at the nursery as it has been found that most oaks are perfectly hardy and do not suffer even if the pots are frozen for a short time. Some of the tender oaks are placed in a cold greenhouse free from frost.

By talking to customers, information about oaks in cultivation has been obtained. For example, *Q. alba* L.

does not grow well in England and it is rare to find a good specimen. The same goes for *Q. virginiana* Mill. *Q. shumardii* and *Q. muehlenbergii* Engelm. are said to be limestone tolerant and we will trial these over the next year or so.

Realizing the need to advertise and tell people about this amazing and varied genus, it was decided to make an exhibit at a leading Flower Show. Early in 1994, an application was made for a site at the Chelsea Flower Show in the following year. This proved to be a long and difficult road as any exhibit takes over a year to plan and prepare. Our application was granted, but only for a small site which was inadequate to display over 100 oaks. What was to be done? We invited Sir Simon Hornby, President of the Royal Horticultural Society, to visit us and have tea. We agreed that the aims and objectives of the Society were to promote and encourage all plants including woody plants. He promised to help and shortly after we were offered a much larger 9 x 9 m (30 x 30 ft) site. The council of the society was concerned if we had the expertise to mount a satisfactory display or had sufficient suitable plants.

They appointed John Bond, Keeper of the Saville Gardens to visit us. He reported back favorably to the Society. John proved to be a tower of strength giving encouragement and providing some plants from his nursery.

The exhibit was designed to be educational. All of the oaks (over 100) had to be well grown and in first class condition. They had to be repotted, cleaned, and in full growth at the time of the show, which was towards the end of May. A booklet was written about oaks, giving the history, classification, and description with drawings. Much support

and help was given by Kevin Nixon and other kind friends from the US. To show the usefulness of oak wood, a local craftsman made a table, litter bin and display boards from red oak. A map of the world was prepared showing where oaks grew in nature, together with photographs of oaks in flower.



RHS Award presented to Mallet Court Nursery. (Photo: James Harris)

In early May, three weeks before the show, a severe frost was experienced. The overnight temperature fell to -4°C (25°F). The center piece for the exhibit was to have been a fine specimen of *Q. robur* 'Pendula' standing over 3.5 m (11 ft). At that size there was no place in the poly-tunnel. In the morning, it was found that all the young foliage had been burnt!

When we arrived at Chelsea, we found that John had edged the site with oak logs all beautifully butted together. It was a huge boost to our morale as we were somewhat overwhelmed by the size of the site. It took three days to set up the exhibit – the first exhibit with living plants. Over 120 different oaks were displayed in the exhibit, which was awarded a gold medal and brought about an immediate interest in oaks. The booklet was also immensely popular and has since been translated into French.

The cultivation of oaks goes on. The search for acorns and the continued acquisition of knowledge of this wonderful genus progresses still.

James Harris

A Sunny Day in the UK

On the morning of July 29, 40 oak enthusiasts from Belgium, the Czech Republic, France, the Netherlands, Italy, and the United Kingdom met in Jermyn's House at the Sir Harold Hillier Gardens (Romsey, Hampshire) for the first Oak Open Day of the year. A grey sky and abundant rain set the tone while participants enjoyed their tea and biscuits, greeting old friends and meeting new ones. No sooner had the army of umbrellas stepped outside but did an indignant sun appear, chasing away clouds and rain forever!

The Sir Harold Hillier Gardens is one of the two national collections of *Quercus* in the UK and many of the accessions were collected in the wild by IOS Board member and former President Allen Coombes, who worked at the Gardens for nearly thirty years. Indeed, as part of the welcome speeches, Allen had sent a message that included, amidst his fond memories, a mission for the day: we were to look at two of his collections, a *Quercus senescens* Hand.-Mazz. and a *Q. rehderiana* Hand.-Mazz., to try and determine if the former is indeed *Q. senescens* or a hybrid of the two. To be continued in *International Oaks*, No. 25...

For the morning visit to the part of the Gardens called Bentry Woodland, the group was divided into two – one was led by Barry Clarke, the other by David Jewell. Here can be found very nice specimens of *Q. affinis* Scheidw., *Q. greggii* (A. DC.) Trel. and one of its hybrids (with *Q. glabrescens* Benth.), and many, many more wonderful trees. It goes without saying that we never have enough time to both look at all the trees we want to see and enjoy the company of friends, new and old.

After a very nice lunch, the second half of the day was self-guided and

for this we were provided with a good map, an accessions list that indicated where the trees were located and a stern reminder that we were expected back at Jermyn's House at a quarter past four for refreshments.



Quercus delavayi Franch. (Photo: Nick Macer)

It is not possible to give here a detailed account of all of our afternoon adventures so I shall just mention a tree that certainly marked the day for me. I was fortunate to have latched on to Nick Macer (IOS member who also used to work at the Gardens) who showed me the way to *Q. delavayi* Franch. I don't think I've ever seen a more beautiful oak tree.

The day was deliciously brought to a close with a beautiful oak-themed chocolate cake tailor-made to IOS member Dorothy Holley's specifications for the event.

Many thanks to Wolfgang Bopp, Barry Clarke and David Jewell of the Gardens for their hospitality and efforts, and to our Tour Director, Shaun Haddock, and Vice-President, Charles Snyers for bringing us together for such a splendid day.

Béatrice Chassé



From the Board

Three Board meetings have been held since the new Board was installed at the end of 2012. Various items have been dealt with and many of these in response to concerns from the membership. These include having more structure to Board activities, increasing input from our committees and formalizing certain procedures important to our membership.

The Finance Committee has provided the Board with updated financial information allowing pertinent decisions on expenditures to be made. Various issues on membership management have been discussed and reported to the Board. A very important issue is the cost and time involved in the renewal process due mainly to late renewals (see this page).

The Website Committee, headed by Charles Snyers, Vice-President and Website Administrator, has been active on many fronts (finance, membership management, electronic newsletter mailings, assisting the Tour Committee, etc.). In order to stimulate use of the website by the membership, Roderick Cameron has been appointed Website Editor. Getting new content for the website has high priority and suggestions from the membership are welcome. There are plans to create an e-bulletin whilst maintaining *ON&N* in its current form.

The Tour Committee has been very active in putting together an Agenda of Activities (see page 4). Thanks to the membership management tools available on our website, simple procedures now exist for contacting participants. As a reminder to members: please be sure that we have your current e-mail address so that you do not miss any of this valuable information!

The Editorial Committee has prepared a new layout for *International Oaks*, a Manual of Style, new Guidelines for Authors, and a new web page reflecting the structure of the Society

(www.internationaloaksociety.org/node/38). Ryan Russell, Editor of *ON&N* proposed to do the desktop publishing in-house – this represents significant savings to the Society. Many thanks to Ryan for his time and efforts! To ensure timely reporting of tours and events, these will be included briefly in *ON&N*, with fuller accounts appearing in *International Oaks*. The Editorial Committee recommended to the Board the inclusion of oak-related advertisements in the newsletter and this was agreed.

The Taxonomy Committee is working towards resolving the problems involved in updating the core species list and cultivar information in our database www.oaknames.org. The Board has agreed that the technology of this database needs upgrading and has asked Charles Snyers to review costs.

We are very pleased that the 2015 Conference Committee has already taken up the job and communicated with the Board on this.

Gert Fortgens

and a new member renewal process on our website have allowed us to streamline our work and make the process easier and more convenient for our members. Of the 180 membership payments received over the past year, 101 were initiated on our website. Prompt renewal keeps *International Oaks* on a stable financial footing, helps us plan how many journals to print and ensures that you will receive all of our publications in a timely way. As our renewal process begins this fall, please consider renewing online.

A few quick tips to make online renewal easier:

-Let us know if you change your e-mail address. We want to make sure we're reaching you.

-Make sure the membership@internationaloaksociety.org e-mail address is on your approved senders list. Otherwise our messages may not reach you and your membership could lapse before you realize it.

-For non-US members: Create an account with PayPal. This worldwide electronic fund transfer system allows you to make secure membership payments (US members can pay through PayPal without having to create an account).

For more information, go to: www.paypal.com.

Emily Griswold



Save Paper and Time by Renewing Early Online

Last year, along with a series of website upgrades, we launched our first paperless renewal process. Paper mailings are time-intensive for our volunteer board, costly with rising postage, and wasteful of resources. E-mail renewal reminders



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