Greek Oak Open Days: September 26 - October 2, 2011



Some members of the IOS Greek tour relaxing under the plane tree in the village square. Vitsa, Epirus, Greece. (Photo: Gert Dessoy)

During this early autumn week of incomparable weather, twelve members of the IOS, and three others who were guests, enjoyed a truly memorable time in northern Greece. There were 13 men and two women, one the wife of the tour leader, the other my own traveling companion. People on the tour were one from the UK, two Americans, two from Holland, the rest Belgians. In many ways the tour was a "moveable feast." (However, while those wild plums may make good slivovitz, they sure were sour!) The tour was organized by Belgian nurseryman Dirk Benoit, IOS Tour Committee Director, and led by Bruno Van Puijenbroek of the Belgian Dendrological Society. Bruno's more than 25 years of botanizing in Greece guaranteed that we would see the best sites for botanizing and enjoy the beauty that this rarely visited part of Greece offers to outsiders.

The tour began on Monday, September 26, in Igoumenitsa, a tourist and port town on the Ionian Sea opposite the island of Corfu in the far northwest of Greece. People began to arrive there in the afternoon of the 25th, and our first event together was dinner in the late evening in an outside setting uptown. The food was of course delicious (Greek cuisine is one of the best kept secrets of European cuisine) and we were really amazed at how one waitress could cover so many tables so efficiently and graciously, and after dark besides!

From the 21st century CE to the 2nd century—BCE!

The next morning early we met our large tour bus and its charming and skillful driver, Grigoris, who hails from the mountain village of Gardiki not far from here. We did a bit of leisurely botanizing before we reached Perdika, our first destination of the day. There are two reasons to visit Perdika: one is the Karavostasi beach, a curving strand with golden sand, and the archaeological site of Dymokastron, a Hellenistic mountain-top town reached by a steep hike. The view of the beach far below was beautiful, as it must have been when the town was still inhabited. The town was destroyed in 167 BCE by a Roman army, along with most of the other towns in the vicinity, all allied with Rome's enemy, Macedonia. The site is under active excavation, and we were able to admire the remnants of protective walls (how in the world did they get those big stones up there?), building foundations, and cisterns, which were certainly needed in case of a prolonged siege, which Dymocastron must have experienced more than once. The site also has many living trees, including wild pears (Pyrus spinosa Vill., also known as P. amygdaliformis Vill.) and figs (Ficus carica L.) which appear to be descendants of wild native trees selected by the original inhabitants, as well as some oaks, of course, such as Quercus coccifera L., Q. cerris L., *O macrolepis* Kotschy. The morning ended with a hike and picnic lunch in a sylvan canyon nearby, filled with oaks and enormous plane (sycamore) trees (Platanus orientalis L.). It



Tree form of *Quercus coccifera*, possibly a hybrid. Vitsa, Epirus, Greece. (Photo: Gert Dessoy)



Acorns of shrub form *Quercus coccifera*. (Photo: Allan Taylor)



Acorns of *Q. macrolepis* on tree. Epirus, Greece. (Photo: Allan Taylor)

is interesting to note that the Greeks so appreciate the plane tree that it is illegal to cut them in the wild. There are many Greek folksongs about the *platano*, which is traditionally associated with water and coolness. They got that right!

During the afternoon we all discovered our inner tourist: overnight was at a delightful beach hotel at Lichnos, near Parga. In addition to swimming, many of us were treated to a speed boat ride by the owner of hostel. The food here, expectable for a tourist area, was outstanding. It's hard to decide which was better, the beach or the veranda, with recorded Greek popular music and nice cold drinks. Incidentally, this is one of the most beautiful areas of Greece I have ever visited. Keep it in mind if you intend to visit Greece!

Now for the mountain flora...

On Wednesday, September 28 we drove into the Pindus Mountains, not far from the Albanian border. Here is the second highest mountain in Greece, Mount Smolikas: 2,640 meters asl. (8,660



Tree form of *Quercus coccifera*; note the prickly cap. Vitsa, Epirus, Greece. (Photo: Gert Dessoy)



Leaves and acorn of *Quercus macrolepis*. Epirus, Greece. (Photo: Gert Dessoy)

feet); the first is Mount Olympus, in Greek Macedonia, whose highest point reaches over 2,895 meters (9,500 feet) above sea level. Our destination for the night was the Zagori District, specifically the Epirot town of Vitsa. We botanized along the way, stopping often to view the many different oak species which are native here: Q. calliprinos Webb (Palestine oak), Q. cerris (Turkey oak), Q. coccifera (Kermes oak), Q. frainetto Ten. (Hungarian or Italian oak), Q.macrolepis (Valonian oak), Q. petraea (Mattuschka) Liebl. (Durmast oak), Q. pubescens Willd. (Downy oak, including a form of the species called Q. virgiliana (Ten.), Q. robur (English oak), subspecies pedunculiflora (K. Koch) Menitsky. I had never seen oaks in the Cerris section, and I was astonished at the size of the acorns and the long, thick fringe on the acorn cap in species in this section. Also very frequent was *Cercis siliquastrum* L, heavy with reddish-brown seed pods, testimony to the abundant pink flowers of last spring. Also common were Celtis australis L., Mediterranean hackberry,



Forest of *Quercus frainetto*. Zagori, Epirus, Greece. (Photo: Allan Taylor)



Leaves of *Quercus frainetto* against sky. Zagori, Epirus, Greece. (Photo: Allan Taylor)

Fagus sylvatica L., European beech, Populus alba L., white poplar, and many naturalized stands of the American tree Robinia pseudoacacia L., black locust.

Sites along the route to Vitsa included the interesting "Pancake Rocks," limestone formations where weathering of the strata has produced what looks like stacks of pancakes. The foreground of some of these formations was occupied by beautiful beds of blooming Sternbergia lutea (L.) Ker-Gawl. ex Spreng (no, not named for Guy Sternberg!), their brilliant yellow flowers brightening the otherwise autumn landscape. Throughout the tour we also saw occasional purple autumn-blooming colchicums and many blooming cyclamens (probably Cyclamen hederifolium Aiton). Other attractions in the Zagori District were large stands of Acer monspessulanum L., Montpellier maple, most with abundant seed, and some with orange fall color; these trees were very attractive to those of us from cold areas where the same species from the western Mediterranean cannot survive. Also present was



Sternbergia lutea near Pancake Rocks. Zagori, Epirus, Greece. (Photo: Allan Taylor)



Blooming cyclamen. Zagori District, Epirus, Greece. (Photo: Allan Taylor)

Acer opalus Mill., Italian maple. Here also we first encountered the beautiful Quercus trojana Webb, (Macedonian oak). Other trees of interest were Crataegus orientalis M. Bieb., silver thorn tree, with large edible fruits, and the rare bigeneric hybrid x Malosorbus florentina (Zuccagni) Browicz, Florentine crab apple, thought by some to be a natural cross between a species of Malus and Sorbus, but generally regarded as a species of Malus.

Another treat of this section of our journey was the afternoon visit near Oxia to the Vikos Gorge carved by the Voidamatis River; this very impressive canyon, with towering limestone cliffs 3,000 feet (roughly 915 meters) high, was breathtaking, even dizzying, and not something you might expect to find in Europe. It is located in a national park, The Vikos-Aoos Nature Reserve, established in 1974.

Of limestone, plane trees, and graceful Ottoman bridges

The village of Vitsa, where we stayed



Limestone roof. Vitsa, Zagori, Epirus, Greece. (Photo: Allan Taylor)



Heavy timbers supporting limestone roof. Vitsa, Zagori, Epirus, Greece. (Photo: Allan Taylor)

two nights, was extremely picturesque. Most of the houses, and the streets apart from the modern highway, are built of hand-tailored limestone blocks; the roofs are also made from thin sheets of limestone. The picture this gave of generations of manual labor was sobering.

One of the most memorable things about Vitsa was the small square (*mesochori*) in front of our hotel, which was shaded by a gigantic plane tree. The tree was so large that the entire square was perpetually shaded. Such *mesochoria* are typical of the villages in the Zagori. We



Limestone block street, with dogs. Vitsa, Zagori, Epirus, Greece. (Photo: Allan Taylor)



Kokkoro stone bridge, near Kipoi, Epirus, Greece. (Photo: Allan Taylor)



Kokkoro stone bridge, side and top view. (Photo: Allan Taylor)

enjoyed a number of beers and ouzos under that tree. At night the local street dogs slept under the tree and in the street in front of it, curled up in the abundant fallen leaves of the ancient tree.

Using Vitsa as our base we made many hikes in the area, admiring oaks and other trees, as well as several Ottoman bridges dating from the 16th century. These high, narrow limestone bridges were built so that people and pack animals could safely cross the rushing mountain streams of the area. People who have any familiarity with these bridges usually think of the famous bridge at Mostar over the Neretva River, in Croatia, completed around 1569. It was destroyed in the fighting there in the 1990s. The news is that there are several of these still standing in the Zagori and in neighboring Greek Macedonia. One particularly beautiful one is the Gephyri Kokkorou, which is along the road to Kipoi ("Gardens") where we also spent time exploring the surroundings.

The Greek Lake District

On Thursday, September 29, we botanized a bit on our way to the Greek "Lake District." Along the way we were impressed by the large stands of Q. frainetto, called both the "Italian" and the "Hungarian" oak. (If it had been first described in Greece, would it be called the "Greek Oak?"). There were also pine forests (Pinus nigra J.F. Arnold, Austrian pine), in fact, we stopped for a hike in a small mountain town in western Macedonia called simply Pefkos, from the Greek word pefko, which means "pine". This area of Greece gets very cold in winter; one resident I spoke to told me that he had seen -27° C (-18° F). Pefkos is located at 1,058 meters (around 3.500 feet) above sea level.

In the evening we reached the first and most famous lake of the Greek Lake District, Lake Orestiada, This lake. as the other northern Greek lakes, is surrounded by high, rather barren hills, very brown at this season. This reminded me of similar lakes and reservoirs in the western United States. In a similar topography in northern Europe, e.g., Switzerland or Bavaria, the lakes would be surrounded by hills covered in thick conifer forest. The lower rainfall in this part of the Balkans, (and the interior American West), is probably the explanation for this, although burning by shepherds to create grasslands could also be responsible. The town of Kastoria, which surrounds the lake, is very touristic; we had our evening meal there, but didn't spend any time looking around, since shopping was not our reason for being there. Before dark we did enjoy the pelicans, ducks, and swans swimming and diving in the lake in front of our hotel.

The next morning we set off early (as usual), headed for the other main lakes in the area, *Megale* ("big") and *Micre* ("little") Prespa. These lakes are so close to both Albania and the former Yugoslav Republic of Macedonia that all three countries share sovereignty of the larger lake. The whole area is a national

park, and renowned for the abundant wildlife found there, including wolves, bears, lynx, and the large, rare Dalmatian pelican (Pelecanus crispus Bruch). The most prominent oak in this area is Q. petraea (Matt.) Liebl.which occurs in very large stands. We spent the afternoon hiking near Megale Prespa after enjoying a wonderful lunch in the small, lakeside village of Psarades ("Fishermen"). This is bean country, and there were people selling many different sorts of beans out of their vans across the street from our restaurant. Indeed, we had some of the beans as a meze ("appetizer") before lunch: giant beans (3 or 4 cm long, over an inch in the English system) called gigantes (no translation required!). The main course was, expectedly, fish from the lake. Another interesting attraction was a van whose owner was selling all kinds of preserved vegetables and fruits: pickles and jams of all kinds, as well as different flavors of honey, in glass jars; some of them looked so appetizing, e.g., quince and sour cherry preserves, that I bought some and passed them around at lunch.

That evening we had another treat: our lodging was a hotel located on Agios Achileos, an island in Lake Micre Prespa. We hiked across a long causeway, past thick stands of giant reeds (Phragmites australis (Cav.) Trin. ex Steud.) growing in the water, to the island, while our luggage was brought over by boat. We were in the middle of a very small northern Greek village, populated mostly by chickens, goats, lots of dogs and cats of indeterminate breed, and maybe 20 human beings. The main touristic attraction of the island (not counting fishing!) is a ruined Eastern Orthodox basilica named for Agios (Saint) Achileos, built in the 10th century by the Slavic (Macedonian) Tsar Samuel who ruled the area at that time. I was interested to note on the explanatory plaque in front of the ruin, (with texts in both Greek and English), that the name "Macedonian" had been scratched out in both texts. This is a reflection of the continuing resentment

in Greece of the Slavic republic's use of the name of the ancient kingdom of Alexander the Great, whom the Greeks claim as their own and aren't about to lend to non-Greeks, particularly when they are *Vourgaroi* (Bulgarians). But ethnic animosities are overcome each August, when a musical concert is held here under the stars, featuring artists from Greece and neighboring Balkan countries; I have to say that it would be difficult to find a more lovely setting to enjoy the timeless beauty of music...

Still more mountains, with fruited plains between...

The next day, Saturday, October 1 we set out early, for the long drive to the other end of the Pindus range. The terrain was mountainous. Along the way, we drove through prosperous orchard country, bordering Lake Vergontis, with lots of plantations of fruit trees such as peaches, pears, and apples, many with unpicked fruit. Many of the apple trees were espaliered on wire-strand fences, literally forming a "wall of apples." There were also many chestnut trees (Castanea sativa Mill., sweet chestnut), heavy with burs. We were also startled to see water buffalo near the lake. As we climbed higher into the Voras range, toward the ski station at Kaimaktsalan, we reached a high ridge (over 2000 meters elevation, around 6,600 feet) near the ski station. The ridge was covered with outcroppings of what looked like schist, and here and there among these were many low mounds of Juniperus communis L var. saxatilis Pall, common juniper, many with ripe seed, as well as a spiny, ground-hugging plant in the Fabaceae, possibly Astragalus angustifolius Lam. This cold and windy pastureland, virtual tundra, is what most of Greece looked like during the Pleistocene ice age, before the onset of the warm Holocene some 10,000 years ago.

As we approached the town of Arnissa we were flagged down by a man who turned out to be a restaurant owner who recognized a potential clientele in our tour bus. His motto was evidently "If your customers don't come to you, go



Rock spires at Kalampaka, Thessaly, Greece, some of which harbor medieval monasteries. Note the oak trees, probably *Q. frainetto*, in the foreground. (Photo: Gert Dessoy)

find them!" We decided to follow him to his restaurant, which proved to be a very good choice.

Soaring spires and peaceful contemplation

Our goal for today was Kalampaka, in Thessaly, to the east and south, which is one of the best-known tourist destinations in Greece. Just north of the town are towering sandstone and conglomerate crags and pillars, some 1800 feet (about 550 meters) high, dating from the early Cenozoic period (60 million years before present), many crowned by churches or monasteries built by Hesychists in the Middle Ages (14th and 15th centuries). "Hesychist" comes from the Greek word hesychia, which means 'respite, quietude, peace.' These were men (and some women) who sought refuge from the turbulent world of temptation and sin in the solitude of cliff-top aeries, six of which are still active monasteries. The buildings high in the sky gives the Greek name for the area, "The Meteora." (Again, no translation required.)

As soon as we arrived in Kastraki, a suburban village very close to Kalampaka, most of the members of our party rushed off to see the spires, armed with cameras and full of enthusiasm for the stupendous views. After everyone had returned, as darkness began to fall, we gathered in the hotel restaurant for dinner. This meal counted as our "farewell dinner," since I and my traveling companion would be leaving the tour early the next day. After dinner we gave formal thanks to our tour leader, Bruno



Monastery of the Holy Trinity. Kalampaka, Thessaly, Greece. (Photo: Gert Dessoy)

Van Puijenbroek, who was given a copy of the beautiful two volume *Guide illustré des* chênes (*Illustrated Guide to the Oaks*), whose author, Antoine le Hardÿ de Beaulieu, was one of the members of our group. Bruno was visibly touched, and he will certainly treasure this monumental work as a souvenir of this tour.

The last chapter

Although I did not participate in the group activities of the last day of the tour, this is what was done, according to participants.

The main scheduled activity of the morning was a visit to the principal monastery of the Meteora, the Agia Triada ("Holy Trinity"). There was some difficulty with the bus, such that it couldn't be driven up to the monastery, so the group decided to hike up. In this they were guided by "Frosso" (Efrossyni) one of the hotel owner's daughters, a student of forestry who was familiar with the area. But a distraction from the principal goal of the hike came up at the very edge of Kastraki, where a Mediterranean forest begins. It was incredibly rich in the tree and shrub species of the eastern Mediterranean. Of most interest were the many different oaks: Quercus cerris, Q.coccifera, Q. frainetto, Q. ilex L., Q. petraea, Q. pubescens, and Q. robur. After a renewed acquaintance with these lower-altitude oaks, many already familiar from the first day of the tour, some of the guys continued on up to the monastery. Others chose to return to Kastraki to sightsee there.

When the visit to the monastery was completed, it was time for lunch, and the bus, by now in running order again, picked up the hikers at the monastery. Lunch was at the same restaurant as on Saturday night. After lunch the journey back to Igoumenitsa was begun. By general agreement, the route followed was a high-speed motorway, rather than the rural roads which had been followed throughout the tour. People were by now thinking of returning home, satisfied with their exploration of the northern Greek mountains, but eager to get back to their normal lives and a less hurried pace.

All in all, the trip was a rewarding and unforgettable visit to one of the less familiar parts of Europe, which just happens to be blessed with an extremely rich flora.

Now, what about you?

I am sure that I speak for all of the fifteen participants in this exciting tour that "a good time was had by all!". Moreover, the opportunity to photograph and collect seed from wild trees in their natural habitats greatly enhanced the many pleasures of the excursion. If you have not yet participated in an IOS event of this kind, I hope that my description of the Greek Oak Open Days will suggest to you what you are missing, and motivate you to join a future IOS tour. You'll be glad you did, because oak trees and "oak nuts" are the greatest!

Allan Taylor



Looking down on Kalampaka from the Holy Trinity Monastery. (Photo: Gert Dessoy)



In the Spotlight: Emily Griswold from Davis, California, USA

Who are the members of the International Oak Society? From what walks – and interests – of life do they come? From Holland to Arkansas, from Argentina to Israel, we hope to be able to present at least some of them in *OAK News & Notes*. If you know someone whom you would like to see "In the Spotlight" please let us know!

Emily Griswold – member of the IOS since 2006 – was born in 1976 in California, the American state that holds second place (after Texas) for total number of oak species. Her early childhood memories are strewn with the prickly leaves of *Quercus agrifolia* Née poking her bare feet while she was growing up in Oakland, a place named for its coast live oaks. From then on, it seems that her career choices and interests have in some way or another been touched by oaks.

Perhaps her first esthetic revelations came from an initial interest in landscape architecture. "While in high school I was able to take classes at UC Berkeley with Professor Russell Beatty. He was a great appreciator of oaks, and he taught me to love the beautiful broad branches and twisted forms of heritage coast live oaks. He also taught me about their susceptibility to damage from over-irrigation or poor construction practices. The combination of strength, majesty, and longevity with vulnerability was quite compelling to me. Dr. Beatty was the first person who taught me truly to understand and embrace the native oak landscape of my home. My interest in oaks increased when I moved to Davis as a student and started working at the UC Davis Arboretum."

Today, Emily manages the University of California Davis Arboretum's scientific oak collection in Shields Oak Grove, home to over 275 mature oaks representing 84 taxa from around the world (see *OAK News & Notes, Volume 14, No. 2, Summer, 2010*).

Up until this year she was also the first coordinator of the ambitious North American Plant Collections Consortium Multisite *Quercus* Collection http://www.publicgardens.org/content/whatnapcc; for oaks, click on Collections by Name. She was very involved in the creation of this innovative project and will remain active within the organization while stepping down from this position that she has held for the past four years. Surely bad news for the NAPCC – but surely good news for the IOS since Emily is a candidate for the IOS Board elections in 2012....

Emily's favorite oak and acorn? Hard to decide. "One of my favorite oaks is definitely Quercus rugosa Née. I like the rough texture of the leaves and the fact that the tree defies most North Americans' concept of what an oak should look like. We have a specimen from Oaxaca in Shields Oak Grove with the most beautiful, deep green luxuriant foliage. Quercus ithaburensis Decne. acorns are one of my favorites. I like the ornate, recurved bristles on the acorn cup. I think of it as a robust and regal-looking acorn."

Her experience at the UC Davis Arboretum continues to be a rich one. She has led projects to improve the documentation of the collection through photography, herbarium specimens and labeling as well as those concerned with accessibility to visitors involving a new trail system, art/science fusion installations and interpretive signage. Through her participation in IOS conferences, Emily has also been able to enrich the UC Davis collection with wild-origin accessions from Texas and Mexico.

She has also had the great fortune to have worked with the late Dr. John Tucker. "(He) was the first one to mention the International Oak Society to me as I was working on a collection analysis for Shields Oak Grove in 1999. In 2006 I learned about the conference in Texas from Kunso Kim of the Morton Arbore-



Emily Griswold with *Quercus agrifolia* at Montaña De Oro State Park, California. (Photo: Nikhil Joshi)

tum. I eagerly signed up for the conference and the pre- and post-conference tours. I had such a fantastic time and learned so much that I knew this would be an organization to stay involved with. My membership supports my professional goals to network with oak experts and learn more about the diversity and cultivation of oaks, but it is also personally very fulfilling to connect with others who share a passion for these trees."

So in her small urban garden she has planted a valley oak, grown from an acorn that was part of a table decoration for an NAPCC ceremony. And she is thinking about removing other trees in order to plant more oaks.

When asked to tell a "tree" story, Emily talks about the scrub jay. "I assume that it's the scrub jay who planted the coast live oak in my parent's backyard – an urban lot in Oakland, a city where, ironically, few native oaks remain. The persistence of the jay/oak relationship in this urban environment insures that little oak seedlings will continue sprouting up all over the city..."

Béatrice Chassé



Blossoming New Collections: Le Bois de Montauté (Nièvre, France)

et le dévouement de son détenteur, il n'est aucune collection dont l'avenir soit assuré à long terme. En conséquence, chacun devra s'efforcer d'effectuer la duplication de sa collection."

("Whatever the competence and dedication of its owner, there is no collection whose long-term future is secure. Consequently, all must strive to duplicate their collections.")

A few years ago this sentence in a publication of the Conservatoire des Collections Végétales Spécialisées (Conservatory of Specialized Plant Collections) left me a bit puzzled. I couldn't quite visualize what duplicating a collection was. How could this be done? Acquire more land elsewhere? Have two arboretums to take care of? Good heavens! Of course, at the time, I did not have much of an idea about what taking care of even one arboretum meant.

Obviously, these words just mean that the systematic planting of specimens of the same origin in different places should be actively pursued. Here at the Arboretum des Pouyouleix we are very lucky in having established such exchanges early on (by means of seeds or seedlings) with different collections in Europe, most importantly, those of Michael Heathcoat Amory in Chevithorne Barton (UK) and of Francisco Garin in Iturraran (Spain).



Quercus cupreata Trel. & C. H. Muller (Photo: Jean Mottet)

In addition to collaborating with established collections such as the two aforementioned, disseminating new plant material with interesting provenances can also serve to establish the backbone of new collections built from wild-collected material.

Since 2009 we have collaborated with Rudolf and Antoinette von Fürstenberg in developing their oak collection, the first tree of which was planted in the spring of 2007. Over 70 North American oak species grown from seed at l'Arboretum des Pouyouleix have now been added to the collections at the Bois de Montauté.

"From the very start, we only wanted to plant trees from wild-collected seed for which the collection data was available. This is not easy to find in France and we were quite fortunate to visit the Arboretum des Pouyouleix and see how many new species of oak were available to be planted. And in excellent starting conditions in the sense that not only would we be planting the same species as Béatrice & Gérard but more importantly, we would be planting plants of the same origin, raised the same year and in identical conditions" Rudolf observes.

The story of the creation of this collection could be entitled "How to transform an industrial mining site into a mountain lake and park featuring an oak collection."

Mining for porphyry (used for ballast on high-speed train tracks) produces an enormous amount of waste material which, though not dangerous, is extremely voluminous. The von Furstenbergs' idea was to use this waste material for the construction of terraces on an adjacent site. One million cubic meters (more than 35 million cubic feet) of material would be gathered up and placed on a twelve hectare (thirty acre)



Quercus canbyi Trel. (Photo: Jean Mottet)

site to create terraces angled at 45°. The project was proposed and discussed with Lafarge, the French company responsible for managing and mining the site. Rudolf donated the land for the terraces and assumed responsibility for managing the arboretum himself. The company agreed to this innovative management plan and the project was officially started in 2005.

The transformation of this waste material allows, in turn, for the realization of their original goal: the creation of a mountain lake in the pit when the mine ceases operation in about 30 years. Rudolf chuckles when he points out that this is a project whose term may be 100 years – which counting from when he started brings us to the year 2066!

Le Bois de Montauté comprises 700 hectares (around 1730 acres) of forest, clear cut after the Second World War, after which about one quarter was replanted with conifers by Rudolf's father. This planting policy was discontinued in 1966 when Rudolf arrived with another vision of the forest and of nature in general. It is always interesting and informative to listen to him relate his relationship to the different places in the world where he has planted trees (Argentina, Chile, France and Spain). The leitmotiv being the firm conviction that man is a part of nature and that it is possible to manage affairs in a harmonious manner, infinitely more agreeable to man, beast, and plant. For example, fences are usually





Oak seedlings supplied to the Bois de Montauté by the Arboretum Pouyouleix. (Photo: Béatrice Chassé)

used to keep animals out. But there are times when what these animals do is beneficial to the forest (and vice versa) and therefore the fences can be used to keep the animals in. This is doing the most with, and the least against, the ecosystem.

Choosing the genus Quercus is also part of this philosophy because the important thing is that these trees produce fruit that can be (are, and have been) eaten by man and animal throughout history. We mustn't forget this economically and historically important role: trees are not just for timber. "Today, in some places, Spain and Morocco, for example, certain regions have become specialized in the production of Quercus suber (Cork oak) acorns for human consumption. And the importance of acorns in animal nutrition and good forestry management can be found in many different cultures."

The department of the Nièvre is in the southwestern part of Burgundy, more or less in the center of France. Temperatures can reach +40° C (104° F) in summer and drop to -20° C (-4° F) in winter. Average annual rainfall is about 900 mm (3 feet).

The trees that are part of the collection are planted with and among the trees that are there from natural regeneration. Bramble and broom are allowed to have their way, being cut only once a year. The trees that are part of the collection are looked after individually, but they are not overly cared for either.

Rudolf and Antoinette are convinced that French forestry needs to make an effort to look at new species that may offer interesting possibilities – and not just for timber production as discussed above. They are planting *Q. canbyi* Trel., *Q. myrsinifolia* Blume, *Q. rysophylla* Weatherby, and *Q. hypoleucoides* A. Camus as well as many others, in order to determine which species offer interesting possibilities.

Rudolf and Antoinette are new members of the International Oak Society. I look forward to the opportunity of organizing an Oak Open Day in a few years time to visit this unique collection.

Béatrice Chassé



The Fibonacci Sequence

We all knew that trees are designed to be efficient users of sunlight. Check out this URL for a description of the mathematics of this process, plus one science student's application of the principle to the design of solar panels. Wouldn't we all love to have a kid like this one?

Allan Taylor

http://www.amnh.org/nationalcenter/ youngnaturalistawards/2011/aidan. html#.Tw7wVfO43uY.mailto



Erratum

We apologize for an unfortunate error in the Winter 2011 newsletter. In the account of the Oak Open Day at the Kew Royal Botanic Gardens (page 9), it was stated that the champion *Quercus crassifolia* Humb. & Bonpl. growing there was planted in 1934. Its great size belies this statement, and it was actually planted in 1840, making it 171 years old, not 70 as was stated.



Oak Open Day in Belgium 2011

It was pouring rain the morning of the 4th of September, 2011. About 35 members and non-members had announced that they would attend the oak open day. Most of those in attendance were from Belgium, but three members traveled from the Czech Republic, two from the Netherlands and two from France. However, some were obviously put off by the weather, as only around 25 showed up at the brand new visitor center of the Arboretum Wespelaar.

Arboretum Wespelaar and Herkenrode

The Arboretum Wespelaar shelters part of the collections of Philippe de Spoelberch. Initially, the arboretum was a 15 hectare (37 acre) plot comprising a native oak wood planted around 1890 and an old meadow. It was landscaped in the mid 1980's. The best oaks were kept and the wood was planted with shadeloving plants. Two ponds were created in the meadow, which was planted with extensive collections, including hundreds of magnolias. This collection at Wespelaar is probably the largest magnolia collection in Europe. The arboretum was later extended by an additional 5 hectares (around 12 acres); a poplar woodland was cleared to make room for other plants.

In 2007 the arboretum — located on the outskirts of the village of Wespelaar — was donated to a foundation created by Philippe and endowed with sufficient funds to preserve the grounds and its collections for generations to come. The foundation subsequently acquired a house adjacent to the arboretum, De Rode Port (The Red Door), which has since been completely renovated and transformed into the arboretum's visitor center. The center was inaugurated in April 2011 and this is where Dr. Koen Camelbeke, Director of the Arboretum Wespelaar, and his staff, welcome us. Koen has been working with Philippe de Spoelberch (also present for the Oak Open Day) for the past ten years.



Less than fifteen minutes after we had left the visitor center, the rain kindly stopped; the rest of the day was dry, if not really sunny. Koen was our guide. Our first stop was in front of a Quercus selection called 'Pondaim'; this cultivar is a must for any garden according to Koen. The late Dick Van Hoey-Smith produced several clones of this hybrid between Quercus dentata x Q. pontica and at least two spectacular specimens can be admired at the Trompenburg Arboretum in Rotterdam, The Netherlands. We then walked along the pond and stopped at a group of three oaks, Q. illicifolia Wangenh., Quercus marilandica Münchh., and the hybrid between the two Q. x brittonii W. T. Davis. Not far away is a bushy shingle oak, Q. imbricaria Michx., a nice plant with an atypical habit.

We then visited a group of oaks, among which were several Quercus x hispanica Lam. cultivars: 'Fulhamensis', the Fulham oak, which several participants believe to be the best selection of this hybrid, then 'Lucombeana' and, 'Diversifolia'. Regarding these, several participants doubted that the tree said to be 'Diversifolia' is correctly identified. Other oaks here are Q. stellata Wangenh., a nice looking specimen and Koen's favorite oak, O. texana Buckley 'New Madrid'. We then walked through the former poplar plot, now cleared, where we saw a very unhappy Q. rubra L. 'Magic Fire', a northern provenance of Q. michauxii Nutt. and Q. dentata subsp. yunnanensis (Franch.) Menitsky. We also stopped to see a Quercus salicina Blume, a hardy oak which Koen feels should be in every garden. From there we crossed a dirt road to Herkenrode.

Herkenrode is Philippe's home; it is surrounded by 9 hectares (around 22 acres) of gardens. It is here that Philippe planted his first trees in the late 1960s, although I believe Philippe really dates the first plantings in his collection to 1972. Part of the gardens are formal gardens designed by Jacques Wirtz, a famous Belgian landscape architect who also designed the Carrousel du Louvre in Paris and the Alnwick Garden for the

Duchess of Northumberland. After touring the garden at Herkenrode, we walked back to the arboretum through the native oak wood and the magnolia collection. We saw a nice 25 year old specimen of *Quercus alba* L., as well as *Q. x bushii* Sarg. We then had lunch in the cafeteria of the visitor center, after which we left for the National Botanical Garden of Belgium.



The National Botanical Garden of Belgium

In Meise, we were welcomed by Dirk De Meyere, the curator of the outdoor living collections. The National Botanical Garden of Belgium has one of the largest herbaria in the world, rich in African tropical plants. Its outdoor living collections are also very extensive. In the 1980s Dirk assembled here what is probably the most comprehensive oak collection in the country. Dirk took us directly to the collection. On the way, we walked past the Castle of Bouchout on whose grounds the botanical garden was established after World War II. once it had been moved from the center of Brussels.

Dirk grouped the oaks here based on the classification of Prantl, as described in Krüssmann (Gerd Krüssmann, Manual of Cultivated Broad-Leaved Trees and Shrubs, Vol. 2 (E-Pro). London: Batsford Ltd. 1986. (Also available from Timber Press, Beaverton, OR.). Dirk says today that this was not such a brilliant idea because when classifications change, it is not easy to move the trees to a different place. Many oaks have been planted here and many have been lost. Dirk wrote an interesting article in 2003 for the yearbook of the Belgian Dendrology Society detailing his experience with the Meise oak collection, many of which are beautiful specimens.

We started with a group of three oaks of differing size and age: *Quercus crispula* Blume, accessioned in 1981, *Q. faginea* Lam., in 2005, and *Q. canariensis* Willd.

in 1986. I am not going to name all of the numerous oaks we saw, but I will just name a few that I found remarkable. The first is *Quercus* aff. bicolor Willd. x O. petraea (Matt.) Liebl., a particularly vigorous tree. Not everybody agreed on the parentage, but this was certainly a fine tree. The second is a good specimen of Q. x bushii Sarg; my third choice is a very good *Q. lyrata* Walter. This is the best specimen of this species that I have seen in Belgium. The collection at Meise contains many more fine oaks and is worth a visit by anyone interested in the genus. And I hope that Dirk will someday revisit his 2003 paper and publish an updated version in the journal of the IOS.

Both gardens which we visited have their holdings available on line at **www.plant-col.be**.

Charles Snyers



From the Editor

Instructions for bringing seed to the Seed Exchange of the 7th IOS Conference (Bordeaux, France)

This is being published now so that you can begin collecting for the seed exchange and secure permission to import seed. The instructions will be published again in the summer newsletter.

- 1. Collect and bring only clean seed with no outward signs of disease or infestation by parasites. Examine your seed for discoloration or insect entry holes, and float the seeds in water, removing the light (floating) seeds: these are most likely not viable.
- 2. Keep your seed in refrigeration (but NOT frozen) in plastic bags until you leave for the conference. If the seed was picked before fully ripe, spread them onto a cardboard or cloth in the shade (but away from rodents) until they are ripe.



- 3. If the seeds emit water vapor in the bags and cause condensation, they need to be ripened a little more and then placed in clean bags and refrigerated. If your seeds start to mold in refrigeration, remove them from the bags and drench them in a 1:10 solution of bleach:water. Let them surface dry, then place them into a new, sterile bag.
- 4. Inspect the seeds weekly for signs of fungus. If they begin to sprout during storage, be careful not to turn the bags over because that will encourage the emerging roots to twist. Long roots (radicals) may be pinched back slightly to retard growth and encourage branching, but always place them back into storage with the roots directed downward.
- 5. Package seeds for the exchange in small plastic bags of 5-10 seeds per bag. Label each individual bag with:
 - Species (and variety, if any) name:
 - Source location and whether from wild or cultivated tree;
 - Your own name and contact info (e-mail) for further information.
- 6. Before boarding an airplane, punch a very small (1 mm) hole in each bag to release air as the plane depressurizes. Failure to do this may result in the seed bags exploding at the cruising altitude, scattering acorns throughout your luggage.
- 7. As soon as you arrive in France, hand your seed donations to the conference coordinator for placement in cool storage until the seed exchange takes place. All seeds will be sorted alphabetically by Latin name for the exchange.
- 8. The seed exchange is open to any participant who is a MEMBER of IOS, regardless of how many seeds he/she may have brought. As you work your way through the seed tables at the exchange, take only small quantities until all participants have had an opportunity to make selections then go back for more if there are any.

- 9. Follow your own country's regulations regarding seed import. Those living in the US should contact the USDA-APHIS office for a "small quantities import permit" if you wish to bring seed home. Do this at least six months in advance of the conference and follow the instructions very closely. Many US members have been through this process and we can show you in France how to process, pack, manifest, and label seed for the return trip as long as you have your permit. Those coming from Australia, New Zealand, some parts of Europe, Mexico, and certain other countries will need to check in advance regarding import restrictions and procedures.
- 10. Bring as much seed to the exchange as you can, and be prepared for one of the most exciting "buffet" experiences you will ever undertake as an oak person!
- 11. While our purpose is to exchange oak acorns, other rare or related species such as *Lithocarpus* may also be brought.

Guy Sternberg



Urban Oaks: University of California Division of Agriculture and Natural Resources

The University of California Division of Agriculture and Natural Resources (ANR) recently published a book entitled *Oaks in the Urban Landscape*. This 265 page book, written by UC Cooperative Extension faculty Laurence Costello and Katherine Jones, and California Department of Forestry and Fire Protection Pathologist Bruce Hagen, takes a comprehensive look at the management of oaks in urban areas. As the

authors point out, more and more oaks are becoming "urban" as development continues to move into oak woodland areas.

As in the wild, urban oaks are extremely important for a multitude of values and benefits including aesthetic, ecological, recreational, economic and cultural. However, significant adverse impacts to the health and structural stability of oaks can result from urban encroachment. Changes in the environment, incompatible cultural practices, and pest problems can all lead to the early demise of stately oaks which end up in an urban setting.

Using this book you'll learn how to effectively manage and protect oaks in urban areas – existing oaks as well new oaks that have been recently planted. Three key issues are addressed: *selection, care,* and *preservation*. You'll learn how cultural practices, pest management, risk management, preservation during development, and genetic diversity can all play a role in preserving urban oaks.

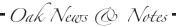
This book will prove a valuable reference guide for a variety of professionals and non-professionals, including arborists, urban foresters, landscape architects, planners and designers, golf course superintendents, academics, Master Gardeners and homeowners. Working together and following the basic tenets outlined, we can all help insure that our majestic oaks will remain for years to come a robust and integral component of the urban landscape.

Specific chapters covered in this publication include Species; Genetic Diversity; Health; Growth; Aging and Decline; Roots and Soils; Cultural Practices; Planting; Biotic and Abiotic Disorders; Structural Failures, Defects, and Risk Assessment; Fire; Oak Preservation During Development; and Ordinances for Tree Protection.

You can order a copy online by going to the following site in the ANR catalogue (http://anrcatalog.ucdavis.edu/Items/3518.aspx). This book is available only in paperback and costs \$55.00.

Douglas McCreary





New From the Board

One of the main functions of the *OAK News AND Notes* is to keep the membership aware of things that are happening in the organization. So, for example, we always provide information about IOS sponsored oak tours, either completed or pending.

Another important area which members of the IOS need to be aware of is the activities of the IOS Board. These people, who volunteer their time, are elected by the membership every three years; they are the executive staff of the Society, and their duty is to make it possible for the Society to function smoothly. Periodic meetings are held, and issues raised either by the membership or members of the Board, are discussed and in some cases voted on. Measures brought to vote become Society policy when a majority of the Board supports them.

The most recent meeting of the Board took place in November. What follows is a summary of the meeting and a summary of the votes taken.

- 1. Treasurer's Report, presented by William Hess, Society Treasurer. The IOS has three sources of income: membership dues, surplus from conferences, and donations. The major expenses are publication and mailing of our journal, International Oaks, of our newsletter. OAK NEWS AND Notes, and planning for the triennial conferences. There are also expenses connected with the day to day activities of the Society (website, oak data base, etc.). He suggested that one area where considerable savings could be realized is through increasing the number of newsletters delivered by e-mail (no printing and mailing costs). Another would be to charge for newsletters which are mailed. There were no votes taken in connection with the Treasurer's report.
- 2. The Membership Director, Rudolph Light, reported that membership is steady at around 450 members, with

drop outs largely matched by new members. Recruitment of new members is important, both to grow the society and its finances, which in turn can permit the Society to do more things for our stated goal of promoting the well-being of oaks and knowledge about them. It was noted that opening IOS activities to non-members is one good way to recruit new members, and there is some evidence that this is working. But the best method of recruitment still remains word of mouth testimony to nonmembers by members, explaining the value of membership in the International Oak Society.

- 3. Eight motions were discussed and voted on. Five motions were approved, to wit:
- a) Income from Life Memberships will be kept in a separate account, the funds to be drawn down over a period of years rather than all at once.
- b) **OAK NEWS AND NOTES** will have an American and an International Editor, to ensure broad diversity in content.
- c) News from sister societies, *e.g.*, dendrological organizations or societies devoted to particular families or genera, (as is our own), may be posted on the website of the IOS if a majority of the Board approves the request.
- d) The Taxonomy Committee of the IOS will be responsible for selecting a Registrar of oak names whenever a vacancy in this position occurs, subject to approval by the IOS Board.
- e) Funds which remain after the completion of IOS tours may be used, at the discretion of the Director of the Tour Committee, for providing complementary memberships in the IOS to worthy persons who are residents of the country or place which the tour visited, and to reimburse non-members who provided services to the tour. Any other surplus funds will be sent to the Treasurer of the IOS, who will deposit them in the general fund.

Also submitted to the meeting was an interim report from the IOS President, Béatrice Chassé. Some of the Presi-

dent's recommendations were enacted in the various motions which were approved. There was also some discussion of whether IOS tour reports should be reported in the Journal or the Society newsletter, although there were no motions or votes in this connection. One opinion is that the longer tours should be published in the Journal, while the shorter ones should be summarized in the newsletter. Another opinion is that given the different kinds of reports tours can result in, plus the constraint of production schedules of our two different publications, flexibility in choice is needed.



New Book on Oak Paintings

A book has just appeared which may appeal to many readers of this newsletter. Entitled simply *Oak*, it is subtitled *One* Tree, Three Years, Fifty Paintings. The author/artist is Stephen Taylor. Grieving at the loss of his parents and a close friend in 2006, he decided to seek comfort in painting over and over again a 250-yearold oak tree which he had seen on walks in the English countryside in Essex. In his collection of paintings made over a three-year period he illustrates what close students of nature have always known: in different seasons, at different times of day, in different lights and different weather cycles, the same object becomes many, though of course the difference is in the eve and the mind, not in the object itself. A beautiful coffee table book as well as a commentary on nature and oaks in particular, the book is also an illustration of visual mechanics and artistic technique, as well as a chronicle of family and social memory, with side glances at contemporary British classical music and English literature. Available from Princeton Architectural Press, New York, or on-line at Amazon.com.





And now for some oak distractions and edifications...

If you want to know all there is to know about pedunculate species of oaks in Europe, go to http://www.monumentaltrees.com/fr/photos-chenepedoncule/ europe/1. This will take you immediately to the part of Monumental Trees treating the species Quercus robur L. in Europe. The language of the site is French, so non-speakers of French should just click on the headings to see where they lead. Monumental Trees actually treats many species of trees from all over the world, so you can spend many happy hours looking at superb photographs of spectacular trees next door to you and on the other side of the globe. A good way to spend a snowy day (in the Northern Hemisphere) and good preparation for the 7th Triennial Conference of the International Oak Society.

http://www.youtube.comwatch?v=ZK **4LjURtaDw**. This video is a time-lapse presentation of the germination of an acorn and its early development into an oak seedling. The filming was actually done in the studio, although it appears to be in an outside setting. The acorn was "planted" in September and filmed in an underground set, filmed with a two hour interval between exposures. This shows what goes on, spring after spring, out of our sight. Watching this made me appreciate even more the miracle of birth. There are other time-lapse videos accessible from this site, including one of an oak tree through the seasons.

Everyone knows and loves the BBC programs narrated by David Attenborough. For a YouTube video on how a wasp parasitizes an oak flower, google "oak tree and wasp eggs—life in the undergrowth. BBC Attenborough." You can also use this URL to reach the same site: http://www.voutube.com/ watch?v=CzXccyoJThI. (When I used this URL I got first a film on adopting a dog. Just exit from that, and the Attenborough film is right behind it.) The gall wasp film depicts the process of parasitizing of an oak flower by a gall wasp, (of which there are more than 70 species), and the life-cycle of the wasp, from egg

to emerging adult wasp. Also shown is the secondary parasitizing of a gall wasp larva inside a gall by a different species of gall wasp. It's a jungle out there!

If you are ever in doubt about the latest and most 'correct' scientific name for a plant, go to http://www.theplantlist. **org**. This is a working list of all known (and named) plant species. The Plant List provides the accepted Latin name for most species, with links to all synonyms by which that species has been known. Maintained jointly by the Royal Botanic Gardens, Kew and the Missouri Botanical Garden, it includes 1,040,426 scientific plant names of species rank, from 620 plant families and 16,167 genera. No need to dither any more...

http://www.fagaceae.org. This is the site of the Fagaceae Project. It disseminates data and analyses of all kinds on the genomics of the Fagaceae. Mostly technical, yet there is an abundance of information accessible to both expert and layman.

One of our members, David Muffly, maintains a website called Oaktopia: "A Circus of Quercus, California Style". Dave is an ISA Board-Certified Master

Arborist who lives in Santa Cruz, California. Go to http://www.oaktopia.net for information on his experiments with growing many oak species in urban and other environments in California, as well as for a wealth of information on other topics having to do with oaks. If you follow all of his links, you won't get much else done that day!

Many of the readers here know of the dangers of transporting firewood—with resident insect pests—from one locality to another, introducing exotic pests in this way into new habitats. One such case is documented in an article last September in the Los Angeles Times, which reports on the introduction of the gold spotted oak borer into San Diego County, California, from its native habitat in Arizona, in loads of firewood. Google "beetle devours Sand Diego oaks-rest of state may be next". A similar article on the same topic can be found by googling "firewood movement leading cause of oak infestation". This article includes photographs of infested logs. Read these articles, and similar articles discoverable by googling, and weep. A classic case of unintended consequences...









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OAK NEWS AND NOTES

The Newsletter of the International Oak Society 787 17th Sreet Boulder, CO 80302 USA

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