Who’s invading whom?

From our point of departure in the Dordogne (a department of the Aquitaine region) to our destination in the Seine Maritime (a department of the Haute Normandie region) there are 587 kms to be traveled, crossing over two regions, the Limousin and the Centre.

From the city of Orléans, passing through Chartres and then on to Rouen, what the words “invasive plants” should be used to designate, but are not, becomes dramatically clear. Nothing but one plant as far as the eye can see for countless miles and what seems like an eternity. The tableau is completed by armies of gigantic fossil fuel-eating machines, high-voltage cables and pylons and mile-long watering apparatus spewing rainbows in the midday sun.

This is of course not a situation endemic to France. Every (agricultural) country in the world has places that are, like this one, so uniformly ugly and so ugly in their uniformity. Can anyone today really believe that this is a solution to anything?

Near Rouen, on the route that we have taken, we cross in different places the valley of the river Seine, which is 777 km long and extremely sinuous, flowing from a place called Source-Seine, through Paris and on to the Havre where it meets that part of the Atlantic Ocean called the English channel (but not in French, of course!).

Our destination is north west of Rouen, about a third of the way between the Havre and Dieppe, to a town called Sassetot le Mauconduit where we have selected lodgings for the evening at the Château de Sissi – not because it is a château (although that might have been sufficient) but because it is situated in a park of 11 hectares planted with trees some of which are over 300 years old.

A change of scenery

It would be hard to say exactly where, but at a certain point along the road (after Rouen certainly) one is struck by the majestic presence of patches of Fagus sylvatica L. and the realization that Quercus robur L., though a nice tree certainly, just doesn’t measure up to this beauty and grandeur. The most beautiful beech forests left in France today are in this region (Haute Normandie).

Obviously, beech is also abundantly planted in parks in this part of the world and the magnificent specimens that we find at the Château de Sissi, probably
planted over 200 years ago, do honor to the species. Here also we find planted: *Q. robur* and *Populus tremula* L. both with circumferences of more than 3m; beech and copper beech of incredible dimensions; *Acer pseudoplatanus* L., *Castanea sativa* Mill., *Cedrus deodara* Roxb. Ex (D. Don) G. Don, *Tilia cordata* Mill., and one very unhappy *Quercus rubra* L., struggling to find its way to the light. Two *Araucaria araucana* (Molina) K. Koch right at the driveway entrance are rather unfortunate recent additions to the grounds. The next time we come, we must bring a chain saw.

*Quercus canbyi* and truck protector

photo © Béatrice Chassé
Quercus graciliformis

Quercus durifolia

photo © Béatrice Chassé
The most spectacular trees to be found in the park are two *Liriodendron tulipifera* L., planted more than 300 years ago. One, with a single trunk of more than 4 m in circumference and the other with a double trunk, each of easily between 4-5 m in circumference. From the single-stemmed tree, a weeping branch, touching the ground shows striking examples of what Francis Hallé calls “traumatic reiterated units” (unités réitérées traumatiques) in his hypothesis about “root wood” (bois racinaire)\(^1\).

As the sun goes down shedding that particular light that is characteristic of places close to coast lines of the Atlantic and after a wonderful meal spent recalling images of the enormous trees we have just seen, visions of our arboretum and how fantastic it will look in 200 years or so accompany us to sleep.

**The Quercetum du Hanouard**

After an early-morning stroll along the sea, we set off for the small town of Le Hanouard, the location of Henri de Brem’s arboretum. A long-standing member of the International Oak Society, Henri once remarked that he finally understood what sudden oak death was after a committee of oak experts came to visit his arboretum. This bitter-sweet reflection, followed by his credo “*I have great confidence in doubt.*”, gives a measure of the man: fine-tuned humor distilled through masses of knowledge in numerous subjects, all wrapped up in an infectious smile and a provocative gaze.

Originally from the Vendée (the southern-most department of the region called the Pays de la Loire), Henri de Brem acquired this property nearly 40 years ago. And he started planting.
With between 800 to 1000 mm average annual rain-fall, the oceanic climate of the Haute Normandie delivers winter temperatures at an average of about +5°C with every now and then some below zero temperatures (as much as -10°C). Summer heat is not extreme, with averages between 17 and 20°C and a few days up to 30°C.

The property comprises 6 hectares of – as nearly everywhere in Normandy – extremely fertile, rich soil made of clay, sand and humus sitting on top of limestone. Faithful to a Norman tradition, the property is a “clos masure”: a house and surrounding grounds enclosed by beech trees planted every meter and a half, “…for wind protection,” explains Henri, adding with a touch of malicious humor, “but really because in Normandy countrymen like to be hidden away, every neighbor being a potential enemy.”
The arboretum is divided into three areas: “la cour”, “l’enclos” and “le bastion”, radiating around the house. The oak collection comprises a little over 100 taxa, with just a few cultivars and as many hybrids. The Quercetum du Hanouard holds one of the 4 “Collection Agréée” labels delivered by the CCVS (Conservatoire des Collections Végétales Spécialisées).

A stroll through Mexico

The elegant silhouette of what is probably the French champion *Q. canbyi* Trel. greets us as we start off for the first part of the visit. It is probably one of the best introductions from Mexico (in the UK, 1979, by Sir Harold Hillier), with brilliant green leaves, pretty young-leaf color and a seemingly endless adaptability to different soils and climates. Here in Normandy, it has reached a height of about 9 meters and was planted 7 years ago.

*Quercus lanata*  
photo © Béatrice Chassé
Not far, a similar species, *Q. graciliformis* C.H. Mull. (introduced to Europe only in 1996) is proudly displaying the coppery-red of new young leaves certainly the result of the much needed recent rain fall after a year of terrible drought. Some authors suggest that this species should be considered an ecotype or geographical variant of *Q. canbyi*. Although the distinction between a maximum of 4 lobes for the latter and 5 for the former seems a bit tenuous, the difference in acorn maturation time (one year for *Q. canbyi* and two for *Q. graciliformis*) is perhaps more significant. But, this too can be a function of the environment. As always with oaks, the plot thickens…

Indubitably one of the stars of the collection – and one of the first oaks planted by Henri thirty years ago – is a *Q. durifolia* Seem. complete with acorns. This for me is one of those Mexican species from the Sierra Madre Occidentale that rivals in elegance with the sub-genus *Cyclobalanopsis* oaks. Henri’s is one of the first
to have been planted in France (just a few years after its presumed introduction to Europe in 1979).

Visiting our arboretum one day a few years ago with a botanist friend, my excited “I will now show you the most beautiful tree in the world” as we approached a *Q. rysophylla* Weath. was answered by his very calm, “It usually is, wherever it is grown.” Henri’s *Q. rysophylla* is no exception – growing next to a *Q. sartorii* Liebm. that wouldn’t fare too badly in a beauty contest either. Both of these species are from the Sierra Madre Orientale. These two trees, as many others here, are exempt of any leaf damage, disease or other signs of ill being. The Quercetum du Hanouard seems to be a stress-free environment for many of its inhabitants.

*Q. crispipilis* Trel. from the state of Chiapas and from Guatemala is rare in cultivation and in nature: it is in the highest risk category of the IUCN red list. Growing here in Normandy it has attained respectable size and appears to have suffered a bit from the severe drought of 2011.

Growing not far is a tree that Henri received labeled as *Q. conspersa* Benth. but it is decidedly much more like *Q. glabrescens* Benth. Amongst other characteristics distinguishing the two, *Q. conspersa* should have a majority of leaves with an entire margin, and this is not the case.

In between the trees, Henri explains his love of the genus: “Their size, their silhouette and leaves, and, of course, their psychology. Most of all, their comforting optimistic vitality as evidenced in their good habit of producing new growth several times during the season, in brilliant colors varying from white to yellow, rose, brown and of course, green.”
From Asia and America

Part of the Quercetum is mowed by a neighbor’s cows. This is of course good use of the land (and a way of reducing potential enemies?) but it means that the trees need very serious protection – as can be seen with this specimen of *Q. acuta* Thunb. Found in nursery catalogues (where they more often than not turn out to be *Q. glauca* Thunb.) this is a rare tree in cultivation in France. This *Q. acuta* with a yellowish pubescence that can be easily removed from the underside of the leaf
and very long, yellow petiole (sometimes exceeding 4 cm) seems to be the real thing. There were no very, very young leaves that presumably would have helped in identification.

There are six other oaks here of the subgenus Cyclobalanopsis: Q. oxyodon Miquel, Q. liboensis Z.K. Zhou, Q. myrsinifolia Blume, Q. glauca Thunb., Q. lanata Smith, and Q. gilva Blume.

Nearly all of the purported Q. lanata that I have seen in cultivation are Q. leucotrichophora A. Camus. In the Flora of China these two taxa have been grouped (but as usual, not everyone agrees on this). I would think that this very velvety, thick white tomentum on the young leaves and shoots of this specimen here in the Quercetum du Hanouard is sufficiently characteristic to confirm that this is Q. lanata. According to Henri de Brem, the representatives that he has of the two aforementioned species do not behave the same way – notably with regard to hardiness.

Henri’s Q. gilva measured 50 cm when it was planted three years ago. It is a splendid little tree that has now reached a height of 2.5m, defiantly pointing very yellow new growth towards the sunny blue sky with which we were blessed during the entire visit. The Q. liboensis is growing more slowly but is very healthy and vigorous, also with new growth. A less vigorous Q. oxyodon (from seeds collected by Jean Merret in Burma in 2005) has been cut back several times.

The oaks from Asia of section Quercus include Q. dentata Thunb., Q. fabrei Hance, Q. acutissima Carr., and Q. castaneifolia C.A. Mey.

Growing together with the magnificent Q. dentata are a fine specimen of Q. phellos and an equally beautiful Q. velutina. From North America also, we find Q. montana Willd., and Q. bicolor Willd., showing health and vigor.

With, as always, a touch of humor and a good dose of honest unpretentiousness, Henri explains what he has learned from planting. “I have come to realize that I have planted almost always in the wrong place and that when it becomes necessary to chop down a dying tree or one that is taking up too much room, the esthetic result is always gratifying. Contrary to decisions that we make based on our judgment, no error is possible when they are based on chance. The open spaces thus created are so attractive that I have come to believe that it is exactly where there is enough room that one should never plant!”

From dry, poor soil to wet and rich and loving it

This is why Francisco Garin, oak specialist and Director of the Jardín Botánico de Iturraran (Spain) insists, “Tenemos que intentar todo” (We must try everything). There are of course limits to this philosophy, but in a large majority of cases, you never know what the response to the environment will be – especially with oaks.

And so it is that all of the European and North American oaks growing in the Quercetum du Hanouard which you would expect to be miserable in wet and rainy Normandy: Q. pungens, Q. ithaburensis, Q. macrolepis, Q. suber, Q. pacifica (unfortunately damaged by snow this past Winter), Q. geminata, and Q. faginea, are unquestionably healthy, happy trees.

Once asked what made oaks so special, Kevin Nixon, after a good long
think, replied, “Nothing... oaks never overspecialized, they never found a niche. They are so successful exactly because there is no reason that they are. Restricted distribution only happens when there is just one reason for a creature’s success.”.  

Not just oaks

Our day was agreeably interrupted by a very nice lunch which we enjoyed with Anne-Marie de Brem and conversation that started from a beautiful branch

*Quercus geminata* and electric fence  

photo©Béatrice Chassé
with acorns lying in my plate of Quercus guesswhat to continue briefly on to Henri’s multiple other interests as varied as 10th-13th Century Chinese porcelain and first editions of French authors of the 19th and 20th Centuries. A little bit of genetics, Latin and botany popped up into the conversation every now and then. And also the story of why he started an arboretum: when he was ten years old and a “louveteau” (the French equivalent of a cub scout), he won a first prize for his herbarium. He made the solemn pledge, as was required of him, to continue his efforts. Which he did… thirty years later at age forty.

The name Quercetum du Hanouard is misleading: there are not just oaks here. Sassafras tzumu (Hemsl.) Hemsl., Austrocedrus chilensis (D. Don) Pichi-Serm. & Bizzarri, Cunninghamia konishii Hayata, Castanopsis cuspidata Schottky (all French champion trees); Fagus japonica Maxim. (fruiting for the first time) and many other species of this genus; Picrasma quassioides Benn., Trochodendron aralioides Siebold & Zucc. and still others, make this Norman destination a true dendrologic experience.

There is also a part of the Quercetum that Henri calls his “forêt en mouvement” a play on words with Gilles Clément’s “jardin en mouvement”. As time goes by, things change and instead of destroying this movement, the gardener (the forester?) intervenes every now and then just to slightly push things in one or more of the directions proposed by this natural change. Time will tell…

In farewell, we left a small box of young trees containing Q. sebifera Trel., Q. viminea Trel., Q. greggii Trel., Q. sideroxyla Humb. & Bonpl., Q. deliquescent C.H. Mull., Q. invaginata Trel. and three pines - who have all indeed found a new, good home.

Bibliography


2 This is poetic license: the Quercetum du Hanouard is not organized geographically. As it is impossible to mention every tree, the choice is also poetic license.

3 Since the 2006 revision of Cyclobalanopsis by Madame Min Deng, this taxon has been split into three varieties: Q. oxyodon var. oxyodon, Q. oxyodon var. hypargyrea M. Deng & Z.K. Zhou and Q. oxyodon var. tomentosa M. Deng & Z.K. Zhou. There are divergent opinions about this.

4 For some authors, this taxon is considered to be Q. glauca var. gracilis A. Camus. For others, not.