

ARBORICULTURE IN FRANCE¹

by F. de Jonghe

I am extremely pleased to be here in this marvelous country. Four hundred and fifty years ago Jacques Cartier explored part of this immense territory which you have embellished and transformed into a rich and hospitable nation. I am pleased to bring you news from France concerning French arboriculture.

I wouldn't be surprised at all at the crossroads of Poitou or Normandy that some old oaks still remember with nostalgia of Sir Champlain, or the departure of some of your ancestors towards the shores of what was then New France. I won't talk to you about our forest trees, but of those that border our roads, canals, and the streets of our cities, that shade our squares, and embellish our parks.

The urban trees of France are acacia, maple, oak, beech, plane tree, cedar, etc. Innumerable varieties of species, sometimes coming from the furthest horizons, have become acclimated to the diversity of our climates and inhabit the landscape of our regions.

What part has the tree played in the elaboration of the French landscape? How does it live in our urbanized, mineralized, and industrialized universe? What is its future and its longevity among all the stresses it undergoes?

Since the beginning of time man has lived among trees; they are the object of cults and beliefs and they belong to mythology. Pliny the elder, the naturalist, notes the strange activity of these robust and long-bearded old men, who bearing a bush hook and in peril of their lives, picked the sacred mistletoe on the oaks, a symbol of renewal and hope in life after death. Particular virtues were attached to certain trees such as the olive, laurel, fig, and yew that enrich the native countryside.

During the era of evangelization, the Church tried to destroy these impious symbols, but understood that it was wise to build churches on

the very grounds of these idolatrous practices. This Christianization of the tree, and of the oak in particular, thus perpetuates the interest the tree arouses, but this time binds it to holy devotion.

To lessen the myth of the oak that still appears a little too pagan, we surround the graveyards with yews, the leaves of which are said to possess the property of absorbing the miasma of decomposing corpses. Trees are planted close to chapels, churches, and graveyards; often in groups of three to remind us of the Holy Trinity, but strangely also the Masonic Triangle. Much later, at the time of quarrels between Church and State, crosses were destroyed, only to preserve an empty space in the midst of three trees bearing the names Liberty, Equality, and Fraternity. When we are called upon to work one of these trees, we never know which of these great republican virtues has received our attentive care.

Religious practices contributed to the formation of the diversity of the French countryside, as testified by the alignment of trees surrounding buildings, and some rare specimens such as the thousand-year-old yews of Normandy, or the oak that shelters two chapels inside of its trunk.

The tree symbolizes the place of assembly for a group as well as the exercise of temporal power. St. Louis held his Court of Justice under an oak at the verge of an immense forest that surrounds the capitol. Small clearings in the forest were the center of an intense activity, as revealed by Duke Berry's colorings of hunting, breeding, fruit and wild vegetable harvesting, smelting works, glass making, pottery, etc.

Power, trade, and crafts utilize the tree for peaceful as well as warfare purposes. In the 15th Century, Sully, the minister of the good King Henry IV (le vert galant), ordered the planting of elms along the roads and squares of villages to supply the wood for gun and artillery carriages. The people had their revenge on Sully by

mutilating the young trees. The famous boiled chicken must have, at times, tasted quite bitter. Later on, Colbert undertook to build a powerful Naval fleet. To this end whole forests were destroyed which were, of course, replanted, but the forest became more sparse.

The nobles and rich bourgeoisie, seduced by Renaissance splendor, adorned their fortresses, the defensive walls of which had become useless, and erected on the banks of the Loire and its tributaries or on the 'île de France, palaces that still fill us with admiration: Versailles, Fontainebleau, Chambord, Chenonceau, Azay le rideau, Vaux le Vicomte. Release from feudal constraints liberated mankind and opened the precious worlds of art, literature, and science.

The secular world erects its own cathedrals. The tree, until now symbolic and useless, becomes a decorative element. The natural order is discarded to the advantage of geometric and cartesian rules. The tree is subdued—its natural state is architected. Exotic species are introduced; audacious practices founded on observation, and the knowledge thus acquired, transformed the landscape. Indeed native trees were cut in "curtain, in bower, marquioness, arbour," without aggression nor mutilization, but with respect. The native plants nevertheless were to submit and integrate.

Following the Versailles example, provincial residences were ornamented with French-pruned, transplanted trees. The roadways to the city or the next town were beautified by full-length or architected rows of trees.

But the revolution was soon to come. In spite of the efforts to extirpate all religions or noble connotation, the tree was rediscovered as a symbol of freedom. Cosmic tree, sanctuary of liberty, poems are composed such as:

*Thou deep root
Shall descend down to hell
And thou fecund shadow
Spread over the universe*

More than 60,000 trees were planted to symbolize freedom, but most of them perished because they had been dug in haste and planted without their roots; generally, the oak, poplar, and plane tree were not then very widely used species. Very few survived the political upheaval

France knew afterwards. Napoleon looked unfavorably upon them as a challenge to his authority. As soon as he returned, Louis the XVIII had them destroyed. In 1848, trees were again planted in profusion. The people commemorated them, the clergy blessed them, and in 1851 they were again suppressed.

The era of industry and the development of large cities then began. In Paris, Haussman designed the great boulevards; the last fortifications were destroyed and trees were planted generously, often along roads and canals. The landscaping of new buildings, which housed the large republican administrations, had as their sign posts plantations of trees, i.e., the railway train stations and, much later, the war memorials.

By 1830, Stendhal gave a warning signal and denounced the barbarous manner in which the trees were pruned to resemble common vegetable plants. Progressively, and until today, various factors have aggravated this situation, reaching a critical and preoccupying point. Most of the plantations that we have inherited were planted from the mid-19th to the beginning of the 20th Century. In the best of conditions for development and satisfactory growth, the trees profited from sufficient aerial and underground space. As they matured they conferred to the urban and rural French landscape its particular character. They impress us with both the centralized planning and the local or regional peculiarities.

It is extremely difficult and delicate to reconcile the existence and presence of these ancient trees with the necessities of modern life. We need to widen the roads, install night lights, overhead and underground networks, etc. The cobblestones also have disappeared. The impermeable street surface must now allow high and heavy vehicle traffic, in total safety and at high speed. In cities, the smallest plots have been purchased by real estate developers for buildings; the remaining open spaces have been transformed so that we can more fully use the car.

Urbanization results every year in elimination of several thousand trees that will never be replaced. Remarkable specimens disappear in apparent indifference, while the trees that decorate little plazas are rotting away. Plantings installed 15 or

20 years ago without any competence were planted in haste and without due care as to the choice of species, with budgets ridiculously insufficient, must now be rehabilitated. Fortunately, some projects conceived by landscape architects concerned about their art, offered perennial satisfaction.

The tree brings many inconveniences. The leaves and fruit must be gathered. The shade is not always welcome. The roots deform the surface of pavements and roads, and they go through and dislocate pipes. The tree also provokes allergies. The tree is a hazard. A branch may fall, and even if in living memory a tree has never crossed a street, it has been held responsible for many accidents.

For these various reasons, the trees have been systematically pruned and sometimes mutilated to such a state that they no longer look like the plant evoked by Stendhal. These practices are no longer justifiable. They are done for convenience, for security, and even for so-called aesthetic value.

In most cases the budgets allocated for the maintenance of trees are insufficient, sometimes lower than those reserved for annual plants, and the pruning specialist no longer possesses the skill and qualifications that used to be renowned. Pruning is considered a secondary and seasonal activity. Traditional techniques that used to concentrate on young shoots have been radically reduced in importance. Whatever the species, whatever the location, all trees undergo the same treatment whether or not they are to be trained to architectural forms.

The results of poor treatments are seen on big trees and after they have been cut down. As a result of the quick rotting of the wood there is hollowing of the bole. The tree also undergoes attack by wood-eating insects and fungi. Its silhouette is destroyed, its foliage area is considerably reduced, it can no longer elaborate its nutritive sugars, it is weakened, and it is soon invaded by a variety of pests which will lead from decay to death. To all this must be added the vehicle assaults on unprotected trunks and the perturbations of trees' surroundings; atmospheric pollution, modification of its pedological environment, mutilation of the root system, soil compaction,

hydrological perturbation, toxicity, etc.

We should not forget the great epidemics such as Dutch elm disease (*Ceratocystis ulmi*) that devastates our elms, and fire blight that destroys the Rosaceae. Moreover, we in France are very worried by the consequences that could result from extension of the sudden sickness (*Ceratocystis fimbriata*) of the plane tree, now localized in the region of Marseilles, because this tree alone represents 70% of our street tree plantings.

Finally, tree replacement costs have become higher and higher, and weigh heavily on the public expenses. Such a situation must not continue to deteriorate. For a number of years, cries of alarm have been launched by local communities or specialized service officials. They draw up inventories, set up diagnoses, calculate the specific value of the ornamental tree, and have taken a certain number of protection measures.

Moreover, for some time the public has demonstrated a real discontent, and associations have been formed. The press has discussed the subject, and the authorities, active and competent people, have proposed and carried out diverse actions to protect, manage, and maintain the trees in the best possible condition so that the trees may insert and develop harmoniously in the modern contemporary landscape.

I, as a minister of Town and House Planning, have been called to assist at different levels of the landscape mission. Before describing them I would like to thank and express all of my gratitude to Sir William Matthews, without whom I would not be here, but overall without whom I should still be in the greatest ignorance. He welcomed me, opened his door to me, and tolerated me when I behaved like a despicable spy. He offered me his friendship and his support, and when he received the landscape missions representatives, generously dispensed to us his learning, his knowledge, and his experience. He enabled me to meet with British Arboricultural Association members and with Professors Gordon King and Alex Shigo, whose work and scientific rigor provide us with essential knowledge which until now was essentially based on empirical observations.

Among the principal actions proposed or undertaken: 1) we have disseminated information to the

public at large and to the elected officials concerning tree problems, as well as the effect of the city environment along the main roads, 2) supported the associations that promote and protect the tree, 3) inventoried the historical trees, 4) encouraged the initiation of a research program whereby the big agricultural laboratories and the Forestry Commission collaborate, 5) established relations with foreign-constituted associations such as the Tree Council and ISA, and 6) proposed a legal status for the tree. We are now training a qualified and competent staff, are able to manage the plantations and to intervene on behalf of the tree according to its needs and to its environment, and we encourage and continue to plant trees.

Very interesting initiatives have been undertaken in two departments in eastern France. While inventorying the aged and degraded road plantations, a thorough study began, taking into account a plan of renewal and long-term management with

harvestable tree species, the profit from which should cover the maintenance and replacement expenses and still maintain a quality tree heritage for the whole of this territory. Quite obviously this represents a vast program.

I am here on my own behalf, in charge of no mission and invested with no power. Nevertheless, I know that there are many of us in France that wish a quick change in the situation in favor of the tree. We still need advice and need to be able to benefit from all experiences. I hope that we will be able to establish the links of a profitable collaboration, and that I will be able to take back to France your encouragement to all those people who are following this path. Possibly we shall have the privilege in the near future to receive you in our country.

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Abstract

SIEVERT, R. C., JR. 1985. **Shade tree commissions and ordinances: do they help or hinder?** *Arbor Age* 5(10):32-34.

Voluntary shade tree commissions have been set up in many cities and villages and have led to total tree management programs. Shade tree commissions are the most successful way for small towns of less than 25,000 people to manage their trees. Such agencies are established by ordinances and consist of both residents and municipal officials. Their powers and duties may cause them to be either advisory or authoritarian. Occasionally the advisory shade tree commissions become the authority because they are considered to be the resident tree experts. In addition to establishing the shade tree commission, many municipal tree ordinances deal with other aspects of tree care, preservation, and promotion. There are some specific ways in which utility foresters can work with shade tree commissions. For example, when street tree brochures are put together, the utility companies may want to help supply input on the contents—as well as assistance with the printing costs. Some communities have established small tree nurseries. Utility companies may be able to work with them by providing small, maturing trees for nursery use. Most shade tree commissions recognize the need to remove hazardous trees. Utility companies can cooperate in removals that help both parties.