



Lilac Newsletter

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INTERNATIONAL LILAC SOCIETY

INTERNATIONAL LILAC SOCIETY is a non-profit corporation comprised of individuals who share a particular interest, appreciation and fondness for lilacs. Through exchange of knowledge, experience and facts gained by members it is helping to promote, educate and broaden public understanding and awareness.

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THE LILACS OF MACKINAC ISLAND

- Carl D. La Rue *

The lilacs of Mackinac Island emphasized in a moving picture taken on that historic island, have been widely known for their large size and great age, but it is doubtful whether many persons have realized how unusual they really are. I had observed their unusual size several times in the last ten years and wondered about their age and growth rate. On June 23, 1947, I had an opportunity to satisfy my curiosity, at least in part, by measuring a number of them. I was surprised to find that they were much larger than I had supposed and that some of them had diameters at the butt which would be significant to a lumberman.

According to popular report the oldest lilacs were planted by the Jesuits at an early date. The story is plausible, though I have not attempted confirmation.

By far the greater number of the old lilacs belong to the species Syringa vulgaris, the common lilac, but white lilacs, Syringa vulgaris var. alba are also common in the landscape. As elsewhere, the white lilacs are taller than the purple ones and have longer trunks, which, however, do not compare in girth with those of the purple type.

Lilacs, under usual conditions tend to be shrubs with many stems, but they respond readily to training into tree forms. Those of Mackinac Island are nearly all reduced to a few stems, either by training or by survival, but one large specimen had a vast number of stems, both ancient and recent. There are many of tree form which appear to have been trained to a single stem. These are true trees, since they exceed by far, the dimensions usually ascribed to shrubs. On most of them, the trunks are very short so diameters could not be measured at the standard breast height. Instead, measurements were made as near the ground level as possible, but above the root crown in any case. The data secured are given in Table 1. Many more trees were seen which appeared to range from six to nine inches in

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diameter.

Many trunks are gnarled and covered with knotty excrescences and remind one of the trunks of ancient olive trees. These irregularities made accurate measurements impossible, but the percentage of error involved in the measurements given in Table 1 is not great. Some of the largest trunks are smooth, so it is evident that the large sizes presented are not due merely to knots.

In plants with multiple trunks, all appear to fuse at the root crown and if the diameters of the root crowns could be secured they would be impressive. For example in the specimen shown with five trunks, the five circumferences add up to 173 3/4 inches. Of course, if the trunks were fused, the total circumference would be less than this, but it would be much greater than that found in any single trunk.

Table 1.--Diameters of Lilacs on Mackinac Island

TYPE	NUMBER OF TRUNKS	DIAMETER IN INCHES	REMARKS
Syringa vulgaris	-----3	(11.1 (9.9 (10.1	
Syringa vulgaris	-----1	9.6	
Syringa vulgaris	1	14.0	
Syringa vulgaris	-----1	11.2	
Syringa vulgaris	1	9.6	
Syringa vulgaris	-----1	7.9	
		(14.1 (11.8	
Syringa vulgaris	-----5	(8.8 (10.6 (9.7 (15.7	
Syringa vulgaris	-----2	(11.6	
Syringa vulgaris	-----1	16.0	
Syringa vulgaris	1	8.9	
Syringa vulgaris	-----1	19.2	-----branch at 5' is 12.7" in diameter

Table 1.--Diameters of Lilacs on Mackinac Island - Con't

TYPE	NUMBER OF TRUNKS	DIAMETER IN INCHES	REMARKS
Syringa vulgaris	-----1	-----16.8	branches at 5' are 9.8" and 10.2" in diameter
Syringa vulgaris	-----1	18.3	
Syringa vulgaris	-----1	15.1	
Syringa vulgaris	-----1	21.8	
Syringa vulgaris	-----2	(12.7 11.9)	
Syringa vulgaris	-----1	12.4	
Syringa vulgaris	-----1	23.6	
Syringa vulgaris	-----2	(15.8 13.9)	
Syringa vulgaris	-----1	20.3	
Syringa vulgaris	-----2	(7.5 6.5)	
Syringa vulgaris var. alba	-----1	7.2	
Syringa vulgaris var. alba	-----1	9.3	

The largest trees are found in the old part of the village on the lower levels and near the shore. The largest lie toward the east end of the village. The largest was found a little east of the Church of St. Ann, and the second largest one was across the street from that church. A fine specimen grows in front of the Early House where Alexis St. Martin received the wound which allowed him to become the subject of the famous experiments of Dr. Beaumont on the physiology of the stomach. This tree is 16.7 inches in diameter and splits into two branches at the five-foot leve. one 9.9 and one 10.3 inches in circumference.

The five-trunked giant shown in Table 1 is in front of the old Astor House (1818-1829). In the grounds of the building, along the sidewalk of the street, there is a row of ten plants, all nearly as large as this one.

Heights of the trees were not measured, but many reached beyond the eaves of two-story houses. The tallest are estimated to be between 25 and 30 feet in height.

All of the trees examined were in remarkably fine condition. The leaves are smaller than those of young plants, but both twigs and leaves fail to show the depauperate appearance of old lilacs farther south. No scale infestation was seen, and no signs of mildew, though it was probably too early in the season for this to be visible. Some plants had lost large trunks, (the five-trunked tree at Astor House had lost two nearly as large as the survivors), but no dead trunks or large dead branches, and remarkably few small ones were seen on this inspection.

The trees appear to grow rather slowly. Rings were counted in a branch 40 inches in circumference which had been sawed off cleanly. A core 2" long was drilled with an increment borer in a dead trunk. The wood was exceedingly hard, and threatened to break the instrument if the boring were continued. From the ring counts obtained, the annual rings appeared to average 10 to the inch, which means the diameters increased an inch in five years. At this rate the oldest tree measured would be about 118 years old. The trees on the grounds of the old Astor House appear not to have been planted during the time that original structure existed (1818-1829), but probably were set out some fifty years later. The data are too scanty to be reliable but they indicate that the trees are not remarkably old, and do not date back to the earliest days of the settlement. Even so, they must be among the oldest, as they surely are among the largest lilacs in the United States. I know of no records of size in lilacs. Unfortunately, while much is known of the life span of species of trees, and many records exist of unusually large specimens, similar data have seldom been collected for shrubs.

In southern Michigan, and similar regions, the main trunks of lilacs do not live very long, although the roots may persist indefinitely. Although they are very tolerant of less satisfactory conditions, lilacs undoubtedly prefer a cool climate. The giants on Mackinac Island owe their stature to favorable growth conditions and a long period of undisturbed development.

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HOW MANY BTUS PER CU. FT. OF LILAC WOOD?

A LILAC NEWSLETTER reader called my attention to a question raised in a recent issue of COUNTRY JOURNAL (March) in which a respective reader laments having seriously worn the cutting links of his chain saw while cutting-up a large Beech tree, yet appreciating the fact that the wood did contain so many BTUs. This same individual having only recently cleared an aged patch of Lilac trunks recalled only too vividly the weight of those sticks, raised the question of heat value of lilac wood, and remarks that if lilacs grew to the size of the "Mighty Oak" our energy problems could be eased somewhat via the old woodlot, the lilac, and the wood burning stove.

However, and for what its worth, I do believe that you'll find that the extreme dense character of lilac wood is pretty much limited to the species vulgaris and is not a value that is shared by the more tree-like species.

Editor

"CULTIVATED SINCE ANCIENT TIMES"

by - Robert B. Clark, Meredith, New Hampshire

Three lilacs were brought into gardens so remotely in the past that their stories are not fully told even today. Curiously enough, each belongs to the Vulgares section of the genus Syringa: two are Asiatic, one European. The Vulgares are characterized by their inflorescences arising from lateral buds of the previous year's growth. Specifically, S. persica and S. vulgaris are pre-Linnean species, the other, S. oblata, although cultivated in Chinese gardens for untold centuries, was not known to science prior to 1753, the date marking the beginning of modern plant names.

The privet-leaved Persian lilac, S. persica, known only from cultivation, is a round-topped shrub, 6 to 10 feet tall with a somewhat broader spread. Its slender upright branches bend to the weight of the usually several pairs of flower clusters, 2 - 4 inches long. Its lance to ovate-lanceolate leaves, 3/4 - 2 1/2 inches long, are occasionally lobed toward the tips of the branches. The florets are pink, but the flowers seldom or never set seed. There is, however, a cutleaved form of the "Persian" lilac, var. laciniata, which differs from the species with its pinnately lobed foliage, only occasionally with entire leaves, its flowers which are bluish, and its capsules which contain fertile seed. It is this latter lilac which contemporary botanists recognize as a valid species, S. laciniata, whose native land was unknown until Frank N. Meyer, a U.S. Department of Agriculture plant explorer discovered it in north-central China in 1915. Meyer found it "covering whole loess hillslopes in company with Amygdalus (Prunus) Davidiana" at 3500 feet elevation, on the dry south-facing flanks of the Tsing ling range above the Wei River in extreme southwestern Kansu province. Near this site passed one of the caravan routes, or "silk roads", between Peking and Persia. One can quickly imagine a handful of seeds being stripped from a wayside shrub, stored in a saddlebag and at some halt or terminus bartered for a smoke or trinket. Anyway, when the Ottoman Turks came into contact with the Western World and its commerce - at Constantinople -

there was the so-called Persian lilac. It had crossed Asia, possibly as early as the thirteenth century, and, at the time that the Pilgrims landed and founded the Bay Colony plantation, in 1620, it was growing in Venice, having been introduced by one Jerome Capelli who is thought to have been an ambassador to the sultan's court.

The privet-leaved Persian lilac is presumed to be a hybrid between the Afghanistan lilac, S. afghanica, and the cut-leaved Chinese species, S. laciniata -- the caravan route traversing Afghanistan, a circumstance which allowed the two species to come together. This, then would be the first hybrid lilac. No one, so far as I am aware, has repeated this cross, principally, no doubt, because S. afghanica is so rare in cultivation. I shall discuss the modern breeding work later, but first let us look at the other pre-Linnean species, S. vulgaris.

The Common Lilac also was brought to Europe - to Vienna - from Constantinople - about 1563, by Busbecq whose story was told us at the 1976 Rochester Convention by Bernard Harkness (see PROCEEDINGS: LILACS Vol. 5, No. 1 "An American Heritage"). Oddly enough the Common lilac, S. vulgaris, is a native of the Balkan peninsula whose habitat was unknown to science until 1828 when Anton Rochel reported it occurring in Banat, a district of western Romania bordering Hungary and Jugoslavia. This lilac is now known to inhabit "inaccessible limestone rocks" along the Danube River. Doubtless it was noticed and collected prior to 1529 by the invading Turks who were halted at the gates of Vienna.

By 1777, just over two hundred years after S. vulgaris had been introduced into Europe and one hundred fifty years after S. persica var. laciniata reached Venice, these two "species" brought forth hybrid seedlings in the Rouen botanic garden, and received the unfortunate scientific name S. chinensis which has confused gardeners ever since, because only one of its parents contained any Chinese "blood", and then, once removed! I prefer to call this lilac the Rouen or Varin's Lilac, for the director of the botanic garden in which it was first raised. (The story is told in the Pipeline, May 1977).

I should now like to trace the story of the third pre-Linnean species, S. oblata, and relate how its introduction to Europe gave rise to yet another hybrid race. Alexander von Bunge, a Russian botanist and traveler, observed the broad-leaved lilac in gardens of northern China in 1831, but it was Robert Fortune, an English plant explorer, who first sent back seed in 1856, and Glendinning's nursery at Chiswick, near London, is credited with its introduction to commerce. The plants in cultivation today, however, owe their derivation to Dr. Bretschneider of St. Petersburg who distributed seed about 1888, characterizing this lilac "by its large broad leaves and tree-like growth". In comparing the flowers with those of the common lilac Dr. John Lindley, who first described this species, states "the flowers are not more than half the size, forming a thin loose panicle", 2 - 5 inches long. Its leaves unfold bronze and in early autumn turn bronze once again, falling much before the green leaves of the common lilac. In 1876 Victor Lemoine produced a cross between these two lilacs, SS. oblata x vulgaris 'Azurea Plena' which he listed in his 1878 catalogue of novelties as S. hyacinthiflora plena. This is the beginning of the early hybrid lilacs distinguished by their robust growth, and their early bloom in shades of violet and pink. Here ends the story of the lilacs "Cultivated Since Ancient Times".

The Vulgares continue to contribute to lilac culture in the twentieth century, but this is contemporary and quite on-going. However, in my next installment I shall try to give pedigrees and possibly look into the future of this very important group of mainstream lilacs.

* * *

BITS OF WIT

You cannot get to the top by sitting on your bottom.

Too many people quit looking for work when they find a job.

GEORGE EASTMAN LILAC

By - Robert B. Clark, Meredith, New Hampshire

Durand-Eastman Park on the shores of Lake Ontario was planted by Bernard H. Slavin following World War I, principally from seedlings, hundreds of species and thousands of plants, all of which were raised in his own backyard. The multitudes of seeds were obtained over the years in exchange through the Arnold Arboretum, but as often as not were collected by the parks department staff itself, consisting of John Dunbar, Richard E. Horsey and "Barney" Slavin. The plantings were made in large groupings resembling a naturalistic setting - the effect is therefore of a magnificent landscape.

Along one of the many roadways is a naturalized planting of the Juliana Lilac, the plants of which were acquired from the defunct Upton Nursery of Detroit in 1945. There are dozens of plants in this group, but among them was a specimen bearing deeper coloured flowers than the pale lilac characteristic of the species.* I say "was" because the plant succumbed to Jim injury (mechanical lawnmowing equipment) several years ago. But, before the accident, cuttings were taken and the stock is being multiplied. It will be offered in a year or two under the name 'George Eastman', commemorating the donor of the park. Eastman (1854-1932) founded the Kodak Company which bears his name. He is also remembered in the University of Rochester's school of music.

*Footnote by the Registrar: Syringa julianae 'George Eastman' was registered by Rev. John L. Fiala on March 20, 1978 with the following description: "Very distinctive; a deep reddish flower compared to pale purple of julianae 'Hers'; spreading by underground stolons; arching branches; good bloom and growth. A chance, naturalized seedling growing along the stream banks in Durand-Eastman Park."

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