

Magnolia × **thompsoniana** 'Cairn Croft'

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Photographs by the author

Magnolia × *thompsoniana* 'Cairn Croft' is the reincarnation of a very old hybrid. Indeed, the sweetly scented *M.* × *thompsoniana* was the first hybrid magnolia to be described in the western horticultural literature in 1820, beating *M.* × *soulangeana* into press by seven years. The original *thompsoniana* selection was discovered in 1808 by a Mr. Archibald Thomson among a flat of normal seedlings of the sweet bay, *M. virginiana*, which had germinated at his Mile End nursery in London, most likely from seed he collected from a plant growing in England. John Sims, writing in Curtis's *Botanical Magazine* twelve years later, described the plant as a robust, large-flowered variety of the sweet bay, to which he gave the name *major*, and published a full color illustration of its leaves and blossom (see Figure 1). In 1838, J. C. Loudon, in his monumental *Arboretum et Fructicetum Britannicum*, followed Sims lead in classifying the plant as a variety of sweet bay magnolia "enlarged in all its parts," but changed its name to *thompsoniana*. He speculated that the plant might be a hybrid between *M. virginiana* and *M. tripetala*, but left the question open. Thirty-eight years later, C. de Vos followed up on Loudon's suggestion and formally reclassified the plant as the hybrid between *virginiana* and *tripetala*, retaining *thompsoniana* as the name.

Despite its large, deliciously fragrant flowers, *Magnolia* × *thompsoniana* has only achieved modest popularity in European gardens since its introduction. This is partly because of its ungainly habit of growth, which makes it difficult to use in small or medium-sized gardens, and partly because it does not seem to perform all that well under typical growing conditions. In the United States, the plant is less widely grown than it is in Europe, mainly because of its lack of winter hardiness. Indeed, the first director of the Arnold Arboretum, C. S. Sargent, writing in *Garden and Forest* in 1888, noted that "it is a curious fact that it [*thompsoniana*] is much less hardy and much less vigorous than either of its supposed parents, suffering here always, unless carefully protected in winter, and rarely rising above the size of a small bush."



Figure 1. The first illustration of *Magnolia x thompsoniana* from Curtis's "Botanical Magazine" in 1820 [t. 2164].

In 1960, the famous magnolia researcher and breeder, J. C. McDaniel attempted to remedy the hardiness problem by recreating the hybrid using *virginiana* parents that were hardier than the one that the original plant came from. His work culminated in 1966 with the introduction of the cultivar 'Urbana,' which had the greatest ornamental potential of all of the seedlings he raised, and was hardy to -15°F

(-26°C). Like its predecessor, however, 'Urbana' has never achieved anything other than limited distribution, and most nursery people who have grown the plant consider it a poor performer. Just this year, Maurice Foster reported that a third *thompsoniana* cultivar, named 'Olmenhof,' has been produced in Belgium. Supposedly it has a better growth habit and earlier, bigger flowers than the 1808 selection, but I have yet to see either the plant or its formal description.

The plant we introduce today, *Magnolia* × *thompsoniana* 'Cairn Croft,' is the fourth reincarnation of this unusual hybrid. The plant was discovered on a private estate in Westwood, Massachusetts, about ten miles southwest of the Arnold Arboretum. It was one of a group of about a dozen specimens of sweet bay magnolia that had been purchased from a "southern" nursery around 1989. On June 22, 1998, the gardener for the estate, Mr. Kevin Doyle, stopped by the Dana Greenhouses of the Arnold Arboretum, in Jamaica Plain, Massachusetts with some cuttings (with flowers) of one of the seedlings that was strikingly different from its other supposed siblings. One quick look was all it took for me to recognize the plant as a *thompsoniana* hybrid, which I knew from the literature but had never seen in the flesh.

Follow-up research in the library confirmed my initial diagnosis, and I immediately set about propagating the plant from the cuttings that Kevin Doyle had brought in by dipping the lower portion of their stems in an aqueous solution of K-IBA (5000 parts per million) for five seconds and then placing them under intermittent mist. Some six out of sixty-three cuttings were well rooted by the following April, two of which are now growing on the grounds of the Arnold Arboretum (AA #174-98), while the mother plant is still alive and well in its original Westwood home.

'Cairn Croft'—the name selected by Kevin Doyle—produces flowers with a sweet, lemony fragrance that are two to three times larger than those of the *virginiana* seedlings that came in the same shipment (see Figure 2). The plant is fully hardy in USDA zone 6a -10°F (-23°C), where it has been growing without any winter protection or damage since 1989. It is a fully deciduous plant, with pale green winter twigs and buds, not unlike those of *virginiana*. It produces relatively large, elliptic leaves, 6.3–8.3in (16–21cm) long by 2–3.3in (5–8.5cm) wide with slightly undulating margins; they are a bright, shining green above and silvery-white underneath as a result of being covered with fine hairs. Like the original clone of *thompsoniana*, the twigs of 'Cairn Croft' have pith that is incompletely septate, while that of *virginiana*

is completely septate and that of *tripetala* is continuous (Spongberg, 1976).

'Cairn Croft' produced flowers from mid-June through July that stand erect on the ends of the branchlets on relatively stout, glaucous pedicels, not unlike those of its *tripetala* parent. The flowers typically have eleven tepals: the three outer ones are greenish-white in color, spatulate in shape, and reflex back as the flower opens. The eight inner tepals are thicker than the outer tepals, creamy white in color and oblong-ovate in shape (see Figure 3). They are 2.8–3.5 in (7–9 cm) long by 0.9–1.4 in (2.2–3.5 cm) wide, and fade to a "rusty yellow" as they age, to use John Sims' phrase. The flowers of 'Cairn Croft' are intermediate in size between its two parents, being roughly twice the size of *virginiana* and three quarters the size of *tripetala*. In terms of fragrance, all of the *thompsoniana* selections fortunately favor their sweet bay mothers rather than its "ill-scented" fathers. °

Figure 3. The fully opened flower of *M. x thompsoniana* 'Cairn Croft,' roughly 6 inches across.



Figure 2. The flowers of *M. x thompsoniana* 'Cairn Croft' (left) next to those of a "sibling" *virginiana* (right).





Figure 4. The original plant of 'Cairn Croft' with its discoverer, Kevin Doyle, in 2002. It is 15ft (4.6m) tall, with a spread of 17ft (5.2m).

'Cairn Croft' is quite vigorous, and somewhat ungainly, in its growth habit and reached a height of 15ft (4.6m) with a spread of 17ft (5.2m) by 2002, without receiving any pruning (see Figure 4). Despite its proximity to flowering specimens of *M. virginiana*, 'Cairn Croft' has never set any viable seed. No doubt it suffers from same pollen sterility problems that have been reported for the original *thompsoniana* clone that were described by Santamour in 1966.

It is my hope that in 'Cairn Croft' we at last have a "native" *thompsoniana* selection that can stand up to the rigors of the North American climate. At this point in time, I make the assumption that 'Cairn Croft' originated from open-pollinated seed collected from a plant of *virginiana*, and was the only hybrid among a group of seedlings that were true to their maternal parent. How accurate this supposition is awaits the results of DNA testing of the plant, which is planned for later this year. In terms of the future distribution of 'Cairn Croft,' scions were distributed to Pat McCracken (McCracken's Nursery) and Dick Jaynes (Broken Arrow Nursery) in March of this year, and, with luck, should be commercially available within a few years.

References

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An excerpt from the mail round robin (Dick Figlar)

Unfortunately, I have to report an infestation of False Oleander Scale. This is also known as Cockerell Scale or *Pseudaulacaspis cockerelli* (see page 374 of *Magnolias of China*). Evidently, this very small, white scale vectored into my nursery via a small *Sabal minor* (dwarf palmetto) that I purchased in 2003. In spring 2004, I noticed "these little white things" on the leaves of a few container-grown magnolias that had been stored adjacent to the palm in the cool greenhouse. I removed (most of) them with my fingernails, but otherwise I did not regard them as any sort of serious pest.

Last August (2005), I began to notice that the scale was present on over 50 magnolias in my nursery (still in their containers) and on ten that I had recently planted out. Alarmed, I frantically began checking the internet for more information. What I found was not good news. This little scale is virtually impossible to control via chemicals or paraffin oils. The latter help in keeping the numbers down but are only about 70% effective. So I began a process of 100% inspection (and removal of all visible scales) from each plant. Since this scale species reproduces constantly all season long, the nearly invisible nymphs are present as well on the plants. Thus, repeat inspections have to be made every two weeks. I've inspected all 60 affected magnolias (100%) about eight times now, and I think I am almost free of this nightmare pest. In my later inspections I realized that I had missed scales that had attached themselves to twigs and backs of petioles. So I consistently improved my observation techniques and effectiveness with subsequent inspections. I also found that an old toothbrush was another useful tool for scale removal.

Since then I have seen False Oleander Scale on *M. grandiflora* in local nurseries as well. Two MSI members that I recently spoke with, Ray Sutton and Dennis Ledvina, both complained about "those little white things" on evergreen magnolias that they had recently purchased. I advised them to perform the same inspections as I had as quickly as possible. Once a large tree is infested, it is virtually impossible to eliminate the scale. It disfigures (yellow to brown spots on the leaves around each scale) the leaves and eventually causes the tree to decline and, possibly, die. Magnolias and palms are evidently very susceptible to False Oleander Scale. Hopefully, it will not grow to epidemic levels as has the Woolly Adelgid with Canadian Hemlock (*Tsuga Canadensis*) in eastern North America.

The best advice I can give is to examine your purchased plants very carefully before placing them near your other magnolias (or before selecting them for purchase). Potentially, this is a very serious pest for magnolias.