Title: The Wisteria Walk: A Renovation and Rejuvenation

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#### **Abstract:**

Like all things in a garden, time and improper growing conditions usually lead to a need for renovation or rejuvenation. This is certainly true for the focus of this year's Rose and Flower Garden Internship project. The Wisteria Walk, originally planted to serve as an attractive allee, has slowly deteriorated over the course of fifty years into an unruly and less than appealing corridor between the Rose Garden and Sculpture Garden; and is now desperately in need of an overhaul.

With the help of staff members at the Morris Arboretum, as well as a select few outside sources, the aim of this project is to redesign the Wisteria Walk in a manner that best compliments the rest of the Arboretum, reflects the overall mission of the Arboretum, and highlights some of the impressive aesthetic attributes of wisteria. Some of the methods that will be exercised to give this garden a fresh look include replacing deteriorated structures with architecturally interesting and structurally sound trelliswork, including a wide variety of wisteria cultivars to expand upon the Arboretum's collection, and incorporating new plant life for seasonal interest, color and texture. Another goal for this project is to provide a screening structure for the greenhouse complex located at the bottom of the Wisteria Walk that will also serve the purpose of keeping Arboretum visitors out of a restricted area.

In the end, the completion of this project will provide the Wisteria Walk with the structure and design it needs to mature into a beautiful garden that will enhance the experience had by all who come to visit the Morris Arboretum.

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#### THE WISTERIA WALK

Looking at a map or comprehensive plan of the Morris Arboretum, it is easy to see that it is composed of a collection of various gardens, all with different design goals. In order to make these gardens flow and work together in the grand scheme of the Arboretum, transition areas are needed to move visitors from one area to another and make the gardens feel connected. One such transition area is the Wisteria Walk. Located between the Rose Garden and Sculpture Garden, the Wisteria Walk serves the purpose of taking the Arboretum visitor from a very formal garden setting to a more naturalized area. While it certainly fulfills its duties, after half a century, it could use a more focused design approach itself.

## HISTORY OF THE WISTERIA WALK

In February of 1956, an article was published in the *Morris Arboretum Bulletin* on the topic of the Wisteria Walk. The article reads as follows, "A new walk has been established leading from the Rose Garden down to the Lower Nursery, thus giving access to a section of the Arboretum seldom seen by visitors. Here, on a double row of black locust posts, has been planted a choice collection of Chinese and Japanese wisterias, which have been held in the slathouse for several years. Altogether about twenty interesting varieties are included in this planting. This new allee is expected to produce a considerable effect this season and should become increasingly attractive as these plants mature."

Unfortunately, this article is the only known written history on this section of the Arboretum. A few pictures of these plants in their juvenile state have surfaced, but maps and planting designs have yet to be discovered. Not knowing the history has provided little direction for the design and maintenance of the Wisteria Walk, but perhaps more importantly, it has prevented the Arboretum from keeping accurate plant records.

#### PROBLEMS FACING THE WISTERIA WALK

Not only has not knowing the identification of each plant provided mystery and intrigue to this project, it is one of several problems that will be addressed. Another set of issues concerning this area are the deteriorated supports on which the wisteria grows. Constructed out of black locust posts, several attempts have been made to reinforce the strength of the supports, but over the course of more than fifty years they have not been able to hold up to the aggressive behavior of the wisteria. In some cases, they have fallen over, leaving the plants to spread by growing along the ground.

Without any solid supports for the vine to grow on, this section of the garden tends to look a little unruly, even with the consistent maintenance it has received. Aside from spring when the wisteria is blooming, this area lacks an aesthetic quality as well as a "sense of place". The manner in which these plants are grown also does not highlight their strongest attributes because they are best viewed while standing underneath the flower cluster, so that the visitor can admire the long, graceful racemes that the wisterias produce.

Lastly, wisteria has the distinction of being aggressive in a garden setting. This project will address that by incorporating native wisteria vines in addition to providing a structure to contain the vigorous nature of wisteria.

## **WHY WISTERIA?**

One question that has been posed regarding this project is, "Why wisteria?". That is to say, considering its destructive habit and short bloom-time, why not choose to redesign this section of the Arboretum with something completely different that will stay in place and possibly provide more year-round interest. While this certainly is a valid point, it can definitely be argued with a few good answers.

Wisteria has a wonderfully dramatic effect in spring, when its long, pendulous flower clusters bloom, that is impossible to find in other twining vines. Blooming in early to mid-May, it also provides early spring interest and fragrance.

After flowering, wisteria puts out a long, flat seedpod that has appeal because it looks like a giant, fuzzy pea pod. This characteristic is also highlighted in children's tours here at the Arboretum, as they are allowed to feel the pods as well as open them to see the big seeds inside.

The vigorous nature of wisteria makes it a great candidate for screening out the greenhouse buildings to the Arboretum visitor. Grown on a trellis, it can fill in rapidly and be a great alternative to a man-made screen.

Lastly, some native wisteria vines will be introduced into this project, in addition to the Japanese and Chinese varieties. When many people think of wisteria, they tend to think of the Asiatic species. One goal of this project is to open their eyes to the native alternatives and highlight some of their great characteristics. Known in the plant world as Wisteria frutescens (American Wisteria) and Wisteria macrostachya (Kentucky Wisteria), the native wisteria does not just bloom in spring, rather it continues to bloom throughout the spring and summer seasons and is also known to be less aggressive. The native wisteria varieties have a slightly different appearance than the Asian wisteria varieties. The flower colors between the native and Asian species are very similar. American wisteria varieties tend to have flower clusters that are more compact, not as long and pendulous, and about five to fifteen centimeters long. They also grow to two-thirds the length of Asian wisteria vines. Native varieties usually lack fragrance and also have smooth seedpods. In addition to that, Kentucky wisteria also differs from American wisteria in that its flower racemes are usually fifteen to thirty centimeters long and has also been known to bloom after growing for only two to three years. This trait is especially beneficial considering other varieties of seed-grown wisteria have been known to take many, many years to make the transition from the juvenile to adult stage. An interpretive sign may someday be incorporated into the Wisteria Walk to address the invasive nature of wisteria. It will inform the Arboretum visitor on the differences between native and Asian species. This sign will also encourage the home gardener to plant the native varieties and stay clear of the more aggressive vines.

In addition to all of these reasons, it is also known that John and Lydia Morris liked to incorporate wisteria into their garden designs. In the spirit of keeping their traditions alive, it is important for the Morris Arboretum to continue to utilize this impressive plant.

#### SITE ASSESSMENT

After visually evaluating the site where the Wisteria Walk is located, it can be determined that sun exposure may be the biggest challenge that needs to be considered. As a means of addressing this concern, four existing mature trees, two *Juniperus chinensis* 'Columnaris', a *Fraxinus* and an *Acer*, were removed. An existing *Quercus macrocarpa* and two *Halesia diptera* plantings contribute varying amounts of shade to this site and were pruned to reduce the amount of shade. However, the amount of sunlight this area receives will still be a concern and plant choices will have to be made with this in mind. Another consideration is that as the wisteria plants grow on their new iron structures, they too may begin to shade out the perennials planted underneath them.

A second issue to be tackled is the slight grade change that exists at the site. The Wisteria Walk tends to slope down as you move from the top of the walkway, which is closest to the Rose Garden, towards the bottom located near the Dwarf Conifer Garden. Some sections in the design may need their topography to be altered for various structures to be installed, such as a proposed blue stone plaza and seating area. Another set of potential problems regarding slope are drainage and storm water run-off at the site. Currently, the topography in this section of the garden is such that the center of the path going down the Wisteria Walk is slightly higher than the sides, allowing for storm water to leave the site through small ditches on either side of the path. This design poses the threat of erosion along the sides of the path. By planting drifts of perennials on either side, the storm water issue would be solved because the plants will take up the excess water running down the slope. In addition, the plant roots will help to keep the soil in place.

The overall general site assessment for the Wisteria Walk is that it has both full and part sun sections and that it has relatively dry soils throughout the year.

#### A NEW DESIGN: ADDRESSING PROBLEMS

In order to successfully implement the new Wisteria Walk design, the first task at hand is to remove all of the existing wisteria plants on site and replace them with various cultivars of the Asiatic and American varieties of wisteria. The purpose of doing this is to officially include the wisteria collection in the Arboretum's plant records with accurate species and cultivar information. Another advantage of new plantings is that young plants are much easier to train to a new trellis structure than vines with fifty years of woody growth.

In regards to a trellis structure, that would be the second problem to be tackled in the design installation. Constructed out of one-inch black iron tubing, the trelliswork consists of a network of thirty panels, each six feet wide and eight feet high. The panels are connected to each other by being welded onto ten-foot iron posts. Along with providing a structure for the wisteria to grow on, the panels also help to create seasonal and architectural interest, in addition to screening out the greenhouse buildings to the Arboretum visitor. The trelliswork will also create some uniformity between the Wisteria Walk and Rose Garden, as the Rose Garden also uses black iron structures.

An added design feature of the trelliswork is that there will be five "window panels" that create framed views of different parts of the garden. In addition to highlighting the beauty of the wisteria blooms as they hang down and showcase the long, impressive racemes of flowers inside

the "window", the framed views will also help to enhance the experience a visitor has in this garden. They will prevent the visitor from feeling as though the Wisteria Walk is just a narrow passageway to walk through, rather it will help connect the Wisteria Walk to the rest of the garden and help the Arboretum visitor experience the Wisteria Walk as a garden in and of itself.

With the hopes of creating a "sense of place" for this section of the Arboretum, a small seating area has been incorporated into the design. It will include a bench sitting on a blue stone plaza and be surrounded by a trellis so as to generate the feeling of a small, hidden room. This will allow the Wisteria Walk to be utilized not only as a transition corridor, but also as a place that the Arboretum visitor can truly spend some time in, rather than just walking through.

## A NEW DESIGN: PLANT CHOICES

As many people know, one of the wisteria plant's characteristics is a very short bloom-time. With that in mind, this design incorporates plants that carry the Wisteria Walk's seasonal interest past the second or third week in May. However, one of the main goals of the design is to still be able to make a dramatic spring impact.

In the hopes of extending flowering time in this section of the garden, I have decided to not only plant wisteria on the new trelliswork, but also flowering vines such as *Schizophragma hydrangeoides*, *Hydrangea anomala* subsp. *petiolaris*, and *Lonicera sempervirens* 'John Clayton', which will bloom throughout July and August. In addition to adding flowers and color during the summer, they will also provide different textures on the trelliswork that will contrast nicely with the wisteria's foliage. Some perennial choices, for example *Gypsophila repens*, *Astilbe chinensis* var. *pumila*, and *Calamintha nepetoides*, will also carry the design through the summer months by providing additional flowering.

To provide much needed color and texture variation, as well as winter interest various conifers have been utilized, in particular dwarf and creeping varieties such as *Juniperus squamata* 'Blue Star', *Juniperus horizontalis* 'Turquoise Spreader', and *Pinus densiflora* 'Low Glow'. These plants will not only create interest in winter months, they will also help connect the Wisteria Walk to the Dwarf Conifer Garden, which is located on the lower end of the Wisteria Walk.

As mentioned before, the big goal regarding the plants for this section of the garden is to create a strong impact in spring. Few plants can do this so successfully as wisteria. For this reason, cultivars such as *Wisteria floribunda* 'Longissima Alba' with its incredibly long and clear white racemes of flowers, *Wisteria sinensis* 'Prolific' which boasts flower clusters of mauve-blue more than two feet long, and *Wisteria frutescens* 'Amethyst Falls' providing lavender-blue flowers throughout the spring season have been chosen for this design. With a wide variety of wisteria cultivars serving the purpose of being the showcase specimens, plants such as *Baptisia alba, Convallaria majalis, Hyacinthoides hispanica*, and *Allium schubertii* bloom at similar times and complement the wisteria very well.

Researching this project has also revealed an interesting fact. It is a Japanese tradition to pair wisteria with tree peonies in garden designs. With that in mind, a few tree peonies, specifically *Paeonia suffruticosa* 'Age of Gold' and *Paeonia suffruticosa* 'Joseph Rock Double' may be incorporated into the design.

## **CONCLUSION**

Having spent a good portion of this internship working intently on finding the best possible way to improve the Wisteria Walk, a specific goal has been reached. By implementing this new design, the Wisteria Walk will finally be able to mature into a visually stunning garden that will not only connect the Rose Garden to the Dwarf Conifer Garden and screen Arboretum visitors from the greenhouse buildings, but will hold its own as a design in the landscape, enhance the experience of all who come to enjoy the gardens, and add to the splendor found at the Morris Arboretum.

## **ACKNOWLEDGEMENTS**

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# **APPENDIX A: PLANT LIST FOR WISTERIA WALK**

Name (Botanical) Size	Quanti	Name (Common) ty	Season of Interest	<b>Color of Interest</b>
Groundcover				
Carex 'Ice Dance' white stripe	12"	Sedge 6	Year-round	Dark green w/
Perennials				
Brunnera macrophylla 12-15"	7	Siberian Bugloss	Spring	Blue
'Jack Frost'	1			
Gypsophila repens 'Alba' 4-8"	12	Baby's breath	Summer	Pale pink
Astilbe chinensis 'Pumila' 2'	20	Chinese Astilbe	Summer	Lavender-purple
Baptisia alba 2-3'	12	Wild White Indigo	Late spring	White
Scabiosa columbaria	6	Pincushion flower	Spring-summer	Lavender-blue
'Butterfly Blue'	12-15" 6 'Butterfly Blue'			
Scabiosa columbaria 12-15"	12	Pincushion flower	Spring-summer	Pink
'Pink Mist'	12			
Aquilegia bertolonii purple 10-16"	20	Columbine	Spring-summer	Pastel blue, pink,
'Biedermeier'	20			and cream
Convallaria majalis 12"	21	Lily of the valley	Spring	White
Corydalis ochroleuca 18"	14	Bleeding heart	Spring-summer	Cream
Tiarella cordifolia 12-18"	7	Foamflower	Spring	White/pink
'Dunvegan'	•			
Calamintha nepetoides 15"	15	Calamint	Spring-summer	White/lavender
Phlox subulata stripes 4-6"	12	Moss pink	Spring	White with pink
'Candy Stripes' Phlox subulata 4-6"	12	Moss pink	Spring	Light blue

'Emerald Blue'				
Penstemon smallii 24"	3	Small's	Late spring	Lavender
24"	3	Penstemon		
Dicentra eximia	4	Fringed	Spring	Rose/pink
10	4	Bleeding Heart		
Bergenia cordifolia 12"	4	Heart-leaf	Early spring	Rose/pink
12	4	Bergenia		
Pulmonaria longifolia 12"	4	Long-leafed	Spring	Purple/blue
'E.B. Anderson'	7	Lungwort		
Bulbs				
Allium giganteum 3-4'	20	Giant onion	Late spring	Lilac
'Gladiator'	20			
Allium schubertii 18-24"	25	Tumbleweed onion	Spring	Pink
Allium sphaerocephalon 18-36"	9	Drumstick chives	Late spring	Purple
Camassia leichtlinii 30"	15	Leichtlin quamash	Early summer	Deep blue
'Blue Danube'	13			
Hyacinthoides hispanica 12-15"	200	Spanish bluebell	Spring	Pink
'Rosabella'	200			
Woody Plants				
Hamamelis x intermedia 5-6'	5	Witchhazel	Winter	Yellow-Orange
'Orange Beauty'	J			
Chamaecyparis obtuse 4-6'	6	Hanoki	Year-round	Dark green
'Nana Gracilis'	6	falsecypress		

Cryptomeria japonica 12'	1	Japanese cedar	Year-round	Bright green
'Black Dragon'	1			
Juniperus chinensis 12-15"	1	Chinese juniper	Year-round	Blue-green
'Daub's Frosted'	1			
Juniperus horizontalis	6	Creeping juniper	Year-round	Turquoise-green
'Turquoise Spreader'	б			
Juniperus squamata 16-36"	2	Singleseed juniper	Year-round	Blue-silver
'Blue Star'	2			
Hydrangea macrophylla 30-36"	14	Bigleaf	Summer	Light Blue/White
'Lanarth White'	14	Hydrangea		
Spiraea x cinerea 4-5'	5	Spiraea	Spring	White
'Grefsheim'	3			
Neillia sinensis 5-6'	3	Chinese Neillia	Spring	Pink
Paeonia suffruticosa 6-8'	2	Tree peony	Spring	Creamy yellow
'Age of Gold'	2			
Vines				
Wisteria frutescens 20-30'	2	American wisteria	Spring-summer	Lavender-blue
'Amethyst Falls'	2			
Wisteria macrostachya 15-20'	1	Kentucky wisteria	Spring	Pale blue
'Blue Moon'	1			
Wisteria macrostachya 15-20'	1			
	1	Kentucky wisteria	Spring	White
'Clara Mack'	1	Kentucky wisteria	Spring	White
	1 15-20'	Kentucky wisteria  Kentucky wisteria  1	Spring Spring	White Light
'Clara Mack'  Wisteria macrostachya purple/white		Kentucky wisteria		

Wisteria floribunda 35'	2	Japanese wisteria	Spring	Purple
'Violacea Plena'				
Wisteria floribunda	2	Japanese wisteria	Spring	Purple
'Black Dragon'	2			
Wisteria floribunda purple tips 'Rosea'	35'	Japanese wisteria 1	Spring	Pale rose w/
Wisteria floribunda	2	Japanese wisteria	Spring	White
35' 'Longissima Alba'				
Wisteria sinensis 20-30'	2	Chinese wisteria	Spring	White
'Texas White'	۷			
Wisteria sinensis 20-30'	2	Chinese wisteria	Spring	Mauve-blue
'Prolific'	2			
Lonicera sempervirens 12-15'	7	Trumpet	Spring-summer	Yellow
'John Clayton'	,	Honeysuckle		
Schizophragma 20-30'	4	Japanese	Summer	White
hydrangeoides 'Moonligh		Hydrangea Vine		
Hydrangea anomala 30-40'	4	Climbing	Summer	White
subsp. Petiolaris		Hydrangeae		