Title: **Plant Collection and Introduction: A Story Worth Telling New Interpretive Signs at the Morris Arboretum**

Author: **Jessica Farmer, Horticulture Intern**

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Abstract:

The purpose of this project is the development of a new series of interpretive signs for the Arboretum focusing on stories of plant collection and introduction. The 16 plants to be labeled fall into six categories:

1. New introductions by plant collectors
2. Tolerance and adaptability
3. Plants and medicine
4. Collection projects
5. Selection for characteristics
6. Collecting for new genetic material

The signs developed will help inform visitors about relationships between people and plants and will recognize the significance of specific plants in the collection.

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INTRODUCTION

Interpretive signs add another dimension to a public garden. They bridge the gap between the visitors' view and the underlying story behind what they are seeing. The purpose of this project was to develop a new series of interpretive signs at the Morris Arboretum.

This series of signs focuses on communicating stories of plant collection and introduction. The signs provide visitors with information about the origins of the labeled plants and why they are important. The process included selecting appropriate plants and researching their history, making decisions on the design of the signs, and ordering and installing them in the Arboretum.

ESTABLISHING THE PLANT LIST

I consulted with Arboretum Director Paul Meyer, Arboretum Curator Tony Aiello, and Director of Public Programs Bob Gutowski in determining appropriate plants. The ideal plants for this project needed to be wild-collected, have interesting collection stories, and be in a setting appropriate for signage. This meant that the plants had to be located near a primary or secondary path to increase the likelihood that the information on the signs would be easily accessible to visitors.

Many plants at the Arboretum have interesting collection stories. I decided to focus on some specific categories in order to organize what types of plants would be labeled. The following is the final list of the categories and plants to be labeled:

- New introductions by plant collectors
  - *Cercidiphyllum japonicum* var. *sinense* (#32-1811-A)
  - *Davidia involucrata* var. *vilmoriniana* (#54-1191-A)

- Tolerance and adaptability (i.e. cold hardiness, disease resistance)
  - *Koelreuteria paniculata* (#81-333-B)
  - *Zelkova schneideriana* (#97-064-B)
  - *Platanus orientalis* (#64-217-A)
  - *Sorbus alnifolia* (#81-329-D)

- Plants and medicine
  - *Camellia sinensis* (#53-174-A)
  - *Eucommia ulmoides* (#58-184-A)

- Collection projects
  - *Chionanthus virginicus* (#35-6753-A)
  - National Fir Collection
  - Michaux Quercetum Project

- Selection for characteristics
  - *Cornus officinalis* (#89-120-A)
  - *Syringa oblata* var. *dilatata* (#81-501-E)

- Collecting for new genetic material
  - *Parrotia persica* (#88-012-B)
  - *Cornus kousa* (#86-016-B), (#86-007-E)

RESEARCH

To find information about these plants, I utilized many resources, and I received valuable direction from Tony Aiello, Bob Gutowski, Paul Meyer, and Plant Recorder Elinor Goff. Elinor's help with plant records and mapping was incredibly helpful.

I browsed back issues of the Morris Arboretum Bulletin for plant profiles and articles on collecting trips. I looked through Arboretum records for each plant on the list. The Internet provided some information about the ornamental properties of the species, but resources in the Arboretum Library were much more helpful. Using the information gathered, I developed a concise set of information for each of the plants selected.

SIGN SIZE, STYLE, AND SITING

The style of sign chosen was the black metal photo label with silver printing. This style was chosen for a few reasons. First, these signs are relatively inexpensive. There are already several signs of this style in the garden, so the new series would be consistent with an already-present design element. This style is also simple and relatively understated so as not to be a distraction from the beauty of the Arboretum.

Many factors go into the development of the text on interpretive signs. For the ease of the reader, shorter sentences must be used. The writer should try to avoid polysyllabic words (3 or more syllables). Plain, everyday language should be used in creating sentences of 10-20 words. The easiest font styles to read are serif styles such as Century Schoolbook and Times New Roman. The font size needs to account for at least six points for every nine inches between the reader and the label (Korn, 1986). The series of signs I developed includes two sizes. On the larger ones (9" × 12"), 18 point Times New Roman was used; on the smaller ones (6" × 9"), I used 16 point Times New Roman.

The decision of where to site the signs was made in cooperation with Tony Aiello and Bob Gutowski. We walked around the Arboretum and looked at the plants being considered for this project, eliminating those where siting a sign would to be too difficult. We also did not want the signs to be placed anywhere that they would interfere with an important view. If a mulch ring surrounded the tree trunk, we looked at possibilities for a place to mount a large sign in the ground. In situations where ground mounting was not possible, the decision was made to make smaller signs that could be mounted on the tree trunks.

DEVELOPING THE IMAGES

Each visitor that views an interpretive sign looks at it in his or her own way. One important factor that can draw a viewer's attention is an image. Line drawings were developed for the twelve larger signs. Kate Deregibus, Horticulture Section Leader, drew the images. I met with Bob Gutowski to decide what images would be best for each sign. I wanted the images to add another educational dimension to the signs. It was important for the drawings to relate to the text on the sign and to display significant plant parts that are not present year-round.

I initially searched the library for images of the desired plant parts to give to Kate as examples. As we got further in to the process, Kate decided pictures and slides would be more useful. The Internet and slide library (in the herbarium) were great for this. I scanned the slides I needed with Tim Block in the Botany Lab. In the end, actual plant material was the most useful resource for Kate to use.

ORDERING THE SIGNS

The labels will be ordered from Nameplate & Panel Technology through their website, www.myplantlabel.com. They are made of anodized aluminum for durability. The "9 × 12" signs will be style 1 – mounting with hidden screw mount. These cost $58.85 each. The 6” × 9” ones will be style 3 – mounting with growth expansion ring. These cost $35.76 each. Bob Gutowski ordered the stands from Architectural Aluminum Works. These are also made of anodized aluminum and cost $225 each.

The labels can be ordered electronically or in paper form. To place the order electronically, the preferred text saving program is a word processor such as Microsoft Word. The preferred graphics saving/ export programs are Adobe Illustrator or Pagemaker, Macro Media Freehand, or Quark Xpress. We should be able to scan the images, and it is best to save in .eps format.

PLACING THE SIGNS

I will go out with horticulture section leaders in whose sections these labels will be placed. I want to use wooden stakes to estimate the placing of the signs in order to discuss with and get approval from the section leaders.

Once the signs arrive, Mechanical Supervisor Ken Stringer will install them in the Arboretum.

CONCLUSION

I am very pleased to have been able to work on this series of interpretive labels for the Arboretum. I have learned volumes not only about the plants researched but also the involved process of developing interpretive signs. This process included selection of plants, research, revisions, illustration and ordering processes.

I believe that it is a great form of outreach to include visitors in the behind-the-scenes activities of a public garden. It allows them an opportunity to greater appreciate the plants they are seeing and the organization as a whole. These signs also help to highlight the Morris Arboretum's collections of rare and interesting plants with origins all over the world.

THANKS

I want to extend my thanks to the team of people that made the development of these signs possible. Thank you to Paul Meyer for helping me to organize this project and for sharing information about plants to be labeled.
Thank you to Tony Aiello for guidance in plant selection and many rounds of editing and revising the text.
Thank you to Bob Gutowski for your help in plant selection, editing, and guiding me through the process of sign selection, ordering, and installation.
Thank you to Elinor Goff for providing me with incredible records and resources on all of the plants as well as assistance with mapping and editing.
Thank you to Kate Deregibus, botanical illustrator, for developing beautiful line drawings for these signs.
Thank you to James Rosenthal for providing me with the necessary information for design and ordering of the labels.

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Plant Collection and Introduction: A Story Worth Telling

Plant list for self guided tour:

1. *Chionanthus virginicus*	**White Fringetree**	**35-6753*A**
2. *Koelreuteria paniculata*	**Panicled Golden-rain-tree**	**81-333*B**
3. *Cornus officinalis*	**Japanese Cornel Dogwood**	**89-120*A**
4. *Abies holophylla*	**National Fir Collection**	**81-559*G**
5. *Quercus prinus*	**Michaux Quercetum Project**	**53-407*D**
6. *Syringa oblata* var. *dilatata*	**Korean Early Lilac**	**81-501*E**
7. *Camellia sinensis*	**Common Tea**	**53-174*A**
8. *Zelkova schneideriana*	**Schneider Zelkova**	**97-064*B**
9. *Parrotia persica*	**Persian Parrotia**	**88-012*B**
10. *Platanus orientalis*	**Oriental Planetree**	**64-217*A**
11. *Sorbus alnifolia*	**Korean Mountain-ash**	**81-329*D**
12. *Cercidiphyllum japonicum* var. *sinense*	**Chinese Katsura-tree**	**32-1811*A**
13. *Cornus kousa*	**Kousa Dogwood**	**86-016*B**
14. *Davidia involucrate* var. *vilmoriniana*	**Vilmorin Dovetree**	**54-1191*A**
15. *Eucommia ulmoides*	**Chinese Rubber-tree**	**58-184*A**

16. *Cornus kousa* **Kousa Dogwood** **86-007*E**