November 25, 2014

Dear Valued Client:

We hope you are enjoying the start of your holiday season. As we begin to put away our tools for the winter, we can't help but be grateful to all the wonderful clients, homeowners, and property managers who help make all the work we do possible. With this in mind, we wanted to reach out and let you all know about some recent developments in the local landscaping community.

Earlier this spring we sent out letters warning about a new disease affecting boxwoods. Boxwood blight (*Cylindrocladium buxicola*) is a fungal pathogen that causes rapid defoliation in many varieties of boxwoods (*Buxus spp.*). We have recently discovered that boxwood blight has been found in at least one residential landscape, and possibly another, in western Albemarle county. Though we're not sure of the exact location of the infection sites, JWT does not appear to be associated with either of the properties in question.

While this is unfortunate news, we are optimistic about the future. We believe we are still several years away from boxwood blight being ubiquitous, and we also think that blight can be managed on a property once it is discovered. Nevertheless, we do think it's only a matter of time before boxwood blight is a household problem that needs to be addressed using a combination of cultural and possibly chemical controls.

We are realistic about the long-term outlook, but we still think there is much that can be done to halt the rapid spread of the disease in the near term. We have done a lot of research on boxwood blight over the last year and we are equipped with the right tools to help manage your landscapes in a way that minimizes your exposure to the disease. We take this threat very seriously, and we believe we are going above and beyond industry standards in terms of the safeguards we've adopted. Starting with this spring's planting season 2014, we have been dramatically changing the way we operate in order to protect you. Some of our new practices have included:

- Sourcing boxwoods only from nurseries that have signed a "Boxwood Blight Compliance Agreement," a voluntary ‘Best Practices’ program for production nurseries across the country;
- Quarantining all newly purchased boxwoods for a minimum of 30 days to ensure plants are free of disease symptoms;
- Opening our holding yard to state regulators for periodic inspections;

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Educating our staff to identify disease symptoms;

Outfitting each truck with a ‘Boxwood Blight Emergency Kit’ which includes:

- Laminated placards with procedures and photos to identify the disease
- Protective gear to handle a potential infection site
- Disinfectant to sterilize tools, shoes, truck beds, etc.

Cleaning and sterilizing our trucks and tools when moving between job sites; and,

Educating our friends in the local landscaping community to keep an eye out for disease symptoms throughout the area.

The best way to avoid boxwood blight is to avoid bringing it to your property. Only buy boxwoods from reputable suppliers. **Do not buy or use holiday wreaths containing cut boxwood stems.** Avoid seasonal offers advertising suspiciously low prices for pruning boxwood hedges. Be aware of who walks around your property and where they’ve been before they arrived. If you hire a landscape contractor to maintain your property, make sure they are educated about the risks involved with boxwood blight. You may want to consider buying your own tools and tarps for crews to use that can be kept at your home at all times. With leaf season in full swing, be aware that the same rakes and tarps being used to clean up your home could have been used to clean a property with boxwood blight.

If you have a large property, consider planting a small, out-of-the-way holding nursery for some future replacement plants. If a boxwood in your garden needs to be replaced, you can immediately replant from your own nursery instead of exposing yourself to a questionable vendor or skipping a quarantine period.

Prophylactic fungicide treatments might be a possible solution for preventing boxwood blight from ever entering a site. This approach, while aggressive, could be helpful in protecting the most sensitive boxwood installations. According to research carried out by North Carolina State University, fungicides applied to healthy boxwoods on a 7-14 day rotation during the growing season are highly effective at preventing inoculation, though plants are immediately susceptible once a spray regimen is interrupted.

No matter what preventative or reactive steps we end up taking, it is clear that we will need to start changing the way we think about boxwoods. We believe that boxwoods will always have a place in Virginia gardens, but we recognize that they are no longer the indestructible stalwarts they once were.
In closing, we hope that this letter has provided a level of clarity about some rumors that you may or may not have heard. We also wanted to make sure that our clients and friends know that the story is not all doom and gloom. If we can continue to manage everybody's expectations in a realistic manner, this problem will not be blown out of proportion. At the end of the day, this is a just another plant disease. This disease has existed in many European gardens for years, and has been successfully managed.

Please let us know if there is anything else we can do to help protect you and your gardens from boxwood blight. If you need more information or have any questions, please do not hesitate to call us. If you are interested in cultivar resistance to boxwood blight, please see the accompanying pamphlet.

Thanks very much,

Leigh Townsend
General Manager

Enclosure: Cultivar Update
Cultivar Update

In the long term, the best way to minimize the impact of blight on our gardens is to start using disease resistant cultivars. Note that all species and cultivars of Buxus (boxwood), Sarcococca (Sweet box), and Pachysandra (Spurge) can host boxwood blight and transmit it to other plants regardless of whether they show symptoms. In general, the most susceptible cultivars are Buxus sempervirens species and cultivars, particularly American and English boxwoods. Dense dwarf cultivars like 'Jensen', 'Justin Brouwers', and 'Morris Dwarf/Midget' are also very susceptible, along with any cultivar that is tightly sheared, sited in heavy shade, or sited under overhead irrigation.

Upright and fastigiate forms ('Dee Runk', 'Fastigiata', 'John Baldwin', 'Graham Blandy', etc.) are typically more tolerant because there is more airflow around the bulk of the foliage. Of the shrub forms, the most tolerant cultivars are Asiatic species and hybrids like 'Green Beauty', 'Green Gem', 'Winter Gem', insularis 'Nana', among others. Some of the other Asiatics are somewhat tolerant to blight, such as 'Green Mound/Pillow', 'Green Velvet', and 'Green Mountain'.

As of today, the most resistant species to blight appears to be Buxus harlandii (Harland boxwood). Literature suggests that these plants are hardy to Zone 7b, which is questionable for many gardens in our area, especially in exposed sites. Fortunately, there are groups currently working hard on cross-breeding harlandii cultivars with hardier forms to create a diverse line of disease-resistant plants. The U.S. National Arboretum, for example, has dedicated funds to a blight-resistant breeding program, and local boxwood grower Saunders Brothers Nursery is also devoting a lot of time and energy into finding new cultivars. Unfortunately, boxwoods grow relatively slow and we are still several years away from a line of truly disease-free boxwoods with widespread appeal.

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<tr>
<th>Most tolerant</th>
<th>Moderately tolerant</th>
<th>Most susceptible</th>
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<tr>
<td>Buxus x. 'Green Beauty'</td>
<td>B. microphylla 'Grace Hendrick Phillips'</td>
<td>B. microphylla 'Morris Dwarf'</td>
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<tr>
<td>B. harlandii</td>
<td>B. microphylla 'Jim Stauffer'</td>
<td>B. microphylla 'Morris Midget'</td>
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<td>B. microphylla 'John Baldwin'</td>
<td>B. x. 'Green Mound'</td>
<td>B. sempervirens (American)</td>
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<tr>
<td>B. microphylla 'Winter Gem'</td>
<td>B. x. 'Green Mountain'</td>
<td>B. sempervirens 'Jensen'</td>
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<tr>
<td>B. sempervirens 'Dee Runk'</td>
<td>B. x. 'Green Pillow'</td>
<td>B. sempervirens 'Suffruticosa' (English)</td>
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<tr>
<td>B. sempervirens 'Fastigiata'</td>
<td>B. x. 'Green Velvet'</td>
<td>B. sinica var. insularis 'Justin Brouwers'</td>
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<tr>
<td>B. sinica var. insularis 'Nana'</td>
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<td>B. x. 'Chicagoland Green'</td>
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