

## Thursday Virtual Gardener Walk with Laura P., March 23, 2021

### THESE NOTES HAVE NOT BEEN REVIEWED BY STAFF

Laura became Garden Superintendent in 2020 after the retirement of James Warkentin. It has been a challenging year dealing with COVID, infrastructure, and the growing impact of climate change on the Garden. Her current focus now on drainage and irrigation.

Our irrigation system dates from the golf course and the 1970s when the Garden was being built. Construction of the new Visitor Centre also created problems. There are lots of tile drains now in bad shape. The irrigation system is hydraulic, meaning that pressure moves water through spaghetti-size lines, which are difficult to locate and easy to slice through. When gardeners use pick axes or sharp shovels, they have to consult with Laura about where they are digging so that the system is not compromised. If the system is replaced, that would also mean cutting through plant roots as well.

The original irrigation system timers were manual, but these are gradually being replaced with electric ones. The Backyard Bird Garden, Alma VanDusen Garden, Canadian Heritage, Fern Dell, Astilbe Bed, and the Meconopsis Dell have had this work done recently. Irrigation is on an 8-hour cycle. Areas that have the new clock system are now being watered at night, with the grassy areas starting at midnight. The goal is to have the entire Garden watered before 7 am when the gardeners arrive. We have permission from the City to water more hours than homeowners, especially when establishing annual beds (three weeks maximum) and watering specimen trees.

Even though the Meconopsis Dell irrigation system has been converted to electric clocks, Erin still uses manual oscillating sprinklers under large trees where there are rain shadows. Runoff where sprinklers hit paved paths goes into storm sewers, a big waste. We are on City water and metered but likely leaking a lot of water. The system is shut off in October and turned on again in early March. Laura noted that the idea to irrigate the Garden from the old reservoir was complicated and expensive so there are no plans to pursue it.

We started our walk at the **Japanese Maple Beds**. These had been planted with perennials and flowering shrubs, but the plants were losing the battle with horsetail, morning glory, fire ants, and verticillium wilt. Last spring these plants were removed, turf was added, and annuals were put in as place-holders. Two curved beds were added to the lawn area by the sequoias, and these will be permanent annual beds. After the initial plant removal, a three-person crew worked one week every month during the high season removing plants that kept returning and dealing with weeds. Work is in the planning stages to come up with a more permanent planting under the maples that will highlight the trees, not overshadow them. The northern section where the large red chairs are will be turned into a wildflower meadow. The wooden garbage/recycle bins in this area go away in the winter each year for refinishing, and the plant trays on top stay at Sunset. Andrew is the gardener in charge, and his area extends from the BC habitat area to the Winter Walk. Lisa, who had part of this area previously, is now dedicated to the street perimeter gardens. Laura mentioned that the **Sequoia Grove** appears to have recovered from the early summer lightning strikes.

There have been some visitor complaints about a humming noise coming from the north fountain that is powered by an electric pump, and they are working on getting it fixed. The same problem may be affecting the fountain closer to the Plaza.

The large wooden owl sculpture, a leftover from a Halloween display a few years ago, is now incorporated into the **BC Habitat Garden**. Turning south along the Sino-Himalayan 'highway', we stopped near the **birches in Bed 74**. Between a birch bark borer attack a number of years ago and bad drainage, these trees are not thriving and are being watched by the arboriculturists. They will probably have to come out at some point. You can see where water collects at the rocky eastern point of this bed, which has now become a Canada goose magnet. As we continued walking uphill towards the south, it's easy to see how the water runs down the roadway. New curbing is helping to direct the water into the drain on the road.

We walked by the bottom of the waterfall, and Laura pointed out the drain in the square casing at the north end of the pond and the electronics nearby. The waterfall water is mostly recycled. They have to watch the drain because if the water level is too low, the pump burns out. Along with the rest of the irrigation system, the water is turned off in October to avoid freezing pipes and turned on again in early March.

In the **Canadian Heritage and Vegetable Gardens**, the new apple orchard was planted last year. The raspberries were recently moved east several metres to the new fence to open up the space closer to the vegetable beds. The grapevine was pruned last month, but unfortunately the pruning was followed by a cold snap, so they are keeping an eye on it. Miguel added red clover to the winter cover crop in the vegetable beds and hopes it will flower before he has to till it in. There has been a lot of work in the bee area. Houttuynia and horsetail had invaded that area, and then the fire ants moved in. These were cleared out, and crushed rock on top of landscape fabric now covers the hive area. There will be a meadow planting, and hopefully the fire ants can be kept manageable. The nearby pond was cleared of vegetation a meter out from the edge and is now more visible.

In the **Alma VanDusen Garden**, Laura noted that where the delphiniums are, there once was irrigated grass, and the system was not adapted to the bed. For years, Manuel had some labour-intensive strategies for keeping the delphiniums watered, but those problems were recently fixed. Moving north from here to the fire-ant barrier/sunflower forest, Laura announced that this bed will be bordered by West Coast Seed's new cosmos mix, Dr. Bonnie Henry Pollinator Blend, featuring flowers in Dr. Bonnie's favourite wardrobe shades of white, pink, and yellow.

We walked to the **Great Lawn**, and Laura noted that, while it looks lush, it so bumpy now it causes an excess of vibration in the mowing machine. That's because the grass was not damaged last year by any special events, so they didn't need to aerate it or top dress with sand. There are developing several upcoming projects in this area, so stay tuned for details.

We moved next to the **Lavender Walk**, which is also being rethought. This area is too wet and shady for sun-lovers like lavender. The **Laburnum Walk** is also a challenge and needs a major drainage review. The laburnums are planted too close together and too close to the pavement. They are top-heavy when in bloom, especially when it rains, and they have been pruned asymmetrically to accentuate the outside flowering areas, so they are more susceptible to falling over.

Redoing the **Heather Garden** is also on the drawing board. It too is very wet, and they would like to focus on heath and heather ecology systems, so there will be changes here as well.

The path along Bed 55 in the **Heritage Rose Garden** flooded this winter, and they had to redo the irrigation and catch basin system. The white-capped pipe by the stone arch will make it easier to clean

the system when it gets blocked in the future. They also discovered a buried catch basin at the foot of the nearby weeping sequoia, and it is now functional. You will also see pink flags marking new irrigation heads in the **Black and Gold Garden**.

Irrigation issues in the **Backyard Bird Garden** are being worked out. They will keep the tropical bed near the road, but the second one will be reduced in size and planted with more bird-friendly plants. These beds are infected with fungal fire blight that has impacted the tulip plantings. The blight is very contagious, and when gardeners work in infected beds, they have to clean their boots and sanitize their tools before going to another bed. This same procedure is in place for the Formal Rose Garden which is infected with crown gall. The hummingbird feeders will be back soon, but the other feeders have been removed for a while because of an outbreak of salmonella in birds.

In the **Bentall Garden**, the area where the Glasshouse was torn down needs a new design, which will probably require a landscape architect and money. The boxwood around the raised beds is looking bad, partly due a layer of concrete under the soil. They are planning to cut through the hedge between the White Garden and the Fragrance Garden, which will open those areas up.

Back at the **Plaza**, Laura said that the David Marshall statue area is also very wet, most likely from roof run-off, and quite shady. It has been a challenge getting Eastern North America plants to thrive here, so they are going to move to more Cascadia plantings. The recent addition of a lower paved area on the Plaza by the statues to hold tables isn't working and is used as a shortcut off the Plaza, so they will probably extend the paving to the path.

Since Laura is focusing more on infrastructure, Cynthia has taken over collection development and bed design. Cynthia will be doing a virtual gardener walk in mid-May which will fill in the details. Laura noted that gardeners have been able to focus more on gardening this past season. The shut-down of the Festival of Lights gave them 6-8 weeks of additional time, and the Garden certainly shows it.