Minutes for the Woody Landscape Plant Crop Germplasm Committee

US National Arboretum, Washington, D.C.

Monday, July 30, 2018

Our business meeting was held in the auditorium of the US National Arboretum Visitor Center beginning at 9:00 am. Attendees included: Stan Hokanson (chair), Alan Whittemore, Kim Shearer, Ryan Contreras, Michael Dosmann, Margaret Pooler, Kevin Conrad, Tim Rinehart, Pam Allenstein, Jeff Carstens, Kim Hummer (remote from Corvallis, OR), John DeMott (remote from Homestead, FL), and Eric Anderson, (remote from Escondido, CA). Snacks were provided by Kevin Conrad and included zucchini bread and garden-fresh cantaloupe and tomatoes. The meeting was convened by Chair Hokanson with introductions around the table.

The meeting agenda was focused on discussion of the WLPCGC Crop Vulnerability Statement facilitated by discussion exercises completed by members prior to meeting. The discussion exercises included a Crop Vulnerability Quad form example using *Prunus* in addition to a template for brainstorming and a Crop Vulnerability Statement Prioritization Exercise. The Quad form included the following quadrants: Vulnerabilities and Threats, NPGS PGR Status and Impacts, Genetic Research & Breeding Impacts, and Priority Issues. The Prioritization Exercise was a homework assignment originally sent by Michael Dosmann in October 2017 and revisited prior to this meeting. For the prioritization exercise, members were asked to list five pressing issues relative to our commodity groups in either temperate or tropical woody crops prior to the meeting.

Due to internet connectivity issues (wireless internet service unavailable at USNA), Hokanson connected one computer to the overhead projector and filled in the Quad document based on ideas contributed by members.

Tim Rinehart initiated discussion by providing an overview of the applied practical aspects of the CVS noting that the maintenance of such documents provides clear justification for funding projects relative to woody landscape plant crop species.

Margaret Pooler noted that these statements also provide guidance for project plans regarding germplasm curation. Without priorities established through official input by stakeholders in place, curators are left to determine how to proceed independently. Pooler noted that an updated CVS for the WLPCGC was long overdue.

Rinehart noted that the statement is not intended to exclude crops through any explicit statement listing priority taxa, but rather is intended to be a dynamic document that can be updated or changed. This document should provide necessary information for succinct messaging in communicating needs and priorities.

Kim Hummer asked how many crops or genera are needed in this vulnerability statement. Hokanson responded that it would most likely require a process of elimination in order to be more focused and succinct. In response to this, Ryan Contreras noted that he was not considering any particular genus, but rather that we need more diverse street trees to prevent losses of entire urban canopies to pests and diseases. Alan Whittemore agreed that diversity does seem to be the greatest need in order to help communities break out of the cycle of planting monocultures.

Pam Allenstein posed the question of whether we would be at an advantage or disadvantage if we were not more specific regarding our target taxa.

Rinehart responded that we would not be at a disadvantage, and that the WLPCGC should craft this document under a preferred and agreed upon framework that was desired while considering prioritizing the top three genera or species.

Kim Shearer suggested emphasizing more focus on themes that address threats (e.g. rising sea levels resulting in brackish water, rapid anthropogenic development in regions such as the southern Appalachian Mountains). Rinehart responded that perhaps structuring the document around themes may be better, suggesting one page devoted to each theme. Rinehart emphasized that the existence of the updated document was more important than the framework itself.

Hokanson inquired if it was more important to complete the quad by end of day than the CVS; and Rinehart answered in the affirmative. Hokanson speculated if it would be useful to have a CVS that outlines issues that researchers could focus on in grant proposals. Contreras commented that this would be a useful resource suggesting it would be a good logic model for drafting appropriate proposals.

Dosmann noted his support of a thematic focus in the CVS rather than listing species or genera due to the constraint it would place on proposals. As a case-in-point, Kevin Conrad pointed out that the CVS composed 15 years prior would not have included *Fraxinus* without any knowledge of the future of emerald ash borer devastation.

Allenstein suggested that we could adapt and edit the CVS every year if needed with a major overhaul every 3 years. Dosmann reiterated that identifying priority themes would eliminate the need to prioritize specific genera.

Whittemore stated he would prefer to have some more specific lists available in addition to the overarching documents that include themes. In contrast, he conceded that there are not really any other crops that combine crop diversity with the challenge of addressing issues over such a long time frame (relative to life span of trees).

Here discussion arose around the challenges of managing such long-lived species as trees. Due to the long-term investment necessary, the WLPCGC tends to have the least amount of industry support relative to other CGCs (Dosmann).

During a pause in discussion, Contreras raised a point discussed with Hokanson the night prior regarding tropical taxa noting the WLPCGC has not funded a tropical project. To Rinehart he posed the question, “Should we consider or recommend creating a separate committee for tropical woodies?”

Rinehart replied that in all likelihood this would not be possible due to the standards for establishing a separate CGC (participation, available experts, etc.). John Redmond made the argument that interior plants (mostly tropical plants) are a major commercial industry across the nation, but conceded that much of the product was exported. Carstens argued that resources necessary for maintaining tropical woody taxa were considerable compared to that of tropical herbaceous taxa—and potentially cost-prohibitive.

In response to the tropical debate, Pooler raised the point that all germplasm does not have to be managed within USDA repositories alone. Conservation of genetic diversity through the Plant Collections Network is another avenue for germplasm maintenance. Conrad supported this statement noting that the USDA would not be capable of maintaining all germplasm collected without the support of the public garden community (American Public Gardens Association et al.) Whittemore inquired whether tropical botanical gardens had organized to work with USDA in maintaining tropical woody taxa.

Allenstein argued tropical material is equally at risk due to climate change and extreme weather events noting that the committee should revisit the discussion over practicality and logistics of curating and maintaining tropical woody taxa. She went on to point out that separating the WLPCGC into temperate and tropical groups would result in more equitable distribution of proposal funding.

Tim concluded the tropical debate by suggesting we propose the split to Peter.

The committee moved onto completing the Quad through discussion until lunch at noon. Pooler started the discussion by suggesting we come up with the broad themes to prioritize.

Boxed lunches were provided by the Friends of the National Arboretum. These included an assortment of sandwiches accompanied by salads, fresh fruit cups, and cookies. Lunch was shared with the Herbaceous Ornamental CGC convened for a meeting in the classroom of the US National Arboretum Visitor Center. Other lunch guests included US National Arboretum staff.

Following lunch, a tour of the arboretum was provided to the WLPCGC and the HOCGC by Scott Aker. The tour included the bonsai collection, garden display beds near the visitor center, and a van ride through the grounds. The *Lagerstroemia* were especially admired by all attending.

Following the Arboretum tour, the HOCGC departed while the WLPCGC reconvened at approximately 3 p.m. One final quadrant was left to be filled: NPGS PGR Status and Impacts. After about an hour of discussion, it was agreed that Kevin Conrad and Pam Allenstein would complete this quadrant with data presented in Conrad’s *Public Garden* article. Margaret Pooler volunteered to start the composition of the framework for the CVS with the intention of passing it along to other committee members for additions and edits. It was agreed that each committee member would contribute to the CVS using the “Track Changes” feature of Microsoft Word. The committee agreed that the Quadrant form should be completed as soon as possible (Kevin stated it would be completed by end of week.) Upon completion of the Quadrant form, Pooler would initiate composition of the CVS.

Chair Hokanson raised the issue of committee membership. After the recent reduction in membership based on active engagement, he inquired whether the committee was satisfied with the number of members and representation of geographic regions, commodities, and institutional affiliation. The consensus was that an effort should be mounted to increase membership to increase diversification in all respects. Members will submit names and Hokanson will contact them to see if they are willing to serve.

One final order of business was raised by Kevin Conrad—nomination of a Chair Elect. Conrad acknowledged the committee had nominated and elected Kim Shearer via conference call for which Shearer was absent. In an effort to be fair, Conrad raised the issue of the vote again and nominated Kim Shearer. The motion was seconded by Margaret Pooler. There was unanimous agreement. Kim Shearer agreed to serve.

The question of timing of transition from Chair Hokanson to Chair Elect Shearer was raised. Contreras suggested Chair Hokanson complete the tasks of updating the CVS and receiving proposals for FY2020. The committee agreed that Chair Elect Shearer would convene the annual meeting via teleconference in 2019.

Stan Hokanson would like to thank Kevin Conrad and Margaret Pooler for all their help with coordinating the meeting on site at the National Arboretum. In addition, he thanks the Friends of the National Arboretum for providing lunch and Scott Aker for the great tour. With no budget, these face-to-face meetings are extremely difficult to conduct. However, they are extremely valuable in terms of getting tasks like the Crop Vulnerability Statement done.

Respectfully submitted by Kim Shearer and Stan Hokanson