

'Grass Roots' Initiative Summary- 2016

The 2016 season was the second full season of the 'Grass Roots' exhibit at the US National Arboretum. Geoff Rinehart continues to work as 'Grass Roots' Initiative Coordinator and he was assisted this year by one full-time and three part-time interns (about 2.0 FTE of intern/seasonal labor). This season presented additional management challenges as we experienced one of the most challenging summers over the last few decades in the mid-Atlantic region with 60 days above 90 degrees at the Arboretum. We continue to make adjustments and improvements to the exhibit to enhance the aesthetic presentation and visitor experience and education on the exhibit. Two of the most encouraging aspects as the landscaping of 'Grass Roots' continues to develop have been the maturing of the turfgrass swards, which provides a good opportunity for visitors to compare their growth habits and features; and the growth in height and girth of the ornamental grasses which were planted to provide a contrast to the horizontal aspect of the turfgrass swards and provide both boundaries between the displays and a mode of consistent connection among the displays. As the exhibit's plant material has matured, this has enhanced both the aesthetic attractiveness of the space and the educational experience for visitors. In addition, the opening of a new 'Grass Roots' exhibit the Maryland SoccerPlex in Boyds, MD this autumn and the addition of another display to the Arboretum 'Grass Roots' exhibit in Spring, 2017 will provide the opportunity to expand 'Grass Roots' public outreach.

- During both 2015 and 2016, based upon spot counts throughout the year on the exhibit, we estimate that 'Grass Roots' has hosted approximately 30,000 visitors annually. Typical visitor numbers throughout the year can range from practically no visitors on weekdays from December-February to 1000+/day during peak weekends in mid-Spring when temperatures are in the 60's and 70's and many plants at the Arboretum are in flower.

Visitors have engaged with the exhibit in a variety of ways ranging from the interactive exhibits; putting a ball on the golf green or kicking a soccer ball on the sports field during one of our 'Grass Roots' Family Fun Day" events; participating in one of our guided tours.....or just relaxing with a picnic under a tree in the lawn areas.

Typical 'Grass Roots' exhibit visitors include many families with school-age children, new homeowners seeking information about properly caring for their first lawn, tourist visitors from all over the country, volunteers from local businesses and organizations who have helped with 'Grass Roots' maintenance and also learned a lot about turfgrass during the course of their visit, master gardeners seeking to enhance their knowledge and understanding of turfgrass management, and landscape designers seeking to learn more about different grass varieties.

Public and Professional Outreach and Education

In 2016 we conducted three homeowner lawn care workshops in the spring (April 9, April 23, and May 21) two in the autumn (September 17 and October 22). Attendance for these events ranged from 12 to 30 people. 'Grass Roots' general lawn care workshops include a 75-90-minute PowerPoint presentation covering turfgrass identification, site evaluation, and the five major cultural practices of turfgrass

management, followed by a 20-30-minute tour of the 'Grass Roots' exhibit. The exhibit has been an excellent resource to "field illustrate" the different turfgrass species and management concepts discussed during the classroom presentation.

Geoff Rinehart and Arboretum native plant collection curator Joan Feeley co-hosted a workshop with about 20 attendees for the Chesapeake Conservation Landscape Council on Saturday, April 23. This workshop included a 60-minute lawn care presentation by Geoff Rinehart followed by a tour of 'Grass Roots' and a tour of the native plant collection.

On May 15, 'Grass Roots' co-hosted the National Cherry Blossom Festival "Petal to the Parks" bike ride which included stops at the National Mall and other NPS parks in DC and culminated with a tour of 'Grass Roots' for participants.

Other visiting groups to which 'Grass Roots' exhibit tours were provided this year include National Golf Day event attendees (May 17), Park Trust School Group (June 3), horticulture staff from the Biltmore Estate (July 19), the Professional Grounds Maintenance Society- DC chapter (August 4), Fairfax Co. Master Gardeners (October 10), and a delegation from the Chinese Ministry of Agriculture (October 19). 'Grass Roots' also hosted over 150 5th graders participating in various sports/lawn games and athletic events as part of a Department of Education-sponsored "Let's Read/Let's Move" event on August 5.

In addition to these on-site presentations, Geoff Rinehart presented about the 'Grass Roots' Initiative at the Mid-Atlantic Turfgrass Expo in January, provided lawn care training to the Fairfax County (Virginia) and Montgomery County (Maryland) Master Gardeners during their winter training series in February and an evening lawn care seminar to the Takoma Park (MD) Garden Club in March; tabled a booth offering lawn care information at the Silver Spring (MD) Garden Show in April; and helped to staff a Montgomery Co. Master Gardeners Farmer's Market booth in August.

Government Outreach

Grass Roots' location at the US National Arboretum (which is administered by the US Department of Agriculture) and its proximity to the Capitol, Executive Office Buildings and departmental agencies provide a unique opportunity to outreach to federal government officials. In early 2016, NTF Executive Director Kevin Morris and Coordinator Geoff Rinehart had "one-on-one" meetings with science policy analysts Drs. Elizabeth Stulberg and Richard Pouyat in the Office of Science and Technology Policy on and USDA-ARS Administrator Dr. Chavonda Jacobs-Young, Dr. Jose Costa, and Dr. Simon Liu to advocate for the significance of the turfgrass industry and the need for increased federal funding of turfgrass science research. 'Grass Roots' was featured in the USDA-ARS "Scientific Discoveries" publication in May, 2016 as one of three programs highlighted in the "Education and Science Literacy" section. Dr. Chavonda Jacobs-Young and ARS program leadership staff visited and toured the 'Grass Roots' exhibit as part of a larger Arboretum tour on June 22. On May 18, 'Grass Roots' participated in National Golf Day by tabling an educational display at the US Capitol.

Maryland SoccerPlex 'Grass Roots' Exhibit

In 2016, we expanded the 'Grass Roots' Initiative and installing a 1-acre 'Grass Roots' exhibit at the Maryland Soccerplex, located approximately 25 miles NW of Washington, DC in Boyds, MD. The NTF was able to collaborate with Maryland SoccerPlex to apply for and receive a USDA-NIFA Specialty Crop block grant to fund the materials cost of exhibit construction. The exhibit was built adjacent the complex's stadium and features 10 interactive educational displays while using a similar format to the Arboretum's 'Grass Roots' exhibit. In addition to a large amount of league participation, the Maryland Soccerplex hosts many regional and national youth soccer tournaments, is the home of the Washington Spirit professional women's soccer team, and has over 600,000 visitors/year. Funding for the construction and initial maintenance for the Soccerplex exhibit was provided by the Maryland Department of Agriculture. 'Grass Roots' Coordinator Geoff Rinehart cooperated with the Maryland SoccerPlex leadership and staff to help guide and participate in the construction and coordinate regional sponsors who contributed in-kind donations of materials and labor. Geoff Rinehart will continue to collaborate with the Maryland SoccerPlex next year to assist with minor adjustments and survey work to be conducted as per the grant.

Looking Forward-2017

In addition to providing modest support and conducting survey research at the Maryland SoccerPlex exhibit, we have plans for improving and enhancing the outreach of 'Grass Roots' in 2017, as well. Over this winter and into 2017, we look forward to reaching out to invite more school groups (possibly using a First Green model curriculum); youth groups (including First Tee- DC); professional landscape architect/design organizations; other horticultural interest groups; and, of course, government officials and policymakers. Next spring, we anticipate expanding the Arboretum exhibit and adding a display which includes ongoing *Danthonia spicata* field research by USDA turf scientist Dr. Scott Warnke. The 'Grass Roots' exhibit will be a tour stop for the International Turfgrass Research Conference Pre-Conference Tour in July, 2017. Also, plans are currently being developed with Arboretum leadership to host a 2-day Turfgrass Summit in fall, 2017.

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- The Maryland SoccerPlex 1-acre 'Grass Roots' exhibit in Boyds, MD was built in 2016 and will be maintained by SoccerPlex staff. A Maryland Department of Agriculture NIFA grant helped fund the construction.
- The Arboretum 'Grass Roots' exhibit hosted an estimated 30,000 visitors/year in 2015 and 2016. The 'Grass Roots' website (www.usna.usda.gov/Education/turfgrass.html) complements the educational concepts in the exhibit and contains information about the benefits of turfgrass, basic lawn care information, and links to each state's turfgrass extension education website
- In 2016, 'Grass Roots' coordinator Geoff Rinehart conducted 6 lawn care workshops and hosted tours for several groups visiting the exhibit, including the Chesapeake Conservation Landscape Council, Biltmore Estate staff, master gardeners, the Professional Grounds Maintenance Society, and USDA-ARS administration staff.
- Plans for 2017 include adding another display at the Arboretum featuring USDA turf research (Spring), host part of the ITRC pre-conference tour (July), hosting a Turfgrass Summit (Fall), and additional outreach to school/youth and horticulture professional groups.



The 'Grass Roots' golf display includes a 1000 sq. ft. bentgrass putting green Zoysia "fairway", and a bentgrass tee.



Children enjoy the putting green at a "Family Fun Day" event this fall.



The Maryland SoccerPlex 'Grass Roots' exhibit opened in November, 2016 and features 10 interactive displays. The sports field display includes "mini-fields" of 'HGT' Kentucky bluegrass, 'Latitude 36' bermudagrass, 'Zeon' zoysiagrass, and a synthetic infill surface.



The 'Grass Roots' lawn displays include 7 different warm-season and 5 different cool-season swards for visitors to compare and contrast.