

**2008 PROGRAM WORK TEAM ANNUAL REPORT FORM**  
**(Please complete items 1, 2, 3 and 4 below)**

1. Full name of your Program Work Team (PWT): Landscape Horticulture
2. Names, affiliations and e-mail addresses of the PWT Co-Chairs: (With an asterisk [\*], please indicate the co-chair responsible for finalizing this report.)

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3. As a separate attachment, please provide a list of names, affiliations and email addresses only of **active** members of the PWT. We realize the organizational structure of the PWTs varies widely. We are interested in obtaining contact information about individuals in the core decision-making or planning group of the PWT, not in an exhaustive list of all participants in general meetings or activities.
4. Please identify your PWT's activities, accomplishments, and, most importantly, outcomes and impacts over the past year.

In your successful PWT petition, your team committed to:

- Fully engage your member stakeholders, especially externals.
- Address specific statewide program needs.
- Conduct or plan to conduct programs/activities to address those needs.
- Seek and document productive outcomes through evaluation efforts.
- Integrate applied research and extension activities.
- Foster multidisciplinary approaches.
- Explore external sources of support for PWT efforts and programs.

PWT co-chairs should do their best to convey their team's progress and accomplishments. Co-chairs are encouraged to choose and include any information that they believe best reflects the productive results of their team's activities and that they wish to share with other PWTs, Program Councils, administration, and the public in general. It is particularly important to include specific programming outcomes and impacts in your report. Please consider and report any changes in audience behavior, skills, or conditions, and what differences occurred in individuals, groups, families, businesses, or communities due to your team's work.

Via the main PWT website (<http://hosts.cce.cornell.edu/admin/pwt/>), you can find your PWT's petition and its previously submitted annual reports to use as reference.

**Please use the next page-and-a-half to report on your PWT's progress and activities in FY 2007-08.**

**The completed report can be emailed as a WORD attachment to me: John Whitcomb (jgw2@cornell.edu) by Tuesday December 23, 2008.** Please give the WORD attachment a filename that includes the surname of the lead PWT co-chair (example: *Smith-PWTReport07-08.doc*).

The Landscape Horticulture PWT was a major contributor to the success of the 40<sup>th</sup> annual Professional Turf and Landscape Conference & Trade Show in January in White Plains, NY. PWT members worked with the NYS Turf and Landscape Association Conference Committee to develop the multi-track, educational program for the professional green industry. This conference has historically attracted upwards of 1000 attendees that come to learn the latest in IPM and other landscape maintenance Best Management Practices (BMP's). PWT members served as facilitators and instructors in various educational sessions.

The Landscape Horticulture PWT was also a key cooperator with the fall 2008 CleanSweepNY program. Although targeted to the Lower Hudson Valley region of New York State, this program provided commercial pesticide users from across NYS with the opportunity to dispose of unwanted pesticides and chemicals in a safe, cost-effective manner. Over 68,593 pounds of unwanted materials were collected. PWT members provided mailings and notices (both hard-copy and electronically) to their partners, stakeholders and end-users to help increase awareness and participation in this important program.

### **Research Addressing Alternative Plant and Pest Management Strategies**

#### *Managing pests:*

- Working with industry stakeholders, strategies for monitoring & managing a variety of pests—oak wilt (a newly discovered pathogen in the capitol district), bacterial leaf scorch, viburnum leaf beetle, mites, black vine weevil, defoliating caterpillars, exotic crane flies, white grub larvae, oriental beetle, lone star/deer ticks, leafminers & trunk borers, etc. — are being tested.
- Tracking the incidence and alerting stakeholders of the spread of exotic pests, including crane fly (2 spp.), viburnum leaf beetle, hemlock woolly adelgid, *Sirex noctilio*, Asian longhorned beetle, etc.
- The fifth year of Annual Bluegrass Weevil (ABW) population survey was conducted with the goal of establishing a predictive degree-day model to predict weevil phenology. Based on the cumulative data, there is potential of predictive models for ABW management.
- Studies continue on the unintended consequences of reliance on preventive neonicotinoid insecticides for white grub control in turfgrass. A single application of imidacloprid can temporarily disrupt the natural rates of predation on Japanese beetle eggs, and thereby dilute the benefits of applications made at the recommended time of egg laying.
- Evaluation of repetitive overseeding with Perennial Ryegrass to maintain turf cover on sports fields without pesticides in Schenectady and Westchester Counties. 2008 results indicate that nearly 80% turf cover can be achieved with this method vs. less than 50% in unseeded control plots.
- An ongoing trial established in 2003 involving the establishment of 7 species of hemlock (*Tsuga* spp.) at Lasdon Park & Arboretum in Westchester County continues to be evaluated for species resistance to Hemlock Woolly Adelgid (HWA) and acclimation to Northeast growing conditions. In 2008, the results from the last 5 years of this study were accepted for publication in the research journal of the International Society of Arboriculture, *Journal of Arboriculture and Urban Forestry*.

#### *Managing plants:*

- The need for plants that are tolerant of environmental stresses (salt, drought, poor drainage, cold temperatures, and high alkalinity) and biological stresses (diseases and insects) has been identified by our stakeholders as critical to the success of plantings in the urban landscape. A landscape plant breeding project was initiated to screen for potential parents and progeny for tolerances to environmental and biological stresses. Preliminary indications/results show promise. Oak hybrids have been produced and are being tested.
- The impact of porous asphalt and structural soil under urban conditions continues to be evaluated in field trials. Use of porous asphalt and structural soil is increasing in many cities nationwide and it is also being used in cities around the world including Sydney, Australia.
- The root hardiness of woody plants suitable for container growing in nursery and urban conditions continues to be evaluated.

#### *Diagnostic services:*

- The entomology diagnostic laboratories at the Long Island Research and Education Center and in Ithaca, as well as those in county extension offices, have helped clientele identify problem pests.

Several members of the PWT serve as identifiers for specimens collected through the CAPS program (which conducts surveys for exotic pests across the state and nation). Additional assistance was provided in phone consultation with many hundreds of end-users across New York State.

**Resources for growers, landscape and turf managers, educators and citizens**

- The *Pest Management Guidelines* for both *Commercial Turfgrass* and the *Commercial Production and Maintenance of Trees and Shrubs* continues to be broadened, strengthened and updated on an annual basis. These publications are used widely by the commercial green industry in NYS.
- Cornell University's On-line Woody Plant Database continues to be updated & strengthened.
- Several new fact sheets/releases were developed and/or updated on pests of importance to the green industry including Oak Wilt, Bleeding Canker on Beech Trees, Viburnum Leaf Beetle, Invasive Crane Flies (along with at least one Spanish version fact sheet) and Annual Bluegrass Weevil (ABW).
- A 50 pp. document anticipated to be of value to professional landscapers, (as well as homeowners) titled "Site Assessment for Gardeners - a step-by-step workbook for better home landscapes and gardens" was published in 2008.
- Extension educators in the lower Hudson Valley (Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, and Westchester) produce a monthly electronic publication titled the *Hudson Valley Horticulture Electronic Newsletter* to a readership of nearly 1000 green industry professionals.
- Extension educators from Nassau County produce a timely newsletter titled *Long Island Protips* to 245 subscribers from the professional green industry.
- The publication *Branching Out* continues to be produced by Cornell's Department of Plant Pathology. This publication provides timely updates to arborists and landscape professionals throughout the growing season. In 2008 it was offered to NYS Turfgrass Association members increasing its readership to over 1500 individuals. One reader writes: "I'm a new subscriber & just wanted to tell you how much I absolutely love this publication."
- The publication *ShortCUTT* continues to be produced by Cornell's Department of Horticulture. This weekly publication provides timely updates to professional turf grass managers throughout the growing season. Its current readership is over 1500.

**Continuing Education: Campus-based Learning:** To meet the needs of our clientele using campus-based resources, the following courses were held in Ithaca in 2008:

- The two-day 2008 Landscape-Horticulture Shortcourse was held at the Cornell campus on July 23<sup>rd</sup> and 24<sup>th</sup>. Approximately 60 green industry professionals as well as Cooperative Extension Educators and specialists attended this program. Feedback included: "Great workshop—great presenters!"
- A total of 52 tree care professionals attended the renowned three-day annual course "Field Diagnosis of Insects and Diseases of Trees and Shrubs". In July, 200 people attended the New York State Urban and Community Forestry Conference in Ithaca including workshops given by PWT members.

**Continuing Education: County and Regional Programs:** This PWT works closely with stakeholders and industry leaders to develop strong educational programs that are critical to maintaining their professional status and credentialing in programs such as Certified Nursery Professional, Landscape Architect, Certified Arborist (ISA), Certified Pesticide Applicator, etc. Last year nearly 50 major educational programs reached thousands of professionals & policy makers. Some of the representative programs were:

- Urban and Community Forestry Conference in Westchester County (January), for nearly 140 green industry and municipal professionals. 96% of respondents indicated they would like further programming like this one.
- Nurseryman's Education Day in Albany Co. (January)—150 professionals received a research update.
- Organic Landscape Management Course in Suffolk Co. (November) – 100 professionals in attendance with 75% indicating that they would consider changing their practices.
- Repetitive Overseeding to Improve Sports Fields in Capitol District (Spring) – 150 turf care professionals learned about overseeding (a pesticide free cultural practice) on sports fields.
- Several 30hr. pesticide certification trainings took place at counties across NYS training dozens of would-be pesticide applicators in pesticide safety and best management practices.