Title: **Nursery Technical Resource Center**

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FINAL STATUS OF THE PROJECT

Executive Summary

The web site for the Nursery Technical Resource Center was established on May 8, 2008. The information available on the web site includes news updates and upcoming events, a library that contains research reports and technical tips, downloadable files on pests and diseases, related web links, a feature story and a contact page for support. Various parts of the web site have been updated since the web site went on line. Tracking software, LiveStats® .XSP V8.03, was used on the web site to keep track of various types of data, including number of visits, hits, pages viewed and downloaded documents. Over 5,900 people visited the web site from May through November 30. Site visitors have viewed a number of different pages. Although a contact page that listed e-mail addresses and a phone number to call if the site viewers had a question needing a quick response, only two e-mail questions have been received since the web site went on line. More publicity was needed to let Idaho green industry professionals know the web site was available for them to use or submit their questions. After information about the web site was publicized in the Idaho Nursery and Landscape Association's newsletter, the number of site visits increased by about 69% per month. The number of downloaded documents by site visitors showed that they were interested in managing disease problems on landscape plants. We believe this web site provided unbiased horticulture information for Idaho green industry professionals when they wanted to see it anytime of the day, and by following page views and downloaded document numbers, we can use this information to guide future educational programming.

Materials and Methods

The Nursery Technical Resource Center web site was established on May 8, 2008. The site was established after permission and space on a server were obtained from the College of Agricultural and Life Sciences at the University of Idaho. The web site address was established publicity as: http://extension.ag.uidaho.edu/nursery.

The web site contained the following information: faculty resource information, news updates and alerts, a library that included research reports, extension publications, trade publications and technical tips, pest and disease information, upcoming events, links to other green industry related sites, a feature story, and a help and support page. Information for the web site was often updated weekly or sometimes biweekly.

Statistics have been kept on the web site to determine how many people have been visiting the site and what pages of the site they are examining. The software program that has been used to track web site statistics is LiveStats® .XSP V8.03 sold by the DeepMetrix® Corporation. Data recorded for the web site for each month included number of visits, page views, hits, pages, media and downloads, browser types (used to access the web site), browser operating systems, and continent breakdown (whether viewers were located in North America, Europe, African, etc). Data for number of visits, page views, hits, pages as well as media and downloads were recorded daily. Only monthly summaries for site visits and downloads from May through November are presented in this report. December data are available only after January 1 (too late for this Final Report).

Results and Discussion

The web site for the Nursery Technical Resource Center has had 5,914 site visits from May 1 through November 30, 2008 (Table 1). Site visits are defined as the total number of times the site is visited by people. A site visit will count only one visit by a person trying to visit the site more than once every 30 minutes. The sharp increase in site visits from September to October was probably due to the publicity the web site received from an article that was published in the Idaho Nursery and Landscape Association's (INLA) Taproot newsletter. The article was published twice (in the September/October issue and again in the November/December issue). The LiveStats® software only states the continent that visitors came from (e.g., North America). For this reason, we are unable to determine how many of these site visits were from Idaho green industry personnel or businesses.

Table 1. Number of site visits for the Nursery Technical Resource Center from May through November, 2008.

Month	Total number of visits
May	**723**
June	**713**
July	**653**
August	**746**
September	**676**
October	**1,144**
November	**1,259**

An important aspect of the web site was to have contact information available so that green industry site visitors from Idaho could either call or write (via e-mail) to request additional information. This aspect of the web site was underused since no one called to request information and only two e-mail requests for information were received from May through November. We are unsure why so few requests for information were received, particularly since the contact page was viewed at least 20 times per month (data not shown). In fact, in August the contact page was viewed 80 times. Perhaps in time more site visitors from Idaho will write or call to request additional information.

One interesting aspect of the web site was the number of downloads made by site visitors each month. Rather than present all the information, the top five downloaded documents each month were summarized for this report (Table 2). Although technical reports about past research experiments and technical descriptions about specific procedures (making a saturated medium extract of potting mixes, for example) were available, most of the downloaded documents pertained to pest problems (Table 2). The most frequently downloaded documents changed seasonally, which provides us with some insight to the problems green industry professionals are seeing at different times of the year. Apparently diseases caused the most concern since documents on fungal and bacterial problems were downloaded most frequently. Also note that the document "Tree injury caused by deer antler rubbing" was downloaded the most only one time of the year, November, when this type of damage would be readily seen. If we could be sure that most of the downloads were from green industry professionals located in Idaho, knowing what these people are downloading provides ideas for where we at the University of Idaho should direct our extension work and the INLA should direct its educational efforts.

Overall, we believe the nursery web site has been successful, based on the number of site visits. We realized in fall that we should have had publicity about the web site right after it was available for viewing. We firmly believe that more and more green industry professionals in Idaho use information provided on the World Wide Web to help them with their businesses. Although the numbers of questions generated by the Nursery Technical Resource Center were low, we think that in time more people will write or call with their questions. By looking at the pages viewed and downloaded documents, we can obtain ideas about subject matter that should be included in university extension programming and training programs offered by the Idaho Nursery and Landscape Association.

Significance to the Nursery Industry

Having a source of unbiased horticulture information on the World Wide Web is important for green industry professionals who need information available anytime of the day and every day of the year. The Nursery Technical Resource Center provided (and continues to provide) information regarding research reports, technical procedures, and plant problems. This information is available 24 hours a day, every day of the week and will remain on the web. Another goal of the web site was to collect plant questions from Idaho professionals. Although few Idaho professionals took advantage of this web site feature, we will maintain the ability of people to contact us (Drs. Barney, Love, and Tripepi) via e-mail. Once the grant funding ends, the call center will be removed from the web site, but web site will continue to be maintained and updated (e.g., calendar events and new technical procedures added) periodically (most likely monthly). By tracking the information downloaded by site visitors or tracking the pages visitors viewed, university extension personnel and the Idaho Nursery and Landscape Association can determine directions for educational programming needed by green industry personnel in Idaho.

Table 2. Top five downloaded documents each month from the Nursery Technical Resource Center from May through November, 2008.

Month	Subject matter	Number of downloads
May	Poplar rust problem	18
	Bacterial canker problem	16
	Fairy ring problem	15
	Fertilizing Spruce Trees - 2002 final report	13
	Black knot fungus problem	12
June	Fertilizing Spruce Trees - 2002 final report	30
	Bacterial canker of stone fruit	23
	Poplar rust problem	16
	Fairy ring problem	15
	Evaluating pinyon pine and subalpine fir in gravel beds	14
July	Bacterial canker of stone fruit trees	51
	Holding Colorado Spruce in gravel bed report	34
	Fusarium problem	20
	Aspen leaf spot problem	19
	Fairy ring problem	16
August	Fusarium problem	32
	Bacterial canker problem	29
	Aspen leaf spot problem	22
	Poplar rust problem	16
	Holding Colorado Spruce in a gravel bed report	16
September	Cooley Spruce Gall	30
	Holding Colorado spruce in a gravel bed report	19
	Bacterial Canker of Stone Fruit Trees	18
	Girdling Roots	17
	Poplar rust problem	15
October	Bacterial canker of stone fruit trees	35
	Girdling Roots	34
	Feasibility of growing Colorado spruce in N. ID	31
	Water conservation in the landscape	31
	Controlling deer damage in ID horticultural crops	31
	Marketing Nursery stock	31
	Cooley spruce gall adelgid	31

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Month	Subject matter	Number of Downloads
November	Tree injury due to deer antler rubbing	118
	Holding Colorado spruce in a gravel bed	60
	Bacterial canker of stone fruit trees	43
	Feasibility of growing Colorado Spruce in N. ID	41
	Success with very small seeds	40