Calendar of Events

January 13th - 17th, Green and Growin’ Trade Show and Conference, Greensboro, NC. Contact NCNLA for complete agenda and registration materials.

January 24th - February 21st, 9:00am - 4:00pm each Friday. Certified Turfgrass Professional Short Course. See attached agenda. 9:00 hrs pesticide credit but must attend all sessions. Mountain Horticulture Crops Research and Extension Center

January 27th, 1:00 - 4:00pm, Pesticide Exams, Buncombe County Extension Center No pre-exam class. Contact NCDA&CS to pre-register.

January 27th, 6:00 - 8:00pm, Pesticide Safety Class (2 hrs. V credit) for private applicators, Buncombe County Extension Center. Call 255-5522 to pre-register.

February 3rd, 6:00 - 8:00pm, Pesticide Safety Class (2 hrs. V credit) for private applicators, Transylvania County Extension Center. Call 884-3109 to pre-register.

February 11th, 6:00 - 8:00pm, Pesticide Safety Class (2 hrs. V credit) for private applicators, Buncombe County Extension Center. Call 255-5522 to pre-register.

February 20th, 8:00am - 4:00pm, Nursery/Greenhouse Workshop Mountain Horticulture Crops Research and Extension Center

March 6th, 8:30am - 3:30pm, Landscape Management Workshop, Lake Junaluska Retreat and Conference Center, Lake Junaluska NC.

March 11th, 8:00am - 3:30pm, WNC Turfgrass Conference, Virginia Boone Building, WNC Agriculture Center, Fletcher NC. Schedule being developed.
Stand out with Certification
Kerrie Roach, Extension Agent, Henderson County

In North Carolina, landscape and nursery businesses compete fiercely for customers. With the cost of a mower and a chainsaw being comparatively low, anyone can operate their own lawn care business out of a truck. Professional certifications are a great way to separate you from these ‘mow and blow’ or ‘hack and whack’ businesses. Not only that, but they can increase the marketability and profitability of your Green Industry business. Here in western North Carolina, you have a wide variety of professional certifications offered close to home.

Each year, a pesticide exam is offered at least 5 times in WNC. At least twice during the year, there is a training class being offered with it. These classes usually take place in May and September at the Mountain Horticultural Crops Research and Extension Center (MHCREC). Stay tuned to future issues of the Green Industry News or check out the North Carolina Department of Agriculture and Consumer Services (NCDA&CS) website at www.ncagr.gov for the dates and times. In order to apply any type of pesticides for payment in the state of North Carolina, you MUST have a North Carolina Pesticide license.

The Turfgrass Council of North Carolina (TCNC) offers a Certified Turf Professional (CTP) certification. The certification is gaining in popularity, and is a sign of true knowledge and professionalism within the industry. Each year the exam and training (CTP short course) is offered by the horticulture agents making up the WNC Green Team. This year the class will be offered at the MHCREC on Fridays from 9am – 4pm beginning on January 24th and ending February 21st with the CTP exam. In order to take the class, you must be a NC licensed pesticide applicator, register for the exam with the TCNC, and register for the class with the Buncombe County Cooperative Extension center. (See enclosed registration form) or go to: http://buncombe.ces.ncsu.edu/ctpshortcourse/

Another great opportunity for advancement is the Certified Plant Professional Certification that is offered by the North Carolina Nursery and Landscape Association. This certification is based on a vast knowledge of horticulture methodology and best practices along with the knowledge of specific plant material that grows well in North Carolina. Again the green team agents have historically offered a training course for CPP followed by the exam during the summer months each year. Not only is it a great certification to be able to add to your resume, but also the knowledge that you will undoubtedly pick up is second to none.

There are many other licenses and certifications that you can gain as a green industry professional. In order to maintain a successful business and rise above the hack and whacks and mow and blows, businesses must look for ways to set themselves apart and strive for excellence. For more information on any of the classes mentioned above, please contact the horticulture agent in your local county.
Safety First for the New Year
Cliff Ruth, Extension Area Agent

The Green Industry has several jobs that are considered to be high hazard occupations by OSHA. Many of the tasks that we do involve working with tools or equipment with sharp blades: working in various environmental conditions; or using an assortment of potentially toxic chemicals. All of these tasks are considered to be potentially hazardous to the health of our employees. Hopefully, all of you have a safety plan in place for your company. If not the New Year brings with it an opportunity to develop and implement a plan that will help keep you and your employees healthy and safe throughout the days ahead.

Here are some things to consider in developing a safety plan:

**Fall and Winter Tasks:**
Snow or ice removal may require individuals to be out in the cold for long periods of time. Be sure that they take several breaks and have changes of clothing to avoid hypothermia. Over exertion can also occur more frequently while working in sub freezing temperatures so additional rest periods are important. Make sure that employees wear adequate clothing and dress in layers to reduce the threat of hypothermia.

Tree and brush removal are often tasks required of landscape or nursery companies due to breakage during ice storms. These tasks often require the use of chainsaws in tight quarters. Make sure that all employees have and use the proper personal protective equipment. Using chainsaws require the use of ear protection, eye protection, hard hats, safety toe shoes, chaps and leather or protective gloves.

**Spring and Summer Tasks:**
Spring often brings with it the need for moving a lot of items from plants to mulch and bag goods. These tasks are often repetitious and require a strong back. Part of a safety plan will include training employees in the proper methods of lifting to avoid back strain and the use of back braces where appropriate.

Another important task most often involves the use of pesticides. One thing to do, now, before the spring season is completely underway is to inventory all of the Personal Protected Equipment (PPE) that you have on hand and replace the equipment that is worn or out of date. Check the expiration time on any respirators as both the respirator body and the filters must be replaced after a set number of hours of being used. Glove and boots also should be check to determine if they will keep out pesticide residues. In addition go over all pesticide application equipment and make sure that it is ready to use. Check for leaks in hoses, tanks and booms. Clean and/or replace nozzles and filters; repair any pumps and pressure regulation equipment and replace worn gaskets or springs.

Additionally, many of you will start mowing this season. Prior to the first lawn that you will need to mow you should have someone check all of the safety features on your mowers, making sure that these devices are in place and functioning properly. Go over the safety procedures for operating mowers, trimmers and edger’s with staff, making emphasis on proper PPE and the use of guards on equipment. Violations of the improper or lack of use of these safety features can be costly. Making the right preparations now can help reduce injuries in the spring season.

Heat stroke and sunburn are also problems that frequently occur when working outdoors during these two seasons. As you develop safety programs for this season be sure to include discussion sessions with your staff on how to reduce both of these potentially dangerous illnesses. Encourage staff to keep hydrated and avoid working too long in the sun. You may want to prepare packs for employees to carry with them to help them develop good working habits for dealing with both of these issues. Include sunscreen, water bottles, and similar items.
Green Team Members:

Meghan Baker  M.S. Small Farms Agent, NCSU College of Agriculture and Life Sciences, Buncombe County Cooperative Extension.

Anthony LeBude, Ph.D.  Associate Professor, Nursery Crops Specialist, NCSU Department of Horticulture Science, NCSU  College of Agriculture and Life Sciences.

Tim Mathews, M.S. CPP, CTP, NCRLC, Extension Agent, Horticulture, NCSU College of Agriculture and Life Sciences, NC Cooperative Extension, Haywood County

Kerrie Roach, M.S. CPP, CTP, Extension Agent, Commercial and Consumer Horticulture, NCSU College of Agriculture and Life Sciences, NC Cooperative Extension, Henderson County

Clifford D. Ruth, M.Ag, NCRLC, CPP, CTP, LICM  Extension Area Agent, Agriculture, Commercial Horticulture NCSU College of Agriculture and Life Sciences. NC Cooperative Extension, Buncombe and Transylvania Centers

Recommendations for the use of chemicals are included in this publication as a convenience to the reader. The use of brand names and any mention or listing of commercial products or services in this publication does not imply endorsement by North Carolina State University, North Carolina A&T State University or North Carolina Cooperative Extension nor discrimination against similar products or services not mentioned. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. For assistance, contact an agent of North Carolina Cooperative Extension.

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in any of these activities, please contact Cliff Ruth at 828-255-5522 during business hours of 8:00 a.m. to 5:00 p.m. to discuss accommodations at least 5 days prior to the event. Also if you need a Spanish Interpreter either for you or employees please let me know at least a week in advance so I can request one and provide them the materials.

Thanks-

Clifford D. Ruth- editor
This short course is sponsored by NC Cooperative Extension and the Turfgrass Council of North Carolina.

Classes will be held at the Mountain Horticulture Crops Research and Extension Center. Classes are on Friday's from 9:00am - 4:00pm each day. To become a Certified Turfgrass Professional you must register with the Turfgrass Council of North Carolina in order to take the exam. You must also have already become a licensed pesticide applicator. Ideally, for one to sit for the exam they should have already been a TCNC member for one year. The fees above include both application fee and exam fee. North Carolina Pesticide Credits have been applied for. Please note-you may take the class for the educational content without taking the exam.

Day 1 - January 24th, 2014

Section I Turfgrass Characteristics
The Benefits of Turf in Our World; The Many Parts of North Carolina’s Turfgrass Industry; Important Turfgrass Characteristics; Vegetative Identification of Turfgrasses; Regions of North Carolina where the major grass species are best adapted; Some of the commonly used cultivars for each turfgrass species.

Section II Establishing Turfgrass
Criteria that should be considered when selecting turfgrasses; Climatic zones of North Carolina; Best time to establish a particular turfgrass species; How to prepare a site for planting; Different planting methods; How to read a seed label to purchase the best seed; How to calculate seed needs; How to renovate a poor or declining turf; How to select and manage turfgrasses for shaded environments

Day 2 - January 31st, 2013

Section III Soils & Nutrient Management
Introduction to Soil-Water Dynamics; Soil Volume; Soil Structure; Soil Depth & Horizons; Soil Colloids; Essential Elements; Nutrient Availability; Cation Exchange Capacity; Soil pH – Acidity & Liming; Macronutrients and Micronutrients; Nutrient Management Strategies: Soil Testing, Plant Tissue Testing, Monitoring & Visual Estimates; Nutrient Management Programs: Turf Species, Fertilization Timing, Fertilization Frequency, Fertilization Rates, Fertilizer Formulations; Environmental Concerns & Considerations.

Section IV Cultural Practices
Mowing; Irrigation; Vertical Mowing; Power Raking; Aeration; Root Zone Cultivation.

continued on next page
Day 3 - February 7th, 2013
Section V  Pests & Integrated Pest Management
Pest Management Strategies; Weed Identification and Management; Diseases: Causes, Hosts, Developmental Factors & Forecasting, Symptoms; Management of Insects: Identification, Prediction, Thresholds & Management.

Section VI  Pesticides Characteristics/Pesticide Characteristics
Pesticide Selection; Pesticide Formulations Applied as Solids; Pesticide Formulations Applied as Liquids; Judicious Pesticide Use; Pesticides in the Turf Environment; Storing, Handling & Disposing of Pesticides; Protective Clothing; Spill Containment, Accident Response; Equipment Cleanup; Plant Growth Regulators **Pesticide Credits applied for – Hands-on Lab.

Day 4 - February 14th, 2013
Section VII  Landscape Safety and Pesticide Use
Personal & Operational Safety; The Role of HAZCOM Training; The differences between the chemical and trade name of pesticides; Safe and effective use of pesticides

Section VIII  Calculations & Calibration
Area Measurement; Calculations & Dilution Ratios; Sprayer Calibration; Sprayer Maintenance; Spreader Calibration; Spreader Maintenance; Fertilizer Calculations; Fertilizer Analysis & Ratios; Application Techniques & Options -Hands-on Lab.

Section IX  Turfgrass Business & Economics/Review
Effective Personnel Management; Estimating Insurance; Accounting: Permitting & Licensing; Marketing; Customer & Public Relations; Review Session; Evaluations

Day 5 - February 21st, 2013  EXAM
This exam may take all of 6 hrs, to be held at the Mountain Horticulture Crops Research and Extension Center. Exam to start at 9:00 am and go until time is called! Exam fees to be paid to Turfgrass Council of NC. You must take and pass this exam to become a Certified Turfgrass Professional.
REGISTRATION FORM

Due by January 10, 2014 (We need confirmation early in order to get the books shipped to us in time for the class to begin). Class Size Limited to 25

Company Name:__________________________________________________________

Employee(s)________________________________________________________________

________________________________________________________________________

________________________________________________________________________

Address:_________________________________________________________________

City: ___________________________ State: _______ Zip: ________________________

Phone: _________________________

E-mail Address:___________________________________________________________

Registration for this class - $100.00 for the first person and $20 each for each additional employee (only one book per company). Additional books are $50 each. This fee covers the first textbook, refreshments, and all hand out materials! If you have a book, the fee is $25.00. This cost does not include the examination fee! That fee is payable to TCNC. This information will be mailed to you at your request if you wish to take the examination. It is not currently, on the internet. PLEASE MAKE CHECK PAYABLE TO Buncombe County and MAIL TO:

Cliff Ruth, Extension Area Agent,
Buncombe County Extension Center
94 Coxe Avenue
Asheville, NC 28801