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AREA Executive Committee

| | |
|---------------------|-----------------|
| President | Christina Wells |
| President-Elect | Zhu Ning |
| Vice President | Rich Hauer |
| Secretary/Treasurer | Eric Wiseman |



AREA Members:

I am excited to bring you this fall edition of the AREA newsletter and hope you find the information both interesting and useful. For the research minded, please make sure you check out the new TREE Fund fellowship. This is an extraordinary opportunity for anyone wishing to mentor an upcoming researcher. This issue also boasts the first installment in a series of outdoor/lab activities intended to help the educator members of AREA reinforced arboriculture and urban forestry concepts taught in class. The activity comes from Dr. Christopher J. Luley and compares different methodologies of assessing tree decay. I hope it inspires some of you to submit your own for future editions! Finally, this issue contains a great article submitted by Dr. Richard Hauer on fall needle drop. I am sure it will appeal to all members, but I can see it being of particular interest to practitioners and extension agents who receive yearly calls from concerned homeowners (in-laws, distant cousins, etc...) who fear their tree is declining.

As always, if you have any announcements to submit to our quarterly newsletter, I can be reached at akooser@isa-arbor.com. Thanks to all who contributed!

Sincerely,

Andrew Kooser

Instead of waiting until October 30th to overnite your proposal, why not get a head start on preparing for the 2008 TREE Fund John Z. Duling Grant?

[Click here](#) for application information regarding “seed funding” through the John Z. Duling Grant Program.

Applications are **due in the TREE Fund office by 5 p.m. Central Time November 1.**

For more information about this and other grants offered through the Tree Fund,

[click here](#).

Priority Areas for Proposals:

- Root and Soil Management
- Planting and Establishment
- Plant Health Care
- Risk Assessment and Worker Safety



Forever Not Green—Fall Leaf Drop of Conifers

Richard J. Hauer

Assistant Professor of Urban Forestry

University of Wisconsin–Stevens Point

Evergreen conifers are highly prized trees that add a variety of forms, textures, and help keep green in the winter landscape. As educators, arborists, urban foresters, and others we probably have observed the interest the general public has in evergreen trees. You also probably witnessed two general misconceptions the general public has with conifers. First, any tree that has needles is a “pine” tree when actually several conifer genera grow in the landscape. The second misconception is evergreen “pine” trees hold their needles forever. The annual shedding of needles is easy to observe in larch, white pine, and arborvitae which retain needles for as short as one or two growing seasons. What is lesser known is conifers differ in the longevity of retaining needles. Other “forever-green like” conifers hold needles for longer periods and the annual shedding of foliage is less noticeable. Environmental conditions, diseases, and insects in conjunction with genetic make-up are factors that affect the ultimate age when needles are shed from conifers. This article discusses how conifer species vary and how factors affect the age when needles are shed.

Leaf Life-Span

Conifer trees are not created equal- they vary in their height (tens to hundreds of feet), shape (pyramidal, round, columnar), leaf color (dark green, bluish, yellow), cone shape (round, oblong, scaly), and also how long they retain their needles or their leaf life-span. Leaf life-span is the age when leaves are shed from a plant. In conifers this includes leaves with acicular (needle-like), awl-like, and scale-like forms. Two extreme examples of leaf life-span differences are larches and bristle cone pine. Larches are deciduous conifers that retain needles for 5 to 6 months (a growing season) and shed them annually. In contrast, needles exceeding 40-years old have been documented on bristlecone pine. Typically, bristle cone pine trees retain needles for approximately 15 years, rather than the maximum 40 year plus extreme. Other examples between these extremes include spruce (5-7 years), Douglas-fir (4-8 years), and white pine (2-3 years). Leaf life-span varies between conifer genera (i.e., spruces, pines, firs, larches, etc.) and species within a genera.

Even within a conifer species the longevity of needles varies. Environmental conditions are one factor that strongly correlates with leaf longevity. In general, as conditions favorable for photosynthesis (carbon gain) increases, the leaf life-span of needles decreases. Conifers on more nutrient rich sites tend to have younger needles on average than conifers on nutrient poor sites. Fertilization with nitrogen will likely produce the same effect with decreasing the leaf life-span of conifers. Sunlight exposure is another factor that influences leaf life-span. Canopy locations exposed to less direct sunlight will have older needles on average. A similar negative relationship, as above, exists for site temperature and leaf life span with colder sites having a greater mean leaf life-span. Scotch pine is a good example of this with a 3-4 year needle retention in the European lowlands (relatively warmer and longer growing season) and 6 to 8 year leaf life-span in more northerly and cooler Russian locations.

Table 1 provides a guide for some conifer species and their leaf life-spans. The life spans should be regarded as mean values rather than absolutes. Environmental conditions as pointed out above will certainly influence needle retention. Needle foliage diseases, insect herbivory, and abiotic disorders such as salt spray will also influence the ages of needles on conifers.



Photo courtesy of US Forest Service

What is Abnormal Leaf Shedding?

Abnormal shedding of conifer needles is defined as the loss of needles at an age younger than the genetic adaptation and phenotypic acclimation of a site afford the tree. Plants have genetic capacities for size, fall color, branching structure, etc. Leaf life span is no different, both between and within a species. Phenotypic acclimation occurs within a species with morphologic (structure) and physiologic (function) altered in response to site conditions. Environmental factors including fertility, sunlight exposure, and site moisture are site factors that result in the trees exhibited phenotypic response. But how can you tell if needle drop of conifers is normal or abnormal based on affected age classes and genotypic and phenotypic responses?

One method is to observe and record the age of needles that drop in your area. This species profile can be used as a base to compare against. Use table one as a guide if you are lacking specific leaf life-span for conifers in your area. Second, are the newest or oldest needles falling from the tree or exhibiting needle damage. Normal leaf drop in pines usually affects the oldest needles. In arborvitae the oldest branchlets are usually shed first. Branchlets are the collection scale-like leaves in a cluster supported by an older woody branch. In spruces and firs shedding is not restricted to the oldest needles but is usually concentrated there. In any case however, if the majority of defoliation occurs on newer needles this could be the result of diseases or insects.

Insects and diseases vary in which age class they affect. For example the European and introduced pine sawfly tend to feed on older foliage, while the white-pine and red-headed pine sawfly feed on both old and new foliage. Pine needle miners affect the newest foliage. Salt spray usually affects all age classes of needles. Rhizosphaera needle cast affects second year needles, brown spot needle blight more commonly affects newer needles, and dothistroma needle blight affects all needle age classes. The shedding of conifer foliage typically occurs in the fall. Severe winters may cause some shedding in the spring and drought may cause partial shedding to reduce the water losing areas.

Summary

Seasonal shedding of conifer needles is a normal and common occurrence in the landscape. The patterns exhibited by conifers will vary from year to year and from species to species due to inherent genetic differences and phenotypic responses to site conditions. The challenge for the arborist, diagnostician, and practitioner is to observe these differences over time to discern what is normal and what is not.

Table 1. Common leaf-life spans for selected conifers.

| Tree Species (Scientific Name) | Mean life span |
|---|----------------|
| Arborvitae (<i>Thuja occidentalis</i>) | 2 to 4 |
| Douglas-fir (<i>Pseudotsuga menziesii</i>) | 5 to 7 |
| Fir (<i>Abies spp.</i>) | 3 to 5 or more |
| Hemlock (<i>Tsuga canadensis</i>) | 5 to 7 |
| Juniper (<i>Juniperous spp.</i>) | 3 to 7 |
| Larch (<i>Larix spp.</i>) | 0.5 |
| Pine - Austrian (<i>Pinus nigra</i>) | 3 to 4 |
| Pine - bristlecone (<i>Pinus aristata</i>) | 15 to 20 |
| Pine - jack (<i>Pinus banksiana</i>) | 2 to 4 |
| Pine - Japanese red (<i>Pinus densiflora</i>) | 3 |
| Pine - Korean (<i>Pinus koraiensis</i>) | 3 |
| Pine - limber (<i>Pinus flexilis</i>) | 5 to 6 |
| Pine - mugo (<i>Pinus mugo</i>) | 5 or more |
| Pine - ponderosa (<i>Pinus ponderosa</i>) | 3 |
| Pine - red (<i>Pinus resinosa</i>) | 4 |
| Pine - Scotch (<i>Pinus sylvestris</i>) | 3 |
| Pine - Swiss stone (<i>Pinus cembra</i>) | 4 to 5 |
| Pine - White (<i>Pinus strobus</i>) | 2 to 3 |
| Spruce (<i>Picea spp.</i>) | 5 to 7 |
| Yew (<i>Taxus spp.</i>) | 3 to 7 |



Photo courtesy of USDA ARS

IMAGES NEEDED

AREA is working to create promotional materials for display and distribution at conferences and seminars. In order to do this we need interesting images of research and education. Potential images include field trips, research “action” shots, climbing classes, and more. Please help AREA by donating research and education photographs that are unique to our profession.

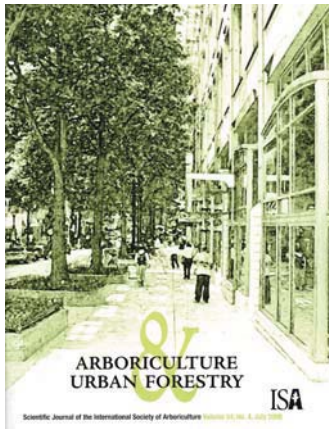
Images may be submitted to akooser@isa-arbor.com

Every accepted picture replaces an Arabidopsis image!

-NOTICE-**Arboriculture & Urban Forestry
FEE IN 2009**

Beginning with the January issue of Arboriculture and Urban Forestry (AUF), all ISA members who wish to receive a hardcopy of the journal must pay a \$25 dollar subscription fee. All members will still retain open access to current and archived issues of AUF online at <http://auf.isa-arbor.com/>

If you prefer to have a paper copy sent to you, please make sure you note this on your membership renewal statement. If you have already submitted your membership information and did not notice this change, ISA's membership coordinator, Danielle Deck, will gladly assist you. You can email her at ddeck@isa-arbor.com

**Then End of an Editorial Era**

Arboriculture & Urban Forestry is proof of the old saying that the “only thing constant in life is change.” Over the past 12 years, AUF has changed cover designs, editorial board members, staff editors, its submission system, and even its name. Through all of these transformations one thing remained constant — Editor-in-Chief Dr. Robert W. Miller.

Dr. Miller's experience and adaptive nature were drawn upon this year to help undertake what may be considered the biggest change made to the journal to date – the adoption of an associate editor editorial system and selection of Dr. Gary Watson as his replacement.

Throughout his career, Dr. Miller has been one of the profession's strongest supporters of arboriculture and urban forestry research and education. As an instructor at the University of Wisconsin-Stevens Point, Dr. Miller helped foster the academic growth of many of today's urban foresters, arborists, educators, and researchers. Dr. Miller reached those beyond his classes through his journal articles and the publishing of his text, “Urban Forestry: Planning and Managing Urban Greenspaces.”

Although retired, Dr. Miller continues to play an active role in arboriculture and urban forestry research as a TREE Fund board member.



The first issue of JOA that lists Dr. Miller as EIC

Special November Theme Issue of AUF

After several months of writing and reviewing, Dr. David J. Nowak and Dr. Robert W. Miller have completed a special theme issue on urban forest assessment. The issue includes papers describing ground and satellite based assessment methodologies, several case studies, and new research regarding the effect of plot and sample sizes on the length and accuracy of urban forest measurements. The two editors collaborated on an introduction and Dr. Nowak provided a summary paper which identifies key points raised in the preceding works. Several more theme issues are tentatively being planned to coincide with past and future researcher summits. Most notably, a Landscape Below Ground edition of AUF will showcase works presented at the October 2008 conference.



TREE Fund Research Fellow Program

Deadline December 1, 2008



The goal of the Tree Research and Education Endowment Fund (TREE Fund) Grant Programs is to provide support for research and technology transfer projects that are in keeping with the TREE Fund's mission and priorities as well as addressing topics that have the potential of benefiting the everyday work of arborists.

Research Fellow Grants are designed to address a specific topic as defined by the TREE Fund Trustees and to provide support to a young scientist who is being mentored by an established and published scientist. Research Fellow Grants support multi-year research projects (three to five years in duration), but no more than one grant can be awarded to any project. Grants are for a total of \$100,000 over three years, with approximately one third released each of the three years, pending completion of interim and final reports. Funds cannot be used to pay for overhead expenses, student tuition or student fees.

Tree Research and Education Endowment Fund Mission:

To identify and fund projects and programs that advance knowledge in the field of arboriculture and urban forestry to benefit people, trees and the environment.

2009 Priorities

The TREE Fund priority areas are derived from input from the TREE Fund Research Committee, TREE Fund Trustees, and the Science and Research Committee of the International Society of Arboriculture. **Tree Biomechanics** have been defined as the overall research priority area for 2009. Grant proposals should focus on tree biomechanics issues relating but not limited to:

- Root pruning/structural loss
- Tree risk assessment
- Long term effects of drought and root loss
- Soil biology/soil amelioration
- Radar and other analyses devices

Criteria for Project Selection

Proposals are evaluated by the TREE Fund's Research Committee, which is composed of research scientists and practicing arborists. Recommendations on grant awards will be presented to the TREE Fund Board of Trustees for final approval in January 2009 and awards **will be announced in February 2009**. Proposals will be evaluated using the following criteria:

POTENTIAL IMPACT OF THE PROJECT

How does the project address the problem/issue as described in this RFP? Are there measurable outcomes which will occur as a result of this project?

APPROACH

Is the methodology and proposed analysis appropriate? How is the project creative or unique in its approach to the problem?

PERFORMANCE

Have the investigator(s) demonstrated appropriate qualifications to accomplish the project? Can the project be completed in the time the investigators have estimated? How will the information be disseminated?

FUNDING

Is there a clear explanation of how funds will be used in the context of the total project budget? Are there additional sources of funding for the project? Is the potential cost/benefit ratio for this project appropriate?

Proprietary Rights

The TREE Fund reserves the right to negotiate proprietary rights for projects on a per grant basis including copyrights, source codes and/or patents.

Reporting Requirements

If selected, the TREE Fund Fellow will be notified, in writing, within 60 days of the award. The award letter will include a grant acceptance document and a grant conditions and agreement form, both of which must be signed and returned within 30 days of award notification date. Upon receipt by the TREE Fund of the Fellow's signed grant acceptance and the conditions and agreement documents, the first installment (33.3%) of the award will be sent to the recipient.

(TREE Fund Research Fellow Program continued on page 6)

C A L L F O R P R E S E N T A T I O N S



**International Society of Arboriculture
85th Annual Conference
Providence, Rhode Island
July 24-29, 2009**

ISA's international annual conference and trade show is the premier gathering of arboricultural professionals in the world. Practicing arborists come together with top researchers and educators to learn the latest in research, technology, and innovations in arboriculture and urban forestry.

ISA is seeking proposals for presentations for the 2009 conference. Proposals will be accepted for 30- to 60-minute oral presentations for general and split sessions, Tree Academy workshops, Climbers' Corner demonstrations, and poster presentations.

Proposals will be evaluated based on overall quality, appropriateness and timeliness of topic, well-defined focus, practical applications of material, and attractiveness to a diverse audience.

To learn more about submitting a proposal, visit ISA's Web site or go to www.isa-arbor.com/calendar/submitpaper.aspx

Only proposals submitted online will be accepted.

(TREE Fund Research Fellow Program continued from page 5)

An interim progress report is due to the TREE Fund office nine (9) months after the initial payment. The second installment of 33.3% will be sent to the grantee at the start of the second year. An interim progress report is due to the TREE Fund office nine (9) months after the second payment. The final 33.3% will be sent to the grantee at the start of the third year. A final report is due to the TREE Fund office within 30 days of the completion date identified in the application. The TREE Fund Fellow will furnish the TREE Fund with interim and final reports, including **a fair and complete financial statement reflecting the original budget submitted and the actual expenditures**, and a narrative that describes program progress based upon the goals and objectives in the original proposal.

Upon the completion of the project for which the Fellowship has been awarded, the Fellow must report the results achieved and the practical or applied outcomes anticipated. These reports shall supply sufficient information for the TREE Fund to determine that the grant is being used for the purposes intended and for the TREE Fund to fulfill its own public reporting responsibilities.

Submission of Proposal and Application Deadline

Brevity and simplicity are encouraged. To save valuable resources like paper, postage and time, the TREE Fund web site (www.treefund.org) is being updated to include an online application form. It should be operational by October 31, 2008. Applications received electronically after midnight on December 1, 2008 will not be considered.

If you choose to submit your application on paper, there is no minimum or maximum length of proposals, but 5-6 pages is recommended (8.5"x11", 12 pt. type minimum). Please provide one (1) typed original and *nine* (9) unbound copies of the proposal in English, to the TREE Fund, 711 E. Roosevelt Rd., Wheaton, IL 60187 USA. **Proposals must be received (not postmarked) by December 1, 2008.** No FAX or reduced copies of the original will be accepted.

In preparing the application on paper, please be sure that all pertinent information is typed. All proposals must follow the outline below. It is important to respond to all categories.

1. Project title
2. Investigator (contact information and qualifications)
3. Student/intern who will work on the project (contact information and qualifications)
4. Executive Summary (**very important** – if a large number of proposals are received, the initial screening of proposals may be based on this alone)
5. Statement of problem and objectives of project
6. Brief description of what is currently known about proposed project area (use citations where appropriate).
7. Brief description of measurable outcomes expected
8. Project plan including design, methodology and analyses
9. Budget (itemized budget for project, minimum funding requested, funds received and pending from other sources). Grant funds **cannot** be used to pay overhead expenses, student tuition or student fees.
10. Project schedule, including starting and completion dates
11. Relevant citations by investigator
12. Explain the significance of your proposed project as it relates to the profession of arboriculture or urban forestry.

Deadline: December 1, 2008

Thank You!

Class Activity

Tree Decay Detection: Which Tool is Best for You?

Introduction:

There are numerous tools and methods used to rate hazard trees and quantify decay. Cavities, conks, carpenter ants, and abnormal trunk growth such as bulging are just a few positive and potential visual indicators used to identify the presence of decay. Beyond a simple visual assessment, one can go a step further and sound out decay using a mallet with a hard plastic head. While somewhat simplistic in appearance, the mallet technique is surprisingly effective at identifying pockets of decay hidden beneath a layer of sound wood. The sounding technique is also very useful as a technique to initially estimate decay presence and severity.

Two slightly invasive methods of decay detection allow one to quantify internal decay in trees. The first is relatively inexpensive and with practice can be quite effective (Costello and Quarles 1999). Using a cordless drill and a long, thin (1/8 inch; 3 mm or smaller diameter) drill bit, slowly drill 1-2 inches (2.5 to 5.0 cm) into the tree. Pull the drill out and examine the shavings for discoloration and changes in texture that indicate decay is present. If the wood is still sound, continue drilling in small increments until decay is located (there may be a noticeable decrease in drilling resistance). If decay is not found, continue until you reach the end of the drill bit or center of the tree. A rubber stopper or foam ear plug may be skewered with the bit prior to drilling and moved as a marker for measurements. Choice of the location to drill test at tree is critical because such as small area is tested with each time. Use of a mallet to initially screen locations for decay is recommended.

The second method utilizes a resistance recording device (such as a Resistograph^{®1}) which, like the cordless drill method described above, uses a small, rotating bit to drill into to tree. As the bit penetrates farther into the tree, resistance is recorded. Decay within the trunk is seen as a decrease in resistance that is marked on a paper chart or recorded on a data logger.

Finally, new alternatives to invasive detection methods have been developed. One notable system is sonic tomography. Tomographs measure differences in the velocity of sound waves as they travel through solid and decayed wood. Other methods of assessing tree decay utilize radar and X-ray technologies. The primary disadvantage to these technologies is their cost.



Activity:

Materials:

- Mallet with a hard plastic head (such as the one pictured)
- Tape measure
- Diameter or D-Tape
- Drill with bit 1/8" or smaller drill bit
- Rubbing alcohol (to disinfect drill bits between trees)
- Resistograph, Tomograph, etc. (if available)
- Evaluation form (such as US Forest Service form found at http://www.na.fs.fed.us/spfo/pubs/uf/utrrmm/chptr3_sec8.pdf)

For this example we will be having 9 groups of students, 9 sample trees, and 3 methods of assessing decay (mallet, drill, and Resistograph) in addition to a visual assessment.

(*Tree Decay Detection: Which Tool is Best for You?* continued on page 8)

(*Tree Decay Detection: Which Tool is Best for You?* continued from page 7)

Designate several trees (in this case 9) as test subjects to be evaluated. Some or all of the trees should have visual indicators of internal decay. Divide class into the same number of groups. Each group should complete a visual assessment of each tree and assign a risk rating. Next, have the groups revisit each tree and estimate decay in using one of the three other methods of decay detection and this simple scale: 1 = extensive decay estimated to be less than 0.1 of the radius remaining as sound wood, 2 = serious decay between 0.1 and 0.3 of the radius remaining as sound wood, 3 = moderate decay between 0.3 and 0.5 of the radius remaining as sound wood, and 4 = minor decay with more than 0.5 and less than 1.0 of the radius remaining as sound wood, and 5 = no decay present, a ratio of 1.0. Ideally there will be the same number of replications of each method per tree when you finish (3 mallet, 3 drill, and 3 Resistograph). *Given the invasive nature of drilling, groups should be restricted to one measurement point when using the drill or Resistograph. It is also important to secure permission to drill test trees prior to the exercise.*

Once all measurements are made, tally the ratings. How do the visual ratings for decay compare to the other 3 methods of detection? How do ratings compare among the 3? Were the decay indicators useful in the identification of decay? Reviewing the results in front of each tree can use a good method to corroborate the class's results.

Acknowledgments: A special thanks goes to Christopher J. Luley, Ph.D. at Urban Forestry LLC for creating this lab activity and reviewing this article.

¹Resistograph® is a registered trademark of Rinntech®, Heidelberg, Germany. However, in this article Resistograph is used interchangeably with “resistance recording device” as the former name is more widely recognized and commonly used in the profession.

Costello, L.R., and S.L. Quarles. 1999. Detection of wood decay in blue gum and elm: An evaluation of the Resistograph and the portable drill. *Journal of Arboriculture*. 25(6):311-317.



Call For Presentations: Student Oral and Poster Competitions

Graduate and undergraduate students are cordially invited to present their original research in this year's student oral and poster competition. The event are part of the 85th ISA Annual Conference in Providence, Rhode Island.

Complimentary full registration will be given to all contestants. A limited number of travel grants are also available.

To learn more about the student competitions, please visit <http://area.isa-arbor.com/>

To submit a proposal visit the ISA website or go to:

www.isa-arbor.com/calendar/submitpaper.aspx

Professional Opportunities

ENVIRONMENTAL POLICY

Assistant Professor

Department of Natural Resources Conservation

University of Massachusetts Amherst

The Department of Natural Resources Conservation at the University of Massachusetts Amherst (www.umass.edu/nrc) is seeking applications for a 9-month, tenure-track appointment as Assistant Professor in *Environmental Policy*, emphasizing forest, wildlife, fisheries or building-related research. Expertise relevant to urban wild-land interfaces is preferred. A Ph.D. in an environmental science-related field with a strong emphasis in environmental policy, including sustainability or integrated human-environmental systems is required. Applicants from social-science fields with a connection to environmental policy are encouraged to apply. The candidate will be expected to develop an independent research program, to build departmental and interdepartmental interdisciplinary collaborations and to teach at the graduate and undergraduate levels. Possible research areas include but are not limited to the policy and/or social dimensions of: changing ecological systems, land use change, adaptive responses to climate change, green infrastructure and construction practices, integrated water resource management, energy conservation, low impact and conservation development, or green certification. Teaching responsibilities include graduate and undergraduate courses in Environmental Policy as well as other courses related to the candidate's area of specialty.

The applicant's experience should demonstrate the ability to work across disciplinary lines in the social and natural sciences and the potential to attract external funding. The successful applicant will be expected to serve as a mentor to minorities and other underrepresented groups within the department. The University of Massachusetts Amherst places special emphases on faculty-student interaction and a commitment to teach and attract a diverse student body.

APPLICATION: Earliest start date is September 1, 2009. Review of applications will begin January 5, 2009. The position will remain open until filled. Applicants should submit curriculum vitae, a statement of research goals, a statement of teaching goals including specific proposals for courses, and the names, addresses and contact information of three references to:

Search Chair
Environmental Policy Search Committee
Department of Natural Resources Conservation
Holdsworth Natural Resources Center
University of Massachusetts, Amherst, MA 01003
(413) 545-2665

The University is part of the 5-College Consortium in the beautiful Pioneer Valley of Western Massachusetts, with excellent social, cultural, and recreational amenities in a town and rural setting. We are 2 hours from Boston and 3 hours from New York City.

The University provides an intellectual environment committed to providing academic excellence and diversity including mentoring programs for faculty. The College and the Department are committed to increasing the diversity of the faculty, student body and the curriculum. The University of Massachusetts is an Affirmative Action/Equal Opportunity Employer. Women and members of minority groups are encouraged to apply.

*Have a career opportunity, fellowship, assistantship, or internship you would like to post?
Contact akoesser@isa-arbor.com*

Call for Papers

Environmental Concerns in Rights-of-Way Management

9th International Symposium Portland, Oregon

The overall theme of this Symposium will be the advance designation of energy rights-of-way (ROW) corridors and related environmental concerns.

Background

The Portland Symposium is being organized by a steering committee representing industries, agencies, and universities involved in research and management of electric, gas, highway, railroad, fiber optic, and water ROW. The Saratoga Springs Symposium, held in September 2004, attracted over 450 attendees from 18 different countries. This symposium is the ninth in a series that began at Mississippi State University in 1976, and subsequently held in Ann Arbor, MI in 1979; San Diego, CA in 1982; Indianapolis, IN in 1987; Montreal, Quebec in 1993; New Orleans, LA in 1997; Calgary, Alberta in 2000; and Saratoga Springs, NY in 2004.

Purpose

The Symposium will address environmental issues in ROW planning and management, and will provide a forum for information exchange among environmental professionals from a wide variety of agencies, industries, and academic organizations. The goal is to achieve a better understanding of current and emerging environmental issues related to ROW

September 27- October 1
2009

management by sharing environmental research and practical experience throughout the world. This exchange of experiences and ideas will result in more cost-effective and environmentally sensitive ROW management.

Brought to you by:



Program

The program will consist of plenary sessions, concurrent technical sessions, and a poster session. In addition to the general theme, an array of topics will be covered addressing environmental issues of concern in ROW planning, routing, siting, construction, operation, maintenance, decommissioning, and abandonment, including:

- Integrated vegetation management
- Reclamation, restoration, and mitigation
- Inspection, monitoring and compliance
- Innovative construction techniques
- Wildlife and aquatic management
- Public participation
- Gas pipeline issues
- Biodiversity and habitat fragmentation
- Indigenous people/lands
- Corridor widths and saturation thresholds
- Endangered species and critical habitat
- Public safety/hazards
- Environmental stewardship
- Ecological risk management
- Cultural resources
- Soil erosion and control
- Wetlands
- Multiple use/visual aesthetics
- GIS and other tools

For titles of papers presented at previous Symposia, visit our website at:

www.rights-of-way.org

Important Dates:

Receipt of Abstracts: November 1, 2008
Notice of Acceptance: January 31, 2009
Registration Package Available: February 1, 2009
Receipt of Manuscripts: August 1, 2009
Symposium: September 27 - October 1, 2009

Call For Papers

You are invited to submit a paper to be considered for presentation at the Symposium in either oral or poster form. Your paper will be evaluated by the Steering Committee based on relevance, quality and timeliness. Abstracts of proposed papers should be typed on one page and limited to 250 words. The abstract should focus on problem objectives, methods, results and conclusions.

Proceedings:

In order to reach the widest possible audience, presenters are strongly encouraged to submit manuscripts of their papers. After peer review by other Symposium participants, the manuscripts will be included in the Symposium proceedings. The demand for previous proceedings has been strong and extended far beyond the Symposium participants.

Submit abstracts:

By mail, fax or e-mail (MSWord only) to address below by November 1, 2008.
The official conference language is English.

Postal Service:

Utility Arborist Association
Attn: Jessica S. Lum
PO Box 3129
Champaign, IL 61826

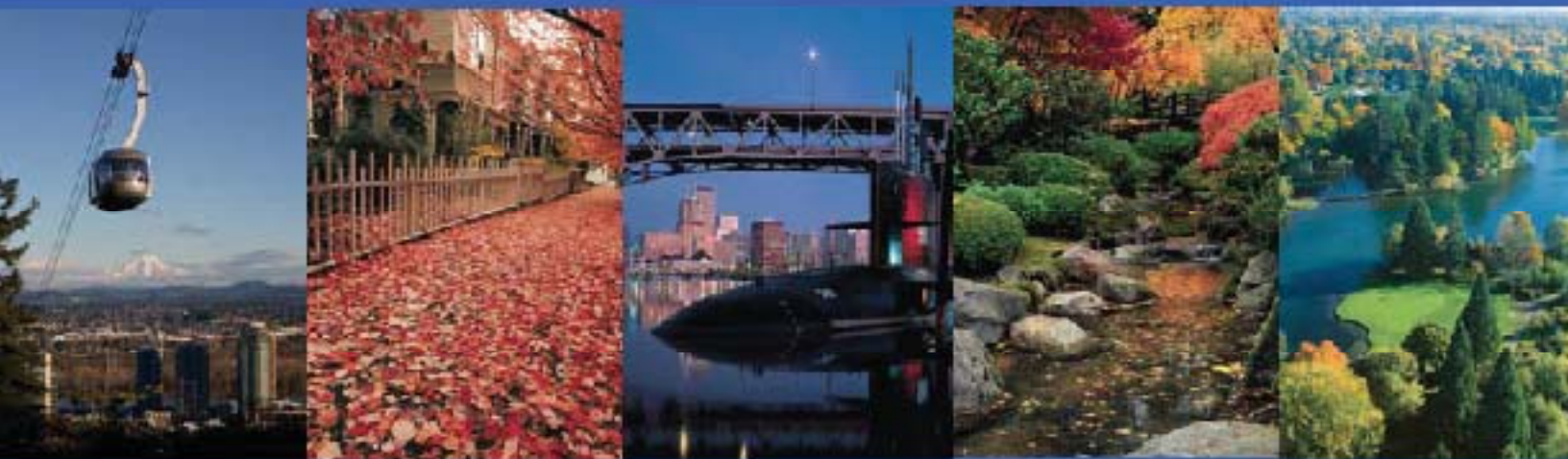
UPS, FedEx, or other Carrier:

Utility Arborist Association
Attn: Jessica S. Lum
1400 West Anthony Drive
Champaign, IL 61821
+1 217-355-9411



Sponsorship:

Please contact Jessica Lum at jlum@isa-arbor.com or +1 217-355-9411 ext. 221 regarding sponsorship opportunities.



The city of Portland, Oregon, has been proclaimed as North America's "Best Big City," according to Money magazine. Come take a first-hand look at the region's natural beauty, its bustling local scene, our seasonally focused dining and its welcoming accommodations – much of which can be accessed via the region's convenient and eco-friendly light-rail system. *Photos courtesy of Travel Portland, David Falconer, Tim Jewett, Edward Nugent, Robert Reynolds, and Richard Stanley.*