

# Quarterly



Photo: Amy Benson, USGS, Bugwood.org

## Invasive Species Identification Services Available

### Montana Fish, Wildlife and Parks Dreissenid Laboratory (Helena, MT)

By Stacy Schmidt

*AIS Technician and Dreissenid Lab Manager*

Zebra and quagga mussels (*Dreissena polymorpha* and *Dreissena bugensis*) are freshwater mussels that are highly invasive and cause economic and ecological impacts relating primarily to their fecundity and ability to attach to solid substrata. These mussels produce larvae, or veligers, that are planktonic until they grow large enough to settle out of the water column.

The Montana Fish, Wildlife and Parks (FWP) Dreissenid Laboratory has been in operation since 2005. The lab processes veliger samples from the Missouri River Basin states, including, Wyoming, South Dakota, North Dakota, Missouri, Nebraska, and Kansas, as well as Montana, at no fee. All samples are processed using the same protocol. The lab primarily detects presence or absence of zebra/quagga mussel veligers and does not quantitatively analyze samples. Each year, the lab increases its work load; in 2010, it processed a total of 939 plankton samples.

Cross Polarized Light Microscopy (CPLM) is one of the simplest and most efficient methods of testing for veligers and is the method used by the FWP Helena lab. Bivalve larvae are one of the few objects found in plankton samples that are able to refract light in two slightly different directions to form two rays (birefringent). They glow as bright spots under

polarized light because of the crystalline calcite structures of their shells. The arrangement of these crystals causes the "Maltese Cross" effect, a dark cross on the shells caused by the polarizing filters not reflecting some of the light from the shells because of their alignment.

Larval identification requires trained personnel with many hours of experience. If a suspect is found in any sample, the technician takes high resolution photographs of the suspect using both a dissecting microscope and a compound microscope and at least two independent labs are used to verify beyond the Montana expertise.

In the winter of 2010, the Helena lab participated in a community double-blind round robin study conducted by the US Department of the Interior in Denver, Colorado, the Skidaway Institute of Oceanography in Georgia, and the Darrin Fresh Water Institute in New York. In total, 18 labs participated in the study and all utilized different methods of veliger identification. The Helena laboratory delivered perfect results with respect to presence or absence detection. The study also found that, "CPLM is a relatively robust and mature approach for detecting and quantifying *Dreissena* spp. larvae in plankton samples and that the available analysts are well trained."

For more information, contact [Stacy Schmidt](#), AIS Technician and Dreissenid Laboratory Manager, or visit the Montana Fish, Wildlife and Parks [Aquatic Invasive Species website](#).

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### Schutter Diagnostic Laboratory (Bozeman, MT)

Montana State University's Cooperative Extension Service provides plant pest identification services through the Schutter Diagnostic Laboratory. The lab utilizes a wide range of techniques for diagnosis, including visual identification, pathogen culture, microscopic identification, and biochemical detection. Instructions for submitting a plant sample for identification can be found [here](#).

For more information, contact [Melissa Graves](#), Plant Identification Diagnostician at the Schutter Diagnostic Laboratory.

### Cornell University Ecology and Management of Invasive Plants Program (Ithaca, NY)

Cornell University's Ecology and Management of Invasive Plants Program provides a free diagnostic service to determine whether a particular stand or clone of *Phragmites australis* is a native or an introduced haplotype using morphological characteristics.

For more information, contact [Dr. Bernd Blossey](#), Assistant Professor in the Department of Natural Resources at Cornell University.

# In Memory of Dr. Les Mehrhoff

By Liz Galli-Noble  
Director, CIPM

It is with great sadness that we report the passing of CIPM's friend and colleague, Dr. Les Mehrhoff.

Several of us at CIPM were lucky to have collaborated with Les over the past few years on projects including: launching the National Network of Invasive Plant Centers, organizing and implementing the 2010 Weeds Across Borders Conference, and establishing the North American Invasive Species Network. Les was an admired and sought after botanical expert, thought-provoking lecturer, experienced field naturalist, and mentor to many, both in his regional home of New England and throughout the US. CIPM's interactions with Les were nothing short of insightful and stimulating, and always joyful.

Dr. Mehrhoff was truly a gentleman and a scholar. He was the director and co-founder of the Invasive Plant Atlas of New England (IPANE) at the University of



Les Mehrhoff at the 2010 Weeds Across Borders conference in Shepherdstown, West Virginia.

Connecticut in Storrs. In addition to his invasive plant management work with IPANE, Les was also the former curator of the George Safford Torrey Herbarium at the University of Connecticut and former chief botanist for the Connecticut Department of Environmental Protection. He will be greatly missed by all of us at CIPM.

*In memory of Les, his family has requested that we please perform an act of kindness for the preservation of our environment.*

## Snake Valley CWMA Water Hemlock Wars

By Tina Mudd  
Nevada Department of Agriculture

On June 5th and 12th a group of students from Utah's Eskdale High School journeyed across the Snake Valley to the Nevada side of the state line to take part in the water hemlock war along Roland Creek. Water hemlock is highly poisonous to humans and livestock and is considered to be the most toxic plant in North America.

Roland Creek is the water source for many of the residents of the Lehman Creek Estates subdivision; therefore, chemical removal of the water hemlock was not an option. The Eskdale students were looking for any and all fundraising opportunities to help pay for a trip to Washington, DC. So, the CWMA came up with a perfect idea: offer the students an opportunity to help with a weed problem while earning funds for their trip to Washington, DC.

Over two Saturdays, a small army of students (with some adult supervision and assistance) tackled the Roland Creek water hemlock problem. They pulled and chopped nine pickup truck-loads of water hemlock out of the creek and riparian area, for an estimated total of 6,000



Students from Utah's Eskdale High School assisting Snake Valley CWMA members with water hemlock removal efforts. Photo: Tina Mudd.

pounds of vegetation removed. The plant material was hauled to the Home Farm where it was deposited into a compost pile to decompose into a reusable product. The finished compost will be used in the gardens around the Home Farm.

Eastern Nevada Landscape Coalition board member Carol Ferguson and her family generously offered their home along Roland Creek as a base for this project and fed everyone on both days. The students put in a total of 174 hours, earning \$1,740 for their school trip.

This was a perfect example of cooperation and coordination between the CWMA and other community members to accomplish a goal which had numerous positive benefits.

## Upcoming Events

[Missouri River Natural Resources Committee Conference and BiOP Forum](#)  
March 9–11, 2011  
Nebraska City, Nebraska

[Western Society of Weed Science Symposium: Ecological Effects of Invasive Plants](#)  
March 10–11, 2011  
Spokane, Washington

[North American Wildlife and Natural Resources Conference](#)  
March 14–19, 2011  
Kansas City, Missouri

[Montana Weed Control Association Spring Weed Managers Training](#)  
March 22–23, 2011  
Helena, Montana

[Western Aquatic Plant Management Society Annual Meeting](#)  
March 28–30, 2011  
Westminster, Colorado

[Cal-IPC Wildland Weed Field Course Series](#)  
April 13–14, 2011  
San Luis Obispo, California

[3rd Annual South Dakota Invasive Species Management Association Conference](#)  
April 18–19, 2011  
Spearfish, South Dakota

[2011 Noxious Weed Short Course](#)  
April 18–21, 2011  
Loveland, Colorado

[Biodiversity Without Boundaries](#)  
May 8–12, 2011  
Nebraska City, Nebraska

[Cal-IPC Wildland Weed Field Course Series](#)  
May 17–18, 2011  
Redding, California

[Western Plant Board 2011 Annual Meeting](#)  
May 17–19, 2011  
Reno, Nevada

[Cal-IPC Wildland Weed Field Course Series](#)  
June 21–22, 2011  
San Francisco, California

[North American Invasive Plant Ecology and Management Short Course](#)  
July 6–8, 2011  
North Platte, Nebraska

[Sustaining Military Readiness Conference](#)  
July 25–29, 2011  
Nashville, Tennessee

## North American Weed Free Forage Program an Enormous Success

The North American Weed Free Forage Program (NAWFF), formerly the Regional Weed Free Forage Program, was initiated by several western states in the late 1980s and early 1990s to meet the demand for weed free forage products and limit the spread of noxious weeds throughout the continent. In 1997, the North American Weed Management Association (NAWMA) took over the program and worked with participating states to develop a set of minimum standards for weed free forage certification. Although NAWMA has no regulatory authority, it houses and mediates the minimum standards across state and national boundaries, and offers a train-the-trainer seminar for inspecting fields and gravel pits at its annual conference.

The NAWFF program has three primary goals: (1) limit the spread of noxious weeds through forage, mulch, and aggregate; (2) provide assurance to all participants that forage certified through the program meets a minimum acceptable standard; and (3) provide continuity between states and provinces.

The program has been an enormous success. When it was first established, only three or four states were involved.

Today, 22 states, two US counties, and one Canadian province participate (see NAWMA's [Weed Free Forage website](#) for the full list). All states and provinces are eligible to join the program; entry requires acceptance of NAWMA's minimum standards. Furthermore, in an effort to limit the spread of invasive weeds, a growing number of federal, state, and provincial agencies have begun to require that all forage products used on their lands be certified weed free and the NAWFF program helps fulfill that condition.

A few years ago, NAWMA discovered that entities in the state of Wyoming were inspecting gravel pits in addition to participating in the NAWFF program. Shortly thereafter, NAWMA was invited to house the minimum standards for gravel. NAWFF is a great preventative program for protecting our lands from noxious weeds and it continues to grow by leaps and bounds. For more information on the program, including a [brochure](#) and forms, visit the [NAWMA website](#), or contact [Adrienne Peterson](#), (307) 367-4728.



## Featured Publication: *Encyclopedia of Biological Invasions*

This pioneering encyclopedia, edited by Marcel Rejmánek and Daniel Simberloff, illuminates a topic at the forefront of global ecology: biological invasions, or organisms that come to live in the wrong place. Written by leading scientists from around the world, the *Encyclopedia of Biological Invasions* addresses all aspects of this subject at a global level – including invasions by animals, plants, fungi, and bacteria – in succinct, alphabetically arranged articles. Scientifically uncompromising, yet clearly written and free of jargon, the volume encompasses fields of study including biology, demography, geography, ecology, evolution, sociology, and natural history. Featuring many cross-references, suggestions for further reading, illustrations, an appendix of the world's worst 100 invasive species, a glossary, and more, the *Encyclopedia of Biological Invasions* is an essential reference for anyone who needs up-to-date information on this important topic.

To order a copy, visit the [University of California Press online bookstore](#) or view a preview from [Google Books](#).

## New in the CIPM Online Store

In the past month, more than 10 new publications and outreach products have been added to the [CIPM Online Store](#) for purchase or download.



**Biology, Ecology and Management Guides** Four new publications from Montana State University Extension describe the biology, ecology, and management of Scotch broom (*Cytisus scoparius*), flowering rush (*Butomus umbellatus*), the knotweed complex (*Polygonum* spp.), and yellow starthistle (*Centaurea solstitialis*).

**Montana Invasive and Native Plant Poster Series** Produced by the Missoula County Weed District, the series includes three posters: Montana Native Plants, Montana Noxious Weeds and Biocontrols, and Montana Invasive Plants. All three posters feature beautiful color illustrations by certified botanical artist Nancy Seiler.



**Common Native and Invasive Wetland Plants in Montana** This intended purpose of this booklet is to help the non-botanist identify potential wetland areas based on the plants present. In addition to its primary purpose, we also recommend this booklet as a great resource for native and invasive wetland plant identification and description. The booklet is informative and easy to follow, provides helpful photos and illustrations, and does an excellent job of describing the distinctive characteristics of wetland native and non-native forbs, graminoids, and shrubs/trees in common terms.

**Protecting Wildlife Habitat: Sportsman's Guide to Noxious Weeds** Produced by the Wyoming Weed and Pest Council's Education Committee in conjunction with the Missouri River Watershed Coalition and CIPM, this booklet was created to inform sportsmen and women of all ages of the threat posed by invasive plants and includes tips on how to prevent the spread of weeds as well as a plant identification guide.



Photo: John M. Randall, The Nature Conservancy, Bugwood.org

## Scientists Study Control of Invasive Tree in Western US

Article courtesy of Science Daily

Simply by eating the leaves of an invasive tree that soaks up river water, an Asian beetle may help to slow down water loss in the southwestern United States.

Two scientists from University of California at Santa Barbara (UCSB), working with colleagues from the US Geological Survey and the US Department of Agriculture, have published the first substantive data showing water savings that can result from using Asian beetles for the biological control of tamarisk, an invasive tree of western rivers. The study is now published online and in print in the journal *Oecologia*.

"Widespread growth of this tree is a critical issue in arid regions facing greater social water demands," said Carla D'Antonio, Schuyler Professor of Environmental Studies at UCSB. "It happens at a time when water supplies may be reduced as a consequence of climate change. Additionally, society is increasingly concerned about wildlife species that depend on these wetland ecosystems."

Tamarisk, also known as saltcedar, is an invasive tree or shrub from Eurasia that occupies over one million acres of river-side habitat in western North America. It displaces native riparian woodlands, reduces habitat quality for wildlife, exacerbates erosion and sedimentation problems, and is flammable, therefore a wildfire hazard. The tree was introduced into North America over 100 years ago, and has overtaken many western river systems.

The study was conducted in the Great Basin of Nevada as part of a USDA Agricultural Research Service program to develop new methods for invasive plant management. During the first year of large-scale tamarisk defoliation by the tamarisk leaf beetle (*Diorhabda cari-*

*nulata*), approximately 2,500 acre-feet of water remained in the ground rather than being lost to the atmosphere. This was in the Humboldt River Basin of northern Nevada in an area of approximately 4,500 acres where tamarisk vegetation dominates.

"This is roughly the same amount of water that would be used to irrigate 1,000 agricultural acres in a year," said Tom Dudley, associate research biologist at UCSB, who cited Pacific Institute figures. "At a value of \$185 per acre-foot, or almost a half million dollars, this amount of water could provide for the annual water needs of 5,000 to 10,000 households. It suggests that the biocontrol of weedy tamarisk across the western US could play an important role in conserving limited water resources."

The researchers pointed out that in warmer desert regions of the US southwest, where water demand by vegetation and by humans is higher, water savings via tamarisk control could be even more important. In some regions the plants that come back following tamarisk control, particularly wetland plants like cottonwoods and willows, also tend to use a large amount of water but they do not get as dense nor cover as much area of the river corridor as tamarisk. So water savings will still accrue, as will benefits to wildlife that depend on these native riparian plants for habitat.

First author Robert Pattison, now an analyst with the US Forest Service Pacific Northwest Research Station, worked from March through December for two years at field sites along the Humboldt and Walker rivers in western Nevada. Both sites have dense infestations of tamarisk and daily high temperatures of about 100 degrees in mid-summer.

Pattison gave a glimpse of the field-work involved in the project. "In addition to the heat and dust, we contended with

## New Monthly Weed Posts

Montana State University Extension and the Montana Statewide Noxious Weed Awareness and Education Campaign and have joined forces to create and distribute monthly "weed posts." The weed posts were designed to present basic, concise, fundamental information and additional resources, and are distributed electronically at the beginning of every month.

Each post features a noxious weed, interesting research finding, or other timely issue related to weed management as well as crossword puzzles (or other educational activity) to test your knowledge.

Weed posts from January (Eurasian watermilfoil), February (knotweed complex), and March 2011 (blueweed), answers to the crossword puzzles, and future posts are available on the [MSU Extension Invasive Rangeland Weed website](#).



(Top left) Eurasian watermilfoil, Alison Fox, University of Florida; (Bottom left) Japanese knotweed, Jan Samanek, State Phytosanitary Administration; (Right) Blueweed, Robert Videki, Doronicum Kft. All photos courtesy of Bugwood.org.

occasional rattlesnakes. And there were cows and rabbits that developed a taste for the cables on our equipment," said Pattison. "Aside from these challenges, the work was very rewarding – in part because of interactions with ranchers and other land owners who granted us access to their lands. And it was rewarding because of the dramatic effect the tamarisk leaf beetle had on tamarisk trees. Entire stands were defoliated within a few years of release."

Published by [Science Daily](#) on March 2, 2011 from materials provided by University of California at Santa Barbara.

# Announcement: Natural Areas Herbicide Working Group

By John Vickery

Natural Areas Specialist, Denver Natural Areas Program

## Introduction

An effort is underway to establish a working group for the registration of herbicides for natural areas, with the goal of improving the collective ability to control noxious weeds and invasive plants. The Working Group is needed because relatively few herbicide products and active ingredients are available for use in natural areas and similar settings. (While a few product labels specify 'natural areas', most of the products employed in weed management in natural areas are those labeled for use in rangeland and non-crop areas.) With the participation and cooperation of the [IR-4 Project](#), registrants, federal departments and agencies, land grant universities, and other interested parties, it is hoped that we can secure

additional rangeland and non-crop area uses. The IR-4 Project is a USDA-funded entity with over 40 years of experience facilitating pesticide use registrations in specialty crops and ornamentals.

Expected benefits of such new uses include one or more of the following:

- Improved control of targeted invasive plants or priority noxious weed species;
- Reduced environmental impacts (compared to current options);
- Modes or sites of action new to rangeland and natural and non-crop areas, including vegetated rights-of-way and related settings.

Other benefits or characteristics of interest that may be pursued include:

- Label language that allows application up to the water's edge or near water;

- Grazing tolerances/shorter grazing intervals;
- Shorter preplant intervals (for example, revegetation, restoration, infilling, and over-seeding contexts).

## Objectives

The objectives of the Working Group will be determined by its members, but are likely to include:

- Serving as an action center whereby participants can facilitate registration of chemical products for terrestrial uses;
- Serving as a forum for soliciting input from stakeholders and for screening product suggestions and establishing priorities;
- Securing the funding necessary to obtain clearances through the US Environmental Protection Agency.

*Article continues on page 6*

# Montana Weed Control Association 2010 Award Winners



From left to right: Barb Mullin Lifetime Achievement Award winner Jim Freeman; Upper Dearborn CWMA members, Weed Fighters United Award winners; and John Armstrong of the Madison County Weed Board. Photos courtesy of Dale Butori.

The Montana Weed Control Association (MWCA) presented awards in seven categories at a banquet ceremony at its annual meeting on January 12, 2011 in Great Falls, Montana. Founded over 50 years ago, the MWCA promotes and supports noxious weed management efforts within the state, focusing on networking, education, and research. Members include professional weed managers, weed control businesses, ranchers and farmers, educators, researchers, students, outdoor recreationists, government officials at the city, county, state, and federal levels, and private landowners.

The annual awards ceremony acknowledges individuals and groups who have made positive contributions to weed management that year. Nominations are submitted each winter by MWCA members and winners are chosen by the MWCA Awards Committee.

This year's award winners included:

**Weed Fighter of the Year (Non-professional)** A proven leader who cooperates or partners with landowners, government agencies, or the public to institute an aggressive attack on weeds using unique and innovative approaches.

*Matt Wilhelm, Center for Aquatic Nuisance Species*

**Agency Weed Fighter of the Year** A proven leader who cooperates or partners with landowners, government agencies, or the public to institute an aggressive attack on weeds using unique and innovative approaches. Nominees must work for a local, state, or federal agency.

*Patricia Gilbert, US Army Corps of Engineers*

**Weed Fighters United** Two or more individuals working together who cooperate or partner with landowners, government agencies, or the public to institute an aggressive attack on weeds using unique and innovative approaches.

*Upper Dearborn Cooperative Weed Management Area*

**Outstanding Weed District** A district that has increased public awareness of weed problems, involved county government and the general public in weed control efforts, used integrated and innovative approaches to overwhelming problems, provided cost-effective means of control within the program, and shown improvement through on-the-ground treatment at a significant level within the county. A weed district may win this award only once in a five-year period.

*Madison County Weed Board*

*Article continues on page 7*

## New CIPM Staff

### **Scott Bockness**

#### **Project Leader, Missouri River Watershed Coalition – Conservation Innovation Grant**

In August 2010, CIPM and the Missouri River Watershed Coalition (MRWC) received a \$1 million grant from the Natural Resource Conservation Service (NRCS) Conservation Innovation Grant (CIG) program to fund a three-year project that will provide knowledge and benefits to producers and land managers throughout the Missouri River Watershed and will serve as a pilot project for the western region and potentially the nation.

Scott joined the CIPM staff as MRWC–CIG Project Leader in December 2010. Prior to this position, he was Superintendent of the Yellowstone/Big Horn County Weed District. In previous years, Scott was involved with multiple saltcedar management projects along the Yellowstone River and became painfully aware of

the ecological impacts of Russian olive and saltcedar on Montana's riparian areas. As a member of the MRWC Executive Committee, Scott became committed to pursuing funding opportunities, such as the NRCS–CIG program, to address these issues. In his new position as MRWC–CIG Project Leader, Scott will work with the Coalition to investigate methods to effectively mitigate impacts of the target invasive plants and explore their potential as bioenergy products. Furthermore, Scott is passionate about developing solutions to regional issues, an interest that fits perfectly within the missions of both CIPM and MRWC. [Read more](#) about the MRWC–CIG Project.



### **Emily Rindos**

#### **Outreach and Science Communication Associate, CIPM**

Emily began working for CIPM in a temporary capacity in July 2009 as Projects and Events Coordinator. In the time since, she has become an important part of CIPM's team and, in January 2011, she began a permanent position as Outreach and Science Communication Associate.

When she first started working with CIPM, Emily had no prior experience in the natural resource management or invasive species fields and was a recently graduated history major; however, she quickly developed a keen interest in the subject matter. Over the past two years,

Emily has collaborated with CIPM and its partners on numerous projects. A few highlights include: coordinating the Weeds Across Borders 2010 conference; designing and launching a new CIPM publication, the *CIPM Quarterly*; and working with the Missouri River Watershed Coalition. Emily finds that the need for effective outreach and science communication mechanisms is great – and knowing that she can help fill these needs makes her job extremely rewarding.



## About *CIPM Quarterly*

The *CIPM Quarterly* is published by CIPM (Montana State University) and distributed electronically to subscribers and partners who have an active interest in invasive species management, research, education, and issues in the western United States.

We ask our readers to please continue sharing management experiences and insights, research findings, project outcomes, publications, and other important invasive plant information with us. By doing so, communication tools such as this one will be relevant and worthwhile.

#### **Articles, comments, and suggestions are welcome and should be sent to:**

Emily Rindos, Editor, *CIPM Quarterly*  
[emily.rindos@montana.edu](mailto:emily.rindos@montana.edu)

#### **Center for Invasive Plant Management**

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Emily's duties as Outreach and Science Communication Associate include: technical writing, editing, and producing reports, website content, and other publications; conference and workshop coordination and facilitation; serving as editor of the *CIPM Quarterly* newsletter; collaborating with CIPM staff on grant and other funding applications; and designing and developing outreach and education materials.

A Montana resident for over 15 years, Emily enjoys traveling, cooking, skiing, and hiking in her spare time.

## Cont'd: Natural Areas Herbicide Working Group

### **Participants sought**

We invite members of the CIPM community to consider participating in the Working Group. Those who are able to contribute time and expertise or other resources to the effort are encouraged to contact us about becoming involved. The Working Group also welcomes individuals who can only serve in a limited or advisory capacity, as well as those who just want to be kept informed of the group's activities. Most any level of involvement or commitment is welcome.

One way for CIPM members to get involved is by contributing examples of weed control scenarios in which currently available products are less than satisfactory. In the future, we may have a preferred format or standardized form; but at this point, we welcome brief, informal submissions via email. For those who are familiar with products used in other markets (for example, turf or agriculture), we are also seeking examples of potential solutions or improvements offered by particular products or active ingre-

dients that are not currently labeled for use in rangeland or vegetated non-crop areas (for example, rights-of-way, natural areas, wildlands, wildlife areas, and other related settings). It is these examples that the Working Group will review and use as a starting point for prioritizing its efforts.

For more information, please contact [John Vickery](#). Prospective members or advisors are asked to provide a brief background or explanation of their interests, expertise, and potential contributions to the Working Group.

## CIPM Needs Your Support

Do you consider CIPM to be a clearinghouse for invasive species information? Have you tapped many of the services and products provided by the Center over the past 10 years? If you are like many of our local and regional cooperators and partners, you would answer “yes” to those questions.

Funding to support basic CIPM services to local and regional stakeholders is becoming increasingly difficult to obtain, and we could use your help. Please consider making a tax-deductible donation to the Center today. Donations will be put to *immediate* and *good use* and will allow us to continue to provide the following important services to individuals and groups just like you:

- CIPM Quarterly newsletter
- CIPM website/information clearinghouse
- Hosting partner websites and listservs
- CIPM Online Store – showcasing free or inexpensive publications, and outreach and education products
- Online courses, trainings, and web seminars
- Outreach and awareness to schools and youth groups
- Technical assistance to the concerned public, CWMAs, and other community-based groups
- Support for local, state, regional, national, and international invasive species associations, networks, and coalitions.

To make a donation or to read more about how to contribute to CIPM, [click here](#).

## Xyleborini Ambrosia Beetles: Identification Tool to the World Genera



A xyleborine beetle from a tropical rainforest.  
Photo: J. Hulcr and S. Smith  
([itp.lucidcentral.org/id/wbb/xyleborini/index.htm](http://itp.lucidcentral.org/id/wbb/xyleborini/index.htm)).

### A new Lucid® identification tool by Jiri Hulcr and Sarah M. Smith

The Center for Plant Health Science and Technology (CPHST) is pleased to announce the release of its latest identification tool, *Xyleborini Ambrosia Beetles: An Identification Tool to the World Genera*. Designed by a leading taxonomic expert on xyleborines, this is the first multi-media internet-based identification tool using the most recent world taxonomic classification of the tribe. *Xyleborini Ambrosia Beetles*, part of the upcoming *A Resource for Wood Boring Beetles of the World*, was created through collaboration among USDA-APHIS-PPQ, CPHST, Michigan State University, North Carolina State University, University of California, and University of Wisconsin. Xyleborini (Coleoptera, Curculionidae, Scolytinae) is the most important and species-rich tribe of ambrosia beetles. The tribe includes more invasive pests than all other ambrosia beetle groups combined and is one of the most frequently intercepted organisms at ports-of-entry.

For more information, visit the [Xyleborini Ambrosia Beetles website](#) or read the [announcement and overview](#).

## Cont'd: Montana Weed Control Association Awards

**Weed Stopper of the Year** An individual or weed district who has identified an initial infestation of one of Montana's Priority 1A or 1B species previously undetected in the area where it was found. Eligibility for this award requires printed verification of the species from the Montana State University Herbarium.

*Ken Bechen, American Enterprises; Ben Johnson and Steve Lowell, Gallatin MDT*

**Outstanding Weed Board Member of the Year** An MWCA member who has displayed commitment and dedication to the cause of fighting weeds and making a difference in their county, takes an active role in county weed management programs,

and actively participates in county, agency, and private weed management programs.

*Phil Donnaly, Mineral County*

**Barb Mullin Lifetime Achievement Award (2010)** An individual who has been active in the MWCA for 10 years or more, demonstrates leadership abilities, and successfully deals with agencies and the public in noxious weed efforts.

*Jim Freeman, Montana State University*

For more information and to view a list of previous winners, visit the Montana Weed Control Association [website](#).



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