



# Newsletter



## PRESIDENT'S MESSAGE

Getting our message out. That'll be the underlying story of my article this quarter. There are so many efforts going on right now through WSSA to accomplish this monumental task, and I've never seen a time when more positives are coming forward because of these efforts.

In October I had the opportunity to present a seminar to EPA on glyphosate resistance, discussing the challenges that we have and the research and educational efforts that are taking place. This is a hot topic for EPA, as evidenced by a standing-room-only crowd that attended my seminar. The Public Relations Committee did a press release from the seminar, which read in part:

In a recent presentation to the U.S. Environmental Protection Agency, officials from the Weed Science Society of America (WSSA) reported that nine weed species in the United States now have confirmed resistance to glyphosate. Among these weeds are strains to common ragweed (*Ambrosia artemisiifolia*), common waterhemp (*Amaranthus rudis*), giant ragweed (*Ambrosia trifida*), hairy fleabane (*Conyza bonariensis*), horseweed (*Conyza canadensis*), Italian ryegrass (*Lolium multiflorum*), johnsongrass (*Sorghum halepense*), Pamer amaranth (*Amaranthus palmeri*) and rigid ryegrass (*Lolium rigidum*).

"Unfortunately it is too late to prevent glyphosate resistance from developing," says David Shaw, WSSA president. "It's a problem that is already with us. The challenge now is to adopt effective management techniques that can keep resistance from spreading."

The consequences of resistance are particularly troublesome for farmers who grow soybean, corn, cotton and sugar beet crops genetically engineered to tolerate glyphosate. Many of these farmers rely almost exclusively on glyphosate for weed control throughout the growing season. Using a single herbicide, though, increases the odds that the weed population will shift to resistant plants that are able to escape treatment and compete with crops for moisture and nutrients.

CONTINUED on pg 2 >>>

FINALIZED MEETING  
PLANS INSIDE!

## IN THIS ISSUE

Condensed Meeting Schedule ... 5	Special Events ..... 8	Important Addresses ..... 15
WSSA Workshops/Symposia ... 6	Symposium Announcement ... 11	Calendar of Events ..... 16

## PRESIDENT'S MESSAGE CONTINUED from pg 1

University scientists recommend a number of techniques for preventing or managing resistance. One of the most common recommendations is to rotate the types of herbicides used for weed control – making it tougher for weeds to adapt. Shaw says that initially many farmers were slow to recognize the seriousness of glyphosate resistance and to adopt this best management practice. However, educational programs in the last few years have greatly increased grower awareness and management efforts.

“One issue may have been the mistaken perception that adopting resistance management practices will cost more, since glyphosate tends to be very affordable,” Shaw says. “But studies show just the opposite is true.”

In a four-year research project now underway in six key agricultural states (Illinois, Indiana, Iowa, Mississippi, Nebraska and North Carolina), researchers are comparing the economics of university-recommended, herbicide resistance management programs with the use of glyphosate as an exclusive treatment for weed control. As of the end of the third year of the study, researchers say the net returns on fields managed according to recommended best practices are equal to or greater than the returns on those where glyphosate is used alone. Increased yields appear to offset any increase in herbicide costs.

“When glyphosate was first introduced for weed control, its unique way of inhibiting protein synthesis and growth in plants led many to believe that resistance would not be an issue,” Shaw says. “Obviously that prediction was wrong. However, best management practices can slow the development of resistant weeds, and one effective approach is to rotate glyphosate with herbicides that work very differently.”

The audience stayed after the presentation for over an hour and a half for questions and discussion. Since then Jill and I have had further dialog with EPA about how we can work together to promote and implement herbicide resistance management practices. This is also opening the opportunity for further dialog on other topics of interest to our profession, including drift management and non-point discharge.

Speaking of the Public Relations Committee, they continue to do an outstanding job in promoting our society as the go-to source for science-based information on weed and invasive plant management. Their latest press release is on IR-4 and the essential role that it plays in making effective weed management tools available to agriculture. Other releases are in the works. If you have suggestions for topics, please feel free to contact any of the committee members with your ideas.

For years now we have been talking about NIWAW – the National Invasive Weeds Awareness Week. After the 10th meeting this past year, a committee was organized to do a top-to-bottom assessment of NIWAW and determine its course for the future. After tremendous discussion and consideration, the decision was made to shift and include other taxa, resulting in the 2010 meeting becoming the National Invasive Species Awareness Week. Other relevant societies and organizations were included in the planning of this event, with WSSA still playing a leadership role. Janet Clark and Lee Van Wyche in particular has done yeoman's duty in pulling this event together, and the excitement is high as it draws near. If you haven't made plans, come to Washington, DC the week of January 11 to participate in this important event. Registration info and the schedule are posted on the WSSA website.

The Joint Conference with the Society for Range Management has all the

CONTINUED on pg 3 ➤➤

## WSSA FUTURE MEETING SITES AND DATES

**2010**

**Sheraton Denver Hotel  
Denver, CO**

**February 7–11, 2010**

**Joint Meeting between WSSA and  
Society for Range Management  
Theme: Working Landscapes**

**Joint Chairs:**

**WSSA: John Jachetta, Rod Lym,  
and Rita Beard**

**SRM: Dennis Child, John Mitchell**

**For more information:**

**[www.wssa.net](http://www.wssa.net)**

**[www.rangelands.org/denver2010/](http://www.rangelands.org/denver2010/)**

**WSSA HOME PAGE  
ACCESSED AT:**

**[www.wssa.net](http://www.wssa.net)**

**THINK NEWSLETTER**

**Deadline for April issue  
March 1, 2010**

## WSSA NEWSLETTER

VOL. 38, NO. 1

JANUARY, 2010

Published quarterly by the Weed Science Society of America. Subscription included in the annual dues paid by members of the Society. Address correspondence and information to:

**Dr. Clifford Koger (Trey), Editor  
WSSA NEWSLETTER  
Delta Research and Extension Center  
Mississippi State University  
P. O. Box 197  
Stoneville, MS 38776  
[tkoger@drec.msstate.edu](mailto:tkoger@drec.msstate.edu)  
(662) 686-9311 Office  
(662) 686-7336 Fax**

## PRESIDENT'S MESSAGE CONTINUED from pg 2

pieces falling into place, under the able leadership of John Jachetta. This will be by far the most "different" conference WSSA will have ever held, since the two organizations have very different meeting formats and cultures. However, this bodes as one of the best conferences we've ever held, with outstanding sessions, a new poster format, a huge trade show, and more fun events than we've ever had. This should be considered a can't-miss event for every WSSA member. We will be spread out more than ever, given the size of the conference, so carefully look at the program and the floor plan so that you can maximize the information you derive from the conference.

The Graduate Student Organization is hosting a workshop on Sunday

evening that is focused on understanding individual strengths and weaknesses, thus enabling a person to better understand how to be more effective in their work and personal life. A part of this will be Meyers-Briggs testing and results. Thanks to Monsanto for sponsoring this event.

There are a number of outstanding symposia that will be held at the conference this year. These alone are well worth attending the conference. We will hold a joint symposium with SRM on invasive species management, and WSSA will host symposia on technology and communications, herbicide resistance, herbicide residue detection, site-specific weed management, spray drift, dicamba-resistant soybean, and weed management in organic agriculture. John's biggest

problem has been how to fit so many great ideas into such a limited amount of time!

This is my last newsletter article before I turn the gavel over to John Jachetta. My term as President has been one of the absolute high points of my professional career, and I have come to a much deeper and greater appreciation for the hard work and commitment that so many make. Our society, though relatively small, is full of simply outstanding individuals, and I have been honored to serve as President. I look forward to seeing everyone in Denver next month!

David Shaw, President  
662/325-9575  
dshaw@gri.msstate.edu

### SEND NEWSLETTER MATERIAL TO:

Dr. Clifford Koger (Trey)  
Editor, WSSA Newsletter  
Delta Research  
and Extension Center  
Mississippi State University  
P. O. Box 197  
Stoneville, MS 38776  
tkoger@drec.msstate.edu  
(662) 686-9311 Office  
(662) 686-7336 Fax

**THINK NEWSLETTER**  
Deadline for April issue  
March 1, 2010

### WSSA Contacts at Allen Press, Inc.

For All Contacts:

Phone: (800) 627-1326, (785) 843-1234 • Fax: (785) 843-1274

Joyce Lancaster, Executive Secretary

Ext. 250; E-mail: jlancaster@allenpress.com

Regarding: Society reimbursements, committee activities, membership reports, list rental requests

Jason Gilbert, Association Manager

E-mail: jgilbert@allenpress.com

Regarding: Membership payments, orders, address changes, claims, author billing

Kate Counter, Meeting Manager

Ext. 225; E-mail: kcounter@allenpress.com

Regarding: WSSA annual meeting

Tracy Candelaria, Managing Editor

E-mail: tcandelaria@allenpress.com

Regarding: Reviewer questions

# **Registration is still open for the 2010 Joint Annual Meeting of the Weed Science Society of America and the Society for Range Management in Denver, Colorado!**

**February 7–11, 2010**

**John Jachetta, Roy Roath, Dale Shaner and Lana Pearson  
SRM/WSSA 2010 General Meeting Co-Chairs**

The Joint Annual Meeting for the Weed Science Society of America and the Society for Range Management is nearly here! The meeting program has developed remarkably well with more than 860 submitted papers, posters and symposium presentations submitted; it's turning out to a very rich meeting in every single session. We have 23 oral paper Sections (the first 13 are the traditional WSSA Sections) as well as nine WSSA and 18 SRM symposia scheduled plus a full-day joint WSSA-SRM symposium along with a robust Trade Show with space for over 70 exhibits. A link to register for this meeting can be found at our website, [WSSA.net](http://WSSA.net).

Many folks from both organizations have volunteered substantial time to make this meeting a rewarding experience for all. Both Societies have long been involved in creating the scientific basis for the protection, conservation and management of the Nation's productive lands. With this joint meeting, the stage has been set to promote discussions that move us all beyond our traditional disciplinary boundaries as we present and listen to new ideas. From the Plenary Session through the broad mix of technical programs, symposia, and social activities, we have strived to create an atmosphere of working together while retaining the character and interests of each society.

Please take advantage of the many opportunities to advance your knowledge in technical areas, become acquainted with a broad spectrum of professionals, renew old friendships and enjoy the Mile High city of Denver, Colorado. We also hope that you will use this occasion to form new friendships, expand your network and provide the basis for new and productive partnerships. We even have a dance on Tuesday night!

## **WSSA Symposia:**

1. WSSA Workshop: Technology & Communication Skills for the 21st Century Marketplace (limited registration)
2. Impact of Herbicide-Resistant Weeds on the Agroecosystem
3. Advances in Regulations and Methods for Measuring Herbicide Soil Residues
4. Where Did All the Weeds Go? A Global Perspective on Site-Specific Weed Management

5. Drift Minimization Technology
6. Advances in Automation and Machine Guided Technologies for Precision Weed Control
7. Biology of Weedy and Invasive Species in Agroecosystems Competitive Grant Program: Case Studies
8. Weed Management in Organic Agriculture: Current Needs & Future Prospects
9. Dicamba Resistant Soybean: How Will it Fit?

## **Joint SRM/WSSA Invasive Plant Species Symposium**

- Plant Invasions: Global Progress in the 21st Century; This Tuesday, February 9th, Symposium will be followed by an open reception before the dance.

## **SRM Symposia:**

1. Conservation Management on Private Rangelands
2. Pastoralists and Property Rights
3. Targeted Grazing – Applying the Research to the Land
4. Applying State and Transition Models Across Diverse Ecosystems
5. Wind Energy and Wildlife
6. Community-based Conservation on Rangeland
7. Rangeland Restoration in Presence of Persistent Invasive Plants
8. Management of Lekking Bird Habitat
9. Sustainable Rangelands through Low-Input Grassfed Production
10. Biodiversity and Plant Material Development
11. Sustainable Rangelands: Planning, Monitoring, & Management for Economic, Ecological & Social Benefits
12. Energy Production – Infrastructure and Development
13. Larkspur – 100 Years of Research, Perspectives and Future Directions
14. Producers Landscape Management
15. Maintaining and Managing Working Landscapes of the West – A Range of Perspectives
16. Politics, Science and Management of Carbon Sequestration on Rangelands
17. Reclaiming formerly Irrigated Farmland
18. Climate Change and Potential Natural Vegetation

# Condensed Joint Meeting Schedule

## 50th Annual WSSA Meeting

## 63rd Annual SRM Meeting

### February 7–11, 2010

#### Friday, February 5

Breckenridge Ski Package

#### Saturday, February 6

WSSA Board of Directors  
Breckenridge Ski Package

#### Sunday, February 7

WSSA Board of Directors  
WSSA Committee Meetings  
Professional WSSA Graduate Students Workshop  
Lasater Ranch Tour

#### Monday, February 8

Committee Meetings  
Plenary Session  
Trade Show  
Joint SRM/WSSA Poster Session following the  
Plenary Session  
Oral Paper Sessions  
*WSSA Workshop*: Technology and Communication  
Skills for the 21st Century Marketplace  
*WSSA Symposium*: Impact of Herbicide-Resistant  
Weeds on the Agroecosystem  
*SRM Symposia*: Conservation Management on  
Private Rangelands  
*SRM Symposia*: Pastoralists and Property Rights  
*SRM Symposia*: Energy Production – Infrastructure  
and Development  
WSSA Awards Presentation  
Brown Palace Hotel Tour and Tea  
Joint SRM/WSSA Trade Show Mixer

#### Tuesday, February 9

WSSA Committee Meetings  
Trade Show  
Oral Paper Sessions  
WSSA Graduate Students Luncheon and  
Business Meeting  
*WSSA Symposium*: Advances in Regulations and  
Methods for Measuring Herbicide Soil Residues  
*WSSA Symposium*: Where Did All the Weeds Go?  
A Global Perspective on Site-Specific Weed  
Management  
*Joint SRM/WSSA Symposium*: Plant Invasions: Global  
Progress in the 21st Century

*SRM Symposia*: Applying State and Transition Models  
Across Diverse Ecosystems  
*SRM Symposia*: Wind Energy and Wildlife  
*SRM Symposia*: Targeted Grazing – Applying the  
Research to the Land  
*SRM Symposia*: Community-based Conservation on  
Rangeland  
Molly Brown House Museum Tour  
United States Mint at Denver Tour  
Joint SRM/WSSA Invasive Plant and Weed Mixer  
Joint SRM/WSSA Evening Poster Session  
Dance

#### Wednesday, February 10

WSSA President's Breakfast with Regional Presidents  
Trade Show  
WSSA Committee Meetings  
Joint SRM/WSSA Poster Session  
Oral Paper Sessions  
*WSSA Symposium*: Drift Minimization Technology  
*WSSA Symposium*: Advances in Automation and  
Machine Guided Technologies for Precision  
Weed Control  
*WSSA Symposium*: Biology of Weedy and Invasive  
Species in Agroecosystems Competitive Grant  
Program: Case Studies  
*SRM Symposia*: Climate Change and Potential  
Natural Vegetation  
*SRM Symposia*: Management of Lekking Bird Habitat  
*SRM Symposia*: Biodiversity and Plant Material  
Development  
WSSA Business Meeting and Reception  
Colorado State Capitol Tour  
Denver Art Museum Tour  
Rocky Flats/Boulder Tour

#### Thursday, February 11

WSSA President's Breakfast with Committee Chairs  
Oral Paper Sessions  
*WSSA Symposium*: Weed Management in Organic  
Agriculture: Current Needs and Future Prospects  
*WSSA Symposium*: Dicamba Resistant Soybean: How  
Will It Fit?  
*SRM Symposia*: Sustainable Rangelands through  
Low-Input Grassfed Production

CONTINUED on pg 6 >>>

## CONDENSED JOINT MEETING SCHEDULE CONTINUED from pg 5

*SRM Symposia:* Larkspur – 100 Years of Research,  
Perspectives and Future Directions

*SRM Symposia:* Open Spaces

### Friday, February 12

Joint WSSA/SRM Board of Directors Recap  
and Breakfast

WSSA Board of Directors

SRM Carbon Sequestration Workshop

Rocky Mountain National Park Tour

### Saturday, February 13

Breckenridge Ski Package

### Sunday, February 14

Breckenridge Ski Package

---

## WSSA WORKSHOPS

**Technology and Communication Skills for the 21st Century Marketplace.** Organizers: Chad Brommer, Emory University; Jason Weirich, Mississippi State University; Dave Horvath, USDA ARS, Fargo, ND; Dawn Refsell, Valent U.S.A. Corp.; and the WSSA Professional Development Committee; sponsored by Dow AgroSciences LLC.

Open to all meeting registrants; limited to 30 participants. No fee for participation.

Where does technology fit into the marketplace of learning and outreach?

Sections of this workshop include: The power and pitfalls of social networking. Subtitle: How not to get fired using social networking tools; presentation and demonstration of Facebook's online software. Twitter is not a bird; it is your

key to relevance; introduction and demonstration of the technology of Twittering. Included is a discussion of the integration of Twitter for monitoring your students (old and new), colleagues, shareholders, and family-friends into your day, without absorbing all of your time. Blogs are not just for pundits (Subtitle: Tying the web together as a gatekeeper). Blogs have been hijacked by the shrill and semi-informed; this session will show you how to use your blog to reach your professional goals and master the skills of an information gatekeeper. Blogs as the tie that can bind together the previous techniques and software presented in this workshop. Required items: Mac or PC laptop/personal computer (any operating system). Optional items: cell phone, camera, PDA, audio recorder, or iPod-MP3 player.

---

## WSSA SYMPOSIA

### 1. Symposium Title: Impact of Herbicide-Resistant Weeds on the Agroecosystem.

**Organizer: William K. Vencill, University of Georgia.**

Increasing reports of herbicide-resistant weeds, weed shifts caused by herbicides, and controversies surrounding the introduction of herbicide-resistant crops have revealed a lack of understanding on these topics by scientists, regulatory officials, and the public. The objective of this symposium will be to present the state of knowledge on the development, management, and impact of herbicide-resistant weeds and weed shifts in conventional and herbicide-resistant crops. Emphasis will be on the impact of herbicide-resistant weeds in the agroecosystem.

### 2. Title: Advances in Regulations and Methods for Measuring Herbicide Soil Residues.

**Organizers: Dale Shaner, USDA Agriculture Research Service, Ft. Collins, CO and Jason Krutz, USDA Agriculture Research Service, Stoneville, MS.**

There have been many changes in recent years in the regulation of herbicide residue analysis for herbicide registration and re-registration as well as in methods to detect and quantify herbicide soil residues. New regulations in NAFTA, South America and Europe will have a major impact on maintaining the availability of present herbicides as well as the registration of new herbicides. There have also been many advances in methods for extracting and measuring herbicide residue from soil. Modeling herbicide behavior in the soil is an increasingly more important method for predicting how herbicides move in the soil and how they can contaminate water supplies, however the output of these models is dependent on the input and the phenomenon of enhanced herbicide degradation can have a major impact on the predictions of these models. This symposium was developed for the WSSA and SRM researchers who are concerned with soil-herbicide interactions as well as the regulations for re-registering present herbicides and the registration of new herbicides.

CONTINUED on pg 7 >>>

**3. Title: Where did all the weeds go? A global perspective on site-specific weed management.**  
**Organizers: Trey Koger and David Shaw, Mississippi State University.**

A multitude of weed scientists have developed research and extension projects in the area of site-specific weed management over the past decade, with projects ranging from improving our understanding of the spatial distribution and patterns of weed populations, properties of weed population sites in landscapes, rangelands, and agricultural fields. Advances in site-specific weed management technologies has been synergistic with the proliferation of other site-selection technologies such as global positioning systems (GPS), geographic information systems (GIS), and remote sensing based sensors, and on-the-go patch sprayers. The state of current site-specific weed management technologies is to determine if practical, economical, and effective site-specific weed management programs can be developed and implemented on a global level. This symposium addresses current site-specific weed management technologies at the national and global scale.

**4. Title: Spray Drift Minimization Technology Symposium.**

**Organizer: Robert Klein, University of Nebraska.**

Spray drift is considered to be the most important issue by many State Departments of Agriculture. Spray drift is a lose-lose situation; drift may cause damage to areas around the treated area as well as reduces the amount of the product applied. Additionally, new regulations for water, endangered species, and other items have contributed to larger buffer area to mitigate the effects of spray drift. Recent developments in application technology including spray nozzle tips, greater ability in the maintenance of desired pressure, boom height control, pesticide formulation, additives, and the ability to put all or a number of these parameters together can minimize the amount of spray drift. This symposium addresses advances in formulation development and application technology to minimize spray drift.

**5. Title: Biology of Weedy and Invasive Species in Agroecosystems Competitive Grant Program: Case Studies. Organizer: Michael A. Bowers, National Institute of Food and Agriculture (NIFA), USDA.**

Since its inception in 1990, the Biology of Weedy and Invasive Species in Agroecosystems National Research Initiative (NRI) Program (in its present and previous incarnations) has supported more than \$50 million in research, education and extension activities focused on weedy and invasive species in croplands, pastures, rangelands, and forests. A hallmark of the program is its emphasis on using basic biology/ecology in the detection, control and management of weedy and invasive species. This session will feature some of the more recent projects in this lineage offered as exemplars and chosen to illustrate the genes to ecosystems approaches that have moved the science forward.

**6. Title: Advancements in automation and machine guided technologies for precision weed control.**  
**Organizers: Steve Young, Washington State University; Rick Boydston, USDA-ARS; Ed Peachey, Oregon State University.**

U.S. producers dedicated over 4 million acres of farmland to organic production systems in 2005. The increase in the number of acres of crops being grown organically has brought with it a growing need for more labor and non-chemical inputs for weed control. Currently, weed control is ranked as the number one production cost by organic and many conventional growers. Site-specific weed control in organic crop production would benefit greatly from robotic weed control systems. Machine vision and RTK GPS guidance systems are the latest technologies being researched for use in weed detection and identification. Other technologies include guidance, precision in-row weed control and mapping. The objectives of this symposium are to present the latest information on automation for site-specific weed control, provide a forum for scientists to interact with biosystem engineers and establish a new section entitled biosystems management and production or biosystems engineering platforms for field crop production.

**7. Title: Dicamba Resistant Soybean: How will it fit? Organizers: Dave Mortensen and Richard G. Smith, Penn State University, Chris Boerboom, University of Wisconsin, Robert Hartzler, Iowa State University.**

Weedy species resistant to glyphosate have appeared at an increasing rate in response to increasing reliance on glyphosate for weed control in the major commodity crops. One solution to this problem is engineered dicamba resistant soybean and cotton. When employed commercially, glyphosate/dicamba stacked trait crops will allow an additional herbicide to be used on many glyphosate resistant species. Other herbicide resistant traits are also under development. Using a mix of highly focused presentations and facilitated discussion, the symposium will assess the emerging weed management needs, opportunities afforded by dicamba resistant soybean, and agronomic and environmental issues associated with widespread dicamba use in soybean. Presenters with expertise in weed management, herbicide fate, landscape analysis and environmental regulation will speak in the symposium from land grant universities, the herbicide and seed industry and environmental regulatory agencies.

**8. Title: Weed Management in Organic Agriculture: Current Needs and Future Prospects.**  
**Organizer: Franck E. Dayan, USDA Agriculture Research Service, University, MS.**

Weeds have a greater negative impact on crop yields than any other agricultural pests and modern cultural practices rely heavily on the use of synthetic herbicides. However, public concerns about the potential health and environmental impacts of the use of synthetic pesticides have resulted in a recent surge in the popularity of organic approach-

es. Because of the paucity of natural alternatives to synthetic herbicides, weed control is the most pressing pest management issue in organic agriculture. Most organic methods rely on soil cultivation, hand hoeing, biocontrol, organic mulches, plastic (synthetic) ground cover, and the use of some non-selective burndown natural products. The objectives of this symposium are to increase the awareness of the various weed management methods currently

available in organic agriculture and explore the potential development of new natural products suitable for weed management. This symposium will include presentations from government, academic, advisory and industry leaders in the area of weed management in organic agriculture with special attention to the opportunities for the development of new tools and new methods.

---

## SPECIAL EVENTS

### **WSSA Wednesday Night Reception**

**Location: Sheraton Hotel**

This is the traditional WSSA reception. Heavy hors d'oeuvres with carving stations and mini desserts will be served; cash bar. There are no fees for this reception. We do ask that individuals indicate on the registration form if they plan to attend so we can make appropriate arrangements for food.

### **DANCE: Tuesday evening from 8:00 PM to Midnight in the Sheraton Hotel Majestic Ballroom; Woodie Procell & the Snowy River Band performing**

The Snowy River Band is lead by former professional rodeo clown, Woodie Procell. This very talented bunch of guys has a varied music list that includes not only some high energy country but Cajun, bluegrass and rock & roll with even a few rodeo favorites added along the way. The band has opened for several national acts including: Roy Clark, Asleep At The Wheel, The Nitty Gritty Dirt Band, Trick Pony, Aaron Tippin, Lonestar, Chris LeDoux, Blackhawk, and Joe Nichols.

### **Lasater Ranch Tour – Sunday, February 7**

**Depart: 9:00 AM, Return: 5:00 PM;**

**Lunch Provided (Grassfed Beef). Fee: \$50.00**

Travel to the ranch through scenic country from the low mountains and foothills to the plains. This is a large ranch where cattle are raised as nature intended – free range, grassfed, with no confinement, no grain, no growth hormones, no antibiotics, no pesticides and no commercial fertilizers. The only supplement that may be provided when winter snows are severe is a little organically grown hay. This is the largest individual “Grassfed” producer in the state and probably the nation. The ranch developed their own sustainable breed of cattle using practical selection criteria. The ranch lives in harmony with nature and views “nature as a partner rather than a force to be overcome.” The ranch uses a holistic approach and implements intensive rotational grazing. Ranch owner Dale Lasater and ranch manager Andy Duffy will be discussing the benefits of sustainable rangelands through grassfed beef production. After lunch there will be a field tour (weather permitting), so dress warmly.

(Minimum of 30 participants, deadline January 5)

### **Rocky Flats / Boulder Tour – Wednesday, February 10**

**Depart: 8:00 AM, Return: 12:00 noon. Fee – \$25.00**

This tour will take place along the foothills northwest of the Denver metro area. Tour participants will view/discuss geology and plant community ecology with local ecologist David Buckner. Mr. Buckner will speak about the unique plant communities found in the area, and how local ecological processes have shaped these communities. Other topics of interest may include the Rocky Flats National Wildlife Refuge, local open space organizations and the National Renewable Energy Lab in Golden.

(Minimum of 30 participants, deadline January 5)

### **Rocky Mountain National Park Tour – Friday, February 12**

**Depart: 9:00 AM, Return: 5:00 PM; Lunch Provided.**

**Fee \$50.00**

Travel to one of the most visited national parks in the nation. See wildlife and learn about wildlife over use and damage to the vegetation especially in the riparian areas. Learn about efforts to improve the situation and learn about reclamation including collection and increase of local native plants in the park. Park Ecologist Jeff Connor will lead the discussion. Dress Warmly.

(Minimum of 30 participants, deadline January 5)

## **City of Denver Tours**

The mile-high city of Denver provides us with a unique opportunity to host several companion and member tours within walking distance of the hotel. There will be a companion/member tour table located in the main lobby of the hotel. All tours will depart from the main lobby 30 minutes prior to the tour with the exception of the State Capitol tour which will depart 45 minutes prior to the tour for security clearance purposes.

### **Brown Palace Hotel Tour and Tea**

**Monday, February 8, 1:00 PM to 3:00 PM**

Enjoy an afternoon with a tour and high tea at the historic Brown Palace Hotel. The afternoon will begin with a tour of the 117 year old hotel. In the late 1800s when people from all over the country were still flocking to the West seeking their fortunes in gold and silver, everyone stopped in Denver, either on their way to or from the mountains. Some

CONTINUED on pg 9 >>>

## **SPECIAL EVENTS** CONTINUED from pg 8

settled; some moved on, but all needed a place to stay. Henry Cordes Brown, a carpenter-turned-real-estate entrepreneur, began construction on The Brown Palace Hotel in 1888. After an expenditure of \$1.6 million – a remarkable sum for the time – and another \$400,000 for furniture, The Brown Palace Hotel opened on August 12, 1892. It had 400 guest rooms (compared to 241 today) that rented for between \$3 and \$5 a night. Every U.S. president has visited The Brown Palace since Teddy Roosevelt (1905), with the exception of Calvin Coolidge. Following the tour, enjoy a high tea with scones, tea pastries and tea sandwiches that are artfully prepared by the hotel's culinary staff each day and Devonshire cream shipped directly from England. [www.brownpalace.com](http://www.brownpalace.com)

### **United States Mint at Denver**

**Tuesday, February 9, 8:30 AM and 9:30 AM**

Denver is home to one of two United States Mints in the U.S. The United States Mint in Denver is the nation's second largest storehouse of gold bullion. Touring the United States Mint is a fascinating experience for those of all ages and one that will be remembered for a lifetime. Tours cover both the present state of coin manufacturing as well as the history of the Mint. Learn about the craftsmanship required at all stages of the minting process, from the original designs and sculptures to the actual striking of the coins. Located directly adjacent to the visitor's entrance, the gift shop has United States Mint coin sets, commemorative coins, numismatic collectables, books, games, and United States Mint souvenirs. You are welcome to visit the gift shop after your tour. [www.usmint.gov/mint\\_tours/](http://www.usmint.gov/mint_tours/)

### **Molly Brown House Museum**

**Tuesday, February 9, 1:30 PM and 2:30 PM**

The Molly Brown House Museum is a house located at 1340 Pennsylvania Street in Denver that was the home of American philanthropist, socialite, and activist Margaret Brown. Brown was known as "The Unsinkable Molly Brown" because she survived the sinking of the Titanic. The museum now located in her former home presents exhibits interpreting the life of high society in Victorian Denver as well as architectural preservation. The tour through this unique home will take approximately 45 minutes. The house was built in the 1880s by architect William A. Lang, incorporating several popular styles of the period. In 1902, it was the governor's mansion for the Governor of Colorado and his

family (Maggie invited the governor and his family to use her home while the governor's mansion was undergoing remodeling). In the 1970's a group of concerned citizens formed Historic Denver, Inc. raising the funds for the house to be restored to its former glory. In restoration, the group used architectural research, paintchip analysis, and original photographs taken in 1910 as guides to reconstructing it. A shuttle will be provided from the hotel to the Molly Brown House. [www.mollybrown.org/](http://www.mollybrown.org/)

### **Colorado State Capitol Tour**

**Wednesday, February 10, 8:30 AM and 9:15 AM**

The 13th step on the west side of the State Capitol is exactly 5,280 feet above sea level – one mile high. Modeled after the U.S. Capitol, the building is known for its brilliant dome, which is covered with 200 ounces of 24K gold. The historic tour will begin with a tour of the capitol building which includes the following: early Colorado history, Capitol construction, the lawmaking process, several stained glass windows, Women's Gold Tapestry, presidential portraits and a stop outside the Senate and House of Representatives' chambers. The final stop on the tour is a climb up 99 steps to the gold dome. The distinctive gold dome consists of real gold plate, first added in 1908, commemorating the Colorado Gold Rush. From the top of the dome, you will be able to see a great view of downtown Denver. The entire tour will take approximately 1½ hours to see the capitol building and the dome.

[www.state.co.us/gov\\_dir/leg\\_dir/lcsstaff/Scrollpages/TourScroll.htm](http://www.state.co.us/gov_dir/leg_dir/lcsstaff/Scrollpages/TourScroll.htm)

### **Denver Art Museum**

**Wednesday, February 10, 1:30 PM**

Visit Denver's newest landmark. The Denver Art Museum's Hamilton Building is an architectural work of art. Designed by Daniel Libeskind, it will change the way you experience art and architecture. Explore the Museum's galleries showcasing a world-famous American Indian art collection, as well as art from around the world. The tour will comprise of a tour of the museum's collection with emphasis on the Western American Art collection. Following the 45 minute guided tour, you will have time to explore the museum and view the more than 60,000 works of art.

[www.denverartmuseum.org](http://www.denverartmuseum.org)

CONTINUED on pg 10 ➤➤

## OPTIONAL SKI PACKAGES TO BRECKENRIDGE

The word quaint might have been invented in Breckenridge. Its main street could be a painting of what a mountain resort town ought to look like. The oldest and largest town in Colorado's famous Summit County started out, like many, as a mining town, and locals aren't about to forget it – there are 250-plus buildings on the National Historic Register. Four mountain peaks flank the town, providing 2,358 acres of the best skiing anywhere and enough variety to suit even the most seasoned skier. Nordic centers cater to cross-country skiers and snowshoers, as well. When you finish enjoying the sports of winter, be sure to walk down the quaint main street, do some window-shopping and admire the well-preserved architecture. Definitely be sure to bring your camera.

For our pre- and post-conventioners that want to spend an overnight stay in this beautiful little town, we are offering a stay at The Great Divide Lodge. The Great Divide Lodge offers the amenities required of even the most seasoned traveler in a convenient central location. This property is a scenic two-block walk to Main Street Breckenridge, while a mere 50 yards to the chairlifts of the Breckenridge Ski Resort's Peak 9 Base Area. With a stop on the town's free shuttle route and complimentary hotel shuttle service, all of Breckenridge is within easy access. Please see the link below for more information on Great Divide Lodge.

<http://breckresorts.com/greatdividelodge/info/rooms.asp>

---

### **Pre-Convention Package**

Package includes one night stay with tax, and a one day lift ticket. (Ground transportation from Denver will be on your own.) (Must be booked by January 5, subject to availability). \$215.00 per person based on two per room if staying February 5th or 6th.

### **Post-Convention Package**

Package includes one night stay with tax, and a one day lift ticket. (Ground transportation from Denver will be on your own.) (Must be booked by January 12, subject to availability) \$227.00 per person based on two per room if staying February 13th or 14th.

### **One Day Package**

Depart Denver Sheridan Hotel at 7:00 AM; depart Breckenridge Ski Area at 4:00 PM. Your ski host will be Colorado SRM member, Vickie Branch, who is also a former Breckenridge PSIA ski instructor. \$144 per person February 6 or 7. Includes ground transportation from Denver to Breckenridge and lift ticket (minimum of 30 participants per day, deadline January 5). Rental fees and advance rentals can be reserved through [www.rentskis.com](http://www.rentskis.com).

## WSSA Symposium Announcement: Advancements in Automation and Machine Guided Technologies for Precision Weed Control (Wednesday, February 10, 2010: 1:00 PM-5:00 PM, Sheraton Hotel, Silver Room)

Producers across the nation and worldwide are dealing with issues associated with weed control, including site specific applications, integrated weed management and application timing. The potential for improving weed control using automation and machine guided technologies can help address these pertinent, production based weed control problems. This symposium at the annual WSSA meetings in Denver, CO will feature biosystem engineers and industry researchers, who have experience with the latest weed control technologies for organic and conventional cropping systems. The panel of experts will share their insights on current research and the prospects for future applications of machine guided technologies for controlling weeds. The symposium will also feature the speakers in a question and answer panel discussion session with the audience.

The invited speakers and the titles of their presentations are listed below.

Weed management techniques used in organic vegetable, fruit and grain production in the western USA

Alec McErlich, Small Planet Foods, Inc.

International research on automation and perspectives on automation for weed control

John Schueller, University of Florida

Automation technologies for crop production, and their applications to mechanical weeding

Qin Zhang, Washington State University

Automated weed control in specialty crops

David Slaughter, University of California, Davis

Technology and market readiness of robotics and automation for weed control

John Reid, John Deere, Inc.

The symposium will be moderated by Fran Pierce, Director of the Center for Precision Agricultural Systems at Washington State University.



## IMPORTANT ADDRESSES

### **PRESIDENT**

David R. Shaw  
GeoResources Institute  
Mississippi State University  
Box 9652  
Mississippi State, MS 39762  
Telephone: (662) 325-9575  
Fax: (662) 325-9578  
e-mail: dshaw@gri.msstate.edu

### **PRESIDENT-ELECT**

John J. Jachetta  
DowAgro Sciences Bldg 308 2E/05  
9330 Zionsville Road  
Indianapolis, IN 46268  
Telephone: (317) 337-4686  
Fax: (317) 337-4649  
e-mail: jjjachetta@dow.com

### **VICE-PRESIDENT**

Mike Barrett  
Telephone: (859) 257-5020, ext. 80709  
e-mail: mbarrett@uky.edu

### **PAST-PRESIDENT**

Jeff Derr  
Virginia Tech.  
Hamptons Rd. R&E Center  
1444 Diamond Springs Rd.  
Virginia Beach, VA 23455-3363  
Telephone: (757) 363-3912  
Fax: (757) 363-3950  
e-mail: jderr@vt.edu

### **SECRETARY**

Richard Zollinger  
North Dakota State University  
Department of Plant Sciences  
Box 5051 Loftsgard Hall  
Fargo, ND 58105-5051  
Telephone: (701) 231-8157  
Fax: (701) 231-8474  
e-mail: r.zollinger@ndsu.edu

### **TREASURER**

Anita Dille  
Telephone: (785) 532-7240  
e-mail: dieleman@ksu.edu

### **DIRECTOR OF PUBLICATIONS**

James V. Anderson  
USDA-ARS, PSR  
1605 Albrecht Blvd.  
Fargo, ND 58105-5674  
Telephone: (701) 239-1263  
Fax: (701) 239-1252  
e-mail: james.anderson@ars.usda.gov

### **DIRECTOR OF SCIENCE POLICY**

Lee Van Wychen  
900 Second St. NE, Suite 205  
Washington, DC 20002  
Telephone: (202) 408-5388  
Fax: (202) 408-5385  
e-mail: Lee.VanWychen@wssa.net

### **EXECUTIVE SECRETARY**

Joyce Lancaster  
P. O. Box 1897  
Lawrence, KS 66044  
Telephone: (785) 843-1235, ext. 250  
Fax (785) 843-1274  
e-mail: jlancaster@allenpress.com

### **IWSS**

Albert J. Fischer  
Vegetable Crops Dept  
University of California  
One Shields Ave.  
Davis, CA 95616  
Telephone: (530) 752-7386  
Fax: (530) 752-4604  
e-mail: ajfischer@ucdavis.edu

### **CAST**

John Bonner  
505 Capitol Court, NE, Suite 200  
Washington, DC 20002-4397  
Telephone: (202) 675-8333, Ext 11  
Fax: (202) 675-8334

### **AIBS (Our Representative)**

Lee Van Wychen  
900 Second St. NE, Suite 205  
Washington, DC 20002  
Telephone: (202) 408-5388  
Fax: (202) 408-5385  
e-mail: Lee.VanWychen@wssa.net

### **NEWSLETTER EDITORS:**

#### **WSSA**

Clifford (Trey) Koger  
Delta Research and Extension Center  
Mississippi State University  
P. O. Box 197; Stoneville, MS 38776  
Telephone: (662) 686-9311  
Fax: (662) 686-7336  
e-mail: tkoger@drec.msstate.edu

#### **Aquatic Plant Mgmt. Society (APMS)**

Chetta Owens  
Telephone: (972) 436-2215  
e-mail: chetta@laerf.org

#### **NEWSS**

Dwight D. Lingenfelter, M.S.  
Extension Agronomist  
Dept. of Crop and Soil Sciences  
Penn State University  
116 ASI Building; University Park, PA 16802  
Telephone: (814) 865-2242  
Fax: (814) 863-7043  
e-mail: DXL18@psu.edu

#### **NCWSS**

Harlene Hatterman-Valenti  
North Dakota State University  
Department of Plant Sciences  
470E Loftsgard Hall  
P. O. Box 6050, Dept. 7670  
Fargo, ND 58108-6050  
Telephone: (701) 231-8536  
Fax: (701) 231-8474  
e-mail: h.hatterman.valenti@ndsu.edu

#### **SWSS**

Al Rankins  
Mississippi Institutions of Higher Learning  
Office of Academic and Student Affairs  
3825 Ridgewood Road; Jackson, MS 39211  
Telephone: (601) 432-6321  
Fax: (601) 432-6978  
e-mail: arankins@mississippi.edu

#### **WSWS**

Cheryl Fiore  
Department of Entomology, Plant Pathology  
and Weed Science  
New Mexico State University  
Box 30003 MSC 3BE; Las Cruces, NM 88003  
Telephone: (575) 646-1627  
Fax: (575) 646-8087  
e-mail: cfiore@nmsu.edu

#### **CWSS-SCM**

Anita Drabek  
P. O. Box 674; Pinawa, MB R0E 1L0  
Telephone: (204) 753-2915  
Fax: (204) 753-2363  
e-mail: assistant@cwss-scm.ca

#### **IWSS**

Micheal D. K. Owen  
Iowa State University  
3218 Agronomy Hall; Ames, IA 50011  
Telephone: (515) 294-5936  
Fax: (515) 294-9985  
e-mail: mdowen@iastate.edu

---

## CALENDAR OF UPCOMING EVENTS

---

DATE	EVENT	LOCATION	CONTACT
January 4–7, 2010	64th NEWSS Annual Meeting	Cambridge Marriott Cambridge, Massachusetts	<a href="http://www.newss.org">www.newss.org</a>
January 23–27, 2010	63rd Southern Weed Science Annual Meeting	Peabody Hotel Little Rock, Arkansas	Bob Schmidt, Business Manager Tel: 217-352-4212
February 7–11, 2010	Joint Meeting of WSSA and Society for Range Management	Sheraton Denver Hotel Denver, Colorado	<a href="http://www.wssa.net">www.wssa.net</a> <a href="http://www.rangelands.org/denver2010/">www.rangelands.org/denver2010/</a>
July 4–8, 2010	12th IUPAC International Congress of Pesticide Chemistry and Royal Australian Chemical Institute's National Convention, RACI 2010	Melbourne Convention Center Melbourne, Australia	<a href="http://www.iupacipc2010.org">http://www.iupacipc2010.org</a>
July 11–14, 2010	50th Annual Meeting Aquatic Plant Management Society	Hyatt Regency Coconut Point Bonita Springs, Florida	Linda Nelson, Program Chair Linda.S.Nelson@usace.army.mil APMS website: <a href="http://www.apms.org">www.apms.org</a>
July 19–23, 2010	XXVII Brazilian Weed Science Society Congress	Ribeirão Preto, São Paulo State Brazil	R. A. Pitelli, Congress Chairman <a href="mailto:rapitelli@ecosafe.agr.br">rapitelli@ecosafe.agr.br</a>
January 24–26, 2011	64th Southern Weed Science Annual Meeting	Carbie Hilton San Juan, Puerto Rico	Bob Schmidt, Business Manager Tel: 217-352-4212

---