

2018 Conference Program



CONFERENCE SITE

The conference center and hotel is the RENAISSANCE St. Louis Airport Hotel at 9801 Natural Bridge Road, St. Louis, MO 63134. A block of rooms has been reserved at the rate of \$139 per night including hotel parking. A special government rate for government employees traveling on government per diem is available with appropriate ID at \$129 per night. The room block is under ASMR. Room reservations can also be made at: www.asmr.us.

The hotel phone number is (314) 429-1100.

TRANSPORTATION

The conference center/hotel is located south of Interstate 70 just across from the Lambert St. Louis International Airport. A hotel shuttle is available from the airport to the hotel. Hotel parking is included in the registration for those who arrive by car.

PARKING

All of the parking on either side of the roundabout entrance at the Airport Renaissance is Self-Parking. Everyone needs to park in Self-Parking. People staying at the Renaissance will use their hotel key as a parking pass. At the ASMR Registration Table, a parking pass will be provided to all registrants not staying at the Renaissance. The parking pass allows them to exit the self-parking at any time during our event Sunday through Saturday 6/2-10/2018. They need to keep and use this pass for the duration of their stay. If for any reason, the pass is lost and needs to be replaced they can obtain another one at the ASMR Registration Table Sunday through Wednesday.

ASMR 2018 Keynote Speakers



Greg Conrad, Executive Director, Interstate Mining Compact Commission:

The State of the Regulatory Environment from the States' Perspective

Greg Conrad is the former Executive Director of the Interstate Mining Compact Commission (IMCC), a multi-state governmental organization representing 26 mineral producing states. Greg served in this position since 1988. He was responsible for overseeing several important issues of legislative and regulatory affairs including mining and reclamation, placement of coal combustion products, financial assurance, identification and restoration of abandoned mine lands, mine safety and health, and environmental issues associated with mineral production including surface and ground water quality. Prior to joining IMCC, Greg served for nine years as senior counsel with the American Mining Congress. While with AMC, he had primary staff responsibility for coal related issues including transportation, leasing, research and development initiatives, and surface mining

and reclamation. Greg has spoken and presented papers at a variety of meetings and conferences hosted by such organizations as the Eastern Mineral Law Foundation, the National Academy of Science, the Conference of Government Mining Attorneys, the American Association of State Geologists, the Colorado School of Mines, the Office of Surface Mining, the National Association of Abandoned Mine Land Programs, the National Mining Association, the Environmental Law Institute, and various state government groups. He has written extensively on mining issues for professional journals and magazines. Greg graduated from Michigan State University with a degree in business administration and later from the University of Detroit/Mercy School of Law where he was an associate editor of the law review.



Dan Barkley, Illinois DNR, Office of Mines and Minerals:

Longwall Subsidence Mitigation of Farmland: Challenges and Accomplishments Over 35 Years

Dan Barkley is currently the Supervisor of the Technical Services Section in the Illinois Department of Natural Resources, Land Reclamation Division. This Division is the primary regulatory authority over coal mining in Illinois. Through his 30 years of experience, he has served as the state's Subsidence Specialist as well as an Engineer overseeing the design and performance of coalmine impoundments, sediment ponds, and drainage control. He has extensive experience in evaluating pillar design for surface stability, longwall design for planned subsidence, and in citizen complaints regarding mine subsidence. Dan is now responsible for overseeing the technical staff engaged in the review and enforcement of permits and

enforcement of coalmine performance standards. Previously, Dan worked for 2 years on the Illinois Mine Subsidence Research Program at the Illinois State Geological Survey. This work involved instrumentation of subsidence sites to evaluate the impacts of planned subsidence on the overburden and groundwater resources. Dan is an instructor for the Underground Mining Technology and Subsidence courses through the Office of Surface Mining Reclamation and Enforcement's Technical Training Program. He has also made presentations and co-authored papers for organizations such as the International Conference on Ground Control in Mining, the Illinois Mining Institute, the Illinois Association of Drainage Districts, and the Indiana Surface Mined Land Reclamation Technology Transfer Seminar. Dan has a B.S. in Mining Engineering from The Pennsylvania State University and is a Licensed Professional Engineer.



Chris Walker, Peabody VP Strategy & Global Energy Analytics:

Coal and the Future of Energy

Christopher S. Walker is Vice President of Strategy and Global Energy Analytics for Peabody. He oversees the company's strategic planning cycle and strategic initiatives, as well as leads global energy and coal market research activities to best inform the organization on new business and market opportunities. Mr. Walker joined Peabody in 2007. He has also held roles in Sales and Trade Support, Corporate Treasury, Investor Relations and Supply Chain Management. Prior to joining Peabody, Mr. Walker held finance and accounting positions with Emerson Electric, Georgia Power, KMPG and Arthur Andersen. Chris holds a B.S. and Master Degree in Accounting from Clemson University and an MBA from Washington University in St. Louis.

Sunday, June 3, 2018

8:00 a.m. – 5:00 p.m.Registration - Concourse Foyer
10:00 a.m. – 5:00 p.m.Exhibitor Setup – Concourse BCD
10:00 a.m. - 4:00 p.m.....NEC Meeting – Board Room 4
6:30 p.m. – 9:00 p.m.Welcome Reception – Concourse BCD
All day.....ASMR Office - Lindbergh

Monday, June 4, 2018

6:30 a.m. – 7:30 a.m.....Haulin’ ASMR - Meet in lobby
7:00 a.m. – 9:00 a.m.Breakfast – Concourse BCD
7:15 a.m. – 8:30 a.m.....Wild Women of Reclamation – Lambert A
7:30 a.m. – 5:00 p.m.Registration – Concourse Foyer
8:00 a.m. – 6:00 p.m.....Silent Auction – Lambert CD
9:00 a.m. – 9:30 a.m.....Plenary Session - Concourse A
Kimery Vories – ASMR President –Welcome
Robert Darmody – ASMR Executive Secretary –Welcome & Announcements
9:30 a.m. - 10:00 a.m.Break - Exhibit Hall - Concourse BCD
10:00 a.m. – 12:00 noonKeynote Speakers Concourse A

Greg Conrad, Executive Director, Interstate Mining Compact Commission:
The State of the Regulatory Environment from the States' Perspective

Dan Barkley, Illinois DNR, Office of Mines and Minerals:
Longwall Subsidence Mitigation of Farmland: Challenges and Accomplishments Over 35 Years

Chris Walker, Peabody VP Strategy & Global Energy Analytics:
Coal and the Future of Energy

12:00 noon – 2:00 p.m.ASMR Awards Luncheon - Renaissance Ballroom
2:00 p.m. – 5:30 p.m.....PM Cultural Tour 1 – Lewis and Clark State Historic Site See website at:
<http://campdubois.com> - Meet with Kim Vories at the Registration Table.

Monday, June 4, Technical Sessions			
	SUBSIDENCE SESSION 1A ONLY ROOM MODERATOR Dan Barkley	LONG TERM RECLAMATION EVALUATION SESSION 1B HEATHROW AB MODERATOR Amy Sikora	SOILS SESSION 1 C GATWICK AB MODERATOR Ed Janak
2:00 p.m. - 2:30 p.m.	Agricultural Longwall Subsidence Mitigation Utilizing Subsurface Drainage Systems: Why Can't We Make It Better? By Gerry Spinner and Dan Barkley	Hickory and Oak Growth Over 10 Years in Response to Initial Fertilization. By Jennifer Franklin and D.S. Buckley	Development of Soil Physicochemical Properties of Reclaimed Croplands in a Large Opencast Mining Area on the Loess Plateau. By Yingui Cao
2:30 p.m. - 3:00 p.m.	Overview of Insar Technology For Areas Monitoring Subsidence Over Undermined Areas By Zach Agioutantis	Survival, Growth, and Blight Incidence of Chestnuts on an FRA-Reclaimed Coal Mine in Southwestern Virginia. By Sara Klopff	Soil Stockpile Seed Viability is Affected By Depth and Current Surface Vegetation. By Jennifer Buss, Student, and Brad Pinno
3:00 p.m. - 3:30 p.m.	Response of Petro Pipelines to Longwall Subsidence. By Gennaro Marino	Soil Water Quality of Reforested Mine Site Twelve Years after Reclamation. By Amir Hass	Early Physical, Chemical and Biological Impacts of Using Stockpiled vs Directly Placed Reclamation Soils By Brad Pinno
Monday, 3:30 p.m. - 4:00 p.m. BREAK - CONCOURSE BCD			
	SUBSIDENCE SESSION 2A ONLY ROOM MODERATOR Dan Barkley	FORESTRY SESSION 2B HEATHROW AB MODERATOR Brandon Holzbauer-Schweitzer	SOILS SESSION 2C GATWICK AB MODERATOR Brenda Schladweiler
4:00 p.m. - 4:30 p.m.	An Assessment of Long-wall Mining Subsidence on Internationally Important Floodplain Meadows: I. Plant Communities and Their Response to Increase in Wetness. By Paul Benyon and Neil Humphries	The Influence Herbaceous Vegetation on Ectomycorrhizal Root Colonization and Nutrient Uptake. By Janice Bauman, Martha Fergus, and J.A. Franklin	Effect of Alders (Alnus sp.) on Technosols Development on Lignite Combustion Wastes Disposal. By Marcin Pietrzykowski

4:30 p.m. -5:00 p.m.	An Assessment of Long-wall Mining Subsidence on Internationally Important Floodplain Meadows: II. A Model for the Prediction and Quantification of Impact and Mitigation. By Neil Humphries and Paul Benyon	Using Groundcover to Outcompete Tall Fescue (<i>Festuca arundinacea</i>) Without Outcompeting Tree Seedlings on a Legacy Mine Site. By Matt Aldrovandi, Student, and J. Franklin	A Pedologic View of Geomorphic Reclamation View in Wyoming. By Amanda Pennino, Student
5:00 p.m. - 5:30 p.m.	Reliance, Wyoming Mine Subsidence Mitigation Project. By Doug Beahm	Technical Division (TD) meeting: ECOLOGY / FORESTY & WILDLIFE (Jerry Schuman, chair)	

Monday Social Dinner 6:00–9:00 PM– Renaissance Ballroom: Living Legends features:

“The Life and Times of a Career Reclamationist” by Vernon Pfannenstiel

Tuesday, June 5, 2018

6:30 a.m. – 7:30 a.m.....Haulin’ ASMR - Meet in lobby
7:00 a.m. – 8:30 a.m.....Breakfast – Concourse BCD
7:30 a.m. – 5:00 p.m.Registration – Concourse Foyer
7:45 a.m. – 8:30 a.m.JASMR Editors and TD Chair meetings (TBA)
8:00 a.m. – 6:00 p.m.....Silent Auction – Lambert CD
8:30 a.m. – 4:00 p.m.Poster Session - Heathrow AB

TUESDAY, JUNE 5, TECHNICAL SESSIONS			
	NOVEL TECHNOLOGIES SESSION 3A ORLY ROOM MODERATOR Bob Nairn	POSTERS SESSION 3B HEATHROW AB	ABANDONED MINE LANDS SESSION 3C GATWICK AB MODERATOR Michele Coleman
8:30 a.m. - 9:00 a.m.	WebGIS Application to Visualize Historical Reclamation Research Sites Using a Modified QGIS2Web Framework. By David Leifer, student, and Ruopu Li	Posters will be installed between 8:00 -10:30, and remain up until 4:00. Presenters will be present 2:00-4:00	Implementation of the 2016 AML Pilot Program in Pennsylvania: Successes, Challenges, and Lessons Learned. By Eric Cavazza
9:00 a.m. - 9:30 a.m.	Using Novel Geophysical Techniques to Relate Surface Coal Mining Fill Characteristics to Effluent Stream Water Quality. By Kathryn Little, student, and Erich Hester		Planning and Implementation of the 2017 AML Pilot Program in Pennsylvania By Eric Cavazza

9:30 a.m. - 10:00 a.m.	Surveyor in the Sky: Using Very High-resolution Drone-collected Data to Monitor Ecological Restoration. By Grayson Koenemann, Student		Investigations of Acidic Discharges from the Historic Mining of the Davis and Dekoven Coal Beds in Southern Illinois. By Paul Behum and Angie Mick
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Tuesday, 10:00 A.M. - 10:30 A.M. BREAK - CONCOURSE BCD

	MINE POOL STUDIES SESSION 4A ORLY ROOM MODERATOR Julie LaBar	POSTERS SESSION 4B HEATHROW AB	LONG TERM RECLAMATION SESSION 4C GATWICK AB MODERATOR Paul Griswold
10:30 a.m. - 11:00 a.m.	Statistical Modeling of Mine Pool Formation in Underground Coal Mines of Ohio. By Lindsey Schafer, student, and N. Kruse Daniels	Posters will be up until 4:00. Presenters will be present 2:00-4:00	Developing Diverse, Effective, and Permanent Plant Communities on Reclaimed Surface Coal Mines: Establishing Ecosystem Function in Reconstructed Wildlands. By Edward Vasquez & Roger Sheley
11:00 a.m. - 11:30 a.m.	Data Management for OSM Mine Pool Project at Ohio University: Lessons Learned. By Rebecca Steinberg, student, and N. Kruse Daniels		Eucalypt Plantations for Mine Site Rehabilitation, Carbon Sequestration, and Wood Products in the Hunter Valley, Australia. By Ashley Webb
11:30 a.m. - 12:00 p.m.	Modeling and Parameter Sensitivity of Mine Pool Formation in the Meigs Mine, Ohio. By Frederick Twumasi, student, and N. Kruse Daniels		Reclamation in Smelter-Impacted Landscapes in Northern Regions – A Comparison of Canadian and Russian Experiences. By Peter Beckett

Tuesday, 12:00 P.M. - 2:00 P.M. LUNCH - RENAISSANCE BALLROOM

~~CANCELED 2:00 — 5:30 PM Cultural Tour 2 — Jefferson National Memorial Gateway to the West Park~~

	TAR CREEK, OK SESSION 5A ORLY ROOM MODERATOR Tim Danehy	POSTERS SESSION 5B HEATHROW AB	RECLAMATION SESSION 5C GATWICK AB MODERATOR Hannah Angel
2:00 p.m. - 2:30 p.m.	Metal Mass Retention in Passive Treatment Systems at the Tar Creek Superfund Site. By Robert Nairn	Posters will be up until 4:00. Poster Presenters will be at their posters from 2:00-4:00.	A Proactive Approach to Imperiled Species Management: Monarch Butterfly Habitat Enhancement on Mined Lands to Prevent Federal Listing By Kristi Dodson

2:30 p.m. - 3:00 p.m.	Geospatial Distribution of Trace Metals in Soils of a Mining Impacted Agricultural Watershed. By Amy Sikora, Student		Geomorphic Reclamation and Landscape Heterogeneity: Results of Vegetation Analysis and Implications for Wildlife. By Kurt Fleisher, Student
3:00 p.m. - 3:30 p.m.	Metals Retention and Remobilization in a Small Mine Drainage Impacted Stream Colonized By Castor canadensis (North American Beaver). By Nick Shepard, Student		Impacts of a Modified Forestry Reclamation Approach on Seedling Growth and Survival on Reclaimed Mines in the Western Gulf. By Cassie Phillips, Student
Tuesday, 3:30 p.m. - 4:00 p.m. BREAK - CONCOURSE BCD			
	PASSIVE TREATMENT SESSION 6A ONLY ROOM MODERATOR Tim Danehy	TD BUSINESS MEETINGS SESSION 6B HEATHROW AB	FORESTRY RECLAMATION SESSION 6C GATWICK AB MODERATOR Michele Coleman
4:00 p.m. - 4:30 p.m.	Phytoremediation of Stormwater By Aquatic Macrophytes. By Michael Nattrass, Student	TD Business Meeting: Water Management Gwen Geidel and, Louis McDonald; co-chairs	Phytophthora cinnamomi is Capable of Colonizing Forestry Reclamation Approach Sites. By Kenton Sena, Student
4:30 p.m. - 5:00 p.m.	Measuring the Recovery of Fish Communities in a First Order Stream to Tar Creek After Implementation of Two Passive Treatment Systems. By Nick Shepard, Student	TD Business Meeting: Land Use and Planning Jon Bryan Burley, chair	Aspen Sprouting Response to Above Ground Disturbance on a Reclaimed Boreal Oil Sands Site in Alberta, Canada. By Stephanie Jean
5:00 p.m. - 5:30 p.m.	A Comparison of Methods for Analyses of Soil Trace Metals in a Mining Impacted Agricultural Watershed. By Amy Sikora, Student		Switchgrass and Giant Miscanthus Biomass from Reclaimed Mine Lands. By Steffany Scagline-Mellor and Jeff Skousen

Tuesday Social Dinner: 6:00 – 8:00 PM, Renaissance Ballroom:

**Featuring:
Muddy Horse Band**

Note: This is not included in the regular registration and is only for those who paid the additional \$60 fee.

POSTER SESSION - HEATHROW AB - TUESDAY, JUNE 5 8:30 A.M. - 4:00 P.M.

Presenters present 2:00-4:00

1	Individual Tree and Stand-Level Carbon and Nutrient Contents Across One Rotation of Loblolly Pine Plantations on a Reclaimed Surface Mine. By Hannah Angel, Student
2	Investigation Acidic Discharges at the Monahan Abandoned Mine Lands Site, Kansas. By Paul Behum
3	Restoring an Oak Savanna in the Upper Mississippi Valley Zinc-Lead District. By Dan Brumm, and Cody Zink, Students
4	Mine reclamation using bioenergy crops: An investigation into plant-microbe interactions of switchgrass (<i>Panicum virgatum</i>). By Brianna Mayfield, Student, and Zachary Freedman
5	Correlating Surface Water Quality and Spectral Reflectance with small Unmanned Aerial System (sUAS)-Collected Imagery. By Brandon Holzbauer-Schweitzer, Student
6	Stormwater management for a large open-cast coal mine: A case study and proposed solutions. By Justin Hugo, Student
7	Preserving Reclamation Research by Geocoding American Society of Mining and Reclamation Proceedings. By Kari Lagan, Lily Currie, Ashley Rovder, Staci Wolfe, Zach Shoff, and David Madl; Students
8	Seeding Techniques to Promote Woody Plant Establishment in the Northern Great Plains. By Gabe Johnson
9	Restoration of the Soil Microbiome Following Mine Land Reclamation. By Jennifer Kane, Student
10	Rehabilitation of the Reitz #1 Passive Treatment System. By Julie LaBar and Grace Bailey, Student
11	Mummified and Partially Petrified Wood from an Eocene Deposit in Mississippi. By David Lang
12	China's Mining Land Policies and Reclamation Practices. By Luo Ming
13	Geomorphic Reclamation: A pioneer method on the frontier of the Wild West. By Amanda Pennino, Student
14	Analysis of EPA Mandated Soil Amendments. By Madison Peppers, Student
15	Continued Assessment of Acid Mine Drainage Treatment Systems in the Greater Kumurana Valley, Bolivia. By Andrew Potopa, Student
16	Use of Poultry Litter, Swine Mortality Compost, and FGD Gypsum on Reclaimed Mine Soil in Mississippi. By John Read
17	The Role of Algal Biomass Growth on Nutrient and Metal Interactions at the Sediment-Water Interface. By Zepei Tang, Student
18	A Lab-Based System to Study the Microbial Impacts on Passive Remediation Systems for AMD. By Michelle Valkanas, Student
19	Quantifying Sulfide Removal Using Solar Powered-Aeration in Passive Treatment of Net Alkaline Mine Waters. By Taylor Wall, Student

Wednesday, June 6, 2018

6:30 a.m. – 7:30 a.m.....Haulin' ASMR - Meet in lobby
 7:00 a.m. – 8:00 a.m.Breakfast – Concourse BCD
 7:30 a.m. – 5:00 p.m.....Registration - Concourse Foyer
 8:00 a.m. - 11:30 a.m.Silent Auction – Lambert CD

WEDNESDAY, JUNE 6, TECHNICAL SESSIONS			
	RECLAMATION CONSTRUCTION SESSION 7A ORLY ROOM MODERATOR Gabe Johnson	RECLAMATION IN CHALLENGING ENVIRONMENTS SESSION 7B HEATHROW AB MODERATOR Julie LaBar	RECLAMATION SESSION 7C GATWICK AB MODERATOR Zepei Tang
8:00 a.m. - 8:30 a.m.	Initial Evaluation of Ripper and Tillage Methods on Reclaimed Heavy Mineral Mine Soils. By Zenah Orndorff	Passive System Rehabilitation of a High Flow Acidic Coal Mine Discharge. By Ryan Mahony	Land Cover Monitoring for Mining Reclamation Area Based Random Forest Classification from Remotely Sensed Images. By Chen Yuanpeng
8:30 a.m. - 9:00 a.m.	Selection Criteria for Sedimentation Ponds that may be Transitioned to Permanent Impoundments for a Reclaimed Surface Mine in the Southwest USA. By Kyle Kutter	Targeted Maintenance Efforts to Ensure a Decade of Successful Passive Treatment. By Robert Nairn	The Use of GPS Treatment Data and ArcGIS Tools to Evaluate Herbicide Treatment Effectiveness on a Reclaimed Coal Mine. By Wayne Erickson
9:00 a.m. - 9:30 a.m.	Integrating Geochemical Characterization and Field Procedures in Construction to Mitigate Potentially Acid-Generating Materials in Northern Minnesota, USA. By Meghan Blair	Manganese Oxide Production and Harvesting Using Metal Removal Units. By Colin Lennox	Why Does Cobalt Supply Need to Move Out of Africa? By Rahul Verma
Wednesday, 9:30 a.m. - 10:00 a.m. BREAK - CONCOURSE BCD			
	RECLAMATION - BOND COST SESSION 8A ORLY ROOM MODERATOR Scott Belden	WATER TREATMENT SESSION 8B HEATHROW AB MODERATOR Gwen Geidel	RECLAMATION SESSION 8C GATWICK AB MODERATOR Zepei Tang
10:00 a.m. - 10:30 a.m.	Case Study to Assess the Costs of the Appalachian Regional Reforestation Initiative's (ARRI) Forest Reclamation Approach. By Jacob Johnson	Peat Based Sorption Media – Passive Treatment of Trace Metals Without a Stink. By Paul Eger	The Deployment and Risks Associated with Different Types and Combinations of Earth Moving Equipment in the Restoration of Soil Profiles. An Updating of the UK Guidance. By Neil Humphries

10:30 a.m. - 11:00 a.m.	Anticipating the True Costs of Mine Closure Reclamation. By Zachary Wappes	Dominant Trace Metal Removal Products in a Hard Rock Mine Discharge Bioreactor. By Julie LaBar	Hydrology-Based Design of Geomorphic Evapotranspiration Covers for Reclamation of Mine Land. By Z. Fred Zhang
11:00 a.m. - 11:30 a.m.	Reclamation Bond Optimization Using 3d-dig Plus. By Jake Anderson	Selenium, Uranium, and Nitrate: Treatment of Troublesome Contaminants in Mining Wastewaters—EBR Case Studies. By Ola Opara	Hydrologic Budgets and Conservative Ions: Potentially Important Yet Neglected Tools in the Evaluation of Passive Treatment System Effectiveness By Robert Nairn

**Wednesday, 11:30 P.M. - 1:00 P.M. STUDENT AWARDS AND SILENT AUCTION RESULTS –
RENAISSANCE BALLROOM**

1:00 p.m. – 5:00 p.m. Cultural Tour 3 – Cahokia Mounds State Historic Site

Website: <https://cahokiamounds.org>

Meet Kim Vories at the Registration Table.

	HYDROLOGY SESSION 9A ONLY ROOM MODERATOR Nick Shepherd	WATER TREATMENT SESSION 9B HEATHROW AB MODERATOR Bob Nairn	RECLAMATION SESSION 9C GATWICK AB MODERATOR Paul Griswold
1:00 p.m. - 1:30 p.m.	Quantitative Evaluation of Flow Loss Restoration Associated with Undermined Streams at the Bailey Mine in Southwestern Pennsylvania. By Michael Shema	Zinc-, Lead-, and Cadmium-bearing Mine Drainage at the Rex Mine Site Coeur d' Alene, Idaho. By Kent Whiting	What is the best time of year to use prescribed fire to control invasive shrubs? A Case Study from the Upper Midwest. By Yari Johnson
1:30 p.m. - 2:00 p.m.	Innovation of Filling Reclamation with Multi-Layered Soil Profile. By Zhenqi Hu	Retrofitting a Lime Doser with Automatic Siphon and Mix Well System. By Tim Danahy	Loblolly Pine Survival and Growth on a Reclaimed Mineral Sands Mine in Southeastern Virginia. By Sara Klopff
2:00 p.m. - 2:30 p.m.	Seasonal Trends in Water Quality in a Treated Acid Mine Drainage Impaired Stream. By Natalie Kruse Daniels	Lion Mining Borehole Project: Drilling a Flowing Artesian Water Well into a Mine Pool. By Daniel Guy	Restoring Wyoming Big Sagebrush to Annual Brome-Invaded Landscapes with Seeding and Herbicides. By Matthew Rinella

Wednesday, 2:30 P.M. - 3:00 P.M. BREAK - CONCOURSE BCD

	WATERSHED APPROACHES SESSION 10A ONLY ROOM MODERATOR Gabe Johnson	SESSION 10B HEATHROW AB	WATER & SOIL TECHNOLOGY SESSION 10C GATWICK AB MODERATOR Brandon Holzbauer-Schweitzer
3:00 p.m. - 3:30 p.m.	A Suite of Options at Tar Creek. By Tim Kent and Summer King		Sloping Sand Filtration Bed for Mineral Sand Plant Effluent Clarification. By Jim Gusek

3:30 p.m. - 4:00 p.m.	Treatment Success in a Heavily Mined Watershed in Ohio. By Natalie Kruse Daniels		Biotic Soil Technology for Cost Effective Mine Closure Cover Systems. By Marc Theisen
4:00 p.m. - 4:30 p.m.			TD Business Meetings: Soil and Overburden/Geotechnical Engineering/International Tailings Michele Coleman (Soils); Suzette R. Burckhard (Geotec); Dennis Neuman (Tails)
4:30 PM – 6:30 PM NEC COMMITTEE MEETING – Lambert CD			
6:30 PM -8:30 PM EARLY CAREER PROFESSIONALS EVENT–MEET IN LOBBY, first bus departs 6:00			

Dinner on your own.

Thursday, June 7, 2018

Breakfast on Your Own

Optional professional Field Trips:

8:00 a.m. – 5:00 p.m.....Professional Tour #1: Remediation of Underground Mine Subsidence on Farmland in Illinois.
Lunch included. Meet in Lobby at 7:50 a.m.

8:30 a.m. – 2:00 p.m.....Professional Tour #2: Prairie State Power Plant and Coal Mine. Appropriate attire required*.
Meet in Lobby at 8:20 a.m. Lunch provided by Prairie State generation Company.

PRAIRIE STATE Generating Company

Dinner on your own.

*** Safety and Tour #2 Attire**

Prairie State Energy Campus is a coal mine and a power plant on the same site, falling within the strict safety regulations from the Occupational, Health and Safety Administration (OSHA) and the Mine Safety and Health Administration (MSHA) as well as other federal and state agencies. Because of these rules and regulations, we ask that all visitors touring the site wear the following:

- Long pants
- Full cover leather shoes with substantial rubber soles
- Shirt with sleeves

Prairie State will provide visitors with all necessary personal protective equipment.

Meeting Financial Sponsors/Exhibitors (to date)

Platinum

Peabody



Meeting Financial Sponsors/Exhibitors (con't)

Bronze (also Exhibiting)



Rocky Mountain Bio Products

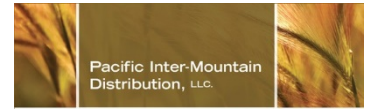


Forest Keeling Nursery

BKS Environmental Associates, Inc.



Pacific Inter-Mountain Distribution



Civil and Environmental Consultants

Civil & Environmental Consultants, Inc.



BRS Engineering

Ernst Conservation Seeds



Foam Concepts



Conference Mobile App Manager

Trihydro Corporation

Break Sponsors

BRS Engineering



Breakfast Sponsors

Granite Seed Company (Monday and Tuesday)



Early Career Professional Event

Inter-Mountain Labs

KC Harvey

Virginia Tech



Exhibitors

Respec

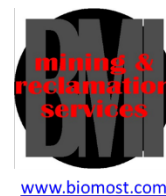
Truax Co., Inc.

Trihydro Corporation

BioMost, Inc.

Voss Signs

JWR Bioremediation LLC



ASMR 2018 Program Committee

Dan Barkley	Illinois Office of Mines and Minerals
Amy Blyth	Trihydro Corporation
Dr. Robert Darmody	ASMR Executive Secretary
Dr. Gwen Geidel	University of South Carolina
Paul Griswold	Peabody
Chris Johnston	Intermountain Labs
Brenda Schladweiler	BKS Environmental Assoc., Inc.
Dr. Stephen Schroeder	Retired North Dakota PSC Reclamation Division
Dean Spindler	Illinois Office of Mines and Minerals
Dr. Pete Stahl	University of Wyoming
Kimery Vories	ASMR President, Event Chairperson
Dustin Wasley	GeoEngineers

**See you in
beautiful Big Sky, Montana
in June 2019!**

**Thank you for your support and
attendance this year.**

Monday, June 4, 2018 Social Dinner

Social Dinner 6:00 PM – 9:00 PM – Renaissance Ballroom

Living Legends features “The Life and Times of a Career Reclamationist” by Vernon Pfannenstiel.



An advertisement for RESPEC. It features a large bulldozer working on a reclamation site with a cloudy sky in the background. The RESPEC logo is in the top left corner. Text on the right side reads: "CREATING A FUTURE, BY RECLAIMING THE PAST." Below this, it says: "Our extensive knowledge and experience in restoration and reclamation projects benefit clients in need of practical mining and environmental expertise." The website "RESPEC.COM" is at the bottom right. On the left side, there is vertical text: "35.150.752 | +106.593611" and "3825 4 LIFT DRIVE | RAPID CITY, SD 57103".

Tuesday Night Social

**Social Dinner: 6:00 PM – 8:00 PM - Renaissance Ballroom
featuring the Muddy Horse Band.**



Thursday, June 7, 2018 Professional Field Trips

Professional Field Trip 1 - Remediation of Underground Mine Subsidence on Farmland in Illinois. This field trip will tour the surface areas over two longwall mines in Central Illinois. The first mine performed longwall operations in 17 panels from 1994 until 2007. Much of the area is flat prime farmland and experienced substantial drainage problems. The panel subsidence troughs are readily evident in many areas. Successful drainage restoration work through both surface waterways and subsurface drainage tile will be discussed and viewed. Lunch will be at a restaurant in Litchfield Illinois on Historic Route 66. The second mine was more recently initiated but has been idled due to underground issues. Three longwall panels were mined and subsided at this facility prior to the idling in 2015. Maximum subsidence experienced in the two longwall areas range from about 4.5 feet to 7 feet. For participants who have not had the opportunity to see subsidence from longwall mining, the tour will give an excellent perspective of the magnitude of longwall subsidence and a good overview of the practices necessary to restore subsided farmland. Lunch included. Meet in Lobby at 7:50 AM. Trip should last about 9 hours and return about 5 PM.



Professional Field Trip 2 - Prairie State Power Plant and Coal Mine –The Prairie State Energy Campus is setting a new standard for clean coal production. The state-of-the-art energy campus uses modern technology to produce cleaner, baseload electricity for their member communities. See website at: <https://prairiestateenergycampus.com>. Meet in Lobby at 8:20AM, see note about attire. Trip should last about 5 hours returning about 2 PM. Lunch included and provided by Prairie State.

PRAIRIE STATE
Generating Company

2018 ASMR Professional Award Winners



Paul Eger - R.I. & L.M. Barnhisel Reclamation Researcher of the Year Award

Nominated by: Robert Nairn

The Richard I. and Lela M. Barnhisel Reclamation Researcher of the Year Award recognizes substantive contributions to the advancement of reclamation science and technology through scientific research. Paul Eger received his B.S., cum laude, in Chemical Engineering from the University of Rochester, and he completed course work in Chemical Engineering and Environmental Health at the University of Minnesota. He is an Environmental Engineer with Global Minerals Engineering / Sovereign Consulting. He has been employed in the field of environmental engineering for over 40 years in Minnesota, Colorado, Venezuela, and the United Kingdom. He has been involved in the regulatory role and as a consultant in mined land and water reclamation. His emphasis has been in the areas of waste organic amendment of mine tailings, pioneering work in wetlands through passive treatment, peat based sorption media, and active chemical treatment. He has published over 95 journal articles, conference and workshop proceedings, and university publications. Two special activities deserve special notice - he led the efforts on decommissioning a decade old biochemical reactor and he was instrumental in developing passive technologies for selenium removal. He has served ASMR on the NEC and as President. He has received the Reclamationist of the Year Award from ASMR and state and national recognition for his research and technology development. Congratulations Paul!



Robert Darmody - William T. Plass Award

Nominated by: Jeff Skousen

This award is given to a person who has distinguished themselves in the field of mined land reclamation at the local, regional, national, and international levels. The award is the highest honor the Society has and recognizes those in research, teaching, outreach, and administration. Dr. Darmody received his B.S. in Conservation and Natural Resource Development (magna cum laude), M.S. in Soil Science, and his Ph.D. in Soil Science from the University of Maryland. From 1981 until 2013, he served as Professor of Pedology at the University of Illinois in the Department of Natural Resources and Environmental Sciences. Currently he is the Emeritus Professor of Pedology at the University. After full time retirement, he spent time as a consultant in mine subsidence mitigation in Australia, and since 2013, he has served as Executive Secretary of ASMR. As a Professor, he received Outstanding Student Instructor recognition from the University of Illinois for 12 years (1985-2010). He was elected Fellow of the Soil Science Society of America and the American Society of Agronomy and he received the Reclamation Researcher of the Year Award from ASMR. He has a long history of research relating to mining and its environmental and agronomic impacts. His related research into the subject of agricultural impacts of high extraction underground coal mining initiated such research anywhere and remain unique in the world. The effects of mine subsidence on post mining land use was of great concern early but his research provided evidence that underground mining, including longwall mining, effects on subsidence could be mitigated. His expertise in this area has recently been called upon by regulators and researchers in China and Australia as well as the U.S. In addition to his teaching and research responsibilities, he served as Director of the University of Illinois Mine Reclamation Program for several years. His research findings have been published in many refereed journal articles, books and book chapters, technical meeting proceedings and 100's of presentations. He has served the Society as President, Chair of the Soils and Overburden Technical Division, and an editor of JASMR. Congratulations Robert!



Zhenqi Hu - Pioneer in Reclamation Award

Nominated by: Brenda Schladweiler

This award is presented to an individual that has had significant impact and influence in the field of land reclamation and environmental science relating to mined land reclamation over their entire career. Zhenqi received his B.E. in mine surveying from China University of Mining and Technology (CUMT), Beijing, M.E. in mine surveying from CUMT, and his Ph.D. in land reclamation from CUMT and Southern Illinois University-Carbondale. Prof. Hu's research and teaching in mined land reclamation spans his entire career, over 28 years. Known as a pioneer of mine land reclamation in China, he was the first Ph.D. in that area in China. Currently, he is Professor and Chair, Department of Surveying and Land Use, College of Geoscience Surveying Engineering, CUMT, Director, Institute of Land Reclamation and Ecological Restoration, and Director, Engineering Research Center of Mining Environment and Ecological Safety, Ministry of Education, PRC. His research includes subsidence land reclamation, coal waste pile revegetation; surface mined land reclamation, and contaminated land remediation. He has mentored and supervised 4 postdoctoral candidates, 45 Ph.D. students, and 32 M.S. students. He has been recognized for his research and teaching by his peers, institutions, and government agencies numerous times. He received the ASMR Reclamation Researcher of the Year Award, Outstanding Teacher Award, Beijing Education Committee, Award for Outstanding Young Scientist (3 times), and Recipient of the UK Royal Fellowship Program with China. He has published numerous refereed journal articles and books and has patents in the field of land reclamation. Prof. Hu is a lifetime member of ASMR and the China Land Reclamation Society. He was a strong supporter and organizer of cooperation among land reclamation organizations from several countries, now reflected in the formation of the International Association of Land Reclamation. Congratulations Zhenqi!



Julie LaBar - Early Career Award

Nominated by: William Strosnider

Dr. Julie LaBar earned her degrees in environmental science, with an emphasis on geochemistry, at the University of Oklahoma. Julie has been working in mining reclamation research since 2003, when her capstone project introduced her to the Tar Creek Superfund Site in northeastern Oklahoma. Research projects conducted as a student and staff research scientist have included long-term water quality monitoring in eastern Oklahoma's mining-impacted watersheds with the Center for Restoration of Ecosystems and Watersheds at OU, leachability and subaqueous disposal studies with chat, characterization of trace metal removal products in vertical flow bioreactors, and ionic strength impacts on passive treatment system performance. After graduation in 2016, Julie moved to Pennsylvania for a postdoctoral fellowship at St. Francis University, where she works with consulting firms, watershed associations, faculty, and students to evaluate and improve passive treatment systems. Overall, Julie's research and teaching focus on understanding and communicating the impacts of resource extraction on the surrounding environment and communities. Congratulations Julie!

2018 ASMR Memorial Scholarship Award Winners



ASMR Memorial Scholarship B.S.: Justin Hugo

Justin Hugo is a student at Saint Francis University in Loretto, Pennsylvania, studying environmental engineering with a concentration in ecological engineering. He has presented research on the co-treatment of acid mine drainage with municipal wastewater and its effect on macroinvertebrate life in streams at ASMR meetings. He has also traveled to Bolivia with Saint Francis University to work with Engineers in Action. In Bolivia, he worked with professors and students to analyze the performance of acid mine drainage treatment systems in heavily mined regions as well on the design of a water catchment system to provide water to a rural community. This summer Justin is interning at Pennsylvania's Department of Environmental Protection in the waterways and wetlands program. Upon graduation, Justin plans on either entering the reclamation industry as an environmental engineer or pursuing a master's degree in water resources engineering. Congratulations Justin!



ASMR Memorial Scholarship M.S.: Amanda Pennino

Amanda is a second year Master's student in Soil Science at the University of Wyoming. She studies reclamation practices in the semi-arid west, looking at how soil responds and develops after drastic alterations. Next year she will begin a PhD program at Virginia Tech and is excited to progress in academia. When not working she enjoys hiking in the prairie with her favorite furry companion, Olive. Congratulations Amanda!



ASMR Memorial Scholarship Ph.D.: Kenton Sena

Kenton earned his B.A. in Biology from Asbury University in May 2012, and entered the M.S. program in the UK Dept. of Forestry in August of that year. His M.S. thesis research focused on improving techniques for reforestation on reclaimed surface mines. After completing his M.S. in 2014, he entered the Integrated Plant and Soil Science program (with Forest Science emphasis) to begin work on his PhD. His dissertation research is focused on characterizing the distribution of *Phytophthora cinnamomi*, a pathogen causing root rot in American chestnut and several other forest tree species native to the eastern US. He plans to pursue a research and teaching career, with a focus on restoration ecology. Congratulations Kenton!

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