



ASRS

AMERICAN SOCIETY OF
RECLAMATION SCIENCES



ASRS/ARRI 2024 Preliminary Conference Program

The 41stth Annual Meeting of the American Society of Reclamation Sciences (ASRS) is June 2-6, 2024, in Knoxville, TN. This conference will focus on the research, technical, and regulatory issues associated with the land and water implications of anthropogenic land disturbances. It will provide a forum for the dissemination of information through presentation of research findings, field tours, and open discussion of public policy relating to the applied science of reclamation, rehabilitation, remediation, and restoration of areas disturbed by mining, oil and gas, conventional and alternative energy production, contaminated sites, agriculture, road construction, large-scale commercial development, and other disturbances to land and water resources.

Schedule at a glance:

Sunday, June 2	Monday, June 3	Tuesday, June 4	Wednesday, June 5	Thursday, June 6
	Haulin'/walking ASRS 6:30-7:15 am	Haulin'/walking ASRS 6:30-7:15 am	Haulin'/walking ASRS 6:30-7:15 am	
	ARRI core/Science team meetings 7:30-9:00 am	Wild Women of Reclamation 7:00 -8:15 am		
	Plenary session 9:00 am-noon Main Ballroom	ARRI Professional tour 8:00 am -4:00 pm Technical sessions 8:30 am - 12:00 pm	Technical sessions 8:30 am - 12:00 pm	Copper Basin Professional Tour 8:00 am - 5:00 pm
	ASRS and ARRI Awards Luncheon and ASRS Business Meeting 12:00 - 2:00 pm Main Ballroom	Lunch buffet 12:00- 1:30 pm Main Ballroom	Student awards luncheon	
Registration and Exhibitor set-up 1:00 pm- 8:00 pm Convention Center Lobby and Ballroom	Technical sessions 2:00 - 5:30 pm ARRI Technical sessions 2:00 - 5:30 pm	Stream Restoration Professional Tour 1:30 - 3:00 pm Technical sessions 1:30- 5:30 pm	Ijams Quarry Professional Tour 2:00 - 5:30 pm NEC meeting 4:15- 5:15 pm	
NEC meeting 4:00-6:00 pm				
Welcome Exhibitor/Sponsor Reception 6:00 - 8:00 pm Convention Center Ballroom	Social Event and Dinner 6:30 - 10:00 pm Museum of Appalachia	Poster session 5:30 - 7:15 pm Main Ballroom Film festival 7:30 - 9:00 pm Lower Level Theatre	Early Career Professional Social 6:00 - 9:00 pm	

Early Registration Sponsors / Exhibitors

More space available!

PLATINUM



Office of Surface Mining Regulation and Enforcement

GOLD



Peabody

SILVER

BRONZE



Abnova University of Tennessee School of Natural Resources

A Special Thanks to Our Conference Planning Committee

CONFERENCE PLANNING COMMITTEE
 Jennifer Franklin, 2024 Conference Chair
 Julie LaBar, ASRS President
 Michele Coleman, ASRS Past President
 Kenton Sena, University of Kentucky
 Gwen Geidel, University of South Carolina
 Will Debord, OSMRE
 Scott Eggerud, OSMRE

SPECIAL EVENT COORDINATORS
 Brenda Schladweiler & Seth Cude- Silent Auction
 Brandon Holzbauer-Schweitzer - Film Festival
 Allen Wellborn - Early Career Professionals
 Michele and Gwen - Wild Women
 Paul Griswold - ASRS Awards
 Scott Eggerud - ARRI Awards
 Michele Coleman & Bill Zeaman - Haulin' ASMR

PROFESSIONAL FIELD TOUR INFORMATION

Tuesday, June 4 – ARRI Reforestation Tour
(Full Day \$30 includes lunch – registration required)*



This tour is open to all – you don't need to be an ARRI member. We will visit reforestation projects on coal mines reclaimed using the Forestry Reclamation Approach. Claiborne County sits on the edge of the Cumberland Plateau in northeastern Tennessee, and has a history of coal mining beginning in the late 1800's. Surface mines follow the contours of the steep terrain, where coal was extracted from seams 13-34 inches thick. One of the last active coal mines in Tennessee, Kopper Glo Fuel, Inc. used the Forestry Reclamation Approach extensively on lands mined over the past 15 years, and was presented with the ARRI Reforestation Award in 2009. They hosted numerous tree planting events, assisted in several UT research projects, and worked closely with the Tennessee Wildlife Resources Agency. In 2019 the property was acquired by the Nature Conservancy as part of the 253,000 acre Cumberland Forest Project across Tennessee, Kentucky and Virginia who manages the property to support both conservation and local economies. We will visit sites reclaimed using the FRA, as well as a forest restoration project an older reclaimed site where soil compaction was relieved by subsoiling prior to planting.

8:00 a.m. – 4:00 p.m.

- 8:00 Board vans and travel to The Nature Conservancy Ataya property about 75 miles north of Knoxville
- 9:30 Arrive at TNC for an overview of the property and tour of areas of various ages reclaimed using the Forestry Reclamation Approach
- 11:00 Arrive at a University of Tennessee research site where native trees were planted on a legacy minesite after subsoiling to relieve compaction
- 1:00 Arrive at Indian Mountain State Park in Jellico, TN for lunch and a discussion of reforestation success
- 2:30 Depart for Knoxville (ARRI members heading North in their own vehicles may depart from here)



*ARRI members attending only on Monday and for the field trip please register at the single day registration rate for Monday, and for the field trip.

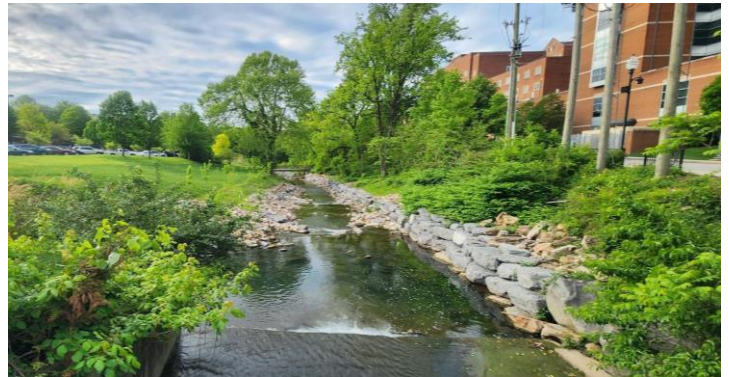
Sponsored by OSMRE



Tuesday, June 4 - Knoxville Stream Restoration (no registration required, just show up)

1:30 - 3:00 p. m. - Professional Tour

Meet in the Convention Center lobby for a 1.5 mile walk along the Second Creek Greenway. The University of Tennessee Stormwater Management team will give an overview of the completed upper section of Second Creek, and plans for restoration of the lower section which will begin in 2024. Students with the Society for Ecological Restoration will give an update on student-led vegetation improvement projects.



Wednesday, June 5 - Quarry Restoration (no advance registration required)

Please stop by the registration desk before lunch on Wednesday to reserve a spot in a van



Knoxville is known as “Marble City” because large quantities of stone were produced by area quarries from the 1880’s to 1950’s and used in the construction of many well-known buildings such as the National Gallery of Art and the Lincoln Memorial in Washington, DC, and Grand Central Station in New York. Called “Tennessee Marble”, the stone often has a pink hue, and is actually a

crystalline limestone that occurs in belts of Ordovician rock and is found only in this region. Mead and Ross marbles quarries in south Knoxville operated until 1978, when the land became part of Ijams Nature Center, a non-profit 501 (c)(3) organization that was established on an adjacent property in 1975. Ijams staff have worked closely with University of Tennessee faculty and students to restore the area to native ecosystems, and assist in the establishment of the rare cedar barrens ecosystem type on parts of the formerly mined area. After tours of the quarry and crag areas, vans will leave at regular intervals from the quarry parking lot so that those who choose to can explore the 12+ miles of trails, swim, or rent a paddleboard or canoe,

2:00 p.m. - 5:00 p.m. - Professional Tour

- 2:00 Board vans for travel to Ijams Nature Center, about 4 miles from downtown Knoxville
- 2:20 Arrive at The Crag to see the results of restoration efforts at the site of a former agricultural lime packing facility.
- 3:00 Board vans to travel to nearby Mead’s Quarry, or walk approximately 1 mile over good, flat trails
- 3:30 Tour Mead’s Quarry recreation area.
- 4:00 -5:30 Depart for Convention Center

Thursday, June 6 - Copper Basin Reclamation (Full Day \$60 includes lunch)



1976

Image: Univ. of TN

In the southeastern corner of the state is Ducktown, TN, a community built around the copper mines and related industries that operated from the 1850's to 1987 on the ancestral lands of the ᏍᏏᏉᏍᏔᏅ (Eastern Cherokee) people. Early attempts at revegetation were largely unsuccessful, and erosion across the North Potato Creek and Davis Hill watersheds impacted downstream water quality. Referred to as the Ducktown Basin, Copper Basin, or Copper Hill, the area was designated an EPA Superfund site, and clean-up activities began in 2001. Work by Glenn Springs Holdings included removal and encapsulation of contaminated materials, diversion of surface

water, and construction of wastewater treatment plants and wetlands to treat surface and groundwater contaminated with zinc, copper, iron, and silt. Revegetation of tailings was found to be limited by phosphorous, and biosolids were shown to promote establishment of vegetation (Cook et al., 2000, <https://doi.org/10.21000/JASMR00010529>). Work to re-establish native vegetation is ongoing.

8:00 a.m. - 5:00 p.m. - Professional Tour

- 8:00 Board bus for Ducktown, TN, about 90 miles south of Knoxville.
- 10:15 Arrive at the Ducktown Mining Museum.
- 11:00 Depart for Burra Burra Creek to see constructed wetlands for the treatment of acidic drainage
- 12:00 Lunch at the London Mills tailings pond, and tour tailings management areas
- 2:30 Depart for Knoxville



SUNDAY, JUNE 2, 2024 AGENDA

All Day

1:00 p.m. – 5:00 p.m.

4:00 p.m. – 8:00 p.m.

4:30 p.m. – 6:00 p.m.

5:00 p.m. – 8:00 p.m.

6:00 p.m. – 8:00 p.m.

ASRS Office – Henley Meeting Room

Exhibitor Setup – Convention Center Ballroom

Registration – Convention Center Lobby

NEC Meeting – Henley Meeting Room

Exhibitor Show – Convention Center Ballroom

Welcome Reception - Convention Center Ballroom

Monday, JUNE 3, 2024 AGENDA

6:30 a.m. - 7:30 a.m.	Haulin' ASRS – Meet at the Knoxville Convention Center main entrance on Henley Street
7:30 a.m. - 5:00 p.m.	Registration – Convention Center Lobby
7:30 a.m. - 8:30 a.m.	Breakfast - Ballroom
7:30 a.m. - 8:15 a.m.	ARRI Core Team Meeting Room C
7:30 a.m. - 8:15 a.m.	ARRI Science Team Meeting Room E
8:15 a.m. - 9:00 a.m.	ARRI Science and Core Team Joint Meeting Room C
9:00 a.m. - 5:30 p.m.	Exhibitor Displays – Ballroom
9:00 a.m. - Noon	Plenary Session – Ballroom
	Jennifer Franklin – Conference Chair – Welcome
	Julie LaBar – ASRS President – President’s Welcome
9:15 a.m. - 10:00 a.m.	Keynote Speaker: Kathryn Newfont, Univ. of KY
10:00 a.m. - 10:30 a.m.	Break
10:30 a.m. - 12:00 noon	Keynote Speaker: Barry Miller, TN Assistant State Geologist
	Keynote Speaker: Bonnie Craighead, TDEC Mining Section
	Keynote Speaker: Daniel Lawrence, TDEC Mining Section
12:00 noon - 2:00 p.m.	ASRS and ARRI AWARDS LUNCHEON / ASRS BUSINESS MEETING
1:00 p.m. - 6:00 p.m.	Silent Auction opens - Meeting room B
2:00 p.m. - 5:30 p.m.	Technical sessions:
	ARRI - Rooms A
	Bat Conservation - Room C
	Water - Room E
5:30 p.m. - 6:00 p.m.	Water TD Meeting Room E
6:30 p.m. - 9:30 p.m.	Social Dinner at the Museum of Appalachia

MONDAY JUNE 3 EVENTS

Social Event and Dinner at the Museum of Appalachia

6:30 p.m. - 9:30 p.m.



Join us for a catered dinner and drinks on the grounds of the Museum of Appalachia. Stroll through the 65 acre grounds and 35 buildings full of pioneer and Native American artifacts in this Smithsonian affiliated museum.

Tuesday, JUNE 4, 2022 AGENDA

6:30 a.m. - 7:30 a.m.	Haulin' ASRS
7:00 a.m. - 8:15 a.m.	Wild Women of Reclamation - Room A
7:30 a.m. - 8:30 a.m.	Breakfast - Ballroom
7:30 a.m. - 5:00 p.m.	Registration - Convention Center Lobby
7:45 a.m. - 8:15 a.m.	Reclamation Sciences Editorial Board Meeting, Room E
8:00 a.m. - 7:00 p.m.	Exhibitors - Ballroom
8:00 a.m. - 4:00 p.m.	ARRI Reforestation Professional Tour
8:15 a.m. - 6:00 p.m.	Silent Auction - Room B
8:30 a.m. - 10:00 a.m.	Technical Presentations: Vegetation - Room A Water - Room C Soil - Room E
10:00 a.m. - 10:30 a.m.	Break - Ballroom
10:30 a.m. - 12:00 p.m.	Technical Presentations: Vegetation - Room A Mercury - Room C Soil - Room E
12:00 p.m. - 1:30 p.m.	Buffet Lunch - Ballroom Lunch Speaker: Matt Drury
1:30 p.m. - 3:00 p.m.	Stream Restoration Professional Tour
3:00 p.m. - 3:30 p.m.	Break - Ballroom
3:30 p.m. - 5:30 p.m.	Technical Presentations: Vegetation - Room A AML Reclamation - Room C Soil - Room E
5:30 p.m. - 7:15 p.m.	Poster Presentations - Ballroom
7:30 p.m. - 9:00 p.m.	Film Festival - Second Floor Theater

TUESDAY JUNE 4 EVENTS

Wild Women of Reclamation

7:00 a.m.- 8:15 a.m. - Room A

Every woman is welcome. Previous topics - choosing your own path, mentoring, starting a business, and juggling a career with family and community obligations. Coffee, tea, and pastries will be provided.

Poster Session Networking Event

5:30 p.m.- 7:15 p.m. - Ballroom

Poster presentations will be on display with authors after the technical sessions. Food and cash bar.

Reclamation Film Festival

7:30 p.m. - 9:00 p.m. - Theater

Join us for the Third Annual Reclamation Film Festival. We will bring reclamation-related topics to you via short (~2-10 minute) films highlighting exciting and intriguing reclamation projects. Awards will be presented to the best in show in Pro and Amateur/Student Categories. Classic movie snacks provided.

Wednesday, JUNE 5, 2022 AGENDA

6:30 a.m. - 7:30 a.m.	Haulin' ASRS
7:30 a.m. - 8:30 a.m.	Breakfast - Ballroom
7:30 a.m. - 5:00 p.m.	Registration - Convention Center Lobby
8:00 a.m. - 7:00 p.m.	Exhibitors - Ballroom
8:00 a.m. - 11:00 a.m.	Silent Auction Last Day - Room B - Winners announced at lunch
8:30 a.m. - 10:00 a.m.	Technical Presentations: Technology - Room A Wildlife - Room C Engineering and Construction - Room E
10:00 a.m. - 10:30 a.m.	Break - Ballroom
10:30 a.m. - 12:00 p.m.	Technical Presentations: Technology - Room A Wildlife - Room C Mine Closure - Room E
12:00 p.m. - 1:30 p.m.	Buffet Lunch - Student Awards/Silent Auction - Ballroom
2:00 p.m. - 5:00 p.m.	Quarry Restoration Professional Tour
4:15 p.m. - 5:15 p.m.	NEC Meeting - Henley Meeting Room
6:00 p.m. - 9:00 p.m.	Early Career Professional Event

WEDNESDAY JUNE 5 EVENTS

Early Career Professional Event

6:00 p.m. - 9:00 p.m.

Join us for an evening of networking!