

Field Trips		Day 2 (August 3)		Weather Permitting		
Topic	Trip Leader	Vehicle Required	Staging Area	Time	Group Limit	Provided
Paleontology - Understanding the Significance of Rainbows & Unicorns	Dr. Alan Titus	4 Wheel Drive (WD) Hi Clearance (HC)	GSENM Cannonville Visitor Center, 10 Center Street Cannonville, UT	10:00 am - 2:30 pm	25	Lunch
Geology - Take a Peek at Slot Canyons: Spooky, Peekaboo & Brimstone	Dr. David Loope	All-Wheel-Drive (AWD) HC recom.; 4WD is best	Escalante Interagency Visitor Center 755 West Main Escalante, UT	9:00- am - 2:30 pm	12	Lunch
Microbiology - Microbial Wildlife: Nature's Smallest, Unpaid Engineers	Dr. Harry Kurtz	AWD Hi Clearance recom.; 4WD is best	Escalante Interagency Visitor Center 755 West Main Escalante, UT	8:30 am - 12:00 pm	12	Snacks
Soils - From Jurassic Park to the Grand Staircase: Biological Crusts, in the Past, Present & Future	Mary O'Brien	4WD Hi Clearance	GSENM Cannonville Visitor Center, 10 Center Street Cannonville, UT	9:00 am - 4:00 pm	25	Lunch
Geology - The Cretaceous Tropic Shale Formation: Witness to Mass Extinction	Dr. Fred Zelt	4WD Hi Clearance	GSENM Big Water Visitor Center 100 Revolution Way, Big Water, UT	8:30 am - 6:00 pm	12	Lunch
Botany - Escalante River Restoration	Dr. Mike Scott, & Melissa Masbruch	2WD	Escalante Interagency Visitor Center 755 West Main Escalante, UT	8:30 am - 12:30 pm	25	Lunch
Archaeology - Paleoecology, Ethnobotany & Life as the Anasazi Knew It	Robert D'Andrea	4WD Hi Clearance	GSENM Kanab Headquarters Building 669 South Highway 89, Kanab, UT	8:00 am - 4:00 pm	12	Lunch
Biology - 650 Species of Gentle, Native Bees: GSENM is Beeyond Beelief	Olivia Messinger Carrill	2-Wheel Drive	GSENM Big Water Visitor Center 100 Revolution Way, Big Water, UT	9:30 - 11:30 am	20	Snacks
Evening Presentation - Take a Peek at Slot Canyons: Spooky, Peekaboo and Brimstone	Dr. David Loope	N/A	Escalante Interagency Visitor Center 755 West Main Escalante, UT	7:00 - 8:30 pm	N/A	N/A
Evening Presentation - The Darkest Skies of Them All: Grand Staircase-Escalante National Monument is the Universe's Showcase	Shannon Holt & Craig Tanner	2-Wheel Drive	Escalante Interagency Visitor Center 755 West Main Escalante, UT	7:00 - 8:30 pm	N/A	N/A

Grand Staircase-Escalante National Monument-related materials (published papers, theses, and oral histories) are digitally archived in Southern Utah University's Gerald R. Sherratt Library at <http://archive.li.suu.edu/archive/search?s=15716725178t=d>. Please contact GSENM for further details.

**Information: 435-644-1200**



**NATIONAL CONSERVATION LANDS**

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**GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT**

# 3rd Science Symposium Session Schedule

## August 2 - August 4

GRAND STAIRCASE ESCALANTE  
National Monument

20  
YEARS

1996 - 2016

*Learning from the Land*

<b>Cultural &amp; Earth Sciences Forum – Kanab, UT</b>				
<b>Day 1 (August 2)</b>				
<b>Time Slot</b>	<b>Topic</b>	<b>BLM Facilitator</b>	<b>Presenter</b>	<b>Subject</b>
8 am - 8:10	Introduction	Cindy Staszak	Cindy Staszak	Welcome, Housekeeping, Speaker Introductions
8:10-8:30	Keynote Speech		Carolyn Shelton	Learning from the Land GSENM Science 2006-2016
8:30 – 8:40	Paleontology Introduction	Dr. Alan Titus	Dr. Alan Titus	Introduction of BLM Regional Paleontologist Dr. Greg McDonald & Overview of GSENM Paleontology Program
8:40-10:25	Paleontology	Dr. Alan Titus	Dr. Barry Albright,	15 Yrs of Paleontology in GSENM: Old Discoveries, New Discoveries & What We've Learned
			Dr. Joshua Lively	Fossil Turtles of the Kaiparowits Formation
			Dr. Joe Sertich	Denver Museum of Natural Science's (DMNS) Laramidia Project: New Discoveries from the Dinosaur Ecosystems of GSENM
10:35-10:50				15 minute break
10:55-12:30	Geology	Dr. Alan Titus	Dr. Jeff Eaton	Overview of GSENM Geology
			David Wheatley	Clastic Pipes & soft sediment deformation of the Carmel Formation
			Dr. Edward Simpson	Cretaceous Earthquakes – Shaky Ground in GSENM
			Dr. Fred Zelt	Mass Extinction, Climate Changes & Huge Volcanic Eruptions: What the Cretaceous Tropic Shale Tells Us About When Seawater Flooded GSENM
12:35–1:15 pm				LUNCH PROVIDED
1:20-3:00	Archaeology	Matt Zweifel	Jerry Spangler	Archaeological perspective on GSENM
			Mike Terlep	Landscape Archaeology's Local Phenomenon: Cup & Channel Petroglyphs
			Rob D'Andrea	Paleoecology of GSENM: Human Landscape Impacts & Management Implications on the Colorado Plateau
			Brian Storm	The Gnarly World of Proto-Utahns
			David Sabata	Ethnobotany at Old Corral
			Dr. Pavlik/ Dr.Louderback	Archaeology & Conservation of the Four Corners Potato
3:05-3:20				15 minute break
3:25-4:25	Human History	Matt Zweifel	Paula Mitchell,	GSENM Digital Research Library at Southern Utah University
			Marsha Holland	Oral Histories (Residents & Designation)
4:30-5:00	Wrap-up	Carolyn Shelton		Final Questions & Answer Session & Thank You's
7:00 -8:30 p	Evening Presentation at GSENM Kanab Visitor Center		Dr. Joseph Sertich DMNS	A Tale of Two Reptiles: The Lost Landmass of Laramidia & the Origins of the Modern World

**Day 2 (August 3) Field Trips listed on Back Cover**

<b>Biological &amp; Social Sciences Forum – Escalante, UT</b>				
<b>Day 3 (August 4)</b>				
<b>Time Slot</b>	<b>Topic</b>	<b>BLM Facilitator</b>	<b>Presenter</b>	<b>Subject</b>
7:00-8:00 am	Citizen Science	Terry Tolbert	Terry Tolbert	Hands-on: Hummingbird Research
8:00-8:10	Introduction	Cindy Staszak	Cindy Staszak	Welcome, Housekeeping, Speaker Introductions
8:10-9:55	Recreation/ Social Science	Lora Anderson-Gale & Allysia Angus	Lora Anderson-Gale	Recreation 10 year Overview
			Dr. Britt Mace, Southern Utah University	Soundscapes of Grand Staircase-Escalante National Monument
			Dr. Tim Casey, Mesa State University	A Monumental Sense of Place: Connections to GSENM
10:00-10:15				15 minute break
10:20-11:55	Botany	Amber Hughes & Raymond Brinkerhoff	Amber Hughes	GSENM Botany Perspective
			Raymond Brinkerhoff	Old Corral Restoration Project
			Adrienne Pilmanis	Seeds of Success
			Dr. Mike Scott	Role of Russian-olive Removal in Longterm Channel Changes Along the Escalante River
			Rob D'Andrea	GSENM Community Phases & Annual Biomass
12:00–1:00 pm				LUNCH PROVIDED
1:00-2:30	Wildlife/Biology	Terry Tolbert & Cameron McQuivey	Kevin Miller	GSENM Wildlife/Biology Perspective
			Cameron McQuivey	Wrap Up of Bighorn, Mt. Lion, & Pronghorn Studies
			Terry Tolbert	Wrap Up of Hummingbird & Bat Studies
			Michael Orr, USDA-ARS Bee Lab	Between a Rock & a Hard Place To Live – A New Bee Nesting in Sandstone
			Dr. Paul Opler	Survey of Lepidoptera in Grand Staircase-Escalante: Status & Opportunities
			Dr. Harry Kurtz	Microbial Communities of the Jurassic Navajo Sandstone & Their Role in Shaping the Landscape
2:35- 2:50				15 minute break
2:55-4:25	Soils & Hydrology	Ken Bradshaw	Kevin Miller	GSENM Ecological Perspectives
			Amy Dickey, Utah Division of Water Quality	Water Quality
			Mary O'Brien & Ellen Bishop	Early & the Late: 2014-2015 Biocrust Study in GSENM
			Dr. Mike Duniway	New Concepts & Tools for Managing Colorado Plateau Landscapes: Soils, Ecological Potential & Ecological Dynamics
4:30-5:00	Wrap-up	Carolyn Shelton		Final Questions & Answer Session & Thank You's
7:00 -8:30 pm	Recreation Focus Group at EIC	Allysia Angus	Dr. Tim Casey	Monumental Sense of Place: Grand Staircase Region Recreation Experience Baseline Study Focus Group
7:00 -8:30 pm	Evening Presentation at EIC	Kevin Miller	Dr. Mikel Stevens	Are There Really More Than 70 Species of Penstemon Flowers in Utah?

**Day 2 (August 3) Field Trips listed on Back Cover**