

SATURDAY, MARCH 11, 2017 Hosted by Stockton University

A day long event featuring educational presentations that explore the unique history, ecology, and culture of the Pinelands.



Photo courtesy of Joel Mott.

5 Professional Development Credits Available for Educators

QUESTIONS REGARDING REGISTRATION?

Call 609.652.4227

QUESTIONS REGARDING CONTENT?

Call NJ Pinelands Commission at 609.894.7300, ext. 125

To register online:

stockton.edu/cs

To register by mail:
SEND THIS FORM WITH PAYMENT TO:
Stockton University | Continuing Studies
101 Vera King Farris Drive
Galloway, NJ 08205

IMPORTANT INFORMATION

YOUR ITINERARY WILL BE
EMAILED TO THE ADDRESS PROVIDED
Workshops will be assigned on a first-come,
first-served basis.

Cancellation Policy: NO REFUNDS

Bring your own lunch or purchase Pinelands inspired food at our food court.

Dunkin Donuts will be open in the morning.

FINAL REGISTRATION DEADLINE March 3, 2017

REGISTRATION STARTS AT 7:45 A.M.							
9:00 - 10:15	10:30 - 11:45		1:00 - 2:15	2:30 - 3:45			
The Coyote in New Jersey	Jeremiah Leeds		The Jersey Devil	Jeremiah Leeds			
Raptors and Reptiles	Raptors and Reptiles		Wilderness Survival Skills				
Ecosystem Services	Ecosystem Services		Plants and Pollinators	Plants and Pollinators			
Threatened & Endangered Snakes	Lenape and the Jersey Shore		Lenape and the Jersey Shore	Sights and Sounds			
Streaming the Rivers - Southern	Streaming the Rivers - Northern	11:4	Wild Turkey				
Lure of the Pine Barrens	Pine Barrens Time Machine	11:45 -12:45 •	Pine Barrens Time Machine	Lure of the Pine Barrens			
Pinelands Forest	Pinelands Forest		Honey Bee Rescue	Honey Bee Rescue			
Pinelands Frogs and Toads	Moths of New Jersey	Lunch	The Fungi Kingdom				
Batsto Beyond The Years	Ghost Towns		Batsto Beyond The Years	Ghost Towns			
Hey, What's That Bird?	Eastern Fence Lizards		How Healthy Are Our Streams?	Hey, What's That Bird?			
A Pine Barrens Newcomer	Here's Double Trouble!		Jersey Soil	Pinelands Rivers			
Station 119	Pine Barrens Byway		A Trip Down the Maurice River	Is Anyone Listening?			
			Music and Dulcimer Performance	Tunes & Tales			
Mullica River Tour			Mullica F	Mullica River Tour cological Forest Management			
Trends in Biodiversity			Ecological Fore				
Birding the Pinelands							

CLIP & RETURN CLIP & RETURN

2017 PINELANDS SHORT COURSE REGISTRATION FORM

SATURDAY, MARCH 11 • STOCKTON UNIVERSITY

Register ONE PERSON per form, copy the form for additional registrants.

IAME		RTH				
STREET ADDRESS						
PHONE	E-MAIL ADDRESS					
	Enclose check, money o	order, or purchase order payab	le to Stockton University			
	9:00 a.m. to 10:15 a.m.	10:30 a.m. to 11:45 a.m.	1:00 p.m. to 2:15 p.m.	2:30 p.m. to 3:45 p.m.		
FIRST CHOICE						
SECOND CHOICE						
1 -	the same courses as someone I do our best to accommodate	vour request	EGISTRATION FEE: CHE DAdult \$40	CK ONE		

□ Senior (65+) \$35 □ Student \$35

OVERVIEW/ECOSYSTEM

LURE OF THE PINE BARRENS

Ted Gordon, Pine Barrens Botanist, Historian, Guide & Photographer

Take a pictorial journey through the New Jersey Pine Barrens in its seasonal aspects. Gordon will focus on the unusual as well as common flora and fauna of diverse habitats, from quaking bogs and cedar swamps to pygmy pines. Further emphasis on the people, traditions, historic sites, and "lost" and "forgotten" towns provides a balanced overview of this enigmatic region.

NEW! A PINE BARRENS NEWCOMER

Andrew Anderson, State Park Service

This virtual field trip is a visual introduction to the Pinelands, touching on the region's unique ecology, culture, history and folklore as seen by someone who grew up just outside the Pinelands National Reserve. Through slides and anecdotes, you will visit some of the most popular ghost towns and other unusual sites of South Jersey.

SIGHTS AND SOUNDS OF THE PINELANDS

Joel M. Mott, Public Program Specialist, NJ

Pinelands Commission

This lively presentation includes sights and sounds while taking the audience on an insightful virtual "walk" in the woods while familiarizing them with the Pinelands. The talk will focus on the importance of water to the area while highlighting the cultural, historic, and natural resources. The goal of this program is to raise awareness, appreciation and further stewardship of the Pinelands by revealing this unique but fragile treasure.

WILDERNESS SURVIVAL SKILLS

Andrew Hov, Program Manager for Children of the Earth Foundation

If you suddenly found yourself in a remote wilderness, would you know how to keep yourself alive? Basic wilderness survival skills will be discussed, illustrated and demonstrated. The information included in this course is applicable to many bioregions, including the Pine Barrens, where Tom Brown Jr. lived and practiced these skills. There will be a fire-making demonstration using bow drills, weather permitting.

IS ANYONE LISTING? WHY PEOPLE MAY NOT HEAR YOU WHEN YOU TALK ABOUT CLIMATE CHANGE

Sarah Watson, Risk Communication Consultant

Worried about climate change and wonder why others aren't listening to scientists? We all perceive information about climate change and other risks differently. This interactive course discusses the psychology behind our personality traits that affect how we recognize climate change risks, and the two biggest errors we make when talking about climate change.

WILDLIFE

NEW! THE COYOTE IN NEW JERSEY

Andrew Burnett, Principal Biologist, NJ Division of Fish & Wildlife

This informative presentation will delve into the history and management of coyotes in New Jersey, including perceived impacts on other wildlife species.

THE WILD TURKEY & ITS REINTRODUCTION

Lou Gambale, National Wild Turkey Foundation

Gambale will focus on the wild turkey's anatomy, desired habitat, predation and history. He will highlight the successful conservation story of the bird's reintroduction in New Jersey, facilitated by the NJDEP's Division of Natural Resources, the National Wild Turkey Foundation, and volunteers.

NEW! HEY, WHAT'S THAT BIRD?

Susan Puder, Author of "New Jersey Birds and Beyond" and President of the Southern Ocean Birding Group

Puder will present a bird identification workshop. Learn techniques on how to identify birds using size, shape, colors, patterns and behavior. Information is included about field guides, habitat, body language and other helpful tools you can use to identify more than 440 birds that can be seen in New Jersey.

NEW! RAPTORS AND REPTILES OF PINES SAMPLER

Denise Peters, Director of Education, and Erin Kiefer, Senior Educator at Woodford Cedar Run Wildlife Refuge Learn more about some of the feathered and scaly creatures that call the Pinelands home, while seeing several up-close and personal.

THREATENED & ENDANGERED SNAKES OF THE NEW JERSEY PINE BARRENS

Matthew P. McCort, Herpetologist/Wildlife Ecologist

Discuss the life history and conservation of northern pine snakes, corn snakes, and timber rattlesnakes in the New Jersey Pine Barrens. Several species of live snakes will be featured and handled.

PINELANDS FROGS AND TOADS

John Bunnell, Chief Scientist, New Jersey Pinelands Commission

Bunnell will cover the distribution, reproduction, habitat preferences, and vocalizations for the frog and toad species found in the largest stream system in the Pinelands: The Mullica River Basin.

NEW! GROWTH AND REPRODUCTION OF <u>EASTERN FENCE</u> <u>LIZARDS:</u> MITES MIGHT MATTER?

Henry John-Alder, Ph.D. Professor and Department Chair, Dept. of Ecology, Evolution, and Natural Resources, Rutgers University

John-Alder will highlight the natural history of eastern fence lizards in the New Jersey Pinelands, focusing on growth, reproduction, and interactions between lizards and chiqger mites.

NEW! AN OVERVIEW OF THE <u>ECOSYSTEM SERVICES</u> THAT INSECTS PROVIDE, <u>WITH SPECIAL REFERENCE TO SPECIES</u> OF THE NJ PINELANDS

Dr. Dan Duran, Associate Teaching Professor at Drexel University

Simply put: all life on earth depends on insects, for more reasons than most people realize. Duran will explore some of the immeasurably important ways that insects keep ecosystems functioning. Nutrient recycling, pollination services, and trophic interactions will be reviewed. Lastly, there will be a discussion of the ways in which we can conserve our much needed insect diversity.

THE SECRET WORLD OF PLANTS AND POLLINATORS

Jennifer Bulava, Park Naturalist

Learn the incredible ways in which plants communicate with animals. Flowers are not pretty colors and pleasant smells for us - it's all about the pollinators. Discover the amazing strategies of Pinelands plants, the colors that pollinators see, and ways in which both plants and animals can help or deceive each other. Take a much closer look at flowers and open up an entire hidden world that is more complex and fascinating than one ever imagined.

THE SILENT MAJORITY – <u>Moths of New Jersey</u>

Blaine Rothauser

With 110,000 species of moths worldwide (+/- 2,000 in the Garden State) one can be kept pretty entertained during sleepless nights attracting, keying and trying to get a peek into their secret lives. Rothauser will discuss moth biology and share images that were taken in a multitude of varied landscapes in New Jersey, including the Franklin Parker Preserve.

NEW! <u>Honey bee rescue</u>

Gary G. Schempp, Owner of Busy Bee NJ LLC Schempp, who is a licensed professional apiarist, will discuss the process to remove and relocate honey bees.

NEW! <u>PINELANDS FOREST</u> MEASUREMENTS AND MANAGEMENT

Bernard Isaacson, Forester, NJDEP, State Forestry Services
Learn the what, why, and how our forests are measured,
monitored, and managed. Handle the tools foresters and
scientists use to measure the woods, and discuss from a
forestry perspective the factors that govern forest management.
Discuss ideas for the future forest, and critically examine
different options for getting there. At the end of the class,
you will have built a foundation for interpreting forest
management decisions.

NEW! <u>JERSEY SOIL</u> – NURTURING THE FOUNDATION OF YOUR NATIVE PLANT GARDEN_

Becky Laboy, Education Outreach Specialist, Ocean County Soil Conservation District

Soil is at the root of all life on earth, including your garden! Understanding the science behind your soil can improve your gardening skills and provide you with the knowledge to select appropriate plants for your native New Jersey garden.

NEW! <u>The fungi kingdom</u> and its importance to the pinelands

Dorothy Smullen, Member of the New Jersey

Mycological Association

Smullen will introduce attendees to the Fungi Kingdom, then discuss the mycorrhizal connections that are important to the pine and oak forests of the Pine Barrens. She will also spotlight common fungi found at the Franklin Parker Preserve located near Chatsworth NJ.

WETLANDS

NEW! PINELANDS RIVERS AND THEIR LANDSCAPES: AN ENVIRONMENTAL BIOGRAPHY

Dr. Claude Epstein, Professor Emeritus, Stockton University
The rivers of the Pinelands look the way they do because of their
geologic history and land use history. This history starts with
the break-up of Pangaea and the creation of the Atlantic Ocean
approximately 150 million years ago. Next the development
of the coastal plain, over and through which these rivers flow,
provided the next chapter. Its natural landscape followed a
pattern typical of other rivers on other coastal plains. European
settlers, from the 17th century on, altered the landscape in
different ways in different parts of these rivers. It is only in
recent decades that Pine Barrens streams have been recognized
for reasons other than commerce.

NEW! STREAMING THE RIVERS AND CREEKS IN THE BARNEGAT BAY WATERSHED

Terry O'Leary, Resource Interpretive Specialist

Take a virtual field trip to explore the principal streams that flow into Barnegat Bay. Learn about the natural and cultural resources of each stream from its headwaters to its confluence with the bay. GPS waypoint locations and descriptions of access points, scenic vistas, and human impacts will be included. The Southern streams from Tuckerton Creek to Forked River and Stout's Creek will be covered in the first session, followed by the Northern streams in the second session from Cedar Creek to Metedeconk River.

HOW HEALTHY ARE OUR STREAMS? USING BENTHIC MACROINVERTEBRATES AS WATER QUALITY INDICATORS

Ashley Aversa, Aysia Gandy, Jim Hansen, and Amy Loesser, AmeriCorps New Jersey Watershed Ambassadors Program

Learn how freshwater quality is assessed using macroinvertebrates such as dragonflies, stoneflies, leeches and snails. The ambassadors will also provide details into how that information is used to address pollution and quality issues within water bodies.

NEW! <u>A TRIP DOWN THE MAURICE RIVER</u> Michael Hogan

Take a photographic trip down the 50 mile Maurice River from its headwaters in Washington Township, through Gloucester and Cumberland counties, to the Delaware Bay. Learn about the river's history, ecology, parks and locations to canoe, hike, bird and photograph.

HISTORY/CULTURE

NEW! LENAPE AND THE JERSEY SHORE

Diana Burich, K-12 Program Coordinator, New Jersey Sea Grant Consortium

Prior to European explorers settling in North America, native peoples lived in what is now New Jersey, Eastern Pennsylvania, Southeastern New York State, Northern Delaware and a small part of Connecticut. The settlers called this tribe the Delaware Indians, and some references still refer to the Lenape by that name. Delve into the history of these Native Americans and how they utilized NJ's coastal environment in everyday life. Learn about the separate roles of men and women, how they fished and collected other foods, and how children developed necessary skills through play that would help them as adults in their communities. All authentic artifacts and activities make this program one that you wouldn't want to miss!

HOW TO REGISTER ONLINE:

Visit stockton.edu/cs and click on 28th Annual Pinelands Short Course. Click the register button and follow the steps below:

- 1. In the Search box choose Continuing Ed Jul'16-Jun'17 from the drop down box.
- 2. Leave the second box empty, click on the magnifying glass.
- Hover the cursor over the course of your choice and click on the plus sign that will appear.

You MUST choose 28th Annual Pinelands Short Course first

- After making all of your selections, click on the register button found on the lower right hand side of the screen.
- 5. Create a new account or sign in with your Stockton "Z" number and pin number.
- 6. Add coupon code PINELANDS, if applicable, on the lower left-hand side of the screen.
- 7. Click Proceed to Payment on the lower right-hand side of the screen.
- 8. Click Proceed to Payment on the lower right-hand side, again.
- 9. Click Submit payment on the lower right-hand side.
- 10. Follow prompts to make payment by credit card or check.

*If you have already registered within the Stockton community for any Stockton event, start by entering your "Z" number and pin on the right side of the screen. Then follow the steps above, omitting step 5 which will not be an option.

Directions to Stockton University Galloway, New Jersey

From the North

Travel south on the Garden State Parkway to Exit 44. Take Exit 44. At the stop sign at the end of the ramp, turn right onto S. Pomona Road (County Road 575). Travel $\frac{1}{2}$ mile. At the entrance sign for Stockton University, turn left onto Vera King Farris Drive. For campus parking, continue $\frac{1}{2}$ mile on Vera King Farris Drive, parking is available on the right.

From the West

Travel east on the Atlantic City Expressway to Exit 12. Take Exit 12. At the stop sign at the end of the ramp, turn left onto Wrangleboro Road (County Road 575). Proceed straight through the traffic lights at Tilton Road (County Road 563) and White Horse Pike (Route 30). At the next traffic light, W. Jimmie Leeds Road, turn right. Travel 1 mile on W. Jimmie Leeds Road to the entrance sign for Stockton University on the left, turn left onto Vera King Farris Drive. For campus parking, continue about 1 ½ miles on Vera King Farris Drive, parking is available on the left.

From the South

Travel north on the Garden State Parkway and take Exit 41. At the light at the end of the Exit 41 ramp, turn left onto W. Jimmie Leeds Road. Travel 1 mile to the entrance sign for Stockton University, turn right onto Vera King Farris Drive. For campus parking, continue 1½ miles; parking is available on the left

THE JERSEY DEVIL AND THE ORIGINS OF NEW JERSEY Brian Regal

The Jersey Devil is more than just the legend of a dragon wandering the Pine Barrens: it is part of the very fabric of the origins of New Jersey and America itself. This talk will cover the real story of the Garden State's favorite monster and its birth in the milieu of the bare-knuckled political and religious drama of colonial New Jersey.

NEW! THE TYPICAL "PINEY" OF THE LATE 1700'S AND EARLY 1800'S: 1ST LT. JEREMIAH LEEDS

Rev. Norman Goos

Rev. Goos will tell the life story of a key figure from a colonial family. At the time of his death in 1838, Jeremiah owned almost all of what is known today as Atlantic City plus other large mainland tracks that make up much of present day Atlantic County. Besides farming, he was also a successful land speculator and climbed to the rank of 1st Lt. during the Revolutionary War. All of the research for this program is from primary sources that include archived documents such as wills, pensions, court and other legal records.

NEW! A TOUR OF THE PINE BARRENS BYWAY Michael Hogan

Learn about the U.S. Department of Transportation's Scenic Byway program, New Jersey Scenic Byways and the Pine Barrens Byway. The 130-mile Pine Barrens Byway extends from Batsto and Tuckerton in the north to Dennisville and Port Elizabeth in the south, passing through five counties and 16 municipalities. Along the route are two National Wildlife Refuges, 10 State Wildlife Management Areas, three State Forests, five County parks, several major rivers and numerous smaller streams, as well as a variety of historic and scenic sites.

BATSTO BEYOND THE YEARS

Wes Hughes, Batsto Citizens Committee

Batsto Village's rich history dates back to 1766. What began as an industrial site important to the American Revolution became a gentleman's farm for a prosperous and innovative Quaker from Philadelphia and was the start of Wharton State Forest. Much has been written about Batsto over the years. Come and learn a few things that you may not have known about this important part of Southern New Jersey and American history.

GHOST TOWNS OF THE NJ PINE BARRENS

Barbara Solem, Author

Some say the Pine Barrens contain more ghost towns than the American west. The Pinelands of today is a very different place than the busy industrial center it was several hundred years ago. Solem will discuss the towns that rose up around the iron furnaces, glass factories, paper mills, cranberry farms and brick-making establishments of the 18th, 19th, and early 20th centuries.

NEW! PINE BARRENS TIME MACHINE

John Volpa, Director of Education for Pinelands Adventures
Life is about change. History is the story of those changes. Join
a New Jersey journey back in time as we examine local history's
meaning and relevance to our present lives. Topics examined
will include geologic time, people and industries of the Pine
Barrens and social evolution.

NEW! HERE'S DOUBLE TROUBLE!

Andrew Anderson, State Park Service

When muskrats twice damaged the mill pond dam, Thomas Potter named this small sawmill hamlet Double Trouble. A second industry emerged with the planting of cranberry vines. Through dramatic pictures, a rarely seen film and first-hand accounts, you will revisit the heyday of this remarkable Pine Barrens village, now a state historic site.

<u>STATION 119:</u> FROM LIFESAVING TO MARINE RESEARCH Kenneth W. Able

Dr. Able will discuss his book "Station 119," which highlights the history the former Coast Guard Station 119 located near Little Egg Inlet and its current use as a marine research facility for Rutgers University.

FIELD TRIPS/OUTSIDE PROGRAMS

NEW! TRENDS IN BIODIVERSITY IN THE NJ PINE BARRENS Jamie Cromartie, Associate Professor of Entomology, Stockton University

Examine the nature of biodiversity hotspots, the particular features of the Coastal Plain that have produced its diverse flora and fauna and the historic and current changes that affect it. The course includes a field walk to examine some efforts to manage diversity on the Stockton campus.

ECOLOGICAL FOREST MANAGEMENT IN THE PINELANDS: THE STOCKTON FOREST MANAGEMENT PLAN

George Zimmermann, Professor Environmental Studies Program, Stockton University

Stockton University obtained approval for a 10-year comprehensive forest management plan for 1,500 forested acres of its campus. Participants will first see a PowerPoint lecture that will give an overview of the plan, then will tour some of the first silvicultural treatments and ecological experiments started on the Stockton University campus forests. Be prepared for a walk!

NEW! BUS TOUR: ECOLOGY OF THE MULLICA RIVER WATERSHED

Ryan Rebozo, Ph.D. Director of Conservation Science for the Pinelands Preservation Alliance

This two hour and thirty-minute bus tour will take you off campus and focus on the ecology of the Mullica River Watershed, while making stops at various habitat types throughout the watershed. Participants will be bused to each location and are encouraged to dress appropriately to be outdoors and do light walking at each stop.

BIRDING THE PINELANDS OF STOCKTON UNIVERSITY John D. Rokita Principle Lab Technician Animal Lab & Collection Room Facilities, Stockton University

Rokita will provide an in-depth look into the avian species that inhabit the university campus. Participants will spend a portion of class time examining taxidermy live mounts and study skins from the universities ornithology collection. The remainder of the class will be spent outdoors identifying as many bird species as possible. Please bring a sense of curiosity, proper attire (warm clothing), sturdy comfortable shoes, (possibly rain gear), binoculars and a field guide if you have them.

MUSIC

OLD TIME <u>MUSIC AND DULCIMER PERFORMANCE</u> Greater Pinelands Dulcimer Society

Members of the Society will play several old time tunes while sharing the origins of the songs. They will play mountain and hammered dulcimers and will discuss the history of both instruments.

TUNES & TALES

Valerie Vaughn, New Jersey's Troubadour

A multi-talented musician and educator from Tuckerton, NJ, Vaughn specializes in writing acoustic tunes that cover the rich folklore and the history of the people and places of South Jersey.