TEACHING FLORIDA'S CLIMATES

In partnership with the Florida Humanities Council

2019 Summer Educator Workshop Agenda

Lead Instructor: Steven Noll, PhD, Master Lecturer, Department of History, University of Florida (UF)

Master Teachers:

- Christine Morrow, Department of Science, Bishop Snyder High School, Duval County
- Gina Simonton, Department of English, Gainesville High School, Alachua County

Lead Coordinator: Sophia K. Acord, PhD, Associate Director, UF Center for the Humanities and the Public Sphere

Assistant Coordinator: Danielle Jordan, Graduate Student, UF Department of English

Program Description:

People in Florida shape their environment, but they are also sensitive to environmental changes. *Humanities and the Sunshine State: Teaching Florida's Climates* is a unique, interdisciplinary residential educator workshop that tackles the complex issue of climate change optimistically by approaching it from multiple disciplines, and by situating contemporary changes in a historical perspective of climatic variations spanning millennia of geological years and thousands of years of human inhabitation of the peninsula. By showing how humans have experienced and responded to environmental changes over this time period, the workshop will emphasize strategies for teaching adaptation and mitigation as a necessary way of life as Floridians. In this way, the workshop connects cutting-edge research in the humanities and ecological sciences to Florida environmental policy issues.

Workshop Texts (available in a pre-circulated PDF):

Anya Kamenetz (2019) "Most Teachers Don't Teach Climate Change; 4 In 5 Parents Wish They Did" NPR (April 22) Eleanor Tremeer (2018) Why We Need Utopian Fiction Now More Than Ever, *Gizmodo.com* (Nov 7) Christopher H. Bachelder (2015). Eighth Wonder, *Loosed Upon the Word: The Saga Anthology of Climate Fiction*. Nelson Blake (1980) "Water for the Future"

Zora Neale Hurston (2006) Their Eyes Were Watching God (excerpts)

Rick M. Spechler & Donna M. Schiffer (1995) Springs of Florida. US Geological Survey, No. 151-95

Timothy A. Martin, et al (2017) Managing Florida's Plantation Forests in a Changing Climate.

Francis E. "Jack" Putz (2012) "Coastal Forests Retreat As Sea Levels Rise"

Ken Sassaman (2016) "What does Shell Mound Archaeological Site have to do with Water & Climate Change?" Cynthia Barnett (2011, February) "A Water Ethic for Florida"

Jeff Goodell (2017) Chapter 12: "The Long Goodbye"

The workshop organizers would like to thank the following organizations for their generous support:









Hyatt & Cici Brown Endowment for Florida Archaeology

MONDAY, JUNE 24 – ORIENTATION AND CLIMATE SYSTEMS

THE BIG QUESTIONS:

How can we engage in hopeful discussion about climate change?

How do we talk about climate variation with students and others holding diverse beliefs and values?

READINGS FOR THE DAY:

Eleanor Tremeer (2018) Why We Need Utopian Fiction Now More Than Ever, Gizmodo.com (Nov 7) Christopher H. Bachelder (2015). Eighth Wonder, Loosed Upon the Word: The Saga Anthology of Climate Fiction.

12:00-1:30 pm Arrival and Check-In

UF Reitz Union Hotel, 686 Museum Rd, Gainesville, FL 32611, 352-392-2151

1:30 pm Sharp! Gathering, Reitz Union Hotel lobby

Meet to walk to afternoon sessions.

2:00-3:15 pm Refreshments, Welcome, and Orientation

The workshop leaders will walk participants through the schedule, provide an overview of the week's activities and guiding questions.

Location: Marston Science Library L136 (Visualization and Conference Room)

3:15-3:45 pm Hopefulness and the Creative Imagination

The complexity of climate change often makes it hard to talk about or understand. In this session, we will explore how to use storytelling to think about human adaptations to a world affected by climate change.

Location: Marston Science Library L136 (Visualization and Conference Room)

3:45-4:00 pm **Break**

4:00-4:45 pm Psychology of Climate Change: Communicating with Optimism about a Difficult Topic

UF psychology lecturer Dr. Ron Chandler will discuss research from Sustainability Psychology that illuminates ways to talk effectively about this politically polarized topic. *Location: Marston Science Library L136 (Visualization and Conference Room)*

4:45-6:00 pm **Break** (Refresh or check into your hotel room)

6:00 pm Sharp! Gathering, Reitz Union Hotel lobby

Meet to walk to dinner and evening session.

6:15-7:00 pm Catered Dinner

Over dinner, workshop leaders will lead a discussion of how educators can teach about environmental changes in the presence of political polarization.

Location: New Physics Building, Conference Room 2205

7:00-8:00 pm How Did We Get Here? Facing Our Changing Climate

Following dinner, Dr. Alexandra Skrivanek from the UF Department of Geological Sciences will discuss the long-view of climate change, more recent human impacts, and provide an overview of scientific evidence for current climate conditions.

Location: New Physics Building, Conference Room 2205

8:00 pm Adjourn

Tuesday, JUNE 25 - FLORIDA'S FRESH WATER CLIMATES

Please wear **your program t-shirt**, water-appropriate gear (or a swimsuit) and bring a change of clothes, towel, hat, bug spray, and sunscreen.

THE BIG QUESTIONS:

What are the sources of Florida's fresh water?

What challenges of quality and quantity are Florida's fresh waters currently facing? How do political and economic forces shape how we use water in Florida?

READINGS FOR THE DAY:

Nelson Blake (1980) Chapter 12: "Water for the Future" In, Land into Water- Water into Land. Zora Neale Hurston (2006) Their Eyes Were Watching God (excerpts)
Rick M. Spechler & Donna M. Schiffer (1995) Springs of Florida. US Geological Survey, No. 151-95

7:00-7:30 am Continental Breakfast in the Reitz Union Hotel

7:45 am <u>Sharp!</u> **Gathering,** Reitz Union Hotel lobby

Meet to walk to the morning session.

8:00-8:45 am Seeing Florida's Springs as a System

After a short introduction to humanistic ways of viewing water in Florida, we will have an introductory presentation on springs as systems with Dr. Nathan Reaver,

Postdoctoral Associate at the UF Water Institute.

Location: Newins-Ziegler Hall 222

8:45-9:30 am **Bus Departure at 9:00 am**

Location: McCarty Drive, behind Newins-Ziegler Hall

9:45-12:00 Canoeing through History on the Santa Fe River

Upon our arrival in High Springs, we will be introduced to the history of north central Florida springs and the Santa Fe River by nature writer and guide Lars Anderson. As we travel down this "lazy" river, we will have numerous opportunities for informal discussion about the ecology of the Santa Fe and its springs.

Location: Highway 27 Boat Ramp, 27004 FL-20, High Springs, FL

12:00-1:30 pm Picnic Lunch and Swimming at Blue Springs

Location: Blue Springs, 7450 NE 60th St, High Springs, FL

2:00-2:15 pm Bus Departure for the Howard T. Odum Florida Springs Institute

2:15-3:00 pm Browse Florida Springs Institute and Bookstore

Following some free time to browse the springs exhibits and bookstore,

3:00- 4:00PM Florida Environmental History

Lead Instructor Dr. Steve Noll will discuss significant historical points in Florida

environmental politics.

Location: 99 NW 1st Ave, High Springs, FL 32643

4:00-5:00 pm Master Teacher Reflection and Educator Break-Out Groups

Following a reflection with Master Teachers on ways to take today's activities back to the classroom, participants will break into groups to discuss the day and related lesson plan ideas.

Location: 99 NW 1st Ave, High Springs, FL 32643

5:00 pm Adjourn and Return to UF

Anticipated return to UF is 5:45pm. Dinner on your own. (Option to join a no-host gathering at First Magnitude Brewing Company, 1220 SE Veitch St, Gainesville)

WEDNESDAY, JUNE 26 - FLORIDA'S FOREST CLIMATES

Please wear comfortable walking shoes and bring a hat, sunscreen, and bug spray. We also recommend either wearing a pair of comfortable long pants for the forest walk. If you have a laptop and earbuds, please bring them for afternoon activities; they will be locked up during excursions.

THE BIG QUESTIONS:

Why are forests important to Florida?

How can forests mitigate climate change?

How can reading and listening to stories help us prepare for a climate-impacted future?

READINGS FOR THE DAY:

Timothy A. Martin, et al (2017) Managing Florida's Plantation Forests in a Changing Climate.

7:00-7:45 am Continental Breakfast in the Reitz Union Hotel

8:00 am or Earlier! Depart in your personal vehicles for the Austin Cary Forest Learning Center

Please see the map provided on Monday, and don't trust your GPS!

8:30-9:20 am **Digestion and Discussion**

Join the workshop leaders to digest and discuss the previous day's activities and preview the day's upcoming schedule. Dr. Noll will also provide an introduction to the historical significance of forests in Florida.

Location of all activities today: Austin Cary Memorial Forest, 10625 NE Waldo Rd, Gainesville, FL 32609

9:20-10:00 am **Southeastern Forest Climates**

Scott Sager, Austin Cary Forest's Educational Program Coordinator, and Dr. Tim Martin, Professor in the UF School of Forest Resources and Conservation, will discuss the important role that forests play in shaping Florida's climate and discuss the spectrum of forest management and climate mitigation strategies.

10:00-10:15 am Break

10:15-12:00 pm Forest Walk and Carbon Calculations

Guided by Scott Sager and Dr. Martin, we will visit site specific areas in the forest that reveal the impact of climate change and learn how to measure the amount of carbon in trees. Then, we will retreat to the air conditioned Learning Center for our final carbon calculations of the carbon storage capacity of a forest.

12:00-1:15 pm Catered Lunch and Turpentining in Florida

After lunch, we will take a short walk to the *Skinner Turpentine Education Site* and discuss the legacy of the turpentine industry in Florida.

1:15-2:15 pm Accessing Florida's Climate Histories through Newspapers

Floridians have had an ongoing concern with environmental change historically, which leads to how we understand our climate today. In this session, we will be introduced to free, digital archives for the historical study of Florida climate experiences with *Chronicling America* Outreach and Promotion Coordinator of the Florida and Puerto Rico Digital Newspaper Project Sarah "Moxy" Moczygemba.

2:15-2:30 pm Break

2:30-3:30 pm Reflecting on Florida's Climate Changes through Oral Histories

Dr. Ryan Morini from the UF Samuel Proctor Oral History Program will introduce us to oral history as a vehicle for helping students to understand Floridians' lived experiences with climate in the recent past.

3:30-3:45 pm **Break**

3:45-5:00 pm Master Teacher Reflection and Educator Break-Out Groups

Following a reflection with Master Teachers on ways to take today's activities back to the classroom, participants will break into groups to discuss the day and related lesson plans ideas.

5:00 **Departure in Personal Vehicles**

Dinner, networking, and reflection on your own. Estimated arrival at UF is 5:30pm.

THURSDAY, JUNE 27 - FLORIDA'S SALT WATER CLIMATES

Please wear long pants and closed-toed shoes that can get muddy. Bring water-appropriate gear and a change of clothes if you'd like to go in the Gulf. Don't forget hats, bug spray, and sunscreen.

THE BIG QUESTIONS:

What are the impacts of sea level rise on Florida's coastal settlements?

How do cultures study and survive ecological change?

How does thinking about adaptation in the past help us to prepare for the future?

READINGS FOR THE DAY:

Francis E. "Jack" Putz (2012) "Coastal Forests Retreat As Sea Levels Rise" *The Palmetto*Ken Sassaman (2016, May) "What does Shell Mound Archaeological Site have to do with Water and Climate Change?"

7:00-7:30 am Continental Breakfast in the Reitz Union Hotel

7:45 am <u>Sharp!</u> Gathering for Bus Departure, Reitz Union Hotel lobby

We will digest yesterday's activities and discuss the day's plan while en route.

9:00-11:00 am Cedar Key Shell Mound and the Deep History of Florida's Waters

UF Anthropology Professor and Director of the Laboratory for Southeastern Archaeology Dr. Ken Sassaman will introduce us to the Shell Mound archaeological site, a place of settlement and ritual for ancient Native people who mounded oyster shell in a massive U-shaped mound as an intervention against climate change. These peoples conceived of their relationship to the local environment in a fluid way, adapting to seasonal and longer-term changes in climate and sea-level rise.

Location: Cedar Key Shell Mound, 17650 SW 78 Pl, Cedar Key [In the case of bad weather or too many insects, we will meet in the Cedar Key Public Library, 460 Second St]

11:00-11:15 pm Bus Departure for Cedar Key

11:30-1:30 pm Picnic Lunch and Swimming

Location: Cedar Key Park Pavilion, 12231 SW 166th Ct., Cedar Key, FL 32625

1:30-2:00 pm Depart for Seahorse Key with Captain Kenny McCain

Seahorse Key is a 165 acre island located in Levy County and is part of the Cedar Keys National Wildlife Refuge. The island's rich history includes thousands of years of human habitation and use, Civil War battles, Marine Laboratory, and inclusion on the National Register of Historic Places.

Location: Cedar Key Public Dock

2:00-4:00 pm Seahorse Key Marine Laboratory (SKML) Tour

SKML is a collaborative space for studying and addressing coastal climate changes. We will be introduced to Seahorse Key's history by 7th Generation Cedar Key resident and former US FWS Law Enforcement Officer Kenny McCain, and then learn about the climate change impacts evident in rural coastal communities from Dr. Mike Allen (Director of the Nature Coast Biological Station and UF Professor of Fisheries and Aquatic Science). Before we head back to the mainland, we'll have some time to explore the island with our hosts and explore some of the research initiatives and curriculum components they are developing to show students how sea level rise affects them.

Location: Seahorse Key

4:00-4:30 pm **Return to Cedar Key**

5:00-6:00 pm **Educator Breakout Groups in the Cedar Key Public Library**

We'll gather in participant breakout groups to discuss the day's activities and brainstorm lesson plans with the workshop instructors and Master Teachers.

Location: 460 Second St, Cedar Key

6:15-7:45 pm **Dinner Out**

Location: Steamer's Restaurant, 420 Dock St, Cedar Key, FL 32625

7:45 pm **Depart for University of Florida Reitz Union Hotel**

Return to the Reitz Union. Estimated arrival time at the University of Florida is 9:00 pm.

FRIDAY, JUNE 28 - WRAP UP AND DISCUSSION OF CLIMATE CHANGE ADAPTATIONS

THE BIG QUESTIONS:

How can educators make the study of Florida's climates accessible to students and to the public? Why do experts from across the humanities, social sciences, and sciences need to work together?

READINGS FOR THE DAY:

Cynthia Barnett (2011, February) "A Water Ethic for Florida" Jeff Goodell (2017) "The Long Goodbye" In, The Water Will Come

7:00-8:45 am Hotel Check Out and Continental Breakfast Offered in the Reitz Union Hotel

8:45 am **Sharp!** Gathering

Meet in Hotel Lobby to walk to Pugh Hall 210

Location: Reitz Union Hotel lobby

9:00-9:45 am **Building Environmental Movements with Danielle Jordan**

Danielle Jordan, PhD Student in English, will discuss organizing and advocacy strategies with a focus on local-level student environmental movements at schools and colleges.

Location: Pugh Hall 210

9:45-10:30 am Final Digestion and Creative Exercise

In this short closing discussion, we will gather what we have learned from the week, reexamine our opening day storytelling project, and complete it with a collective art project.

Location: Pugh Hall 210

10:30-11:45 am Action Planning

Participants will have time on their own and in groups to discuss lesson plan ideas from the week's materials and prepare their action plans to present.

Location: Pugh Hall Ocora

11:45 am Gather to Walk to the Lunch Banquet

12:00-2:00 pm Closing Banquet and Presentation of Lesson Plans

After joining together in food and fellowship, we invite all participants (individually or in teams/groups) to "share out" their draft action plans from the week.

Location: Ustler Hall Atrium