

# BAHAMAS: PLACE-BASED ECOLOGICAL DESIGN

WINTER/SPRING

202019

## NR 185 – Tentative Syllabus

**Travel Dates:** January 3-11, 2020

**Credits:** 3

<b>Hans Estrin</b> , Local Food Specialist, University of Vermont Extension 130 Austine Drive, Brattleboro Phone 802-380-2109 (cell/text) hestrin@uvm.edu	<b>Ethan Thompson</b> , Farmer, Queen City Acres, and CDAE Instructor 14 Convent Square Burlington, Vermont 05401 802 598 3180 (cell/text) ethan.thompson1@gmail.com
---	---

### Course Overview

The Bahamian Island of South Andros is one of the gems of the Caribbean. Though only a short 20-minute flight from Nassau, it is a world apart from the development, tourism, and bustle of the capital. Known as the ‘Nature Island’ of the Bahamas, the rural community of about 1,200 residents live alongside stunning blue holes, an extensive barrier reef, and acres of mangrove wetlands, hardwood hammocks, and pine forests. Unlike most islands in the Bahamas, there is very little tourism infrastructure, and the few outsiders who visit the island mainly come to bone fish or scuba dive.

Over the past five years, a unique cross-cultural exchange program has emerged between Vermont and South Andros. Food systems have been at the center of this exchange, and an innovative ecological agriculture program at South Andros High School has been developing in partnership with the University of Vermont. Reciprocity has been the hallmark of the evolving relationship between the Bahamas and Vermont, with students, teachers, and community members travelling back and forth between the places, sharing ideas and inspiration for local food production, design-build projects, and celebrating the unique culture of each place.

It is our belief that the quest for community self-reliance and resilience is predicated on an intimate knowledge of the local ecology and culture. It is this intimacy with a particular place – the flora, fauna, climate, culture, physical features, and ecological processes – that allows us to grow our own food, create shelter, and generate energy, all while promoting sustainability and vitality. As Van der Ryn and Cowan explain in their seminal book on the topic: “Ecological design begins with the intimate knowledge of a particular place. Therefore, it is small-scale and direct, responsive to both local conditions and local people. If we are sensitive to the nuances of place, we can inhabit without destroying.”

## Course History

This course will build on the successful experiences of previous UVM courses that have taken place on South Andros over the previous six years. In 2013, instructors Felix Wai and PJ McHenry piloted an approach known as *Socially Engaged Ecological Design* (SEED) in which students had the opportunity to work in partnership with high school teachers and students on designing and building a hydroponic system and a chicken coop. As articulated by Felix and PJ,

*Ecological design results in products and landscapes that are invaluable to sustainable communities. Such products and landscapes include intensely food productive landscapes, energy efficient structures, water cycling structures and landscapes, and more. Often, ecological design is seen as the key strategy for just and sustainable futures. And the ecological design products (e.g., permaculture farms, solar powered buildings) are often seen as the end goal. But ecological design is just a tool that is only as effective as the context in which it is used. In our quests for a more just, sustainable, and equitable communities, we encounter complex systems with complex relationships. In this dense web, we forget to see the forest for the trees and get focused on one small goal (like implementing water purifying wetlands) and forget the larger goal we face (like providing a community with durable access to healthy water). In the end, our goal is a sustainable and just community, not just the projects found in such a community. When community-organizing strategies incorporate ecological design as an integral tool, powerful and effective change is possible.*

In subsequent years, UVM students worked alongside our Bahamian partners to construct a poultry incubation house, create a lending library, and develop maps and interpretive materials that captured the unfolding story of the natural and cultural history of the place. They have designed and constructed an aquaponic system that combines the production of freshwater fish and vegetables, and built wooden bee hives that continue to produce honey to this day.

UVM students have also written successful grants that have facilitated weeklong visits to Vermont by Bahamian students and teachers during the summers of 2014, 2015, and 2018. In addition to visiting a range of local farms (e.g., Intervale, Bread and Butter Farm, Shelburne Farms, Catamount Farm) during their trips to the Burlington area, our guests from South Andros have also established a strong working relationship and exchange program with Burlington's Rock Point School.

In February 2018, UVM extension professional Hans Estrin piloted a "Vermont Farmer-in-Residence" program in collaboration with the community of South Andros. Hans, who works closely with farmers in the Vermont Vegetable and Berry Grower Association (VVBGA), helped facilitate a 10-day service-trip for two Vermont farmers from Trillium Hill Farm. In Feb 2019, Farmer and UVM instructor Ethan Thompson, from Queen City [Greens-Acres](#) in Burlington, worked along-side students and teachers in South Andros to finish a new wash-pack station.

This year, Ethan returns as co-instructor for the course, bringing both experience and expertise in small-scale farming, farm market development, and agro-ecology.

## Community Partners

**South Andros High School** - This is the only high school on South Andros Island and is located less than 1/2 mile from the Andros Beach Club where we will be staying. The high school is comprised of approximately 200 students from grades 7 through 12. Principal Duncombe and the school community have welcomed us as service-learning partners since the inception of the program.

**Trenton Durant** – Trenton is the science teacher (and debate coach) at South Andros High School. He is originally from Guyana in South America and has special expertise in many forms of agriculture. Trenton is an experienced educator who is committed to having the high school become a sustainable food system hub for the entire island.

**Jesse Leopold** - Jesse has been visiting South Andros Island since 1993 with his family and has been living there since 2003. He operates the Andros Beach Club (our home base) and a scuba diving business called Andros Diving. He is one of the leaders in the local tourism industry and serves on the South Andros Island Board – an organization focused on the development of the local community and the South Andros Island tourism industry. He is well respected and has developed lasting business and personal relationships with community members and leaders.

**Jeremiah Duncombe** and **Lukanda Gardiner** - The founders and managers of *The Bahamas Holy Land Experience* — a 20-acre eco-adventure, geological study and biblical theme park — in Deep Creek, South Andros that features a small and vibrant "homestead" permaculture farm.

## Pre-Course Gatherings

Although the centerpiece of the course is the trip to the Bahamas in January, this 3-credit course consists of meetings, readings, and assignments that will take place both before and after our time on South Andros. The three pre-trip meetings will take place on the Sunday evenings, on the following dates (location TBA):

- **November 10<sup>th</sup>** (6-8 PM) - This two-hour session will include a presentation and discussion designed to introduce the nature and culture of the Bahamas, small scale diversified sustainable agriculture, and a place-based approach to landscape analysis and community engagement.
- **November 17<sup>th</sup>** (6-9 PM) - This three-hour session will focus introduce the service-learning projects and provide a chance to skype with our Bahamian partners. We will also introduce the menu of pre-trip research topics.
- **December 8<sup>th</sup>** (6-9 PM) - This three-hour session will be dedicated to travel logistics, place-based ecological design, and sustainable ecotourism.

**Note:** The course follow-up meeting will take place **on January 26<sup>th</sup>** (6-9 PM). Final assignments and reflections will be due at this time.

## **Tentative Schedule - Bahamas**

January 3 (Friday) – Travel Day

- Arrive in Congo Town, South Andros
- Bahamas Welcome Dinner

January 4 (Saturday) – Island Exploration

- Morning – Blue Hole and Forest Tour
- Afternoon – Explore Marine Environment
- Evening – Reflective Writing, Reading Assignment

January 5 (Sunday)

- Morning – Tour the high school agricultural campus with Trenton
- Afternoon – Holy Land tour with Lukanda and Pastor Duncombe
- Evening – Form Project Teams

January 6 (Monday)

- Morning and Afternoon – Service Learning Projects
- Evening – Discussion, Reflection, & Reading

January 7 (Tuesday)

- Morning and Afternoon – Service Learning Projects
- Evening – Discussion, Reflection, & Reading

January 8 (Wednesday)

- Morning – School Assembly
- Afternoon – Service Learning Projects
- Evening – Discussion, Reflection, & Reading

January 9 (Thursday)

- Morning Majority Rule Day Celebration
- Afternoon - Service Learning Projects
- Evening – Discussion, Reflection, & Reading

January 10 (Friday)

- Morning – Finalize Projects

- Afternoon – explore the island with community members
- Evening – Debrief and Celebrate

January 11 (Saturday) – Travel Day

- Early morning flights

### **Course Requirements**

- Reading Assignments – Pre-course required reading along with daily reading assignments during the course must be completed in order to participate and reflect effectively.
- Participation – Before the trip, there will be three required group sessions to go over required reading and logistics. On the island, once a day there will be a group debriefing. This reflective period will be an intense group discussion of content covered.
- Prompted and Reflective Writing – You will be asked to keep a daily journal throughout the duration of the course. Prompted writing assignments will be discussed in the group and reflective writing will be reviewed one-on-one with the instructors.

### **Learning Outcomes**

Students will:

- make adequate preparations to engage respectfully with a new culture and geographic setting prior to travel
- listen carefully to the needs and wishes of local hosts prior to designing and implementing projects
- learn the basic tenets of place-based ecological design
- actively engage as part of a student-team to implement a sustainable food production project in collaboration with project sponsors
- create culturally appropriate documentation that describes each project's process, outcome, and maintenance (e.g. wash station, cold storage unit, irrigation system).
- be familiar with the colonial history of the Bahamas and its impacts on the demographics, politics, economics, culture, and ecology of South Andros
- reflect daily on the larger conceptual topics of service, privilege, and community partnership while also reflecting on the challenges and successes of daily interactions, discussions, and actions.
- discuss and explain in writing how this project integrates with personal (school, education, life) goals, as well as the larger (Bahamas, USA, world) sustainability goals.

## **Assignments and Grading**

- Pre-trip Reflection – 10%
- Pre-trip Research Assignment – 10%
- Mid-trip Reflection – 10%
- Team Service-Learning Project – 25%
- Contribution to Documentation – 10%
- Team Final Assignment – 20%
- Final Reflection – 15%

*“If you have come here to help me, you are wasting your time. But if you have come because your liberation is bound up with mine, then let us work together.”*

***Lilla Watson***