



PINELANDS PRESERVATION ALLIANCE &
THE BONAZZI FOUNDATION
FOR THE PROMOTION OF SCIENCE EDUCATION

Life Science Field Training Institute | June 24-27, 2019

Program Syllabus

Preparations: *This week you will be in the field often. Please wear field appropriate clothing – a change of clothes is a good idea for every day. Ticks are present and clothing choice, preventative measures and thorough end-of-the-day inspections are necessary. Bring plenty of water and wear sunblock as needed. Close toed shoes are a must for all field experiences. Shoes that can get wet are needed for Wednesday. The syllabus that follows may change depending on weather or other circumstances.*

Monday, June 24 *Meet at Pinelands Preservation Alliance*

8:30 – 9:30am	Welcome and Introductions
9:30 – 10:30am	Introduction to Field Studies and Basic Principles of Ecology: The Pine Barrens of New Jersey
10:30 – 10:45am	Break
10:45am – 12:15pm	Connecting Abiotic and Biotic Factors in Ecosystems: Plant Richness Quadrant Study Soil Temperature and Vegetation Cover Study
12:15 – 1:00pm	Lunch
1:00 – 2:00pm	Basic Principles of Statistics and Data Analysis and Display: Use of Excel and Graphing Calculators
2:00 – 2:15pm	Break
2:15 – 3:15pm	Introduction to Ecotones and Setting Pitfall Traps Examining Ecotones – Invertebrate Community Diversity
3:15 – 4:00pm	Introduction to Bird Studies – Bird Basics 101

Tuesday, June 25 *Meet at Pinelands Preservation Alliance*

- 8:00 – 9:00am **Bird Walk and Species Inventory**
- 9:00– 10:45am **Collection of Pitfall Traps and Identification of Invertebrates:
Analysis, Discussion and Display of Data**
- 10:45am – 12:00pm **Introduction to Population Ecology**
- 12:00 – 1:00pm Lunch
- 1:00 – 2:00pm **Collection of Population Data** (Wildflowers and/or Invertebrates)
- 2:00 – 3:15pm **Analysis and Discussion of Population Data**
- 3:15 – 4:15pm **Climate Change Bird Atlas – using biodiversity as a measure of potential
impact**
- 4:15 – 4:45pm **Preparations for the Canoe Trip
Discussion: Field Trips in your curriculum**

Wed., June 26 *Meet at Pinelands Adventures (directions to be provided)*

- 8:00am Depart Pinelands Adventures for a Paddle on the Batsto River
- 8:30am – 4:00pm **Canoe Trip – Flora and Fauna of the Pine Barrens
Data Collection, Taxonomy Studies and Field Journals
Water Quality Studies – Linking Ecological Health and Species – Relevé Plant
Community Sampling Method**

Thurs., June 27 *Meet at Pinelands Preservation Alliance
Carpool to Rutgers Pinelands Field Station*

- 8:00am **Meet at PPA**
- 8:30 – 9:30am **Tour of the Rutgers Field Station**
- 9:30 – 11:30am **Forestry Study; Tools of the Forest Ecologist
Comparing Oak and Pine Tree Data; Height, Diameter, Wood Volume,
Age and # Logs
Ecological and Economic Value of Forests**
- 11:30am – 12:30pm Lunch (at Rutgers)

12:30 – 2:30pm	Disturbance and Community Ecology – Species Area Curves The Effects of Disturbance on Community Diversity
2:30pm	Return to PPA
3:00 – 4:30pm	Analysis of Forestry and Species Area Curve Data
4:30pm	Closing Remarks and Graduation

**All times are approximate*

**Sequence of Investigations may change due to weather or other factors*



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www.pinelandsalliance.org www.bonazzifoundation.org

