



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

Life Science Field Training Institute | June 26-29, 2017

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 26 *Meet at Pinelands Preservation Alliance*

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| 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 27 *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 28 *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**

Thurs., June 29 *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

