# **Invasive Species: Revisited**

Lecture and Walking Tour Project Proposal and Outline

#### **OVERVIEW & PURPOSE**

Zack Rouda of Rewild Maine will deliver a short lecture presenting an overview of invasive species of plants and animals (with focus on the history of plant spread and present solutions for management/removal), lead a discussion, and a guided walk to visit invasive plant species in the wild.

#### **OUTLINE OF LECTURE**

- 1. Examine the definitions of "Invasive species"
  - a. USDA says "non-native under consideration; causes economic or environmental harm"
    - i. Native to where, native to when? Many plants moved around the continent due to climate change, farming and etc., also many plants moved around the world before European globalization
    - ii. Interesting that economic harm is primarily more important than environmental harm; if these plants could be used for economic gain, would they be non-invasive? Can we reduce environmental harm without causing further harm using herbicidal chemicals?
  - b. My definition Invasive species are plants that have been moved around as a result of European globalization, prolifically outcompete local species, and are not loved by humans (like *Rosa rugosa*)
- 2. How plants move
  - a. Natural spread Swallow carrying coconut
    - i. Hurricanes, tornadoes
  - b. Colonial forces
    - i. Accidental (zebra mussels on boats)
    - ii. Ornamentals (bittersweet, knotweed, barberry)
    - iii. Planted to control erosion (kudzu, honeysuckle)
    - iv. Control other species (cane toad to eat the cane beetle)

- 3. Are they really that bad?
  - a. Food for animals pollinators (knotweed, honeysuckle)
  - b. Good erosion control (knotweed, kudzu)
  - c. Soil fixers
- 4. How we currently deal with invasive species
  - a. Chemical herbicides bad
    - i. Highly conflicting information regarding toxicity probably all toxic
    - ii. Huge industry (\$15 billion)
  - b. Cutting and sometimes planting native plants
    - i. When we just mow stuff and don't plant natives, it's arguably worse
    - ii. Ignoring it and letting it go is also not good
- 5. What we can do differently
  - a. Permaculture planting way more native plants
    - i. Don't just remove the invasive species plant lots of native stuff!
  - b. Get people involved
    - i. Use invasives for basketry, foraging food and medicine, furniture
    - ii. Invasive species eating festivals (Oregon, Wisconsin)
  - c. Monetize it make businesses
    - i. High-end restaurants (green crabs in Maine)
    - ii. Herbal medicine knotweed more effective than antibiotics for fighting Lyme disease
    - iii. Craftspeople
- 6. How to get involved
  - a. Rewild Maine
  - b. Wild Seed Project
  - c. Will Bonsall, Scatterseed
- 7. Discussion, Questions

#### **OBJECTIVES**

- 1. Provide an introduction and overview to the concept of invasive species.
- 2. Challenge students' preconceived notions about invasive species.
- 3. Remind everyone that chemical herbicides that fuel giant economies will probably never be a safe and reliable solution for everyday people.
- 4. Suggest some positive alternatives, provide examples of functional art and tasty snacks made from invasive plant species, and inspire creative solutions for the future.

### **MATERIALS NEEDED**

- 1. Room with one table for me to put my flip chart on and another table for me to display baskets and snacks
- 2. Chairs for people to sit in

## **COST OF PROGRAM**

\$200 (or more! Donations are always appreciated) check made out to Rewild Maine