

Notes from Presentation by Ethan Belair,  
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Sandown Garden Club  
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Talk addressed three areas:

- Biology of invasives
- Control methods
- Alternatives to invasives

Biology

- Crowd out natives, creating monoculture. Not native to country or region and cause economic and/or ecologic harm
- Create erosion, such as garlic mustard which can damage soil because of chemicals in roots and can prevent other foliage from growing
- Alters wildlife habitat
  - Invasives “add insult to injury,” for instance, monarchs lay eggs on black swallow wart because it looks like milkweed but then hatchlings can’t eat the black swallow wart so they die
- What makes the 25 invasives in NH invasive?
  - Very tolerant to wide spread of conditions, such as autumn olive which can stand sun, arid location, acidic soil
  - They reproduce more and faster than natives. Autumn olive produces seed in 2-3 years versus choke cherry that takes 8-10 years
  - They have a leg up in dispersal because they provide incentive to wildlife to carry around and vegetative re productive can be phenomenal like Japanese knotweed (a ½” piece can survive for several years)

Control Methods

- Biologic - via animals, such as goats. Good tool to have but not usually enough to be effective
- Mechanical – physically removing material, low inputs but time intensive
  - Digging it out
    - Use if a small area
    - Dig out all roots with a spade fork, not spade, to get all roots out. A spade can cut the roots and leave some.
    - Moisten soil to make easier.
  - Hand pulling
    - Good method if small area and for species such as garlic mustard or burning bush that have easy-to-pull seedlings
  - Smothering

- Put tarp over, 4-6 feet past edge of plants.
    - Good for small population
    - Leave in place at least a year
  - Repeated cutting, weed wacking is most effective
    - Dispose of what is cut in a sealed container at transfer station
  - Drying, “cooking”
    - Cover it completely
    - In 4-6 weeks when “crispy,” burn it or add to compost if really dead
  - BE PERSISTENT!! MONITOR RESULTS, MAKE A PLAN. MECHANICAL IS A LOT OF WORK!!
- Chemical
  - Herbicides are most effective and efficient
  - There is risk in using if you treat plants you don’t want to
  - “Label is the law!” Read the label as there are regulatory and legal requirements you are to follow if using
    - Sites for use
    - Time of year
    - Proximity to water
  - To make using chemical safe:
    - Ask a professional about specific
    - Use personal protective equipment such as gloves, eye protection, a suit if necessary
    - Read the label!!!
  - Types of chemical control
    - Foliar - spray until wet but not dripping, on the top and bottom of leaves
    - “Cut stump treatment” - - spray the outside edge of a stump
  - Concentration in chemical control is very important
    - Spray might use 5%, stump control 50%
  - Timing
    - In spring, use from bottom up, best time
    - In summer there is sugar in leaves so is harder to make work
- Cultural control – not so active, something to be wary of
  - If you make a hole in the wood, that’s an opportunity for invasives, so “fill it up”
  - When areas are under construction, dirt comes from elsewhere and may contain seeds from or pieces of invasives

#### Alternatives

- For knotweed, Bearberry or Northern Bayberry; hardy and OK in poor soils
  - Department of Agriculture has info on Best Practices for Management
- For buckthorn, hazelnut and highbush blueberry
- Many others in his talk, but he ran out of time