Everything You Wanted to Know about Invasive Plant Removal but were afraid to ask!

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Methodology I

• **Young and Small Plants**
  – Wait until it is wet and pull or dig them out, roots and all. Caution, this does not work for all plants! Root fragments for some plants will resprout!

• **Larger or Older Plants**
  – Some may be pulled out but most need to be cut down.
  – Many plants will show regrowth after cutting so you have two options
    • Break off the regrowth, wait and repeat until the plant dies.
    • Treat with herbicides. Note that this is the last resort!
Invasive Plants – Herbicide Response

• **Most difficult**
  – Mesquite
  – Large Leaf Privet (*Ligustrum*)

• **Moderately difficult**
  – Giant Reed Grass
  – Honeysuckle

• **Least Difficult**
  – Heavenly Bamboo
  – Bastard Cabbage
  – Chinaberry
  – Common Mullein
  – Lilac Chastetree (*Vitex agnus-castus*)
  – Salt Cedar
  – Johnson Grass
There are 4 methods of treatment that I use when I choose to go the herbicide route.

– First, you can spray the foliage. This method is the most inefficient in terms of the amount of herbicide that does not land on the plant.

– Second, you can cut the plant down and paint the stump with a strong herbicide. This is the cleanest method in terms of herbicide efficiency and contamination. Sometimes a second round is needed.

– Third, an 18” (vertical) swath of bark is sprayed around the base of the trunk.

– Last, inject herbicide into the plant.
Methodology II - Continued
Methodology III - Herbicides

• Each type of treatment requires a different concentration of herbicide.
• Each species of plant requires a different concentration and type of herbicide.
• Each type of herbicide has many different plusses and minuses.
• Herbicides are toxic to humans, many plants and animals. For this reason many concentrated forms must be treated very carefully and many formulations are restricted by law.

Bottom Line – You must do your homework!!!
Methodology IV - Herbicides

• Most off-the-shelf herbicides are complex mixtures.
• There are three types of ingredients
  – Herbicides: There is often more than one active ingredient. Some herbicides come in more than 1 chemical form.
  – The “inactive ingredients” fall into two groups.
    • Chemicals which improve penetration and absorption.
    • Inert Fillers
• Each individual herbicide reacts differently with the plant, the soil, animals, other plants and water.
• Each individual herbicide lives a different amount of time in the environment. This can be very complex!
• The “inactive ingredients” can be lethal to the surrounding life.
Bottom Line – Always ask an expert!!!
Methodology V
Important Considerations

- Timing is critical (when, how fast, how many)
- Herbicide concentration
- Wind conditions (contamination)
- Air and soil temperature
- Type of application
- Protective equipment
  - Gloves
  - Eye protection
  - Chain saws can be lethal!
    - Cutting down trees can be a lot more lethal than you think.
- Laws
Methodology V
Tools
Methodology V

Tools
Appendix
Invasive Plants – Future

• Large Leaf Vinca (Miller Springs)
• Chinese Tallow? (Georgetown)
Appendix
Common Formulations

• Roundup (ready to use)
  – Poison Ivy and Brush Killer (1% Glyphosate, 0.1% Triclopyr)
  – Weed and Grass Killer (2% Glyphosate, 2% Fatty Acids)
• Tordon RTU (ready to use) (2,4-D, Picloram)
• Speedzone (2,4-D, Mecoprop-p, Dicamba, Carfentrazone-ethyl)
• Remedy (Triclopyr)
• Rodeo (Glyphosate)