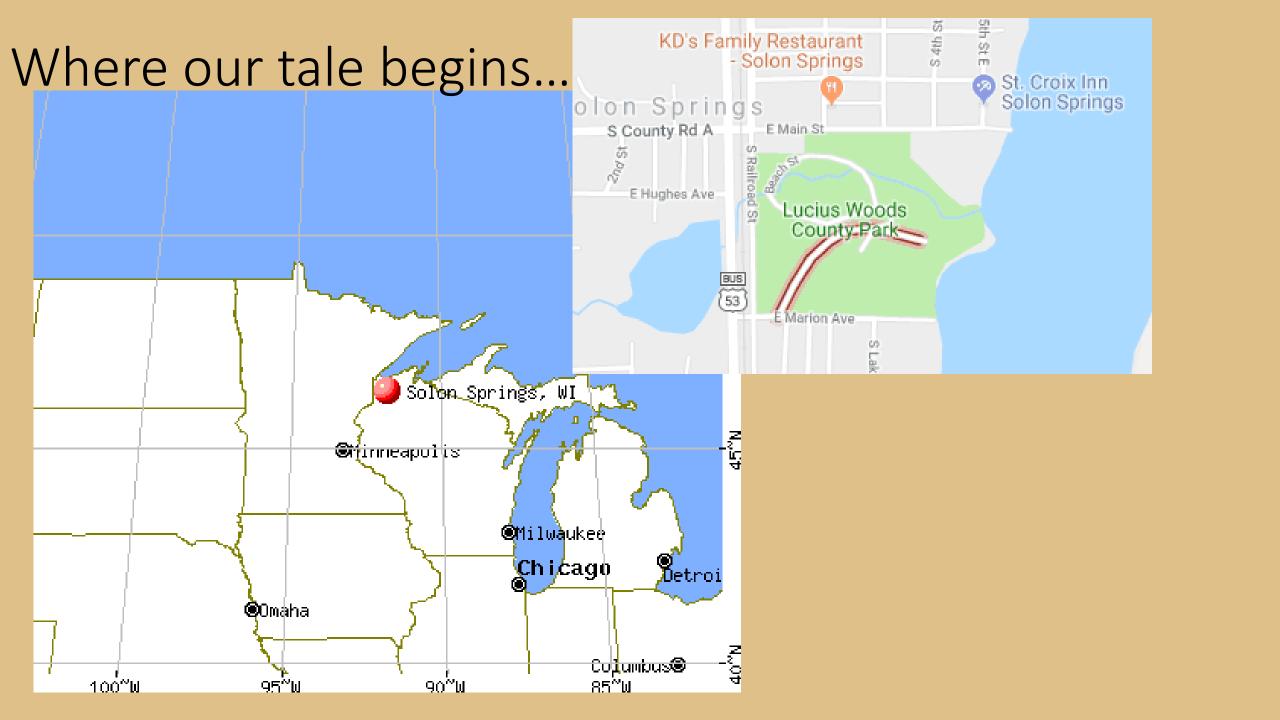


## **Back Story**

- A county park (Lucius Woods) in Douglas County was using goats over the past 3 years to control unwanted brush
- We wanted to compare the efficacy/economics of herbicides to goats
  - Target spp: Buckthorn & Honeysuckle
- Local law prohibits use of pesticides in public areas
  - This project ended up upsetting a small group of locals!



#### What we did:

• Set up 4 treatments, 3 reps

• Goats: 200'x200' plots

Control

Foliar Application

Cut Stump Application

~50'x50'



- Set up quadrats (4 in goat plots, 3 in other plots) to monitor percent cover of spp present in plots before applying treatments
- Applied treatments (explained next slide)
  - Monitored volume of product used and time spent in each plot to calculate the economics of application methods
- Came back in fall to conduct point transect surveys and efficacy ratings

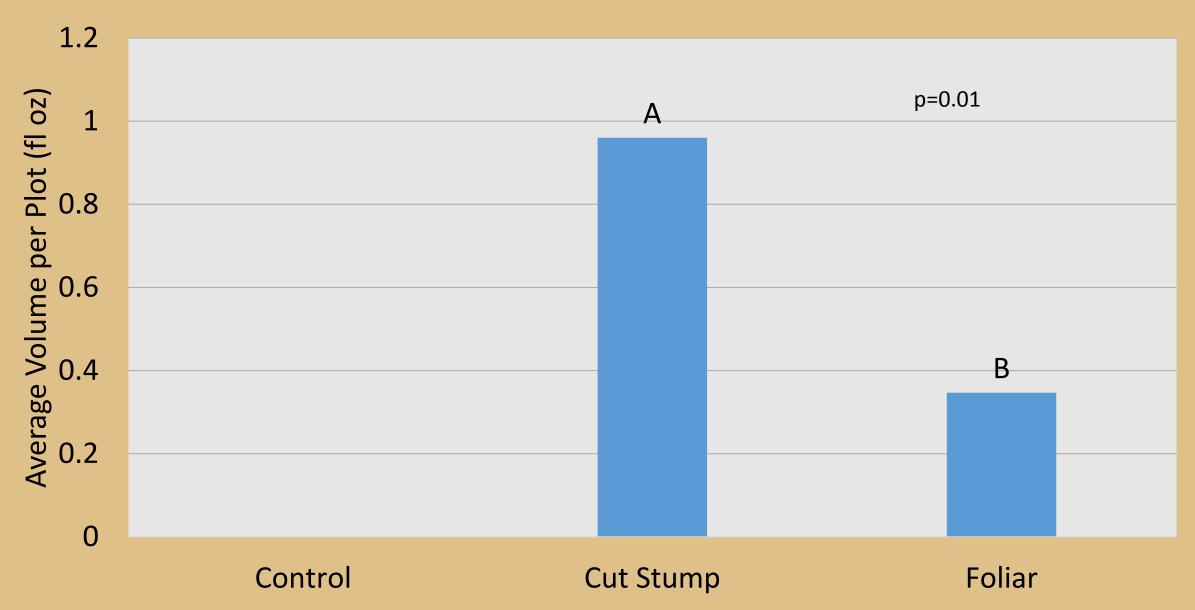
### Application methods

- Applied Garlon 4 (triclopyr) to both buckthorn and honeysuckle
- Foliar: used air pressurized hand sprayer to selectively apply herbicide to target species
  - Used 2% solution, water as carrier
- Cut Stump: used air pressurized hand sprayer to apply herbicide to stems of target species
  - Used 30% solution, bark blue as carrier
  - Cut stems ~6"-10" from ground, applied treatment within 30 min of cutting

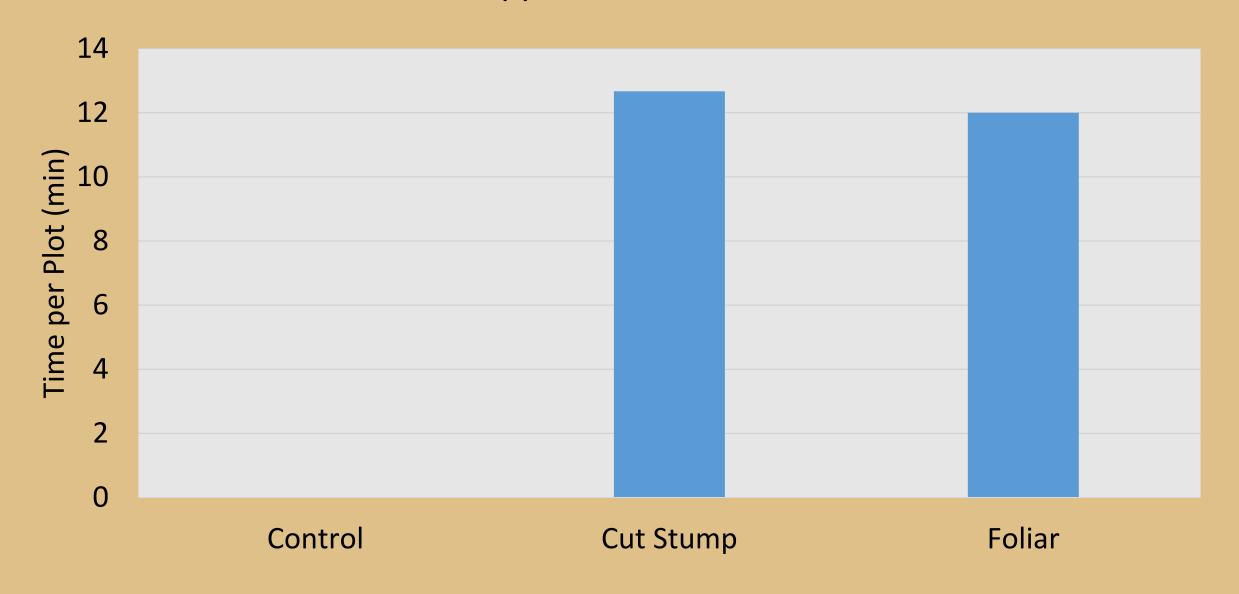


## The "Economics"

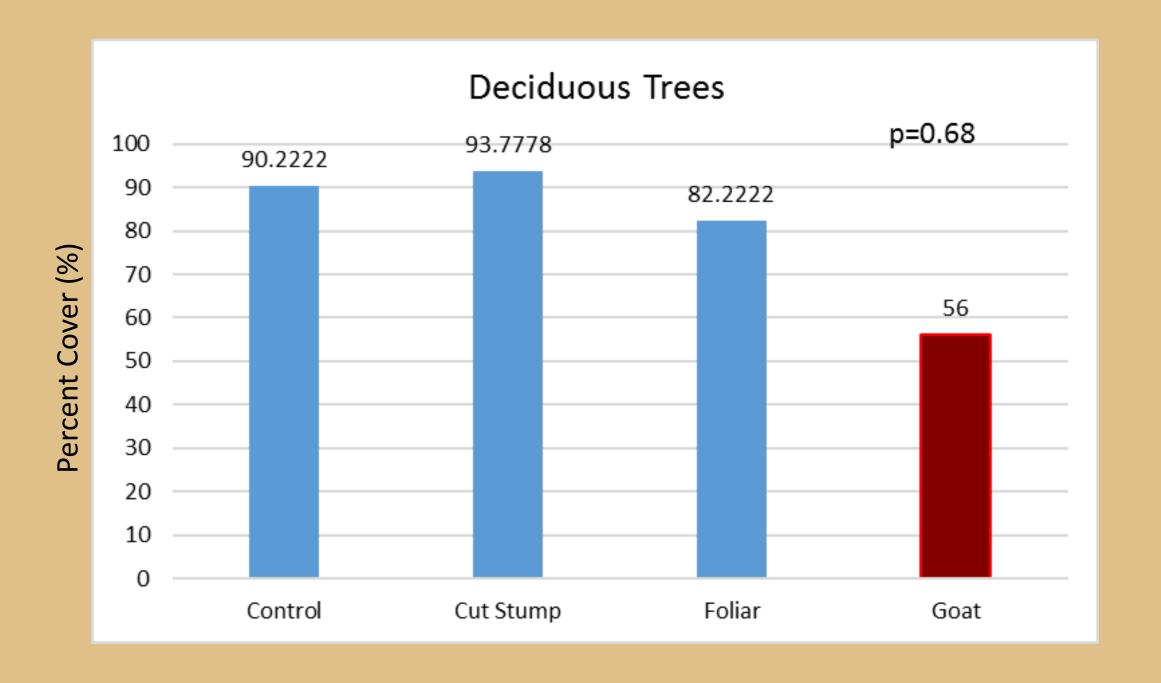
#### Herbicide Used

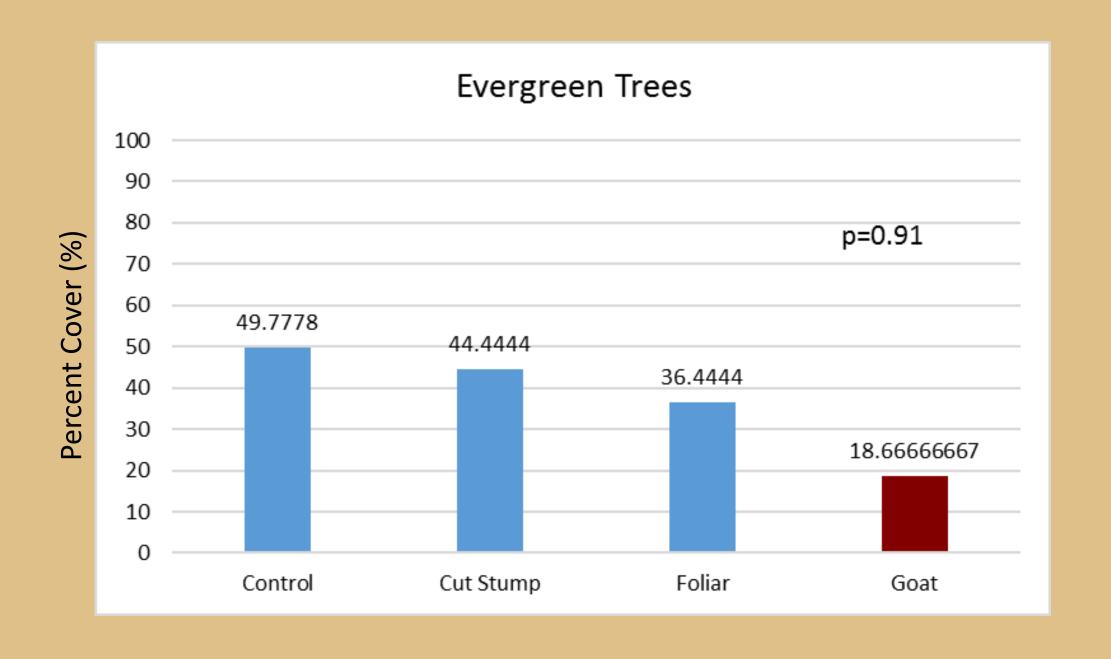


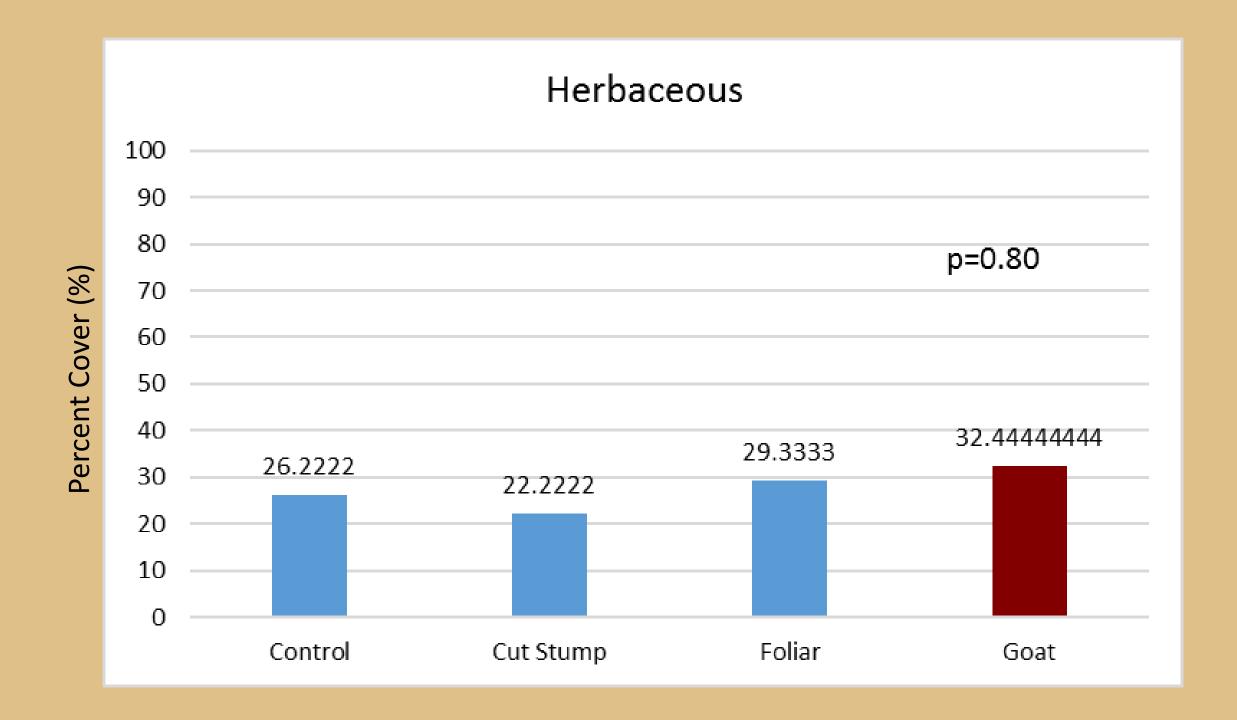
#### **Application Time**

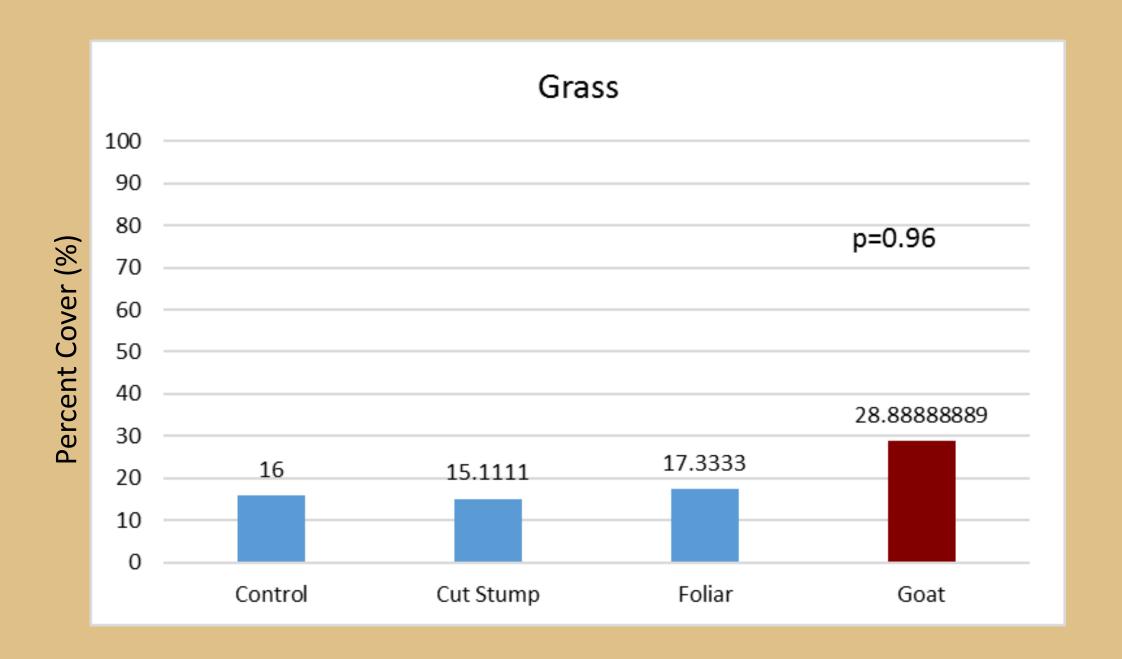


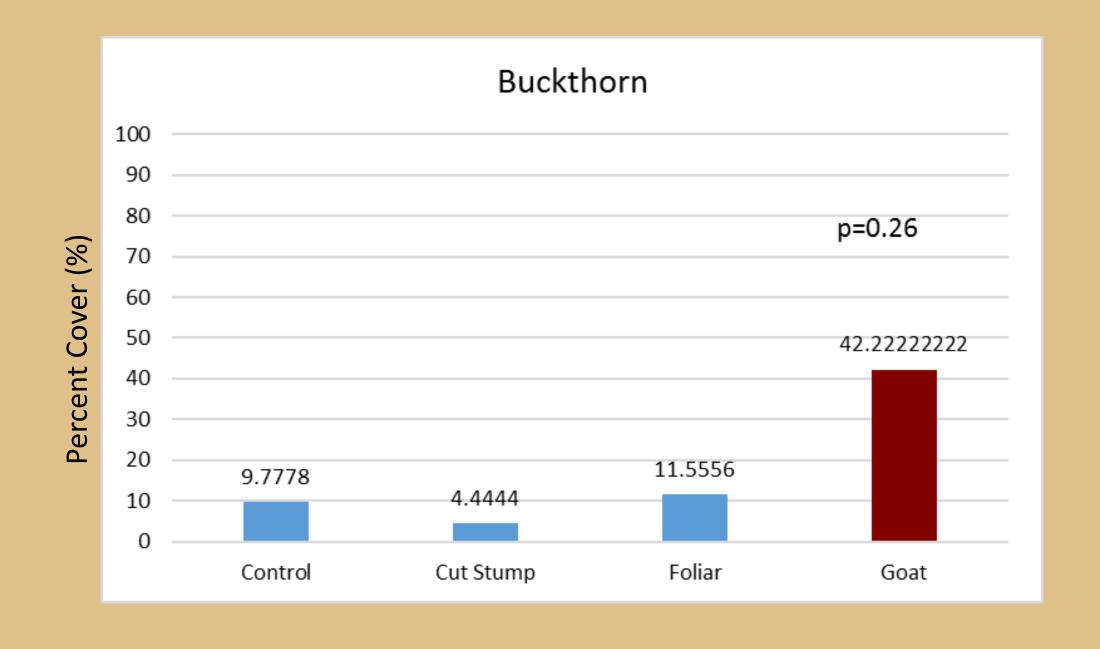
## Transect Surveys

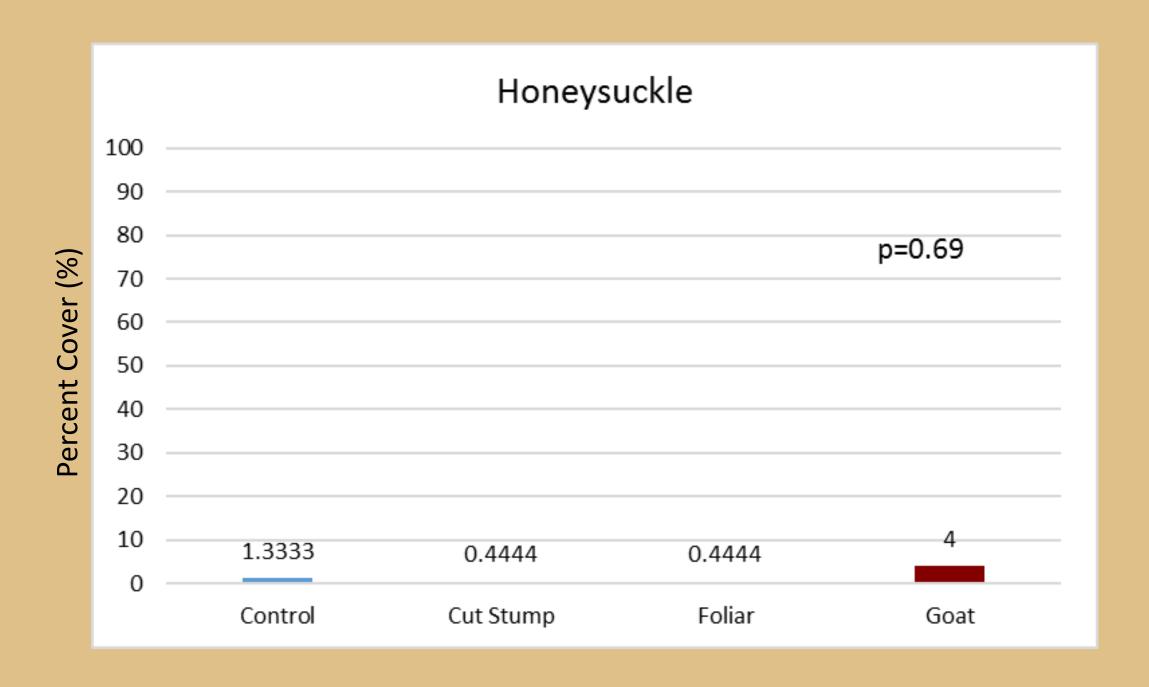




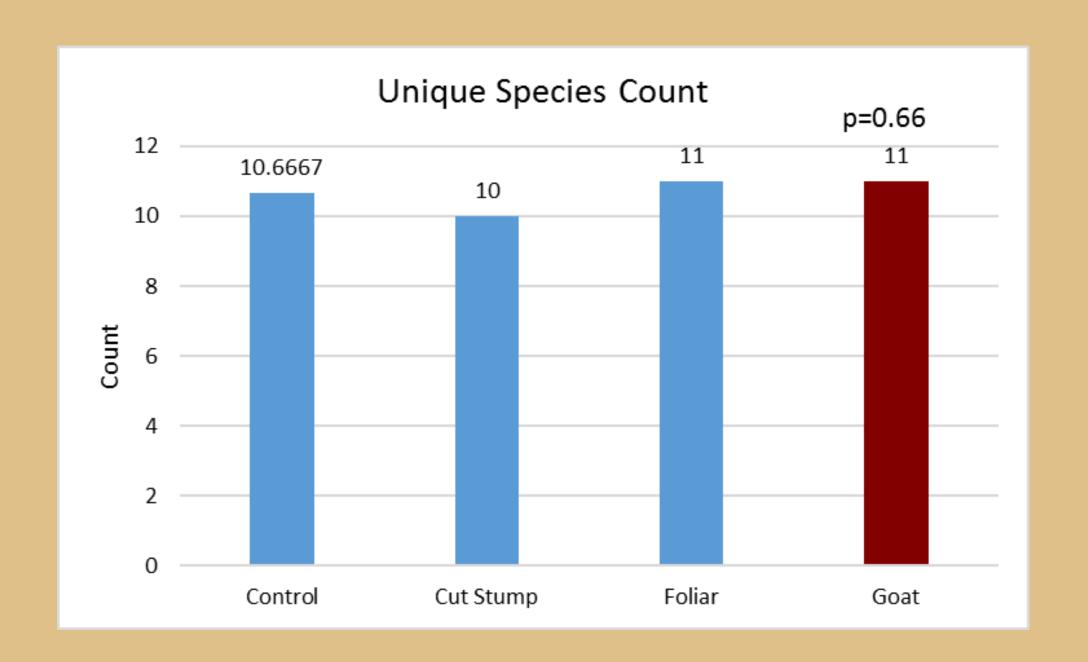








# Species Counts



## Conclusions/Discussion

- Herbicide applications appear to be \$\$ effective:
  - Applied a total volume of 3.92 fl.oz. of triclopyr
  - 74 mins in total spent treating plants

- More data to be collected this upcoming spring fall
  - Difficult to draw concrete conclusions from preliminary data