Integrated, Multi-Year Protocol for Targeted Grazing with Goats

Copyright 2018, Goats On The Go, LC
• Founded in 2012 by the Steele and Steenhoek families
• Based in Ames with 16 affiliates in 6 states
• Large project capacity all over Iowa and beyond
• Clients: IDNR, USFWS, CCB’s, schools, not-for-profits, city govs, private property owners
Targeted Grazing
The application of a specific kind of livestock at a determined season, duration, and intensity to accomplish defined vegetation or landscape goals. aka “Conservation Grazing,” or “Prescribed Grazing.”
What’s the right “defined vegetation or landscape goal” for targeted grazing of invasives?

Killing mature invasive vegetation is only one goal, and probably not the most important one in most cases!
Grazing Goal #1: Reduce plant mass/volume

- Get sunlight to the ground
- Promote competition and diversity
- Grow ground cover for holding and improving soil, infiltrating water
- Grow ground cover to carry fire
- Make environment safer for workers
- Improve morale of volunteers
- Identify key plants for removal
- Simplify follow-up treatments
Grazing Goal #2: Stop expansion

• Remove berries and seeds
• Prevent seedlings from reaching sexual maturity
• Exhaust soil seed bank
• Remove recent growth (including sprouts)
• Expand preferred vegetation at edges of invasive strongholds
Grazing Goal #3: Outreach

- Engage the public in a new way
- Provide a dramatic visual aid for education
- Get positive press
- Generate conversation about invasive species
- Reinvigorate volunteer recruitment
- Get immediate visual results to fuel a long-term battle
- Reach new financial supporters
Grazing Goal #4: Stress and kill vegetation

• Timely and repetitive removal of leaves to exhaust root reserves
• Removal of recent supple growth
• Removal of woody branch tips
• Stripping bark on some species (mulberry, Eastern red cedar)
• Breaking trunks and stems on some species
Goal #1: Reduce
Goal #2: Stop expansion
Goal #3: Outreach
Goal #3: Stress & kill

Grazing Impacts Over Time

Year 1

Year 2

Year 3

Year 4
What tools do we have at our disposal?

Herbicide Spot Treat

Timely Grazing

Prescribed Fire

Cutting

Utility Grazing

Herbicide Broad Spray

Introduced Insects
Ideal Multi-Year Protocol: Forest with Invasive Brush
Forest with Invasive Woody Brush

Year 1
- Timely Grazing
  - May/June

Year 2
- Timely Grazing
  - May/June
- Cutting
  - Brush too tall for goats
- Timely Grazing
  - 4-6 weeks after first

Assess
- Repeat year 2 if fire fails

Prescribed Fire
- Fall/Winter
Forest with Invasive Woody Brush

Year 3
Cutting
Live stems after green-up
Herbicide Spot Treat

Cutting
Year 4
Prescribed Fire
Fall/Winter

Herbicide Spot Treat
Year 5
Prescribed Fire
Alternate spot treatments and fire as appropriate. Apply goats if/when fire cycles are missed or invasives regain a foothold.
Year 1

Utility Grazing
Anytime during growing season

Cutting & stump treat
Brush too tall for goats

Year 2

Utility Grazing
To facilitate more cutting and stump treat

Prescribed Fire
Fall/Winter

Assess
Repeat year 2 if fire fails
Questions?

Aaron Steele, Founder/Co-Owner
Goats On The Go, LC
www.GoatsOnTheGo.com
info@GoatsOnTheGo.com
515.257.6846