Prescribed Grazing

For Invasive Species Management

What is prescribed grazing?

Prescribed grazing is the use of livestock to accomplish predefined vegetation management and other landscaping goals. Livestock affect vegetative growth, nutrient cycling, soil quality, and watershed behavior. With careful planning and monitoring of the ecosystem, livestock behavior can be directed to bring about desired changes in a landscape. Livestock mitigate invasive species growth by defoliating and trampling the invasive plants, which removes energy and prevents seed propagation. Moreover, livestock support a balanced ecosystem that is less hospitable to invasive species by stimulating nutrient cycling and the native seedbank.

Sheep defoliate and trample common reed in Albany County.

What is a grazing plan?

A grazing plan is a document that describes how livestock are directed to meet the predefined management goals. A grazing plan will include a well-defined goal, detailed protocol for managing the behavior of the livestock, and the methodologies for monitoring the ecosystem. The grazing plan describes the day-to-day activity of the livestock and their manager, as well as the conceptual strategies that motivate the day-to-day activity.

Cattle manage Japanese stiltgrass in Dutchess County. Treated pasture on the left and untreated pasture on the right.

Does prescribed grazing really work?

Yes! Academic research demonstrates that prescribed grazing is effective at controlling a wide range of invasive grasses, herbs, and shrubs. In New York State, livestock have successfully mitigated populations of many priority invasive plant species including mile-a-minute, bittersweet, purple loosestrife, Japanese stiltgrass, reed canary grass, common reed, and Japanese knotweed. The best results follow consistent grazing through multiple seasons.

Key Principles of an Effective Grazing Plan:

- Identify and address the root cause
- Avoid damage to the native plants
- Repeated grazing for at least 2 - 3 years

Key equipment includes solar-powered fencing, water barrels, and shelter.

Is Prescribed Grazing Cost Effective?

Yes! Prescribed grazing is economically viable, especially when considering environmental and social externalities. Livestock are less expensive than heavy machinery and less damaging to native plants than chemical treatments. The cost of a prescribed grazing program depends on the site, project partners, and grazing strategy. In New York State, a small project may be implemented for as little as a $1000.

Additional Resources

USDA NRCS
Green Goats
Fortunate Ewe Farm
The Farm on Peaceable Pastures
https://bit.ly/2REycRv

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