

Do you have a problem with...

Weeds and brush in pasture fields?

Invasive plants taking over areas of your farm?



Kudzu

Biological control is using a disease, parasite or predator to control a pest. In the case of unwanted and invasive plants, goats can be an effective tool for vegetation management.

Potential benefits and purposes of using goats for biological pest control:

- Reduced need for chemical herbicide use
- Savings on herbicide costs
- Potential of decreasing fuel and machinery use
- Reduced on- and off-farm environmental risks
- Improved use of the land overrun by undesirable plants
- Improved productivity of pastures
- Goats may provide opportunities for additional secondary farm income, in addition to controlling pests, through production of products for wholesale/retail markets
- Increased plant and animal diversity
- Improved cycling of plant nutrients



Goats can do a good job of controlling weeds and brush

How much does it cost?

Costs will vary depending upon the problem to be addressed and the existing resources on your farm. Where goats are used for undesirable or invasive vegetation control, costs may include:

- Purchase of goats
- Fencing (establishment and maintenance)
- Shelters
- Water sources (waterlines, troughs)
- Control of internal parasites (worming)
- Losses to predators



Goats can be difficult to control, good fences may be needed.

Biological Pest Management for Plants



Goats can help to restore cycling of plant nutrients, releasing nutrients stored in woody vegetation and replacing them in the soil. With the woody vegetation killed and more nutrients available, it becomes easier for desirable grassy species to become established.

Goats can be grazed alone or with other livestock such as cattle or sheep. Goats, sheep and cattle prefer different forages. Goats will utilize and suppress plant species that are not eaten by cattle or sheep. As a result, if the grazing is well-managed, grass production and carrying capacity of pastures may increase, allowing the land to be used more fully and to generate more income.

Using Goats to Manage Vegetation

Goats have been used for vegetation management in this country for over a hundred years. Goats, as you know, will eat about anything and are relatively easy to maintain. A goat is able to consume up to 3 to 5% of its body weight in dry matter daily. In areas where undesirable or invasive plants such as kudzu, thistle, leafy spurge, multi-floral rose, or even weeds, brush and brambles, are a problem, goats may be an ideal solution. They can be used to control or eliminate undesirable vegetation while producing potentially profitable wool, milk, or meat products. Meat and fiber goats are particularly useful for brush control. Goats have excellent reproductive ability and typically produce an average of two kids per doe per year.

Goats consume a wide variety of plants and are resistant to many plant toxins. Not only will goats will eat grasses, weeds, tender branches and buds of trees and shrubs, the bark of some trees, effectively killing the trees by girdling, but they also preferentially consume seeding stems, reducing the spread of weeds by seeds.



Goats can be difficult to contain, and the cost of permanent fencing for goats is relatively high. In order to effectively control invasive vegetation, goats must be kept in the area to be controlled until all of the undesirable plant species are eliminated. The most effective control is obtained by confining the goats to small areas, which requires more fencing and water sources. The need for and frequency of de-worming may also increase.

Biological Pest Management for Plants



Goat health and nutrition are important considerations, particularly if goats will provide additional farm income

Opportunities for Additional Income

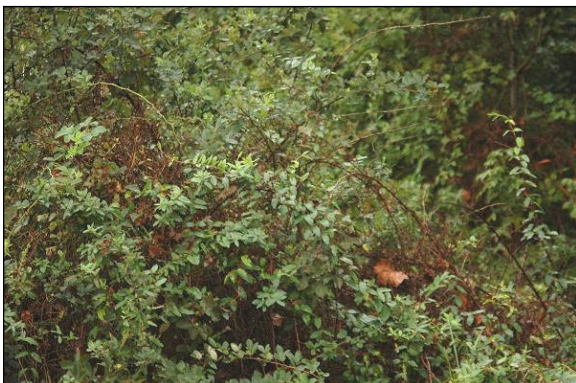
If you are interested in providing an additional source of farm income, care should be used in selecting the species of goat that will provide the benefits and products you desire, such as wool, meat or milk. It is also recommended that you investigate the market for these products in your community and develop a sound strategy for selling your products.

A rotational grazing system can be developed for maximum grazing use. To prevent overgrazing, be careful to understock rather than overstock your land and always remove animals from a pasture when the vegetation is grazed down to about 3 to 4 inches. Browse must also be managed so that it is maintained and not killed.

Goats can tolerate cold weather, but get chilled in cold, wet conditions. Adequate shelter should be provided. Depending on your climate, shelters may range from trees in the pasture, portable shelters, or permanent sheds or barns. While shelters may be minimal, they should be clean and well-ventilated.



Thistle



Goats can help control invasive, exotic or native plants, both woody and non-woody.

SMALL SCALE SOLUTIONS FOR YOUR FARM

Technical Help Is Available

Your local Natural Resources Conservation Service (NRCS) office has experienced conservationists that can assist you with biological pest management for plants. They can also help you develop a Conservation Plan to solve other problems you have identified on your farm.

There is no charge for our assistance. Simply call your local office at the number listed below to set up an appointment and we will come to your farm.

You may also be eligible to receive financial assistance, through a state or federal program. Your NRCS office will explain any programs that are available so you can make the best decision for your operation. All NRCS programs and services are voluntary.



Helping People Help the Land

For More Information Contact the:

Natural Resources Conservation Service

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