

Goats at Work- Eating Invasive Species

Boozhoo! This summer we rented a herd of goats at Fond du Lac. Although these animals were very adorable, they were hard at work, serving a very specific purpose in aiding in invasive species control. Goats are natural grazers, and specifically they like to munch on shrubs and other woody species. They are non-selective in their grazing, and some even theorize just the impact from their movements is enough to stifle vegetation growth. This brings us to our use of goats for the control of invasive buckthorn. Buckthorn (pictured right) is



Buckthorn overtaking a forest understory. Everything green in this picture is buckthorn. It is affecting the health of the trees above. Photo: MN DNR

a type of woody invasive species that can form a dense layer in the understory of forests, making it difficult, if not impossible for wildlife to move through. It grows extremely fast, and has the tendency to completely take over the areas in which it grows. It can grow in most conditions, seeming to be only slowed down by extreme shading, and it has little to no nutritional value for our wildlife since its berries contain a diuretic. It also can alter the soil chemistry, making it too acidic for other plants to

grow, and it is an overwintering host to a pest called the soybean aphid, which wreaks havoc on soybean fields and is a huge issue for folks in the agricultural industry. Lucky for us, goats contain a special type of bacterium in their gut that allows them to be unaffected by buckthorn, plus they are mostly targeting the leaves and bark when they graze, not the berries, allowing them to be a great solution as we aim to manage this plant.

So why grazing at all? Grazing has many benefits in the uses of agriculture including increasing forage production, soil fertility, resistance to drought and others. The hopes of using grazing to control invasive species is that the area being controlled will gain these benefits, while at the same time have enough invasive species removal to encourage native species populations to come back. Most of the time, in overrun buckthorn and other invasive species areas, a good native seed bank still exists, and is just waiting for its opportunity to begin growing again. In the area we chose for the grazing site, the buckthorn was comparable to a carpet or mat with the density of plants in the area. The plants were all in their seedling stage, meaning they were at approximately waist height, and most were not yet able to reproduce. The site we chose is a continuation of a FDL forestry project in which they were also trying to control the buckthorn. The goats took a little while to warm up to their new surroundings, but once they were comfortable, they got to munching on not only buckthorn, but also common tansy, which is another extremely present and difficult to manage invasive species present on the Reservation. We had the goats for approximately four weeks, and they have now traveled home. We had four animals, and in the four weeks they were here, they managed to make a dent in an approximately 4200 sq. ft. enclosed area. The hope is with continued grazing in the future, we can restore native species in the area that serve the FDL community, and the wildlife, the soil, agriculture, forestry, the water, and all other things we aim to protect in a much more positive and beneficial way.



Pictured above: Madison Bear and Mariah Fehringer taking care of the goats. Almost everything green in this picture that they are standing in is buckthorn. Photo: Kelsey Wenner



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