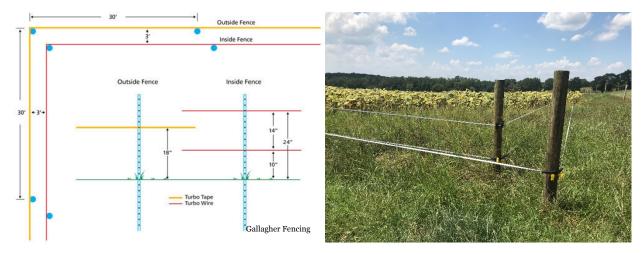
## Controlling Browsing Pressure in Plots

Browsing pressure by white-tailed deer can be detrimental to establishing a food plot, dove field, or even a tree orchard. Food plots are generally designed to provide nutrition during the stress periods of late summer and winter or provide observation opportunities, but browsing pressure while plants are emerging can destroy a plot before it starts growing. Young plants are often targeted by deer since they are tender and nutritious. However, at this stage, plants are most susceptible to damage from herbivory. Intense browsing pressure on young plants can turn a would-be food plot into a dirt patch. Many species planted in dove fields, like sunflowers, are highly palatable to deer and they can consume an entire field in some cases. Deer may also damage young trees, limiting tree growth and development of orchards. Additionally, bucks may rub on young planted trees, which can damage or kill the tree. To temporarily reduce damage until food plots can get established there are many methods including alterations to planting regimes, repellants, fencing, and increased deer harvest.

Planting alterations such as delayed planting dates and increased planting rates can be effective at limiting the effect of browsing pressure by deer. Altering planting regimes generally works best if pressure is light but may be ineffective in plots with heavy pressure. Increasing planting rates can combat loss to deer during plant emergence. When food plots are planted early in the growing season, native food sources may not be developed so deer can cause greater damage to a plot. Planting a quick germinating nursery crop can alleviate browse pressure by providing alternate foraging opportunities while the desired crop develops. Planting cereal grains like wheat or oats with clover allows can help prevent damage to young clover plants.

Repellants can be used to control browsing pressure in plots until they can sustain foraging. Repellants are generally odor-based but can be visual or auditory repellants. Milorganite is a fertilizer made from processed sewage that can be used as a temporary repellant. Milorganite has been shown to be effective at limiting browse pressure by deer when applied at 240 pounds per acre, but the effect is generally short lived (~2-4 weeks). The effect of Milorganite as a deer repellant is reduced in areas with high deer densities, limited alternate food sources, and extreme weather condition. Other odorbased deterrents can be spread over the plants, around the plot, or on a ribbon surrounding the plot. A ribbon surrounding the plot is the most common method for odor-based deterrents and involves constructing a fence around the plot with a ribbon that is covered in a deer deterrent. Common odor barriers and deterrents include Plotsaver, Deer Busters, Deer Stopper, and Liquid Fence. Odor deterrents require routine reapplication and can be less effective during periods of frequent rain. Odor repellants are generally effective, but deer can become acclimated to them. Ribbons have been used to visually deter deer from using a plot, but this is generally ineffective without an odor repellant. Sound deterrents, such as motion sensed sound devices, have been used to deter deer from using an area, but deer can quickly acclimate to these deterrents.

The most effective method for limiting deer browse on plots is limiting deer access through fencing. Fences can also direct points of access to plots and provide perching areas for birds such as doves. High fences can be the most effective method at limiting deer browse but are costly to construct or may be time consuming to erect and remove to allow access to deer. These fences are constructed around a plot, then entirely or partially removed after crops matures to allow access. Electric fences can also be used to limit deer access and browse on a plot and are typically the most cost-effective. Electric fences can be single or dual perimeter fences (dual perimeter pictured below). Deer can generally cross single perimeter electric fences, so dual perimeter electric fences are preferred. Deer seldom jump dual perimeter electric fences because they have poor depth perception and the shock deters them from crawling under the fence. Non-electric dual perimeter fence can limit deer access to a plot, but the effect is short lived because deer quickly learn to navigate the fence. Additionally, tree tubes can be used as protection for individual trees to protect saplings in tree plots from browsing pressure and bucks rubbing.



Harvest can be used in addition to other methods to mitigate browsing pressure by deer on plots. An increased harvest regime, especially of does, reduces the deer herd which reduces the browse pressure on a plot. Additionally, harvest in or near plots can deter other deer from using a plot. Reducing the deer herd can also reduce browse pressure on native vegetation which can increase additional forage across the landscape. Reducing the deer herd to mitigate browse pressure on plots is only recommended when the deer population is at or above carrying capacity and preferably under the guidance of a wildlife biologist.

To effectively alleviate browse pressure on a plot multiple methods may be needed. Manipulations in planting regimes can be useful to help reduce browse pressures. Deterrents and fencing may be necessary for areas with moderate to heavy browse pressure by deer. Deterrents tend to be cheap but are less effective than fencing. Fencing is the most effective but generally more expensive. Harvest can be used to reduce deer numbers and thus browse pressure but should be used with caution.