Lightly on the Land with Horse Logging[1]

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Small forest landowners are often confronted with a timber harvest dilemma. On one hand they may want to cut timber for a variety of reasons ranging from aesthetic improvements to economics. On the other hand, they fear damages, perceived or real, associated with typical commercial logging equipment. As tract size goes down, the fear appears to increase. In addition, particularly in times of low stumpage prices, it is very hard to find loggers willing to invest their time in small tracts.

One of the greatest landowner fears is the creation of skidder ruts. A second is the residual damage to boles of residual trees that is all too often a problem where heavy equipment is being used intensively. Letting such fears cause the landowner to fail to do anything may result in future stand deterioration at worst, and a continuing dissatisfaction with stand conditions at best.

An alternative for these situations is the use of horse logging. There are three main approaches in horse operations. The first will involve a logger who fells trees and skids them to a portable sawmill located on site. In the second approach, the logger fells the trees, then with his team skids the logs to a log landing where standard commercial equipment takes over to load the logs on to trucks for transport to a mill. The third approach, and probably least used, has the logger felling, skidding, and loading the logs, often with his horses.

Horse logging, when skillfully done, is the true "lightly on the land" approach to timber harvest. It tends to sacrifice economic returns for a more desirable condition of the stand and soils at the end of the day. In addition, the process itself has an aesthetic quality pervaded by a sense of reenactment of something from the past - a benefit without an environmental or economic metric. Often landowners want to take numerous photographs of the process to be shown with pride to children and adults alike, and just as part of a family history album. It is also common for the landowner to have quite a few requests to visit the site while the logging is in progress. In the absence of discretion, photographers and visitors getting in the way of the loggers can be a problem for the latter who are people that are trying to make a living.

Horse logging benefits are likely at their zenith when doing selective cuts. Log lengths rarely exceed 16 ft. so potential for damage to the bases of residual trees is fairly low. Horses can be used in regeneration cuts, but the high densities of slash in these operations can cause some significant problems for skidding.

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Distances that logs can be moved with horses with practicality in time considerations probably does not exceed about 1500 ft. from the stump to the log landing. This depends on the topographical conditions, soil conditions, environmental conditions (particularly temperatures), and size of the horses. Large draft horses (typically weighing more than 1400 lbs each) will be able to draft greater loads for longer distances than the smaller draft breeds.

Ultimately, the efficiency, effectiveness, and quality of the residual stand conditions will depend upon the skills of the horse logger. He must be skilled in both felling trees and as a teamster. To watch a logging teamster and his team is like watching a ballet, each partner knows the other's every move and each responds in concert with the other. It is indeed a high art form once common in America, but today unrecognizable by most Americans.

Landowners wishing to try horse logging operations on their lands should find a forestry consultant with the appropriate contacts. In some regions, this may mean contacts within the Amish or Mennonite communities where the necessary skills are most frequently found and usually highly developed. But there are also other horse loggers that are highly skilled.

Sources for additional information on contacts include:

***The Draft Horse Journal*: http://www.drafthorsejournal.net/**
***Small Farmer's Journal*: http://www.smallfarmersjournal.com**
***Rural Heritage*: http://www.ruralheritage.com**

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Figure 1. A horse logger working alone to thin a white pine stand on the Sumter National Forest in South Carolina easily skids an 18-in., 16-ft. log. (Photo by G. W. Wood)

Figure 2. No skidder ruts here and the soil shows minimal disturbance. (Photo by G. W. Wood.)

Figure 3. Two teams hooked in tandem to pull a very large red oak log on the Foltman Farm, near Churchville, New York. (Photo courtesy of Judy Del Hinkson.)

Figure 4. A team of logging horses at ease around a heavy log loader in operation. (Photo courtesy of Judy Del Hinkson.)

Figure 5. The skipper, a device designed to keep the near end of the log from gouging into the soil which would make the draft more difficult and the level of soil disturbance greater. (Photo by G. W. Wood.)