

## What About Dragging Pastures?

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One of the questions that I commonly hear at producer meetings is: "Does it do any good to drag pastures?"

My usual answer is the universal extension answer for all questions, "It depends!" and that is usually followed by my question, "What are you trying to accomplish?"

Some day when you have a lot of time on your hands, think about all of the things you do during a day, and ask yourself what you are trying to accomplish with each task. The result may be a little scary.

What are we trying to accomplish with dragging pastures? The most common goal is to spread manure piles to accelerate mature decomposition and enhance nutrient cycling. Covering seed or disturbing a thatch layer are other common objectives. Dispersing manure piles may also lead to more uniform grazing. On some farms, dragging pastures is a tool to transfer funds to dependent children in a tax deductible manner.

Does dragging to scatter manure piles actually enhance nutrient cycling? For all practical purposes, no research exists to answer this question. From high school chemistry or building a campfire, we know intuitively that as particle size decreases, rate of reaction increases. Thus, if manure piles are reduced to manure fragments, they will decompose more quickly. The smaller particles also have greater surface area contact with the reactive surface (the soil). I believe it is a pretty safe assumption that nutrient cycling is accelerated following dragging.

The next question is, is the rate of increase in nutrient cycling economically meaningful? I really haven't a clue whether it is or not.

Some other aspects of dragging pastures may have economic relevance. The chain or flex type harrow is a very useful tool for bringing overseeded legumes or grass into better contact with the soil. The greater likelihood of the overseeded crop establishing is probably worth the cost of dragging. Mature dispersal comes as an added benefit.

Spotty grazing is very often the result of livestock avoiding manure piles. Scattering those piles can lead to more uniform regrowth and less selective grazing. To completely avoid manure-induced spot grazing is virtually impossible with any class of livestock which are in a production mode. Dragging pastures after every grazing period to avoid spot grazing is probably not economically kfeasible.

Timing of dragging can be fairlyk critical. Autumn dragging to break piles up going into the winter can result in much more even growth on pastures which do not receive nitrogen fertilizer. Nutrients contained in the manure are likely to be back into the soil solution for early spring growth if autumn harrowed. Manure piles that have dried a few months tend to shatter and scatter very nicely this time of the year. It also ensures that legume seeds contained in dung piles are more likely to come into soil contact in the spring.

Spring harrowing can either accelerate or slow pasture growth rate in the spring. Harrowing prior to ar at green-up frequently accelerates pasture growth by disturbing the thatch layer and allowing the soil to warm up more quickly. We have measured three to five degree differences in soil temperature in side by side harrowed and unharrowed strips in early spring. But, if harrowing is delayed too long after early green-up, growth rate can actually be slowed due to damage to tender young plant growth. Delaying dragging too long in the spring can also result destroying legume seedling growing on dung piles.

Some concern has been expressed that dragging pastures may increase the likelihood of spreading infection of intestinal parasites to grazing animals. While this may be a concern in some environments, it is generally not considered to be a problem in the Midwest and upper South.

Manure in dragged pastures dry out very quickly during most of the year (May to October) in Missouri. Exposing more manure surface area to the sterilizing effects of solar radiation kills most parasites. Simply drying the manure out reduces the likelihood of some survival for some organisms. In cooler, cloudy climates, parasite persistence is much more of problem. Parasite re-infection because of dragging is also more likely to occur with horses than with cattle due to the very severe overgrazing habits of set stocked horses.

We have kicked the pile around and thought about some of the benefits of dragging pastures. It is very difficult to say whether or not the benefits of dragging are worth the

cost of doing it. In terms of economic importance, I would rate the benefits in the following order: reduced spot grazing (enhanced utilization rate is the economic benefit); improved seed/soil contact (the eco-

nomc benefit is improved pasture productivity; and accelerated manure decomposition (the economic benefit is reduced fertilizer input).

## Ag Progress Days Started By Council

Dauphin counties.

Then, in 1969, the PFGC decided to expand the focus of the event and changed the name to Ag Progress Days. The event continued to change locations each year until 1975 when the Ag Progress Days was in Mercer County. By this time Ag Progress Days had grown and become so popular that the organizing committee felt it was time to find a permanent location, which is the current site near State College.

HERSHEY (Dauphin Co.) – One of Pennsylvania's big agricultural events in the summer is Ag Progress Days, which attracts about 50,000 people to central Pennsylvania for three days of farm-oriented activities.

But did you know that the Pennsylvania Forage and Grassland Council (PFGC) initiated what is today known as Ag Progress Days?

Yes, it is true! In 1965, the PFGC in cooperation with Penn State University, PDA and many other organizations conducted what was called the Pennsylvania Forage Progress Days at Hershey Farms in Hershey. In successive years the Forage Progress Days were conducted in Mifflin, Somerset, and

The PFGC, which began 40 years ago, has played a key role in the Pennsylvania agriculture we know today. Events such as Ag Progress Days, statewide hay shows, and the Forage and Grazing Conferences all have their roots in the 40-year history of the PFGC.

For more information about the PFGC and its many programs, including the 40th Anniversary celebration, contact Richard Hann at (717) 520-2349.



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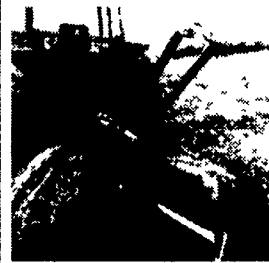
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