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## **ARE THERE PROFIT ROBBERS IN YOUR HAY PRODUCTION ENTERPRISE?**

Keith D. Johnson  
Forage Crops Specialist  
Agronomy Department, Purdue University  
West Lafayette, IN 47907-1150  
Phone: (765) 494-4800  
Fax: (765) 496-2926

E-mail: [johnsonk@purdue.edu](mailto:johnsonk@purdue.edu)

What differentiates hay crop producers in the amount of hay produced per acre, the quality produced and the longevity of stand? The simple answer is "lots of things". Hay crop producers should evaluate their own production program to better evaluate what profit robbers exist in their business. Steps should be implemented to "jail" the robbers.

**It begins with the soil.** Crops respond differently to soil properties. Blueberries grow better on soil type A and alfalfa grows better on soil type B. Red clover grows better than alfalfa on soil type C. Man can intervene and apply amendments like limestone and fertilizer, install tile drainage, and/or irrigate to make a soil more conducive to profitable forage production.

It is imperative to have the correct soil pH for the specific crop before seeding occurs. Therefore, it is important to soil test, preferably a year before seeding, so limestone can be applied to increase soil pH. Also, if soil test levels are less than ideal for phosphorus, potassium and magnesium, measures can be take to make these nutrients non-limiting.

**Plant-back restriction.** Plan the rotation scheme carefully to avoid use of a herbicide on the crop prior to seeding the forage crop that has a very long plant back restriction. Make sure the crop rotation plan is adequately communicated with the entity choosing the herbicide and applying the product.

**Species and variety selection.** Select forage species that are adapted to the soil types on your farm and will meet the needs of the hay-consuming animal to be fed. Become aware of variety differences within the species of choice as there will be differences in pest resistance, flowering date, yield potential, winterhardiness, cost, and, possibly, forage quality.

**Quality hay preferred.** Whereas, crude protein is an important quality trait, producers need to strive to produce hay where fiber levels are not too high to

depress forage intake and digestibility. Both buyers and sellers must learn the importance of forage quality traits and communicate with each other about hay characteristics other than protein content.

How is quality hay produced? Legumes are generally of higher quality than grasses and timeliness of harvest is essential. In general, harvest should be completed by the time legumes are in early flower and grass seed heads are fully extended, but before pollen shed.

Harvesting hay in Indiana can be a challenge, but several technologies can reduce the risk of rain-damaged hay. These technologies include use of a properly set mower-conditioner, seeding an adapted grass species with the legume of choice, tedders, inverters, drying agents, making chopped silage or wrapped bale silage, and/or organic acid preservatives. Seize the opportunity of making hay when the sun does shine; don't become a weekend only haymaking warrior or you will be less than satisfied with the hay quality harvested.

Techniques of helping producers target hay harvest have been developed (scissors cut and Alfalfa Quality Prediction Stick). While they can be useful in determining harvest date, don't get caught up in striving for a suggested quality level without regard to the incoming weather system's rain percentage. I'd rather harvest a day or two early in a good window of opportunity rather than risk waiting an extra day because the targeted quality level was not reached.

**Beware of pests.** Make it a part of your week to monitor insect, weed and disease pressure in the forage crop. Excellent economic thresholds have been established for the control of alfalfa weevil and alfalfa varieties that are susceptible to the potato leafhopper. If the economic threshold value is reached, take action by harvesting the crop, if maturity is proper, or apply a labeled insecticide that has a harvest restriction that is not going to delay harvest date.

I would encourage producers that will not make the commitment to sweep net alfalfa fields for leafhopper presence, never seem to have the time to sweep their fields, or have customers that desire non-pesticide treated hay to consider the use of potato leafhopper varieties that have greater than 50 percent resistance to the sap-sucking pest.

By close examination of hay fields for the presence of small winter-annual weeds in November, a producer will not be caught off-guard with an explosion of a winter-annual weed (e.g. chickweed) in April.

Close watch of the vegetation for leaf disease will alert producers to the need of selecting future varieties that have resistance to diseases that are limiting yield, quality and persistence.

**No harvest past early September.** Producers are tempted in many years to take a last cutting in late September or October when a string of warm days occur and the forage is ready to be harvested. This has much risk. If the forage is harvested, regrowth resumes, and a killing freeze occurs, the stand could be in jeopardy as storage reserves of starch and proteins may not be great enough for winter survival.

**Top quality hay covered, please.** Too much effort is expended in the making of high quality hay to have it stored outside to become compost. If inside barn storage is available, use it; if it isn't, then consider storing the bales on a crushed rock base and covering the stack with a heavy-duty tarp.

**Hay value.** Do your homework regarding the pricing of hay. A forage test analysis will be helpful documentation of justifying price assigned or determining what supplements are in order to balance the ration. One of the beauties of raising hay for the cash market is flexibility in marketing (i.e. hay doesn't have to go to the elevator at some predetermined price.) Sell hay by the ton and not by the bale unless first accounting for the pricing of hay by the ton.

If lower quality hay is sold below breakeven value too often, decide whether you have the savvy to feed your own livestock with lower nutritional needs. Many times the value-added to this type of hay exceeds the value obtained by selling it to other parties.