

Forage Seed Production in Rotation

Gord Pearse
Nipawin, SK

I will discuss five basic reasons why forages are an important part to prairie producers' rotations, and discuss how these aspects relate to forage seed production on my farm, on an individual basis. There are pros and cons for having forages for seed production in reduced tillage operations. Following this will be some general recommendations for producers considering forage seed production.

A. Improve Soil Properties

There are noticeable improvements in soil quality following forages, as many producers have realized with direct seeding. Water infiltration improves following legumes and grasses, and our land at one time used to crust. Grasses, particularly fescues, with their fibrous root system, have helped to eliminate this problem, almost as much as direct seeding. **BUT...** To get the full benefit of having a forage in rotation depends on how the forage stand is terminated. If the stand has to be disced and cultivated several times to kill it and get it into shape for the following crop, you are not getting the full benefit. Tillage may be required for some crops due to glyphosate resistance or inadequate machinery. Also, deep rooted crops like alfalfa are very adept at retrieving soil moisture from a great depth, and often the expected improved yields of annual crops following alfalfa may not be realized due to growing in drought conditions.

B. Break Annual Weed Concerns

This is a huge and understated benefit for forage production, **BUT** not necessarily for forage seed production. Perennial crop production in theory at least, reduces annual weed germination, but tends to increase the development of most perennial weeds. When producing a seed product, there can be a zero tolerance with some of our more popular weeds; therefore repeated herbicide applications (often the same product) may be necessary. Forages sown for seed are usually sown at $\frac{1}{4}$ to $\frac{1}{2}$ of the rate that you would sow the same forage for hay or grazing, and therefore seed stands are usually less competitive with weeds, and require more care. Also, some short-lived forage legume crops volunteer and can be weeds themselves. Ask an alfalfa seed producer for an opinion on sweet clover!

C. Spread Workload Seasonally

This depends greatly on which forage crop is grown, but long-term forage stands require less man-hours in the peak workload periods of spring and early fall, except in the establishment year. **BUT...** Depending on your weed spectrum and pressure, hours per acre may be higher on forage seed fields than annual crops. For the large seeded grasses, roguing is a requirement, and nobody likes this job. Also, July is often the only reprieve for cereal grain producers, and some forage crops are combined by mid-July. This is not always a benefit!

D. Complement or Expand Livestock Operation

Grass seed fields generally have the crop residue baled following harvest. This feed is often average quality at best, but some years the bales can pay for the fertilizer. Some crops that respond to summer moisture well (like meadow brome grass) can and should have their regrowth grazed or hayed off in September. Livestock producers also have the option of baling up a

portion or all of a field that for whatever reason has a weed concern. **BUT...** In my past life, I have come to realize that livestock producers are not the best forage seed growers, not because they are poor managers, but because they often have different goals. For example, they may not be as diligent on weed control, because there is a tremendous hay crop anyway. There is also often opposite agronomic management of a hay field versus a seed field (example – row spacing, seeding rates).

E. Higher Net Income per Acre

We have and always will grow forage seed. What crops and acreage will depend on future markets, or at least how I read them. No other crop can offer the potential return that forage seed can, **BUT** it will remain the highest risk crop on the farm. Production risk is a variable that you can at least have some control over, but forage yields are extremely dependant on appropriate weather conditions. Market and price volatility is normal and dramatic, and not very predictable, and therefore budgeting for yield and price is often futile. You also must remember to amortize your costs of the year of establishment into the years of seed production.

There are a few general recommendations that I would recommend any current or potential producer of forage seed consider. Do your “due diligence” prior to seeding, by clearly defining your goals in forage seed production in your seeding system, and understand the opportunities and limitations of forage seed production. Ask yourself the following questions:

- a. Can you afford to establish the crop properly, to minimize the risk of failure?
- b. Will you need help, and will you accept a production contract?
- c. Do you understand production requirements and the market that you are producing for?
- d. Is your land, land base, and equipment well suited to forage seed production?
- e. Can you afford market volatility?

Good luck in 2003. I think we all deserve it.