Forage Facts

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Establishing Forage Legumes

By: Johanna Murray

Legumes are generally considered the nutrient powerhouses of perennial pasture. They are generally higher in protein and energy than the

grasses they are grown with, and cattle tend to prefer them. However, legumes can also be difficult to establish, and hard to keep in pasture stands. Grazing pressure, establishment issues, and competition can all reduce the longevity of tame legumes in pastures. Wild vetches and other native legumes may move in to pasture, but while they can be hardier than tame varieties they are often also smaller and less productive.

Whether your chosen method of re-introducing tame legumes to your pasture includes tearing up the whole pasture, or sod seeding a legume mix into the pasture right

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after grazing or spraying, there are a couple of ways to make sure that your legumes establish, and do well in the stand.

The most important factor in perennial plant production is selecting appropriate species for the conditions. Winter hardiness, drought or flood tolerance, acidity or salt tolerance and drainage preferences all play a role in the longevity of your legumes. For example, birdsfoot trefoil prefers damp - more poorly drained soils while clovers tend to prefer dry ground. Sanfoin needs extra care to ensure overwintering while Cicer Milkvetch can be difficult to establish but is extremely winter hardy. (https://upick.beefresearch.ca/)





Seeding Perennials &

Another key consideration is inoculant. If you have grown legumes in the field in the past, chances are good that you already have some native species of rhizobium present. That being said - different types of legume require different types of inoculant. Additionally, Rhizobium is extremely sensitive to soil pH. some research has been done on developing more acid-resistant rhizobium, but the best bet is to make sure that your chosen legume varieties are acid-tolerant. (deptdocs.nsf/all/agdex9682/\$file/120_22-3.pdf?OpenElement)

The last key consideration is seeding depth. The ideal seeding depth varies by variety and seed size, anywhere from 0.65 to 1.25 cm for small seeds such as clover, birdsfoot trefoil and alfalfa. In heavy soils, like most of those in the peace, it's better to err on the shallow side. Seedlings contain limited

Shaye Godberson is a third generation peace country resident, she grew up outside of Hines Creek in a farm setting. She is currently in the process of finishing a bachelor's degree in Environmental Science with a specialization in Agrology at the University of Lethbridge. She has always been one to love the outdoors and has been around agriculture from a young age so this career path came naturally. When she is not working or in school, she can be found camping in the region or snowboarding in the winter. She is excited to learn about all of the interesting projects that are part of the PCBFA and how she can implement their ideas into her learning.

energy until they can start photosynthesizing, you don't want the seedlings to expend their limited energy stores attempting to reach the surface of the soil.

Once the legumes are in the ground, grazing pressure can also have an impact on the longevity of legumes. Cattle may be inclined to selectively graze legumes, because of their superior nutrient content and palatability when compared to grasses. Because of this, continuous grazing systems may be extra hard on legumes and allowing them to re-grow during the season may improve longevity.

There are a lot of challenges when establishing perennial legumes. But once they're present, legumes can boost pasture and animal productivity, making the effort of establishing them worth it to many producers.





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Meet Our Summer Staff!



Matthew McNaught grew up on a cattle ranch south west of Spirit River, in the Northmark area. Matthew has always played an active role on his family's farm when ever possible and his passion for agriculture has grown throughout the years of experience.

Matthew is currently going to school at the University of Saskatchewan pursuing an agriculture degree with a major in soil science. Matthew's hopes after graduating is to gain more experience and knowledge in the agriculture industry that he can eventually bring back and implement on his own family farm.





Jared Horvath grew up in the small farming community of falher. There he gained his love of biology that he wanted to pursue into a degree. Leaving the small town atmosphere to pursue the degree made him realize how much he appreciated it. This is what pushed him towards agriculture research.

Jared finished his bachelors of Science in biology in 2020 at MacEwan university with a focus on genetics. This year he has been finishing a agronomy certificate through Olds. Using these he wants to pursue a career in plant breeding research.

If Jared is not studying or working he is either fishing or playing instruments. Jared is excited to work for PCBFA and take what he learns here to further his career.

Our Summer Staff team has been with us since May 3rd, and they have been a great crew! We are so excited to introduce Shaye, Matthew, and Jared to our membership. If you see them around this summer, be sure to say hi!

Keep an eye our for July Forage Facts to meet our new Master's Student, and a new employee who will be starting soon!



Event	Date & Time	Venue / Location
Crop Livestock Inte- gration & Intercropping Field Day	Wednesday, July 7th	Northern Sunrise County Location TBA
Crop Livestock Inte- gration & Intercropping Field Day	Thursday, July 8th	Clear Hills County Location TBA
Pasture Walk Series	July 12 -16th	Various Locations
Soil Health & Grazing Day with Dr Kris Nichols, Kim Cornish & Brian Luce	Postponed to September	Clay & Ash Armstrong Ranch Goodfare, AB
Soil Health & Grazing Day with Dr Kris Nichols, Kim Cornish & Brian Luce	Postponed to September	Bill & Jeanne Hanson Ranch Valleyview, AB

We are Planning a Robust Extension Schedule for Summer 2021!

All Events will Abide by Current Health Reccomendations and are Subject to Change. Check our Website for the Most Up-To-Date Event Information

To Register for any of our Events: peacecountrybeef.ca | 780-523-4033 | info@pcbfa.ca

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