Perennial Pastures & Hayfields: What’s in them?

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| **Grasses** | **Legumes** | **Forbs** |
| Grasses are plants that have long, thin leaves – “blades” of grass. Perennial grasses form dense mats of fibrous roots that hold soil in place. A field of perennial grasses can soak up lots of water and dissolved nutrients, preventing them from running off into rivers and streams. Grasses for pasture and hay are generally divided into “cool-season” grasses, which have their main growth in the spring and fall; and “warm-season” grasses, which grow well in the heat of summer. In northern states, cool-season grasses are what you most commonly see in pastures and hayfields. | Legumes are plants related to beans and peas. They have a close relationship with a particular group of bacteria that live in the soil, called Rhizobia. Rhizobia bacteria species “infect” legume roots where they collect nitrogen that the plants take in from the atmosphere, which is about 70% nitrogen gas. The bacteria break down and transform this atmospheric nitrogen into a form useable by plants. Well-managed legume crops can reduce the need for purchased synthetic nitrogen fertilizer, which is produced using fossil fuels. | Forbs are broad-leaved plants that are neither grasses nor legumes. Most of the plants that you recognize as weeds in your garden are forbs. Perennial forbs can also become weeds in perennial pastures, and may be harmful to livestock. Some forbs are planted intentionally in pastures to provide variety in the cattle diet. Certain types of forbs have other beneficial effects such as long and fleshy roots that can loosen compacted soil. |
| **Common types of cool-season hay & pasture grasses:** | **Most common hay & pasture legumes:** | **Common planted forbs for pasture:** |
| Timothy | Alfalfa | Turnip |
| Smooth bromegrass | Red clover | Chicory |
| Orchardgrass | White clover |  |
| Quackgrass (often considered a weed) | Birdsfoot trefoil | **Common pasture weeds that are forbs:** |
| Fescues | **Less common hay & pasture legumes:** | Canada thistle |
| Ryegrasses | Kura clover | Goldenrod |
|  | Sainfoin | Curly dock |
| **Common types of warm-season grasses in the Midwest:** | Crownvetch | Wild carrot |
| Switchgrass | Alsike clover |  |
| Big bluestem |  |  |
| Indiangrass |  |  |
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More information: Evaluating Land Suitability for Grazing Cattle, Green Lands Blue Waters , <http://greenlandsbluewaters.net/Perennial_Forage/CG_Evaluating%20Land_final_0313.pdf>