

Pasture Fertility – Rules of Thumb

1. From a recent soil test (done every 3 years) you can determine the lime, phosphorous (P_2O_5) and potassium (K_2O) needs.
2. Keep pasture soil pH above 5.8 so there is good response from applied fertilizer or manure (this will minimize nutrient tie ups).
3. For grass pasture, use 25 – 40 kg/ha nitrogen (N) from fertilizer in the spring three weeks before turnout or just after the first grazing rotation. Additional nitrogen applications between July to mid August depend on soil moisture, grazing requirements and species productivity.
4. Mixed pastures (15 – 30% clover) need 20 – 30 kg/ha nitrogen in spring.
5. Depending on soil test levels, most pastures will benefit from a mixed fertilizer in spring (eg. 19-19-19 or 26-32-0 U). Phosphorous is critical for new root and shoot development, while potassium improves both growth and winter hardiness. Some pastures are high in potassium (above 350kg/ha of K_2O from the cattle's manure so consider a 26-32-0 U blend).
6. Proper paddock configuration, water source location and grazing management will distribute manure nutrients more effectively.
7. Lime is expensive to over supply (use a soil test). Lime is critical to maintain a soil pH of 5.9 – 6.4. This range ensures fertilizer effectiveness and good pasture growth.
8. Good pH enhances clover content ($pH \geq 6.0$).
9. Remove unproductive weeds (wild carrot, thistles, buttercup, chickweed and plantain) through better grazing management, fertilizer to increase grass competitiveness and possibly a herbicide application.

For more information, please contact:

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