Improving Pasture Management

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fact, it is a common practice to plant trees to provide these areas. Don't! Eliminate them! These areas only accumulate manure, and after rain are wet and muddy — the ideal environment for growing all the bugs we don't want cows exposed to. Studies have been found that congregation areas under trees are the areas highest in bacteria and pathogens. Saw them down and sell the firewood. On extremely hot days, it is better to keep the cows in a well-ventilated barn.

Maintain Vegetation On Pastures

Another benefit and reason to maintain vegetation on pastures is that they are cooler. Throughout the summer, bare areas range from eight to 15 degrees hotter than adjacent vegetated areas. Eliminating bare areas and maintaining vegetation means reduced heat stress.

Provide Adequate High Quality Water

Finally, provide lots of high quality water. Water is the most important nutrient in a dairy cow's diet! If a cow's water consumption drops by 20 percent, dry matter intake will drop by 2-2.5 pounds. This will lower milk production approximately five percent. Remember, clean water doesn't always equal quality water. Stream water, while accessible on pasture, is most often not high quality water. Water must have low bacteria counts, low mineral content, and taste good. Anything less will affect your cow's nutrition, production, and health. In conclusion, provide easy access to high quality water. Don't compromise.

Conclusion

Most of these pasture improvement suggestions are relatively inexpensive. In fact, they are cheap practices to implement when evaluated in light of increased milk production, improved herd health, lower somatic cell counts, and improved cow comfort.

Poisonous Plants Of Pennsylvania

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ing the appetite and profusing copious drooling of saliva. This is particularly true with horses in which it is difficult to feed any red clover hay for this reason.

Ergot — This fungus disease of many native and domestic grasses is found most frequently on rye and rye grasses. Black masses along the seed heads are usually produced by this fungus. Wet, dark weather favors the formation of this fungus on these plants. Ergot causes disintegration of red blood cells, sloughing of the ends of the ears and tail, abortion and, in severe cases, death from exhaustion.

Mushrooms — There are many so-called rules by which one is supposed to be able to distinguish safe from *deadly poisonous wild mush*rooms. Even the experts disagree on how to tell the edible from inedible species. Do not eat wild mushrooms unless you are absolutely certain that the species is non-poisonous. Some poisonous species are rendered safe by cooking; others are rendered unwholesome by cooking. The safest mushrooms to eat are domestic mushrooms grown under cultivation. Even these may not be wholesome if stored too long or harvested when too old and partially decayed.

Nitrate-Nitrite Poisoning — During periods of stress, many plants accumulate toxic quantities of nitrate or nitrites within their tissues. Sudden cold weather, drought, for the first four or five days after a good rain following drought, excess nitrogen fertilization may produce an accumulation of nitrates or nitrites. Excessive intake of these compounds *ties up the oxygen-carrying* capacity of the red blood cells and symptoms are directly proportional to the amount absorbed. Also important is whether or not the nitrate bearing forage forms the major part of the diet. Cattle seem to be able to handle much more nitrate if they are receiving at the same time high-energy supplement or other forage. The symptoms may vary with the amount eaten, stage of gestation and the activity of the animal. Stabled animals or those fed in a dry lot appear to tolerate larger amounts of nitrate than those which are free to exercise. Cows receiving too much nitrate may show only shortness of breath when forced to walk for a few hundred feet. Abortion results if the amount eaten results in asphyxiation of the fetus. Many other symptoms are described: indigestion, poor rumination, milk depression, ketosis, and failure to come into heat, etc.

Nitrate Accumulating Plants — Annual Grasses — Oats, corn, wheat, rye, sorghum, sudan, etc., in approximately that order. Most broad-leafed weeds (lambsquarter, pigweed, smartweed, plantains) may accumulate large quantities under stress. Common shrubs which may be browsed during dry weather may accumulate excess nitrate levels. Ordinary Canada Thistles, rarely eaten by cattle, are readily eaten when cut and wilting. These have been incriminated in several herd abortion problems.

How to Handle Forages Suspected of Excess Nitrate Content — Wait until weather conditions return to normal before feeding. For example: Corn dangerous for green chopping or small grain for pasture, if still alive after growing conditions return to normal, will quickly use up excess accumulated nitrate. Five days after a good rain, drought-stricken corn — if still alive — will use its excess nitrate.