

Managing a Nitrate Problem

REDUCING THE NITRATE CONTENT OF FEEDS

- Leave drought-stressed forages in the field as long as possible; nitrates diminish as the plant matures; if the forage survives the drought, the nitrate levels should be back close to normal after 2 weeks.
- Cut suspected forages higher than normal to avoid the higher nitrate containing portions of the lower stems and leaves.
- Avoid use of drought-stricken forage for 3-5 days after a rain.
- Control weeds closely to avoid nitrate accumulation by the weeds.
- Ensile to reduce the nitrate content (may be reduced by 70%).
- Utilize proper ensiling and feed-out techniques to restrict mold growth (certain molds will convert nitrates to nitrites).

REDUCING THE RISK OF FEEDING HIGH NITRATE FEEDS

- Increase the level of high nitrate feeds gradually to allow adaptation by the animal.
- Dilute the amount of high nitrate feed with feeds testing low in nitrates.
- Feed the questionable feed in several small feedings during the day to avoid large nitrate doses.
- Provide adequate dietary carbohydrates to maximize microbial fermentation and degradation of the nitrates.
- Avoid rapid changes in the diet, or other situations which may impair rumen function.
- Keep the herd healthy (healthy animals are better able to tolerate high nitrate intakes).
- Direct-fed microbials may benefit the animal by improving rumen fermentation.
- Avoid unnecessary handling or other practices which might excite the animals.
- Research trials are conflicting regarding the role of vitamin A in nitrate toxicity; to be safe, higher supplemental vitamin A is recommended (about 50,000 International Units above standard supplementation is suggested).

