Discussion Breakout Sessions
Fertility
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Session 1


This group was made up of individuals that represented a strong and complete cross section of all groups invited to this one day event. The concern for proper soil fertility was certainly expressed by the group as a major concern to the production and longevity of orchardgrass stands. Several key components were recognized by the group that they felt were contributing to their fertility concerns.

Critical Issues/Primary Problems

Nitrogen Use
- Amount and timing as associated with plant growth
- Benefits of split application after 1st cutting

P&K Use
- Are the amounts being applied insufficient for projected yields and stand longevity?
- Are the sources of P&K availability and cost detrimental to proper levels being applied? Sources recognized include both commercial fertilizer and various types of animal waste.
- The need for individual Nutrient Management Plans to fit the individual farming operation. Not blanket plans or recommendations to fit all farming operations.
- What is the best timing of P&K applications when amount of fertility inputs are restricted due to supply, cost, or regulation?

Soil Testing
- What is the proper frequency of soil testing?
- Are we soil testing for the correct nutrients?
- Need to have producers recognize the importance and need for P&K recommendations and not ignore test results.
- A change in mindset is needed in that nitrogen is not the only important nutrient to production and longevity.
• Can there be a specific variability in soil nutrient levels within a field and to what extent. How is the best way to identify this variability?

**Soil PH**

• There is a need to recognize the benefits of proper PH on nutrient availability and plant uptake.
• How does soil PH interact with other factors such as total soil fertility, cutting management, etc.?

**Sulfur**

• Is sulfur a major concern for optimum orchardgrass production?
• What are the best sources of sulfur?
• Is plant tissue sampling the best way to sample for sulfur?
• Should soil testing for sulfur be done subsurface or utilizing the entire soil profile down to 4-6 inches?

**Strategies\Action Items**

• There is a need to develop a complete orchardgrass Production Survey in the next five months. This could be done through a complete effort including:
  State Entomology Specialists
  State Fertility Specialist
  State Forage Specialists
  Extension Agents
  Industry Representatives
  Email Conference Attendees for input
• Data Collection (1/10/10 to 10/11/10)
  This would have to be done in person by Extension Agents and Ag Consultants. Not a mail type survey. This survey would be in-depth and require personal inquiry
• Review of Survey Results (2-3 months) by State Forages Specialists
• Summarize total results (Complete by 5/11)
  Ben Tracy – Virginia Tech

**Helping with Specific Needs of the Project**

• Those outlined above.
Session 2


This group was made up of mostly Extension, NRCS and other agency personnel. There was one producer in the group.

Critical Issues/Primary Problems
Nutrient Uptake and Removal

- Are nutrients being replenished to crop needs?
- Are producers aware of the rate of nutrient removal?
- Importance of micro and macronutrient relationships and utilization as they relate to specific soil types.
- Timing strategies for fertilizer applications.
- Soil PH and its role in nutrient availability and uptake.
- What is the efficiency of animal waste?

Fertility Recommendations

- Is new research needed to update fertility recommendations?
- Luxury nutrient consumption and use equals bad economics and how do we get this message across?
- What different forms of potassium are available? If so, at what levels?
- Is potassium chloride toxic?
- Cost analysis and availability of potassium alternatives is needed.
- What role do “safety factors” play in the overall picture of sufficient fertility inputs being applied?

Soil Testing

- What should the soil testing frequency be for a particular field for the best testing results, best yield, and most efficient use of fertility inputs?
- How should samples be taken for best results?
- Should soil sample protocol be based more on the actual soil type being tested?

Survey

- It was felt that a survey of producers needed to be done to learn more about individual producer soil fertility strategies and management. It was also stressed that the need to get surveys back to get a strong representative sample was important. This type survey would have to be done one on one to assure that information is provided.
Strategies and Future Actions

- (6 votes) More work needed in regard to fertility recommendations based on different soil types, soil productivity, timing and what the orchardgrass will be used for. Will the orchardgrass be used in a “systems approach” in research not just individual disciplines?
- (5 votes) A need to look at actual nutrient removal rates to arrive at actual levels needed and applied.
- (4 votes) Education needed in the importance of keeping yield records.
- (4 votes) The need for nutrient management planning as a management tool and not just an environmental tool and/or strategy.
- (1 vote) Soil testing to coincide with yield for more accurate nutrient removal information.
- (0 votes) Better ways to estimate yields.