In Balance

a newsletter for the Whatcom County Dairy Industry

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Whatcom CONSERVATION DISTRICT

SAVE THOSE PRE-SIDEDRESS SOIL NITRATE TESTS! It's Not Official Yet, but Fall Soil Tests May Not Be Needed in Corn Fields With PSNTs

Now there is another reason for growers to use the Pre-Sidedress soil nitrate test (PSNT). Dan Sullivan, an Oregon State University soil scientist, is currently revising some of the soil testing requirements for nutrient management.

Sullivan feels that generally there is a strong relationship between soil nitrogen levels prior to sidedress and soil nitrogen levels at the end of the growing season (i. e. a field that tests high for nitrogen in June will probably also test high in October). Therefore, the PSNT test could eliminate the need for fall soil nitrogen testing. Since Sullivan wrote the original fall soil nitrogen testing procedure (the "Report Card Test") in 1994 when he worked at the Puyallup Research Station, his suggested revisions will probably be adopted – hopefully this year.

The WCD staff wishes you a fun, safe, and sunny summer!

Mechanically Processed Corn Silage Offers Potential Benefits to Local Dairies

Lynn Johnson and Joe Harrison are a pair of dairy nutritionists who have done extensive research on mechanically (or kernel) processed corn silage. Johnson and Harrison recently completed a series of seven articles in WSU's DAIRY NEWS about their work in this area. Some of their findings on opportunities and challenges of processed corn silage include:

The opportunities:

- Milk production increases (by over 1 pound per day) due to an increase in the digestibility of both the starch and fiber in processed corn silage. This increase in production would be equivalent to adding over 4 cows to a 300 cow herd.
- There is less spoilage and dry matter loss with processed silage during storage due to greater wet pack density and more uniform fermentation.
- If corn is mature enough when it undergoes kernel processing, the grain requirement in the ration can be reduced.

The challenges:

- Due to our short growing season (where's global warming when it could do some good?) most of the corn in Whatcom County is harvested during early maturity. This is when corn is in the hard dough to 1/3 milk line stage (dent is somewhere in between these 2 stages) and dry matter is usually less than 25%. Processing silage at this stage may improve fiber digestibility (though Johnson and Harrison point out that not all research is conclusive on this), but it does not provide kernel processing's main benefit (i.e. boosting starch digestibility) and will not stop juices in wet corn from running.
- Harvesting during late maturity (2/3 milk line to black line, or about 30%-35% dry matter) is necessary to achieve the most benefit from processing. In most years, only the earliest maturing varieties of corn will make it and they need to be planted early in order to beat October's rain.

Water Quality Continues To Improve In Watersheds Where Agriculture is the Dominant Land Use

Water quality monitoring results for 1st Quarter 2002, released by the Department of Ecology's (DOE) Bellingham Field Office, continue to show decreases in fecal coliform counts. Five out of the six north county watersheds draining to the Nooksack River met the Total Maximum Daily Load (TMDL) goal set by DOE for the quarter. The only one that failed (Fishtrap Creek) exceeded its goal by just 8 fecal coliform colonies. The following table summarizes the results:

Watershed	1st Quarter 2002 fecal coliform count (colony/100ml)	1st Quarter 2002 Goal (% +/- TMDL)
Kamm	*99*	*136 (-27%)*
Scott	*39*	*107 (-64%)*
Fishtrap	*136*	*128 (+6%)*
Bertrand	*60*	*117 (-49%)*
*LLPL **	*104*	*115 (-10%)*
Ten Mile	*89*	*104 (-14%)*
Nooksack River at Marine Drive	*22*	*54 (-59%)*

* a ditch that outlets below the Guide bridge

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THE PRE-SIDEDRESS SOIL NITRATE TEST (PSNT) FOR SILAGE CORN:

Heed it and Reap – Cut Costs by Thousands of Dollars Without Cutting Yields

For corn silage growers, mid June to mid July is decision time on how much sidedress nitrogen fertilizer their crop needs. Making this decision has been made easier because a reliable soil test is available that relieves both corn growers and their fieldman of the need to "guesstimate" how much sidedress nitrogen is needed. The test is called the pre-sidedress soil nitrate test (or PSNT) and it is taken when corn is about 12 inches high to evaluate nitrogen fertilizer need. By using the PSNT, growers can save thousands of dollars ($20 to $40 an acre) in added costs without sacrificing yield or quality.

At Rod Vandehoef's dairy in Everson, Whatcom Farmer's Co-op is cultivating corn and interseeding rye grass.

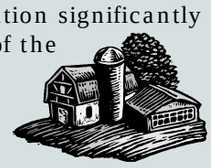
Steve Fransen, a Washington State University Extension Agronomist, recently said, "The PSNT uses the idea that soil nitrate at sidedress is strongly related to the amount of nitrogen that will be available to the crop during the rapid growth phase and the soil's ability to supply nitrogen when the crop needs it." Fransen also said, "The PSNT takes into account nitrogen that is released by green manure crops (e.g. relay crops), soil organic matter, previously applied manures, and compost".

The following table outlines Fransen's recommendations for sidedressing silage corn:

PSNT value: (ppm NO3-N)	Sidedress N Recommendation (lbs/Acre)
0 – 15	160
16- 20	120
21 –25	80
26 – 30	40 (Oregon State Extension recommends 0)
30+	0

New Farm Bill Supports Conservation

President Bush signed the 2002 Farm Bill into law on May 13, 2002. The 2002 legislation significantly increases funding levels for many of the popular conservation programs originating in the 1996 Farm Bill. These programs include the Conservation Reserve Program, Wetland Reserve Program, Farmland Protection Program and the Environmental Quality Incentives Program (EQIP).



Over the past six years, EQIP has been used in Whatcom County to help fund dairy nutrient management practices. Because Congress modified several aspects of EQIP in the 2002 Farm Bill, USDA must rewrite EQIP rules. The USDA expects to have new rules out by mid August 2002.

Major changes to EQIP include:

- Applications will be evaluated and funded based on the environmental benefit of the practices. There is no longer a requirement for producers to submit bids.
- The $10,000 annual payment limitation has been eliminated.
- The $50,000 maximum payment limitation per producer has been raised to $450,000.

Producers holding existing EQIP contracts signed under the 1996 Farm Bill rules will likely be allowed to submit applications for additional conservation work under the 2002 Bill. Signup dates for the new EQIP program have not been established. It is speculated that there will be not be any signups this fiscal year (before September 30, 2002). Additional information on the new Farm Bill is available at the USDA Farm Bill web site: http://www.usda.gov/farmbill/.

Jerry VanDellen Elected to Conservation District Board

Congratulations to Jerry VanDellen. Welcome to the WCD staff!

On June 18th, Whatcom County voters chose Jerry VanDellen, an Everson area dairy farmer, to serve on Whatcom Conservation District's Board of Supervisors over Hank Reasoner, a retired forester from Bellingham. Jerry replaces Debbie DeJong who served one term on the five-member District Board and decided not to seek re-election. Jerry's term of office is for three years. His election means that the District Board will continue to have at least one active dairy farmer.

Nutrient Management Tip:

Tis the season to be empty – ***If manure applications are timed to occur with crop nutrient uptake then manure storage facilities should be empty by some time in late June or early July on most farms.***