

AM PAC Impact

April 2010

A Quarterly News Publication

Production & Market Update By Aaron Kuenzi

I am sure you have all heard about the reduction of grass seed acres in Oregon and the Pacific Northwest. Here are just a few examples: In Oregon certified Kentucky Bluegrass acres are down about 30% from a high of 18,367 acres in 2005. Certified Perennial Ryegrass acres are down nearly 44% from a high of 82,571 acres in 2005. So the big question is, have we reduced our production (supply) enough to come into line with the reduced demand. Most in the industry feel we have and once the old inventory is used up we could see sharp price increases on some items. With good spring movement (currently Oregon

is very busy shipping seed) I would expect to see things turn around in the next 6-12 months.

You may be asking yourself what the farmers are growing if they are not growing grass seed. The main answer is wheat. Even though \$5/ bushel wheat prices are not very attractive to most growers, they consider it a "cash crop" that is more liquid than grass seed. At 100-150 bushels per acre most farmers can make a profit growing wheat in the Willamette Valley. Another answer is "I don't know" and neither does the farmer. There are a lot more brown fields with no crops in them because they have been sprayed out or plowed. Lastly, we have seen an increase in fine fescue, specialty crops (turnips, radish, hazelnuts, strawberries, etc.) and clover production.

To date the crops generally look very good. There are however a few exceptions. Any crop that was planted late may have been damaged by a week of extremely cold weather in December. By extremely cold I mean lows of single digits for one week. The extremely cold weather coupled with the wet soils caused freeze damage to species like turnips, annual ryegrass, crimson and medium red clover.

Logistic Nightmares

Wow! I don't recall when shipping has been this difficult. The supply of over the road trucks are down due to the fact a lot of "mom & pa" outfits are out of business. Equipment for stacktrains and pigs can be hard to get because of increased demand for them and consolidation of shipping companies. Lastly, the Pacific Northwest needs an additional 70,000 shipping containers for

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Spring in Oregon.

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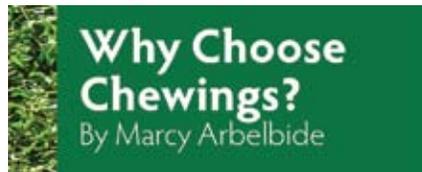
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export of goods internationally. Oh, and it's only supposed to get worse as the demand for freight transportation increases as the economy strengthens. In the age of "just in time" inventory this is creating a huge challenge to get the products to the customer on time. So a little careful planning and owning a little inventory can help overcome these logistic nightmares. Besides, when was the last time you could buy seed this cheap?

Trouble getting large, fluffy seeds to flow through the drill?

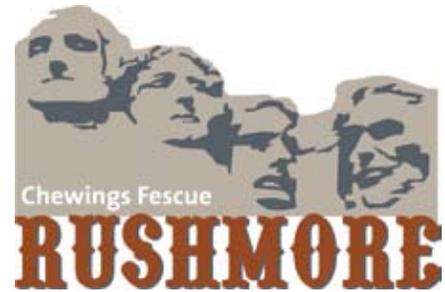
- Have producers put graphite on the seed. Graphite seed flow lubricants, are made from high quality graphite powders from environmentally safe, natural mineral, and will not hurt seeds, or plantings as they grow. Graphite will help the seed flow evenly and smoothly through the drill. Graphite can be purchased at farm stores and certainly implement dealers sell it as well.
- Oasis Chicory produces more forage & has better regrowth according to a University of Georgia 3 year study (http://www.ampacseed.com/pdfs/oasis_ts.pdf)



Chewings Fescue has fallen into Creeping Red Fescue's "shadow" when it should actually be the other way around. Chewings Fescue rates higher than Creeping Red Fescue in NTEP Shade trials! Just why should you take a second look at Chewings Fescue when choosing a fine fescue? Following are the ABC's of why and when to choose Chewings Fescue.

- Chewings Fescue has a bunch type growth habit and forms a dense, tight knit turf.
- Chewings fescue also tends to be slightly more disease resistant and persistent under lower maintenance practices.
- Due to the density, Chewings Fescue naturally has improved poa annua and other weed suppression.
- Chewings fescue is more tolerant under close, continuous mowing and can be mowed as low as 1.5 inches. (Golf course fairway height).
- Chewings Fescue is the choice for traffic pressure with its ability for fast recovery.
- Chewings Fescue is very winter hardy.
- Chewings Fescue has excellent shade tolerance.
- Chewings fescue has a lower growth height at maturity and is an excellent component for low maintenance mixes with Hard and Sheep fescue.
- Chewings Fescue has low fertility requirements and is tolerant of acid pH.
- Chewings fescue can be mixed with Perennial Ryegrass, Kentucky Bluegrass and other fine fescues. Due to its aggressive tillering Chewings

Fescue should only be used in mixes with Perennial Ryegrass and Bluegrass at a rate of no more than 20% by weight so that it doesn't dominate the mix.



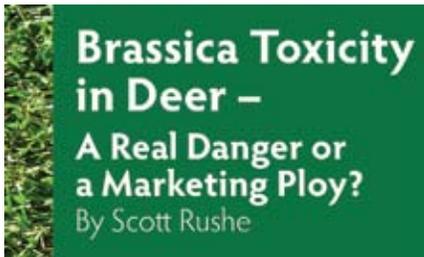
Plant breeders have put more effort into chewings fescue than any other fine fescue. Because of this, new varieties like **Rushmore Chewings Fescue** are dense, fine bladed with good disease resistance. **Rushmore Chewings Fescue** has excellent winter hardiness, drought tolerance and shade tolerance. Rushmore persists in the toughest turf challenges.

In spite of long-term breeding efforts on strong creeping red fescue, new varieties have changed little from the older varieties of Pennlawn and Canadian Common. Part of the lack of aggressive breeding in strong creepers stems from the seemingly endless supply of cheap red fescue seed from the Peace River region of Canada. With the base price of creeping red fescue set so low, production companies have little incentive to invest research and development dollars into this species.

Improved varieties, like **Gibraltar Creeping Red Fescue**, DO offer better uniformity, color and seed quality than common red fescue, as well as endophyte enhancement for insect resistance, heat and drought tolerance.

Bottom line is Chewings fescue tends to get overlooked when choosing a

fine fescue for a turf blend, when in many cases the improvements made in chewings fescue in recent years make it an excellent choice for lawns, golf courses and parks. Add **Rushmore Chewings Fescue** to your mixes for a tougher all around turf.



About 10 years ago a “new” group of plants called Brassicas hit the Wildlife Management and Food Plot Planting Scene and became the “hands down” most popular annual planting for fall attraction and winter feed for deer, especially in the snowy North Country. Brassica is not a plant, but an entire family of plants that includes Cabbage, Broccoli, Kale, Canola, Radishes, Turnips and Rape. These plants can be planted in late summer and will grow and mature in late fall. They withstand extreme cold and remain upright in deep snow to provide a high protein and high carbohydrate forage well into the winter. The large leaves are usually consumed first, and then the roots of Turnip and Swede are often eaten into the spring.

In the past few months an ad by a well known food plot seed producer that does NOT market Brassicas has been appearing in outdoor publications suggesting that Brassicas are toxic to Deer. They are using results from a study that was conducted 30 to 40 years ago and on cattle. The research was conducted in a fenced pasture where the cattle could only consume the brassicas that were grown. By publishing this data they are



Purple Top vs. Appin Turnip

suggesting that we might be poisoning our deer with Brassicas. The scare tactics are to get us to quit using Brassicas and instead use their cereal grain product.

It is true that Brassicas can contain large amounts of toxic alkaloids, glucosinolates, thioglucosides and SMCO that are linked to several unhealthy conditions such as: anemia, goiter, nitrate poisoning, rumen stasis, bloat, diarrhea, respiratory disease and others. Again, these conditions can also be associated with many other improperly used types of forages. In spite of these potential problems, Brassicas have been used as livestock forage in this country for decades and in Europe and Asia for centuries. A bit of knowledge and common sense can minimize or even eliminate any threat of Brassica Toxicity in wild or domestic Cervids.

In a recent phone conversation, I asked Ed Spinnozola, well known to QDMA members as “Mr. Brassica”, about Brassica Toxicity. His response was that it is a concern BUT a deer would have to consume over 75% of its food intake in Rape or Turnips to even begin to have an adverse effect. He stated “If Brassica toxicity were such a serious problem

Southern folks would have to stop eating turnip and collard greens and cole slaw; Indians would have to stop grazing their sacred cattle in forage rape fields (which they have been doing for 300 years) and New Zealand, the world leader in Red Deer meat and antler velvet production, along with Sheep production, would have to stop feeding and developing Brassicas. Alfalfa, Clover and Corn can also be toxic to deer if fed exclusively or they are not introduced to it gradually”.

The important points to remember to greatly reduce or eliminate any threat of Brassica Toxicity are:

1. Deer have a much smaller Rumen than cattle and must forage selectively on high quality foods, rather than just stuff themselves with whatever is at their feet. They forage on the move and pick up a wide variety of foods in the process. They also have an uncanny ability to determine which foods are best for them at the time.
2. Plant a variety of different food plots and/or plant combinations. Plant high carbohydrate crops such as corn and cereal grains or

have natural foods like browse, fruit or acorns in close proximity to your Brassicas.

3. Plant your Brassicas in mixes with other plants such as cereal grains (oats, wheat, rye, triticale), soybeans, Winter Peas and even corn.
4. Avoid planting Brassicas in high Sulphur soils and/or using high sulphur fertilizers. High amounts of Sulphur can compound the occurrence of SMCO and glucosinolates. High amounts of Selenium in the soil, other foods or dietary supplements can counter those effects.
5. Use more Improved Brassica varieties like you find in our Wildlife Perfect Brassica Mix.

Since the 1980's forage producers have been developing Brassica forages with highly reduced amounts of glucosinolates and erucic acid, the main culprits in Brassica Toxicity. See the following report from the Canadian Government, dated 2008/09, I found on the internet by "Googleing" SMCO as instructed in the Brassica Toxicity AD. Note the dates of all the Brassica Toxicity research cited, it's 21 to 50 years old!

General poisoning notes:

From Canadian Gov't.

Biodiversity Information Facility

Brassica oleracea includes common cultivated crops such as kale, broccoli, Brussels sprouts, and cabbage. All these vegetables are capable of forming toxic quantities of SMCO, a chemical that can cause hemolytic anemia in livestock. These plants also contain glucosinolates, which can cause goiter. In general, these widely used vegetables are safe for human consumption. Cases

of livestock poisoning occur when they are used **almost exclusively** as fodder for animals (**Kingsbury 1964, Smith 1980, Cheeke and Schull 1985, Benevenga et al. 1989**). Glucosinolates contained in kale, cabbage, and broccoli (Brassica oleracea) can cause goiter in humans. These plants cause goiter in less than 5% of cases in humans. The chemicals cause a reduction in performance of young livestock, **especially swine and poultry** (Fenwick et al. 1989). **It is important to note that the frequency of toxicity has dropped dramatically since a few decades ago. Researchers have changed the quantity of toxic compounds in the entire Brassica spp., creating new cultivars with lower quantities of these chemicals. The threat of poisoning from some of the plants has diminished or virtually disappeared in some cultivars.**

For example, the Canadian development of rapeseed into the so-called "double-zero" cultivars (low in glucosinolates and in erucic acid) has allowed rapeseed meal to be used for livestock at much higher levels without reducing performance (Cheeke and Schull 1985).

In my opinion, this "Brassica Toxicity Scare", is just that. A marketing ploy used by one company, twisting the facts from decades old research, to scare the food plot planting public into avoiding the "competition" and planting only their products. If you follow the recommendations in this article Brassica Toxicity should NOT be a problem for your deer herd.

