

FORAGE FIRST

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Canadian Award to Peace BeeKeeper

by Sandra Burton

We can feel very proud of one of our Forage members and supporters. Dale Hansen, of Van Han Apiaries in Farmington, was recognized with a Canada wide award this winter. He received the Fred Rathje Memorial Award from the Canadian Honey Council. This award was established in 1985 after Fred Rathje passed away. He was the well liked manager of Alpha Honey in Basano for many years, a man with vision and energy. The award recognizes innovative individuals who have made significant contributions to the industry. The award has often been given to researchers, including Kerry Clark. It has not often gone to beekeepers.

Dale received this award for the countless volunteer time and effort he put into issues facing the honey industry in the 80's and 90's. He was Chairman of the Canadian Honey Council in 1986 and 1987. During this time, in Dale's own words, "The honey industry as we knew it changed forever, when we had to close the US - Canada border because of disease problems and northern beekeepers could no longer import bees." This was also a time when a lot of legwork was done to try to bring in a levy. Dale continued his involvement with 12 years on the Board of Directors for a marketing cooperative, Bee Maid (with 6 years as Chairman).

Dale feels that he shares this award with his wife Sue and partners, Rick and Chris Thomson. "It was only possible for me to be so involved because they were back here managing things." Van Han Apiaries have 1500 hives that make a "living" for 2 families and employ 3 to 5 seasonal people.

When the border first closed, they built an over wintering facility. "But our long winters, with too many chinooks in March and late snows in April left the colonies less populated and vulnerable." They decided to spread their risk and take a portion of their colonies to winter in the Okanagan. This was so successful, that now all their bees are trucked south to winter in the Okanagan. Van Han bees currently do double duty, pollinating orchards in April, then after being moved north in May to the Peace, they pollinate crops and fill the hives with honey here.



Sue & Dale Hansen

The BC Honey Producers Association is holding its annual general meeting in Dawson Creek this year from Oct. 25 to 27 at the George Dawson Inn.

2007 Directors of the Peace River Forage Association of British Columbia

"Dedicated to putting forage first in the hearts, minds and pocketbooks of livestock producers and other forage enthusiasts"

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Musings From My Quarter

by Deryle Griffith

The Greener Side of Grass

With the push for grain-based ethanol to offset oil in North America, especially in the US, the price of grain will surely rise. This might look like a bad thing for livestock producers but there may be a bright side to this trend. The forage and grass based systems may well be not only the most cost effective, but also produce a superior product with huge health benefits.

It's said that grain is needed to finish livestock, but marbling is controlled by the rate of gain. If cattle are kept near a two-pound per day rate of gain while they are being finished, the meat will marble and be tender and juicy. This is easy to do with grain finishing, but requires a bit of skill and management with grass finishing, and the liver will certainly be healthier on grass.

Two people, who I have been reading about for some time, have been spearheading grass feeding livestock: Jo Robinson and Allan Nation. Jo Robinson has done great work in researching the health benefits of grass-fed meat and dairy products. She has written several books and maintains a web site (www.eatwild.com) with all the results of her research. Allan Nation is the editor of the Stockman Grass Farmer magazine and also has a web site (www.stockmangrassfarmer.net). He is a leader in grass-fed livestock, and has run conferences on the subject, as well as many books, in which he has gleaned a great amount of wisdom. He also includes practical how-to information to guide grass farmers around the pitfalls of a new enterprise.

The egg producers are already marketing CLA (conjugated linoleic acid) in their eggs and getting a premium for their product. CLA is greatly increased in grass fed stock, but the increase in Omega-3 is the truly great benefit. It appears to inhibit all modern diseases of affluence. These include heart disease, cancer, Alzheimer's disease, arthritis and the many autoimmune diseases. Whereas grain fed stock tend to be high in Omega-6, which tends to greatly increase the rate of cancer growth. Increases in beta-carotene and vitamin E also are a result of grass feeding stock. The rumen is much less acidic in grass fed stock, so the E-Coli production is much different and the stomach acid destroys them, so they are not harmful to people with healthy stomachs.

The health benefits are good and will help in the market place, but the benefit to the land is also important. Properly managed pasture is a thing of beauty. As the grass is grazed, the roots die back and leave carbon in the soil. This forms humus and feeds the biology in the soil, which balance the nutrients and feed the plants, making healthier grass. Thus the land spirals upward through the grazing cycles, getting healthier, just as the people who consume the meat, eggs or dairy products do. All the while sequestering carbon and saving the earth.

I may have got carried away a bit, but with a change in mindset, there may be an opportunity for forage producers with an increase in the price of grain. Maybe it's worth a look. That is my opinion. What is yours?

Deryle's Reading List:

"Beyond Organic" by Jo Robinson

"Confused About Fat? Chose Grass-fed !" by Jo Robinson

<http://www.eatwild.com>

<http://www.stockmangrassfarmer.net>



Colony Collapse Disorder

by Kerry Clark

Public awareness of honey bees increased in the first few months of 2007, as reports of unexplained widespread disappearance of bees from hives in the US hit the news media, under the name "Colony Collapse Disorder" CCD. The contribution of honey bee pollination to our food supply (and the threat of losing it) was news to many.

The "unexplained" aspect of the problem is generating a lot of speculation, because no one can definitely exclude even the most unlikely claims for a cause. New variants (resistant forms) of some usual honey bee diseases and pests, for years an on-going concern, were a reasonable possibility, but there are claims that pesticide contamination of hive equipment or even the general environment, genetically modified crops, or electromagnetic radiation from cellular phone towers could be responsible: all have their supporters.

As of early May however, some information is emerging that seems to me a more likely cause. As background: honey bees Latin name *Apis mellifera* ("bees that carry honey") in North America were imported from Europe where they evolved. The species has a group of ailments that it is more or less adapted to. One of these "diseases" is an infection of the gut of adult honey bees, with the Latin name *Nosema apis* (the *Nosema* organism that infects *Apis mellifera*). The disease organism is a microsporidian, a little-known group thought to be related to fungi. The infection damages the intestinal wall of honey bees, interfering with their digestion of food for energy, and can cause them to die at an early age. It is worst in winter when bees are confined by bad weather and unable to defecate outside. "Our" bees usually tolerate it, and an antibiotic is available that can be used to treat colonies at risk.

There is however a related species of honey bee, from Asia: smaller in size and with fewer bees in a colony: named *Apis cerana*. It has its own variations of diseases that are slightly different from those for *Apis mellifera*. For 15 years prior to colony collapse disorder, the greatest health threat to North American honey bees has been a parasitic mite inadvertently transplanted from *cerana* honey bees to *mellifera*. The mite was far more damaging on the new host and beekeepers are still working on adapting to that problem.

Similarly, a species of *Nosema* from Asian honey bees (named *Nosema ceranae*) has recently been identified from many locations in the US, and also from eastern Canada. This is a possible cause of or at least contribution to CCD that doesn't require an extraordinary explanation (except possibly how it arrived and spread so widely before being noticed). I think it's quite likely that at least some of the other proposed causes: parasitic mites and associated viruses, bad weather (which may include warm weather in mid winter followed by more winter) and others, combined to result in a widespread "wreak" in the bee population. With at least one clear problem to address, resources can be directed to clarify the situation and try to solve it

In the long run, perhaps it will end up to have been a good thing that a lot more people are now aware of how important honey bee pollination is to a large part of our food supply.

Kerry Clark, P.Ag., is a Crop Protection Specialist with the B.C. Ministry of Agriculture and Lands
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Industry Specialist: Beef & Bison

by Sandra Burton

Jim Forbes has accepted a new position as Provincial Industry Specialist for Beef and Bison with BC Ministry of Agriculture and Lands. He has already started working out of Kamloops, and will move his family there at the end of the school term. Jim has always been a champion for our Forage Association and dedicated countless hours to R & D projects, always with a tremendous amount of thought behind that great sense of humour. We will all miss you, Jim! But we look forward to working with you in new ways.





Highlights from 2007 Forage Seminar
Rainey's tours to New Zealand & Carribean (above)



Trip Across Australia
by Glenn Hogberg, Gino Morrone & Dan Rose
(below & to right - The Crew with Gino's sister)





2007 PRFA Board:

(left)

Bill Wilson

Rick Kantz

John Kendrew

Chuck Sutherland

Deryle Griffith

Pat Gerlinski

Julie Robinson

Sarah Davies



Buchannon Farm Visit

Ellet feeding at Buchannons'
(top right)



Traw bale grazing setup (left)



Todd Bondaroff, Johanna
Klasson & Ron Buchannon
(right)



Clarke Farm Visit

Bill Clarke with Johanna
Klasson, a Swedish
Ag student (left)

New calf sucking at
Clarks' farm (right)

Bickford Farm Visit
Ewe at Kantz/Bickford Farm
(left)



Wildlife damage to Kantzs'
stackyard (right)



Beaters, Turners, TriLand, Auction & Soil

by Sandra Burton

What do vertical beaters on a manure spreader, a compost turner, a Triland built zero till drill and a spring auction sale have to do with my favorite topic, our soil? I am really excited to hear what some of our Forage Association members are doing this spring for the soil.

First, let me tell you about the Lowlander Spreader, recently purchased by the Forage Association. It is manufactured by Bunning & Sons from England, and distributed by Glen Mor Grain Systems in Prince Albert, Saskatchewan. Kenver also has one on their lot. It uses a moving floor and vertical beaters to spread the manure out over the field more evenly and widely, with a finer particle size. Thus the fine particles of manure are fanned out over a 25 to 45 ft spread. Another unique feature is the guillotine style, hydraulically controlled panel at the back. When the panel is raised, no manure falls over the top, ending up as big clumps on the ground. The Forage Association will set up some demonstrations with this vertical beater manure spreader this year.



Next, we have the compost turner that Rick Kantz is championing. He is investigating the purchase of a Brown Bear Compost Aerator for tractors with a PTO drive. It is capable of building its own windrow and combining windrows as volume decreases. Aeration is critical to effective composting and stabilizing of nutrients. (see the article on composting on the next page)

Triland? Have you ever heard of the infamous first zero till drill ever in the Peace? This drill was built by Henry and Rick Graw of Triland Farms in Manning, Alberta. Back in 1985, there were few, if any, equipment dealers building drills that would seed straight into sod.

This drill has been tested and improved over 20 years by a family committed to direct seeding. It now has a new home with Bill Wilson, so you have a chance to see it perform.

Now, just so I don't leave you with the impression, that big equipment is the only way to look after your soil. I am also impressed with the recent announcement from Steve Rainey and Sarah Davies... saying they are holding an auction to get rid of all their haying equipment. It seems they have whole heartedly committed to grazing systems to produce their beef. And anyone that committed to their grazing resource has to be looking after the health of their soil, as the foundation to their whole management system.



Who said we have to travel outside of the Peace to meet and talk with innovative thinkers!

Where is Julie?

Has anyone seen Julie? Just joking. The absence of Julie in this newsletter is because she is very busy out in the field with many of you, monitoring the wildlife situation, working through an environmental farm plan with you, organizing the summer tour or setting up some really cool R&D projects for 2007. We did track her down long enough to get some pictures and a tour poster. But other than that Kim and I wanted to give her a "one issue break", so we have drawn out some of the other writers in the community.

Speaking of Kim

Don't forget she's the one behind the scenes patiently laying out the issues, arguing with the printer and stuffing the envelopes to mail to you. Thank you, Kim.



Lacombe Pasture School

June 4th & 5th, 2007

Yearling/Custom Grazing Systems for Success!



At the Lacombe Research Station

Brought to you by ARECA's Forage/Livestock Team
and the Western Forage & Beef Group

Attendance is limited to 40 participants so register early!

Registration Fee: \$250.00/Person

Contact the Grey Wooded Forage Association Office
for more information and to Register.



403 844 2645



Recipe for Composting

by Wayne Temple & Sandra Burton

Why Compost?

- Kills pathogens and weed seeds.
- Stabilizes nutrients.
- Improves characteristics for land application, especially uniformity.
- Reduces odors during spreading on fields.
- Reduces wear and tear on equipment. Higher rates of application are possible at lower ground speeds.
- Required to be Certified Organic that all livestock manures used on crops for human consumption.

Important! Compost Requirements:

- Compost pile must heat to above 55 degrees C.
- Correct balance of carbon (C), nitrogen (N), oxygen (O) and water are required.
- Pile must be turned 5 times.

Recipe for Successful Composting

- Begin with a mixed feedstock with a carbon/ nitrogen (C/N) ratio of 25 to 30.
- Begin with a moisture content of 40 to 50%.
- Thoroughly mix feed stocks to ensure aeration.
- Construct a windrow no more than 7m wide by 3 m high, length can vary.
- Monitor the core temperature. Once it reaches above 55 degrees C, wait 2 to 3 days.

- Turn the pile.
- Repeat this monitoring/ turning procedure 5 times over a 2 to 3 week period.
- Cure the compost for at least 6 weeks. Keep covered from rainfall, and prevent runoff to surrounding waterways.

These points are excerpts from "Fact Sheet Poultry Litter Composting" prepared for the COABC by E.E. Milligan, Dr. W.D. Temple and Dr. A. A. Bomke of the Faculty of Land and Food Systems, University of British Columbia, Vancouver, BC. The fact sheet is one of many publications summarizing several years of research.

A few years ago, Chuck Sutherland, Bill Wilson, Brian Haddow and Sandra Burton visited some of the field sites where the research for these recommendations was being done, through our involvement with the Soil Conservation Council of Canada.

Currently, the Forage Association is investigating the purchase or lease of a compost windrow turner. Stay tuned for more details on this exciting R & D project, or contact Rick Kantz if you have questions.

The Lighter Side of Forage

by Shannon McKinnon

How to Make 90K From a Single Bale of Straw



A ferrier once told me about one of his customers who was trying to sell a horse. The horse was barely into its teens and a good, solid, mount for kids. The kind of horse that everyone is always looking for. Thinking to price the horse reasonably in the hopes of it going to a good home, he was asking \$800. Weeks went by and although several people came to look at the horse, surprisingly, there were no takers. "You're not asking enough," the ferrier finally told him. "Ask \$2000 and by next week I bet you'll have yourself a buyer." The ferrier was wrong. The man didn't sell the horse the next week. He sold it in two days.

It can work the same way in the forage industry. Instead of selling oat straw by the ton, why not sell it for nine bucks a gram? I know what you're thinking. Why not sell some ocean front property in Dawson Creek, or ride an elephant backwards out of an airplane? But that's because you haven't spent enough time looking through the 2007 Richters Herb Catalogue.

Flip to the "O" section and you will find dried oat straw being sold for \$9 per 100 grams or bulk priced at \$40 a kilogram. The only difference between your oat straw and theirs is the intended market. While farmers sell straw for animal bedding, Richters sell it to humans. According to their blurb, oat straw is used for "neuralgia and irritated skin conditions."

I bet some foragers are breaking out in a few skin conditions right now, realizing that just one of their oat bales could be worth \$90K.

It gets worse. Or better, depending on how you look at it.

Richters also sells *Trifolium pratense* seed - commonly known as red clover - for eight dollars per 100 grams. The dried clover blossoms sell for \$220 a kilogram. It's enough to make a person run down to the barn and snatch that hay right out of Bossy's lips. Herbalists maintain that red clover blossoms steeped into a tea "is an exceedingly good remedy for cancer on any part of the body." Red Clover is also effective at treating bronchial troubles, whooping cough, gastric troubles and ulcers.

Now you know why you have never seen a cow slugging back Maalox.

A seed packet of sweet clover (*Melilotus officinalis*) costs \$1.25 or you can buy it in bulk for \$15 a kilogram. The dried herb will set you back \$55 a kilogram. Medicinally, sweet clover prevents blood clotting. A salve or poultice made from the plant is used for swellings, boils, arthritis and rheumatism.

Other plants offered in Richters catalogue, show up in most forager's fields free of charge.

For example, stinging nettle sells for \$360 a kilogram. While the cooked young shoots are very high in iron, the nettle is most coveted for its bio-dynamic properties. Simply put, stinging nettles make great neighbours. A patch of nettle will stimulate humus formation, increasing the potency of any herbs growing nearby. Also, for those who like to dye their own wool, the leaves produce green, gold and chartreuse tones. Fresh nettles deter flies, so it's not a bad idea to keep a vase on the kitchen table. Just don't go sticking your nose in them. Apiarists have even been known to plant stinging nettles around bee hives to keep frogs away.

If you have an extra \$210 in your wallet, you can buy a whole kilogram of *Taraxacum officinal* seed; otherwise known as dandelions. During the Second World War, dandelions were harvested and made into latex. Another little known fact is that the dandelion hosts more medicinal properties than any other herb on the planet. I know a 94 year old lady who belly dances, does yoga, aqua fit and ball room dances. She gives all her health credit to her penchant for eating dandelion greens. It could very well be that the fountain of youth is right under our noses, but we are too annoyed by the plant to realize it.

It's true that sometimes a person can't see the forest for the trees. Or in this case, the forage for the fees. It would seem that here in the Peace River country, all the ingredients for riches and longevity are ours for the harvesting. For some savvy foragers, riches await. The rest of us should buy shares in Richters.

You can order your own Richters seed catalogue by writing to Richters Herbs 357 Hwy 47 Goodwood, Ontario L0C 1A0 or check them out online at www.Richters.com

Shannon McKinnon is a humour columnist from the Peace River country.

You can visit her online at www.shannonmckinnon.com