



The Forager

B.C. FORAGE COUNCIL

BC Forage Council
300 – 640 Borland Street
Williams Lake, BC V2G 4T1
Phone: 250-267-6522
Email: bcfc@bcforagecouncil.com *New email

The BC Forage Council was established in 1988 to support the forage industry in the province and to provide a unified voice to speak for forage crop producers.

July 2011

BCFC Annual General Meeting

The AGM was held on March 1, 2011 with 13 board members participating. The 2011 priorities included:

- Look at the noxious weed issue and explore funding
- Approach Regional Districts for partnering on projects
- Re-create the forage seminars to earn funding and get new information out to producers
- Check into partnership/stakeholder role with the new Applied Grassland Research center in Kamloops
- Check into DIAP Funding for projects, look at what the Raspberry growers are doing to secure funding
- Look into a forage finished beef project with some of the Ranching Task Force funds – A subcommittee was struck to look into this of John, Garth, and Fran

If anyone would like a copy of the AGM minutes, please email: bcfc@bcforagecouncil.com or visit the BCFC website: <http://www.farmwest.com>

BCFC Proposed Project ... Fraser Valley Forage Variety Trial

The BCFC is currently investigating the feasibility of a Fraser Valley Forage Trial. Any interested forage seed companies are encouraged to contact the BCFC to indicate their interest in participating. We have contacted two companies to provide a bid on this project. A budget will be prepared and if there is enough support for the trial, we hope to start in 2012.

BCFC supporting the Advanced Forage Management Guide

The Pacific Field Corn Association is revising and updating the 10 year old Forage Management Guide. This publication will present advanced forage management information as well as the agri-environmental aspect of forage production. The BCFC is pleased to support this project.

BC FORAGE COUNCIL PROJECTS

New Variety Trials for Highway 16, (2008 – 2011)

This trial was seeded in 2008. It is looking at alfalfa-grass blends, non-bloat legumes & 2 new varieties of grasses. The grass for seed production portion of the trial was not successful. The 2010 data table for the alfalfa/grass blend is included in this newsletter. In 2010 the non-bloat legumes and the new grasses were severely overrun with quackgrass, and the plots were not able to be harvested. The grass seed portion of the trial was reseeded in 2010, but failed again due to drought.

These trials have been very beneficial to the producers and the seed retailers in the area. Many people have stopped by to view the plots and have also reviewed the results posted on the Farmwest website. The one major piece of information resulting from these trials was the identification of a new alfalfa to replace the 'standard' *Peace* which has been grown in this area for at least 30 years. *Peace* seed is no longer available as of this year and the plots clearly indicated the best suited varieties for this area. (Although a new grower has taken *Peace* on and it should be available again for 2013 growing season.) Other grass and legume varieties in the trials showed that producers are currently using the best varieties or are able to select a variety that will provide better results.

This trial has reinforced the theory that trials must be placed on ground that is weed free and has been for a least one complete year prior to planting e.g. no quack grass, June grass, thistle and other volunteer species. These foreign species will soon compete with the trial varieties and make the trials unuseable. It seems producers want to 'get on with the trials' and not lose that year that is necessary to get that clean ground.

After consultation with local producers and funding groups, we have decided to discontinue these trials. Due to drought at seeding time and through the 2009 and 2010 seasons, and a weed infestation which resulted in a poor catch, the trials will not provide accurate data.

The BCFC thanks the following organizations which supported this project: Beef Cattle Industry Development Fund, Nechako-Kitimaat Development Fund, CIDC Horn Fund, Fort Fraser Livestock Association, Sinkut Mountain Cattlemen's Association, Clucluz Lake Livestock Association, Glendale Agra Services (financial and in-kind contributions) and Art Wiens. The trial was located along Highway 16 near Fort Fraser, BC.

Cariboo-Chilcotin Forage Variety Trials (2009-2011)

The annuals for silage were harvested in 2009 and 2010; the data table is posted on Farmwest and enclosed with this Newsletter. The legumes were harvested at 3 sites in 2010. The one year data for the Cariboo legumes is posted on the Farmwest website and enclosed with this newsletter.

For 2011, the Soda Creek site (Kaufman's) was seeded on April 28. And the Miocene (Starr) and Redstone (Bayliff) sites were seeded on June 1 & 2 under very wet conditions. After 2 years of drought, 2011 is proving to be a very wet year at the trial sites. However, all remaining legume and grass sites should produce good results this year except varieties which don't compete well against weeds and volunteer clover.

The fibre plots did not grow sufficient for harvest the first year (2009). The plots were on two sites (Williams Lake & Miocene). In 2010 Miscanthus and triticale were replanted at Miocene and triticale and reed canary was harvested. The Williams Lake site was replanted in spring 2010 but failed to establish a second time due to drought. The drought conditions of 2009 and 2010 are making establishment of these crops extremely difficult. The layout of the fibre plots made it impossible to prepare a seedbed with available equipment and

excessive moisture at time of seeding. In hindsight, 2011 would have been an excellent year to try to establish the Miscanthus & switchgrass.

This project is funded by the Investment Agriculture Foundation of BC, the Northern Development Initiative Trust, the CIDC Horn Fund, the Cariboo Regional Cattlemen Association, the Chilcotin Stockmen's Association, 150 Mile House Livestock Association, Big & Beaver Lakes Stock Association, Chimney Creek Livestock Association, and Rose Lake Cattlemen Association.

Verticillium Wilt of Alfalfa

Introduction

Verticillium wilt of alfalfa is a disease which can cause serious stand thinning and yield loss in third year or older alfalfa fields. This disease has been prevalent in northern Europe since the early 1950's but did not become established in North America until 1976. By the late 1970's, verticillium wilt was widespread in Washington, Oregon and Idaho in the U.S., and in British Columbia in Canada.

Cause

Verticillium wilt is caused by a fungus with many strains. Several crops, including potatoes, tomatoes, sunflowers, peanuts and alfalfa can be infected.

However, the strain which infects alfalfa is very specific to alfalfa, and does not affect these other crops. Likewise, the strains which affect these other crops do not infect alfalfa. The alfalfa strain may survive on the roots of some crop plants (clovers, trefoil, soybeans) and on some weeds (lambsquarters, mustard, plantain), but does not produce symptoms on these plants.

Verticillium wilt may infect alfalfa plants through the roots, if the fungus is present in the soil. The plant can also be infected by spores through the cut stem during harvest. These spores may be carried by the cutter bar, on infected leaves, or by some insects. The infection progresses upward through the plant in the water conducting tissue, plugging these vessels and limiting water movement in the plant.

Symptoms

The first noticeable effect is a wilting of the leaves during the heat of the day, with plants recovering overnight. As the disease progresses, leaves show a pale yellow or light tan colouring, starting at the tips of the leaves (in a pattern similar to that caused by leafhoppers). Leaves will then curl upward and inward, continuing to lose colour until the entire leaf is a tan brown. Eventually these leaves shrivel up, but the plant stem will remain green and upright. A cross-section cut through the tap root of seriously infected plants will show a brown ring.

In the initial stages of disease, plants showing symptoms will have a normal growth rate compared to healthy plants. Often only one or two of the several stems from a crown will be infected. These plants will regrow after cutting, and appear healthy until regrowth reaches 15-20cm. Symptoms will then show up again, often severely stunting the growth rate. As normal plants continue to grow, the stunted diseased plants become hidden in the alfalfa canopy, making detection of affected plants difficult.

This is particularly true in the first cut growth. The disease is often easier to detect in the third cut and tall regrowth, where the shorter growth at that time of year does not hide the infected plants as much. Disease levels in an infected field are often highest in the tall regrowth, probably because disease spread is favored by the higher moisture and cooler temperatures that often occur during September.

It is rare to see symptoms of verticillium wilt in alfalfa during the direct seeding year, or the first production year after seeding under cereals. Most second year production fields show a low level of plants with symptoms. Occasionally, where the disease is well established on a farm and weather conditions are favorable to the disease, second year fields will be hurt significantly. It is during the third year that this disease can have a major impact, often affecting 20-30% or more of plants. Yield is reduced as plants die throughout the summer and over the winter, and weeds such as dandelions move in. Yields are often unprofitable in the fourth year, and the stand will continue to thin out as more plants die.



Third year stand showing infected and healthy plants.



Typical wilting and discoloration caused by verticillium wilt.

Diagnosis

Discoloured leaves on alfalfa can be caused by potato leafhopper injury, by potash or boron deficiency, or even by severe drought. These problems are usually much worse in hot dry weather, and usually occur in patches in which almost all plants are affected. On the other hand, verticillium wilt shows up in both wet and dry weather and symptoms show on scattered plants more or less uniformly distributed through out the field. Phytophthora root rot can also cause discoloured alfalfa leaves but it shows up mainly in the seeding year on heavier soils after a period of excessive rainfall. Assistance in diagnosing suspected verticillium wilt can be obtained through an OMAF Office.

Source: <http://www.omafra.gov.on.ca/english/crops/facts/88-036.htm>

Advertise in the BC Forage Council Newsletter

Full page:	\$100
Half page:	\$50
Quarter page:	\$25

Introducing New Board Members ...

David Clarke

I've been a high quality forage producer on a small ranch in the Chilcotin for 18 years and a member of the Forage Council for most of this time. I am a busy farmer: livestock, machinery, land preparations, water management and fencing are some of the tasks that fill my time if not my bank account.

I decided to become a director as the spread of Noxious Invasive Weeds from neighbouring absentee landlords became a real issue, and I found that the both the Regional and Provincial Governments are not willing to effectively enforce the Provincial Weed Act.

I hope to see the BC Forage Council assume an effective lobbying role representing all the BC forage producers in dealing with common issues. I think the variety trials are an important function to help BC producers reach greatest productivity with least inputs.

I would like to see each member enroll another producer and a supplier to build momentum in membership growth, I hope we can invite other Forage Associations to join with us to become a force to advance forage issues as a unified and dynamic Provincial Council.

Darrell Smith, P.Ag.

Resource Stewardship Agrologist, Ministry of Agriculture, Cranbrook, B.C.

Darrell was born and raised in Red Deer, Alberta. He received a Bachelor of Science Degree in Forestry (focused on range management) from the University of Alberta in 1987, and then worked for 2 years in Edmonton with the Alberta Forest Service, Range Management Branch. Darrell then relocated to Rocky Mountain House, Alberta with the Alberta Forest Service to be in charge of the range program, first such position outside of Edmonton. He left Rocky Mountain House in 1995 to take a position (Range Officer) with the BC Forest Service in Invermere, BC, and then in 2002, left government to work for the East Kootenay Conservation Program, as their first Program Manager. In 2007, returned back to the BC government with the Ministry of Agriculture for the Kootenay region.

Have been married to my great wife Barb, for 26 years this summer! Two wonderful children, Olivia (20) and Daniel (15). Invermere is home as we have been there for 16 years and have a great network of friends in Invermere and throughout the East Kootenay's!

Garth Healey

Garth was born and raised in Saskatchewan, and grew up on large family mix farm operation. Choosing to leave the farm in 1988 so his wife could follow her dream of University, took their family to Alberta, where his wife studied at the U of A and completed her BA, her MA as well as her PhD. Garth at this time worked for Hole's Greenhouse and Garden in St Albert, where he was an on the road sales person helping to establish the large beautiful restraint patios Edmonton is known for. The patio idea continued till it was from Winnipeg to Victoria.

In 2000 Garth took a new challenge with a wholesale floral company, where they put a large refrigerated truck on the road to take flowers shipped from around the world, to every florist in north central Alberta, with a route from Lloydminster to Settler, Red Deer to Olds and Rocky Mountain House and then up to Grand Prairie, up to Peace River and back home through Slave Lake, Garth soon found a way to get to meet ever florist, with some new flower or on time service.

In 2004 his wife (and mother of their 4 children) was offered a position at TWU in Langley BC, they took the opportunity to see where this was to lead; as it turned out, Garth took a management position with a large horse ranch, bringing him full circle, while at the ranch Garth was taken back, by the hay prices charged to horse owners. When he left the ranch in 2009 he wanted to set up and sell hay at a fair price to all. While building the hay sales, he found the need for an alternative bedding for dairy and poultry barns, with the shortage of dry sawdust. With info gleaned, from local farmers as well as help from Alberta suppliers a StrawDust (wheat straw cut 5/8 – to 1 inch long) was now available in the Fraser Valley. Now working with local sawdust companies is able to provide a dry, environmentally available product to dairy, poultry and the equine market.

Garth is also the BC director for the CFGA, works with WFFP for BC, is a member of the BC Back Country Horseman, a strong supporter of The Maine Event, and raises Hancock ¼ horses with his wife at their Riverstone Ranch in the Colombia Valley.

Growing Degree Days

Growing degree days (GDD) is a weather-based indicator for assessing crop development. It is a calculation used by crop producers that is a measure of heat accumulation used to predict plant development rates such as the date that a crop reaches maturity.

In the absence of extreme conditions such as drought or disease, plants grow in a cumulative stepwise manner which is strongly influenced by the ambient temperature. The Growing Degree Days calculation allows producers to predict the plants' pace toward maturity. Daily growing degree day values are added together from the beginning of the season, providing an indication of the energy available for plant growth. Growing degree day totals are used for comparing the progress of a growing season to the long-term average and are useful for estimating crop development stages and maturity dates.

Growing degrees (GDs) is defined as the number of temperature degrees above a certain threshold base temperature, which varies among crop species. The base temperature value is derived from the growth habits of each specific crop. The base temperature is that temperature below which plant growth is zero. For example, cereal and forage crops show little growth or development when average temperatures are below 5°C.

GDUs can be used to: assess the suitability of a region for production of a particular crop; estimate the growth-stages of crops, weeds or even life stages of insects; predict maturity and cutting dates of forage crops; predict best timing of fertilizer or pesticide application; estimate the heat stress on crops; plan spacing of planting dates to produce separate harvest dates.

NEW ON FARMWEST ...

Customize your growing degree days

Choose a base temperature for your specific crop

You asked, and Farmwest delivered ... use the drop-down menu to select your base temperature from -5°C to +10°C.

www.farmwest.com



BC Forage Council Contacts 2011

EXECUTIVE	NAME	PHONE	EMAIL
President	Doug Hatfield	250-998-4505	doug@hatran.ca
Vice President	Doug Summer	250-783-5757	dasummer@pris.ca
Secretary	Geneve Jasper	250-398-4504	geneve.jasper@gov.bc.ca
Treasurer	Bill Awmack	604-574-7333	bawmack@shaw.ca
BOARD OF DIRECTORS			
Fort Fraser/Vanderhoof	Art Wiens	250-567-4636	
Hixon	Doug Hatfield	250-998-4505	doug@hatran.ca
Peace Region	Doug Summer	250-783-5757	dasummer@pris.ca
Soda Creek	Ron Kaufman	250-297-6515	kaufman@laketown.net
Williams Lake	Corky Tucker	250-392-5068	
Abbotsford	Garth Healey	604-864-3922	garth@bcstrawdustsales.com
Williams Lake	David Clarke	250-476-1121	haydave@telus.net
Vancouver Island	Grant Henry	250-748-0574	gmhenry@shaw.ca
Agri-business			
Glen Dale Agra Services	Norm Dueck	250-567-4225	norm@glendaleagra.com
Monsanto Canada	Jody Murdoch	250-919-1074	jody.r.murdoch@monsanto.com
Sure Crop Feeds	Mike Witt	250-838-6855	mike@surecropfeeds.com
Quality Seeds West	Bill Awmack	604-574-7333	bawmack@shaw.ca
Education			
Thompson River University	Dr. John Church	250-828-5150	jchurch@tru.ca
Public Sector			
AAFC (Agassiz)	Dr. Shabtai Bittman	604-796-1735	shabtai.bittman@agr.gc.ca
AAFC (Agassiz)	Derek Hunt	604-796-1728	derek.hunt@agr.gc.ca
BC AGRIC (Williams Lake)	Geneve Jasper	250-398-4504	geneve.jasper@gov.bc.ca
BC AGRIC (Cranbrook)	Darrell Smith	250-421-0747	darrell.smith@gov.bc.ca
Others			
Manager	Fran Teitge	250-267-6522	bctoragecouncil@farmwest.com
Membership	Nancy Portman	250-371-6052	nancy.portman@gov.bc.ca
Plot Manager (Vanderhoof)	Traugott Klein	250-567-3262	owsklein@hotmail.com