ASB 2020 – 25 Years of Agricultural Service Board in Alberta
Banff Springs Hotel, Banff, AB. ,
Jan. 21 – 24, 2020

By: Garry Candy

Tuesday, Jan. 21

- Travel
- Registration
- Finger food get together
- Ag Field men had meetings

Wednesday, Jan. 22 - Breakfast at 7:00 am.

Dianne Finsted from 40 Mile County in southern Alberta

- Brent Hyland, CAO Flagstaff County spoke about the history of the Ag Service Board – an excellent speaker
    - Topic focused on Pioneers & Ag Innovation – past, present and future
    - He spoke of the low population in the west and that Canada advertised in a number of countries for people to come and homestead in the prairies in order to supply the east with agricultural products
    - Using photographs to illustrate, Brent explained the Homestead Act – you would file on a quarter section of land and have 3 years to complete your obligations to the government in order to get title to it. These obligations were to live on it for at least 6 months of each year and bread 30 to 40 acres per year. (My father explained this as betting a 1é4 section of land against your hard work.)
    - 40,000 acres of homesteaded land resulted and farming began in the west. One of his pictures showed a steer harnessed and pulling a wagon parked in front of a meat market and beside a leather goods store. His comment was ``Beyond Beef can`t pull a cart! ``
    - With the homesteads came the need for Herd and Fire Districts, creating the need for infrastructure – fresnos were purchased for road building and local farmers were hired part time for construction jobs. Grain prices were higher than we would think, "2.31 bushel of wheat in 1919. My Dad also told me in 1919 he had a fair bit of money and but then in 1920 a relief ticket. The Great Depression Years also known as the Dirty 30`s caused a lot of people to give up and move away.
    - In 1928 inspectors were appointed by the government and the inspectors were subject to being fined for not doing their job properly
    - In 1941 the Municipal Act resulted in 70 rural municipal districts
    - In 1942-43, lands had been abandoned and were in poor shape and needed some sort of action and the local government seemed to be the answer – Dr. Longmen, Department Agriculture and Art Wilson, President of the Alberta

Association of M.D`s were instrumental in setting actions to cope with weed and erosion problems. The first Service Board was started with a $1000 grant.

- Brent talked of the advancements or actions such as the Rat Act, the Shelterbelt Trees and Rabies Control. Bill Lobay was one of the provincial supervisors of these programs plus inspections of seed cleaning plants so as not to seed weeds.
- In 1945 Ag Service Boards were started and Brent emphasized the terrific job and results of the Alberta Ag Service Boards, the only province to have them

- Doug Griffiths, former MLA, President and CEO of 13 Ways Inc.
  - Doug spoke of the needs for strong communities and the need for infrastructure to build for 10 years from now
  - In 66 years have gone from Wright Brothers first flight to man on the moon
  - Agricultural progress was slow first 5000 years, invention of the steam engine `made the world smaller`
  - Spoke of advances in the digital age – next year will see electronic devices (ipads) that wrap around your wrist.
  - Within 15 years, 80% of vehicles will be automated. Digital capabilities double every 9 months Quantum computers are next
  - Due to the machinery technological practices, the urban mindset of `straw hats and slopping the hogs` will need to change to high tech agricultural operations
  - Also mentioned that microbial manufacturing of meat and leather are in early stages
  - Everything has a background – a version of a fax machine was used in the 1800`s
  - Commented on misinformation and how quickly it can change markets and minds. Spoke about the `flat eartheners`` and their followers as being known ``all around the globe``. The anti-vaccine information that is out there is now causing great concerns.
  - Good speaker – has a book called ``13 Ways to Kill your Community``
  - Invited to go to a town in Minnesota to help stimulate the economy and raise employment. The town had tried many things including building a state of the art Rec Centre, parks, etc. He accidentally found out from a young mother that they had very limited day care. He convinced the town to include a large day care centre and pay good wages in a new administration building that was under construction. In 3 years, the unemployment rate was at an all-time low, business was booming, young families were moving into the area because of good, reliable day care and now their rec centre was in use. Maybe a lesson to be learning in our rural areas.

- Cory Baujot – Saskatchewan farmer, businessman with Seed master Men, DOT Innovator
    - Father was an inventor, holding many patents. His dad was often up at 3 am scratching out drawings on scrap paper and napkins. Next day someone in the fab shop was working on them. They built the Sea Hawk air seeder in 1992 with the smart hatch and developed openers that are used on several air seeders
    - Cory has been involved with the fully automated tractor DOT and sees some problems ahead. Because of the size the equipment is getting to – 600 HP tractors and 100 ft. seeders, land compaction is a problem because of the amount of ballast required. The implements for DOT are loaded on it for ballast and smaller. DOT will be an ongoing venture with Raven Industries now holding the controlling interest in DOT.
    - Gave his dad all the credit and quoted him - ``you never change things by fighting the existing reality – to change, make a model that makes the existing obsolete. ``

- Jonathon Gill – Robotic Engineer, Lecturer at Harper Adams University, U.K.
    - His use of drones and electronic controls together with existing farm machinery led to what started as the hands free hectors but has now moved to 1500 acres
    - Land is farmed with no operators or agrologist on the ground
    - Admits to making a stubborn challenge that full automation is not possible
    - One hectare minus the headlands was the start of completely hands-free, from tillage, seeding, spraying and fertilizing to harvesting and hauling in the grain. Planted to barley 2017, winter wheat in 2018, rye and clover mix in 2019.
    - His method could be referred to as a single plant approach, much like a garden. He is getting away from the compaction by large machinery and replacing it with swarms of small equipment with no operators to tire.
    - Throughout the growing season he collects plant samples by the use of drones that have clippers and a type of tweezer to cut and remove plant parts.
    - Everything he has purchased to add to the older small equipment was from Amazon, EBay and the like. He showed an older ford row crop tractor and what looked like an old 410 MF combine.
    - He was granted a Nuffield Scholarship which has been used by people with an Ag interest to travel the world and study different agricultural methods since 1986
    - He learned that sheep in the beginning could be herded by drones can`t nip at heels.
    - However the sheep could be attracted to move to new paddocks by the sound of the drone. Opening a gate to a new field would probably entice them to move but the film showed them moving more quickly.

- Nicolette Hahn Nimen – Bolines, California. Environmental lawyer and rancher (Bill Nimen Ranch)
    - Spoke of importance of animals on the plate and in the field. In her past as a lawyer for Robert F Kennedy, she had cases against some agricultural practices and in 2000 became a vegetarian. Since meeting and marrying Bill Nimen who ranches raising grass fed beef she has educated herself about livestock and written books about it: The Righteous Pork Chop, Finding a Life and Good Food Beyond Factory Farms.
    - She mentioned the push to go meatless and claimed the media has had a lot to do with it as well as ads like GoVegan
    - Her statement: ``For every complex problem, there is an answer that is Simple and Wrong`` - Taking a complex situation and reducing it to so simple that it is distorted.
    - Her talk included nutrient cycles – water cycles and how proper grazing practices are very valuable to the climate not as is published in poor documentaries that are not factual and blaming greenhouse gases squarely on animals: methane, CO2 and NOx. NOx is being listed as the bad one from cattle emissions. From my experience with engine emissions, the only way NOx is formed is a combination of nitrogen and oxygen at extremely high temperatures in the engine cylinder (3500 degrees F and up). Thus the need for ECR on engines at high H.P.
    - The amount of carbon capture is high when grazing is done properly and it helps build soil. The capture is done in several ways:
        - use of carbon dioxide by the plant and release of oxygen – photosynthesis
        - 80% of warming is caused by water vapor in the air if the soil will accept water and hold it – a positive
    - She says carbon sequestration can be carbon negative. Fracking wells are the main cause of methane emissions but she says that scientists agree that the methane count has been done incorrectly but it is too difficult to change what goes out to the public. Methane is getting a bad rap because carbon from cattle methane is not new carbon but recycled through the animal so again, the count is inaccurate
    - Methane from fracking is confused with methane from rice growing. Termites reduce methane substantially with bacteria they leave behind. Studies are under way as to the effects of feeding seaweed to cattle to reduce methane. I don`t know if that means they fart less but maybe humans could use some.
    - The soil degradation is less in Canada than in most of the world. Livestock around the world have received the blame for degradation because they are seen on land that farming has degraded. Thirteen species of animals over 100 lbs. were domesticated in Europe – animals that contributed to the culture of Europe
    - Livestock can be used or saved (held over), not like field crops that have to be seeded and harvested regularly

- Living and working with animals help to control health issues by being in contact with a different environment
- Benefits of grass:
  - Protect soil and water
  - Build carbon and fertility
  - Hold the soil from erosion as 90% of grass is below the surface creating an optimal subterranean environment
  - Eco system diversity
  - Good grazing can be carbon negative
  - Trees are a tremendous benefit and provide shade
  - Inverse water quality and quantity by retention
- Talked about diet – you only get Vitamin K2 from cheese, eggs, and animals on grass. Vitamin K2 is essential for bone health. Fats are now good for you, other parts of the world have known that for a long time
- In an effort to produce palm oil and coconut oil to prepare a butter substitute, grazing acres are being destroyed
- In her words: Ìt`s not the cow, it`s the how``

- Dr. Merina Van Keyserlingk – Animal Welfare – U of BC
  - Has a 270 dairy cow farm – has no extra money put into it, has to stand on its own, but the research department for dairy is heavily funded by the BC Dairy Farmers Association and Alberta Milk
  - She talked about the video with 2 workers at a dairy farm that was an isolated incident and assured everyone it doesn't happen. The US in some states passed Ag gag laws – no photos or entrance without permission. Her feeling is that laws like this simply make the public think there is something wrong or cruel and it's being hid. In Idaho judges ruled against Ag gag laws because of loss of trust.
  - A lot of studies are being done basically to identify comfort levels of dairy animals. One study involved using weights to open doors to fresh feed: different feeds like treats or to a mechanical rubbing brush – looks like a street sweeping brush. They increased the door weights and proved they would prefer the rubs to the free food. This was put on videos and people in the Netherlands began chastising farms because they didn't have mechanical brusher.
  - She cautioned people that if they take people on tours not to ask if they have any questions but to ask if something bothered them and address that concern.

- Graham Sherman and David Farran – shared the stage speaking of their backgrounds, their goals and the fight to become: private brewer for Graham and private distiller for David
  - Graham self identifies as a tech nerd. He contracted to the army and spent time in Afghanistan making sire the troops had communications. He became tired of

the time away from home and decided he wanted to make beer but found that was impossible at the time. He pushed the envelope until the laws relaxed. Finally brewed his beer for export, got and importer's licence and imported his own beer back.

- The first law that stopped him brewing at all was that you had to brew 500,000 litres per year or you need not apply. He now has his Toolshed Brewery using as he says the best barley in the world from Alberta in a 15,000 sq. ft. facility near the Barlow Trail in Calgary and employs many people
- David was a business man who started a group of Vet Clinics to work under his banner. He had originally started Pipestone Raven and sold clothing and trips, as he put it, to weird places. Sold out his Vet business and did nothing for a while until his wife said she would like to see him do something. He decided to become a distiller and his story of red tape was much the same as Graham's.
- He bought an old movie theater in Turner Valley and set out to make the world's best single malt whiskey. He mentioned getting funding for a project and the financial institutions wanting to know the expected time of return. When told there would be nothing for 10 -12 years, there would be dead silence.
- Doug did find financial backing and has Las Eau Claire distillery running in Turner Valley, hiring people and rejuvenation the town.
- David also has a passion for horse farming and has a 35 acre site that is farmed using the old methods and equipment with Perc heron horses. He invites people, mostly horse people, to come and have a hand in the farming. The ranch is called the BarU in the Longview area.
- Both of these speakers were excellent and are promoting Alberta Farm products as well as value added products

- Dave McCauley – gave some ASB updates
  - He was happy to announce that he has ministerial support for 5 year agreements with the government instead of 3 which will make things easier and better. There is a program launch coming with budgets shortly.
  - The province has 57,000 weed inspections done, 67 seed cleaning plants certified and 300 plus agricultural education events
  - Alberta has a competitive advantage because ASBs have:
    - Market access
    - Public trust
    - Strengthen rural Alberta
    - Farmer led policy development
    - Reduce industry threats
    - Cut red tape initiative
    - Farmer led research session
    - Canadian Ag Partnerships

- Kevin Hursh – south western Saskatchewan farmer
    - Warns wild ride coming up for farmers – and predictions for the next 10 years
    - Talked about climate change hysteria – with the size and population of Canada affecting the world atmosphere is like a no pee zone in a pool – we are all still in the water
    - Glyphosate is on the way to being banned or curtailed and means a new way of arming. Experiments are being done with high temp steam for non-selective weed control.
    - Claims are that it would take 1 -2 gallons of water to steam per acre
    - Farmland prices will be cool, stable for a period
    - Need more value added products, large and small
    - Will see more black swan events and trade disruptions such as swine fever
    - Ag costs plus the carbon tax makes us not competitive in the world market
    - Crop diversification such as Maple Peas (Acer variety) are being grown and sprouted for sale to China, peas were first used as feed for racing pigeons
    - Morris manufacturing is under credit protection
    - Protein fractuation plant is being built in Manitoba for peas – possibly for beyond meat products
    - Intercropping will be more common such as peas and canola, chick peas and flax
    - Closed by saying there are 3 types of farmers: optimist, pessimist and opportunist

Clubroot Response Workshop
Rycroft, Alberta
By: Brian Harcourt

Clubroot is a serious disease of Canola and other crops of the Brassica family.
It leads toswollen and deformed plantroots restricting H2o and nutrient up take.
Clubroot is caused by the soil bourne pathogen Plasmodiophora Brassica.
Preventing the introduction of the pathogen is critical but management is possible.
Learn the Life cycle, how to spot it, how to diagnose it, how to manage it,
and how to stay informed at...clubroot.ca
Crop rotation cannot stop or prevent the spread of the disease.
Alberta is not the only province with the clubroot problem.
Check out the differences of a strain, pathotype, and a race.
Seed only clubroot resistant varieties!!
Grass in the entrances to your fields to reduce the risk.
Clesn your equipment before leaving the field and if possible
disinfect by using a 2% hydrogen peroxide bleach spray for 20 minutes.
Isolate infected areas, grass them in and 30--50 feet around
them and identify them clearly. Its not OK to do Nothing!
5 stages of Grief, 1 Denial, 2 Anger, 3 Bargaining, 4Depression,5 Acceptance.
Talk to your neighbors. Scout your fields! clubroot.ca