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Saskatchewan
Agriculture

Minister's Message



As some of you know, at the recent SARM convention in March I announced I would be stepping down as Agriculture Minister when the next cabinet shuffle occurs later this year.

Our government has many new, fresh faces in our caucus, as well as representation from all of rural Saskatchewan. I felt it was time for somebody new to bring their ideas to this file and I am confident agriculture will be in good hands with the new minister.

I have had the honour to be Saskatchewan Agriculture Minister since our government was first elected in November 2007. It has been a truly rewarding experience to work hand in hand with producers and industry to move agriculture forward in our province.

Agriculture has always been a priority for our government and I am proud of our government's record. We have introduced the four largest agriculture budgets in our province's history, and committed to fully funding our share of federal-provincial programs in each budget.

We have also continuously worked to improve the Crop Insurance Program for producers. This began with a review of the program in 2008, and led to improvements in each year following the review. We have introduced the five largest Crop Insurance budgets and coverage levels in our province's history. We also introduced yield trending, yield cushioning, improved pricing options and an enhanced Unseeded Acreage Benefit for producers. I know our government will continue working to improve the program in the future.

Our government also worked to address significant challenges facing producers over the last several years. We provided a \$71 million Cattle and Hog Support Program when cattle and hog producers were facing several years of low prices. We also worked with the federal government to address weather-related disasters by providing the Excess Moisture Program, the Saskatchewan Feed and Forage Program, and the Pasture Recovery Initiative.

I was also pleased to introduce several other programs and initiatives to support farmers and ranchers. These include the Gopher Control Rebate Program, the Farm and Ranch Water Infrastructure Program, an improved Wildlife Damage Compensation Program, compensation for livestock killed or injured by predators, the Crown Land Sale Program, increased funding for rat control, funding for beaver control, and brining the administration of AgriStability back to Saskatchewan.

I am also proud of the work our government has done to address other issues in rural Saskatchewan, such as increasing funding for highways and rural roads, health care and education. However, I am most proud of the reduction in education property taxes by an average of 80 per cent, compared to 2007. I have always felt this tax was an unfair burden on farm and ranch families, and it was never addressed by the previous government. With the mill rate now set at 3.91 on agriculture land, producers can head into each year knowing the education portion of their property taxes, rather than waiting for school boards to determine their mill rate. This reduction has saved many families in our province thousands of dollars.

I have never seen more optimism in our agriculture industry than I see today. Prices for both crops and livestock are currently strong, our provincial agriculture exports lead the country for the first time ever, and there are opportunities throughout the industry. This is thanks to the hard work of Saskatchewan's farm and ranch families.

In closing, I want to thank our farm and ranch families for everything you do for our industry and our province. You are the backbone of our province and the reason we all enjoy the Saskatchewan Advantage today.

Sincerely,

A handwritten signature in dark ink that reads "Bob Bjornerud". The signature is written in a cursive, flowing style.

Bob Bjornerud

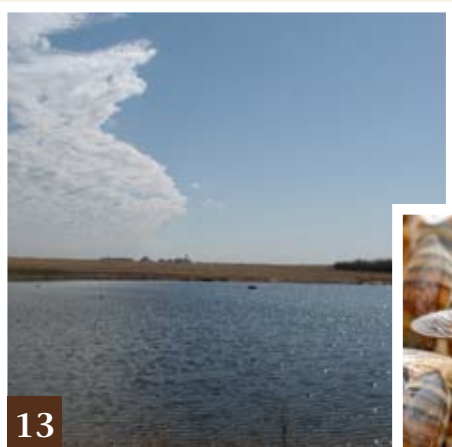
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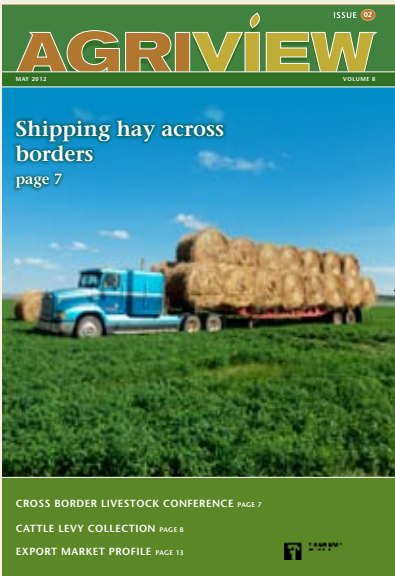
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Cover: The size and weight of the load is critical when shipping hay long distances. Turn to page seven for more information.



Saskatchewan
Agriculture

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To view this publication online, visit www.agriculture.gov.sk.ca/programs-services.



Clubroot of canola: prevention and awareness



by *Faye Dokken-Bouchard, MSc., AAgr*
Provincial Specialist, Plant Disease
Crops Branch

To confirm the presence of clubroot we must observe disease symptoms in a susceptible crop and detect the pathogen's DNA in a plant or soil sample. Symptoms may include wilting, stunting, yellowing, or patches of premature ripening combined with abnormal roots (root galls or clubs).

It is also important to realize that above-ground symptoms may only be detectable at higher levels of clubroot in the soil. Periodically checking roots of healthy plants is a good way to catch the disease early. If symptoms are noticed, the plant can be submitted for visual confirmation and then for a DNA test to positively identify it as clubroot.

Soil samples can also be used to detect the presence of clubroot in a field. Samples from the entrance to the field are a good starting point. Positive DNA results from a soil test do not tell us if the clubroot spores are alive or at high enough levels to cause disease, so a plant bioassay is required. A bioassay involves growing a susceptible plant in a sample of soil in a greenhouse to watch for clubroot symptoms.

The Ministry of Agriculture co-ordinates canola disease surveys and clubroot surveillance in collaboration with Agriculture and Agri-Food



Clubroot galls in early stages or low infection levels on canola. Photo credit, Clint Jurke, Canola Council of Canada.

Canada to provide information to increase public awareness of clubroot.

Analysis of the 2011 clubroot soil survey was recently completed. Clubroot was not confirmed in any of the fields sampled; however two cases of clubroot on plants were reported by Cargill in the fall of 2011. Clubroot was detected in a soil sample in our survey in 2008. Therefore we must continue to be diligent with clubroot monitoring and management.

As the Canola Council of Canada would say – geography is not immunity. We are not immune to clubroot in Saskatchewan, regardless the soil pH or where clubroot has been found. The best way to prevent clubroot is through sanitation of equipment and proper crop rotation (canola once every four years). Catching it early is crucial for managing the disease, so crop scouting and surveying is very important. Resistant varieties are another tool to help reduce the impact of clubroot, but should be included as an integrated

pest management strategy, not a silver bullet.

If you find clubroot or have concerns about the disease, work with your local rural municipality (RM). RMs are responsible under *The Pest Control Act* to help deal with this disease as a declared pest. The Ministry of Agriculture, SaskCanola, and the Canola Council of Canada can also provide information and support.

FOR MORE INFORMATION

- Visit www.clubroot.ca; or
- Contact your Regional Crop Specialist.

CAMELINA: A NEW OILSEED CROP FOR THE PRAIRIES



by *Venkata Vakulabharanam, MSc, PAg*
Provincial Specialist, Oilseed Crops
Crops Branch

Camelina, or false flax, a potential new oilseed crop for the Prairies, has been garnering a lot of attention over the past few years. This is, in part, due to a worldwide interest in bio-fuels. Camelina is well adapted to Saskatchewan growing conditions. It is highly heat and drought tolerant, shatter resistant and matures relatively early, making it suitable for the warm and dry regions of Saskatchewan.

Other possible bio-based products include fish feed, bio-lubricants and healthy oil. The jet fuel market has emerged as a potential business opportunity for camelina oil and, therefore, camelina producers. In January 2012, the United States Environmental Protection Agency (US-EPA) proposed adding camelina to the Renewable Fuel Standard (RFS2) and is currently under review.

It is natural for producers to be cautious in adopting new crops like camelina. Like any new crop, camelina production needs to fit into current crop rotations, have proper



agronomic recommendations and good marketing opportunities. The Saskatchewan Ministry of Agriculture, through funding programs like Agriculture Development Fund (ADF) and Agricultural Demonstration of Practices and Technologies (ADOPT), has been investing in projects to develop agronomic packages, crop and technology demonstrations and market development through animal feeding studies. If you would like to see how camelina performs in your area, contact the Agri-ARM site nearest you.

Camelina acres in Saskatchewan peaked in 2009 due to contracts offered by two companies based in the United States. One of the companies did not accept deliveries and left growers with camelina seed in their bins. The latest update from the company showed that most of the production is now accepted. If any Saskatchewan growers are still holding on to their camelina, we would like to hear from you. Buyers, from time to time, contact the Ministry to buy camelina seed. The Ministry may be able to provide you with contact names to sell your camelina production.

FOR MORE INFORMATION

- Contact the Agriculture Knowledge Centre at 1-866-457-2377; or
- Visit our website at www.agriculture.gov.sk.ca/Agri-ARM.





New crop sprayer and nozzle factsheets



by Brent Flaten, PAg, CCA
Integrated Pest Management Specialist
Regional Services Branch

New to the Saskatchewan Ministry of Agriculture website are updated sprayer and nozzle factsheets authored by Dr. Tom Wolf from Agriculture and Agri-Food Canada, recognized expert on sprayer and nozzle technology. Producers now have easy access to recent research in a reader friendly format over the internet.

The new fact sheets include topics such as:

AIM Command and Capstan Sharpshooter spray systems: The AIM Command and Capstan Sharpshooter are the same technology and made by the same company. The system allows for more precise rate and droplet size control than conventional rate control systems. The traditional use of spray pressure to control nozzle output is replaced by the duty cycle of a pulsing solenoid.

Common questions asked by producers about nozzles: Dr. Wolf answers the steps involved in finding the answers to common questions such as: "Which low-drift nozzles do I use on a sprayer?", "How do air-induction nozzles compare to low-pressure nozzles?", "What pressures are needed for air-induced nozzles?" and "Should I point nozzles forward or backwards or both?".

Minimizing spray drift: This question is very important from an economic and environmental point of view. Dr. Wolf discusses factors that govern spray drift risk and how to manage those risks with



Sprayer and nozzle technology at work.

sprayer settings, spray droplet size, travel speed, boom height, shrouds and air assist. Other important considerations include the potential vapour drift and buffer zones of each product being sprayed. Also, common courtesy discussions with neighbours often helps to avoid problems later on.

FOR MORE INFORMATION

- Refer to our factsheets at www.agriculture.gov.sk.ca/sprayer-nozzles; or
- Contact your Regional Crops Specialist.

REMINDER - SPRING UPDATE TO THE 2012 GUIDE TO CROP PROTECTION AVAILABLE MAY 1



by Clark Brenzil, PAg
Provincial Specialist, Weed Control
Crops Branch

The *Spring Update to the 2012 Guide to Crop Protection (Spring Update)* is available as of May 1 on the Saskatchewan Agriculture website. Keeping a printed copy of the *Spring Update* with your *2012 Guide to Crop Protection* will ensure that you have the most current information on pest control products at your finger-tips heading into the growing season.

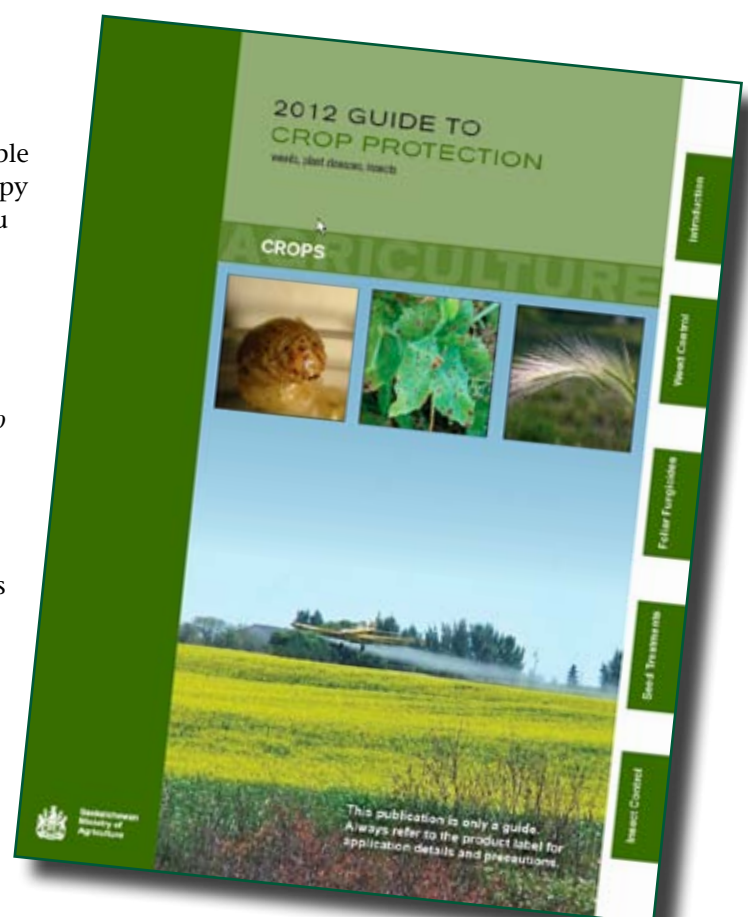
Crop protection products include herbicides, fungicides, insecticides and seed treatments. The *Spring Update* includes new products, as well as expanded uses for old products that have been registered since the release of the *2012 Guide to Crop Protection* in January.

Download the electronic version of the *Spring Update* to the *2012 Guide to Crop Protection* or pick up printed copies of the complete guide at your nearest Saskatchewan Agriculture Regional Office. Retailers of crop protection products may also choose to have printed copies of the *Spring Update* on hand.

The *Spring Update to the 2012 Guide to Crop Protection* is available at www.agriculture.gov.sk.ca/Guide_to_Crop_Protection.

FOR MORE INFORMATION

- Contact the Agriculture Knowledge Centre at 1-866-457-2377; or
- Visit your nearest Regional Office.





Inputs to target high canola yields



by *Kim Stonehouse, M.Sc. PAg*
Regional Crop Specialist, Tisdale
Regional Services Branch

Given the high returns on canola, producers may be tempted to try new inputs to obtain higher yields. Unfortunately, the financial returns from the higher yields may not always cover the cost of the extra inputs.

To help producers make informed decisions, an Agricultural Demonstration of Practices and Technologies (ADOPT) project was developed in 2011 to demonstrate potential economic benefits from adding inputs or management practices to a production system that already targets high canola yields.

The two groups that ran the project, the Northeast Agricultural Research Foundation (NARF) at Melfort and the Western Applied Research Corporation (WARC) at Scott, looked at a number of possible additional inputs and practices:

- Added micronutrients;
- Avail®-treated phosphorus fertilizer;
- Increased nitrogen fertilizer;
- Increased seeding rate;
- Added foliar fungicides (one additional application);
- Added Bioboost®;
- Soil fracturing (NARF only); and
- A combination of all added inputs and practices.

These inputs/practices were compared to a normal high-yield input and management package as determined by a consensus of the farmer-board members of NARF and WARC. This check package achieved high yields at both test locations.

The tests showed some small yield increases from some of the additional inputs/practices as compared to the check, but none were

significant. As well, no significant yield difference was observed for the combination application of all added inputs and practices, indicating there was no additive effect.

As the accompanying table shows, when the cost of each product or practice, including application costs (in brackets), was compared to the change in yield, it was obvious that none of the inputs or practices had a net economic benefit.

It is possible that, in some years, one or all of the added inputs or practices may produce an economic benefit. However, producers must be cautious about using an added input or practice unless they are confident it will provide an economic return. One of the goals of WARC and NARF is to identify conditions where economic responses to inputs and practices could be expected.

FOR MORE INFORMATION

- Contact Kim Stonehouse, Regional Crops Specialist, at (306) 878-8807; or
- the Agriculture Knowledge Centre at 1-866-457-2377.

Yield and economic impact of adding inputs to canola where high yield is being targeted.

Treatment	Yield (bu/ac)			Average cost increase* (\$/ac)	Average impact** (\$/ac)
	Melfort	Scott	average		
Normal Inputs	63.2	52.8	58.0	0	0
Add Micros	63.7	52.5	58.1	5.50 (8.36)	-4.30 (-7.16)
Add Avail®	64.0	50.0	57.0	3.50	-15.50
Add Nitrogen	66.7	53.6	60.1	26.80	-1.60
Increase seed rate	68.6	50.0	59.3	17.94	-2.34
Add Fungicides	65.7	52.2	59.0	24.08 (26.94)	-12.80 (-14.94)
Add Bioboost®	66.8	50.1	58.5	5.00 (6.43)	1.00 (-0.43)
Soil Fracturing	61.8	n/a	n/a	4.85	-21.65
Combined application	63.3	56.6	60.0	87.67 (93.39)	-63.67 (-69.39)

(Source: Northeast Agricultural Research Foundation 2011 annual report)

*Costs based on N @\$0.67/lb.; RR canola seed @ \$10.25/lb.; and our best estimate for Avail® treatment of \$0.10/lb. of phosphate; Bioboost® @ \$5/ac. Numbers in brackets include application costs.
** Impact based on canola @ \$12/bu so impact = change in yield x \$12 – cost increase.

ARE MY SEEDLINGS STRESSED OR DISEASED?

by *Faye Dokken-Bouchard, M.Sc., PAg.*
Provincial Specialist, Plant Disease
Crops Branch

Seed and seedling health are important to help establish the crop so it can better fight stress and pest pressures throughout the growing season. Whether it is too wet or too dry, too hot or too cold, environmental stresses and seed/seedling diseases are common when field conditions are anything other than “just right”. Sick-looking plants may be just under stress, but then they are also more likely to fall victim to disease. Knowing the difference between stress and disease will ensure you implement the appropriate integrated pest management strategy in the future.

Seed and seedling diseases can be either soil/residue- or seed-borne. Seed testing is a great way to diagnose disease issues before planting. If your seed is disease-free, examining the field history can help you predict and prevent other seedling issues originating from soil/residue-borne pathogens. Seed treatments can be used to combat both soil/residue- and seed-borne diseases, but they will not help with environmental stress.

Once the seed is in the ground, producers should monitor their fields early and regularly for signs of trouble, such as seeds that have failed to germinate, seedlings that have failed to emerge and roots or stems that are starting to decay. Symptoms often involve yellowing or wilting,

stunting or death, but it is important to remember that environmental stresses often have similar symptoms. In general, diseases are usually scattered throughout the field in patches, whereas environmental damage tends to affect the entire field equally.

Seedling diseases are caused by a variety of pathogens, some of which can produce near-identical symptoms. The only way to determine the cause of a problem for certain is to send a sample to a lab for testing.

If you decide to have a seedling tested for disease, remember that, if the plant is dying, sample quality is very important to differentiate saprophytes from pathogens. This requires that scouting, sampling, and testing be conducted in a timely fashion. Collect plants displaying both light and severe symptoms as well as healthy specimens for comparison. Submit whole plants, including the roots, to determine if a root pathogen is the cause. When including a root/soil ball, enclose the ball in a plastic bag leaving the above-ground parts loosely packed in dry paper towel.

FOR MORE INFORMATION

- Contact the Agriculture Knowledge Centre at 1-866-457-2377; or
- the Saskatchewan Agriculture Crop Protection Laboratory at (306) 787-8130.





Marketing hay across borders



by Andre Bonneau, BSA, PAg
Forage Management Specialist
Regional services branch
and



by Lorne Klein, PAg
Regional Forage Specialist, Weyburn
Regional Services Branch

Over the past year, a significant amount of hay has been sold into the American market. The drought in 2011 in Texas and Oklahoma has created a market for Saskatchewan forage. Good quality alfalfa hay in large square bales has sold for \$80 to \$100 per ton picked up in the yard.

The southern US market for Saskatchewan hay will eventually soften as buyers look for alternatives to paying high hay prices. As well, it will eventually rain in Texas and Oklahoma. Until then, hay from southern Saskatchewan will move into the U.S. Below are some things to consider if you are selling hay into the U.S.

The Hay Package

Hay is expensive to truck. Large squares are the preferred bales to haul due to load width, reduced wind resistance and higher hay density to meet weight allowances. Large square bales can be loaded inside vans and onto trailers. Round bales are less appealing for trucking due to load width and lighter weights.

Hay Quality

It makes more sense to transport high-quality hay as opposed to poor-quality hay. A distant market will be more receptive to high-quality rather than low-quality forage, so the hay should be tested before it is marketed.

Travel Restrictions

When transporting hay into the U.S., take note of the planned route. Keep in mind that some American states have regulations concerning weight and width restrictions. Some states also have an inspection requirement on incoming hay. Contact state officials before making the trip.

Payment

Marketing hay, especially across borders, can be risky due to non-payment. Determine payment details where both you and the buyer are protected from fraud. Ensure the buyer knows the quality of the hay and the price. The least risky option is to get paid before the hay leaves the yard.

FOR MORE INFORMATION

- Contact Andre Bonneau, Forage Management Specialist at 1-866-457-2377; or
- Contact Lorne Klein, Regional Forage Specialist at (306) 848-2382.

2012 CROSS BORDER LIVESTOCK HEALTH CONFERENCE



by Kathryn Ross, BSA, MSc, AAg
Animal Health Program Officer
Livestock Branch

Saskatoon is hosting the 2012 Cross Border Livestock Health Conference from July 17-18, 2012, in conjunction with the Pacific Northwest Economic Region (PNWER) 22nd Annual Summit, which is being held July 15-19, 2012.

PNWER includes the American states of Alaska, Washington, Oregon, Montana and Idaho, as well as the Canadian provinces and territories of British Columbia, Alberta, Saskatchewan, Yukon and the Northwest Territories.

Livestock health is a two-day conference that will provide attendees with the opportunity to enhance cross border cooperation on animal health issues:

- Enhance relationships and build networks between U.S. state and Canadian provincial/territorial jurisdictions.
- Exchange information on animal health issues/concerns.
- Develop a common understanding of disease policies.
- Exchange information on emergency response to emerging and foreign animal disease.
- Advance Canadian and American animal health interests.
- Identify and execute action items to collectively address animal health and cross border issues.

Conference attendees include: state and provincial veterinarians, federal government veterinarians, animal health representatives,

industry representatives, legislators and elected officials from both Canada and the United States. Follow up with event participants will continue after the event as the action items identified at the conference are addressed over the following year. Progress on the action items will be communicated to conference participants through email and postings on the conference website.

Topic areas that will be covered at the 2012 conference are:

- Regulatory Cooperation Council (RCC) Action Plans that are specific to livestock. These include: zoning for foreign animal diseases, certification products for meat and poultry products and veterinary drugs submission harmonization;
- Animal welfare; and,
- Improving on-farm disease detection.

FOR MORE INFORMATION

- Visit the conference website at www.cblhconference.com/index.html; or
- Visit the PNWER 2012 22nd Annual Summit website at www.pnwer.org/2012annualsummit/Home.aspx.





2012 Saskatchewan Pasture School: a forum for grazing managers

by Lorne Klein, PAg
Regional Forage Specialist, Weyburn
Regional Services Branch

The ninth annual Saskatchewan Pasture School is scheduled for June 13-14, 2012, in Saskatoon. The school is an opportunity for grazing managers to gain practical knowledge in a hands-on environment. This year's format will focus on a case study of a working ranch.

The two-day training event offers presentations by producers and industry specialists. Topics covered include tame and native pasture management, rotations, condition scoring and rejuvenation. Other topics are water delivery systems, brush encroachment, fencing methods, low stress livestock handling, forage quality, economics and any questions that participants have. In case of heavy rain, a full schedule of activities and exercises will be held indoors.

On the morning of the first day, participants will travel by bus to an operation in the Borden area to tour and take inventory of the ranch resources. These include the land base, tame and native pastures, fences, water delivery systems, handling facilities, livestock resources and labour.

On day two, school participants will critique and develop revised plans for the ranch. These will include grazing plans, livestock resources and all other management ideas.

Attendance is limited to 30 participants. Producers are encouraged to register early to ensure an opening. The cost of one registration is \$199.50, and additional registrations from the same operation are \$178.50. Both prices include GST.

Organizations on the school planning committee include the Saskatchewan Ministry of Agriculture, Agri-Environmental Services Branch of Agriculture and Agri-Food Canada, Ducks Unlimited Canada, Saskatchewan Forage Council, Saskatchewan Watershed Authority, Saskatchewan Forage Seed Development Commission and the University of Saskatchewan.

The registration form is available on the Saskatchewan Forage Council website at www.saskforage.ca and the Saskatchewan Ministry of Agriculture website at www.agriculture.gov.sk.ca.

FOR MORE INFORMATION

- Contact Lorne Klein, Regional Forage Specialist, Weyburn at (306) 848-2382 or lorne.klein@gov.sk.ca; or
- Contact the Saskatchewan Forage Council at (306) 867-8126 or office@saskforage.ca.



School participants identifying forage plant species.

ARE YOU PAYING YOUR CATTLE LEVY?



by Rusty Hawryluk
Supervisor, Livestock Services
Livestock Branch

When cattle are sold in Saskatchewan, the buyer is required by law to deduct both the provincial and national levy from the money payable to the cattle producer and forward the amount deducted to the Saskatchewan Cattlemen's Association (SCA).

The SCA is an organization that represents all production sectors of Saskatchewan's beef cattle industry through representation from all regions of our province. The funds collected by the SCA are used to provide services, promote beef, fund research, work with provincial and federal governments to improve the industry and educate people on the value of Saskatchewan's cattle industry.

A significant portion of the provincial levy provides funding to the Canadian Cattlemen's Association to develop policy and support advocacy efforts at the national and international levels. One dollar collected from the levy is forwarded to Canada Beef Inc. for domestic and international beef cattle marketing, promotion and research.

Since Aug 4, 2010, the SCA has been responsible for collecting the levy for cattle sold in Saskatchewan. All Saskatchewan livestock buyers are required to collect and remit the levy on all sale transactions with two exemptions: (1) for the sale of 4-H cattle and (2) for livestock dealers and agents who feed or own cattle for not more than seven days. A buyer is any person who buys cattle including livestock dealers, livestock agents or an abattoir. If the buyer does not deduct the levy from the sale proceeds, the buyer or the cattle producer is liable to the SCA for the amount of the levy.

Ensuring that livestock buyers meet their regulatory requirements for the collection and remittance of cattle marketing levies is the responsibility of the SCA. As such, the SCA has the authority to conduct random audits to ensure that all livestock buyers are complying with this regulatory requirement.

FOR MORE INFORMATION

- Contact the SCA office at 1-877-908-2333; or
- Visit the SCA website at www.saskbeef.com.





Adding tenderness to Saskatchewan beef — *ADF project profile*

Producers and agri-food processors in Saskatchewan are always looking for ways to innovate and add value to existing products. Research leading to value-added opportunities can help producers increase profits, find new markets and build a more profitable agricultural business.

In the meat industry, producers and processors strive to provide a product with a high degree of value for the customer at a reasonable cost of production. That value depends on taste, consistency, tenderness, convenience and perception. The ability to develop value-added products that fit these criteria is an important part of growing a successful livestock industry in Saskatchewan.

A recent study from the University of Saskatchewan, College of Agriculture and Bioresources, may provide a way to add value to traditionally tougher cuts of meat. Research was led by the team of Dr. Phyllis J. Shand, Dr. Zeb Pietrasik and PhD. student Anusha Perera, with funding from the Ministry of Agriculture's Agriculture Development Fund (ADF), to modify connective tissue and enhance tenderness of mature beef.

Existing research has found a connection between meat tenderness and toughness to the properties of connective tissue components such as collagen. Using this as a starting point, the group examined ways to modify the properties of bovine connective tissue, especially from mature animals, in order to improve tenderness of tougher cuts and further processed products.

Using samples of connective tissue from a number of heifers and cows, a series of tests were conducted to determine ways to improve tenderness of traditionally tougher cuts of beef. Two age groups were studied for comparison—heifers under 17 months and cows over six years. Shear (cutting) force was used to measure toughness and change in tenderness during testing.

The group investigated a number of methods to improve tenderness, included cooking temperature and duration, moisture enhancement, blade tenderization, heating regimen and even chemical treatments. While cooking temperature and duration improved tenderness of both age groups, cooking method and tenderization provided unique

benefits depending on the muscle being used in the sample.

All methods tested improved tenderness with a combination of blade tenderization followed by injection with a salt-and-phosphate solution having the best result. However, the impact of cooking method on tenderness was dependent on muscle type. For example, the *biceps femoris* (also known as bottom round or flat) were toughest when grilled but equal to other muscle types when cooked using a slow, high-moisture regimen. Other muscle types such as the *longissimus* (strip loin) were more tender by comparison, but showed no difference depending on cooking method.

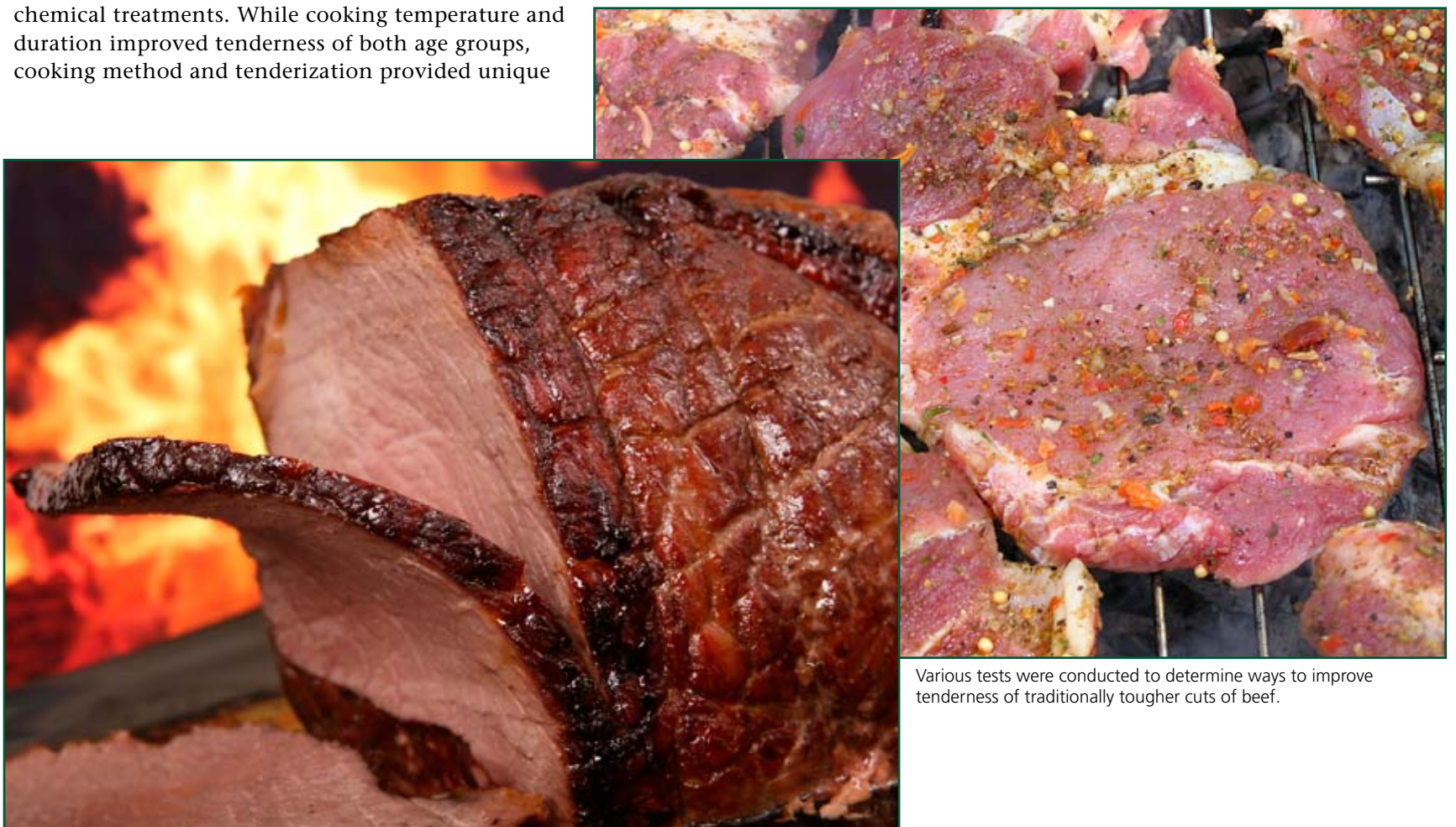
While the properties of collagen and connective tissue are unique and complex, many meat cuts from mature cattle may be quite acceptable to consumers as value-added products if they can be made more tender, as they are often more flavourful than that from younger animals. With this information, meat producers and processors may have an opportunity to add value to cuts of meat previously believed too tough.

The Agriculture Development Fund provides funding to institutions, companies and industry organizations to help them carry out research, development and value-added activities in the agriculture and agri-food sector. The results produce new knowledge, information and choices in technologies, techniques and varieties for farmers, ranchers, processors and input suppliers, to improve the competitiveness of Saskatchewan's agriculture sector.

In 2012, the Saskatchewan Ministry of Agriculture committed \$11.8 million in new funding for 60 ADF research projects.

FOR MORE INFORMATION

- Visit the Saskatchewan Agriculture research reports page at www.agriculture.gov.sk.ca/ADF/Search and enter the report number #20050732 into the search function.



Various tests were conducted to determine ways to improve tenderness of traditionally tougher cuts of beef.





Agriculture in the schools of tomorrow



by Jonathan Tremblay
Communications Consultant
Communications Branch

At one point in Saskatchewan's history, agriculture was survival. The farmers and ranchers of a century ago were essential to colonizing the Wild West. Today, agriculture consists of an extremely varied range of professions and the senior high school students of this province know all-too-well the importance and wealth of opportunities awaiting them.

Kenaston, SK, has a population of 269 and yet the K-12 Kenaston School on its 5th (of six) Avenue, has 800 students. An explanation is in order.

Founded in 1993, Kenaston School is a technologically advanced hub in west-central Saskatchewan. Just over 100 students aged five to 18 file the halls of the school and have access to top-notch facilities, an inviting library and more electronic access than the crew of the Starship Enterprise. This is because the other almost 700 students connect with the teachers of Kenaston School via video conferencing, phone and email communications. From home-schooled children and those very far from any school district to those signed up for one of the school's specialized classes, Kenaston uses a system of cameras, lighting and interactive boards to teach students both in class and via television screens. Teachers can even pre-record lessons if they need to be away for a period of time. These become available to distance students and can be viewed at any time.

"It's about having students participate in their own education," the teachers say. "With support from community and industry, we teach kids to go out and learn about real-life Saskatchewan and get an introduction to new career paths they may not have considered otherwise."

- Tina Rioux and Sarah Clark, Teachers at Evan Hardy Collegiate in Saskatoon.

"We are very proud of what we've been able to offer here," says Principal Darren Gaspar. "We're looking to efficiency and to accessibility," he tells us as the school brings a wide range of both theoretical and practical knowledge for students in and outside Kenaston by means of solid technological resources.

It is indeed with impressive communications technology that Kenaston School is elevated to a model for both rural and urban schools across the Prairies. Kilometres apart, teachers and students share assignments, discuss subject matter and benefit from a flexibility of education that was not available a century ago to the children already helping out at seeding and harvest time. Even a few years ago, such options would not have been available for children and young adults far from schools.

Kenaston School not only creates flexibility of schedules for students, but also flexibility in career choice. Don't be fooled by the place's "small-town charm" embodied by scenic vistas

everywhere you look, a trademark welcome sign on a grain elevator and a giant snowman as its mascot. Kenaston is a breeding ground for the young professionals of tomorrow. Trade apprenticeships are offered at the school along with several university-level introductory

classes in kinesiology (focused on anatomy and movement), business (in partnership with the University of Saskatchewan School of Commerce) and of course, Agriculture, in co-operation with the Ministry of Agriculture's Green Certificate Program.

The Ministry provides an apprenticeship-style, on-farm skill-training program called the Green Certificate Farm Training Program. Trainees can acquire skills in one of several agricultural sectors, including feedlot, cow/calf, dairy, sheep, crop and irrigated crop production.

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Students from both urban and rural parts of Saskatchewan learn about agriculture at events such as Canadian Western Agribition and with courses from the Ministry's Green Certificate Program.





Agriculture in the schools of tomorrow - *continued*

Technology is one part of the equation but passion is the other and Kenaston School has plenty of it. Paula Evans is the mother of three girls attending Kenaston School and owns a ranch near the village. Also a part-time teacher, Paula teaches the cow-calf and field crop classes to senior high-school students.

“They [students] get to do homework with their parents directly on the farm and start fascinating conversations about the why and how of farm work,” says Paula. “At tradeshow, you should see them go up to producers and equipment dealers and ask detailed questions about something they clearly have a passion for.”

From chemical identification and safe handling to emergency calf midwifery and field trips to the Western Canada Farm Progress Show and Canadian Western Agribition in Regina, Paula says that students are connecting with their roots, getting credit and recognition for work they already do at home and exploring agriculture’s many career paths that could lead to anything from crop research, flax farming, farm writing, farm business management, chemical development and countless others.

What’s next for the agriculture curriculum and for Kenaston School in general? Principal Darren would like nothing less than to offer “more courses to more students and to a larger part of the province.” A partnership with the U of S College of Agriculture and Bioresources is also on the Principal’s wish list.

Across the Bridge

Now, to the city we go. At over 260,000 inhabitants, Saskatoon is far from the village of Kenaston and agriculture as a subject might be viewed as an afterthought at schools in the Bridge City. Not so, as we look at Evan Hardy Collegiate in Saskatoon’s College Park neighbourhood.

Close to the U of S with all its agricultural research and field testing facilities, it is the optimal place for an ingenious curriculum involving agriculture as a science, career and way of life.

Tina Rioux and Sarah Clark have been teaching “Bioresources Management” to senior high school students for the better part of the last three years and not only is the subject matter untraditional, the teaching method is highly unconventional.

“It’s about having students participate in their own education,” the teachers say. “With support from community and industry, we teach kids to go out and learn about real-life Saskatchewan and get an introduction to new career paths they may not have considered otherwise.”

From 18 students the first year of the program to 40 in 2011-12, the course has yielded much interest. We could think that urban students, often without even a close relative involved in agriculture, would not find such a class interesting but the teachers tell us that their urban reality is actually an advantage. Students experience a sense of marvel at agricultural subjects, that are going on all around them on a daily basis but of which they know little. The few students with active farming knowledge hold others amazed with this incredible knowledge passed down from their families.

Sarah and Tina take pointers and hold a dialogue with the University of Saskatchewan’s John Treylor out of the College of Agriculture and Bioresources. John is a great supporter of investigative teaching and a strong promoter of agriculture in schools. Providing materials and case studies for students, John hopes to encourage future enrollment in the College’s many programs as kids learn about the life-blood of this province while still in grade and high school.

A New Generation

From village to city and through wireless networks across the province, students in Saskatchewan are being shown what their fellow Saskatchewanians knew a century ago: Agriculture is the future. This province has become the top agri-food exporter in Canada, achieving sales of \$10 billion for the first time ever in 2011. This year, we will see \$20 million in research commitments and with the expansion of grain marketing options in the Prairies, career possibilities and opportunities for truly prolific agriculture-related careers abound.

FOR MORE INFORMATION

- Visit the Kenaston School website at www.sunwestsd.ca/kenaston;
- Visit Evan Hardy Collegiate’s website at <http://schools.spsd.sk.ca/evanhardy>; or
- Visit the Ministry website at www.agriculture.gov.sk.ca for more on the Green Certificate Program.





Growing Forward



Opportunities for business development on the farm, ranch and agri-business



*by Doris Morrow
Manager, Farm Business Management Services
Regional Services Branch*

Farmers and ranchers in Saskatchewan still have time to access information and funding to increase profitability in their operations. Funding available through the federal-provincial Growing Forward framework for the Farm Business Development Initiative (FBDI), the enhancement for young farmers (YFBDI) and the Saskatchewan Agri-Value Initiative (SAVI), is available until March 31, 2013, when the current framework is scheduled to end.

FBDI helps farmers and ranchers take training or hire consulting services to achieve business goals in the areas of business strategy, marketing, production economics, human resources, financial management, succession, business structure, environmental strategy and risk management. A Taking Stock self assessment exercise pinpoints exactly where needs exist and which area should be worked on under the Farm Development Plan. Farmers and ranchers under 40 years of age can apply for up to \$10,000 with 90 per cent covered by the program; other producers can obtain up to \$4,000 with 75 per cent covered by the program.

SAVI provides funding to pursue adding value to your operation. This funding, to a maximum of \$100,000, is available for 50 per cent cost sharing for product and prototype development, marketing, systems improvements and skills and training opportunities. Small to medium-sized agri-businesses, producer/processor or industry organizations who are involved in adding value to agricultural products (i.e. food, feed and bio-products) and want to grow their value-added business and industry should apply.

Both programs require an assessment, development or action plan and application before the consulting work and/or training can begin. Anyone interested in learning more about these two programs should contact the Ministry as soon as possible to start the process.

FOR MORE INFORMATION

- Contact your nearest Regional Farm Business Management specialist;
- Call the Agriculture Knowledge Centre at 1-866-457-2377; or
- Visit www.agriculture.gov.sk.ca/programs-services.

SAFE USE OF TOW-ROPES, STRAPS AND CHAINS

*Andre Bonneau, BSA, PAg
Agriculture Health and Safety Representative
Saskatchewan Ministry of Agriculture*

Nearly all farmers have the need to tow or pull out vehicles or equipment at one time or another. In order to prevent close calls and injuries from chains and towropes that fail, consider the following:

Tow straps vs. recovery straps

A tow rope or strap is designed for towing wheeled vehicles and equipment without load. Recovery straps are designed for pulling vehicles and equipment that are stuck. Recovery straps have more elasticity and will stretch and transfer the energy into pulling the vehicle out of the mud or hole. Tow ropes will usually have hooks fastened at each end while recovery straps will have loops stitched or braided at each end.

Weight ratings

Use straps with a weight rating of at least double the weight of the vehicle or implement being pulled. Keep in mind that a stuck vehicle has to be lifted from its position, not just pulled. Keep in mind the hooks on the tow straps may have a lower weight rating than the device. Make sure the tow vehicle has the power and the weight to safely tow or recover the vehicle.

Inspection

Inspect the tow rope, chain or strap before each use and clean when needed. Frays, notches, heat damage or chemical damage can significantly reduce the towing capacity of the towing device. Do not use stretched chains.

Attachment

When attaching to a vehicle or piece of equipment, review the manufacturer's recommendations for towing, when possible. Attach the device low to the ground to keep the centre of gravity low. Do not attach at a point where the rope or strap can be cut or frayed while under tension. Ensure the attachment points are secure and can handle the tension of the pull. Use the shortest device possible to reduce spring-back if it breaks. Do not loop a tow rope or hook a strap onto itself. Do not tie knots in ropes or straps.

Safety

Bystanders must observe from a distance. A good rule to follow is to stand at least one and a half times the length of the strap away.

FOR MORE INFORMATION

- Contact Andre Bonneau, Agriculture Health and Safety Representative at 1-866-457-2377.





2011 agri-food exports break previous records



by Darryl McCallum, BA Advanced
International Business and Development Specialist
Policy Branch

In 2011, the value of Saskatchewan’s agri-food exports topped \$10 billion for the first time in our history. Saskatchewan has now become the top agri-food exporter in Canada, taking over from long-time leader Ontario.

Top five destinations for our exports (and the value of those exports in 2011):

United States	\$2.9 billion
China	\$1.07 billion
Japan	\$1.02 billion
Mexico	\$625 million
India	\$559 million

In addition, 15 other countries were the recipients of over \$100 million in Saskatchewan agri-food exports giving us the most diversified markets of any industry sector in the Canadian economy.

The large increase is attributed to a combination of higher commodity prices, increased production and higher market demand. Currently, Saskatchewan is Canada’s leading producer of canola seed, flax seed, lentils, dry peas, durum, mustard seed, oats and canaryseed. Furthermore, Saskatchewan is the world’s leading exporter of dry peas, lentils, flax seed, durum, mustard seed, canola seed, canary seed and oats.

Demand for Saskatchewan’s cereals increased in 2011 due to a tight world supply. This is due in part to the drought that hit large parts of Eastern Europe in 2010 including major cereal producers Russia and Ukraine. Except for red lentils, Saskatchewan pulse exports increased in 2011 as a result of increased demand from China and India.

A significant part of this year’s export growth is due to our canola crop. Canola seed exports increased in value by 30 per cent and took over from non-durum wheat as Saskatchewan’s top exported commodity. Canola seed was the only commodity to eclipse \$2 billion in export sales in 2011.

Canola’s value-added products – oil and meal – also experienced very strong growth with canola oil exports surpassing \$1.6 billion and canola meal surpassing \$460 million. In 2011, Saskatchewan’s export capacity for canola oil and meal grew with operation of two new crushing facilities in Yorkton.

The United States is the top export destination of canola oil and meal. U.S. demand is increasing due to canola’s positive health effects relative to other edible oil competitors. For example, large companies such as McDonald’s and Frito-Lay have converted to canola oil and canola oil blends as their cooking oil of choice.

Growth has been steadily building over the last several years. This trend will be maintained as government and industry take steps to continuously improve Saskatchewan’s competitive position internationally.

FOR MORE INFORMATION

- Visit the Ministry website at www.agriculture.gov.sk.ca.



Saskatchewan
Ministry of
Agriculture

The Farm and Ranch Water Infrastructure Program (FRWIP) is coming to a close.

August 1, 2012 is the deadline for applications.

Inquiries and applications: 1-877-874-5365 toll free,
Email fpbinfo@gov.sk.ca, or visit
www.agriculture.gov.sk.ca/FRWIP_2009.





New forms for SCIC AgriStability participants

When filing for the 2011 AgriStability program, Saskatchewan participants need to make sure they are using the right form.

SCIC has changed which form individual (sole proprietor) participants need to use. For the 2011 program year there are two separate forms that need to be completed. The T1163 is for filing tax (income and expense) information and the 2011 Supplemental Accrual Information form is to be used for submitting inventories, purchased inputs, deferrals, payables and receivables.

Why new forms?

The move to having both of these forms for individual participants is part of SCIC's effort to improve AgriStability program delivery for Saskatchewan's farmers and ranchers. The new 2011 Supplemental Accrual Information form is to be submitted directly to SCIC. Previously this information had to be sent to the Canada Revenue Agency (CRA) in Winnipeg, who forwarded it on to Agriculture and Agri-Food Canada (AAFC) before it went to SCIC. SCIC will now receive the information directly and can begin processing the application sooner.

An individual participant's tax (income and expense) information still needs to be submitted to the CRA using the T1163 form, ensuring the requirements for participating in AgriStability and/or AgriInvest are met.

There is one other option for submitting this AgriStability information. AgConnect, SCIC's new online tool, can be used for sending the income and expense as well as supplemental information to SCIC. With AgConnect, the participant's information is automatically entered into SCIC's computer system, making it possible to begin processing a file even sooner than if the information was submitted using fax or mail. Please keep in mind, even though individual participants can submit their income and expense information using AgConnect, they are still required to complete the T1163 form and submit it to the CRA.

Corporations, co-operatives and other entities filing for AgriStability are to use the same form as they have in the past, the Corporations/Co-operatives/Other Entities form, and submit directly to SCIC. These businesses can also use AgConnect to complete and submit their AgriStability program information. Whether they use the online tool or submit through the traditional methods, corporations, cooperatives and other entities, are fulfilling their submission requirements for both AgriStability and AgriInvest.

FOR MORE INFORMATION

- Visit a local Crop Insurance office;
- Visit www.saskcropinsurance.com; or
- Contact the AgriStability Call Centre at 1-866-270-8450.

PROVINCE OBSERVES THE DAY OF THE HONEY BEE



*by Geoff Wilson, M.Sc., PAg.
Provincial Specialist, Apiculture
Crops Branch*

Honey bees are an important contributor to agriculture in Saskatchewan. In the past few years, they have been under increasing pest and disease pressure which has killed large numbers of them in Saskatchewan and around the world. To recognize the importance of these insects, their contribution to agriculture and the difficulties they currently face, the Day of the Honey Bee will be observed in Saskatchewan in May for the third consecutive year.

Despite the difficulties facing honey bees, Saskatchewan's beekeepers have been successful in expanding their industry. The number of colonies has increased by almost 20 per cent in the last three years. Based on the recent five-year-average, Saskatchewan beekeepers produce about 8,000 tonnes of honey a year for Canadian and international consumption. The product is worth about \$21 million a year. In addition to the honey they produce, honey bees contribute over \$2 billion annually to Canadian agriculture by pollinating crops, according to the Canadian Honey Council.

Various countries around the world have recognized the importance of honey bees to agriculture and the threats

that these bees face. Saskatchewan is proud to join in the acknowledgement of this industrious insect by proclaiming the Day of the Honey Bee.

Anyone interested in learning more about bees and beekeeping in Saskatchewan should visit the Saskatchewan Beekeepers Association website at www.saskbeekeepers.com.

FOR MORE INFORMATION

- Contact Corey Bacon, president, Saskatchewan Beekeepers Association, and vice-president, Saskatchewan Beekeepers Development Commission, at (306) 864-3774 (phone) or (306) 864-3260 (fax); or
- Email beeranch@sasktel.net.





Update Crop Insurance contract after any land transactions

Purchasing, selling and renting land is part of the normal business of operating a farm. Reporting all land in operation is part of the normal business of your Crop Insurance contract.

Producers should inform the Saskatchewan Crop Insurance Corporation (SCIC) of any land additions or deletions as soon as they are aware of the change. Land changes may be requested following the enrolment deadline of March 31, 2012, but before the Seeded Acreage Report deadline.

All land changes should be reported early to avoid any loss in coverage. If damages occur before notifying SCIC of the land changes, producers may not be eligible for insurance coverage.

Land changes can be made by completing the Land Change and Acres Seeded Form or directly contacting a local Crop Insurance office. The form and instructions for completion can be found online at www.saskcropinsurance.com. New for 2012, the form can be completed electronically, printed and then submitted to SCIC.

All additions or deletions may be subject to approval and verification. Documentation may be required for this verification. Field checks may also be required to determine if liability will be accepted. Land additions, deletions and changes are tracked to ensure there is not land active on more than one contract, land deleted to avoid insurance or an outstanding balance from a related contract.

Crop Insurance eligibility requirements maintain contract holders must demonstrate legal, operational and financial independence from all other producers. Producers must have legal access to the land, whether it is owned or leased, on which insured crops are grown.

If producers are considering making land changes or require assistance making these changes to their contracts, they should contact a customer service representative. SCIC is here to help.

FOR MORE INFORMATION

- Contact the nearest Crop Insurance office;
- Call 1-888-935-0000; or
- Visit www.saskcropinsurance.com.

GROWING REGISTERED VARIETIES



*Mitchell Japp, M.Sc, PAg
Provincial Specialist, Cereal Crops
Crops Branch*

There have been profound changes in the grains industry in Western Canada in the past few months. Bill C-18 removed the sole purchasing powers of Western Canadian wheat, durum and barley from the Canadian Wheat Board (CWB). These changes have led to the question: “Can I now plant unregistered wheat varieties?” The answer is “no”. Regulations regarding unregistered varieties remain in place to preserve wheat quality and agronomic performance by restricting the importation and sale of unregistered wheat varieties.

Unregistered varieties of grain are managed by the *Seeds Act* and the *Canada Grain Act*, legislation that is independent of changes under Bill C-18. Under the *Canada Grain Act* and its regulations, any grain produced from seed of a variety that is not registered under the *Seeds Act* will be assigned the lowest grade available for that kind of grain.

For most crops, the *Seeds Regulations* of the *Seeds Act* specifies how unregistered varieties can be obtained. For crops other than wheat, growers can import and grow unregistered varieties, but will be subject to the lowest grade available when selling their grain.

Wheat, in what is defined as the “Canadian Wheat Board Area”, cannot be imported for crop production purposes unless the variety is registered under the *Seeds Act*. The “Canadian Wheat Board Area” includes the provinces of Saskatchewan, Alberta, Manitoba and the Peace Region of British Columbia. However, Bill C-18 did not change the “Canadian Wheat Board Area” with respect to the importation or sale of unregistered wheat varieties. The “Canadian Wheat Board Area”

is defined in the *Seeds Regulations* and clearly prohibits importing or selling wheat seed of unregistered varieties. The *Seeds Act* is enforced by the Canadian Food Inspection Agency.

While it is not illegal for a grower to produce wheat from an unregistered variety, there is no legal way to obtain an unregistered variety of wheat for crop production purposes. The *Seeds Act* directs fault at the seller or importer of the unregistered variety, so for the most part, the liability for producers is quite low. However, the financial risk from producing an unregistered variety and being downgraded to feed grain could be relatively high.

FOR MORE INFORMATION

- Visit the Canadian Food Inspection Agency website at www.inspection.gc.ca/english/plaveg/variet/questionne.shtml; or
- Visit www.agriculture.gov.sk.ca.





DATE	EVENT	LOCATION	PHONE	INTERNET
May 10, 2012	Statistics Canada News Release of Agricultural Census		1-800-263-1136	www.statcan.gc.ca
May 21, 2012	Deadline to seed camelina in the brown soil zone and all classes of chickpeas.		1-888-935-0000	www.saskcropinsurance.com
May 27 - 29, 2012	Saskatchewan Stock Growers Association (SSGA) 99th Convention and Annual General Meeting		306-757-8523	www.skstockgrowers.com/ssga-99th-convention-annual-general-meeting
May 31, 2012	Deadline to provide production contract information to Saskatchewan Crop Insurance Corporation (SCIC) for the Contract Price Option, as well as Khorasan wheat.		1-888-935-0000	www.saskcropinsurance.com

New 639 area code and local 10-digit dialing coming in 2013

Saskatchewan is getting another area code: 639. That means you'll need to dial 10 digits for local calls by May 2013 – the area code plus the phone number. (Dialing 1 first is not required when placing a 10-digit local call.)

SaskTel customers across the province can already dial 10 digits for local calls and can start preparing for mandatory 10-digit dialing by updating speed dial lists, cellphone address books, fax machines, modems, equipment for the hearing impaired, security systems, etc. (if you have any questions about your security system's 10-digit dialing readiness, contact your security provider). Non-SaskTel customers should contact their service provider if they have questions about 10-digit dialing.

Special 3-digit numbers like 911, 611 and 411 will still be three digits. Local calling areas and long distance calls will also stay the same.

- For more information
- Visit www.sasktel.com/dial10.

