



# GLYPHOSATE: Frequently Asked Questions

- A National Farmers Union Fact Sheet -

## What is glyphosate?

Glyphosate, pronounced **GLY**-fuh-sate, is a non-selective, systemic herbicide. This means that it kills all types of plants by affecting all parts of the plant – above and below ground. Glyphosate was discovered in 1950 and originally used as an industrial “descaling” agent that strongly adsorbed minerals. It was not recognized as a herbicide until 1970 when Monsanto developed and patented a concentrated form introduced as *Roundup*® in 1974. Glyphosate is also referred to by the chemical names (N-(phosphonomethyl) glycine) and 2-[(phosphonomethyl)amino] acetic acid.

## What is the difference between glyphosate and Roundup®?

Glyphosate is the active ingredient in Monsanto’s Roundup® herbicide. When Monsanto’s patent on the use of glyphosate in herbicide formulations expired in 2000, other companies were free to develop and sell herbicides using glyphosate as the active ingredient under their own brand names.<sup>1</sup>

## How does glyphosate work?

Glyphosate is the only herbicide in “Group 9” of the herbicide mode of action classification system.<sup>2</sup> Glyphosate interrupts the EPSPS enzyme pathway, a bio-chemical process that all plants and some bacteria and fungi use to produce certain amino acids they need to survive. Glyphosate herbicide products contain additional chemicals, *surfactants*, to allow the active ingredient to be more easily absorbed into plant leaves. Once inside the leaves, the chemical moves into growing plant parts, where it kills tissue and prevents re-growth. The plant yellows and dies within ten days to two weeks after being sprayed. Glyphosate herbicides also contain or are mixed with *adjuvants* – other chemicals that enhance the performance of the active ingredient or affect other aspects such as droplet size, mixing, foaming, etc.<sup>3</sup> Neither surfactants or adjuvants are subjected to toxicity studies.

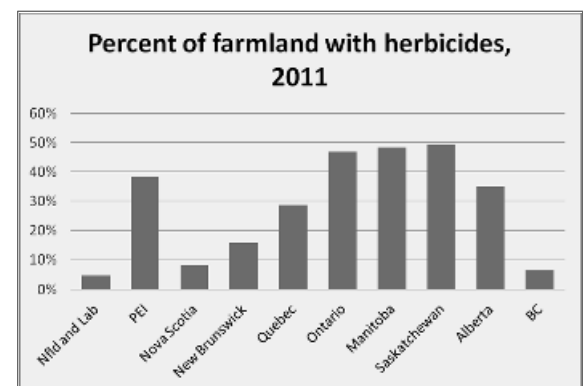
## How much glyphosate is used in Canada?

According to pesticide sales data published by the Health Canada’s Pesticide Management Regulatory Agency (PMRA), glyphosate is Canada’s top selling pesticide, although the precise amount is not reported. In 2011, over 40% (37.3 million kg of active ingredients) of total pesticide sales were in the phosphonic and phosphinic acids group (glyphosate and glufosinate, often sold as Liberty herbicide). Agricultural sector products made up 68.7% of pesticide sales in Canada in 2011, comprising over 62 million kilograms of active ingredients. Herbicides made up 81% of agricultural sector use sales.<sup>4</sup>

## What are the farm uses of glyphosate?

Glyphosate is used to control annual weeds before seeding or in summerfallow (chemfallow); to control perennial weeds before seeding or after harvest; to control Canada thistle and other perennial weeds in summerfallow, shelterbelts and post-harvest; to terminate alfalfa stands; for patch treatments of perennial weeds in cereals, forages, and non-herbicide tolerant corn, soybeans; and for weed control in glyphosate-tolerant crops.

Glyphosate can be used as a pre-harvest aid (dry down) on cereals, canola, pulse crops and flax to allow earlier harvest with the option to straight cut instead of swathing. Farmers are advised not to use glyphosate for dry down until grain moisture is less than 30% - the “hard dough” stage. Spraying earlier will increase the



Source: Statistics Canada

(continued on page 2...)

*(Glyphosate, from page 1)*

amount of glyphosate found in harvested kernels and cause yield loss. Glyphosate should not be used on any crops grown for seed because it impairs germination. Barley and oat producers are cautioned to check with their buyers to see whether they will accept grain treated pre-harvest with glyphosate.

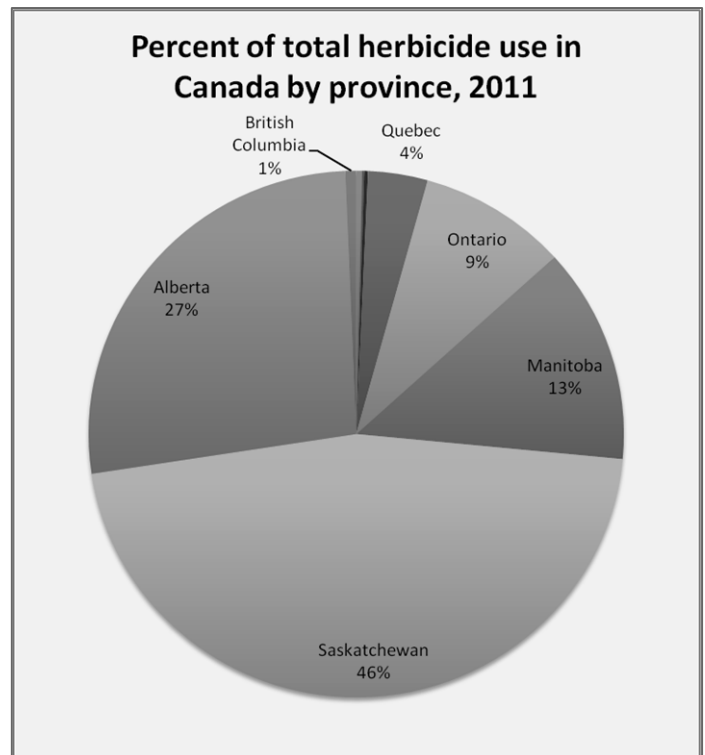
Glyphosate is a herbicide, not a desiccant. Desiccants can absorb water and are used to dry other substances. Reglone® is the only chemical registered for use as a crop desiccant in Canada, but it is not registered for use on cereal crops. When sprayed with glyphosate, however, all plants in the field will be killed within seven to 10 days. It is then possible to eliminate swathing and the associated weather-related risks, and schedule harvest by straight-cut combining fields when weeds and crop are no longer green.

### **What is the relationship between glyphosate and genetic engineering?**

Certain varieties of canola, corn, soybeans and sugar beet have been genetically engineered to withstand being sprayed with glyphosate. Genes inserted into these “herbicide tolerant” or “Roundup Ready®” plants allow them to produce large amounts of the EPSPS enzyme, while other genes help the plant break down the glyphosate molecule. The plants can, therefore, make essential amino acids even after being sprayed.

### **Are there glyphosate-resistant weeds?**

Over the years, some weeds have developed resistance to glyphosate and thus can survive being sprayed. Glyphosate-resistant Kochia, Canada fleabane, waterhemp, common ragweed, giant ragweed and horseweed have been found in Canada. Additional glyphosate-resistant weeds have been found in the USA.<sup>5</sup> Glyphosate-resistant weeds first appeared after 2000, as the evolution of resistance is related to the interaction between plant biology and the rate and intensity of glyphosate use. In weed populations with a high degree of genetic diversity, frequent glyphosate use encourages plants with natural resistance to reproduce and become more common. When glyphosate is used at higher rates, it kills all but the most resistant survivors, which go on to reproduce. Weeds with high genetic diversity are also more likely to develop resistance to multiple herbicides - for example, when a particular tank mix is used frequently. The increase in glyphosate-resistant weed species has coincided with the widespread adoption of genetically engineered glyphosate tolerant corn, soybeans and canola in Canada and the USA, which were first introduced in 1996.



Source: Statistics Canada

### **Does glyphosate influence plant disease?**

Using glyphosate to kill weeds has been shown to make fungal disease problems worse.<sup>6</sup> Fusarium head blight and other fungal diseases can be serious problems for farmers. Several studies show that frequent use of glyphosate increases the amount of Fusarium infection in subsequent crops when grown in affected fields.<sup>7</sup> The dead roots of plants killed by glyphosate are colonized by micro-organisms, including those causing crown- and root rot diseases which grow and later infect cereal crops. Glyphosate itself is a source of phosphorus for Fusarium.

### **What are the environmental impacts of glyphosate herbicides?**

Glyphosate and its breakdown products are long-lasting in surface waters, and highly toxic to aquatic life and amphibians that live in ponds, streams and sloughs. The surfactant, polyethoxylated tallow amine (POEA), used in some glyphosate herbicide formulations, is highly toxic to amphibians and shellfish. It interferes with normal development, stunting growth and causing abnormalities in sex organs and tails in tadpoles.<sup>8</sup> Monsanto's product label notes that Roundup® is toxic to aquatic organisms and instructs users to avoid direct applications to any body of water; observe buffer zones (50 feet for field sprayers, 100 feet for aerial sprayers); and to avoid contaminating water sources when disposing of waste or cleaning equipment.<sup>9</sup>

*(continued on page 3...)*

Glyphosate can be broken down by micro-organisms and lasts varying lengths of time in soils, depending on the type of soil, and the kind and population size of soil microbes present. Roots of treated plants release glyphosate and its metabolite, AMPA, into the soil. Glyphosate reduces the biodiversity of soil microorganisms in the root zone.<sup>10</sup> Glyphosate also binds tightly with certain soil minerals, such as magnesium, iron and potassium, making them less available for plant use. (Remember its original use as an industrial de-scaler.)

### Top 10 Active Ingredients Sold in Canada in 2011 in the Agricultural Sector

Active Ingredient	Product Type	Quantity (kg active ingredient)	Chemical Group	Well-known brand
Glyphosate	Herbicide	Over 25 million	Phosphonic acids, Phosphinic acids	Roundup
2,4-D	Herbicide	Between 1 and 25 million	Phenoxy acids	Tordon
Glufosinate ammonium	Herbicide	Between 1 and 25 million	Phosphonic acids, Phosphinic acids	Liberty
MCPA	Herbicide	Between 1 and 25 million	Phenoxy acids	Dyvel
Mineral oil	Insecticide/ Herbicide/ Fungicide/ Other	Between 1 and 25 million	Oils, minerals and vegetable	
Surfactant blend	Herbicide	Between 1 and 25 million	Fatty acids and surfactants	Score
Chlorothalonil	Fungicide	Between 1 and 25 million	Benzonitriles	Bravo
Bromoxynil	Herbicide	Between .5 and 1 million	Benzonitriles	Buctril M
Mancozeb	Fungicide	Between .5 and 1 million	Biscarbamates	Dithane
1,3-dichloropropene *	Other	Between .5 and 1 million	Organochlorines	Telone

\* no longer registered in Canada

### Many people have health concerns about glyphosate. Is there evidence of any problems?

Professor Gilles-Eric S eralini and his team did the first study that analyzed blood, urine and organs from animals treated with the complete agricultural formulation of Roundup<sup>®</sup>, not just the active ingredient, glyphosate. Their study followed rats for two years instead of the 90-day period used in the studies that manufacturers submit to regulators. The rats treated with Roundup<sup>®</sup> were given drinking water with concentrations of the herbicide lower than allowed by drinking water standards and food residue limits. Signs of liver and kidney toxicity (poisoning) that were noticed at 90 days got worse, and turned into severe disease over the course of the study. The ill effects were not tied to the size of dose, which suggests the presence of the chemical mixture that constitutes Roundup<sup>®</sup> triggers a developmental change, and thus is an endocrine disrupter. S eralini calls for re-evaluation of Roundup<sup>®</sup> by independent health authorities, as well as long-term studies of complete pesticide formulations to measure their potential toxic effects.<sup>11</sup>

### Are glyphosate residues in food products regulated in Canada?

The PMRA establishes maximum residue limits in food crops and livestock commodities for glyphosate and its metabolites (breakdown products), AMPA and phosphonic acid. The highest residue limits are for dry soybeans and canola at 20 parts per million (ppm) and oat milling fractions, excluding flour, at 35 ppm. The residue limit for wheat is 5 ppm, or 15 for wheat milling fractions other than flour.<sup>12</sup> All parts of forage and field crops treated with glyphosate products may be fed to livestock. Canada's residue enforcement program covers only fruits and vegetables; commercial relationships are considered adequate to deal with residue limits for other commodities.<sup>13</sup>

(continued on page 4...)

(*Glyphosate*, from page 3)

## What regulatory process was used to register glyphosate in Canada?

The PMRA (Health Canada) approves pesticides by evaluating data submitted by the company applying to register a new pesticide. For chemicals such as glyphosate the company must provide studies that deal with the active ingredient's chemistry, efficacy, environmental effects, food residue exposure, occupational exposure and toxicology. The PMRA requires specific information on a series of topics under each category. Generally, the required environmental and toxicology studies focus on acute and short-term (90-day rat/12-month dog studies) effects of the active ingredient. Data on the environmental and toxicological effects of the pesticide's complete commercial formulation is not required.<sup>14</sup> Glyphosate is currently under re-evaluation as required by regulations under the *Pest Control Products Act*. A public comment period is expected during 2015.<sup>15</sup> -nfu-

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### Endnotes:

- 1 Glyphosate is sold in Canada under the following brand names: Cheminova Glyphosate, Clearout 41, Cleanstart, Credit, Credit 45, Crush'R Plus, Eclipse III, Factor 540, FirstStep Complete, Glyphogan Plus, Glyfos, Glykamba, Knockout Extra, Matrix, Maverick III, MPower glyphosate, NuGlo, Pace, Polaris, Prepare, Prepare Complete, PrePass, Renegade, Roundup Transorb HC, Roundup Ultra2 Roundup WeatherMax, Rustler, R/T 540, Sharpshooter, Sharpshooter Plus, Spike-Up, StartUp, Tackle, Touchdown Total, Traxion, Vantage Plus Max II, and Wise Up.
- 2 The mode of action classification system is a tool for rotating herbicide use according to the way the chemical kills plants, thereby reducing the risk of herbicide-resistant weeds developing.
- 3 *Adjuvants for Enhancing Herbicide Performance*, Penn State College of Agricultural Sciences Extension. <http://extension.psu.edu/pests/weeds/control/adjuvants-for-enhancing-herbicide-performance>
- 4 *Pest Control Products Sales Report for 2011*, Pest Management Regulatory Agency, Health Canada.
- 5 *Weeds Resistant to EPSP synthase inhibitors*, International Survey of Herbicide Resistant Weeds. <http://www.weedscience.org/summary/MOA.aspx?MOAID=12>
- 6 *Glyphosate and glyphosate-resistant crop interactions with rhizosphere microorganisms*, by Robert J. Kremer, Nathan E. Means. *European Journal of Agronomy*, June 2009. [www.elsevier.com/locate/eja](http://www.elsevier.com/locate/eja)
- 7 *Glyphosate associations with cereal diseases caused by Fusarium spp. in the Canadian Prairies*, M.R. Fernandez, R.P. Zentnera, P. Basnyat, D. Gehl, F. Selles, D. Huber, *European Journal of Agronomy*. [www.elsevier.com/locate/eja](http://www.elsevier.com/locate/eja)
- 8 *The Acute and Chronic Toxicity of Glyphosate-Based Pesticides in Northern Leopard Frogs*, Christina Howe, Trent University, Michael Berrill, Dept. of Biology, Trent University, and Bruce D. Pauli, Canadian Wildlife Service. [https://www.trentu.ca/biology/berrill/Research/Roundup\\_Poster.htm](https://www.trentu.ca/biology/berrill/Research/Roundup_Poster.htm)
- 9 Product label, *Roundup WeatherMAX With Transorb 2 Technology Liquid Herbicide*. [http://roundup.ca/uploads/documents/WMAX\\_May2013.pdf](http://roundup.ca/uploads/documents/WMAX_May2013.pdf)
- 10 *Glyphosate and Glyphosate-Resistant Crop Interactions with Rhizosphere Microorganisms*, Robert J. Kremer. USDA-ARS Cropping Systems & Water Quality Research Unit and University of Missouri Columbia, Missouri U.S.A.
- 11 *Republished study: long-term toxicity of a Roundup herbicide and a Roundup-tolerant genetically modified maize*, by Gilles-Eric Séralini, Emilie Clair, Robin Mesnage, Steeve Gress, Nicolas Defarge, Manuela Malatesta, Didier Hennequin and Joël Spiroux de Vendômois. *Environmental Sciences Europe*. <http://www.enveurope.com/content/26/1/14>
- 12 *Maximum Residue Limits for Pesticides Database*, Health Canada. <http://pr-rp.hc-sc.gc.ca/mrl-lrm/index-eng.php>
- 13 *Chemical Residue Monitoring Program*, Canadian Food Inspection Agency. <http://www.inspection.gc.ca/food/fresh-fruits-and-vegetables/food-safety/chemical-residues/eng/1374005319039/1374005320133>
- 14 *PMRA Chemical Evaluation Templates*, Health Canada. <http://www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/prod/templates-modeles-eng.php>
- 15 *Re-evaluation Note REV2010-02, Re-evaluation Work Plan for Glyphosate*, Health Canada. [http://publications.gc.ca/collections/collection\\_2010/arla-pmra/H113-5-2010-2-eng.pdf](http://publications.gc.ca/collections/collection_2010/arla-pmra/H113-5-2010-2-eng.pdf)

# Recognizing the Inherent Rights of Farmers to Save Seed and putting the Interest of Canada's Food and Farmers ahead of Corporate Interests

- Election Messages and Questions for Candidates from the NFU Seed and Trade Committee -

## Canada should enact a Seed Act for Farmers

based on the NFU's *Fundamental Principles of a Farmers Seed Act*, which recognizes the inherent right of farmers — derived from thousands of years of custom and tradition— to save, reuse, select, exchange, and sell seeds. Seeds must be recognized as a creation of nature, not intellectual property created, owned and controlled by multinational seed corporations. Current and proposed restrictions on farmers' traditional practices criminalize these ancient practices and harm farmers, citizens, and society in general. A *Farmers Seed Act* would only allow plant breeders to claim royalties at the time of seed sale, it would ensure new varieties eventually enter the public domain, it would provide for a variety registration system that protects farmers and our food system, and it would prohibit the use of patents on seed.

## Canada should restore full funding to public sector plant breeding.

For over a century, Canada's efficient and effective public sector plant breeding system has produced numerous crop varieties to the benefit of Canadians, including canola and our most important cereal varieties. Most wheat varieties currently grown in western Canada were developed by public breeding programs and most of the wheat seed planted in western Canada is farm-saved. The federal government has closed important Agriculture Canada research centres and cut public breeding programs and stopped public funding to the variety level in important cereal crops. As a result, seed companies will now decide which new varieties will be commercialized and they will reap additional profits from royalty payments, enabled with the passing of Bill C-18.

**Canada should not ratify the Canada-European Union Comprehensive Economic and Trade Agreement (CETA) or participate in the Trans Pacific Partnership negotiations** because these agreements are not about trade. Instead they are anti-democratic agreements designed to promote the

economic interests of global corporations at the expense of Canadian people, Canada's environment and small businesses.

- ➔ CETA would make it much more difficult for local governments, schools, hospitals and prisons to use local procurement policies to develop the local food system. Many communities want to support their local farmers by providing assured markets for their products, particularly for perishable foods such as fruit and vegetables. Local public purchasing contracts are an effective tool, but above certain thresholds CETA would take those options away.
- ➔ CETA adds another four percent of Canada's cheese market to European companies, bringing their share up to nine percent. The federal government knows that millions of dollars will flow to these companies instead of to Canadian farmers and cheese producers as a result of CETA and said it would use public money to compensate the dairy sector for the lost market. In effect, the federal government plans to use taxpayer money to paper over its own destruction of an important part of Canada's food system. In January, 2015 the federal government indicated it would back away from a similar promise to help Newfoundland and Labrador deal with the loss of fish processing jobs that will occur if CETA goes through. Canada should not make trade deals that cause such damage to important sectors of our food economy.
- ➔ CETA includes draconian measures to enforce intellectual property rights. For example, CETA will require Canada to give the courts the power to seize property and bank accounts when infringement, such as patent or plant breeders' rights infringement, is alleged – before proving it has actually occurred. The new Plant Breeders' Rights enacted under Bill C-18, *The Agricultural Growth Act*, expands the intellectual property rights over seed that agribusiness companies can claim against farmers.

(continued on page 6...)

(*Election Messages & Questions, from page 5*)

- ➔ The Investor State Dispute Settlement mechanism in CETA allows corporations to sue governments if they believe a change in a law or regulation would reduce their ability to make a profit. Many laws recently passed allow corporations to avoid responsibility for their actions, to offload their costs onto the ecosystem and future generations and to take advantage of people, such as individual farmers, who have less power in the marketplace. If CETA is adopted, these unjust laws will be locked in. It is profoundly undemocratic to tie the hands of future governments in this way.
- ➔ CETA offers Canadian farmers flawed business logic. As an example, CETA is being promoted to Canadian pork producers. However, Europe

exports more pork than Canada produces and the EU prohibits pork produced with ractopamine. Canada is able to export up to 7000 tonnes of pork to the EU tariff-free. In 2013, Canada only exported 100 tonnes of pork to the EU. If CETA leads to an overproduction of pork and thus a drop in prices, will the public be asked to subsidize the pork industry to maintain these export markets under trade agreements?

- ➔ CETA and other trade agreements accelerate climate change and climate variability by promoting carbon emissions as they perpetually seek new export markets which will require fleets of carbon emission-generating transportation modes.

## **Questions to raise with candidates in the federal election:**

Over the last five years we have seen the federal government bypass the established parliamentary process to quickly pass *The Marketing Freedom for Grain Farmers Act* which destroyed the Canadian Wheat Board, and use omnibus bills, such as Bill C-18, *The Agricultural Growth Act* which amended nine different agricultural laws while bringing Canada under the multinational seed corporation-friendly UPOV '91 Plant Breeders' Rights regime.

We have also seen Canada sign trade deals, such as the Canada-European Union CETA, which include Investor State Dispute Settlement (ISDS) mechanisms that will limit Canada's ability to put in place regulations to protect our environment and our health, if those regulations have the potential to limit the profits of agribusiness corporations.

- ① What are you prepared to do to honour the intent and spirit of Canada's democratic parliamentary traditions and to facilitate transparent and public debates and discussion about new laws or major trade agreements?
- ① What actions will you take to ensure Canada's farmers retain their inherent right to save, reuse, select, exchange and sell seeds?
- ① Do you believe the broader public sector has a role to play in supporting local farmers by negotiating local public purchasing contracts? How will you prevent such contracts from being opened up to foreign businesses through trade agreements?
- ① What actions will you take to protect Canada's unique supply-managed sectors from becoming trading pawns during the negotiation of trade agreements?

## Bill C-48 changes mandate and powers of Canadian Grain Commission

—by Cathy Holtslander, NFU Director of Research and Policy

**A**griculture Minister Ritz introduced Bill C-48, *An Act to amend the Canada Grain Act*, on December 9, 2014. If passed, Bill C-48 will make significant changes to the way the Canadian Grain Commission (CGC) operates and will eliminate the CGC's duty to report to Parliament annually.

The Canadian Grain Commission was established in 1912 through the *Canada Grain Act*. The CGC was set up to protect farmers' interests, administer the *Act* and its Regulations and resolve disputes between farmers and grain companies. It deals with elevators; weighing, handling, transportation and storage of grain, including grading and all types of inspection; grain-related research; and producer cars.\* The CGC has provided a strong foundation for Canada's grain industry, upholding the quality of our products and fairness in our processes.

The CGC's purpose is to establish and maintain standards of quality for Canadian grain and regulate grain handling in Canada to ensure a dependable commodity for domestic and export markets. Bill C-48 changes the mandate of the CGC from carrying out its work in the interests of grain producers to acting instead "in the interests of *Canadians and grain producers*". While this may appear to be a minor change, it means that the CGC will be required to avoid putting farmers' collective interests ahead of those of multi-billion dollar grain companies such as Cargill and Richardson. This one change removes Canada's official recognition of the power imbalance that exists when thousands of individual farmers must deal with the few multinational grain companies that dominate the industry.

Bill C-48 sets up a structure to replace the current bond-based producer payment protection system with a government-administered insurance system that can be initiated once the necessary regulations are adopted. Currently, all licensed elevator companies and grain dealers are required to maintain bond security, with the amount for each company set by the CGC and adjusted as necessary based on mandatory monthly reporting of outstanding liabilities (payments owed to farmers). In the event a licensed company refuses to pay, becomes insolvent or closes without paying for grain it has received, the CGC uses the security to pay farmers what they are owed.

In 2013 the federal government tried and — after a year of negotiations with a multinational insurance company — failed to replace the bond system with a private credit

\* **Producer cars** are railway cars that farmers are entitled to use for shipping their own grain as an alternative to using and paying for the services and facilities owned by grain companies.

insurance system because the proposal did not comply with insurance industry rules. (See the NFU's brief, *Comments on Producer Payment Protection Amendments to Canada Grain Act* <http://www.nfu.ca/story/comments-producer-payment-protection-amendments-Canada-grain-act>) The new system under Bill C-48 would be similar to the failed 2013 initiative, but with the federal government instead of the insurance industry administering it.

Bill C-48's proposed producer protection fund would have the federal government collect fees from licensed elevators and grain dealers based on an assessment of each company's risk of non-payment. The fees would be deposited in an account that would be used to provide partial payment to farmers who submit claims of non-payment for grain delivered. Large grain companies would benefit from this change, as it would give them access to capital currently tied up in security bonds. Smaller companies would likely have higher fees based on higher non-payment risk levels, which in time would lead to greater concentration of ownership in the industry. Large and small companies alike would seek to pass the cost of the fee on to farmers as a component of basis.† The net result would be farmers subsidizing grain companies' business risk in return for only partial coverage (if any, due to tighter claim timelines) in the event of non-payment.

Bill C-48 also gives the Minister the power to appoint and dismiss members of the Western and Eastern Standards Committees. The Standards Committees are responsible for recommending official samples that represent as accurately as possible the average quality of grain of each grade received at any or all elevators at any or all inspection points. These standard samples are used to assess grades assigned when farmers deliver to country elevators. If a farmer and buyer disagree on grade the CGC uses the standard grade to settle the dispute. Currently the CGC Commissioner appoints Standards Committee members who then serve until their terms expire. Bill C-48 introduces the potential for political interference in grain grading.

Under the current Act, foreign grain is not graded, it is only identified as to its country of origin. Bill C-48 creates a new provision that not only allows imported grain to be graded, but CGC inspectors are required to assign it the highest possible grade for which it is eligible. Thus Bill C-48

† **Basis** is the difference between a futures market price for a commodity and the local cash price offered at a country elevator. Basis levels are the prerogative of the grain buyer and are not subject to government regulation.

(Bill C-48, from page 7)

opens the door to companies sourcing grain in other countries and obtaining the benefits of Canada's grading system when re-selling it.

Bill C-48 extends the CGC's authority to include container-loading elevator and country elevators, terminals and grain processing facilities that handle/use grain grown in Eastern Canada. As in Western Canada, this includes facilities for handling and storing grain as part of the operation of a flour mill, feed mill, seed cleaning plant, malt house, distillery, grain oil extraction plant or other grain processing plant, and into which grain may be received, at which grain may be weighed, elevated and stored and out of which grain may be discharged for processing or otherwise.

The expanded CGC jurisdiction also increases the scope of the federal government's capacity to enforce the exclusive rights granted to seed companies through the *Agricultural Growth Act*. Bill C-48 allows elevators to refuse to take delivery of any grain of a variety that is not registered under the *Seeds Act* for sale in or importation into Canada. Under the current Act, elevators may only refuse delivery of out of condition grain or grain likely to go out of condition (i.e. too moist and likely to rot). The Bill gives CGC the authority to enter and inspect the premises of anyone an inspector believes may be carrying on business as a grain dealer without a required license. It also authorizes the CGC to obtain samples from licensed premises to verify compliance or to "further the objects of this Act." Fines are increased, with maximum \$500,000 for corporations on indictment. Bill C-48 also gives the courts the power to issue orders to prevent continuation/repetition of offences and to impose other conditions.

In the context of the revised mandate, which does not differentiate between the interests of grain companies and farmers, there is no guarantee that the CGC's new powers and scope will be beneficial to farmers and the broader public interest. — nfu—

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## Grain Companies take \$13 million Valentine's gift from farmers

- from CWBA media release

In mid-February, 2015 the Canadian Wheat Board Alliance (CWBA) reported on newly revealed figures that show farmers had \$13.7 million dollars in excess profits taken from them by the grain handling companies in one week alone.

The CWBA compared low prices offered by grain companies to farmers with recent West Coast port wheat prices reported by Agriculture Canada to Feb. 6/15 along with Canadian Grain Commission (CGC) shipping data from week 27 of the crop year (Feb. 2 to 8/15).

The West Coast port price for #1 Hard Red Spring Wheat was in the range of \$337.96/metric tonne (\$9.21/bushel) while the local price available from a major grain handling company in eastern Saskatchewan was in the \$205.52/mt (\$5.60/bu) range — a difference of \$133/mt (\$3.64/bu). According to the CGC report for the week ending February 8, 2015, 227,000 mt of wheat was exported from Vancouver and the St. Lawrence. Thus, a simple calculation reveals that in one week the grain companies added \$13,781,170 (\$60/mt or \$1.65/bu) to their bottom lines at the expense of farmers, over and above the regulated profits and return on investment allowed grain handlers under CGC rules.

WHEAT	PER METRIC TONNE	PER BUSHEL (ROUNDED)
Port Price (FOB Vancouver)	\$337.96	\$ 9.21
Rail cost	\$40.00	\$ 1.09 (average, varies depending on distance)
<b>Maximum Regulated Tariffs: (Cdn Grain Commission)</b>		
Primary elevation	\$15.50	\$ .42
Terminal elevation	\$10.40	\$ .28
Terminal cleaning	\$5.83	\$ .16
<b>Sub total:</b>	<b>\$71.73</b>	<b>\$1.95</b>
Net to grain companies:	\$266.23	\$7.25
To farmers:	\$205.52	\$5.60
<b>Excess profits to grain companies:</b>	<b>\$60.71</b>	<b>\$1.65</b>

(see <http://www.cwbafacts.ca/2015/02/grain-companies-take-13-million-from-farmers/> for full press release)