



**WHEATLAND**  
COUNTY

SEPTEMBER 2021

**CONNECTOR**

# GOOD FOOD BOX

## Fresh Produce at a fraction of the Cost!

The Good Food Box program was established to encourage healthy eating while making it affordable for individuals and families alike. The program has been in our area since the fall of 2014 and offers fresh fruits and vegetables to its clients.

The program is available to anyone who is interested in taking part; no restrictions to numbers of boxes purchased or eligibility of participants.

**Boxes can be purchased in three different sizes:**  
SMALL which offers 25-30 pounds of food= \$27  
MEDIUM which offers 35-40 pounds of food= \$32  
LARGE which offers 45-50 pounds of food= \$37  
*\*There is a \$2 handling/shipping fee which is also added to the initial cost.*

Each box contains the basic produce staples: potatoes, carrots, onions, apples and oranges with additional seasonal fruits and vegetables rounding out the weight.

The program is made possible because the Community Kitchens Program of Calgary (with whom we partner) bypasses the retailers and goes directly to importers and produce handlers in the province.

Participants pre-order, pay and pick up their boxes at Wheatland FCSS, Wheatland Administrative Office at the corner of Range Road 243 and Highway 1.

Upcoming 2021 order and delivery dates:

**Order before 3:00 PM on:**

September 21  
October 19  
November 23

**Pickup your box on:**

October 1  
October 29  
December 3

*Christmas Break*

Note: payment must be received two days prior to delivery date.



For additional information or to order your box, please call Wheatland FCSS at Ph: 403-934-5335 or visit [www.wfcss.org](http://www.wfcss.org)



## Help Guide Wheatland County

# AGRICULTURE

### **Wheatland County is looking for members from the agricultural community to sit on the Agricultural Service Board.**

Wheatland County invites applications for “Members-At-Large” to sit on the Agricultural Service Board (ASB). The ASB is a special committee appointed by Council to address agricultural concerns in the municipality. This is done through developing and evaluating agricultural policies and programs to meet the needs of Wheatland County producers. Applicants should be well versed in a wide variety of agricultural areas; reside in, or own property within the boundaries of Wheatland County and be able to attend four board meetings per year plus the Regional and Provincial ASB conferences.

Membership appointments may be made by County Council at the November 1st, 2021 Organizational Meeting for a term of three years with eligibility for reappointment. Current membership of the Board includes both Councillors and “Members-at-Large” with the exact makeup of the board moving forward to be determined at the

Organizational Meeting. County Council reserves the right to accept or reject any or all applications.

### **The deadline for applications is 4:30PM on September 30th, 2021.**

For more information or to submit an application please contact Russ Muenchrath, Manager of Agriculture and Environmental Services.

Email: [russel.muenchrath@wheatlandcounty.ca](mailto:russel.muenchrath@wheatlandcounty.ca)  
Phone: 403-934-3321

### **Mailing Address**

Wheatland County, 242006 Range Road 243,  
Wheatland County, AB T1P 2C4

Additional information regarding the ASB is also available on our website at [wheatlandcounty.ca/agriculture/](http://wheatlandcounty.ca/agriculture/)

### **Thank you!**

to our past and present ASB board members for their commitment to agriculture in Wheatland County.



keep   
in touch

## How do you Keep in Touch?

### Have you heard the news?

Wheatland FCSS has partnered with Strathmore FCSS to bring you a new program designed to combat isolation and connect local residents with each other. Keep In Touch (KIT) is a program developed by Volunteer Lethbridge to connect participants and volunteers on a regular basis.

KIT is more than just a phone call or conversation. It is confirmation that there is someone who cares, that someone is willing to provide support, take the time, and simply listen. The program is open to all residents in need of support and friendly conversation.

<b>Wheatland FCSS</b>	<b>Strathmore FCSS</b>
<b>Ph: 403-934-5335</b>	<b>Ph: 403-934-9090</b>
<b><a href="http://www.wfcss.org">www.wfcss.org</a></b>	<b><a href="http://www.strathmore.ca">www.strathmore.ca</a></b>



### Wheatland FCSS Lunch & Learn

*Fall 2021 - Spring 2022 Schedule*

Pre-registration is required. Please call Ph: 403-934-5335 or visit our website at: **[www.wfcss.org/lunch-n-learn.html](http://www.wfcss.org/lunch-n-learn.html)**

Cost is a free-will donation, suggested \$2. Sessions start promptly at noon and are located at the Wheatland County Municipal building (242006, Rge Rd 243).

<b>Sept 15, 2021</b> Let's Talk Brain	<b>Feb 16, 2022</b> ICU - UCMe
<b>Oct 20, 2021</b> Where There's smoke.	<b>Mar 16, 2022</b> Get Your Plant On!
<b>Nov 17, 2021</b> S...A...D...	<b>Apr 20, 2022</b> The Sky's the Limit!
<b>Dec 15, 2021</b> Slices of Yule	<b>May 18, 2022</b> It's a Wrap
<b>Jan 19, 2022</b> The Buck Stops Here	<b>Jun 15, 2022</b> Fun in the Sun

# Home Safety & PERMITS



## Why do I need permits?

- To comply with codes and standards, that protect your investment.
- Its a legal requirement in Alberta
- Access to a knowledgeable team can help to apply the codes and establish solutions
- Work without permits can result in fines, penalties, insurance difficulties, and resale roadblocks.

Reach out to our team with any questions, feedback or concerns with your project or the permitting process. Help us continue to improve our work together to ensure you get the most out of your engagement in the safety codes process!

## Do shipping containers require a building permit?

**The Alberta Building Code requires a building permit for relocated structures.**

This includes the relocation and use of shipping containers. This also includes when they are used for personal use and storage purposes.

## Demolition Permits

The demolition of a part or entire building requires a Building Permit. Always check with County staff to confirm if a Development Permit is also required. Demolition work is covered under the Alberta Building Code, as with any permit the objective is public safety and code compliance. Your permit helps to safeguard your safety and others.

## Buildings over 100 square feet require building permits

### Code Clause 1.1.1.1.(5)(f)

This code applies to an accessory building not greater than 10m<sup>2</sup> in building area that does not create a hazard.

## Plumbing Rough-in

Do your permit conditions require a rough-in plumbing inspection? What does that look like?

The rough-in means that all water supply and drain pipes have been run through bored holes in the studs and other framing members and that all pipe connections have been made. No sinks, faucets, or other fixtures and end elements are yet installed at this phase.

## What is a rough-in electrical inspection?

A rough-in inspection takes place when all branch circuit wiring and outlet boxes are installed and prior to any wiring being concealed by insulation, vapour barrier or drywall ect.

When do you need a rough-in inspection?

Check your permit under the heading "conditions" to see what inspection stages are required for your project.

## Where can I find the permits I need?

All of the Safety Code application forms and development permit applications can be found on the Wheatland County website at: [wheatlandcounty.ca/document-category/forms/](http://wheatlandcounty.ca/document-category/forms/)

## Inspections

Park Enterprises Ltd. is Wheatland County's Safety Codes Inspection Agency. They complete inspections for building, gas, electrical, plumbing, and private sewage permits. If you require an inspection, please contact Park at 1-800-621-5440 or [contact@parkinspections.com](mailto:contact@parkinspections.com).

## For more information please contact

Development Officer Suzanne Hayes or  
Safety Codes Technician Cindy Ramsay



# Wheatland County VOTES!

## 2021 Election Nominations

Nomination period closes: September 20th, 2021, at 12:00 p.m.

Nominations for Councillors will be accepted by the Returning Officer until 12:00p.m. sharp on Monday, September 20th, 2021. Prospective candidates filing their nominations must schedule an appointment with the Returning Officer.

Further information on nomination requirements and a list of current registered candidates, please go to

[wheatlandcounty.ca/  
municipal-election](http://wheatlandcounty.ca/municipal-election)



# COMPASS for The Caregiver

Online



Caregiving can be a stressful, isolating, and overwhelming experience. And Covid-19 adds to the stress level and anxiety.

The COMPASS for the Caregiver program helps caregivers balance their own well-being with the challenges of caregiving. Join our trained facilitators as they walk us through a 4-week virtual course. Sessions will run:

Monday, September 20th	1:30 pm to 4:00 pm
Monday, September 27th	1:30 pm to 4:00 pm
Monday, October 4th	1:30 pm to 4:00 pm
Monday, October 18th	1:30 pm to 4:00 pm

If you are a resident of Wheatland County, Hussar, Rockyford or Standard please contact Joanne Simpson at Ph: 403-361-7277 or Lynn Walker Ph: 403-934-5335 for more information and to register. Wheatland FCSS will absorb the cost of registration for local residents.

Residents outside of Wheatland County will pay \$45 for registration fee and manual.

Because of the dry year and limited forage available  
it is more important to watch out for

# Water Hemlock

Water Hemlock (*Cicuta douglasii*) is a poisonous, perennial plant from the carrot family. This plant is a widespread native of North America which grows in wetter areas. The main stem from these plants is branching and the leaves are pinnately compound with jagged edges. Purple spots may be found on the stems and the flowers start to mature in late June or July, the silhouette resembles an umbrella and consist of many small white flowers.

Mature plants may reach close to 6 feet tall towards the fall which may make them stick out like a sore thumb in the often brown and dry pastures. It is no surprise that this little greenery left late in the summer season would be tempting feed for livestock. Unfortunately the chemical cicutoxin (which is present in stem, leaves and even more concentrated in the roots) can kill large livestock so quickly that treatment is often not possible. **DO NOT CONSIDER THIS PLANT FORAGE!** A single bulb ingested from a single plant is reportedly enough to kill a large animal in 15 minutes. Animals ingesting between 0.1-0.5% body weight of Water Hemlock plant material is often enough to be fatal.

## Symptoms of poisoning may include:

- Frothing at the mouth
- Uncoordinated movements
- Nervousness
- Tremors/seizures
- Weakness
- Respiratory failure



In addition to the many concerns and restrictions of spraying herbicides near water there are no products that list Water Hemlock on the label for control. Continuous mowing, hand pulling or other mechanical control treatments may be effective in reducing the population after years of continuous efforts, but keep in mind that this plant produces many seeds and the seed bank in the soil may be large. Exclusion zones (fencing around wetlands and streambanks) may be another consideration to segregate livestock from the poisonous plants.

*Note: funding is available for fencing creeks and wetlands, for information contact Sarah.Schumacher@wheatlandcounty.ca or Ph: 403-333-6943*



# Clubroot DOGS

## *Sport Detection Leads to Conservation*

*Written by Wendy James, DVM*



The idea for the project started when my uncle who is a farmer and crop consultant sent me this article about 2 dogs that were trained in 2019 to detect Clubroot.

<https://www.producer.com/news/two-sniffer-dogs-pass-in-field-clubroot-test-in-alta/>

Clubroot causes significant financial losses for farmers and is prevalent throughout many areas of Alberta. In canola, it causes swellings or galls to form on the roots and premature death of the plant. It is caused by a fungus-like protist called *Plasmodiophora brassicae*. There is no currently no method for farmers to eradicate clubroot and the spores remain in the soil for up to 20 years. The farmers may be able to visually detect infected plants as they appear unhealthy but conformation of the disease involves pulling up the plants to confirm the presence of the root galls. A disease-causing organism (such as a fungus or bacteria).

Interested in the idea I contacted the plant pathologist who works for the Government of Alberta that was providing the scent material to the trainer in New Brunswick. The two dogs trained in 2019 was as a proof of concept. Dr Harding expressed interest in doing a formal study with the goal of publishing a paper if a minimum of 5 dogs could be trained. Through my involvement in SDDA and SAR I was able to get 7 dog-handler teams for the study.

## **This is the outline of our study design:**

### **Phase 1:** Introduction of scent material

Two TADD devices were utilized for phase one training with one device containing scent material ("hot container") and one empty device ("cold container"). When the dog showed interest in the hot container the marker was given. Training was performed in varying environmental conditions and field locations.

### **Phase 2:** Cup Choice testing

Each dog will be exposed to 100 cup choice tests where there are 5 to 10 cups with material in them, but only one has the target scent. The dogs will be scored on whether they correctly identify the cup with the target scent. The target scent will be placed into a different cup for each test. This could be done as four sets of 25 tests or 5 sets of 20 tests.

**Phase 3:** Recognition of scent material on live canola plants in tubs.

### **Phase 4:** Testing on plants in tubs

10 tubs of canola plants are presented to the dogs, one of which has clubroot symptoms on the roots. The dogs will be scored on whether they correctly identify the tub with the clubroot (which will be placed in a different location for each test).

### **Phase 5:** Field test.

Take dogs to a canola field known to have a clubroot infestation. Have the dogs scout in late August or early September and record the number of true positive alerts, false positives, and missed (false negatives).

We are currently using autoclaved root gall for training material which is not a biohazard risk and still contains the target volatile organic compounds. We also have healthy canola roots for proofing and as we progress through the phases of the study will be going to the plant pathology lab to train on live plants. The challenging part of the study will be if the dogs can detect the resting spores in the soil which is the most useful application for the farmers. The dogs could be utilized to scout the field before planting in the spring to detect potentially infected areas as well screen equipment and vehicles.

I'm very excited to be involved in this project and see what the dogs can do!





# Cleanfarms 2021 Unwanted Pesticide & Old Livestock/ Equine Medications Collection

Southern Alberta - October 25th to 29th, 2021

## Farmers! Got unwanted pesticides or livestock/equine medications?

Safely dispose of unwanted or obsolete agricultural pesticides and livestock/equine medications – **no charge!** Take them to the following locations on the dates noted between 9 a.m. and 4 p.m.

Check for Event Locations & Dates here:

### BROOKS

Thursday, Oct. 28  
Nutrien Ag Solutions  
Brooks  
403-362-2072

### CLARESHOLM

Tuesday, Oct. 26  
UFA Claresholm Farm  
Store  
403-625-3337

### HANNA

Monday, Oct. 25  
Fox Lake Agro  
Services Ltd.  
403-854-2820

### MEDICINE HAT

Tuesday, Oct. 26  
Nutrien Ag Solutions  
Medicine Hat  
403-526-9499

### RED DEER COUNTY

Wednesday, Oct. 27  
Central Alberta Coop  
Innisfail Agro  
403-227-3466

### CARSELAND

Friday, Oct. 29  
Richardson Pioneer  
403-934-9267

### DRUMHELLER

Friday, Oct. 29  
Kneehill Soil Services  
Ltd.  
403-823-4600

### HIGH RIVER

Monday, Oct. 25  
South Country Co-op  
403-652-4143

### MILK RIVER

Thursday, Oct. 28  
Parrish and  
Heimbecker  
403-647-3633

### TABER

Monday, Oct. 25  
Taber Home & Farm  
Centre  
403-223-8948

### CARSTAIRS

Friday, Oct. 29  
CORE Ag Inputs -  
Carstairs  
403-940-0472

### ENCHANT

Wednesday, Oct. 27  
Nutrien Ag Solutions  
Enchant  
403-739-2012

### HUSSAR

Monday, Oct. 25  
Richardson Pioneer -  
Hussar  
403-787-3931

### OLDS

Thursday, Oct. 28  
Richardson Pioneer  
Olds  
403-556-6606

### THREE HILLS

Tuesday, Oct. 26  
Kneehill Soil Services  
Ltd. TH  
403-443-2355

### CASTOR

Thursday, Oct. 28  
Meadowland Ag  
Chem Ltd.  
403-882-2490

### FOREMOST

Wednesday, Oct. 27  
South Country Co-op  
403-867-3200

### MAGRATH

Friday, Oct. 29  
Richardson Pioneer -  
Magrath  
403-758-3162

### OYEN

Tuesday, Oct. 26  
UFA Oyen Farm Store  
403-664-3611

### VETERAN

Wednesday, Oct. 27  
Richardson Pioneer  
403-575-4600

- Next Cleanfarms collection in this area in fall 2024.
- COVID social distancing measures may be in place.
- For collection dates elsewhere on the Prairies, go to: [cleanfarms.ca/materials/unwanted-pesticides-animal-meds/](https://cleanfarms.ca/materials/unwanted-pesticides-animal-meds/)

Partners:



Cleanfarms.ca

[info@cleanfarms.ca](mailto:info@cleanfarms.ca) @cleanfarms





# WC MERCANTILE

## *Connecting the Agribusiness Value Chain*

All Wheatland County agribusinesses should be aware of the WC Mercantile initiative to connect the agricultural value chain – the interconnected web of farm to table that includes input suppliers, producers, processors, and retailers. Already many businesses have got in on the groundfloor and registered.

As investors become aware of the advantages of setting up shop in Wheatland County, it will become ever more critical to know who is in our backyard and what they can offer. For example, an organic food processor setting up shop in the county may be able to purchase locally grown vegetables or mushrooms for use in a soup mix. At the same time, our tourism trade may also be able to utilize local products in their restaurants and B&B operations; thereby, promoting local and showcasing Wheatland's excellence. Perhaps you deal with suppliers that are outside the county that could find a home here?

*The opportunities to connect businesses locally and regionally are unlimited*

In the WC Mercantile we have categories for producers; processors, manufacturing and packaging; distribution, service providers; retail; and restaurants, caterers and chefs. If you are a Wheatland company that fits in somewhere on this value chain, register your business with WC Mercantile [infinitewc.ca/wc-mercantile](http://infinitewc.ca/wc-mercantile) today. It is a free service that provides you with publicity and makes good business sense!

On the provincial side, Alberta Agriculture and Forestry maintains a directory of agri-food exporters used to showcase our industry when they attend international events. If you are an exporter, be sure to check out the directory and have your business added at [www.alberta.ca/directories-of-agri-food-exporters-and-contacts.aspx](http://www.alberta.ca/directories-of-agri-food-exporters-and-contacts.aspx)





# Wheatland County

*The ideal place to grow your business*

Less than 30 minutes from Calgary International Airport, Wheatland County is located in the heart of the Western Irrigation District. Farmers in the County cultivate 830,000 acres of field crops yearly including wheat, canola, barley, oats, field peas, and lentils. There is also a large livestock industry with over 150,000 head of cattle and 95,000 pigs.

Getting your product to market is convenient in Wheatland County. The County is easily accessible from Calgary via Highways 1, 22X or 564 and connected north south via Highways 21 and 56. Highway 2 that forms part of the CANAMEX corridor is a short distance away. The CP Rail Calgary to Saskatoon line runs through the county and there is a CN Rail spur at Lyalta.

With excellent transportation options, abundant feedstocks and the lowest land costs in the region, Wheatland County is the natural location to grow your business!

For more information visit  
[infinitewc.ca](http://infinitewc.ca)

**For more information on investing in Wheatland County contact Economic Development Officer Jamie Kramble at [jamie.kramble@wheatlandcounty.ca](mailto:jamie.kramble@wheatlandcounty.ca)**

## Advantages of doing business in Wheatland County

Lowest agricultural and industrial land costs in the region

Two industrial areas: Origin Business Park and Goldfinch Industrial ASP area

Low municipal tax rates

Irrigated lands in western part of county

Access to agricultural feedstocks (830,000 acres of farmland)

Good transportation options (rail and highway access)

Close to transportation and logistics hub (road, rail, and air) in Calgary

Available labour at competitive rates

Proximity to urban centres (Strathmore, Chestermere, Calgary)

Developed industrial cluster

# Nitrate Poisoning and Feeding Nitrate Feeds to Livestock



Nitrates in forage are a concern immediately following a period of drought, wet, or dull weather. Nitrates are more likely to accumulate in annual forages than in perennial crops.

Signs of acute poisoning in cattle are increased heart rate, muscle tremors, vomiting, weakness, blue-grey mucous membranes, excess saliva and tear production, depression, labored or violent breathing, staggered gait, frequent urination, low body temperature, disorientation, and an inability to get up. Animals often lie down after a short struggle. In most cases of acute poisoning, animals are found dead before any signs of toxicity are observed.

The risk of nitrate toxicity can be reduced, but not eliminated, by taking the following steps:

- Dilute the nitrate content of the total ration by feeding a combination of low and high nitrate feeds.
- Feed the ration in two or three meals per day rather than just one meal per day.
- Allow cattle to adjust to low levels of nitrate before increasing the nitrate content of the ration.
- Ensure that livestock are being fed a balanced ration for the level of production expected.

Most feeds that contain nitrate can be fed to cattle if managed properly. **Feed testing** is essential in determining what forages are safe and how to mix different forages and grains to provide a safe ration. The costs of feed testing are considerably less than the loss of a single animal.

The accumulation of nitrate in plants does not necessarily mean that a problem will occur. Knowing how to manage the harvesting and feeding of a feed that contains nitrate will reduce possible problems in your livestock operation.

For more information visit [www1.agric.gov.ab.ca](http://www1.agric.gov.ab.ca)

## 2021 Pest Inspections

Wheatland County Agriculture and Environment staff will be visiting crop fields during the months of August and September to conduct grasshopper, wheat head and canola surveys.

This effort aims to assist our agricultural community in identifying presence of pests and disease before it has the chance to spread. We aim to complete these surveys when grasshoppers and wheat heads are mature, and canola when it has been harvested or swathed.

The staff members performing the surveys are appointed as inspectors under the Agricultural Pests Act. This means that they may legally enter onto any land at a reasonable hour for the purpose of inspecting for legislated agricultural pests, in this case, grasshoppers, dwarf and karnal bunt and clubroot.

While it would be ideal for us to notify all landowners prior to performing surveys, it can be very difficult to locate contact information for each parcel of land, especially while in the field. Staff have a lot of surveys to complete in a short period of time, and we recognize that farmers will be busy with harvest, which increases the difficulty in connecting with people. If you do run into a staff member in your field, inspectors will be happy to explain their purpose and will show you their identification.

More information can be found at [wheatlandcounty.ca/weeds-pests-soil](http://wheatlandcounty.ca/weeds-pests-soil)



# ENERGY SAVINGS FOR BUSINESS

The Energy Savings for Business program is offering incentives of up to \$500,000 for buildings, including \$250,000 per project. CHP incentives, for example, support both projects smaller than 150 kW and larger projects between 150 kW and 4MWe.

The program is currently over halfway through the program, with approximately 50% of the total incentive budget remaining. For larger projects such as CHP, we will accept post-project applications until Oct. 1, 2022. This means you have until then to apply for pre-approval, construct and apply for post-project incentives.

### To date, other participants in the agricultural sector have taken advantage of:

- **Agricultural lighting, including top lighting linear fixtures and high bay lighting,**
- **Variable Frequency Drives (VFDs) that can adjust the speed of your HVAC to the occupancy of your buildings,**
- **Wall and Ceiling insulation,**
- **Air compressors and compressed air storage, and**
- **Evaporator fans and strip curtains for refrigerated components of their business.**

Incentives for these measures and many others are available in the ESB Program. Just click the link to find out how to participate and upgrade your operations.

[www.eralberta.ca/energy-savings-for-business/](http://www.eralberta.ca/energy-savings-for-business/)



### Over the summer some of the Canadian Agricultural Partnership funding programs (CAP) re-opened and new funding is available

#### Efficient Grain Handling Program

The Efficient Grain Handling Program is an energy efficiency program intended to assist producers with reducing the overall energy use on their operations. The program will fund equipment that shows a significant energy efficiency improvement over standard practice. Eligible expenses will be cost-shared at 50% grant and 50% applicant. The maximum grant funding an applicant can receive from the program is \$100,000.

#### Farm Technology Program

The Farm Technology Program supports producers in protecting their business by encouraging the adoption of best management practices in farm technology and security.

Note: A valid Alberta Environmental Farm Plan (EFP) is a prerequisite to this program.

To complete or update your EFP contact Sarah.Schumacher@wheatlandcounty.ca Ph: 403-333-6943

#### Water Program

The Water Program assists primary producers in enhancing agricultural water management for continued growth and long-term success of the agriculture industry. There are two streams under the Water Program: 1) on-farm irrigation projects, and 2) on-farm water supply projects.

[cap.alberta.ca/](http://cap.alberta.ca/)

# Troubled

# TUBERS



As temperatures dip close to freezing, the growing season draws to a close, potato tops start to die down, and potato harvest really gets underway. As potatoes are taken out of the ground and put into storage, people start to notice problems with their potatoes. Unfortunately, most of the problems in potato tubers that manifest themselves at or after harvest cannot be fixed or managed at that point in time. Most potato problems are managed during the active growth phase, if they can be managed at all.

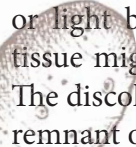
One of the most common problems that growers of potatoes encounter is a disease called Common Scab. This disease is typically introduced to the soil on the seed tubers, however it could also arrive on soil, manure (from cows fed scabby potatoes), or in potato debris. Once it is present in the soil, it tends to stick around for an extended period, lasting well over a decade, even without potatoes present.

Scab is aptly named, with the pathogen causing round and irregular brown lesions on the surface of the tuber, which resemble scabs. The severity of the lesions can vary quite variable, depending on the variety and the specific conditions in the growing location, such as organic matter, moisture availability, soil conditions, etc. Small amounts of scab can be more of a nuisance than a major problem, as the scab does not spread in storage, but can be a pain in peeling, and can increase moisture loss somewhat.

One of the most common tuber rots that people encounter is called Fusarium Dry Rot. The pathogen that causes this disease is pretty common in the soil. Usually, the tubers are infected when they are wounded or injured at or before harvest. Initially, you won't see anything, as the rot develops internally. In time, tissues might be slightly darkened, but gradually they become sunken and somewhat wrinkled. Under the surface, at first, the tissues will be wet and brown, but eventually a cavity is formed, and the rotted tissues are dry and dark, and the cavities may be covered with the fungus. The rot doesn't spread between tubers in storage. The best way to manage this disease is by preventing infection, which is best done by careful handling and encouraging good skin set.

There are also a couple of insect pests that are only really noticed due to the holes you discover when examining the harvested tubers, or when peeling the potatoes.

Damage from the tunneling action of wireworms (the long-lived larval stage of the click beetle) looks like something has made a random hole in the side of the potato (or other root vegetable). The width of the hole tends to be about 1/8 to 1/4 of an inch, or about 5 mm. The depth of the hole varies but can be up to an inch or 25mm. The tissues on the sides of the holes tend to be healed over by the time that you find it.



Tunneling by the threadlike tuber flea beetle larvae results in very fine, shallow tunnels right under the surface of the skin. When you are peeling the potatoes, these tunnels might look like brown spots or light brown streaks, and a couple of layers of tissue might need to be removed to get past them. The discoloration is actually wound tissue, not any remnant of the larvae.

Feeding by the small, brown/black adult beetles (which jump when disturbed) results in shot holes in the leaves during the growing season.

When it comes to managing these pests (a.k.a. doing something about it), it is not always simple and straightforward.

There are many suggestions for managing scab, including altering soil pH, using clean seed, and rotating between crops, but there are really only two that are practical and effective in almost every growing situation.

The first strategy is to choose a variety that is resistant to the scab pathogen. Historically, most varieties were considered at least somewhat susceptible to scab, but there are more varieties available now that have some good resistance to it. Do a little bit of research on the type(s) of potato that you want to grow and see if you can find a variety that checks all the boxes.

The second strategy is to ensure that soil moisture levels are not allowed to fluctuate dramatically during the season. It is particularly important to ensure that there is good moisture around the time that tubers are first starting to form (often signaled by flowering, but this is typically 4-6 weeks after planting).

An intact skin is the potato's best defense against many of the pathogens that can cause them to rot in storage. Damage to the potato, in terms of skinning, scrapes, or bruising can happen when potatoes are handled roughly, dropped from higher than 12 inches (30cm), or if they are harvested early. To improve their ability to store, while reducing the amount of damage that they might get at harvest, make sure that tops are killed at least 2 weeks prior to digging.

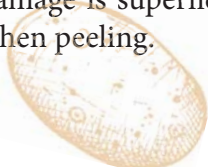
This toughens up the skin significantly.

Managing wireworms and tuber flea beetles can be challenging, partly because the damage occurs long before you notice it, and also because there are not many controls that are effective.

For the most part, with wireworms, avoid planting in ground that had grasses growing within the recent history (this would include grass, or cereals). You can try to lure wireworms to bait stations (pieces of cut carrots or something similar) but it can be hit and miss.


For tuber flea beetles, once you know what you are dealing with, you might try and control the adults when you see them, or perhaps cover the crop in extreme cases, to prevent adults from getting onto the plants and laying eggs. Rotating to other crops can help knock things back a bit, but it is not a guaranteed solution.

The overall message is to watch your potatoes and note when things are not entirely right, then work the next season to try and correct things. And, in the end, while having a few holes and scabs can be frustrating, most of the damage is superficial and can be worked past when peeling.



**Have a question about a tree or horticulture related problem?  
Let us help.**

Wheatland County's Agriculture and Environment department has access to contracted professionals to help with your issue. If possible, please send an email with photographs and a detailed description of the problem to  
**agandenv@wheatlandcounty.ca or  
call Ph: 403-361-2006**

A photograph of a field with tall, thin, light-colored plants (possibly a type of grass or seedling) growing in a grassy field. The plants are the central focus, with a semi-transparent white box overlaid on the bottom half of the image containing contact information.

**We have a new address!**

Wheatland County  
242006 Range Road 243  
Wheatland County, AB T1P 2C4

T: 403-934-3321 F: 403-934-4889  
[wheatlandcounty.ca](http://wheatlandcounty.ca)  
[@wheatlandcounty](https://www.instagram.com/wheatlandcounty)