

# Un-harvested and overwintered crops

## Spring management options for un-harvested crops.

How can you best to capture the highest value from your un-harvested crop that was overwintered, while managing cost and risk, and ensuring soil health for subsequent crops?

### Check on your Insurance FIRST.

Before you take action with an un-harvested crop, contact your crop insurance provider to ensure that your plans are not contrary to your insurance policies' recommendations or restrictions, and determine what is required in order for them to assess loss and make a claim.

### Is the crop worth harvesting?

Yield and grade can be reduced, but the value may be surprising and worth the effort. In some cases the crop may not be as tough as last fall. Take a representative sample of the crop to determine quality.

If rodent or wildlife damage has destroyed or shelled the grain, or if the crop is too flattened to pick up with a combine, then harvesting is not an option.

### What are my crop management options?

To decide which management option is most suitable, consider the condition of the crop, soil conditions and what the field conditions were last fall. This will have an impact on spring field access, as the presence of the crop and/or swaths will slow soil drying and delay entry to the field. Other considerations include the economics of the management option, current cropping plans, risk of equipment damage, soil conservation, soil moisture and the long-term soil health.

The solution must leave the field surface in good condition for subsequent equipment operations and for crop establishment.

**More Information:** visit [agriculture.alberta.ca/unharvestedcrops](http://agriculture.alberta.ca/unharvestedcrops) for pros and cons on options on how to manage un-harvested crops.

There are several different management options that can include harvesting, baling, grazing, mowing, chopping, residue stacking, tillage and harrowing, each with their own pros and cons, and varied costs.

# Un-harvested crops

## **What downgrading factors may have worsened in a crop left overwinter?**

Sooty molds caused by naturally-occurring fungi will become more prevalent on dead plant material of any kind, including un-harvested crops. These molds/mildews can be a downgrading factor. Freeze damage, rodent excreta, and sprouting are also downgrading factors that can be more common in spring-seeded crops that overwinter.

## **What if the overwintered crop delays the timing of my normal seeding operations?**

When overwintered crops threaten to delay normal seeding operations, it may be wise to be ready to seed an early-maturing crop, or a silage crop, to ensure that late-seeded fields have a chance to reach maturity.

## **Will crop diseases be worse in a crop that has overwintered?**

A crop that goes long past maturity without being harvested may have fungal growth on it. The growth of most fungi only occurs when temperatures are above freezing and lots of moisture is available, so this is not an issue during the cold winter months. Fungal growth is a natural occurrence on crop residues every year, and is not a cause for great alarm. In some cases, the fungi may be plant pathogens, but they will not cause any elevated risk of disease when good crop rotation and disease management principles are followed.

It is important to note that some fungi may produce mycotoxins (poisonous compounds). As a result, it is wise to get overwintered, or moldy crops tested for their levels of mycotoxins before feeding them to animals.

## **Can I seed directly into the un-harvested crop?**

It may be possible to seed into an un-swathed crop. Although some equipment can seed through standing crop residue, the crop material will affect crop establishment and equipment performance; resulting in hair pinning, poor seed to soil contact and emergence issues. If the area of un-harvested crop is small, this approach may work but as the number of acres increases it would become more difficult.

Seeding directly into an un-harvested crop will result in volunteer plants and weeds from the last year's crop, so crop selection will be key.

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## Burning: what to consider

In cases where mechanical methods to remove the crop are not possible, or insufficient to handle the residue, burning could be used as a last resort to remove crop residues prior to seeding.

Check with your county or municipal district, most will require permits before burning your crop. If you are in the Forest Protection Area of Alberta, you need to get a fire permit from the Government of Alberta. There may also be fire bans or restrictions in place, especially early in the spring. Please check [albertafirebans.ca](http://albertafirebans.ca) for any restrictions and remember to contact your crop insurance agency.

Burning an un-harvested crop will not provide any value to you from the crop, and may negatively impact the soil. Smoke generated from burning can have air quality and visibility impacts that can be far-reaching, depending on weather conditions.

### Should I burn my crop to prevent diseases and mycotoxins from spreading?

Burning may destroy crop residues but will have little-to-no effect on crop diseases. As a result, burning crops is not recommended to prevent diseases or destroy mycotoxins.

### Should I burn my crop to remove the crop residue?

Burning reduces soil organic matter, carbon and nitrogen. It can have negative effects on soil erosion, permeability and air quality. Finally, burning disrupts the balance of microorganisms in the soil reducing the biological activity and overall soil health.

## If you decide to burn: burning tips

- Do you have a fire permit? Follow the directions on the permit, or act as directed by the municipality.
- Make sure you also have sufficient property insurance in the event that your fire gets out of control, or spreads to neighboring land.
- Monitor your burn; don't leave your field while it's burning.
- Burn small areas at a time.
- Have a plan to deal with any emergencies.
- Have a water truck and other equipment on hand.
- Till the outside rounds of the field to create a fire break.
- Monitor after your burn.
- Consider baling the un-harvested crop, removing it from the field, and later burning the bales away from your field. Burning the bales in a smaller, controlled area is easier to monitor and manage than burning swaths in a field. This option will also help preserve the ground cover, residue and organic matter in the field.

Call 310-FARM or visit [agriculture.alberta.ca/unharvestedcrops](http://agriculture.alberta.ca/unharvestedcrops) for more information.

