



## Chapter 4

### Harvesting the Crops

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By the time the crop is ready to be harvested, months of work and investment have already gone into it. It's exciting seeing the fields turn golden, but harvest is a critical point in the season, with a high risk of losing the crop if the quality falls below that required for the human food chain. Combine harvesters for bringing in grain are hugely expensive if you don't have one and need to rely on contractors; this poses risks of which you should be aware.

#### 4.1 When to Harvest the Crop?

General harvesting times are below, though there can be a lot of variation on this depending on the weather:

- Winter and spring-sown wheat can be harvested from August onwards, depending on the weather and ripeness
- Oats can also be harvested from August, and when the grain moisture level is around 15%
- Rye can be harvested from the end of June

Use a moisture metre to monitor when your crop is ready for harvest. For wheat this wants to be between 14 and 20%, though if harvested at the upper end of this scale you will need to dry it to get it to the milling requirement of 14%

Harvest is a great time to engage your community. Lay on events like farm tours, harvest suppers, watch the harvest come in etc

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#### 4.2 What Needs to be in Place Before Harvesting?

Ensure that you have clean, dry, vermin-proof storage for the harvest to go into

Identify who is going to undertake the harvest and what kind of machinery they will be

using

- a trailer

- containers for the grain, or dumpy bags

- extra tractor for moving the grain

- auger

- transport to the grain store

Ensure that you have a grain cleaner lined up, ideally so that the newly harvested grain can go straight into it, before going into the drier ([See 5.1 Drying and Cleaning](#))

Ensure that, if needed, you have a grain drier lined up and two tractors, one to run the PTO shaft and one for loading

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### 4.3 Using Contractors

It is usually the responsibility of the farmer to find the contractor

Unfortunately contractors tend to prioritise larger jobs over smaller ones, and if fair weather is in short supply around harvest time, this can undermine all the hard work of growing the crop. Build up a good relationship with your contractor before you need them and offer above the going rate to ensure that you get your crop harvested at the optimum time

Transport is the other logistical consideration around harvest time; if you are contracting others to move your harvest minimise the movement of the crop will save considerable expense e.g from farm to processing unit, or to the storage site, including the needs for drying and cleaning. Haulage is expensive and can make the

difference between financial viability or not

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## 4.4 Alternatives to the Combine



reaper binder\*

A reaper binder is a machine which cuts the standing crop, e.g wheat, binds it with string in to bundles called sheaves\*, and then drops them on the ground at even distances apart. The sheaves are then collected and stood up into A-shaped conical stooks\*. It is important to cut the crop when the stems still have some green in them, treat it as if it is thatching straw, (another part of the sustainability story) [Thatching with 'Long Straw' - Keith Quantrill and John Letts](#)<sup>1</sup>.

The grain is allowed to dry for several days before being picked up and threshed\* (or combined). If you are not combining the sheaves it is a more labour intensive process, but has the advantages of being lighter on the soil and useful for smaller fields. By using the reaper binder before the crop has fully ripened the volume of weeds will be greatly reduced as the crop is cut before the weeds go rampant



Scything\*

Before reaper binders and combine harvesters were invented grain was cut with scythes. These are long poles with two handles mid-way, and a long curved blade attached at the bottom of the pole. To harvest grain a cradle is attached behind the blade to guide the stalks and reduce grain spillage.

Traditionally a team of scythers would cut while others followed behind making and tying the sheaves and stacking them upright into stooks to dry. The sheaves would then be taken to a threshing barn to separate the grain from the straw.

These days scythes are useful for smaller areas of crop, or where grain is intercropped with other plants. Whereas a machine will cut the whole field in one go, a scythe can harvest as much as the grower can process and store safely at any one time. More can then be harvested when ripeness and the weather allow. [scytheassociation.org](http://scytheassociation.org)

\* Denotes items featured in the [Glossary - Chapter 11](#)

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<sup>1</sup> Thanks to John Letts for his advice

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## 4.5 Straw for Housing

### Thatching

For thatch it's best to grow winter wheat of either N59, Squareheads Master (heritage) or Maris Widgeon. Seed of all three is available and it bakes well. More information can be found through Hills of Devon <http://www.hillsofdevon.co.uk>

An average house needs at least 5 tons of straw, which with 25% loss for processing will require 7 acres of straw. Thatchers need the straw to be uniform and without awns\* Spring heritage wheats will probably not make the grade for stem quality or uniformity.

Einkorn is not good for thatching. It lasts well on the roof, but requires double the acreage because it has such a thin straw<sup>2</sup>

\* Denotes items featured in the [Glossary - Chapter 11](#)

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## 4.6 Key Risks at This Stage

Lodging\* - The crop is sensitive to lodging around harvest time; this is when the crop falls over. Tall-stemmed heritage varieties that have too much nitrogen available in the soil are particularly susceptible, other causes are extremely wet and windy weather, and overcrowding due to the crop being sown too densely

Weather window - wet weather can put tremendous pressure on harvest time. It is imperative that the crop is dry and that the soil structure is not excessively damaged by heavy machinery compacting wet soil. In a damp harvest it will be necessary to use a grain drier to get moisture levels down to an adequate level

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<sup>2</sup> Thanks to John letts

\* Denotes items featured in the [Glossary - Chapter 11](#)

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## 4.7 Community Involvement



Harvest time is an opportunity to involve your supporters, customers, volunteers and the wider community with events and activities

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