

WELCOME TO THRESHING

Threshing is the final part of the farming process to make our arable crop ready to use – separating the grain from the straw. The tools and techniques have changed over time, but the result is the same. Grain to store in the granary ready to be milled, used as animal feed or kept for seed. Straw to use for thatching, bedding, harness collar-making or even a scarecrow to discourage birds eating next season's crops in the field.

The Museum team have grown, harvested and are now threshing this year's oat crop as it was done over 100 years ago. This process started back in the autumn when the field was ploughed by our team of Percheron horses. The ground was then harrowed to break up the soil and create an even seedbed to plant or 'drill' the oat seed. This gave the oats a good start despite, heavy rains in the spring and extreme heat this summer. Our Triticale crop (wheat/rye hybrid) planted in the spring this year failed because of the heat.

Once the oat crop was harvested in July, it was stooked into sheaves in the field to dry out. After, traditionally, three Sundays of church bells nearby (or three weeks), it was then moved to Greenways field to build the two ricks.



WHAT'S ON THIS WEEKEND

Daily Programme for Sat 5 & Sun 6 Sept 10am-3.30pm

Steam powered threshing machines operating at two oat ricks

Museum heavy horses and cart transporting straw bales to **Cowfold Barn (49)**

Daily Timed Talks

12pm : Agricultural vintage steam power (10 mins)

Meet next to active Threshing machine in Greenways Field

2pm : Museum harvesting and threshing with heavy horses (10 mins)

Cowfold Barn (49)

3pm : Agricultural vintage steam power (10 mins)

Meet next to active Threshing machine in Greenways Field

HOW DOES IT WORK?

Feeding: Oat sheaves are fed into the threshing machine.

Threshing Drum: A rotating drum with beaters strikes the stalks against a curved casing called a conclave which separates the grain from the straw.

Separation: The grain falls through a sieve into a collection tray – the straw is expelled from the threshing machine.

TYPES OF THRESHING MACHINES

Hand-fed and horse-powered: Early machines were often powered by horses and required people to feed machine manually.

Steam-powered: Later models were powered by steam engines, increasing efficiency and capacity. By the late 1800s, threshing machines were often steam-powered mobile units travelling farm to farm.

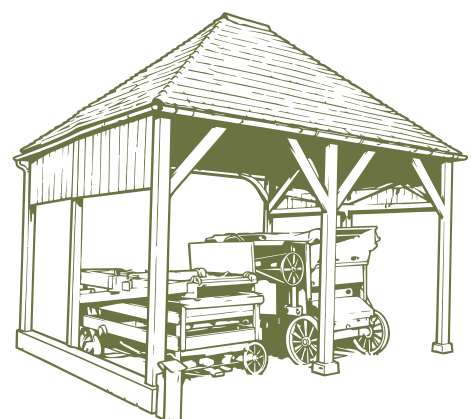
Modern Combines: Now, threshing is done using combine harvesters which combine cutting, threshing and winnowing into a single process. Our modern combine is generously loaned by Lady Benson from Cucumber Farm.

Social Impact: Whilst making farming more efficient, steam powered threshing threatened the livelihoods of and displaced rural labourers. The threshing drum became a symbol of job loss, contributing to the Swing Riots (1830s in England) during which workers smashed threshing machines and threatened farmers under the name of ‘Captain Swing’

THE ENGINES

Today we are using an Aveling 8653 built in 1915 for the War Office. During World War II she was taken out to France with a Ruston baler to help with hay baling. Afterwards, she was then sold to various owners in the Kent area including; Wingham Engineering, Chris Lambert and Pegged Brothers. Then in 1951 John Sparks of Outwood, Surrey brought the engine and used her for sawing and woodland clearance up until 1978. After his death in 1988 his daughter Janet had the Aveling 8653 restored in memory of her father.

The second engine built in 1895 is a Fowler A46HP (No. 7459). The engine's name is Endurance. It has been with the Langley family since about 1972 who have carried out extensive work to keep it in good operating condition.



THE HISTORY OF STEAM POWERED THRESHING

The first steam powered threshing machine was invented around 1786 by Andrew Meikle. It mechanised grain separation which had been done by hand for thousands of years using a wooden flail. Mechanisation reduced the labour and time required in harvesting grain. It controlled impact, feed-rate, separation and cleaning so the farmer could keep more usable grain with less breakage. It was a major development that accelerated the agricultural revolution.



TIMELINE

Milestone	Date	Significance
Early manual flailing	Ancient - 18th century	Labour-intensive grain separation
Early mechanical attempts	1730s	Unsuccessful prototypes
Meikle's drum invention	1786-1788	First practical rotating drum thresher
Steam-powered threshers	Mid-late 1800s	Large-scale mobile threshing
Swing Riots	1830s	Social backlash to mechanisation
Combine harvester	20th Century	Drum integrated into full harvesting system.

AROUND THE MUSEUM LOOK OUT FOR...

Ockley Hay Barn (42)

These 3 items, together with a steam traction engine, comprised a Threshing Train which would have travelled from farm to farm with a gang of dedicated contractors to process their harvests. The steam engine would be used to transport the train and also power the machinery when stationary.

Threshing Machine:

The central piece of machinery into which the cut and dried crop was fed, threshing or separating the grain from the straw. Our example was manufactured by William Marshall & Sons in 1862 and although in working order is not used due to its great age.

Elevator:

Used to lift crops and straw into ricks for effective storage. This example is called the ‘Unique’ and was manufactured by Carter Brothers of Billingshurst. Another example is the **May Day Barn (42)**.

Contractor’s Living Van:

All itinerant work gangs need somewhere to rest, eat and keep all the spares and tools needed for the job at hand. Like our threshing machine this van is also made by Marshall & Sons and bears that company’s paint scheme.

Goodwood Cattle Shed & Yard (44)

Steel-framed Wagon:

A 'boat' type wagon by R.J. & H. Wilder of Wallingford which would have been used to transport cut crops. To optimise the load latticework 'ladders' were fitted at each end of the wagon which enabled 3 or 4 times as much harvest to be carried. This example is unusual in that the undercarriage is made from iron rather than the usual timber.

Contractor's Living Van:

This contractors van was used by the 'Best's Threshing & Baling Contractors' of Twyford near Winchester and donated to the museum in 1999 by the family. Opposite **Cowfold Barn (49)**.

Dorset Wagon:

A 'box' type wagon with latticework 'ladders' to optimise the load able to be carried. Donated by the family of Jim Oliver who was a Trustee of the museum and whose great, great, great grandfather, Job Rose, originally commissioned and used the wagon.

Vehicle & Implement Gallery (31)

Water Cart:

Iron water carrier used for a variety of purposes including irrigating lawns and crops, but also providing water for the working steam engines during threshing. Manufactured by Coleman and Morton of Chelmsford in the late 19th Century.

Barns

The following exhibit buildings are all examples of threshing Barns. Doors on each side allow loaded wagons to enter the building and deposit their crops into the storage areas on either side of the central floor. The floor was used to thresh the crops by hand using a flail – the method which predated the threshing machine in use at the moment. The two doors also provided a through-draught which helped disperse the chaff and other unwanted material from the grain. Also, note that one set of doors is always lower than the other; a fully loaded wagon piled high with crops would enter through the higher door and once emptied would exit through the lower set.

Hambrook (59) | Cowfold (49) | Court (29) [Currently The Repair Shop] | May Day (45)