



The machinery revolution

If the farmer's job is to produce food, then the machinery manufacturer's job is to produce the equipment that helps to make this job more efficient, more productive, more environmentally friendly – and more profitable!

Machines, and the diesel engine that powers many of them, have revolutionised the way we produce food, whether it's crops, milk or meat. Over 100 years ago a large farm would employ around 100 men with 50 horses for food production, whereas today the same work could be done by two men and two tractors.

This information leaflet illustrates some of the key machines that power our farms and produce our food. Use it, and the website sources listed overleaf, to help put the message across to your Open Farm Sunday visitors that farming is a modern, highly mechanised and technologically advanced industry, employing and supported by highly trained and motivated people.

Everywhere you look on a farm today, there's a machine doing something. At the heart of most farm work is the tractor – every farm will have one, of whatever size.

An idea for your event:

Most of your visitors will have come by car – get a question and answer session going by comparing their car with your tractor. Explain how both replaced the horse, one as a means of transport, the other as a source of power (hence the use of the term horsepower to measure engine performance, originally invented by 18th century engineer James Watt to compare horses with steam engines, and still used today) – 100 years ago, one person and a horse could plough just 1 acre in a day; today, one person and a tractor can do 40 acres or more in the same time.

FEATURES	CAR	TRACTOR
Transmission	4 to 6 gears, manual or automatic	Anything from 16 to 48 gears, manual or automatic
Air conditioning & heating	Yes	Yes
Music system & touchscreen displays	Yes	Yes
Wheels	4, 2-wheel drive as standard	4 or 8, 4-wheel drive as standard, option of low ground-pressure tracks
Satellite navigation	Yes	Yes, with option of automatic hands-free steering and turning
Towing capacity	Up to 1.5 tonnes (ie about its own weight)	Up to 18 tonnes (ie up to 4 times its own weight)

