

# What Is Ploughing (Plowing) All About?



The plough is one of the oldest tillage tools known. One of the oldest ploughs known to exist (said to date from 2000 BC) is a testament to the timelessness of this tillage practice. The first ploughs were little more than crooked sticks with one or more prongs digging into the soil. Later, animals or humans were harnessed to a pole, with a short stub of a branch on one end. By Roman times, wooden ploughs that somewhat resemble our modern ploughs, were pulled with oxen. Later wheels were added to the beam in order to control the depth of ploughing more easily. With the easier manufacture of steel, the use of steel ploughs became common.

## Why Plough

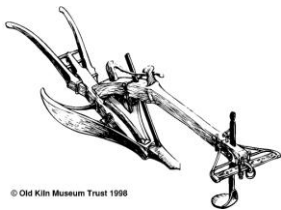
One of the most valuable tillage tools of agricultural history, the plough has transformed millions of acres of land into a productive seedbed. Through the ages, good ploughing has been soils best friend, initially by:

- preparing a seedbed with a top layer of soil that could easily surround the newly planted seed and encourage germination,
- helping to control weeds,
- assisting in the degradation of mulch into organic matter,
- increasing water retention, and
- improving soil aeration.

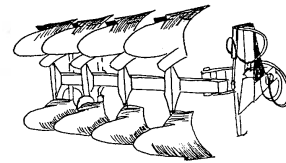
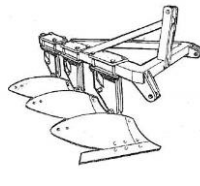
In more recent times new innovative equipment designs and increased power have allowed these requirements to be expanded and modified to meet an expanding list of tillage, cropping, conservation, and environmental practices, including:

- soil conservation through the control of water and wind erosion;
- improved secondary tillage
- energy conservation through reduced tillage practices;
- chemical weed control;
- precision seed placement, into and through crop residue.

When ploughing, a farmer is a part of a fraternity that spans many continents and generations. Plowing contests are more than turning over soil, they are a celebration of tradition, of agriculture, and of friendships.



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## **What Makes Good Ploughing?**

The question of “what makes good ploughing” has many answers depending on the historical time frame, the end result desired, the equipment being used, and who’s making the decision.

Skillful ploughing provides many benefits for the seedbed:

1. Furrows that are turned over at the proper angle create a furrow comb (ridges and valleys) that makes an excellent seed bed.
2. Clods and holes should be avoided as they allow seed to fall too deep or cause it to lay on top. A farmer should be able to broadcast seed over the ploughed field and harrow it lightly to incorporate the seed at a uniform depth. Once the crop emerges, rows should be visible.
3. The furrow comb also helps to slow the wind at ground level. This reduces the amount of soil that blows away and helps to deposit snow in the depressions. On hilly land, contour ploughing slows water runoff which reduces erosion and improves moisture absorption.
4. Weed control can be achieved with good ploughing. Furrow slices that are properly cut off, rolled over, and placed tightly against the next furrow bury growing weeds and weed seed deeply enough to help prevent weed growth and seed germination.
5. An extra weed control measure may be taken by ploughing an opening split and then placing the crown on top of that. The split shaves off all growing plants at ground level so they do not grow through the crown placed on top of them.

A good job of ploughing also helps maintain a field that is easy to work with:

1. An opening crown that is level with or only slightly higher than the surrounding furrows is preferred to one that is too high as it is easier to maintain proper seed depth for good germination and is more comfortable to drive over for the farmer.
2. The closing or finishing furrow should be narrow and shallow while still maintaining furrow conformation and trash coverage. This will help insure the best possible seed placement at planting time and reduce the depression that runs through the field for years to come.
3. The plough should be placed into and taken out of the ground quickly and uniformly across the field so that the ins and outs may be cleaned up with only one pass of the plough. Anyone who has ploughed an uneven headland knows how rough bouncing through furrows can be.
4. From year to year, opening furrows should be placed over last year’s dead furrow to “unplough” ridges and depressions. This requires planning and skill with a plough.

In addition to producing a good seedbed a well ploughed field must look good, and good looking ploughing has the following characteristics:

- straight furrows
- all furrows well turned, defined and look the same, and
- neat in appearance

As the art of ploughing developed, the challenge of producing good ploughing and the pride in its accomplishment led to “over the fence” competitions. As in any competition,

winners are always looking for additional opportunities to prove their abilities. Today, local, national and international competitions are held around the world. To assist the individual responsible for deciding the best plough person, a set of attributes of good ploughing were developed. These attribute include:

- straight furrows
- uniform furrow
- conformity of furrows
- shape of furrow
- distinctness of furrow
- closeness and packing
- firmness
- covering of vegetation
- soil availability
- level from start to finish
- neatness

In Canada, each “land” ploughed at a competition is judged out of 200 points. The attribute listed above are arranged into 20 judging categories each worth 10 points.

The “look” of a competitively ploughed land will vary dependent on:

- the type of equipment used – horses or tractors,
- the age of equipment – antique, current, competitive,
- the condition of the equipment,
- type of plough – trailer, mounted, or semi-mounted
- style of plough – convention or reversible,
- soil and field conditions – sand or clay, wet or dry,
- the expertise of the plough person.

An experienced judge must recognize these inherent differences in each land and at the same time maintain a bench mark image of the “perfect” furrow and ploughed land to determine **“The Best Ploughed Land”**

