

## Crimped grain for finishing beef cattle diets

### By Fraser Scott

Fraser finishes beef cattle on his Northumberland farm alongside 850 ewes and 566 hectares (1,400 acres) of arable. He buys in mainly Continental, Angus and Angus X heifers and steers as stores (18-27 months) and finishes them in 60-120 days. He has a throughput of around 100 cattle per week. They kill out on average at 330kg carcass weight and Fraser achieves predominantly R conformation grades from the dairy cross heifers and steers.



#### Crimped grain - the benefits

Crimping grain offers an opportunity to harvest cereals earlier than conventional harvesting for dry grain, this reduces drying costs and contributes to a rumen-friendly ration. After losing a supply of potato waste in 2011, Fraser Scott's substantial beef finishing operation in Northumberland looked to crimped grain for a cost-effective starch supply.

#### The transition from dry to moist grain



Combining the six row barley at 40 per cent moisture content (MC) was no problem. However, another combine will be drafted next year to cut the crop more quickly as the crop needs to be cut as soon as it is ready.

Initially, it was difficult to keep the crows off the crimp store, therefore Fraser now uses bird proof covers and bird scarers. Oxygen barrier sheets and heavy gauge wall sheets stop oxygen getting into the clamp because the grain should come out as fresh as it went in. The grain is ensiled for at least three weeks before use. A silage rotor (a rotating cylinder with small knives powered by hydraulic motors) helps maintain a smooth clamp face.

One minor drawback is the straw, it takes longer to bale for bedding (it is used for bedding), therefore some turning and conditioning equipment was purchased and a big square baler is now used.

#### Feeding

The grain is analysed shortly after the clamp is opened. With four clamps storing 150 tonnes of grain in each, the aim is to have enough to last all through the year. When rations change from including crimped barley to wheat or vice versa, the new grain is phased in gradually over several weeks to avoid rumen upset.

A high starch content in the ration is a priority to ensure an efficient finishing phase, where cattle are growing fast, without becoming excessively fat. Crimped grain is fed at an average of 10kg per head, with 10 -12kg grass silage. The remainder of the ration is made up from wholecrop peas, vetches, oats and spring barley. Yeast is added to improve diet digestibility and it has been noticeable that less undigested grains are visible in the dung. Fraser has purchased a tub grinder which grinds the milling straw, this improves palatability and digestibility.



Fraser has calculated the total ration costs at around £1.55 per day.

Take a look at the [BRP Cereals Directory](#) more information