



Why Grow Forage Rye?

- Early turnout
(reducing overwintering costs)
- Early bite for dairy cows
- Winter sheep keep
- Flexible sowing options after maize or cereals
- Catch crop
- Zero grazing option
- Helps mop up residual nitrogen and prevents soil erosion

Typical Yields and Feed Quality

Average Dry Matter yield	= 5-6 tonnes/ha
Average fresh yields	= 20-24 tonnes/ha
Dry Matter	= 25%
Crude protein	= 11-12%
Metabolisable energy	= 10 MJ/kg DM



Typical Costs and Value

	Total Costs
Cost per acre	£147 (£364/ha)
Cost per tonne fresh weight	£13
Cost per tonne utilised dry matter	£83
Relative value £/tonne DM	£112
Cost per litre of milk	5.3p
Cost per kilo of live weight gain	35.0p



FORAGE RYE

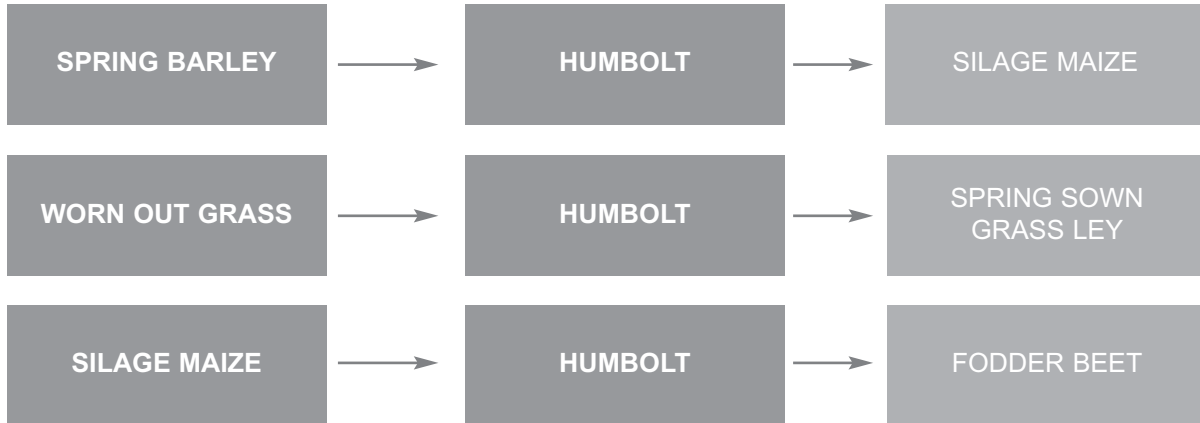
Sowing, Growing and Feeding

SOWING	Sowing Period	September - October
	Weeds	A broad spectrum herbicide applied to the stubble before drilling should provide a clean enough seed bed so that the seeds can get away easily.
	Seed Rates	Drill only = 185 kg/ha (75 kg/acre) pure sown or 125 kg/ha (50 kg/acre) Forage Rye and 17 kg/ha (7 kg/acre) Italian Ryegrass
	Sowing	Cultivate as cheaply as possible. Direct drill into stubble or lightly disk to produce a tilth before drilling. The less you disturb the ground the better the stock carrying capacity in the spring. Cross drilling gives a thicker sward.
GROWING	Fertiliser	Lime at 1t/ac (2.4 t/ha) to keep pH's between 6.0 and 6.5 Forage Rye should need very little additional nutrients, especially if a light slurry application is applied. Check P & K status and adjust accordingly. Be aware of NVZ limitations on spreading muck and fertiliser in the autumn Refer to DEFRA's RB209 for more details.
	Tillering	If the crop is planted early and the weather favourable then it can be over mature before winter. If this occurs a light grazing, when the crop is 4" (10cm) will improve the tillering, winter hardiness and spring growth.
	Pests & Diseases	Forage Rye suffers from few pest problems.
FEEDING	Method	Graze from late February onward, when the crop is 6" (15cm) tall. Strip grazing is essential to minimise waste. Move the fence daily. Early grazing will increase the likelihood that a second growth flush will occur before you need to plough out the crop.



FORAGE RYE HUMBOLT

Sowing and Rotation Options



Humbolt Features and Benefits



Humbolt forage rye is the crop for early bite grazing for cattle or sheep. Humbolts' spring growth is up to 3 weeks earlier than Italian ryegrass and an early sown crop can also provide an additional light grazing for sheep before Christmas. Excellent tillering capacity and early vegetative growth ensures maximum intakes and palatability.

- Fast establishment
- Specially bred for forage production (Humbolt is not a grain variety)
- Excellent winter hardiness
- Fantastically flexible!



HUMBOLT GROWING AND SOWING

Soil Type/Site Selection

As forage rye is primarily grown for its ability to deliver very early grazing in the New Year it is essential to make sure that the right field is selected. A sheltered, well-drained field is ideal and if it has a southerly facing aspect then even better. Although forage rye will grow on a very wide range of soil types it is best to avoid very exposed or badly drained fields - and it is obviously not advisable to force livestock to trek long distances down muddy lanes. The crop can even produce a reasonable yield on poor, acidic soils which is why it is sometimes used as a pioneer crop on reclaimed hill-land. Try and select a field which is as weed-free as possible.

Seedbed and Sowing Methods

The seedbed for the rye should be reasonably firm and well consolidated. A seed rate of between 160-185 kg/ha (65-75 kg/acre) is adequate under most circumstances and the seed should be drilled to a depth of 3.5-5.0cm.

Cross drilling the rye usually helps to promote a thicker stand and direct drilling is an option if required. Direct drilling will eliminate soil disturbance and give a much firmer footing for the stock in the spring.

Forage rye is a catch crop so it can slot in between say a cereal crop and then be followed by a crop of forage peas, fodder beet or kale.

Drilling date can vary with the locality but in general aim to get the seed in the ground between mid August and late September. This ensures that the crop gets well established before the winter sets in.

Some farmers mix Italian ryegrass with their forage rye so that the spring grazing programme can be prolonged. If you adopt this option use a sowing rate of 17kg/125kg/ha (6kg/50kg/ac) respectively. Some farmers have also direct drilled forage rye into a permanent pasture. However if you use forage rye it will enable you to squeeze extra production out of your land.

Fertiliser

As a general guide 50 kg/ha of both P and K (soil index 2) is a suitable dressing at sowing time. If nitrogen is needed at sowing time then a dressing of 50 kg/ha should be adequate. The main application of nitrogen will need to be made in the spring when 75 kg/ha should be sufficient. This should be applied between 2-4 weeks before the first day you expect to graze the crop. If you have a large acreage of rye to graze then consider splitting the nitrogenous dressing to ensure that you do not have one massive flush of growth when grazing commences.

Weeds, Diseases & Pest Control

No herbicides should be needed and the crop suffers from few pests and diseases. Any leatherjackets, wireworms or slugs which are seen should of course be controlled using the appropriate chemical.

Feeding

Forage rye should not be allowed to enter the winter in a very proud state and in a mild autumn, crops sown in good time can be lightly grazed in late November or early December. Providing the grazing is not too severe this operation (carried out when the crop has around 10/12 cm of growth) will encourage tillering, increase winter hardiness and boost the amount of green matter produced in the spring.

One key factor is to ensure that the grazing in the spring is not delayed - this is because the crop can quickly become stemmy and unpalatable to stock.

If you are grazing dairy cows on rye then the crop length needs to be about 15 cm. For sheep the crop can be a little shorter. If you graze early then you may well get a second flush of growth before you need to plough out the field for the following crop.

Controlled grazing, using an electric fence, is very important to avoid excessive wastage.

Another option which some farmers exploit is to zero graze the crop. This avoids having to take the stock onto the field - which in wet weather can help reduce poaching.

To help you plan your feed requirements you should work on the basis that one hectare will provide 2 weeks grazing for 25 cows or 50 lactating ewes. There would also be the possibility of some surplus growth in the previous autumn.