

Improving soil health – the role of grass

There is widespread acknowledgement that the health of UK's soils needs to be improved. The Environmental Audit Committee recommended this in [its report published on 2nd June](#). Growing grass can significantly increase the organic matter content of soil, and should be encouraged. However growing grass as a feedstock for biogas plants is threatened by proposals primarily aimed at curbing the use of maize as an energy crop. DEFRA has had concerns about the widespread use of maize as an energy crop for some time, and renewable energy policies are being changed to discourage the use of maize. **However, the proposals would also impact grass.** The REA and the NFU feel this would be misguided, because of the beneficial role growing grass plays in improving soils health and benefitting UK farming. We therefore believe the following crops should be exempted from impending rule changes to the Feed-In Tariff and Renewable Heat Incentive:

- grass silage cut from marginal land in environmental management
- silage from grass leys in crop rotation
- grass silage from pastures and meadows which are also grazed by livestock

This 1 page briefing note sets out why growing grass is so beneficial for improving the health of UK soils, and another briefing note looks at the benefits it brings to UK agriculture.

Organic matter in soil is crucial to producing high-yielding crops and forage, as well as having many other benefits, including;

- Helping reduce soil erosion by stabilising and holding soil particles together as aggregates
- Helping prevent nutrient run off
- Improving the structure and drainage capabilities of the soil
- Promoting water infiltration and the water retention capacity of soil, which helps reduce runoff and flooding
- Making soil more friable and easier to work, which reduces the requirement for fuel-intensive cultivation machinery
- Enabling direct drilling. Crops following grass can be directly drilled, which slows down mineralisation of nitrogen enabling it to be utilised more efficiently by the subsequent crops
- Reducing soil compaction and soil crusting, which improves the drought tolerance of soil by decreasing evaporation
- Promoting plant growth through improved storage and transport of air and water
- Providing food for soil organisms, which hold on to nutrients and release them in plant-available forms
- Storing and supplying N, P, K and micronutrients, which reduces the requirements for fertilizer because the soil organic matter serves as a reservoir for plant nutrients
- Providing a source of carbon and energy for soil microbes, which cycle nutrients and fight plant diseases
- Binding with pesticides, heavy metals and other pollutants, and reducing their negative environmental effects