



# Best Practice Soil Management

Sheet 21.0a

## Managing ditches

### Why change?

Good ditch management can save you money and protect the environment by helping to:

- maintain optimum field drainage conditions for crop growth
- minimise sediment and nutrient transport from the field to the river
- improve the health of livestock
- highlight pollution problems early
- enhance the wildlife value of your farm.



Fenced ditch with good habitat

### Steps to Success

1. **Review** the current situation by examining the management of ditches on your farm. Under Cross Compliance no pesticides, may be spread within 1m, fertiliser within 2m and Farm Yard Manure and slurry 10m from the top of a ditch or watercourse. Any dredgings should be spread at least 1m away from the top of a ditch.
2. **Identify** potential opportunities for improved management of your ditches. Look out for significant or frequent brown water run-off, sewage fungus, poaching of banks by livestock and any absence of vegetation.
3. **Calculate** the cost-benefit of these opportunities by considering the benefits of improved ditch management against the cost of problems such as stock injury and waterborne disease risk, soil erosion, watercourse pollution and reduced habitat quality. Payment for ditch management options are available under Countryside Stewardship (CS).
4. **Prioritise** improved management of ditches that drain directly into watercourses. Be aware of the pathways that your ditches follow, remembering that up-slope problems can be transmitted downstream.
5. **Develop** an action plan for improved ditch management:
  - exclude livestock from ditches using fencing where necessary in order to protect the ditches from stock damage, and livestock from lameness, injury and waterborne diseases
  - maintain ditches on a rotational basis in order to minimise costs, maintain habitat diversity, and encourage settling of sediments and nutrient uptake by vegetation. A 2-3-year cycle of clearance is recommended as a minimum; once every five years is ideal. Clear ditches in autumn to minimise disturbance to birds, aquatic insects and seed setting
  - leave as much vegetation on the sides of the ditch as possible. Trimming should preferably take place on one side only or on different sides in alternate years. Remove only the sediment that has accumulated at the bottom of the ditch. Spread dredgings on adjacent land and allow grass to re-establish naturally. Cut vegetation should be moved away from the ditch to avoid pollution from leachate
  - try to include a variety of bankside profiles around the farm to encourage a greater diversity of species
  - consider creating small ponds and wetland areas at ditch junctions or by drainage outlets to help manage run-off and increase wildlife diversity
  - Avoid fires from hedge trimming close to ditches
6. **Check** your ditches for signs of brown water run-off or sewage fungus, particularly during or after rain. Maintain land drain outfalls regularly. Follow up any pollution problems.



# Best Practice Soil Management

Sheet 21.0b

## Managing ditches - practical examples

### Ditch clearance savings

Save money by extending the rotational dredging or clearance programme for ditches on your farm e.g. from three to four years.

For example, if 250m of a 1000m long ditch system is left untouched each year, annual costs will be reduced by 25%. The cost of ditch excavation and cleaning is estimated to be up to £175/100m. The total annual saving of an extended clearance programme is therefore approximately £440. Grant aid for ditch restoration of £3.70/m may be available under the Countryside Stewardship Scheme.

In addition, an extended programme causes less damage to wildlife habitats and enhances the ability of vegetation to trap both sediments and nutrients.

### Rotational ditch clearance

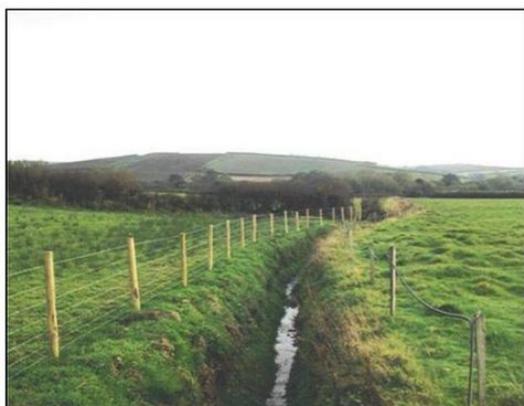
In this example, a farmer with an 89ha beef enterprise, with 2.4k of ditches, took advice and decided to manage his ditch clearance differently.

The normal cost of ditching 2400m was £1.75/m, a total of £4200.

Taking care to minimise pollution, he cleared only two thirds of his ditches leaving one third well vegetated.

This reduced his costs by £1400 a year with no loss of drainage efficiency. He gained extra benefits by spreading the nutrient rich sediment over his fields and protected an important wildlife habitat.

Payback was less than a year.



Sensitive ditch management



In ditch habitat

### Remember

- Use your ditches as an early warning system for pollution. Check for signs of brown water run-off and sewage fungus during rainfall. Act quickly to avoid the risk of fines for watercourse pollution.
- Maintain your ditches for good land drainage and habitat diversity in order to optimise conditions for crop growth and increase the wildlife value of your farm.
- Grant aid for ditch restoration may be available under an Environmental Stewardship Scheme.



This information sheet is part of a series produced by Westcountry Rivers Trust providing farmers with advice on land management practices to protect water bodies. The advice enables farmers to use farm resources more efficiently, helping to meet Nitrate Vulnerable Zone, Cross Compliance, Farming Rules for Water and other regulations while protecting our environment and natural resources.

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