

# Grass cutting - reducing flood risk

You may have seen our Environment Agency teams (and contractors on our behalf) out and about cutting grass on the thousands of kilometres of Main River, sea and reservoir banks that serve as flood defences. These banks are man-made and help reduce the risk of flooding to people and property.

Embankments need regular maintenance. The Environment Agency bids for public funding every year to carry out this maintenance and we use our permissive (discretionary) powers to deliver the works. Other ordinary watercourses (dykes/streams) are still important to local flood risk, but are likely owned by the landowner who will be responsible for its maintenance and conveyance.

## How do we cut the grass?

Grass cutting will be carried out by using either a mechanical plant fitted with a flail, by hand or by remote controlled mowers where slopes are steep or unsuitable for larger plant.

## Why are we cutting grass at this time of year?

It is essential that flood defence embankments (coastal or river) are kept in good condition and so are mown regularly throughout the grass growing season.

On embankments where we only mow the top of the slopes, by mowing during the time when plant growth is vigorous, it encourages nesting birds to make their nests lower down the embankment slopes in the longer vegetation, away from machinery.



## So why do we cut the grass?

Research has shown that the regular close mowing (5-10cm) of grass improves the strength of the root network and erosion resistance of the grass sward. This sward helps protect the earth embankment underneath from external erosion caused by rainfall, wind, currents, wave action and traffic (vehicular, pedestrian and animal).

Regular cutting also prevents broad leaved plants and woody vegetation from getting established. Such vegetation can damage the embankment beneath by root penetration, overturning, encouraging burrowing animals, discouraging

adequate grass growth and concentrating flows which then cause scour.

Shorter vegetation helps our teams monitor and inspect our defences, which we do regularly (six monthly,



annually or every other year) to identify any signs of damage. Shorter vegetation is also a health and safety measure to help define the edge of the crest when we are cutting our raised embankments.

### How have we adapted our work to support biodiversity and wildflowers?

We are working to create a better place in everything we do. We have a team of biodiversity experts whose role it is to advise and help us adapt our maintenance work to support biodiversity where possible. For example, on appropriate embankments (where the impacts of flood risk are lower) we will only mow along the crest (top) of the embankment and a swathe (the width of the grass cutting head) at the top of the slopes. This is to ensure the crest edge is defined to provide safe access for driving machines. The long vegetation that is left lower down the embankment slopes is cut later in the year, therefore allowing for most plants to flower (providing nectar for pollinators) and to set seed; as well as providing cover and food sources for other animals, including water voles.

We are also researching and developing projects looking at where less intensive mowing regimes could work on other embankments.



### What checks do we put in place for nesting birds?

Some of our grass cutting and maintenance does need to be carried out during nesting bird season. Nesting birds are legally protected, and so we apply stringent environmental checks before any work is carried out. This includes working with our internal biodiversity experts and carrying out walkovers before cutting begins, ensuring nests are not damaged.

If the grass is long, before mowing it, during the bird breeding season (1st April- 7th August) the machine operator will walk over the site to try and identify any nesting birds or other habitat or hazards. Our staff are diligent and will stop work if they see something of interest to get further advice.

If a nesting bird is found, our machine operators will leave a 10 metre perimeter on either side of the nesting area, so as not to disturb the nest.

### Who can I contact for more information?

If you would like further information on maintenance, please get in touch using the contact details below:

**Post** - National Customer Contact Centre PO Box 544 Rotherham S60 1BY United Kingdom

**Email** - [enquiries@environment-agency.gov.uk](mailto:enquiries@environment-agency.gov.uk)

**Telephone** - 03708 506 506 (Monday to Friday, 8am-6pm)

**Incident Hotline - 0800 80 70 60** - to report flooding, blockages, pollution, unusual changes in flow of water, collapsed or badly damaged defences (24-hour service).

