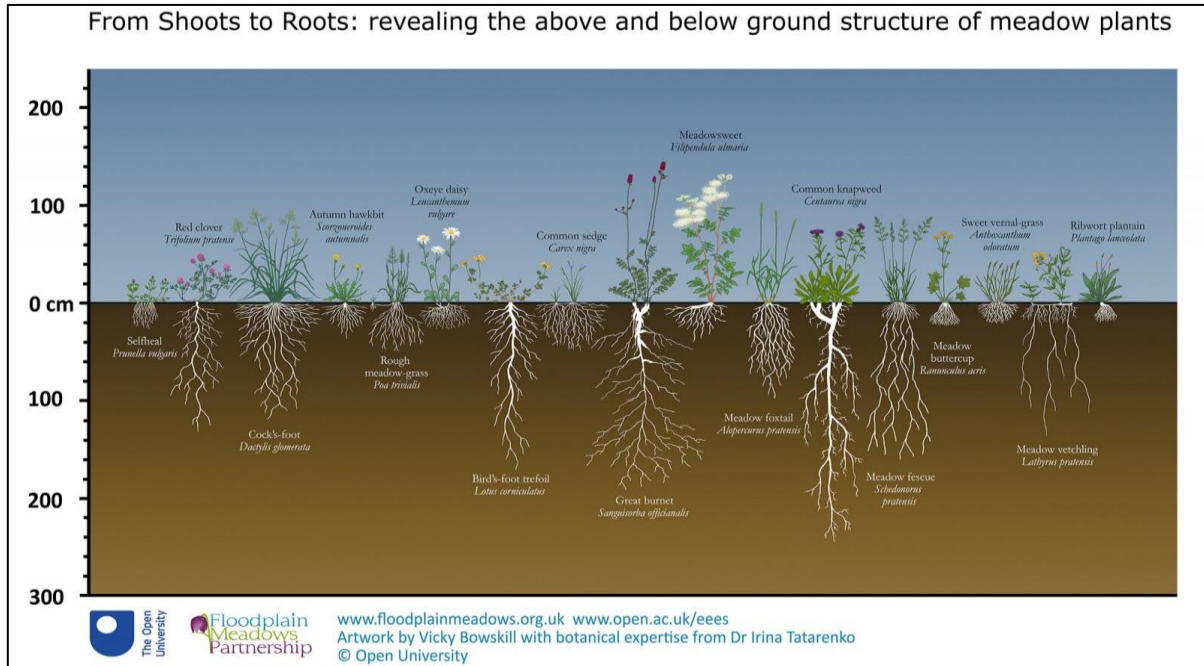




Riparian Grazing

For a riverbank to be naturally stable, it generally requires diverse vegetation - the deeper rooted the better. The vegetation visible above ground is generally reflective of the root structures below, so the more abundant and diverse the vegetation, the greater the variety and extent of roots they support.



www.floodplainmeadows.org.uk/about-meadow-wildlife-shoots-roots

Grazing has a similar impact to mowing: the reason a garden lawn remains largely grass is that they are one of the few groups of plants that can withstand regular cropping. Just as grazing (and mowing) limit the extent and variety of foliage above ground, the associated loss of species also reduces root matrices within the ground. The plants also expend more energy on foliage regrowth, rather than root systems, to the point they may even slough some of their roots if they become heavily grazed. All of which can leave riverbanks poorly consolidated and susceptible to erosion. For this reason, the most stable and biodiverse banks are generally ones where livestock have been excluded.

Beyond the loss of bankside vegetation diversity, one of the other clear symptoms of long-term grazing, particularly with sheep, is the loss of willow. Being one of the most palatable tree species, willow is selectively browsed by sheep. This can often even happen at grazing levels that are sufficiently light they don't destabilise a bank, but the initial signs of their impact is still there.

As grazing intensity increases, regeneration of other tree species is lost, often leaving only single lines of mature trees along a watercourse, with no smaller sapling regeneration to replace losses through old age or erosion – the latter often completely outflanking trees in a heavily grazed scenario. In the most extreme cases, trees are lost completely from the watercourse.





When grazing is by cattle, the negative impact upon foliage and root structure is generally less marked, as the grass is not so tightly cropped as by sheep, but they create greater physical damage to a bank, which can be significant, particularly so if they are grazed at high densities and/or alongside sheep.



Livestock farming is an important aspect of the UK rural economy, supporting vital food production, and there are simple ways of protecting riparian habitat from its influence. With the most environmentally sensitive of farming regimes, it may be possible to reduce stock density and duration to facilitate improvement to riparian habitat. However, often the simplest and most effective way to protect watercourses is with a fence and buffer strip that will allow a healthy riparian zone to develop – sometimes assisted by reseeded or planted. The benefits of protecting trees and facilitating regeneration not only extend to the natural ecology of an area, but can also deliver benefits to the farming community too, as shown in the [Pont Bren Project](#) (and many others), where improvements to agricultural production, habitat quality and flood risk have been delivered through trees and shelter belts.

