



PHOENIX EROSION CONTROL

Phoenix Amenity offer a comprehensive range of environmentally friendly products designed to combat erosion on a number of diverse sites, including remedial work on rivers, canals, ponds and wetland related projects.

All our products are manufactured from natural materials and include:-

- Planted Coir Pallets to help establish aquatic vegetation on wetland projects
- Straw and Coir blended erosion control blankets for slope applications.
- 100% Coir blankets for erosion control on steep banks.
- Coir logs (planted and un-planted) to prevent bank scouring on rivers and streams.

We also supply a wide range of mild steel, wood and plastic fixing pins suitable for use on all our products.

Riverbank Erosion

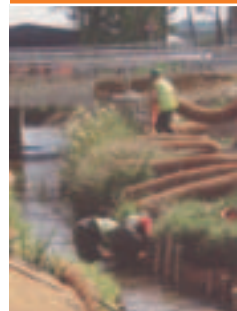
Bank erosion is a natural process and is an important source of sediment for a natural river system. Indeed, certain habitats and species would not exist were it not for actively eroding banks. However, bank erosion can be triggered or exaggerated by human activities and this "accelerated" bank erosion can throw a natural channel system out of equilibrium and result in severe ecological degradation to the watercourse. Erosion can cause the loss of valuable land and threaten flood defences and properties.



Coir rolls protecting the river bank

Shorelines

Most bioengineering techniques are suitable for the long-term protection of eroding or exposed lake shorelines. A wide margin of wetland plants absorbs wave energy whilst supporting valuable wildlife habitats. From urban lakes to inter tidal and coastal shorelines, we can advise suitable bioengineering solutions that stop erosion and provide diverse marginal habitat.





Wetlands

Phoenix Amenity specialises in integrated constructed wetland and habitat creation schemes, within the context of storm water and wastewater management. The basis of the SUDS approach is the use of water management technologies such as grass swales, constructed wetlands and infiltration basins within a treatment circuit to achieve the water flow and quality targets.

We work with natural materials to create robust, ecologically stable systems that do not require high levels of maintenance. The overall result is a system that attenuates storm flows, supports high levels of biodiversity, produces an amenity and landscape resource and greatly improves water quality.

Habitat Translocation

We specialise in the translocation of entire or fragmented habitats by moving whole ecosystems including both the vegetation and soil elements. Many types of habitat can be moved in this way including reed beds and wetlands, heath land, grasslands and salt marshes.

Phoenix Amenity can advise on the suitability of the donor and receptor sites, including all elements of ground preparation and the depth of soil that needs to be lifted.

Erosion Control - Slopes

Soil should be regarded as an invaluable and finite resource, as most UK soils have taken hundreds, and even thousands or years to evolve and develop. Inappropriate management can expose this valuable resource resulting in irreversible damage in weeks, days or even a few hours. Soil should not simply be viewed as a "growing medium", but a unique habitat, containing whole ecosystems.

EROSION CONTROL PRODUCTS

Coir Rolls and Pallets

Coir Rolls and Pallets are manufactured in the UK to any specification, depending upon specific site requirements. Coir Rolls and Pallets are an excellent technique for establishing marginal vegetation around lake edges, canals, streams and riverbanks. Coir rolls are cost-effective, organic revetments that are a suitable alternative to hard revetments in many applications.



Coir pallets in situ





Floating Reed Islands

Floating Reed islands are bespoke portable floating refuges, which provide instant cover, habitat and protection for fish, invertebrates and mammals. The modular floating frame supports pre-established (vegetated) coir fibre plant pallets. As the pallets mature both the vegetation and root establishment provides a haven for all kinds of aquatic life, including fish, water voles, newts and invertebrates. The island's protective measures are further enhanced when fitted with a fish refuge. This meshed cage allows fish stocks in but keeps predators out.

Reinforced Turf

In order to support our bioengineering techniques a pre-vegetated turf with a site specific vegetation mix can greatly enhance the success of a project, especially in areas with high energy water flows or in reinforced soil structures where plant germination and establishment can be very limited. **Phoenix Amenity** can grow numerous mixes of pre-established wildflower, grass and wetland mix turfs for a wide variety of applications.

Jute Netting - Soil Control

Jute mesh is one of the most favoured and cost effective environmentally friendly methods of stabilising soil on embankments. Independent trials have consistently shown that more expensive synthetic mats fail to match the environmental benefits of jute mesh as a soil stabilising method. Therefore, unless the erosion forces are harsh or vegetation difficult to establish, jute netting is the best solution for temporary surface protection.

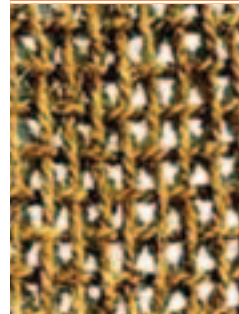
EROSION CONTROL BLANKETS

Coir / Straw Blanket

50% coir + 50% straw (homogeneously mixed) biodegradable erosion control blanket, with or without seed. Bound with polypropylene (pp) or jute mesh. Relatively slow decomposition. For use on moderately erodible soils; gentle to steep slopes; moderately exposed locations; moderate rainfall intensity ; occasional stream flow. (Fixing pins are available).

Coir Blanket

100% coir (coconut fibre) biodegradable erosion control blanket, with or without seed. Bound with polypropylene (pp) or jute mesh. Slow decomposition. For long term protection of highly erodible soils; steep slopes; exposed locations; high intensity rainfall ; high rates of water run-off; seepage flows; moderate stream flow. (Fixing pins are available).





Soil Nailing Blanket

Coir geo-composition high strength soil stabilisation, erosion control and revegetating blanket incorporating multiple geogrids. Suitable for very steep slopes, including soil nailing applications. Available preseeded or unseeded. (Can be manufactured to specification).

Coir Netting

100% coir durable high strength mesh for dry slopes, reclamation and lining water channels. Traps and holds soil particles to build up slit or, to enable establishment of mature protective vegetation. (Fixing pins are available).



Jute Netting

100% biodegradable unbleached jute mesh for erosion control, hydroseeding and revegetating. Provides cellular seed containment and favourable microclimate for rapid seed germination and establishment of viable protective vegetation. (Fixing pins are available).



Coir Mulch Disks & Blankets

100% biodegradable needlepunched coir mulch incorporating organic binders. BonFlora provides maintenance-free environmentally friendly weed control around trees and shrubs. Working life - 3 years. (Fixing pins are available).



Also available: Straw blanket - coir loop blanket - coir filter blanket - pre grown sedum or herb blankets - faggots - willow panels - rockrolls. Mild steel, wood or plastic fixing pins and timber stakes. Most products can be manufactured to specification.





ADVANTAGES

Erosion control products offer the following significant advantages for protecting slopes, drainage channels, stream banks, and shorelines etc:

- Prevent loss of precious topsoil to wind and water erosion.
- Provide excellent conditions for quick, healthy vegetation growth.
- Provide long-term protection for dormant seeding during winter months.
- Stabilize slopes from erosion to protect roadways and keep them safe and clean.
- Protect water quality in lakes, rivers and streams.
- Permanently reinforce the root and stem structures of vegetation.
- Easily conform to landscape features.
- Lightweight for easy handling and transportation.

A range of mild steel, wood and plastic fixing pins and timber stakes, suitable for the above-mentioned products.

A complete range of geotextiles and other products including rabbit netting are also available.



Failed riverbank before reconstruction



Regraded bank before vegetative establishment



Riverbank after 1 years growth

