

Coir Pallets

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Description

We produce and pre-establish high quality Coir Pallets with mature aquatic vegetation for numerous applications.

Coir Pallets can be an excellent technique for establishing native marginal vegetation around lake edges, streams and rivers banks.

Coir Pallets are an organic living revetment and provide erosion control and rapid vegetation establishment.

Coir Pallets are produced as 1m and 0.5m wide units to suit various applications.

Coir Pallets are available unplanted or pre-established with mature native wetland plants. Standard plant mixes are available from stock all year round or specialist mixes can be contract grown to order.

We have developed a range of specific species mixes for use in all types of water bodies.

We plant our pallets at a high density and grow on at the nursery from between 12 to 24 months to ensure that the vegetation is dense and provides an instant hardy cover.



Mature Coir Pallets are often used for ecological restoration projects where mature vegetation needs to be established rapidly, noticeably for protected species such as Water Voles and Great Crested Newts.









Applications

- Water Vole Habitat Creation
- Wetland & Reedbed Establishment
- Habitat Ponds & Great Crested Newts
- River Restoration
- River Bank Erosion Control: Bioengineering Solutions



Applications

Water Vole Habitat Creation

Water Voles are the fastest declining mammal in the UK and habitat loss has been a major factor in this decline.

Efforts to improve water vole habitat quality and quantity form a key part of any ecological restoration or habitat mitigation scheme and using mature "pre-established" Coir Pallets is a recognised best management practice in order to achieve these goals.

Our Water Vole rolls are grown for between 12 to 24 months so that the vegetation is mature and provides the fastest method of establishing water vole habitat available.

Plant species are selected that provide both cover and a food source and water voles have been observed amongst the vegetation within mature Coir Pallets within days of installation.





Coir Pallets after 4 months creating mature Water Vole habitat



Reedbed planting <u>after 10 mo</u>nths

Wetland / Reedbed Establishment

Many wetland schemes need a kick start in order to get the target vegetation established and mature "pre-established" Coir Pallets are an ideal establishment method.

Sometimes fluctuating water levels, river flow and grazing can make natural colonisation difficult or even impossible.

Pre-established Coir Pallets are grown to maturity and are therefore more resilient than any other form of plant establishment technique.





Newly installed Coir Pallets at Wisley Golf Course



River Bank Erosion Control: Bioengineering Solutions

Pre-established Coir Pallets can be used as a part of a "Soft Engineering" (Bioengineering) approach to dealing with bank erosion.

The mature planting and Coir Pallet (mix of coir fibres and coir netting) provide an excellent cover for exposed soils and the mature vegetation slows water flows locally to reduce erosive forces.

As our Coir Pallets are grown to maturity the root matrix is dense and will lock into the underlying soils very quickly and improve soil stability rapidly.

The result is a soft engineered bank with instant habitat and stability that becomes more resilient with time as the plants establish fully into the bank.

Habitat Ponds & Great Crested Newts



Our pre-established Coir Pallets are extremely effective for rapid establishment of pond habitat suitable for newts as part of a habitat mitiaation or creation scheme.

Our Newt Mix is established at our nursery to full maturity with species known to provide newt habitat and uses plants that allow them to lay their eggs on.

River Restoration

Driven by the Water Framework Directive, river restoration has gained momentum in recent years.

Coir Pallets are widely used for marginal, emergent and bankside plant establishment within river restoration schemes.

It has been observed that establishing target native vegetation using mature pre-established coir pallets can reduce the risk of invasive plant species colonising river banks after restoration.









Unplanted and pre-established Coir Pallets

SPECIFICATION

Net Specification

Net Material:

3mm coir twine yarn in a square mesh pattern **Net Opening:** 50mm

Stuffing

Virgin coir mattress fibre:

Not less than 50mm length, typically 100mm to 150mm

Optimum depth of evenly distributed stuffing: 40-50mm with approximately 2.5kg of coir fibre per m2 dry weight

Standard Pallet Sizes

2m x 1m x 40-50mm depth 2m x 0.5m x 40-50mm depth



Pre-established Coir Pallets

- Coir Pallets are established at our specialist UK nursery with a proven track record of growing high quality coir products.
- Coir Pallets are planted at a rate of 20 plants per m² and grown outdoors in wet beds to create a hardy plant.
- Minimum growing period is 6 months during the growing season (March – September).
- Roots of plants are grown extensively through the bottom of the coir pallet to create a dense mat of root and rhizome.
- We grow a variety of species to suit different sites. Many species may be available in stock and if not they can be contract grown to order.

Contact us for correct species choice at specification stage

Excellent rhizome growth on mature pre-established Phragmites Coir Palle

Plant Species Selection

Standard mix*

- Apium nodiflorum (Fools Watercress)
- Alisma plantago-aquatica (Water Plantain)
- Carex acutiformis (Lesser Pond Sedge)
- Carex flacca (Blue Sedge)
- Caltha palustris (Marsh Marigold)
- Glyceria maxima (Sweet Reed Grass)
- Iris pseudacorus (Yellow Flag Iris)
- Filipendula ulmaria (Meadowsweet)
- Juncus effusus (Soft Rush)
- Lycopus europaeus (Gypsywort)
- Lysimachia vulgaris (Yellow Loosestrife)
- Lythrum salicaria (Purple Loosestrife)
- Myosotis scorpioides (Water Forget Me Not)
- Mentha aquatica (Water Mint)
- Phalaris arundinacea (Reed Canary Grass)
- Ranunculus flammula (Lesser Spearwort)
- Schoenoplectus lacustris (Common Club Rush)
- Valeriana officinalis (Common Valerian)

Monocultures

- Alisma plantago-aquatica (Water Plantain)
- Caltha palustris (Marsh Marigold)
- Carex acutiformis (Lesser Pond Sedge)
- Glyceria maxima (Sweet Reed Grass)
- Iris pseudacorus (Yellow Flag Iris)
- Lythrum salicaria (Purple Loosestrife)
- Mentha aquatica (Water Mint)
- Myosotis scorpioides (Water Forget Me Not)
- Phalaris arundinacea (Reed Canary Grass)
- Phragmites australis (Common Reed)
- Ranunculus flammula (Lesser Spearwort)
- Schoenoplectus lacustris (Common Club Rush)

Floating Wetland & Water Vole Mix*

- Carex acutiformis (Lesser Pond Sedge)
- Carex pseudocyperus (Cyperus Sedge)

- Glyceria maxima (Sweet Reed Grass)
- Iris pseudacorus (Yellow Flag Iris)
- Lythrum salicaria (Purple Loosestrife)
- Mentha aquatica (Water Mint)
- Phalaris arundinacea (Reed Canary Grass)
- Schoenoplectus lacustris (Common Club Rush)

Newt Mix*

- Apium nodiflorum (Fools Watercress)
- Lythrum salicaria (Purple Loosestrife)
- Potamogeton natans (Broad Leaved Pond Weed)
- Myosotis scorpioides (Water Forget Me Not)
- Mentha aquatica (Water Mint)
- Veronica Beccabunga (Brooklime)

*typically contains a mixture of these plant species





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