

Medmerry Realignment Mitigation Work



Medmerry from the air, photo courtesy of The Environment Agency®

Salix worked with The Environment Agency and Team Van Oord on the Water Vole mitigation work at the Medmerry Realignment project, West Sussex.

Medmerry is one of the stretches of coastline most at risk of flooding in southern England. The overall scheme involved building major new sea defences inland and allowing a new intertidal area to form between Selsey and Bracklesham in West Sussex, impacting an area of Water Vole habitat.

Salix, working as a specialist sub contractor and supplier worked on 7km of ditches in total, 4km where plants were translocated from adjacent donor sites and 3km where Salix's pre-established Coir Pallets and plug plants were used, creating vital new habitat for Water Voles. The pallets were planted with Salix's Water Vole habitat species mix to ensure a high rate of success.

Products Used

- **Coir Pallets**
- **Native wetland plants**



New ditches for Water Vole

Creating natural solutions

Salix were asked to review the establishment methods for the wetland features creation. We based our recommendations on the following criteria:

- Establish vegetation to allow suitable water vole habitat by March 2013 (one growing season only!)
- Establish the maximum amount of habitat within a fixed budget
- Focus techniques within key/priority areas
- Limited donor sites of aquatic macrophytes for translocation with a very short time frame.

Therefore 3171 metres of pre-established Coir Pallets and 3100 metres of high density wetland plug planting was required to make up the shortfall.

2930 metres of vegetation from the centre of existing Water Vole habitat ditches was carefully removed under close supervision. The vegetation was translocated into the newly created ditch network at average water level.

Each particular plant species or community of vegetation was dug at different depths and translocated and placed in the new channel differently to reflect the species specific needs.

The establishment of the translocated material has been a great success with over 3km of new bank habitat to maturity in only a four month period.



Coir Pallets installed April 2012

Proven effective

A report was commissioned with Brighton University which involved monitoring of Water Voles and their adaptation to their new habitat.

The report, written by Rowenna Baker, concluded that areas with pre-established Coir Pallets provided excellent and immediate cover for Water Voles.

“Areas established from translocated vegetation and coir matting provided the most amount of cover at this time and was where the majority of water vole signs occurred.

By September 2014, the number of signs and distribution of water voles had increased in response to the increased cover provided by establishing vegetation.

The distribution of water voles was significantly influenced by the planting scheme with activity and breeding colonies favouring the translocated and coir matted areas.”

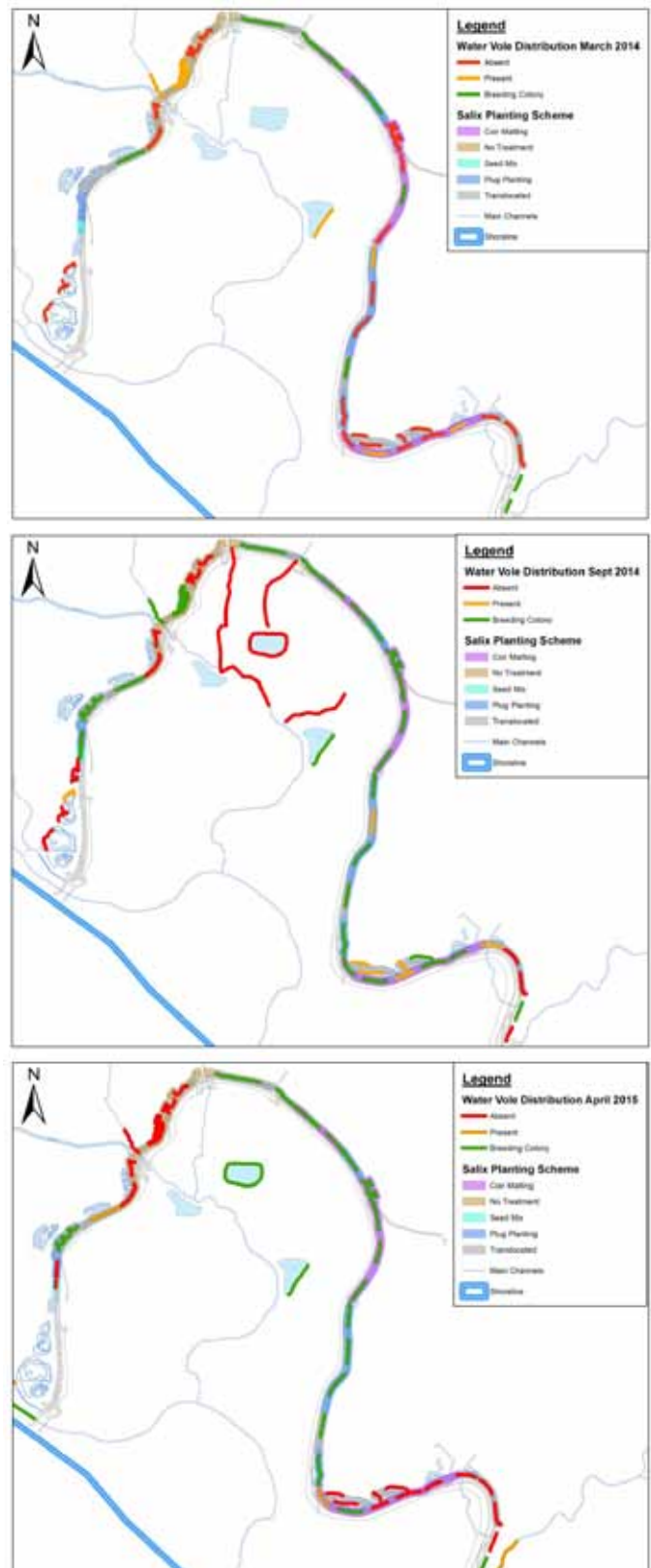
The report also concluded

“The coir matting provided the highest species richness, as determined by the vegetation surveys carried out in autumn 2014, and has been consistently favoured by water voles.

As the plug planting establishes to provide greater cover, this has become increasingly favoured by water voles.”

Many thanks to the report’s author, Rowenna Baker, The Environment Agency and Brighton University for allowing us to use their data and distribution maps.

Commissioned Report Water Vole Monitoring
Medmerry Coastal Realignment Scheme - Rowenna Baker ©



Distribution maps provided by Rowenna Baker MSC, University of Brighton

Improving success rates

The species rich planting ensured an excellent success rate in the translocation of this sensitive species.

Pre-established Coir Pallets and the diverse species mix were crucial to the project and meant that there was suitable habitat immediately available for the translocated Water Vole.

The plug planted areas came into their own a little later but also rapidly increased the availability of habitat to the Water Voles.

Where no treatment occurred then few or no Water Vole have been found.



Regrowth in new channel August 2012



Rowenna Baker

Water Vole are being monitored using radio transmitters



New habitat for Water Vole 4 months after installation