

## Sandbag growing method

We use this method for growing small groups of plants for establishment in wet areas, the bags are used in shallow water (up to approx 30 cm). The technique gives a quick and safe way of planting without the need to dig planting holes under water.

The bags are laid out in the water (onto the soil/silt/gravel) – spacing depends on species and the area to be planted – and as the plants are actively growing they will soon root through and anchor in the substrate. Where the bags will be under water we weight them by putting gravel in the bags with the growing medium or on top at time of final planting on site.

These bags are biodegradable and will soon break down. The use of bags also reduces competition from pre-established vegetation, and will allow establishment if Crassula is a problem in the water body.

### Materials required

Starter plants, growing in large plugs or small pots (9cm max.)

Hessian sandbags ( <https://mudfords.co.uk/collections/sandbags-and-ibc> )

Growing medium (We use Melcourt Sylvagrow peat free, nursery stock grade)

Controlled release fertiliser (CRF)

Gravel

Growing media, fertiliser, pots etc. from horticultural wholesalers.



Controlled release fertiliser  
Various makes available (Osmocote, Basacote, etc.). We generally use a 2–3 month release time



Put approx 10 litres of growing medium into a bag. Add gravel at this stage if needed.



Tie with hessian string supplied



Lay the bag on its side and even out the growing medium



Cut evenly spaced slits in the bag—just big enough to get the starter plant through. 3–4 plants per bag is usually OK. Put some CRF pellets into the growing medium at each hole (5–10 pellets).



Remove plants from pot or tray, push one into each hole and firm them into the growing medium. Once a bag is finished carry it flat holding both both ends and place onto a suitable growing area, water them and keep moist. The bags are approx, 30x60cm so you may need a large flat area, ideally fairly close to the final planting site.



Mixing spp. also works well.

We recommend laying the bags onto polythene sheets and leaving the plants to root into the bag, in summer we have found 2–3 weeks will give adequate growth – watch for roots under the bag – so that they can be moved into the planting site. You may need to protect from pests – rabbit/deer!!

*Note – The amount of fertiliser used is just enough to get the plants started in their new habitat: the actively growing plants use this fertiliser and there should be no significant release into the water body. However, if you are working on a particularly sensitive site such as an oligotrophic or mesotrophic lake, or a Site of Special Scientific Interest, you can omit fertiliser.*

If you think your plants will need a longer growing period in the bags before moving to their final planting site you may need to use the Rot-proof bags – the ordinary hessian does not last very long during the warm summer – the rot proof bags are wax coated and will last much longer but do eventually break down.

We have used the rot proof bags for spp. such as *Schoenoplectus lacustris* which needs about 60cm of water. The plants need a longer time before planting out, so we use the bags open and upright with gravel at the bottom and then some growing medium holding the plant. The bags are held in tanks with about 30cm water. Once established they can be moved into the deeper areas with a boat or raft and safely lowered onto the water body floor using the full 70cm length of the bag; with sufficient gravel they stand upright and still root into the soil. This is a safe way of dealing with deep water planting especial if you are working on unstable silt!

The sandbag preparation is great for community volunteer involvement