

Planting

Appropriate methods

Development and implementation of appropriate methods requires experience and familiarity with species' growth habits and life histories. Numerous methods have been shown to establish seagrass successfully; however, familiarity with handling and planting methods, as well as the ability to work in or under the water, are requisite. The familiarity of an individual with these plant communities is inversely proportional to the difficulty encountered in executing a planting. Low-bid contractors must at least have seen the species involved and, if needed, have the ability to snorkel or SCUBA dive. Inexperience can lead to project failure.

Planting strategies can be divided into SCUBA and non-SCUBA assisted operations. In either case, once the required acreage for planting is decided, the planting area should be clearly marked off so its boundaries are visible from the surface (e.g., poles, buoys). Experienced boat operators and SCUBA divers may be required. The decision to utilize SCUBA does not necessarily mean that depths are over one's head. Where the water is deep enough to prevent a snorkeling diver from reaching the bottom without breath-holding, a person walking and either handing planting units (PUs) to the diver or pre-placing them for installation can greatly reduce physical exertion. Various combinations of planting and providing PUs to the planter will work effectively. Some experimentation will typically improve efficiency by best utilizing the skills of the personnel involved.

Plug method

Plugs of seagrass with the associated sediment can be harvested using a core tube. Core tubes (Fig. 2) are used to remove plugs from the donor bed and transport them in the tube to the planting site. The tube (usually 4- to 6-inch diameter PVC) is inserted into the



Figure 2. Demonstration of core tube on sand beach. Planting on beach for demonstration only. (Top) 4-inch diameter PVC core tube with 1-inch PVC tube installed and sealed. Removable metal handle inserted in tube for coring. Rubber stopper loose on top for insertion into sediment. Note beveled lower edge of 4-inch tube to aid in cutting rhizomes. (Right) Core tube after twisting into sediment to depth of ca. 20 cm. Rubber stopper is in place in plywood plug that was screwed in place and bedded in sealant. Placement of the stopper creates a vacuum that allows the plug of seagrass to be withdrawn from the substrate. Removal of the stopper allows the plug to slide out of the tube into the substrate for planting.

