INSTALLATION GUIDELINE FOR KOIRLOGS

- Determine on site where the installation should begin and end. Usually installation begins downstream. Sediment and erosion control measures such as silt fence and sediment barriers should be in place of disturbances on work site. Prepare the site of installation by removing large rocks or other such obstructions. Re-grade slope, if necessary. Gradual slopes flatter than 2:1 are preferred.
- Determine the mean water elevation. Mark the level on a stake driven into the substrate 1 to 2 feet off-shore. KoirLogs should be 1/2 to 2/3 below mean water elevation for the survival of vegetation (Fig. 1).
- KoirLogs must be level, installed along a horizontal contour and parallel to the streambank. KoirLogs can be installed adjacent to the shoreline (Fig.2 & Fig. 3) or away from the shoreline (Fig. 4 & Fig. 5) depending on the prevailing physical conditions.
- When KoirLogs are installed adjacent to the shoreline, drive pencil point hardwood stakes (2" x 2" x 36") through at least 2 loops of the outer netting of the KoirLog on the waterside. Stakes can be spaced 3' on center for medium flow conditions and 2' on center for rapid flow conditions. KoirTwine or BioTwine can be used to tie the logs to the stakes. Stakes should be driven down so that the top of the stake is level with the top of the KoirLog. KoirLogs shall be placed along the streambanks at a height sufficient to protect the shore from flows or waves. Additional KoirLogs may be stacked above the lower logs to protect the upper shore or streambank (Fig. 3).
- When KoirLogs are installed away from the shoreline, the area behind the logs can be backfilled and covered with KoirMat to create an aquatic shelf (Fig. 5). Alternatively, the area behind the log can be stabilized using pre-vegetated KoirBed (Fig. 4). For off-shore applications, drive stakes 1 to 2 feet on center along both sides of the KoirLog in parallel rows. Lacing across the stakes is a good method to hold the KoirLogs in place. Weave lacing back and forth across the KoirLog and attach the lacing to each stake using knots, notches, staples or nails.
- Adjacent KoirLogs must be laced together, end to end, tightly and securely with KoirTwine or BioTwine (Fig. 6).
- Ends of the KoirLog not abutting another KoirLog must be bent towards the shore and dug into the bank to prevent the water from flowing behind the KoirLogs causing them to be pulled out.
- Plant the KoirLog with appropriate native plant species after the KoirLog has been submerged in water for a short period of time. Insert fingers or a planting iron through the outer netting to create a hole for the plant plug. Gently push the plug deep into the KoirLog. Recommended spacing of the plant plugs is 4" to 12" along two lines in a staggered pattern.
- Cover the root ball by wrapping coir fiber around the base of the stem. Check to ensure that the plants have been firmly installed in the substrate. Plants and materials have to be monitored approximately 3-4 weeks after installation to ensure the success and survival of the plants and the integrity of the materials.

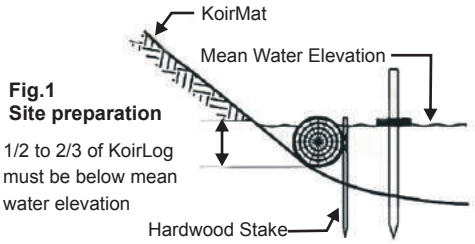

Fig.1
Site preparation

1/2 to 2/3 of KoirLog must be below mean water elevation

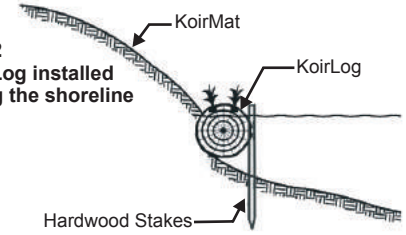

Fig. 2
KoirLog installed along the shoreline

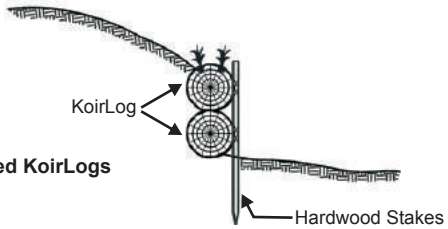

Fig. 3
Stacked KoirLogs

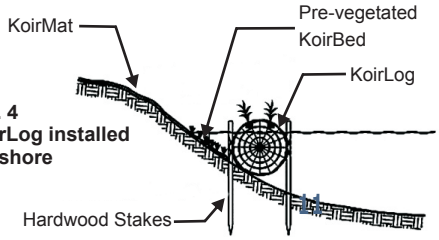

Fig. 4
KoirLog installed off-shore

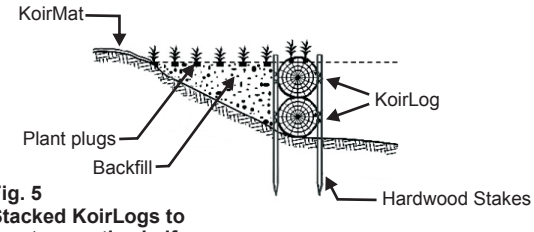

Fig. 5
Stacked KoirLogs to create aquatic shelf

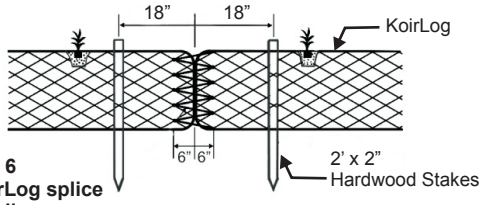

Fig. 6
KoirLog splice detail