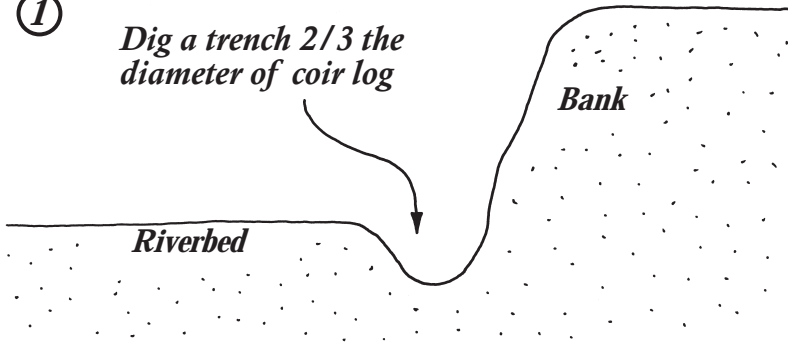


Coir Logs Step-by-Step

①

Dig a trench 2/3 the diameter of coir log



②

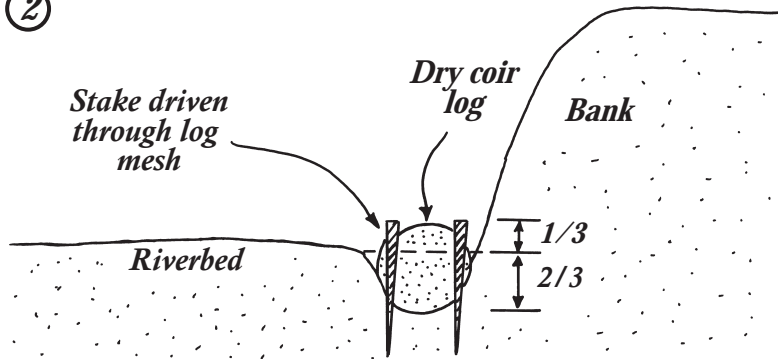
Stake driven through log mesh

Dry coir log

Bank

Riverbed

1/3
2/3

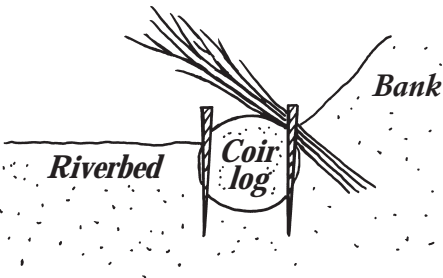


Install coir log during periods of dry riverbed or isolate area (See silt fence installation). Secure log with wooden or live stakes woven through coir log mesh and driven into earth. Stake log into place every foot on both sides. Tie adjacent logs together with biodegradable twine. Compact soil around logs. Secure the upstream and downstream ends by positioning coir logs so they transition smoothly into a stabilized bank.

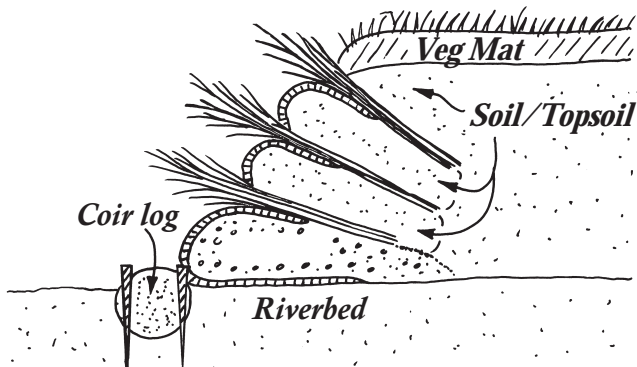
③

Alternatives using coir logs for securing toe of slope depending upon site:

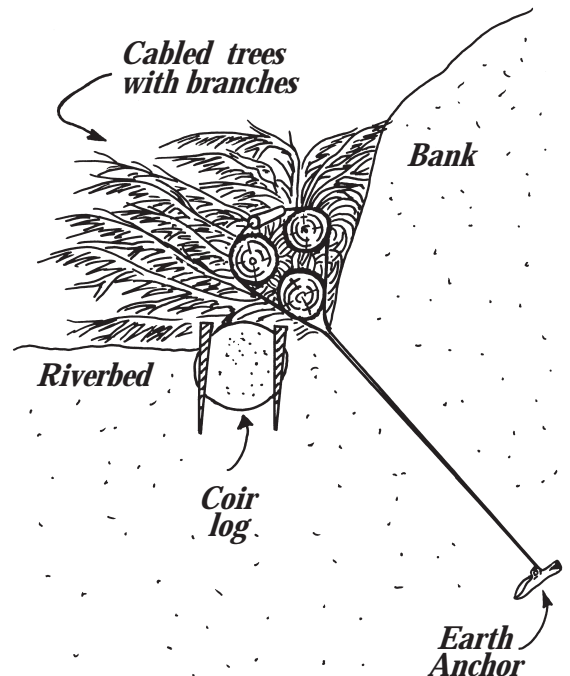
(a) Crisscross layers of dormant cuttings 15 stems per linear foot (See live siltation). Trim willow after installation.



(b) Brush Layering



(c) Spruce Tree Revetment



Coir Logs

Coir logs are constructed of interwoven coconut fibers that are bound together with biodegradable netting. Commercially produced coir logs come in various lengths and diameters. The product needs to be selected specifically for the site. Fiber logs composed of other sturdy biodegradable materials may function equally as well.

Applications for coir logs occur in many streambank, wetland and upland environments. The log provides temporary physical protection to a site while vegetation becomes established and biological protection takes over. The logs can provide a substrate for plant growth once the log decay process starts and protects native and newly installed plants growing adjacent to the log. This technique can be used as a transition from one revegetation technique to another and used to secure the toe of a slope in low velocity areas. Both the upstream and downstream ends of the coir log(s) need to transition smoothly into a stable streambank to reduce the potential for wash out.

Install the logs to ensure contact with soil along the entire length. In most cases, excavate a shallow trench to bury the log 2/3 into the soil. At no time should the coir log span any open space that may occur between rocks, logs or uneven ground. Tie logs together that have been placed end-to-end and staked into place every foot (dependant on site conditions) on both sides. Wooden stakes or live stakes with biodegradable twine may be used to securely anchor these logs by interweaving supports and driving them into the bank. To provide fish habitat, use coir logs in conjunction with spruce tree revetment (see next section) and/or revegetation techniques.

Advantages:

- Requires minimal training
- Biodegradable toe-of-slope protection
- Easy installation

Disadvantages:

- Moderately expensive
- Least effective toe protection of techniques listed in this manual if used by itself
- Not recommended for high velocity areas