

BRANCHPACKING

Branchpacking is the layering of live branch cuttings and compacted soil to fill small holes and slumps in a streambank.



Figure 13. Active branch packing system

Advantages and Disadvantages

- Branchpacking is used to fill holes or gullies (two to four feet in height and depth).
- The branches root and stabilize the soil to the bank.
- An immediate barrier is provided to reinforce the bank and prevent bank erosion from overland flow.
- Branchpacking is an effective and inexpensive method on small projects.
- Natural vegetation is established.
- Branchpacking should not be used on an eroded bank with holes greater than four feet in depth and four feet in width.
- Branchpacking should be established flush with the existing bank to prevent scouring.
- Branches need to be long enough to reach from the face of the existing bank to the back of the fill or gully.

Materials

- Rootable live cuttings, one-half to two inches in diameter and three to five feet long.
- Stakes five to eight feet long and three to four inches in diameter or two- by four-inch lumber.
- Adequate supply of backfill to fill the area.

Preparation

- Clean out the bottom of the hole to ensure a good foundation.
- Slope the bottom of the hole towards the rear of the bank.
- Use rock to stabilize the toe of the fill.

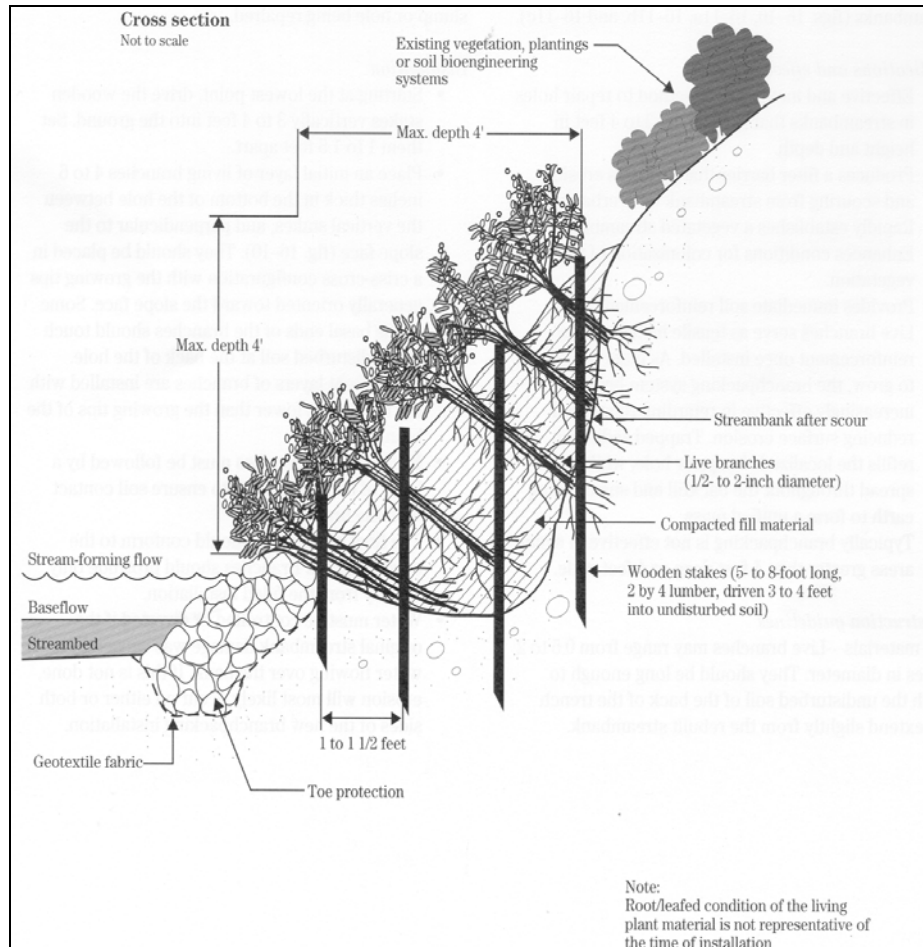


Figure 14. Active branch packing installation

Installation

- Drive stakes vertically three to four feet deep into the ground and about one foot apart.
- Combine the first layer of branches with some rock.
- Compact the soil above the first layer.
- Repeat with branches and compacted soil.
- Place the basal ends of the branches lower than the growing tips and against the back of the hole.
- Continue layering the branches and stakes up until the level of the existing streambank.