

PRIMARY USE: Minimize bank erosion.

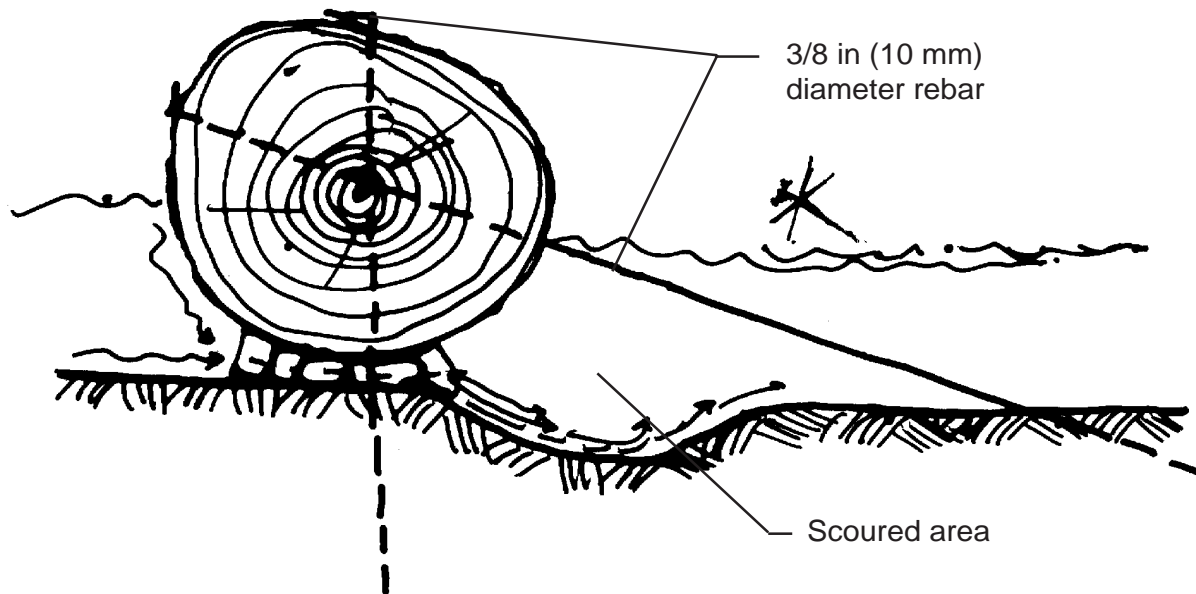
ADDITIONAL USES: Provide desirable scouring and sorting of channel materials, pool formation, added flow and habitat diversity, and redirection of currents through flow constriction.

UNDERPASS DEFLECTOR/DIGGER LOG

What is it? This device is a variation of a wing deflector suitable for use on small streams. It is often used in combination with other in-channel treatments to increase circulation in pools and enhance pool quality.

Purpose

This structure is used to "blow out" silt and soft bottom materials, thereby scouring a pool. Overhead cover is also provided. When installed so that there is no end-cutting or undercutting, they will last for upwards of 15 years.



**Underpass Deflector / Digger Log
Section View**

Limitations

Bank erosion and formation of unwanted silt bars downstream can reduce the effectiveness of underpass deflectors. Debris dams may be formed.

Materials

Natural materials on site, and #3 (3/8 in, 10 mm) steel rebar.

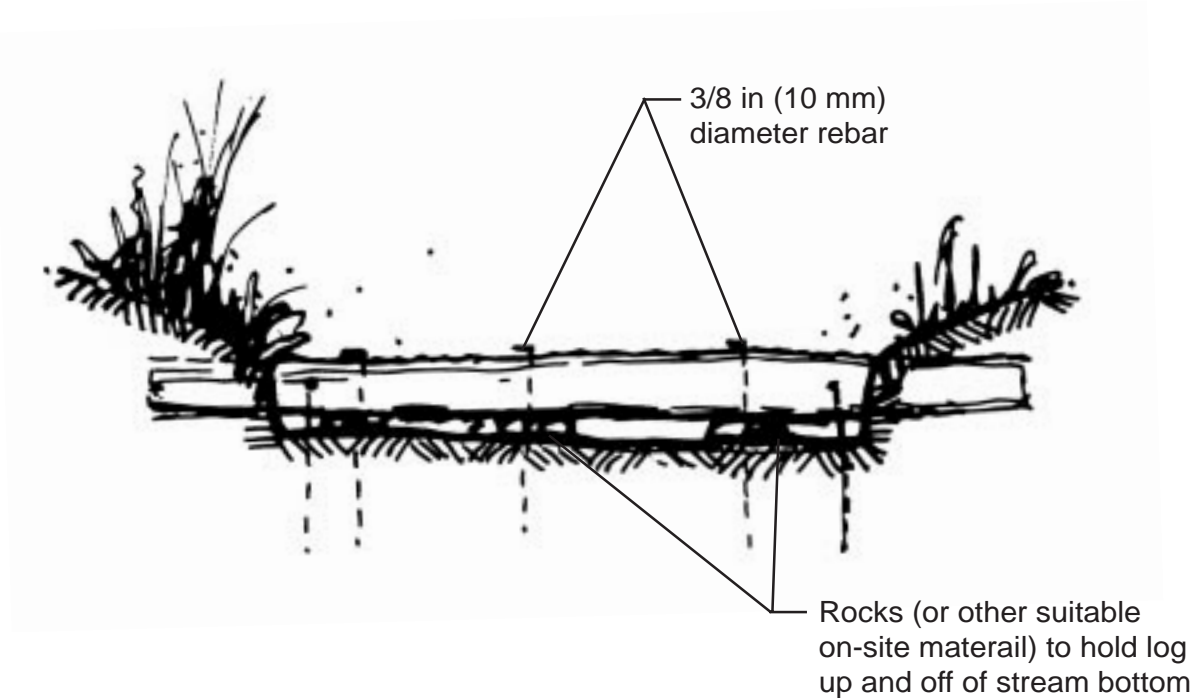
Installation

Construction consists of setting the main log across the channel 2 to 5 in (51 to 127 mm) above and off the bottom. The ends are anchored well into the bank and braces on the downstream side can be added for additional stability.

Source: The Restoration of Streams and Rivers, Gore, James A.

UNDERPASS DEFLECTOR/DIGGER LOG

Additional Drawings:



**Underpass Deflector / Digger Log
Section View**