



Structures Requiring Foundations

Bog Bridge

A bog bridge is a form of puncheon. Normally, bog bridges have a single- or double-plank tread surface resting directly on mud sills (sleepers) (figure 50), cribbing, or piles. A puncheon, by contrast, will usually have stringers resting on the mud sills or sleepers, with tread decking nailed perpendicular to the stringers.

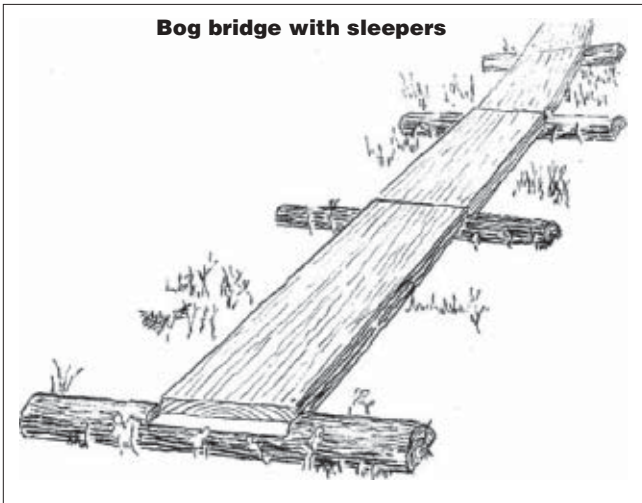


Figure 50—A simple bog bridge with sleepers. This common structure is also called a single-plank boardwalk in coastal Alaska.

To add to the confusion over terminology, in coastal Alaska, bog bridges are called boardwalks, or step-and-run boardwalks if spacers are used to create steps (figure 51). In other places, the term bog bridge is synonymous with puncheon. In parts of the Rocky Mountains and Sierras, bog bridge equates to turnpike, a structure we described as a raised walkway of stone and fill material. We define bog bridges as a series of connected, short-span bridges close to the ground.

The tread of a bog bridge is usually treated, rough-sawn 3- by 12-inch plank that is 6 to 9 feet long. The plank parallels the centerline of the trail and rests on closely spaced, lightweight foundations. This means that the tread of the bog bridge can be closer to the ground, perhaps only 6 to 12 inches above it, providing 3 to 9 inches of clear space below the tread. There is little to block the flow of water (in either direction) below the plank, and little to resist the force of floodwater going over it. In the backcountry, bog bridges are normally one 12-inch plank wide. A plank this narrow does little to interfere with plant growth underneath. The span of each of these small bridges will vary with the type of wood used for the plank, the thickness of the plank, and the anticipated weight on the plank. In areas of heavy, wet snow, the snow may be the heaviest weight on the bridge. Snow load may be as much as 300 pounds per square foot in such areas. If the bog bridge is more than 2 feet high, it should be two planks wide for safety.

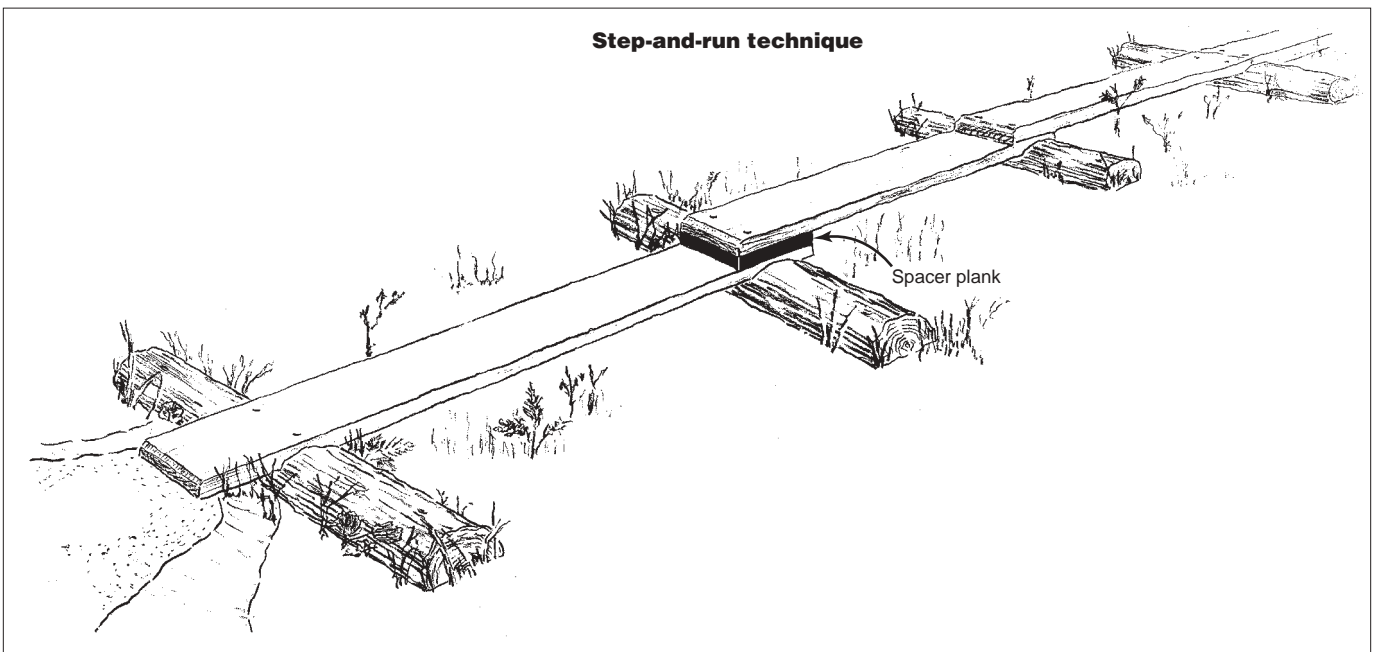


Figure 51—The step-and-run technique is a way of keeping planks level as elevation changes. Level planks help reduce slipping in wet climates.