Why Build Trails?

Once you have created or restored a woodlands, you will need appropriate access to manage and enjoy the natural area. Trails open your woodland to many recreational and educational opportunities. They also provide the access needed to monitor woodland conditions and identify management needs.

Access is necessary, but without properly planned trails, you may do more harm than good. Poorly planned and managed trails may cause erosion, cut through sensitive habitats, cause soil compaction, and become safety problems.

Trail Construction Guidelines

There are seven steps to take for planning and building your trails.

Step 1. Inventory the Woodland
You have already done this in your previous woodscaping activities. From what you know about your property, identify points of interest, different habitats, and physical features such as steep grades or water bodies.

Step 2. Decide the Trail’s Purpose
Most people overestimate their need for access. Carefully consider why you need access and what you need to accomplish from the trail. Most trails will be built so you can enjoy a walk in the woods. However, if you are developing an area and know it will take several years to complete, you may need to create a special trail that allows you access for this work. Also, decide if your trail is strictly for pedestrians or if it should accommodate vehicles.

Step 3. Scout the Trail Corridor
You should have some general ideas where you want the trail or trails to go, so now get out into the woods and walk the areas. Take a map along so you can make notes about special features or obstacles. Look for deer trails and other wildlife travel routes. These can make excellent human paths as well.

Step 4. Design the Trail
Once you have established your route, design the trail to take advantage of the topography, special interest features, and to minimize disturbance. Generally, you want to walk parallel with hillsides, use gradual curves in flat land, avoid stream and pond edges, and keep the trail width to a minimum.

Step 5. Clear the Trail
This step will remove woody vegetation that obstructs safe passage. Usually this only involves removing brush and very small trees. To avoid tripping hazards, remove old and new stumps to below the ground level. Whenever possible, do not cut exposed tree roots unless it is absolutely necessary.

Step 6. Construct the Trail Surface
You want to keep the trail surface as natural as possible. Bare earth is acceptable, but only in flat areas. You can use leaves, wood chips, and gravel. Small logs and rocks can be used to define the trail’s edge.

Step 7. Mark the Trail
If you have a large area or more than one trail, a simple marking system may be helpful for you and your visitors. The marking system can be as simple as using different colored spray paint on trees to using more elaborate manufactured signs.
Recommended Trail Standards

You may need to consult with an environmental professional on some aspects of your trail design, but by following these standards you will be able to create a useful, enjoyable, environmentally-friendly trail.

➤ Trail Layout
Design trails to cover a variety of vegetation, landforms, and sights. Trail patterns vary depending on the expectations of the user. Loop trails are most popular, but short spur trails may be used to access waterways and views. Frequently occurring curves and grade changes will add interest.

➤ Clearing Width
Vary clearing widths to avoid the tunnel effect and promote a variety of trail environments such as woodland flowers, meadow openings, and woodland edges.

- Light Use – 4 to 6 feet
- Hillsides - 3 feet

➤ Clearing Height
8 feet

➤ Tread Width
2 to 3 feet

➤ Trail Surface
Light use – natural, with gravel in wet areas
Heavy use – natural, with gravel and wood chips as needed

➤ Turning Radius
Turning radius is not critical; however, gentle curves are aesthetically pleasing and easier to maintain. Straight sections usually should not exceed 100 feet.

➤ Percent Grade
Grades exceeding 10% are difficult for hikers to traverse, and without additional protection, erosion problems often will develop. Steps, switchbacks, or water diversion devices may be needed on slopes over 25%. Occasional grade changes and dips should be incorporated into the trial layout to promote interest and to facilitate natural drainage.

- Desired - 0 to 5%
- Maximum -15% sustained
- 40% less than 50 yds

➤ Water Crossings
Structures for crossing water depend on the flow and length of the crossing and the abilities of the hiker. If large structures are required for safe crossing, the expertise of a professional may be required.

- Bridges – Must be located above ordinary high water mark or secured to prevent washout.
  - Width – 2 to 4 feet

- Fords – Slow moving water less than 24 inches in depth may be forded. Rocks and stepping stones may be used to assist hikers.