

How to Start a Fire Using the Bow Drill

Step-by-Step Instructions

Before you begin, acquaint yourself with the parts of the fire-making kit, including the bow drill, hearth, spindle, handhold, and tinder (labeled on the diagram and on the Annotated Object List). The bow drill should only ever be used outdoors in an open area by one person at a time. Please remember to check fire bans in your area before doing this exercise.

The steps below describe how to start a fire from scratch with the finished hearth wood provided. Please be careful.

1. Kneel beside the hearth as pictured in the photos. Secure the hearth to the ground with your foot.
2. Wind the bowstring around the spindle as pictured in the diagram, and then set the spindle flat-end down into the depression on the hearth.
3. Brace your left arm against your knee and secure the pointed end of the spindle with the handhold, applying pressure downwards. You can apply grease to the handhold or the top of the spindle (pointed end) to allow the spindle more ease of movement.
4. With slow, even strokes, begin to work the bow back and forth, causing the spindle to twist. Gradually work faster until it smokes, creating a hot ember. If it will not smoke, adjust the pressure applied to the spindle. The dust created by the friction should be dark brown or black.
5. Tuck a clump of tinder into the notch. Resume the correct posture as pictured, replace the spindle with the bowstring wrapped around it, and once again move the bow back and forth, adjusting for speed and pressure as you go. When smoke appears, pick up the pace until you have a steady wisp of smoke rising from the tinder.
6. Remove the tinder from the notch. It is often helpful to place a large leaf beneath the tinder before you begin to make this step a little easier. Carefully fold the tinder nest around the ember and blow on the bundle with slow, controlled breaths. As it smokes, keep blowing and tighten the nest with your fingers. Keep applying air until you get a flame.