

## Turning a Hummingbird Feeder

### Supplies Needed

- 1" Drill Bit
- Blank at least 8" Long
- Faceplate
- Revolving Center
- Silicon Glue
- Sandpaper/Finish
- Drill or Drill Press
- Waste Block
- Eyelet Screw
- Eye and Ear Protection

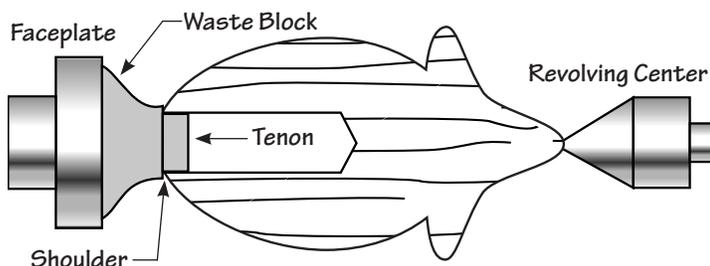
### Cutting and Drilling the Blank

1. Select a wood blank at least 8" or longer. Mark the centers of the top and bottom of the blank for drilling.
2. Drill a small hole for an eye-screw in the top and a 1" hole 6-1/2" deep in the bottom for the tube.

### Turning the Hummingbird Feeder

1. Mount a 2" thick waste block on a faceplate. Turn a 1" tenon about 1/2" long on the front of the waste block. The tenon should fit snugly into the 1" hole drilled into the bottom of the blank. Leave a small shoulder on the waste block at the base of the tenon. The tenon will center the blank and the shoulder will drive the blank while turning. (see Figure 1)
2. Mount the blank between centers with a revolving cone center on the eye-screw hole and the waste block tenon in the 1" hole. Make sure that the blank is held firmly between centers. (see Figure 1)
3. Turn the blank to the desired shape, sand and finish.
4. Glue the glass tube into the hole with a silicon adhesive glue (see Figure 2). The silicon adhesive will expand and contract with wood movement.
5. Screw the eye-screw into the small hole in the top. (Figure 2)
6. Always fill the feeder (glass tube type) completely full with cool nectar. Insert the stopper and invert quickly to avoid any air from entering the feeder. Tube feeders operate on a vacuum principle. Only if the feeder is initially filled completely full will the vacuum form.

Figure 1



### Helpful Tips for using Tube-Type Hummingbird Feeders

Tube-type feeders are very popular with hummingbirds as they simulate the shape of many nectar-bearing flows. Because these feeders are filled with water that rests on a small column of air, they may occasionally drip. Most importantly: Always fill your feeder completely full with cool nectar. Insert the stopper and invert quickly to avoid any air entering the feeder. Tube feeders operate on a vacuum principle- only when the feeder is filled completely full will the vacuum form.

Hang feeders in shade or partial shade only. The cooler the feeder, the less likely it is to drip and the food will remain good longer. Make sure to keep the feeder clean. You can use hot water (add a small amount of vinegar if desired) and a bottle brush. Never use soap and be sure to rinse thoroughly. If the feeder drips, you can soften the tube in hot water and bend it slightly to increase the bend angle. This will stop dripping but might make it more difficult for the nectar to flow.

### Nectar Mixing Instructions

1. Add 1 part sugar to 4 parts cold water and mix thoroughly.
2. When sugar is completely dissolved, you can fill the feeder. Store unused nectar in the fridge. Nectar typically stays good for a week or so in a feeder.
3. Change food once a week to keep it fresh and the hummingbirds coming back!

Figure 2

