## INSTRUCTIONS FOR ASSEMBLING THE POINT INTERCEPT FRAME AND EMPLOYING IT IN THE FIELD (You can also refer to the instruction video)

Thank you for purchasing the Point Intercept Frame (Figure 1).

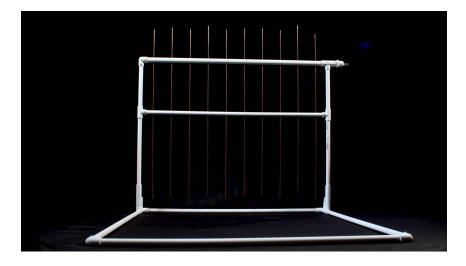


Figure 1. Assembled Point Intercept Frame

The instructions for assembling the Point Intercept Frame are as follows:

First, double check that your kit contains all the pieces referenced on the contents list, included with your kit (Figure 2).

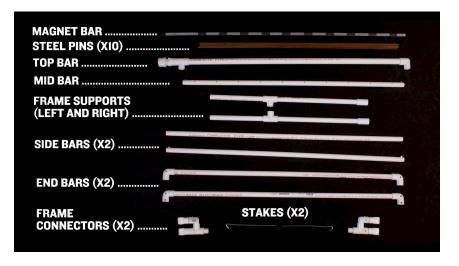


Figure 2. List of pieces in the Point Intercept Frame kit

You will find the Magnet Bar and *ten* Steel Pins and 2 stakes by unscrewing the End Cap on the Top Bar.

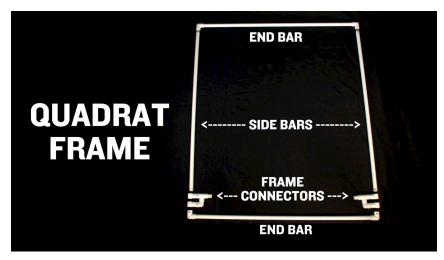


Figure 3. Pieces for the Quadrat Frame

We will start by assembling the **Quadrat frame**, (Figure 3) or the BASE Frame section. For this, you will need the two side bars, the two end bars, and both frame connectors. Lay them out as shown, with the pushpin-side UP on the Side Bars.

Depress the pushpin on the side bar to slip it into the End Bar. Now insert the second side bar into the first End Bar. Now slide the frame connectors over each side bar, with this taller end facing you. You will need to depress the pushpins to get the connectors onto the side bars. Now attach the second End Bar to the 2 Side Bars in the same manner.

Keep in mind that if you need to DISASSEMBLE any part of the frame during this tutorial, it will help to slightly TWIST the PVC pipe with the pushpin connector after depressing the pushpin to ensure smooth disassembly.

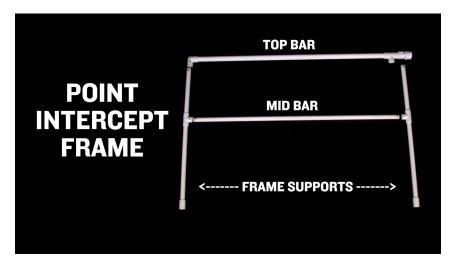


Figure 4. Pieces for the Top Frame

Next, we will assemble the Point Intercept portion, or **Top Frame** (Figure 4). Lay out the Top Bar, the Left and Right Frame Supports, and the Mid Bar as shown. Make sure the pushpins on the Frame Supports and the Mid Bar are facing up. Attach the Mid Bar to the Left and Right Frame Supports first. If you have not removed the Magnet Bar and Steel Pins, from the top bar, do so now... then attach the Top Bar.

Now that our Top and Base Frames are assembled, turn the Top Frame so that it is vertical and guide the bottom part of the Frame Supports onto the Frame Connectors, one at a time. It may help to insert the two metal Stakes into the Stake Holes on the Base Frame to keep it from moving during assembly. You will definitely want these in place BEFORE you start using your Point Intercept Frame, as they will ensure that your target area isn't altered while adjusting the Top Frame.

With your Point Intercept Frame positioned over your target area or plot, insert the magnet bar all the way to the end of the top bar. Then insert the Steel Pins into the *ten* Pin Holes along the Top Bar. If the magnet bar is fully inserted the pins should fall easily through the Top and Mid Bars and still have their tips accessible from above the Top Bar. Now pull the Magnet Bar out slightly until the pins connect with their respective magnets. You should now be able to slide the Pins up from the ground, and they will stay in place. Move the Top Frame to the desired location along your

Quadrat Frame and release the pins by pushing in the Magnet Bar. You will feel the magnets release the pins, and the pins will fall to the ground.

There are no pre-designated markings on the Quadrat frame, so with a measuring tape and a sharpie marker, you can add your own at specific intervals along the one square meter frame.

Once you are done measuring for the day and are ready to pack up your Point Intercept Frame, remember to wipe off your Stakes and Steel Pins, and place the Pins and the Magnet Bar back into the Top Bar for safe keeping. The frame connector tees may gum up over time due to plant residues and dirt. If this happens clean the side bars and inside of the tees with soap and water or a solvent. Also, you can rub a bar of soap or wax over the side bars and inside of the tees to make them slide more easily. And as a reminder, it will be easier to disassemble pieces with the pushpin connectors if you give the pushpin end a slight twist as you depress the pushpin.



The Point Intercept Frame is made to last for a long time, but after consistent usage, the sheathing that holds the magnets onto the Magnet Bar may wear thin and need to be replaced. In order to make repairs in the field we suggest that you have on hand some

double sided tape and half-inch

inch diameter shrink-wrap sheathing. These can be found at your local hardware store. If the pins (which are gas welding rods) should get bent or lost, you can purchase them from your local welding supply company.



To replace a worn-out magnet sheath, first ensure that you are repositioning the magnet in the same spot that it was originally. The double sided tape will mark the spot where the magnet goes. Reapply new tape, if necessary. Now slip the sheathing over the magnet making sure it is about in the middle, and while holding the bar in one hand, use a lighter to shrink the sheathing

onto the Magnet Bar. The lighter can be as close as necessary to melt the shrink wrap, and should not flame up, HOWEVER... the strong magnets may want to pull the lighter towards the bar, so be aware of this while applying the new sheath. You can also use a heat gun to shrink the sheathing.



Thanks again for purchasing the Point Intercept Frame. If you have questions or suggestions, contact Forestry Suppliers.

## INSTRUCTIONS FOR USING THE POINT INTERCEPT FRAME (PIF)

- 1. Set the frame over your plot making sure the frame connectors are situated so the tallest part is nearest you and at the beginning of the plot. The position of the frame connector is important because you will notice that the quadrat frame is rectangular in shape and longer than a meter by about 5 cm. This extra length is necessary because the frame connectors have two tees rather than just one, which means that without the extra length you would not be sampling the entire meter.
- 2. As stated before, the frame connector tees may gum up over time due to plant residues and dirt. If this happens clean the side bars and inside of the tees with soap and water or a solvent. Also, you can rub a bar of soap or wax over the side bars and inside of the tees to make them slide more easily.
- 3. Once you have the PIF situated over your plot and the pins are in the up position, release the pins by pushing in the Magnet Bar. You will feel the magnets release the pins, and the pins will fall to the ground. You will now record all plant species that are touching each pin (both at the ground level and along the entire length of the pin). You can also record other layers on the ground such as bare soil, moss, and thatch.