

BSNE Dust Collector Installation

Materials:

Rubber Mallet
Compass
Scissors
BSNE Collector(s) with hardware
Pole
Flathead Screwdriver
Measuring tape
Sharpie
Numbered metal tags
18 gauge wire (~8cm)
Wire Cutters
GPS
BSNE Installation data sheets

Site Selection along a 35m transect:

1. Starting from either point of the transect, pace out 17.5m towards the center of the transect line.
2. At 17.5m, pace 5m perpendicular and out from the transect in the down-slope direction.
 - a. If soil is too shallow, pace 5m perpendicular from opposite side of the transect *towards* the upslope side of the transect.
 - b. If soil is still too shallow, move up or down the transect line by 1m to place the pole.
3. Pole does not need to be exactly 5m from line, but rather it is important to place collector so that it is equidistant to the surrounding vegetation. For example, if there is a “ring” of four trees, place the collector in the center of the ring.
4. The pole should be placed so that collectors are not touching any plants in the full 360 degree rotation.
 - a. Any small plants that may be in the way of the collector can be trimmed to ground level with scissors.

Installation:

1. Mark 20cm from the bottom of the pole. Use a rubber mallet to pound pole into soil, 20cm is the minimum installation depth but deeper than 20 is preferably.
2. Place pipe clamp first, then washer onto pole along with the wind vane.
3. Measure 15cm from the surface of the soil to the lip of the dust collector
 - a. Generally, these measurements have been taken starting from the upslope side of the collector to ensure that the wind vane has enough clearance for movement.
4. If placing more than one collector on a pole, measure from the soil surface to the lip of the collectors and adjust to the desired height.
5. Measure the distance from the lip of the collector to the surface of the soil at the 4 cardinal directions (north, south, east, west). The average should be within +/- 1cm or so of 15cm.

6. Cardinal measurements do not need to be retaken for collectors at 50cm and 100cm, but should be taken for at least one of the cardinal directions.
7. After installation, record data and take a GPS point.
8. Secure metal tag with wire and record number; tag number should correspond to the GPS waypoint number.
9. Record location and bucket height data on datasheet.

For poles with one collector at 1m:

1. Follow initial protocol for installation, but place two hose clamps below the pipe clamp and washer.
2. Install three duckbill anchors into ground in a triangular formation around the pole.
3. Attach a cable turnbuckle to duckbill cable.
4. Measure cable and attach to pole and duckbill by looping through Nico crimp, then crimping.
5. Tighten each turnbuckle so that pole is standing upright and level; duct tape turnbuckles so they don't loosen.