

Hello Nuts.

Some sites that have deployed our nitrogen sensors have found that occasionally birds will use them as perches and defecate into them (see figure). As you can imagine this is a problem if we want to accurately measure nitrogen deposition. This seems to occur rarely, but most often in areas where the N collector is the highest point in the bird's territory. If the collector is near the herbivore enclosure, for example, the taller posts of the enclosure seems to be the preferred perching spot. We have also not had issues with these at sites where it is located near a weather station or next to a corn field.



We have struggled to come up with a solution to this that would both deter birds and be secure enough not to blow out. Then, EUREKA!, while fencing in my garden we came up with the following solution: the "bird crown". This crown has a wire tail that extends down into the tube which seems to secure it well enough and we have not observed bird defecation in those we have deployed.



For those with N collectors we propose the following options:

Do nothing

This option is best if birds do not perch on the funnels or you do not observe “deposits” in the funnel. Also if you visit your site infrequently and cannot otherwise observe your funnels, this is your option. However, if you do nothing and subsequently notice bird deposits please note upon submission.

Make your own bird crown – instructions attached

This is very simple and requires a wire cutter and small scrap of wire fencing. Maximum time involved <15 minutes (longest time is spent acquiring the scrap of fencing).

Request a bird crown

This would come flat and require manipulation to force it into the proper shape to get it into the funnel. Please email Lori (lbied@iastate.edu) to request crowns for your site.