GPS Surveying Protocol

GPS Setup

- Turn on the data connection (bottom-right icon, to the right of the Bluetooth icon), hitting OK to start it.
- Start TopSURV after the connectivity icon stops moving
- Start a new job each day with the above naming format
- Configure \rightarrow Global \rightarrow Code file \rightarrow choose STIPASPARTEA.xml (should be on flog too)
- Wait for the Network Connection screen to start up and connect. After you close that screen you'll hear the chk-CHK noise of a cocking shotgun. This means you're almost ready to go
- In the Topo collection screen (in the Survey menu), wait until you get a Fixed connection
 - While you wait, click on the Settings button
 - Change the Solution type to "Fixed and Float", but don't take data points when Float isn't giving very good accuracy; make sure to have 20cm or better accuracy when beginning to take points on Float
 - In Auto Accept, change "Num Means to Avg" to 20
- Shutting down
 - Close TopSURV by clicking the X in the top right.
 - \circ $\;$ Turn off the data connection via the bottom-right icon
 - \circ Hold the power button until the device shuts down (several seconds)

Taking the points

- Sidle up on the north side of the plant
- Holding the pole keeping the bubble centered, begin GPS point collection. Wait until the data entry screen pops up
- Name the point
 - Use the lookup ID for the sites (when you know them, otherwise make it obvious. For example, WOOD_1 for the first Woody's point)
 - The point will increment automatically
 - If it's not Echinacea, name it with the site and a descriptor (eg SAP_SURVEY for the surveyor point by the pole)
- Enter the data:
 - site (select your site)
 - textLocId (tag number and demo codes, the same thing you give to Stuart when poling, eg 86753.3S1)
 - survNote (notes, if necessary)
 - alias (if you pulled a tag while you're GPSing)
 - demo_on_visor (true or false; if you're doing rechecks and take demo, select true. Make sure to put it back to false on the next point if necessary)
 - actually_echinacea (this will usually be true; only select false when you're GPSing some landmark, but this is uncommon. Make sure to put it on true for the next echinacea)

Computer work

- Plug the USB cord into the computer and Topcon
- Start TopSurv and Import From Device into the appropriate project folder.
- Fix data as needed

• Export data as Topcon XML (the one not in a sub-category)