**FORESTGEO INVASIVE SURVEY 2018**

The SCBI plot is 25.6 ha (400 m x 640 m) divided in 640 quadrats of 20m x 20m. The goal of this survey is to visit every quadrat and evaluate the amount of select invasive species.

**METHODS**

We follow Shen et. al. (2016) as a reference for this survey.

* Percent cover classes will be used to evaluate the presence of *Alliaria petiolata* (garlic mustard), *Microstegium vimineum* (Japanese stilt grass), *Oplismenus hirtellus* (wavyleaf basketgrass), and *Polygonum perfoliatum* (mile-a-minute).
  + **0** = absent; **1** = 1 - 25%; **2** = 26 – 50%; **3** = 51 – 75%; **4** = 76 – 100%
* Common woody invasive species will be counted individually, *Berberis thunbergii* (Japanese barberry), *Elaeagnus umbellata* (autumn olive), *Lonicera japonica* (Japanese honeysuckle) [how many trees have honeysuckle on them], *Rosa multiflora* (multiflora rose), and *Rubus phoenicolasius* (wineberry)

**In the office:**

1. Select column to survey.
2. Print data sheet for the corresponding column (located in V:\SIGEO\Invasives\Invasive 2018\Data)
3. Equipment:
   1. Clipboard
   2. Small pad of paper and pencil
   3. Compass
   4. Check Rebar\_Tag paper to see if Rebar or Tags need to be replaced on your column

**In the field:**

1. Navigate to selected column. At SCBI, a blue re-bar located in the SW corner gives the quadrat names. For example, if the tags says 6-12 it indicates you are in column 6, row 12. It will be read as quadrat 612 in the database or field form.
2. Orient yourself from the rebar.
3. Start surveying from the southern end and work north in a sweeping pattern.
   1. If multiple surveyors in one quadrat, split the quadrat and total data once both surveyors finish their section.
4. COLLECTING DATA:
   1. Counting Individual Plants:
      1. For woody species “*all stems emanating from one rooting point is counted as an individual*” (Shen et al. 2016)
      2. Some quadrats will have upwards of 100 individuals; use a small notebook to keep tally marks of the individuals you have counted and give the final total to the data recorder.
   2. Collecting Percent Cover:
      1. Percent cover is a visual estimation by all data recorders in the quadrat and fit into the corresponding cover class.