

## Data Collection Protocols -- NY-NJ Trail Conference Invasives Strike Force

BEFORE YOU LEAVE: Ensure that you have all the necessary equipment. At least 10 copies of data sheets, clipboard, pencils, GPS unit with extra batteries, trail map, camera, binoculars, knife or clippers, plant id guide(s), data collection protocols (this doc) plus your usual hiking gear such as water, snack & sunscreen/bug repellent.

At the top of your datasheet, record the **Date**, **Location** (Park and Trail name), and your full **Name(s)**.

- I. FIND THE RIGHT TRAIL SECTION. Travel to one end of your assigned trail section.
  - ❖ TURN ON YOUR GPS and ensure it is communicating with satellites. Ensure that you are ready to start looking for invasives.
- II. START POINT Take a GPS reading at your Start Point – record the waypoint number or your GPS location on the datasheet.
  - If you are recording waypoint numbers, write the number as it is shown on the GPS unit in the **GPS Point #** field (e.g., if it shows 002, write 002 not 2).
  - If you are recording GPS coordinates, use the **Notes** field. Use **decimal degrees** if you can set the format of your coordinates (e.g., 40.76542 N, 74.54163 W) or you can use degrees/minutes/seconds (e.g., N 40° 19.808' W 074°08.881').
- III. SCAN FOR INVASIVES Begin slowly walking your section scanning for invasive trees, shrubs, vines, and herbs. Refer to the data sheet to remind yourself of what species you are looking for. Look close to the trail (within 15 ft on either side) and further out (15-50 ft) as visibility allows. There is no need to walk off the trail to look unless you wish to satisfy yourself of correct id by getting a closer look (try using your binoculars first). It's ok to miss small individuals and singles that are further away from the trail -- we don't expect you to see everything.
- IV. RECORD OBSERVATIONS. Observations can be the fact that you have NOT seen anything OR occurrences of target species.
  - ❖ If you have not seen anything after walking approximately 100 ft, stop and take a GPS reading. Record the **GPS Point #**. Write a "0" in the Species Code column, then continue walking.
  - ❖ If you see a target species before you have walked 100 ft, stop and take a GPS reading for that species.
    1. Record the **GPS Point #** or GPS coordinate
    2. Write the 4 letter **Species Code** in the next column. The codes are listed on the right hand side of the data sheet.

*If you are uncertain of your ID, make notes in the Notes column or datasheet margin. Take photos if appropriate. Make sure to include leaf shape, branching*

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pattern, flowers or fruit and an overall view of the plant. Record your photo numbers next to the row on the datasheet.

3. Record **Distance** from the trail

Looking around you approximately 50 ft in each direction, does this species occur within 15 ft of the trail, is it visible 15 – 50ft off the trail?

**T** = trailside only (0 – 15 ft from the trail)

**D** = distant from trail only (15-50 ft from the trail)

**TD** = both trailside and distant

4. Record the **Abundance** of this species looking approximately 50 ft around you.

Abundance is one single estimate for the entire population of this species that you can see within the 50 ft radius circle around you regardless of if they are trailside or distant.

**F** = Few – 1 to 3 individuals or total patch size 1' x 1' for smaller herbs

**S** = Some – 4 -11 individuals or a few scattered patches.

**M** = Many – 11 – 100 individuals. For smaller herbs, thin bands all along trail but not elsewhere, or big patch but doesn't cover more than ½ of your 50 ft circle.

**X** = Extensive – more than 100 individuals. Small herbs/vines – covers more than ½ of your circle. (or It's everywhere!) [We use X instead of E so it's not confused with the F's]

Use common sense with this category. If it "seems" like a *few* or it "seems" like *extensive*, go with that. If you are one category off, it's no big deal (e.g. it's ok if you put *few* when it should be *some*).

5. Record the **Habitat Code** for the kind of Habitat this species is primarily occurring in at this location. Sometimes more than one category will fit, use the one that *most* of the individuals occur in within your 50 ft radius circle.

**1** = Forest – mostly trees. Looking up, about ½ or more of the sky is obscured.

**2** = Scrub – this is an area that is mostly shrubs (woody plants) with possibly a few scattered trees.

**3** = Meadow – a field or meadow with mostly grasses and flowers, with possibly a few scattered shrubs or trees.

**4** = Water – in the water or very close to the water's edge (within 1-2ft)

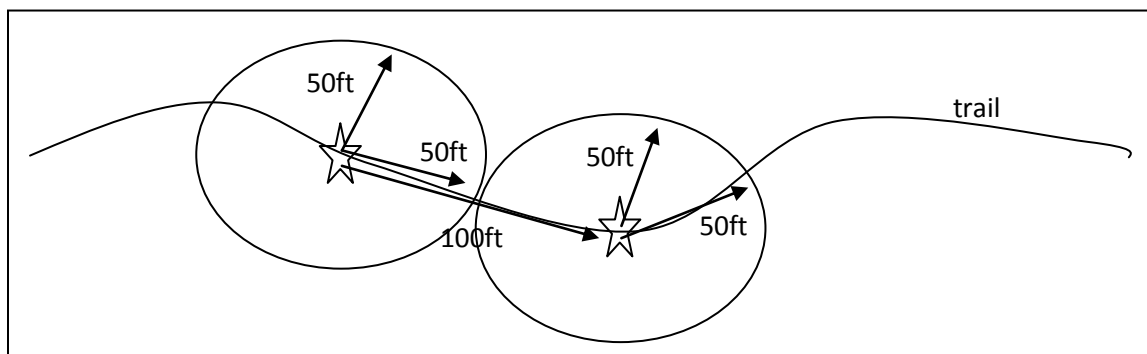
**5** = Edge – this is the boundary between two of the above habitats.

**6** = Planted – you should rarely have to use this. Only put this selection if it is very clear that they were planted (like they're all in a row along a path or geometric or equally-spaced arrangements)

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If you are on a trail that has forest on one side and meadow or street on the other, record Forest (1) if most of the individuals are in the forest and distant from the trail, record Edge (5) if they are near the trail or road.

6. Record additional observations for each additional target species you see at this same location. Use the same waypoint (GPS Point #, or coordinates) for each species at the same location.
7. Resume walking your trail section. Walk at least 50 ft (to the edge of your imaginary circle) and begin looking for target species again. After you have gone another 50 ft (100 ft total from your previous GPS point) or when you encounter a new target species you did not see in the previous observation, stop and record a GPS point, imagine a new 50 ft circle and record the species as above.



- ❖ These 50 ft and 100 ft measurements do not need to be exact, just approximated. If you are in a highly invaded area where you are recording multiple species with Many or Extensive abundances every time you stop or you are consistently recording **0** observations with none of the target species, and you are getting this for more than 2 such points in a row, lengthen the distance between observations to 200 ft (you'll still be looking in a 50ft circle but stopping less often). Until your observations become different (less invaded or more invaded, respectively), then go back to 100 ft apart.

### V. END POINT

Once you reach the end of your trail section, or if you decide to stop collecting data for the day and resume another time, take another GPS reading and record it as your END POINT.

Record your End Point waypoint (GPS Point # column) or GPS coordinate (Notes column) and write "END POINT" across the species code and distance fields of that row.

- ❖ Feel free to update or correct your observations upon your return, or if as you start to move off from your recorded GPS point, you notice additional individuals.