

Data Collection Protocol 2009

PROTOCOL FOR VOLUNTEER DATA COLLECTION

Equipment: clip board, data sheets, ID materials (booklet, crib sheet, Xeroxed pictures) collection bags, pedometer, compass, ropes, flagging tape, flags, and GPS.
Binoculars and pocket knife are recommended.

For your assigned two miles:

1. Based on your map, drive to or hike to one end of your segment.
2. Note on the datasheet the location of the end that you start at (e.g., 'trail head on 7 Lakes Drive,' 'on Laurel Pond Trail, at intersection with Wingdam Rd Trail' etc.).
IMPORTANT: if your assigned trail has one end on a road or crosses a road, start at the road (use parking permit if necessary), and mark the data points for validation (see below) starting at the road.
3. Start data collection at this point. Label the first data point on the first data sheet with the trail segment name and '01'. Fill out the information at the top of the first data sheet.
4. Walk 10-15 feet into the woods. Face the right side of the trail (facing in the direction that you're hiking). Record on the data sheet the direction in which you are facing (1 or 2).
5. For the first 11 points, place a flag off the trail, about 1 foot into the vegetation, and put pieces of flagging tape around 3 plants close to the flag (the nearest trees or hanging from a bush).
6. Take a GPS reading for the point. Record the accuracy value on the GPS on the data sheet.

IMPORTANT: if you can't get a reading on the GPS, mark the point with 3 pieces of flagging tape, and make a note on the data sheet.

7. Lay out your ropes: 10 foot ropes on either side of the flag point, and each 6 foot rope going into the vegetation from the 10' rope ends (i.e., mark out a rectangle 20 ft x 6 ft, centered on the flag).
8. Observe the vegetation within the rectangle. Look first at the trees, then at the shrubs, then at the herbs. For trees, binocs may help you see the canopy leaves. For all exotic species observed, confirm the identification¹ (**IMPORTANT – SEE BELOW**) and enter the code in the data sheet. Mark the 'distance' column with '**T=TRAILSIDE**'. Make a judgment about the abundance of the species within the rectangle:
 - a. F = 'Few' = less than 3 individuals of the species'
 - b. S = 'Some' = more than 3 individuals, but less than complete cover
 - c. M= 'Many' = ground is completely covered by this species
 - d. If you are unsure about the abundance category, note in parenthesis the other possibility (example: 'S(M)')
9. Observe the vegetation directly behind the rectangle (estimate where the back line of the rectangle is located). Without going off the trail, scan for exotics (again, trees, then shrubs, then herbs). Record all exotics observed on the data sheet with the

¹ **SEE DIRECTIONS BELOW ABOUT TAKING A SAMPLE OF THE FIRST SPECIMEN YOU IDENTIFY OF EACH EXOTIC SPECIES**

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distance code ‘**D**=Distant.’ Estimate the abundance as above. Don’t go off the trail to check the species.

10. Repeat steps 7 and 8 for the other side of the trail. Before starting the plant observations, note the compass direction you are facing in the “Trail Side” column.
11. For points with no invasives observed, enter the data point number and write ‘NONE’ across the data line.
12. Observe all land-use indicators on either side of the trail, any distance. Record the point number (trail code plus data point number) and check off all indicators observed. If none are observed, write ‘NONE’ across the data line.
13. Hike 0.1 mile to the next point. Use the pedometer to determine your distance and don’t forget to note if any invasives are found in between points (place your observations on the lines for your previous point—it does not matter which line).

For the ‘validation’ trail.

The validation trail is approximately 1 mile long, with 11 data points marked with flags along it.

1. Locate the ‘start’ stake It will be an orange flag along the side of the trail, with NY/NJTC and project logos printed on it.
2. Start data collection at the ‘start’ stake.
3. Follow the same methodology you used for your 2 mile trail segment.
4. NOTE: if you do not find any exotics, simply make one entry for that point and write “none” in the species column.
5. Once complete, walk to the next flag.
6. Complete the 1.0 mile of marked trail. (Z1 to Z11).

Once you have completed both your 2 mile segment and the validation trail mile:

Return the data sheets, plant press materials, and your GPS unit to the trail conference office. .

PLANT PRESS:

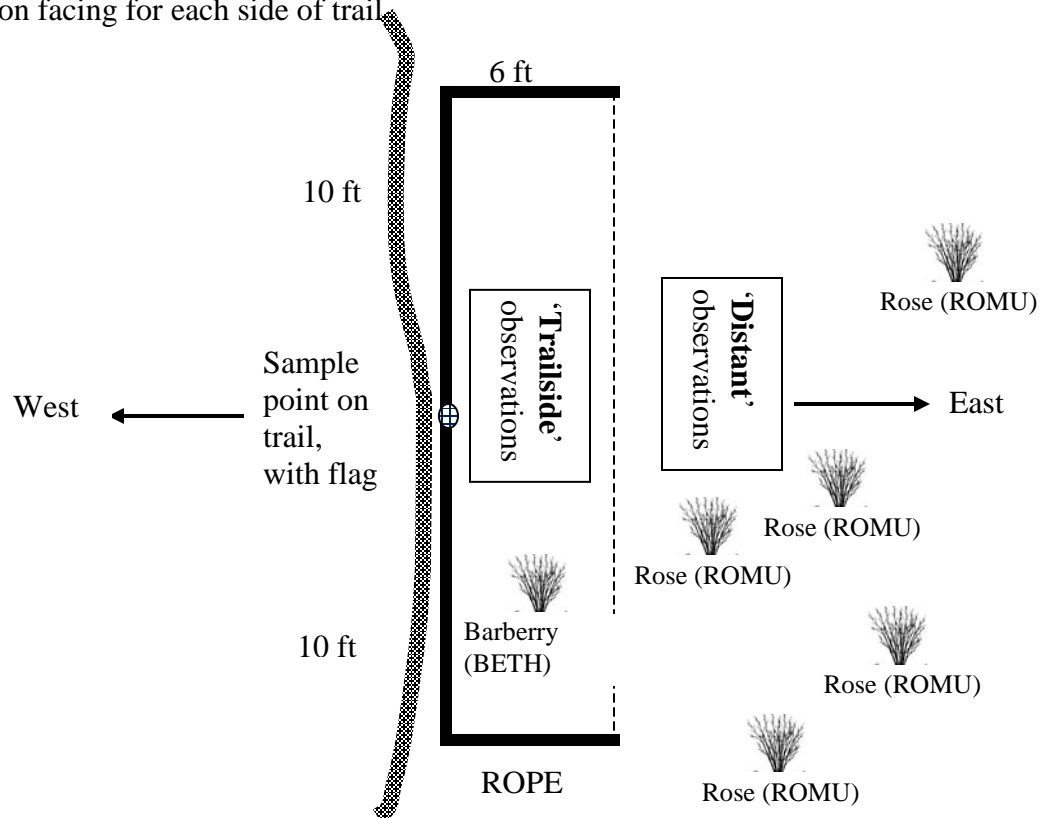
VERY IMPORTANT: The first time you identify each invasive species (on your experimental trail), clip a piece that is long enough to allow verification of the identification (10 – 15 inches, with leaves and buds of woody plants and vines; a whole plant for herbs). Place a piece of tape around the stem with the point code (09-Park code+trail code+point number) written on the tape, and place the labeled sample the white bag.

Use the plant press when you return home to preserve the specimen. Place the specimen inside a folded piece of newspaper or newsprint, write the trail ID and point number and your identification of the plant on the newsprint. Lay out the specimen as fully as possible, so that leaves and stems are clearly visible. Layer pieces of paper towel between the pieces of folded newsprint, and then tighten the straps around the press as much as possible.

Keep all specimens in the plant press until the debriefing session.

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Diagram of sampling protocol: do one side of trail, then on the other.
Note direction facing for each side of trail.



This would result in the following data:

POINT #	GPS ERROR	TRAIL SIDE	DISTANCE	SPECIES CODE	ABUNDANCE	BETWEEN-POINT SPECIES
			T= trailside D= distant		F=few S=some M= many	
O1	27 feet	1	T	BETH	F	
		2	D	ROMU	S	BETH