

Land Use Indicator Presentation Notes

Slide 1: There are many signs visible in the forest that give us clues about how the land was used over the past several decades. This presentation will go over some of the easily-observed indicators that you can use to fairly easily tell areas that have been forested for a long time from areas that were used for farming or pasture up until the mid-1900s. Observations both in our area and elsewhere in the Northeast suggests that exotics may be more common on land that was previously used for farming, and is now reverting to forest. Therefore, we would like to collect some information about the presence of indicators of past agricultural use as we collect the data on the occurrence of the exotic species.

Having learned these indicators, you will find that you can ‘read’ the history of a forest easily as you hike through it (or even as you quickly drive down the interstate on your way to a hike).

Slide 2: Here is the data sheet you will carry, and fill out for each data point after collecting information about any exotic plant species that are present.

We have divided up the indicators into categories, to make it easy to record your observations. You just need to put a check mark for any indicator that you observe at each data point. Let’s now review the various indicators.

Slide 3: After collecting the exotic plant data, scan the entire site (both sides, all distances) for evidence of prior land-use. Use the “land-use data” data sheet for this data; it already has all the point numbers recorded; you only need to enter your volunteer code, the park and the trail letter on the top. You only need to indicate IF you see any of the categories in the data sheet - put an ‘X’ or a checkmark in each box. You might see several indicators at point, or you might see none. If you don’t see any indicators, write ‘None’ or “N” under ‘NOTES’ for that point. You do not need to indicate anything about the location or abundance of the indicators, but you are free to make observations about the indicators, if you wish in the “notes” column.

Slide 4: STRUCTURES refer to anything constructed by people - walls, foundations, buildings, wells, mines, etc. These are undoubtedly the most obvious, and the best-known, indicators in the woods. Here are some typical pictures of stone walls. These were built mostly to clear land of the large rocks that made plowing or planting impossible, as well as to delimit individual fields or pastures. They definitely indicate some kind of either pasture or crop land-use.

Slide 5: “Structures” include many types of things, some not easily identifiable, but all obviously constructed at some time in the not-so-distant past, that indicate that people were using the land for living (building foundations) or working.

Slide 6: Some trail segments go along, or cross, old roads that are no longer used for vehicular traffic. You should note whether a point is on such a road, or if such a road is evident from where you are standing.

Woods roads may be paved, or gravelly, or just dirt, but they are wider and flatter than foot paths, and often have two parallel tracks from the wheels of carts.

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Slide 7: OPEN FIELD: Sometimes, especially along ridge tops, there are no trees present, or only scattered individuals, and the vegetation is mostly grasses and herbs. Note such points as 'open field'.

Slide 8: Young forests have many very small trees, often growing very densely. There may be a few large trees present; often these are along stone walls or the edges of old roads.

Slide 9: Open-grown trees: Often, farmers would leave a couple of trees in pastures to provide shade to the animals. Trees that grow up in open fields - or along streets - have a different growth form than trees that grow up within forests. They grow with branches spreading out widely, often all along the trunk. This is, of course, what makes for a really beautiful shade tree in a back yard!. In contrast, trees growing up within a forest grow straight up, and don't invest in low branches or spreading branches, because all the light is at the top of the canopy. Trees that grew up in an open field therefore stick out like a proverbial 'sore thumb' when surrounded by forest-grown trees. Here are a few examples - you can clearly see that these trees have very different shapes from the typical forest tree. The presence of such an open-grown tree is a certain indicator that the land surrounding the tree was an open field or pasture when the tree was growing.

Slide 10: Here is another example of an old pasture tree (open-grown) surrounded by young woods (lots of very small trees).

Slide 11: Rights-of-way: Many trails cross, or go along, rights-of-way for electric transmission lines or gas pipelines. If you hike in our region, you have undoubtedly crossed these features, and will recognize them. Note it on the data sheet if your sample point falls within or along the edge of a right-of-way

These indicators should be easy to recognize. Again, all you need to do is observe the forest around each data point, and put a check mark on the data sheet for any and all indicator(s) that you see at a point.