Monitoring Pasture Succession

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Year-to-year changes in botanical composition

The interplay of animals and plants in the pastures and woodlands of New York result in a succession of changes over time. This ecological succession can result in pastures that are more productive or less productive, but never remain the same. Succession also may change the pasture in such a way that what was once ideal for goats would now be more profitable as a resource base for cows, or vice versa.

We will discuss a few methods of monitoring the ecological succession of a pasture and demonstrate and practice one of them [Step Point Transect)

Ground Photography Aerial Photography Permanent Transects

Step-Point (See attached instructions)
Ring Toss

Overhead line

Estimate of useful standing forage.

For many pasture management purposes, it is important to estimate how much feed is present in a pasture right now. Depending on how this is information is taken, it can be used to plan the next movement of animals and/or fences, assess the impact of grazing in general or estimate the amount of forage taken (when contrasted with exclosures).

- 1) Pull standard wire clothes hanger into a square. This should be about 9" by 9" (81 square inches). Adjust calculations for other size hangers.
- 2) Toss hanger onto pasture and clip forage to final grazing height desired.
- 3) Put forage into pre-weighed paper bag.
- 4) Weigh forage fresh and/or after drying.
- 5) Multiply weight in ounces by 2.4 to get forage present in tons per acre.
- 6) Take at least five estimates from a pasture. (5 samples for one bag)

 Dry sample can be sent to a lab for nutrient analyses.

Step-Point Transects to Monitor Pasture Species Composition

- 1) Fine a transect line between two landmarks and note its location
- 2) Start walking from one end of the transect to the other
- 3) After 5 steps, stop with your heel on the ground and your toe above the ground.
- 4) Let your welding rod slide down the front of your boot
- 5) Identify and record the first thing the rod touches
- 6) Continue until you have 30-100 points. Come back along the transect, if needed.

In addition to pasture plants, you may note: dried plants, bare ground, rocks, manure, etc.

Species or object	Tally Marks	Number	Percentage
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