

Meander Survey Guide (Modified from LCCMR Guidance)

This survey method can be used when surveying vegetation and tracked in the Habitat Friendly Solar monitoring form in the above document.

Rationale

Documenting species presence and relative abundance provides useful information for assessing the outcomes of the project work and the condition of restored or enhanced habitats (Wortley et al., 2013). This standard data collection and presentation process provides a consistent format for reviewing evaluations and comparing outcomes.

Meander Guide

Site assessors should conduct a meander survey of project sites noting species presence and cover range using the following guidelines.

- Meander surveys involve walking “randomly” through a site and noting each new species—in particular, noting where planted species occur and their percent cover
- The base meander time is 30 minutes, unless the entire solar site can be covered in less time. If three or more new species are identified during the last 10 minutes of the timed meander, then an additional 10 minutes are added to the meander. This should be repeated until less than three new species are identified within the 10 minutes. The timing should be paused while identifying plants, taking photos, collecting specimens, etc.
- Conduct a separate meander for each unit/area with a unique seed mix
- Note location of field meanders and time surveyed on a map to be attached with the data form.

Percent Cover

Scientific Name	Common Name	Percent Cover	Species Planted/Seeded*	Species Status [^]
<i>Echinacea purpurea</i>	Purple Coneflower	1%	Yes	Non-native
<i>Phalaris arundinacea</i>	Reed Canary Grass	25%	No	Invasive

List the percent cover (relative cover) of individual species. The total cover of all species can be greater than 100%. The diagrams below can be used to estimate percent cover.

In the species list indicate if the species was planted. For the species status column indicate if species are native (to Minnesota), non-native (to Minnesota), or invasive.

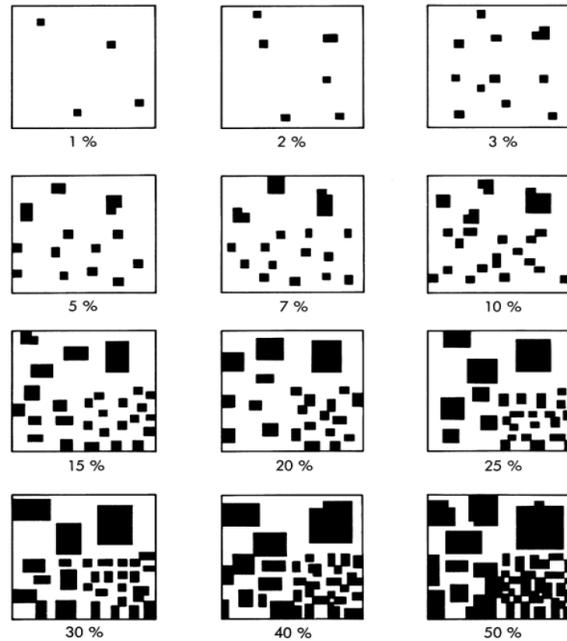


Figure 1 – Ocular guide from [Bohnen & Galatowitsch, 2016](#).

Bohnen, J, and S Galatowitsch. "Restoration Evaluation Project vegetation Monitoring Tool University of Minnesota". https://www.lccmr.leg.mn/pm_info/restoration_evaluations/Restoration_Evaluation_Project_Vegetation_Monitoring_Tool.pdf

Wortley, L, J-M Hero, and M Howes. "Evaluating ecological restoration success: a review of the literature." *Restoration Ecology* 21.5 (2013): 537-543.