

Ecologist report – July 2024. Bioblitz – Meersbrook Park.

Study of mown, eastern un-mown (ski slope) and Western un-mown (above playground).

Results:

Total count of species in the mown area was 15, in the eastern un-mown area it was 21, with 12 in the western un-mown area. The eastern area has been managed as a hay meadow for longer than the western and this is probably why it has more species.

The mown area is in general less diverse because there are only 6 species that are either abundant or frequent. In contrast in the eastern un-mown area has 15 species that are either abundant or frequent, while the western un-mown area has 12 species that are abundant or frequent. This shows that overall the un-mown areas are more diverse than the mown. If you did a quadrat record e.g. 2x2metres, you might find there are fewer species in the mown versus the unmown area. DAFOR (dominant, abundant, frequent, occasional, and rare) scale is very crude and to get a clearer idea of the species-richness people usually do quadrat samples too.

To give more detail the mown area is more dominated by a few species of big robust grasses like ryegrass, cocksfoot and Yorkshire fog, also white clover and some daisies, with most other species only occasional or rare. Some of the species in the mown area are typical of disturbed ground (e.g. greater plantain likes some disturbance creating bare soil - mower cutting too low etc). What is in the mown area generally lacks a variety of flowers that are attractive to bees, hoverflies etc, and lacks structure to feed and hide insects.

In comparison, the unmown areas are less dominated by big grasses and have an abundance of flowering plants such as catsear and autumn hawkbit that are good for insects, also both red and white clover, and the flowering grasses provide a much better structure that provides food and habitat for many insects that wouldn't have anywhere to hide in the mown grassland. With more time under the hay meadow mowing regime (this might be a better term to use in some ways) you can expect an increase in species diversity, and continued reduction in dominance of grasses. Scarification and spreading some wildflower seed or green hay from a nearby nature reserve could help speed this up

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