Report To: Planning, Leisure & Date: 14 October 2024

Environment Committee

Paula Harrison

Subject: Grass Cutting Policy 2025

1. PURPOSE

Contact Officer:

1.1 The purpose of this report is to provide the Planning, Leisure & Environment Committee with information to consider for future grass cutting.

2. RESEARCH

- 2.1 Urban green spaces that offer a variety of habitats across woodland, meadows, residential gardens, grass lawn and parks can offer multiple ecosystems however scientific research is nuanced for both the benefits of cut or uncut grass.
- 2.2 Lawn grass has the potential to offset emissions by sequestering carbon dioxide. Through the process of photosynthesis, all plants remove carbon dioxide from the air and utilize it to form new growth, including root mass. As grass roots die, they decompose into soil organic matter, fixing carbon in the soil.
- 2.3 One of the key insights from related studies is that regular mowing allows for faster decomposition of grass clippings and promotes soil health by stimulating root growth. Managed lawns, including those subjected to regular cutting, can sequester 0.3 to 3.6 Mg C/ha/year, depending on practices like fertilization and irrigation. Some research suggests well-maintained grass tends to have more vigorous regrowth, which can lead to a denser root system. These deeper root systems capture and store more carbon below ground, partially offsetting the emissions from mowing. Moreover, urban grass cutting also improves water infiltration and soil aeration, which helps reduce stormwater runoff during heavy rains and minimizes erosion compared to uncut, tall grass that can become overly dense and less permeable.
- 2.4 Sustainable mowing practices, such as reducing the frequency of mowing, no use of fertiliser, and selecting low-input grass species, can prolong the period during which a lawn remains a net carbon sink. This makes managed lawn comparable to agricultural systems or perennial grasslands in terms of carbon storage. However, the long-term impact of such management depends heavily on sustainable practices, as excessive fertilizer use and intensive mowing can reduce impact.
- 2.5 The biodiversity benefits of not cutting grass mostly relies on the removal of grass arisings and the expansion of pollinator species. The categorisation can be viewed as lawn versus meadow. Many local authorities have considered deploying different grass cutting approaches for different spaces. Often grass is often managed as either urban or rural.
- 2.6 Plantlife UK recommends several key principles for grassland management to promote biodiversity and ecological health. One principle is to reduce mowing frequency, as over-frequent mowing prevents wildflowers from completing their life cycles, which in turn reduces biodiversity. Plantlife suggests mowing only once or twice a year, outside the main flowering season from April to August. This allows wildflowers to thrive and supports diverse habitats. Additionally, a "cut-and-collect" approach is recommended, where grass cuttings are removed after mowing to prevent soil fertility from increasing. Higher fertility

- favours dominant grasses and common aggressive species such as bramble, thorns and thistles, which can suppress wildflower diversity.
- 2.7 Additionally, Plantlife emphasises the importance of avoiding soil compaction by minimizing heavy machinery use and over-grazing, as well as addressing "problem plants" that dominate and outcompete wildflowers.
- 2.8 Lawns managed at a higher mowing height have greater shoot biomass. However, a lower mowing height produces greater lawn density by stimulating lateral growth. Recent research (Braithwaite et al) suggests that a 2-inch mowing height is optimum for lawn health, broadleaf weed prevention and carbon sequestration.

3. OUR PRACTICE

- 3.1 West Swindon Parish Council manages 991,136 square metres/99 hectares of grass. On average, the first grass cuts of the season have taken place in early to mid April depending on ground conditions and finishing mid to late September. Eight full cuts were completed during the season based on the last two years. Six key principles are applied to West Swindon Parish team's approach to grass cutting as follows:
 - no mow
 - low mow
 - low mow and collect
 - high height
 - no fertilisation
 - minimal interference to tree roots

No Mow

3.2 No mow is an approach to grassed areas that are uncut due to low visibility and minimal requirement for access, play and recreation. No mow includes Eastleaze field and Blagrove footpath and supporting volunteer activity at Edgehill haven. It accounts for

Low Mow

3.3 Low mow is an approach to grassed areas that can be allowed to grow longer without any detriment to kerb appeal, sight lines or recreational use. Cuts are done at the point where the grass is growing close to a height that will be unmaintainable. This has been trialled on main roads such as Whitehill Way and open spaces such as Shaw Ridge. These spaces can create a negative impression of how well maintained an area is and can initiate complaints from neighbouring residents. In previous years, the Parish team have had low mow spaces on a rotation so that grass can recover.

Low Mow and collect

3.4 Low mow is an approach to support meadow spaces. This was trialled on Toothill Park for five years with low success on creating diverse species and has continued on Shaw Ridge FAB meadow. The collection of grass arisings is time consuming and needs specialist equipment. This has been undertaken by Lydiard Turkeys in previous years at a cost of approximately £2500 and more recently by the Parish Team through equipment hire.

High Height

3.5 The Parish Team has been cutting at a higher height for the last three years with grass being cut throughout the season at around 2 inches high. This practice has found that there is a minimal interference of low lying fauna such as daisies and buttercups as a result.

No Fertilisation

3.6 The use of fertilizers in grass areas can negatively impact carbon sequestration, primarily by disrupting the natural balance of the soil and increasing greenhouse gas emissions. The Parish Team do not apply fertilizer to grass areas.

Minimal interference to tree roots

- 3.7 The Parish Team generally avoiding grass cutting in and around newly planted tree areas and will generally avoid close cutting to trees this is also to safeguard damage to mower cutting equipment. Strimming may be deployed on an occasional basis.
- 3.8 Of the 991,000 square metres of grass maintained by the Parish low mow or no mow treatment is applied to 7.7% of all grass, and of this, 10.2% of residential grass and 32% of open space grass.

Other Considerations

- 3.8 To improve on its current practice, the Parish Council could consider enhancing its approach by the removal of grass arising. Removing grass arisings, such as clippings and cuttings, from grass areas reduces soil fertility. Grass cuttings, when left on-site, can decompose and enrich the soil with nutrients, particularly nitrogen, which encourages the dominance of fast-growing species, often at the expense of more diverse, slower-growing wildflowers and plants. By collecting and removing these cuttings, soil fertility is kept lower.
- 3.9 The removal of grass arisings would be a significant undertaking and would need to be considered on balance with fuel consumption, time efficiency, resource management and benefits. The Shaw FAB meadow is an illustration of the inputs required to minimise soil fertility to allow for more pollinators. Given the volume of grass managed by the Council, this is not practical with the current resource.
- 3.10 Where there is an opportunity to plant on rough ground, the Parish Team have planted wildflower seeds. Examples include Mead Way footpath to the Chesters and Purton Road.

4. PROPOSAL FOR 2025:

- 4.1 It is proposed that West Swindon Parish Council continues with its 6 key principles of no mow, low mow, low mow and collect, high height, no fertilisation, and minimal interference to tree roots and that the following spaces are agreed:
 - Continuation of 25 low mow/no mow sites
 - Addition of The Chesters, Rivermead and Toothill Pond (volunteer project) 12,960 square metres

5. FINANCIAL AND OTHER IMPLICATIONS:

5.1 The proposal detailed in Section 4 fits the existing staff and machinery resource. There are currently four mowers plus the five gang mower and tractor mower regularly deployed during the season. The grass cutting cycle is very weather dependent and may fluctuate. Any significant changes would need to consider any financial impacts arising.

6. RECOMMENDATION:

6.1 It is recommended that Councillors consider the information in this report and agree the proposal.

Paula Harrison

Parish Manager/Clerk

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