Impact of COVID-19 on Biodiversity in Perth and Kinross Survey Results



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1.0 Introduction

Councils across the UK are increasingly changing mowing regimes in public parks and greenspaces by reducing the amount of mown amenity grass and increasing wild areas and areas managed as wildflower meadows. Benefits of wildflower meadows in greenspaces include enhanced biodiversity value to wildlife such as pollinators, carbon and financial savings achieved through less amenity grass mowing and enhanced aesthetic variety of greenspaces. Local Climate Change Cafes are calling on Perth and Kinross Council (PKC) to change their grass mowing regime for the benefit of biodiversity.

The COVID-19 lockdown from March 2020 meant that areas of amenity grass that were normally cut by PKC were left uncut. A simple survey was designed asking residents to survey an area that has been cut normally and compare it to an uncut area while adhering to all COVID-19 lockdown restrictions and guidance.

The survey asked for simple details of wildflower, butterfly and bee species observed and included resources available online to help identify species such as Plantlife, the Wildlife Trusts, Butterfly Conservation, the Bumblebee Conservation Trust, Buglife, OPAL and the iSpot app. At least two photos were submitted for each survey: one close-up and one in context to be able to find the area in future.

The Tayside Biodiversity Partnership helped advertise the survey to local Tayside recorder groups and members of the public through social media pages.

2.0 Survey Aim

The survey aimed to ascertain if there is a difference in biodiversity in areas of grass usually cut by PKC that are no longer being cut because of COVID-19 in comparison to grass which has continued to be cut.

2.1 Survey Objectives

- 1. Gather information on the biodiversity value of cut and uncut areas.
- 2. See what happens when we just stop cutting.
- 3. Gather people's perceptions on uncut and cut grass.
- 4. Establish what management in required in future to receive multiple benefits.
- 5. Gather list of areas to focus on.

3.0 Survey Response

A total of 30 surveys were received from 17 surveyors across nine towns and villages within the Perth and Kinross Council area:

- Aberfeldy
- Abernethy
- o Abernyte
- o Blairgowrie
- o Dunkeld
- o Errol
- o Inchture
- Milnathort
- o Perth

	NO OF SURVEYS	% OF SURVEYS
Verge	15	50%
Residential	7	23%
Park	6	20%
Graveyard	2	7%

4.0 Results - Wildflowers

	UNCUT AREAS	CUT AREAS AS NORMAL
Wildflowers in flower present	100%	48%
Number of different looking wildflower species (average)	6.2	1.7
Most common wildflower species	1 - ox-eye daisy 2- buttercups	1 – daisy 2- clover
	3 – poppy, cow parsley, cuckooflower	

A total of 41 wildflower species and eight grass species were recorded. The highest number of different wildflower species in a single $1m^2$ square was 16 species.

5.0 Results - Invertebrates

	UNCUT AREAS	CUT AREAS AS NORMAL
Butterflies present	21%	0%
Number of different looking butterfly species	2	0
Most common butterfly species	White species	N/A
Bees present	62%	12%
Other insects present	53%	8%

Variables included weather and identification difficulty and during June less butterflies are observed due to the gap in two generations.

	NO OF SPECIES
Beetles	7
Butterflies	4
Moths	3
Bees	3
Birds	9

6.0 Results - Biodiversity Value

Areas were analysed for their biodiversity value dependent on number of species present. Eleven areas were scored a high biodiversity value based on the number of wildflower species present (eight and above), presence of butterflies, bees and other insects.

Of the 11 areas, eight were connected to other green areas highlighting the importance of habitat connectivity. Verges had the highest biodiversity score, followed by parks and graveyards.

From this survey, the areas with the highest biodiversity value were rural verges and rural parks connected to other green areas.

7.0 Results - Negative Impacts of Uncut Grass

	UNCUT AREAS	CUT AREAS AS NORMAL
Evidence of litter present	Yes in 10%	Yes in 12%
Evidence of dog fouling present	Yes in 3%	Yes in 8%

8.0 Results - Public Perception of Uncut Areas

	UNCUT AREAS	CUT AREAS AS NORMAL
How does the area look?	Messy 0%	Messy 8%
	Unkempt 3%	Unkempt 4%
	OK 17%	OK 72%
	Pretty 45%	Pretty 16%
	Beautiful 35%	Beautiful 0%

9.0 Additional Comments from Respondents

"As well as flowers there was a fantastic variety of grasses. I also noticed species of bees which I have never noticed before."

"Daisies had real impact when you drove in beautiful!"

"We need to realize that doing nothing / let it grow is also management."

"When PKC teams strim even the plants under trees and fences, nature has literally nowhere to hide. The grass lawn obsession here is the real problem."

"Never before have I witnessed so many people seeking out nature for their emotional health.

However, nature will soon be gone unless we act now to protect it."

At the same time an online petition was running on Change.org calling for Perth and Kinross Council to 'Keep the wildflower verges of Perthshire blooming and save pollinating insects'.

The results of this survey are being taken into account to review PKCs grass mowing regime. Thank you to all volunteers who took part in the survey.