

Protect our wildlife...ban plastic grass in Wales!

Y Pwyllgor Deisebau | 4 Tachwedd 2024
Petitions Committee | 4 November 2024

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Petition Number: P-06-1472

Petition title: Protect our wildlife...ban plastic grass in Wales!

Text of petition:

Watching a Blackbird or Song thrush searching for worms and invertebrates on artificial grass must be one of the saddest sights in nature!

No insects can live there and no seeds or flowers are produced and so you remove the food source for birds, hedgehogs, shrews, frogs, bats, moles, butterflies, bees and many more species.

Add to this the fact that artificial grass does not soak up carbon dioxide and will eventually end up as yet more plastic rubbish taking thousands of years to biodegrade.

As our country side is increasingly converted to intensive farming, our Welsh wildlife is becoming more and more reliant on our gardens for food.

The groundbreaking "State of Nature" report (stateofnature.org.uk) clearly warned us that we need to change the way we run our lives if we are going to reverse the dramatic drop in our wildlife numbers.

There are very real concerns about the negative effect plastic grass use will have on both micro plastic pollution and the risk of future flash flooding events.

Manufacturers will argue that artificial grass does not need to watering or use the use of chemical fertilisers but in Wales you should rarely need to water a lawn and there are organic fertilisers which can be used and maintained with



electric mowers using renewable energy.

I have no doubt that once people are given the full facts about the damage artificial grass does to our Welsh wildlife they would choose to garden sustainably. Wales could once again lead the way for future bans in the rest of the UK.

1. Background

Plastic/artificial grass, or turf, consists of man-made fibres made to look like natural grass.

Research by UK insurer Aviva found that a fifth (21%) of UK homeowners have already replaced or plan to switch their natural lawn with artificial grass, and that many are unaware of the associated increased flood risk from such lawns. Reasons for homeowners choosing plastic grass include that upkeep is easier, it doesn't need to be mowed or watered, and it's resilient to heavy use.

However, the University of Plymouth said "the environmental issues caused from choosing an artificial lawn far outweigh any of these potential benefits", and discussed how plastic grass is harmful to the environment, including that it:

- does not provide any food for living creatures;
- restricts access to the soil beneath for burrowing insects and to the ground above for soil dwellers such as worms;
- restricts access to natural materials;
- reaches significantly greater temperatures than those reached by natural grass under the same weather conditions;
- absorbs significantly more radiation than living grass;
- displaces living plants that could remove carbon dioxide;
- creates a large carbon footprint during a journey that includes the manufacturing, transportation and installation; and
- is more likely to cause surface run off after significant rainfall which may contribute to flooding.

1.1. State of Nature report

The [2023 State of Nature Report](#) highlighted that 18% of 3,897 species in Wales are threatened with extinction, and that 42% of Wales' plant species are found in fewer places than before.

This [Senedd Research briefing](#) explores the benefits of, and pressures on, biodiversity. It also looks at what is being done to protect biodiversity and what further action is being called for.

1.2. Microplastics

Artificial grass is made from polyethylene, a common plastic, and [fragments from this material can make their way into the soil](#), and beyond, in the form of microplastic pollution.

Microplastics are plastic particles which are just a few millimetres in size, less than 5mm in any dimension.

A 2017 report by OSPAR, [assessment documents of land-based inputs of microplastics in the marine environment](#), showed that 'artificial turf and infill' is the cause of some of the highest emissions of microplastics in OSPAR countries.

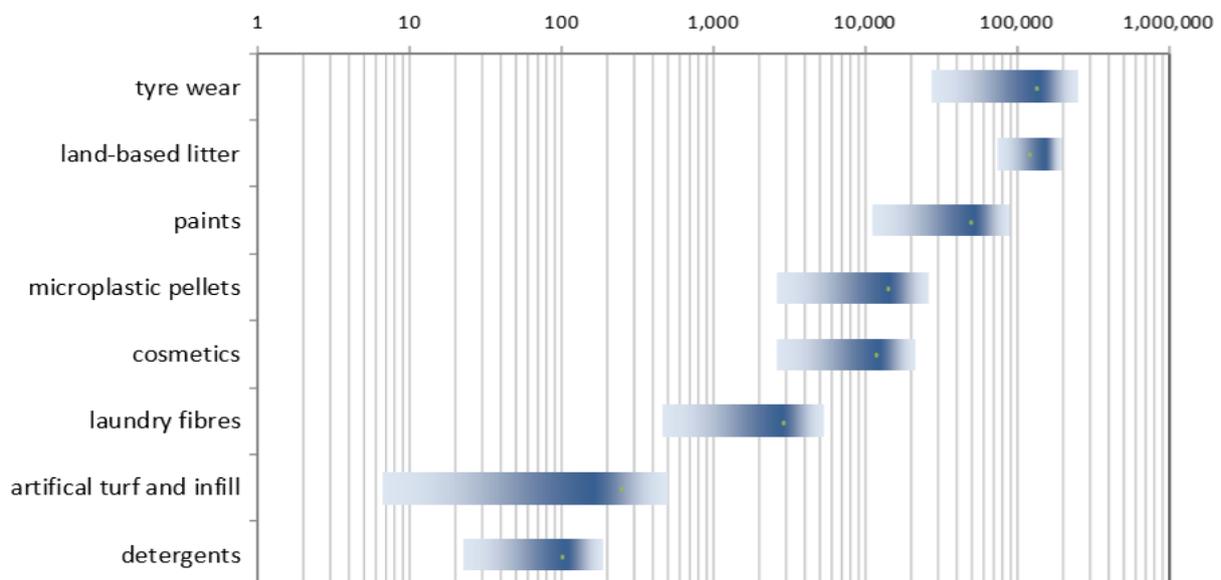


Figure 1. Estimated emissions of microplastics in OSPAR catchments (tonnes/year)
[Source: [OSPAR](#)]

2. Welsh Government action

The Welsh Government has introduced a number of measures aiming to curb plastic pollution, including:

- introducing a [charge on single-use carrier bags](#);
- banning [microbeads in wash-off personal care products](#); and
- banning [commonly littered single-use plastic products](#).

In June 2023, the then Minister for Climate Change, Julie James MS, told the Senedd she wanted to “[explore whether our new single-use plastics \[Act\]](#)” could be used to ban artificial grass, but [back-tracked only days later](#).

In response to this petition, the Deputy First Minister and Cabinet Secretary for Climate Change and Rural Affairs, Huw Irranca-Davies MS, says that as microplastics come from various sources, the Welsh Government has “several existing strategies... committed to taking a focussed and evidence-based approach to tackling the issue”.

He highlights the Welsh Government’s Circular Economy Strategy [Beyond Recycling](#) explaining that a circular economy is where plastic pollution, together with other forms of waste, is avoided and resources are kept in use as long as possible. He says through this approach it is “vital to consider the whole lifecycle of products such as artificial grass”. [Senedd Research’s 2023 article](#) looks at ways the Welsh Government is tackling plastic pollution through Beyond Recycling, and this [2024 article looks at progress](#) against the targets set out in the strategy.

In his response, the Cabinet Secretary said he had asked [Environment Platform Wales](#) to organise a microplastics event to understand what research is being undertaken. An event has been [scheduled for March 2025](#).

He also highlights the role of [Planning Policy Wales](#) in “securing positive biodiversity outcomes when new development is proposed and to promote more sustainable behaviours and outcomes wherever possible”. He says that further actions to tackle the nature and climate emergencies will be set out in upcoming “legislation to include a framework to set detailed statutory nature recovery targets”, which is discussed in [this Senedd Research article](#).

3. Welsh Parliament action

The Fifth Senedd's Climate Change, Environment and Rural Affairs committee undertook an inquiry into reducing plastic waste, where it looked at the sources and impact of microplastic pollution.

The increased flooding implications from plastic grass were discussed by the Climate Change, Environment and Infrastructure Committee in February 2022. This was in reference to increasing pressures on Wales' sewerage system.

The use of plastic grass in public spaces was discussed in Plenary in June 2023, following a question from Sioned Williams MS on 'Improving the Urban Environment'.

Every effort is made to ensure that the information contained in this briefing is correct at the time of publication. Readers should be aware that these briefings are not necessarily updated or otherwise amended to reflect subsequent changes.