

A step into the unmown creates a 'win-win' for wildlife and humans

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Wild cycling: a small boy enjoys the unmown areas of Saltdean Oval

Creating unmown areas in an urban park can significantly increase flowers and pollinating insects while also leading to a greater enjoyment of the space by people, according to a University of Sussex study.

Researchers at the University's Laboratory of Apiculture and Social Insects (LASI) monitored [areas](#) of one of Brighton & Hove City Council's managed parks to see what would happen if the grass was left uncut for different periods of time.

They found that, during the course of one year, the blocks of unmown land at Saltdean Oval saw a three-fold increase in the density of [flowers](#), while the numbers of flower-visiting insects such as bees, butterflies and moths was up to five times higher in the least-mown areas compared with the areas mown regularly as normal, every two weeks.

A public opinion survey of the park's users revealed that more than a quarter of the visitors said the new land management scheme improved their enjoyment of the park, while 64 percent said their enjoyment was unaffected. In particular, park visitors noted that they enjoyed more colour brought in by wildflowers and butterflies. Only one in ten said the scheme had led to a decrease in their enjoyment.

Some of the important flowering plant species that bloomed in unmown areas included wild carrot (*Daucus carota*), black knapweed (*Centaurea nigra*), buttercup (*Ranunculus bulbosus*), wild thyme (*Thymus polytrichus*), cat's ear (*Hypochaeris radicata*), ragwort (*Senecio jacobaea*), bird's-foot trefoil (*Lotus corniculatus*) and restharrow (*Ononis repens*). Of these, black knapweed was the most important source of forage for bumblebees and butterflies. The commonest butterflies seen nectaring on flowers were common blues (*Polyommatus icarus*) and meadow browns (*Maniola jurtina*). Also common were a few day-flying moths, such as Silver-Y (*Autographa gamma*) and burnets (*Zygaena* species). In addition to greater abundance of flowers, the unmown areas also presented important sites for resting and shelter for both butterflies and moths.

A global decline in pollinating insects, caused largely by human activities, such as the introduction of alien pests and pathogens, land use intensification or habitat destruction to make way for development or agriculture, is now of great concern to governments and conservation organisations. The long-term consequences are likely to lead to reduced food production and a serious decline in natural environments.



Researcher Katherine Fensome monitors the wildlife in unmown areas of Saltdean Oval

While most conservation actions are aimed at natural or semi-rural environments, the Sussex researchers wanted to highlight how urban areas can support abundant and diverse communities of flower-visiting insects.

Lead researcher Mihail Garbuzov says: "These results present an encouraging example of a potential win-win situation in urban land management changes, where the interests of humans and wildlife are aligned."



Black knapweed at Saltdean Oval

Professor Francis Ratnieks, the head of LASI and one of the [researchers](#) who carried out the project comments: "What we have done is to show that the new grass management scheme started by the Parks Department of Brighton & Hove City Council really works. The longer grass really does result in more flowers, bees and [butterflies](#), and the public response is very positive. The Parks Department were smart. They have left plenty of short grass for picnics, games and so on."

"The huge increase in [wild flowers](#) seen came about not because they were planted, but because they were already there and were simply given a chance to bloom by not being mown every few weeks. Our study shows that in some parks and grass areas, encouraging wild flowers can be based on encouraging what you already have."

More information: Garbuzov, M., Fensome, K. A., Ratnieks, F. L. W. (2014), "Public approval plus more wildlife: twin benefits of reduced mowing of amenity grass in a suburban public park in Saltdean, UK."

Insect Conservation and Diversity. doi: 10.1111/icad.12085

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