



POČÍTÁME S VODOU 2022

Přístupy k implementaci modro-zelené infrastruktury

PRAHA, 24. listopadu 2022

Making Blue-Green infrastructure better as climate change bites

Hlavní partner



Partner



Mediační partneři



Podporující organizace



AGENTURA KONIKLEC



Konferenci pořádá 01/71 ZO ČSOP Koniklec, p. s., v rámci projektu Počítáme s vodou, jehož cílem je informovat především zástupce veřejné správy a občany o principech přírodně blízkého hospodaření s dešťovými vodami (HDV) a prosazovat systémy decentralizovaného odvodnění a využívání dešťové vody. Je nutné, aby se nejen v odborných kruzích vědělo, co HDV je a jaký má společenský význam, a aby bylo vnímáno jako perspektivní řešení odvodnění urbanizovaných území v duchu udržitelného rozvoje.

Projekt Počítáme s vodou je spolufinancovaný Státním fondem životního prostředí České republiky na základě rozhodnutí ministra životního prostředí. Akce se koná pod záštitou Ministerstva životního prostředí a Ministerstva pro místní rozvoj.



Ministerstvo životního prostředí



STORMWATER SHEPHERDS

We are a Charity
dedicated to the
reduction of
pollution from
urban surfaces,
including
microplastics and
plastic litter



We know that BGI schemes can reduce urban flooding

This is an iconic BGI scheme in Sheffield, England

This photo shows that when it rains very hard, the surface runoff enters the raingarden and so the risk of flooding on the road and in the river is reduced.



Making Green Blue Infrastructure do more

- In the UK we have been delivering BGI schemes for over 20 years and some of them are excellent.
- But we have got into a bit of a 'rut' doing the same stuff over and over again.
- As the impacts of climate change get worse, our BGI needs to do more.



Young people enjoying the green spaces at Sheffield Grey-to-Green. July 2022.

Using BGI to create habitats for wildlife

- As temperatures increase and rainfall becomes less reliable, we need to include cool, damp, dark spaces for creatures to hide away.
- Include ground-level planting and organic mulches.
- Keep healthy soils aerated and damp so that the micro-organisms can thrive and birds & mammals can feed on invertebrates.



Connect habitats to one another

- Provide stepping-stones of habitat so that the insects and mammals can move from place to place safely, giving them more opportunity to feed and nest.
- Consider connections above ground level if necessary, with green roofs on bus shelters, bin shelters and covered walkways.
- And below-ground connectivity can be useful below roads and paths.



A wildlife bridge over a new road near Manchester

Connect habitats to one another



Wildlife passages below roads can allow toads, frogs, mammals and snakes to make their way safely below the road or path. Image: aco.co.uk

Less light in BGI schemes

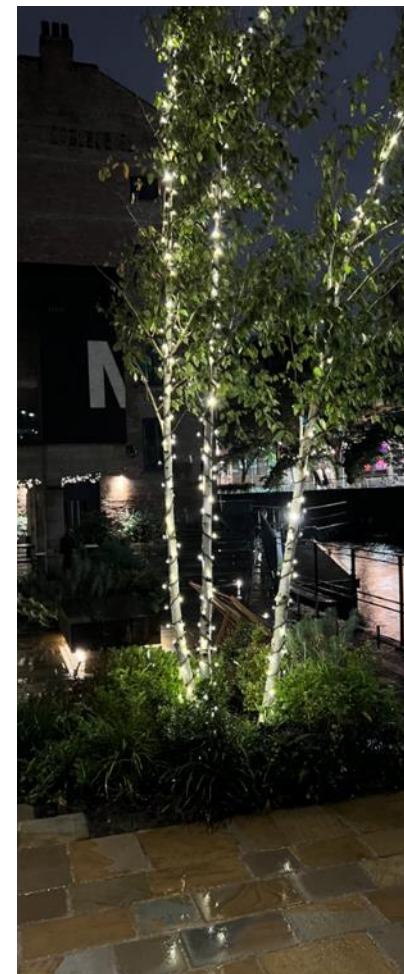


Lighting in this scheme in Manchester makes it less attractive to wildlife

By including lights in BGI schemes, we reduce the opportunity for birds, moths and other insects to live in the vegetation and to feed at night.

Lighting must be included as little as possible and turned off for as long as possible.

**BGI schemes are not
'art installations' –
they are living
systems**



Growing food in BGI schemes

- We should include fruit trees and fruit bushes in BGI schemes.
- Children and families living in towns should be able to pick fruit and to share it with their friends and families.
- It creates a connection between children and the fresh fruit that they are eating.



In the UK, we can include apples, pears, damsons, plums, raspberries and more.

Capturing and managing water

- We must capture rainwater wherever we can and then use it.
- We can use it in the home or garden to save the use of tap water.
- But we can also use it to irrigate our BGI devices to keep them cool and healthy in the summer.
- And we can use it to provide clean, reliable drinking water for wildlife in the heat of the summer.



This rainwater tank has a pump so that it can be emptied when a storm is forecast.

Using water to keep wildlife alive

- During the drought of 2022 in England, some of our BGI devices died.
- If we had captured rainwater nearby, we could have kept them alive.
- Any wildlife that was relying on this habitat will have died too.



This raingarden died back in the drought of 2022

Water supplies for wildlife must be reliable

- If we create safe spaces for wildlife, with cool dark places and water or food, we must make sure that the safe spaces are maintained.
- Sometimes, this can be done by local people.



Keeping towns & cities cool

- During the heatwave of 2020 in the UK, thousands of people went to local parks and gardens to seek shade and cool spaces.
- By including trees, shelters and hedges in our BGI designs, we can create shade for people and wildlife.



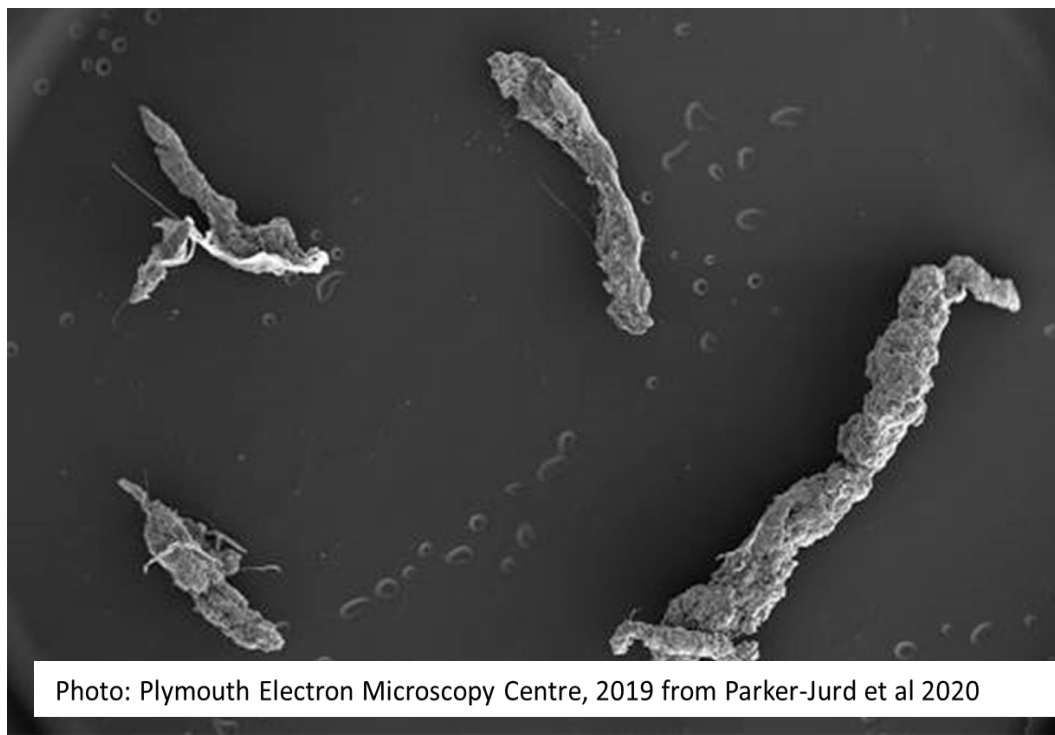
Treating pollution from road runoff

- Runoff from busy roads is too polluted to put straight into BGI devices
- Always include a sediment removal devices in your treatment train first.
- This runoff is from a car-park and road and it causes pollution of the river when it rains.
- A good BGI scheme could treat this pollution.
- It would need to include a well-maintained sediment capture device such as a vortex grit separator or oil/water separator and then a large pond or basin.



Tyre wear particles in road runoff contain toxins and cause plastic pollution in our oceans

- Tyre wear particles in road runoff cause widespread pollution.
- Good BGI designs can capture them and keep them out of our oceans.



All BGI devices need to be maintained and operated properly

- All devices need some maintenance
- This is an oil/water separator and you can see that it has effectively captured several tonnes of contaminated sediment and prevented pollution
- Now it is time to remove the sediment and to clean or replace the filters



Summary

- BGI schemes are brilliant for urban drainage; they reduce flood risk and improve water quality.
- But as the impacts of Climate Change get more severe, these schemes can deliver more.
- We must use them to create cool, damp, dark places for wildlife.
- And to provide food, shelter and shade for people to enjoy.
- We must build the best schemes that we can and we must do it now.





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Thank you for your attention / Děkuji za pozornost ☺

Hlavní partner



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