

# Understanding the value of ecosystem services provided by our cemeteries and burial grounds

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Making space for nature in our burial grounds

# The role of cemeteries in cities?

Cemetery space as multifunctional (Woodthorpe, 2011), with growing international research about its importance in cities beyond bodily disposal (Evensen et al., 2017, Goh and Ching, 2020, Raem 2021)

- Spaces for recreation/reflection/leisure
- Spaces for nature
- Ecosystem services - cultural, regulating and provisioning

But cemeteries are rarely considered in local planning documents:

- 38% of LAs had no policies for cemeteries
- 14% = green infrastructure
- 14% = green/open space
- 10% = suitable for the green belt
- 11% include a site allocated for a new/extended cemetery
- 5% have specific policy

# Places of social, cultural and environmental importance

- Cemeteries serve diverse and multifaith populations in many ways
- This is not always adequately considered in their planning and management
- Spaces don't always meet the needs of groups

**CeMi:**  
www.cemi-hera.org

Cemeteries and crematoria as public spaces of belonging in Europe. A study of migrant and minority inclusion, exclusion, and integration.

**HERA**  
Horizon Europe Research Area  
Public Spaces: Culture and Integration in Europe (2019-2022)

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RTPI Royal Town Planning Institute  
Nederlands Ultravaert Museum  
tot ZOVER  
Terebinth  
University of Reading  
university of groningen  
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SLU Swedish University of Agricultural Sciences  
UCL  
UWE Bristol University of the West of England  
Uio University of Oslo

# Cemeteries for diverse uses and users



*'I think it's not labelled where you should and shouldn't be walking – there's people walking over the graves. And you see a lot of people getting offended. There's a lot of people walking over. If there's anything there, especially the older ones [graves], you sometimes don't realize and you just walk over... people are walking along thinking it's grass and its actually graves they're walking on. That's a big issue.'*

(British Muslim Man, Focus group D, 2018)



# What are Ecosystem Services?

## **Provisioning**

e.g. food, timber,  
fibre, energy, water,  
medicines

## **Regulating**

e.g. pollination,  
water and air quality  
improvement, flood  
protection

## **Cultural**

e.g. physical activity,  
education, heritage,  
spiritual, recreation

## **Supporting**

e.g. biodiversity, water cycle, soil formation

# ESs from burial grounds

Type	Service <a href="https://cices.eu">cices.eu</a>
Provisioning	Water supply due to permeable surfaces
	Food from pollination or vegetation onsite
	Timber from maintenance activities
Regulating	Flood risk management and reduction in water pollution
	Air quality improvement, reduction in urban heat island
	Visual screening
	Pollination, seed dispersal, genetic diversity
	Decomposition
	Regulation of soil quality
Cultural	Education and heritage, particularly in older cemeteries
	Religious and spiritual meaning
	Recreation, physical activity, restoration

# Cemeteries as greenspace

Proportion of people	Doorstep	Local	Neighbourhood
All	43.4%	45.1%	58.6%
Cemeteries	3.3%	4.3%	7.4%
Only cemeteries	2.1% 1.18m	2.2% 1.09m	2.6% 1.39m

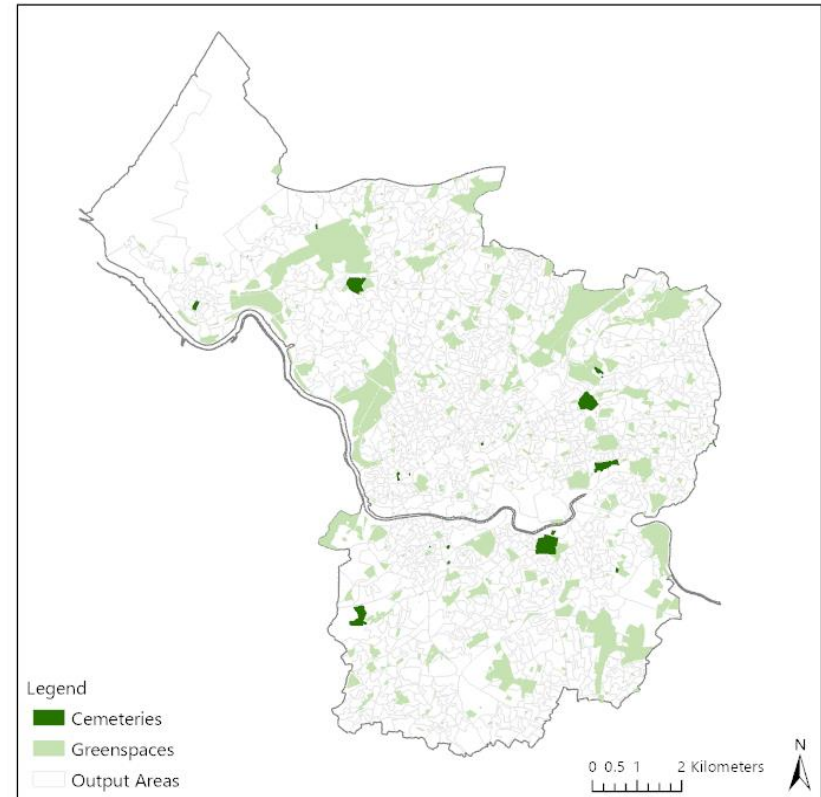
Cemeteries contribute around 4% of the total greenspace area in English towns and cities.

- Important in areas of high-density housing, with higher levels of flats, social rent, unemployment, numbers of children and lower car ownership
- And areas with greater than average levels of ethnic diversity

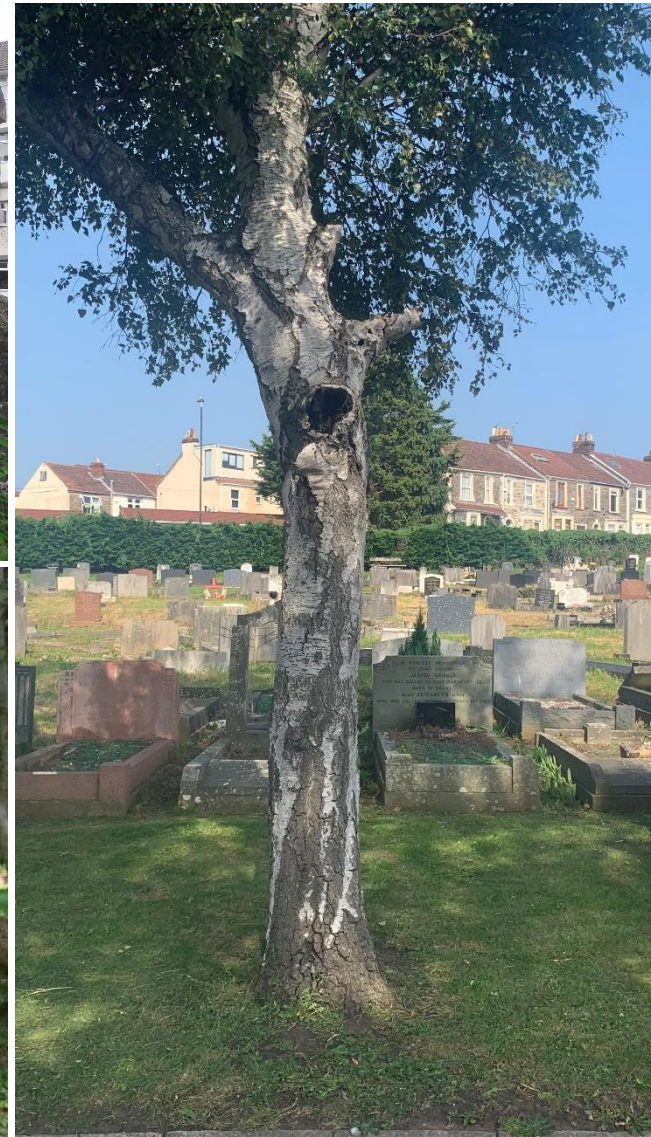
# Bristol sites

Surveyed 11 out of 19 which met the ANGSt criteria using National Greenspace Survey tool

St Johns Churchyard
Blackhorse/Waters Road
Birdcage Walk
Shirehampton
Greenbank
St John's burial ground
Henbury
Canford
South Bristol
Avon View
Arnos Vale







# Cemeteries in Bristol

Site	Area (ha)	Total domain score (maximum; weighting)					Incivilities (14; 24%)	Total Score /100
		Access (11; 18%)	Recreation facilities (25; 16%)	Amenities (16; 22%)	Natural features (16; 20%)			
Arnos Vale Cemetery	18.43	8	8	9	9	14	71.6	
Wesleyan Burial Ground	0.50	0	0	0	4	14	29.9	
St John's Burial Ground	0.54	6	5	2	8	12	51.5	
Avon View Cemetery	8.73	5	2	2	3	14	39.9	
Birdcage walk	1.06	4	6	6	7	14	55.2	
Greenbank Cemetery	12.99	5	4	2	7	13	48.5	
Canford Cemetery	11.71	6	6	6	8	14	60.7	
Henbury Cemetery	0.58	3	3	5	3	13	39.9	
Shirehampton Cemetery	2.15	2	1	2	3	13	32.8	
St. John's Churchyard	0.57	6	4	3	7	14	53.1	
South Bristol Cemetery	11.00	2	3	5	5	13	42.7	

# Quick wins for wildlife (and people)

- Leave areas with longer vegetation (e.g. boundaries)
- Wildflowers if possible
- Limit pesticide use
- Include a diversity of vegetation
- Include trees (e.g. fruiting, berries) – heavy standards
- Select native species or those that are climate adapted
- Incorporate built features (e.g. bat and bird boxes, bug hotels)
- Select species that will contribute to local biodiversity action plans
- Create networks with other habitats
- Get people involved in design and delivery
- Include signage to let other people know
- Wildlife-friendly maintenance plan for contractors

# Cemeteries as greenspace?

- Management for nature - space for tree planting ambitions?
- History, place attachment
- Walking and cycling



- The need to “find a balance between under and over-management of common spaces that enables multiple uses without placing valuable assets at risk” (Swensen et al., 2016, p. 49).



# Conclusions/future research

- Public perception of acceptable use of cemetery space?
- Planning for new cemeteries - building in ecosystems services by design



# Thank you!

Open access paper: [Planning Cemeteries: Their Potential Contribution to Green Infrastructure and Ecosystem Services](#)

Blog: [New research suggests that cemeteries provide many of the same benefits as green spaces](#)

Other blogs: [Centre for Sustainable Planning and Environments blog](#)