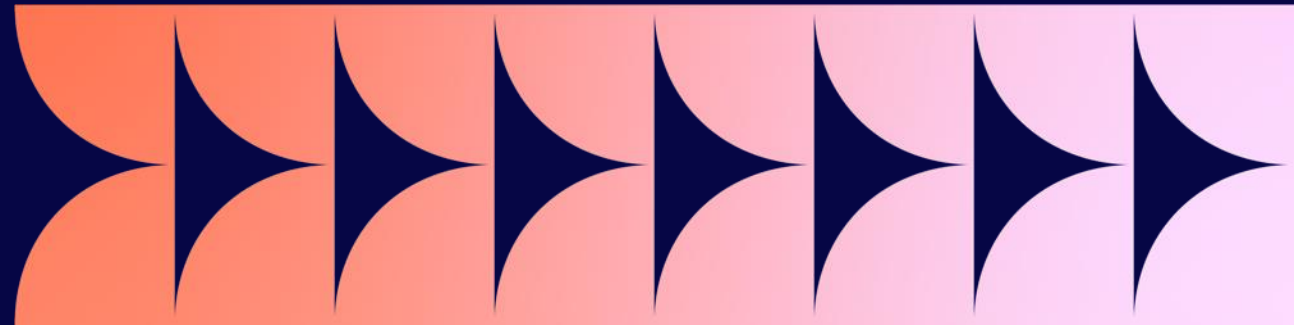




Ageing Well Public Talks



Talk 9. Making friends in blue and green spaces

Dr Yoseph Araya

Senior Lecturer Ecosystems and Geobiology,

Dr
STEM

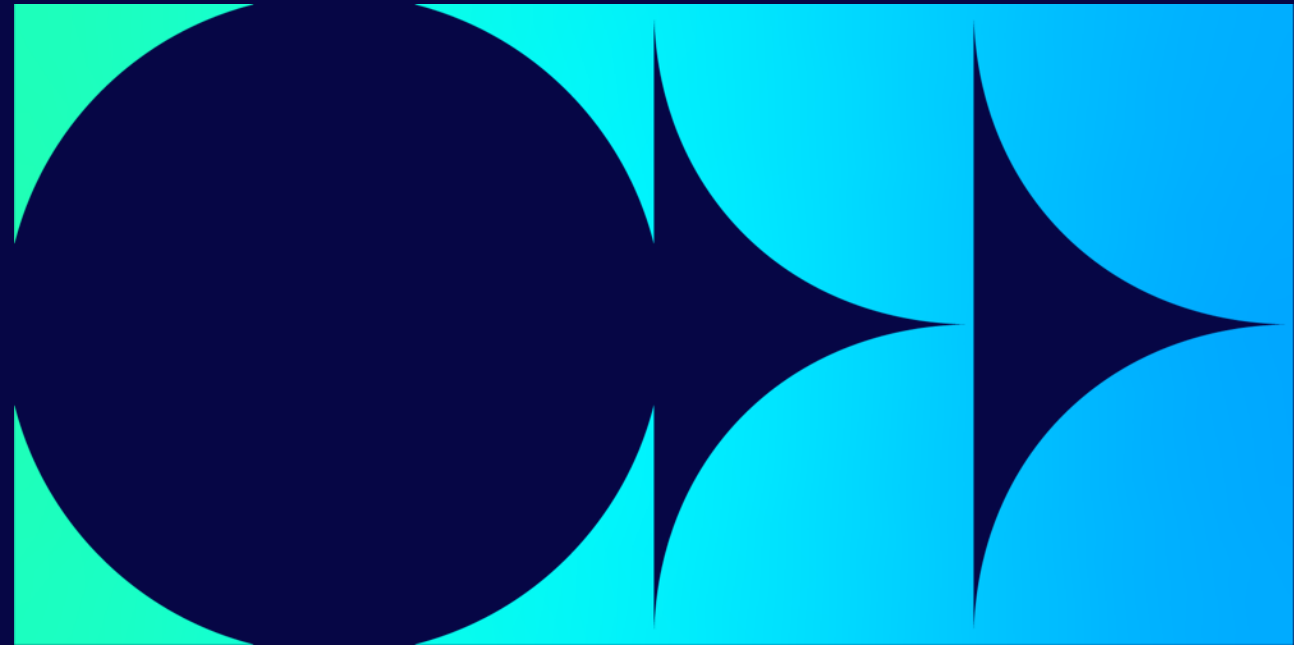
Dr Gráinne O'Connor

Research Assistant, WELS

22nd May 2024



**Ageing Well
Public Talks**



The many benefits of urban green spaces: from provision to wellbeing



Yoseph Araya

Senior Lecturer in Ecology & Environmental Sciences



Parks are a typical component of an urban settlement



Hyde Park, London by George Sidney Shepherd (1784–1862) © Yale Center for British Art

Why now

The world has been rapidly **urbanising**
>50% live in cities.

Nature is at peril from destruction,
change & now climate emergency.

Nevertheless, **nature still thrives** in
increasingly human environments.

*We need nature to mitigate climate change,
provide food and resources and wellbeing.*



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Two



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What are the benefits

Ecosystem services are benefits provided by our environment, ranging from resource, ecological, economical to social and to the cultural.

There is increasing utilisation of urban green spaces by various stakeholders and for various activities.



Pollination

©Andrew Mandemaker. Wikipedia



Cultural value

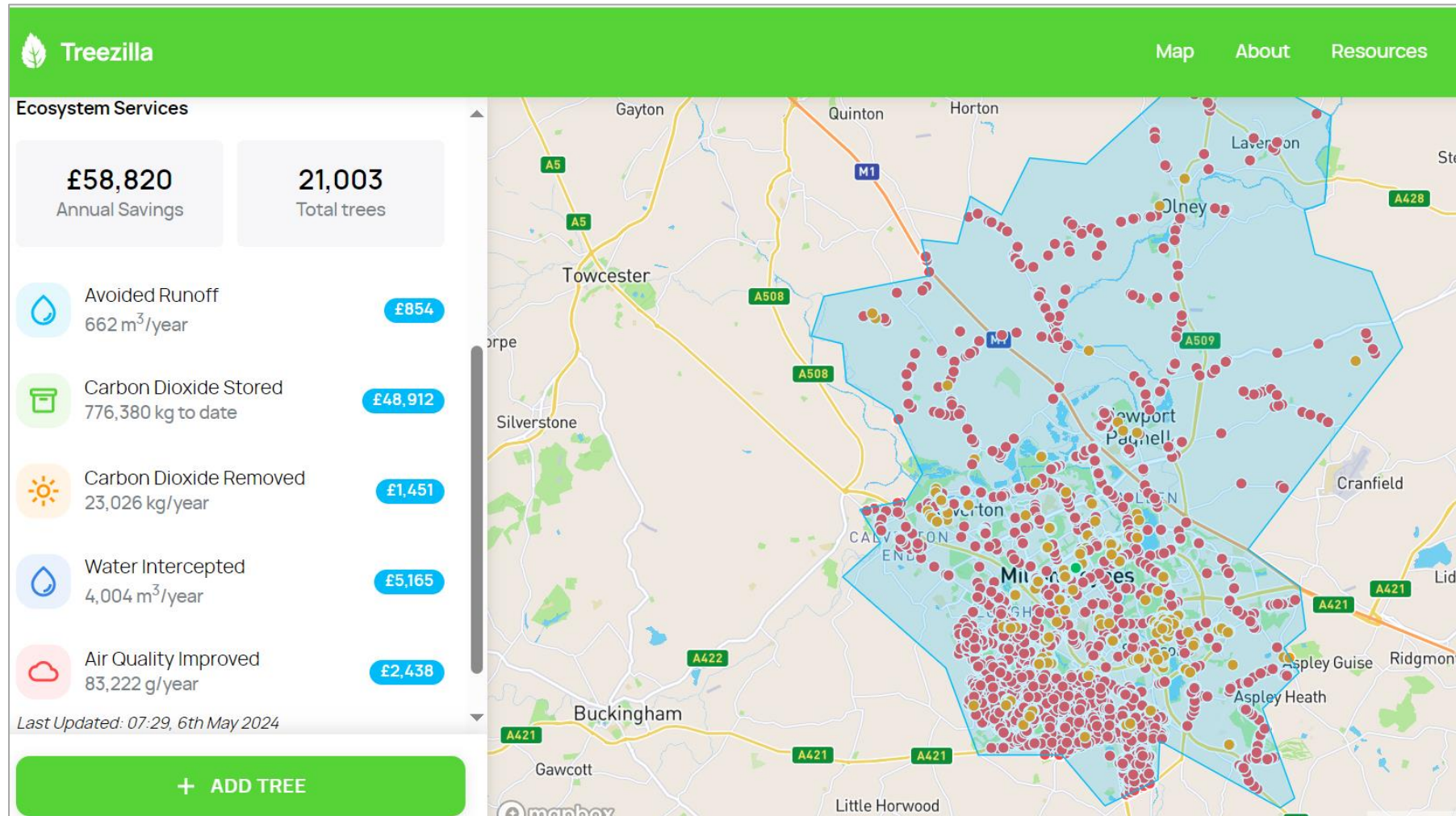
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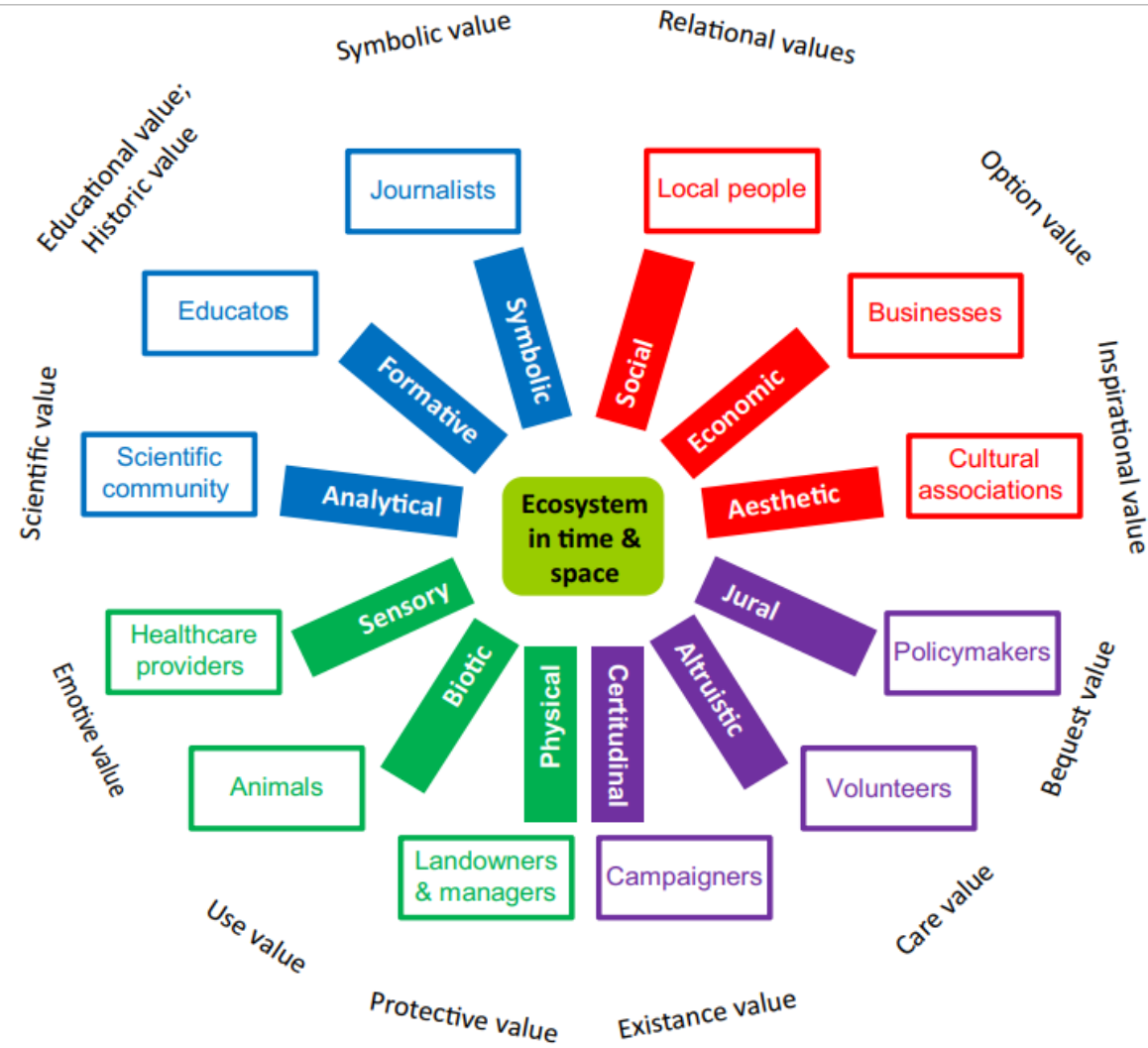
Water reservoir

©OLU. Wikipedia

The **economic benefits** of nature is also well recognised e.g. from urban trees calculated by <https://treezilla.org> in Milton Keynes.



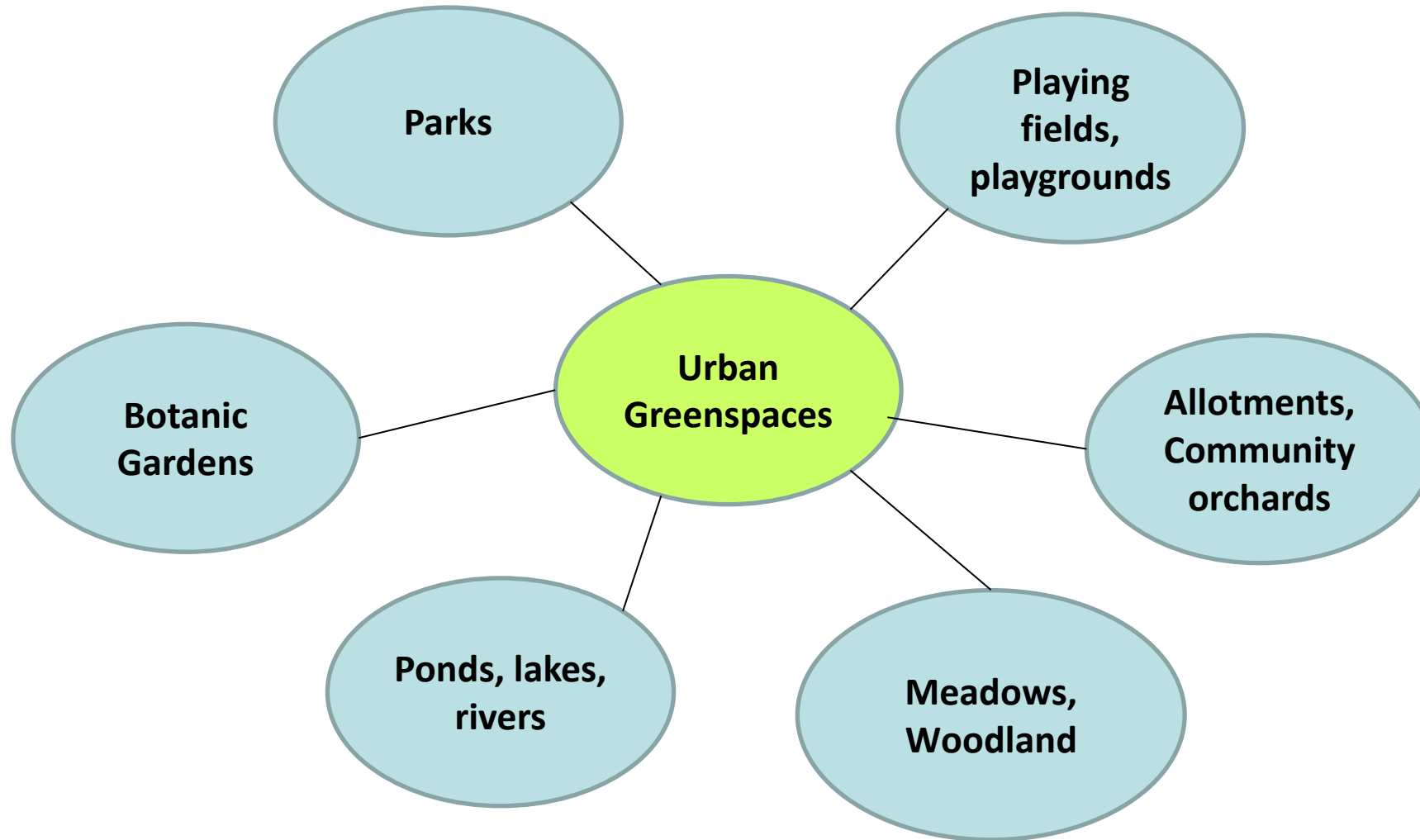
Thinking in depth, elicits many aspects and stakeholders meaning ecosystem values beyond mere ecosystem service.



Gunton et al. (2017) TREE

Types of Urban Greenspaces

Victorian public parks in urban areas have been around since 1840's, designed to create physically healthy spaces and for walking and promenading.



Greenspaces in Milton Keynes

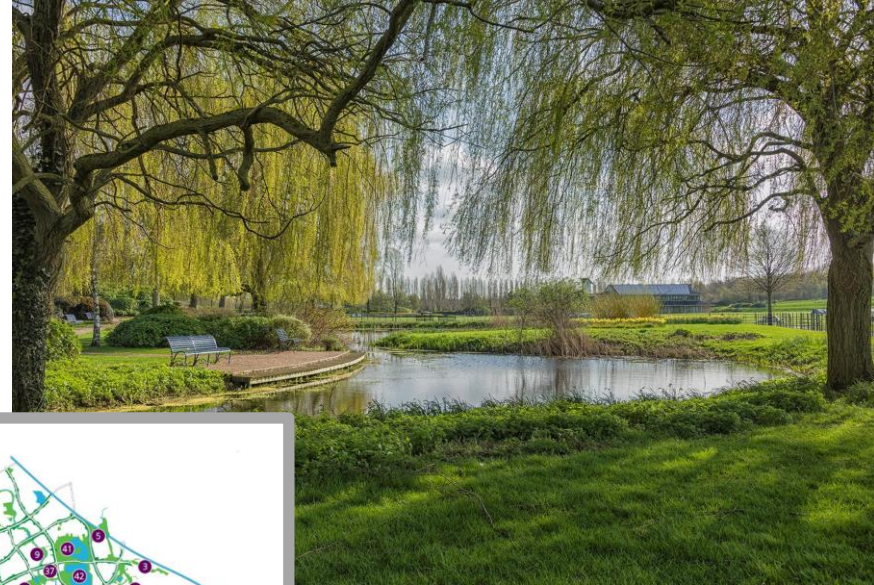
Established as an independent charity in 1992, cares for MK's ancient woodlands, lakes, river valleys for ever, for everyone.

The Parks Trust, Milton Keynes

>2500 ha

25% of urban area

> £140 million endowment



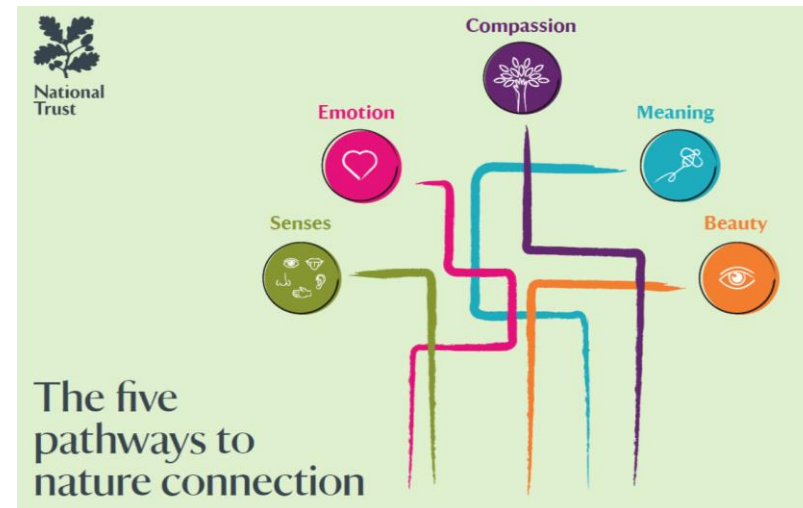
Nature for wellbeing

Both conscious and unconscious **benefits**:

- Physical exercise
- Making friends avoiding loneliness
- Natural soundscapes and smell helping calm
- Mental health and mood
- Engaging dementia sufferers and carers
- Exercising cognitive skills e.g. appreciating season, wildlife
- Ecotherapy

To **engage** effectively with nature:

- Learn about nature
- Go out and experience it
- Meet people and talk in greenspaces
- Work with societies and interested bodies



Example of engaging with nature

“Isn’t he beautiful”

Geese, they are taking over”




“Today’s nature”

“Geese had a party at the lake yesterday”

OU free learning to engage with nature

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 Level 1: Introductory


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Pet ownership in older years



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Before we begin ...



- ❖ Human-Animal Interaction (HAI)
- ❖ What do we mean by a 'Pet'?
- ❖ Five Pillars for Ageing well with pets

A Nation of Animal Lovers ?

Some we love, some we hate, some we eat...

Context

- Western concept & Culture
- Three worlds collide
- Domestication / Biophilia Theory
- Biopsychosocial model
- Special relationship



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Share of households owning a pet in the United Kingdom (UK) from 2012 to 2023*





Sources
TNS; UK Pet Food
© Statista 2024


Additional Information:
United Kingdom; TNS; UK Pet Food; 2012 to 2023; 8,901 respondents; 18 years and older; Online


statista


Top Ten Pets in the Uk 2024


 **Dogs:** approximately 13.5 million dogs as pets in the UK, with 36% of households owning a dog.


 **Cats:** approximately 12.5 million pet cats in the UK, with 29% of all households having a cat.


 **Indoor Birds:** approximately 1.5 million birds kept as indoor pets in the UK, with 3% of households keeping them.


 **Domestic Fowl:** approximately 1.3 million domestic fowl as pets in the UK, with 1.6% of households having at least one.


 **Rabbits:** 1 million rabbits as household pets in the UK, with 1.6% of households having at least one.

 **Tortoises & Turtles:** approximately 700,000 tortoises and turtles being kept as pets in the UK, with 1.6% of households having one.

 **Horses & Ponies:** approximately 700,000 horses as pets in the UK and 1.5% of households have one.

 **Guinea Pigs:** approximately 700,000 guinea pigs as pets in the UK, with 1.2% of households having at least one.

 **Hamsters:** approximately 600,000 hamsters as pets in the UK, with 1.5% of households having a pet lizard.

 **Snakes:** approximately 600,000 pet snakes in the UK, with 1.3% of households having one.

A special relationship

🐾 Dogs (*Canis lupus familiaris*) were the first animals to be domesticated (twice) in Europe (16,000 years ago) & in Asia (14,000 years ago) from 2 separate wolf lineages.

🐾 Cats (*Felis silvestris catus*) were also domesticated (twice) in SW Asia (10,000 years ago) & in Egypt (3,500 years ago)

🐾 Dogs were the first domesticated animals, cooperating with humans by hunting and guarding livestock.

🐾 Cats were domesticated as predators of rodents and they lived near human habitation when humans began to settle and farm crops.

🐾 Studies indicate when a dog's owner gazes into their dog's eyes oxytocin is released and vice versa, enhancing this bidirectional bonding & attachment between dogs and humans.



Pets and Pillars: What are the benefits of pet ownership in older years?

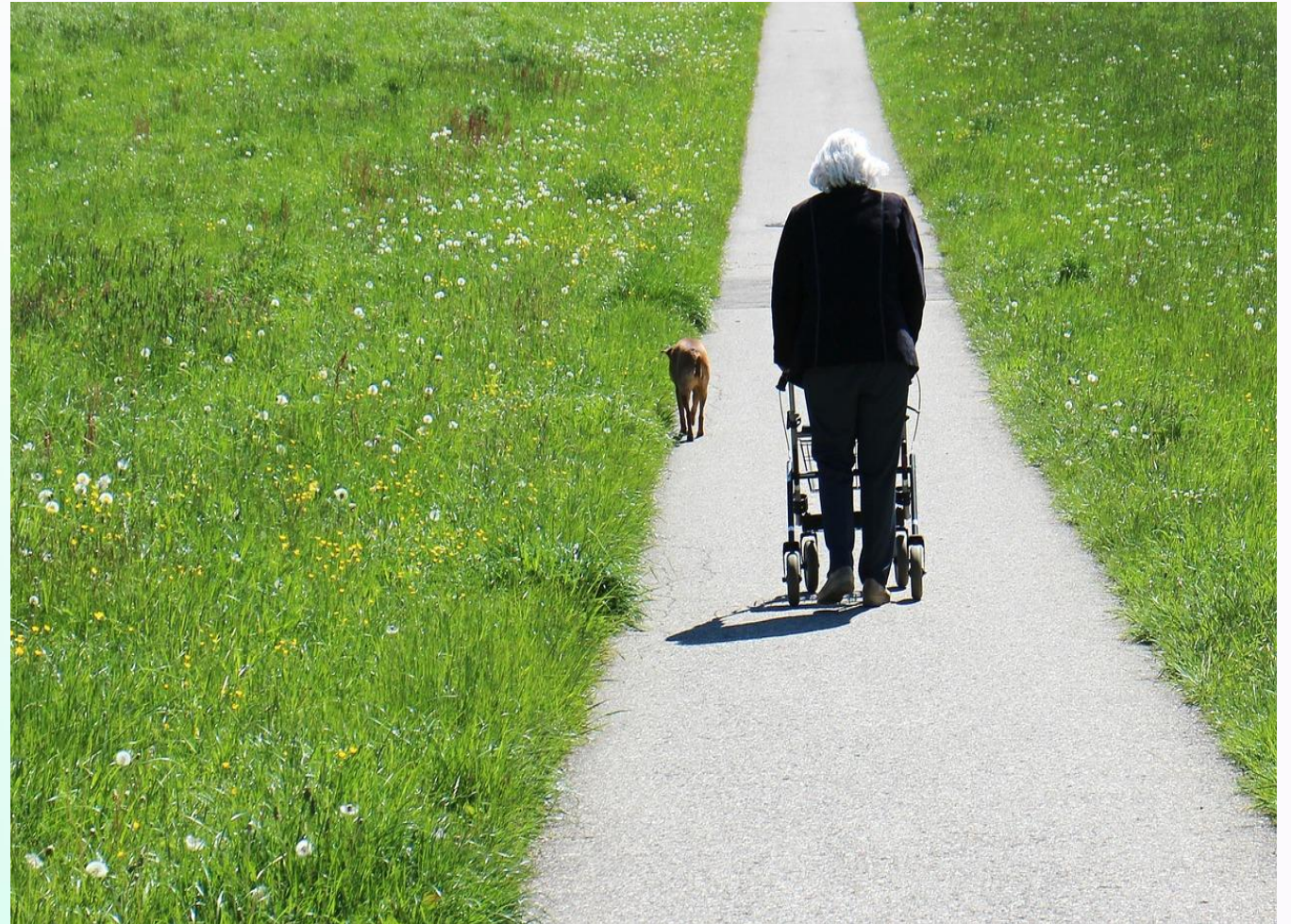
NUTRITION

HYDRATION

PHYSICAL ACTIVITY

COGNITIVE STIMULATION

SOCIAL STIMULATION



Physical Activity and Pet Ownership

More rigorous research needed. Mixed picture. 1970's, 2012, post 2012 to the present. Ioannidis (2005) argues that areas of research that typically contain small homogeneous sample sizes, small effect sizes and a wide diversity of research designs (such as those in HAI research), will exhibit conflicting results.

- Physical benefits Cardiovascular Health Statement from the American Heart Association on Cardiovascular Disease (CVD) (Levine et al., 2013). Pet ownership, particularly dog ownership, is probably associated with decreased CVD risk (*Level of Evidence: B*). Pet ownership, particularly dog ownership, may have some causal role in reducing CVD risk (*Level of Evidence: B*).
- Increased physical activity (22 minutes/day extra) for dog walkers. 150 minutes per week recommended.
- More specific to the elderly population, Friedman et al. (2013) reported that just the presence of a pet, and in particular a dog, improved ambulatory blood pressure in older (50 – 83 years) adults with hypertension.
- Increased survival & recovery post heart attack dog vs pet vs cat
- Stress reduction Influence of pets can include decreases in biological stress indicators such as cortisol, blood pressure, and heart rate. By reducing stress, pet ownership may minimise deterioration in cognition, more for those who are mildly cognitively impaired than those who are not. Higher chronic stress was associated with faster cognitive decline in individuals with moderate cognitive impairment but not in cognitively normal participants over 3 year (Friedmann et al., 2023)
- Less depression with pet owners and found to be a protective factor in preventing suicide (Young et al., 2020)

Long term Health Conditions (LTCs)

- 15 million people in England live with LTCs.
- 50% of all GP appointments and 70% of all hospital bed days
- 70% of acute and primary care budgets in England.
- Morbidity/Comorbidity/Multimorbidity increases with age.

The need to improve the treatment and management of long-term conditions is the most important challenge facing the NHS today.

Cognitive Stimulation

- Little research focused on deterioration in cognitive function.
- Recent study examined the relationship of pet, dog, cat ownership, and dog walking to changes in cognitive function among 637 generally healthy community-dwelling older adults (185 pet owners) aged 50–100 years ($M = 68.3$, $SD = 9.6$) within the Baltimore Longitudinal Study of Aging (BLSA).
- Cognitive assessments every 1–4 years over 1–13 years ($M = 7.5$, $SD = 3.6$) include the California Verbal Learning (Immediate, Short, Long Recall)
- Deterioration in cognitive function with age was slower for pet owners than non- owners (Immediate, Short, Long Recall; Trails A,B,B-A; Naming; Digit Symbol); dog owners than non- owners (Immediate, Short Recall; Trails A,B; Naming; Digit Symbol); and cat owners than non-owners (Immediate, Short, Long Recall; Naming), controlling for age and comorbidities.
- Among dog owners ($N = 73$) walkers experienced slower deterioration than non-walkers.
- Pet ownership and dog walking contribute to maintaining cognitive function with ageing, as a society we need to support pet ownership and dog walking in design of senior communities and services.

(Friedmann et al., 2023)

Social Stimulation

8754:6



Loneliness and social support

- Human–Animal Interactions, pet ownership and pet attachment can help reduce feelings of loneliness (Krause–Parello, 2008; Krause–Parello & Gulick, 2015; Smith, 2012; Stanley et al., 2014).
- Pets can provide a strong emotional and affectionate relational bond (Ainsworth, 1989; Bowlby, 1969, 1973; Collis & McNicholas, 1998). Support provided by companion animals involves shared leisure and other activities primarily for the intrinsic goal of enjoyment (Rook, 1987).
- Living with a pet may be an alternative and easily accessible coping mechanism to relieve loneliness for older adults living in the community. Research findings suggest that pet attachment support can mediate the effect of loneliness on general health (Krause–Parello, 2008), and it was found that older adults experienced less loneliness from a loss when they rated a higher attachment to their pet than individuals who rated lower pet attachment (Krause–Parello & Gulick, 2013).
- People with pets, compared with those without pets, reported a 36% reduction in loneliness when controlling for age, living status (alone or with someone), and mood (feelings of happiness) (Stanley et al., 2014). Therefore, pet ownership may attenuate loneliness and enhance wellbeing through a sense of social connectedness and belonging (Stanley et al., 2014).
- Older adults cope with loneliness by reaching out to others, helping those in need, and seeking companionship with pets (Smith, 2012). Dogs can provide company during a walk, and cats might seek physical contact through rubbing on someone. These various interactions with pets provide older adults with companionship that in turn can decrease their loneliness (Smith, 2012).
- Overall findings from these studies suggest that when older adults experience loneliness, those with pets report less loneliness and seek out their companionship, implying that companion animals can be an effective mediator for reduced loneliness.

Social Capital



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- Social capital generally describes social networks as having value and forming a framework upon which individuals in a community establish reciprocity and are inclined to do things for one another.
- Social capital (as contrasted to other valued commodities in a community such as human capital, financial capital, or technological capital) is the connectivity among people, based on trust, norms, and networks, that enhances cooperation for mutual benefit.
- Strong social capital promotes social, economic, and physical well-being through the trusting, supportive relationships that develop among residents. **Pet ownership is significantly associated with higher levels of social capital.**
- Results are not confined to dog owners nor dog walkers. People with dogs are perceived to be more trustworthy and the presence of dog walkers in an area makes people feel safer.
- **Pets are an under-recognised conduit for building social capital.**

What are the challenges of pet ownership in older years?

- If/when an older adult suffers a health problem, or when the pet may become ill and requires potentially expensive veterinary care, older adults may require support to responsibly maintain their pet in their home. The 'Cost of Loving Crisis'.
- An older adult may forego their own medical treatment if they do not have access to pet care because they are concerned that an extended hospital stay will require them to give up their animal.
- An older adult with declining cognition may not fully understand or be able to implement the daily duties required of responsible pet ownership. In one case, the human's health may suffer and in the other case, the pet's health may suffer.
- Housing – Recent estimates suggest that nearly half of all households in relative poverty are owner occupied, and of these 1 million are headed by someone aged 55 and over. The proportion of privately rented homes headed by someone aged 55–64 increased from 6.3% in 2010/11 to 11.3% in 2020/21. In the last year, it has risen particularly sharply, from 9.9% to 11.3%. Renting privately means higher levels of financial insecurity and the potential for more pensioner poverty. The private rented sector also has the highest proportion of poor-quality homes.



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Challenges continued ...

LOSS AND BEREAVEMENT

DISENFRANCHISED GRIEF

AMBIGUOUS GRIEF

COMPLICATED GRIEF

CONTINUING BONDS



Help and Support

- **DOGS TRUST** <https://www.dogstrust.org.uk/>

Canine Care Card, Behaviour Support line

- **The Cinnamon Trust** <https://cinnamon.org.uk/>

Free voluntary dog walking support for owners who can no longer exercise their pets themselves. 65+ or with terminal illness , care card, foster, updates & visits

- **National Animal Welfare Trust** <https://www.nawt.org.uk>

- **Dementia Dog** <https://dementiadog.org/>

Collaboration between Alzheimer Scotland & DfG

- **PDSA** <https://www.pdsa.org.uk/what-we-do/treat>

Low Cost/No Cost Veterinary Care e.g receipt of pension in house band A-D

- **RSPCA** <https://www.rspca.org.uk/whatwedo/whoweare>

Welfare, microchip, neuter, rehome, foster



Support if you have experienced Pet Loss

- **BLUE CROSS** <https://www.bluecross.org.uk/>

Home Direct, Pet food bank, Pet advice A-Z, Rehome,

- **Blue Cross Pet Loss Support** 30 years, help to cope with the loss of a pet, either through death, enforced separation or theft. With a free and confidential helpline, webchat, [email](#) and Facebook group. 8.30am – 8.30pm, 365 days a year

- **Paws to listen** <https://www.cats.org.uk/what-we-do/grief/advice>



Image Credit: <http://www.bluecross.org.uk/sites/default/files/>

**Thank you for
listening.**

Any questions?



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Ageing Well series of Public Talks

“Being mindful of eating well, hydration, physical activity, learning new things and social connections can delay the decline caused by ageing.

Come and join us for the series of public talks with the title “Ageing Well”



Dr. Jitka Vseteckova
Senior Lecturer, Health and Social Care



Summary of related resources to The Ageing Well Public Talk Series

Podcasts

- Vseteckova J & King J (2020) COVID-19 Interview podcast for The Retirement Café: '[Ageing Well Under Lockdown](#)'
- Vseteckova J & Broad E (2020) Podcast – Open University & The Parks Trust [Keep Me Walking – researching with people living with dementia and their carers](#) –
- Vseteckova J (2020) Podcast – [Areas of research with The Open University](#)
- Broad E, Methley A & Vseteckova J (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust – [Spotter sheet and mindful walking](#).
- Vseteckova J, Methley A, Broad E (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust [Preventing brain decline while ageing](#)



Methley A, Broad E, Vseteckova J (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust [Walking therapy](#)

Vseteckova J, Methley A, Broad (2021) Podcast OU & The Parks Trust & Northamptonshire Healthcare NHS Foundation Trust [Understanding our memory](#)

Araya Y, Broad E, Vseteckova J (2022) [Engaging with our environment](#)

Joannidi H, Araya Y, Broad E & Vseteckova J (2022) [Sense of self during aging: how mindfulness and nature can help](#)

The above podcasts can be also seen on [The Parks Trust YouTube Channel](#)



Vseteckova J (2020) [Ageing Well Public Talks Series](#)

Vseteckova J (2019) [5 reasons why exercising outdoors is great for people who have dementia](#)

Vseteckova J (2019) [Depression, mood and exercise](#)

Vseteckova J (2019) [Five Pillars for Ageing Well](#)

Vseteckova J (2020) [Ageing Brain](#)



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Methley A & Vseteckova J & Jones K (2020) [Green & Blue & Outdoor spaces](#)

Vseteckova J, Borgstrom E, Whitehouse A, Kent A, Hart A (2021) [Advance Care Planning \(ACP\)](#)

Vseteckova J (2020) [Walking the Parks with The OU and The Parks Trust](#)

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Care and caring related

Vseteckova J, (2020) [How to age well, while self-isolating](#)

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Vseteckova J et al (2020)

[COVID-19 The effects of self-isolation and lack of physical activity on carers](#)

Taverner P, Larkin M, Vseteckova J, et al. (2020) [Supporting adult carers during COVID-19 pandemic](#)



Robb M, Penson M, Vseteckova J, et al. (2020) [Young carers, COVID-19 and physical activity](#)

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