



Community understanding of carbon smart green spaces

Christopher Raymond, Oriol García-Antúnez, Anton Stahl Olafsson, Natalie Gulsrud, Eugenia Castellazzi, Jussi Lampinen

Managing for 'carbon smart' green spaces





Research questions

Are carbon-smart green spaces supported by the public, by whom, where?

What explains varying levels of support among the public?

How do social values for green areas align with biodiversity and carbon?

Key message 1

Public support for carbon-smart green spaces is moderate to strong among residents of Helsinki, but varies according to...

- different ways of **valuing, using, and accessing** green spaces
- different **socio-economic contexts** (age, gender, income)
- different **understandings** of the role of green spaces in carbon sequestration and storage
- across **different places**
- according to **perceived trade-offs** to biodiversity and well-being

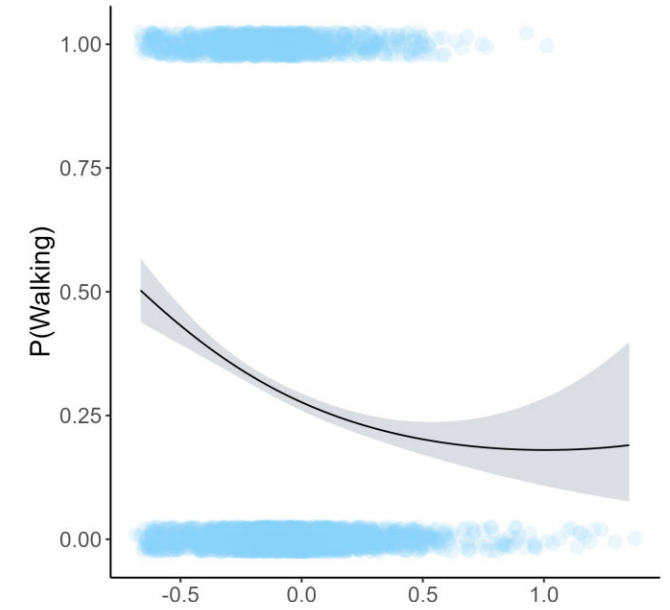
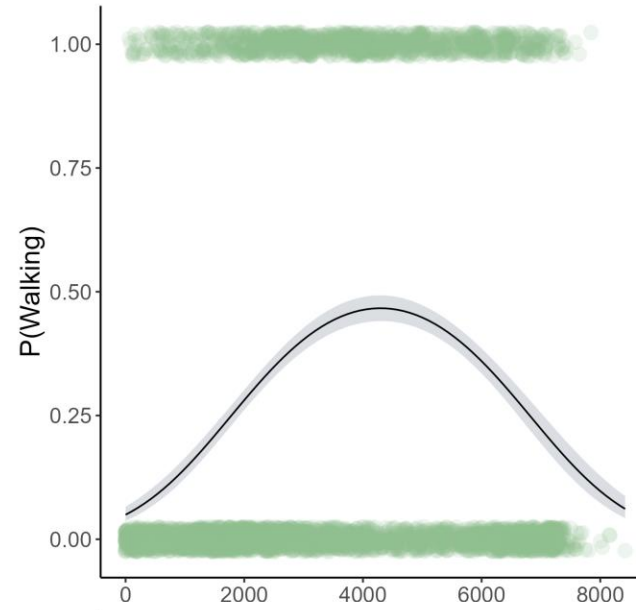
Key message 2

The relationships between biodiversity, carbon, and social values in green spaces across Helsinki is variable. Yet, certain generalizations can be made:

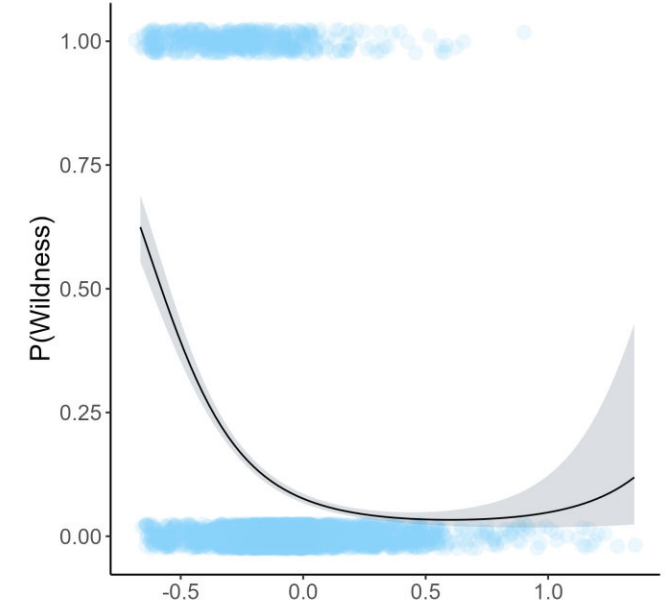
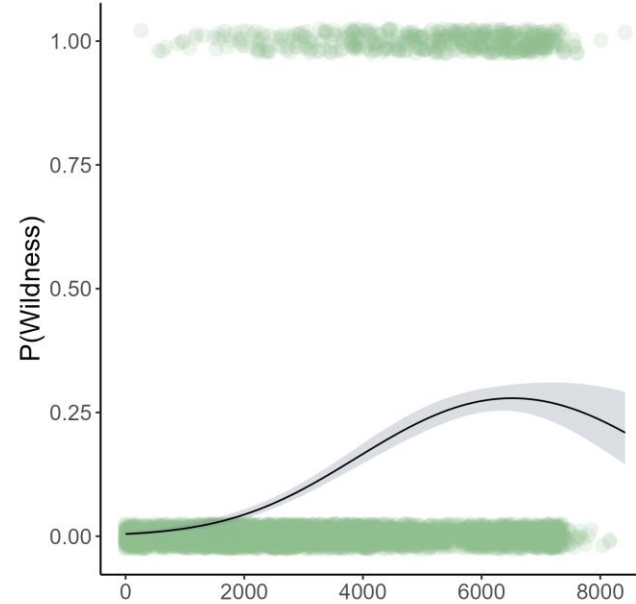
- Biodiversity, carbon sequestration, and social values for nature co-occur in **large green spaces**
- Perceptions of biodiversity and carbon **follow modelled estimates of actual** biodiversity and carbon sequestration

*Different parts of the
biodiversity- and carbon
–gradients are valued in
different ways*

*Predicted presence
of social value:
Walking
 $n = 3\,616$*



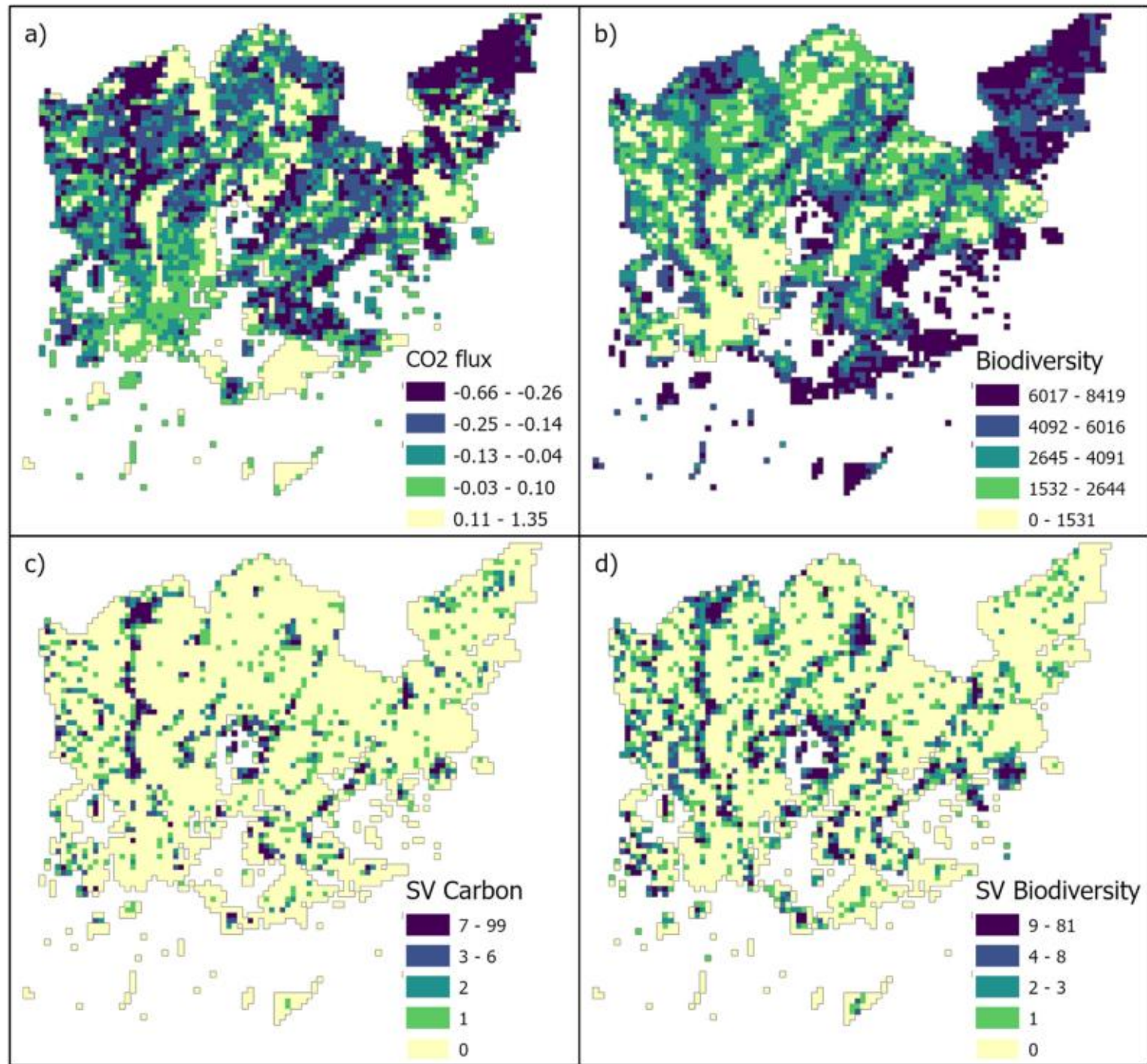
*Predicted presence
of social value:
Wildness
 $n = 1\,158$*



BIODIVERSITY

CARBON FLUX

Perceptions of carbon sequestration and biodiversity align with modelled estimates of carbon sequestration and biodiversity



Conclusion

The results show how biodiversity, carbon sequestration and well-being values need to be managed within specific places in Helsinki. Place-specific management needs to be guided by:

- **Inclusive and participatory** planning practices
- Recognition of the **interconnectedness** of everything
- Understanding that win-win-win situations between biodiversity, carbon, and social values for green areas **are unlikely to be universal**



Thank you!

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