

Biomimesi: la soluzione che arriva dalla Natura
Nuovi approcci turistici orientati alla salute delle persone e delle Aree
Protette Alpine

07 Novembre 2025
Polo universitario - Via Monte Vodice - Aosta

Interreg
Alpine Space



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LiveAlpsNature



Equilibri necessari

Salute degli ecosistemi per il benessere dell'uomo



Università
Ca' Foscari
Venezia

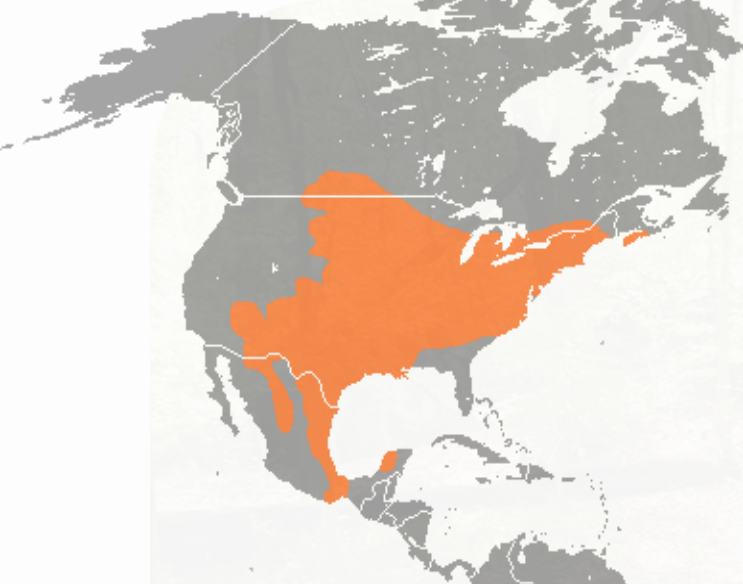
Alice Stocco

Dip. Scienze Ambientali,

Informatica e Statistica

Università Ca' Foscari, Venezia

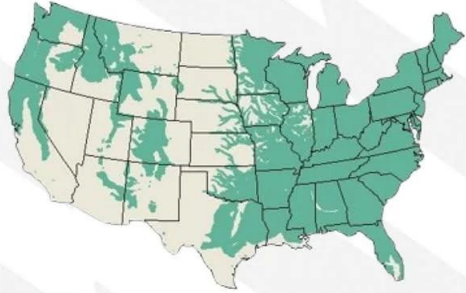




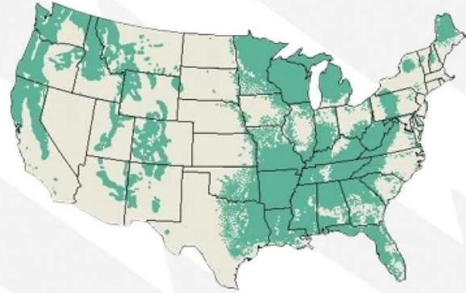
Forest Loss in the **United States** Over Time



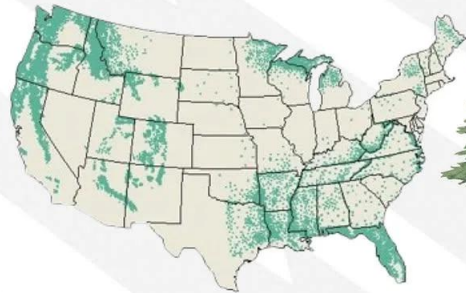
1620



1850



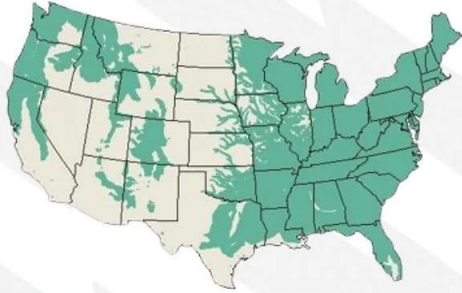
1920



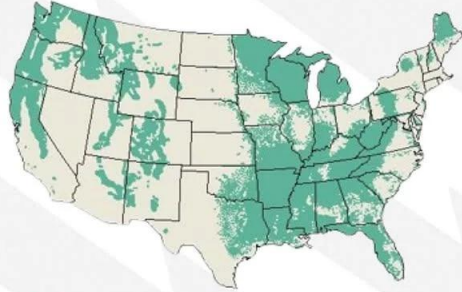
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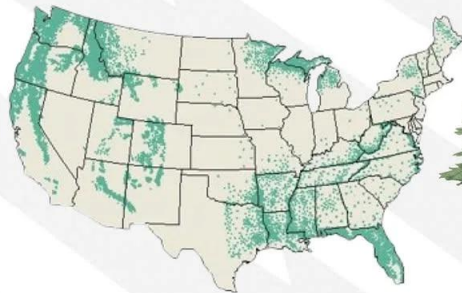
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1850

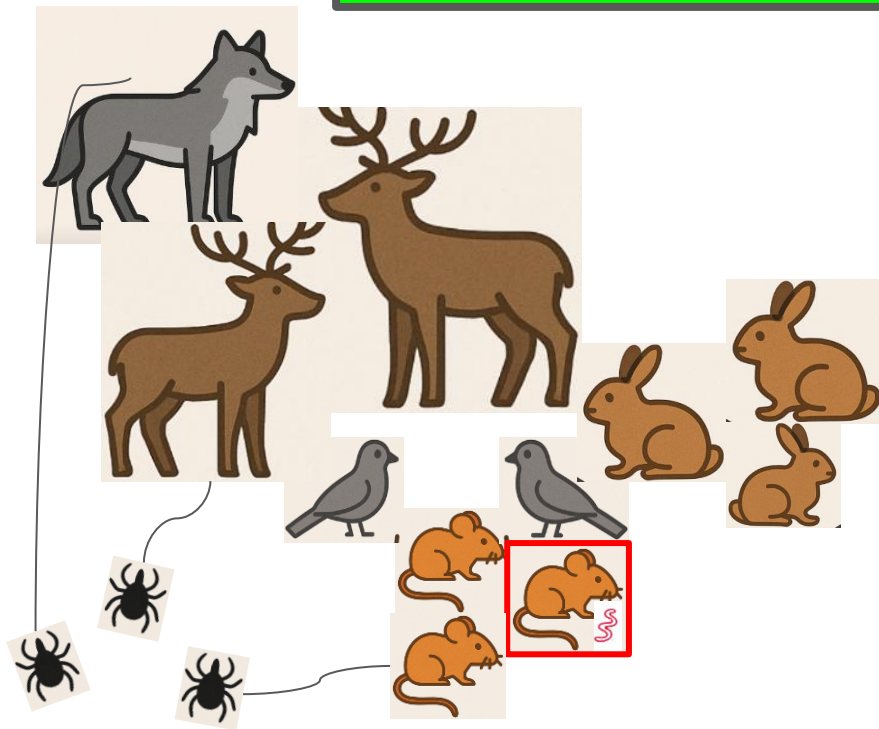


1920



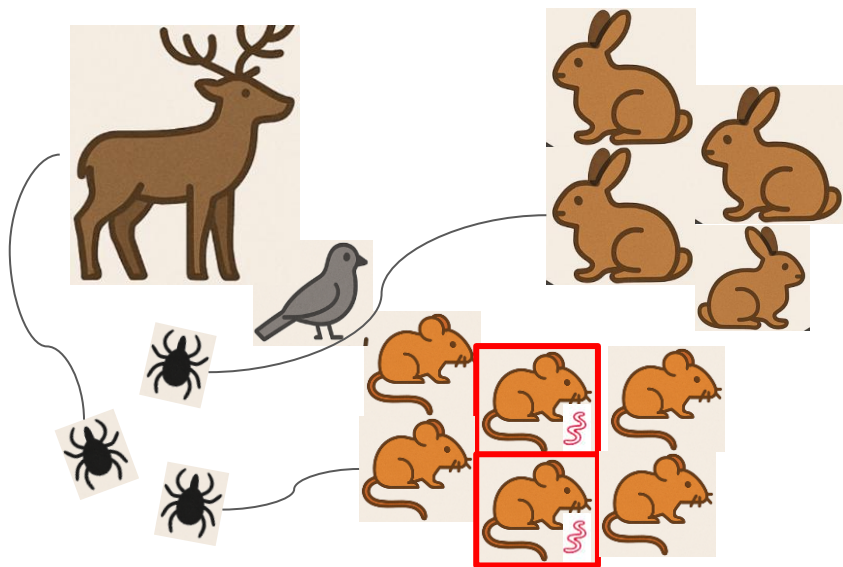


BIODIVERSITÀ



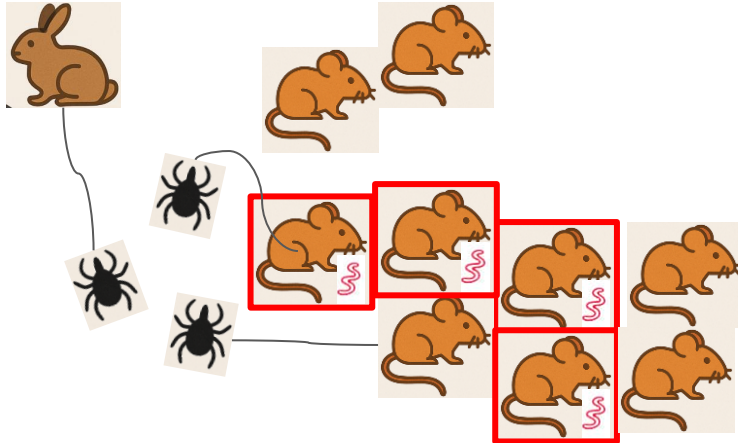


BIODIVERSITÀ





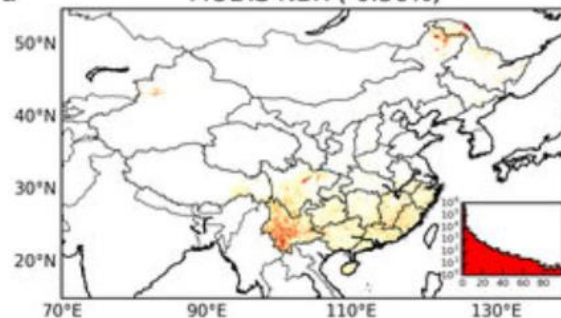
BIODIVERSITÀ



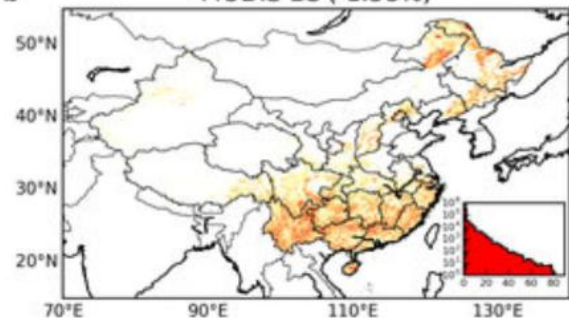


Perdita % di aree
 forestali in Cina,
 2000-2013
 (Li et al., 2017)

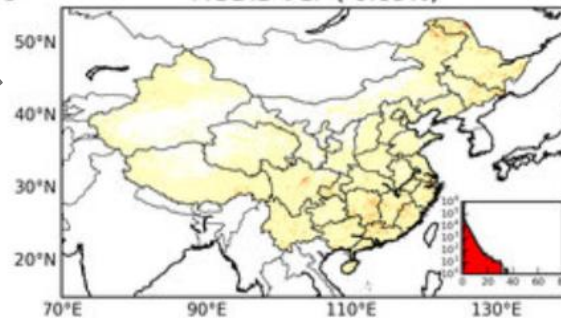
a MODIS NBR (-0.56%)



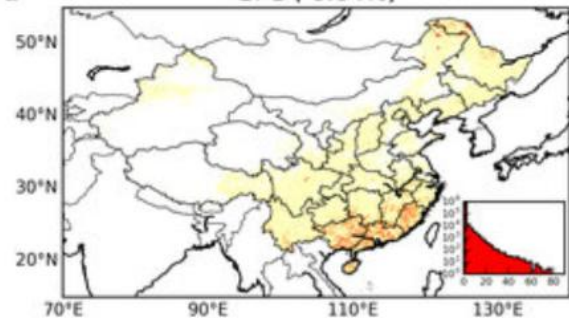
b MODIS LC (-1.58%)

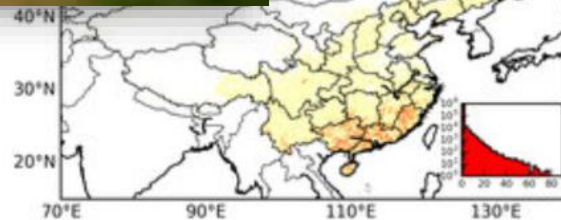
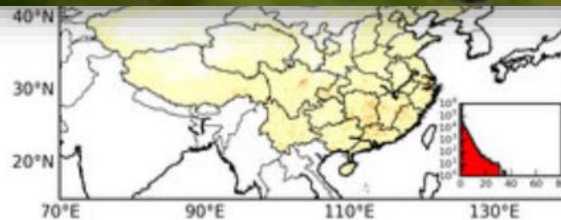


c MODIS VCF (-0.69%)

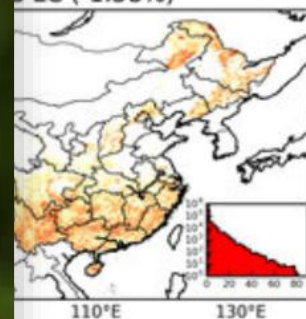


d GFC (-0.64%)

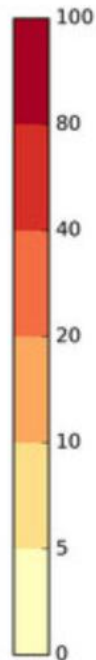
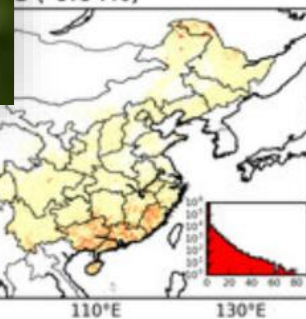


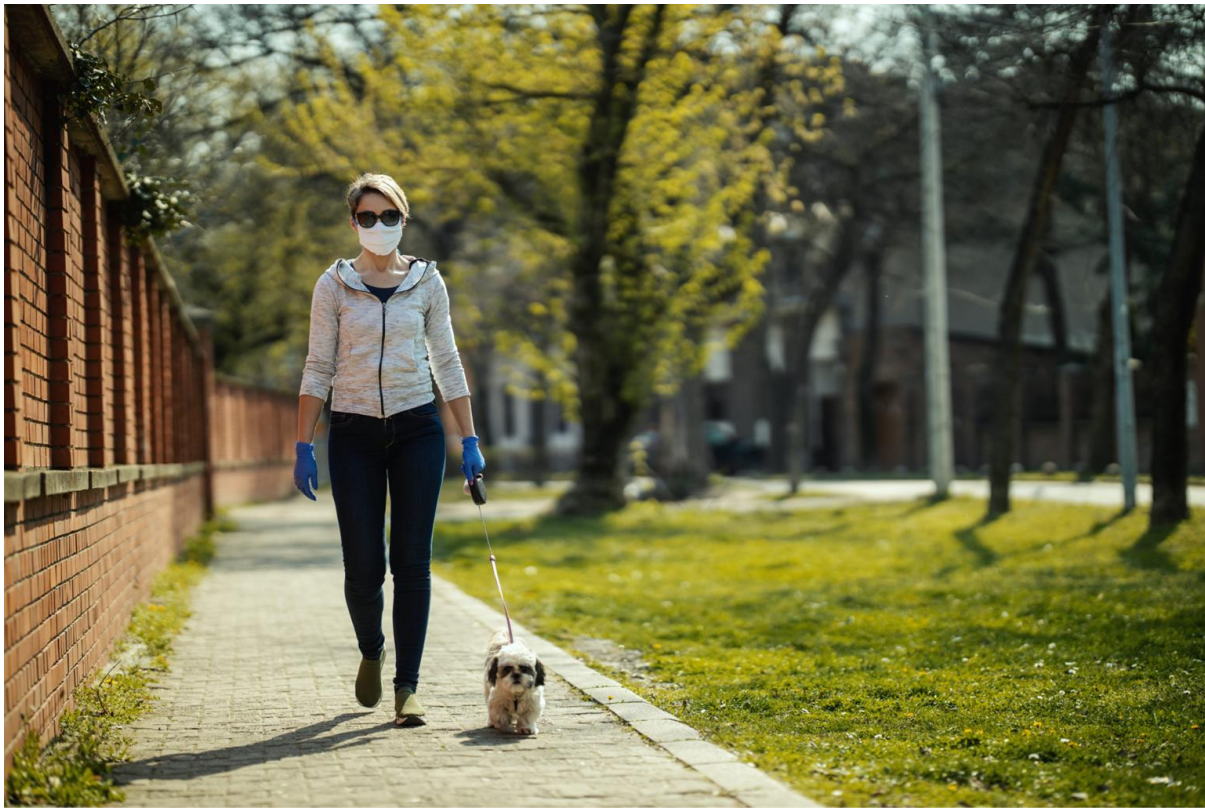


S LC (-1.58%)



C (-0.64%)







forest bathing

Search term

+ Compare

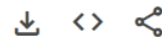
Italy ▼

01/01/2010 - 05/11/2025 ▼

All categories ▼

Web Search ▼

Interest over time ?



Vie di interazione Natura - essere umano

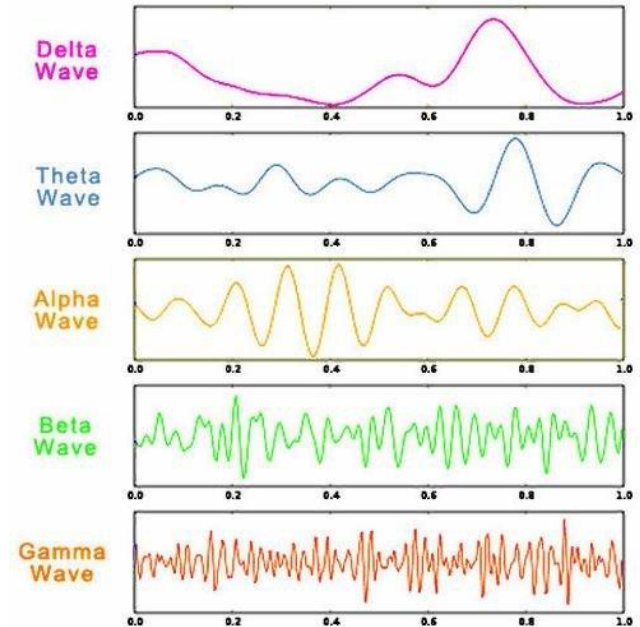


Andersen et al., 2021; Berto et al., 2014; Bratman et al., 2019; Li, 2016; Song et al., 2015

“Sicura che funziona...?”

All'EEG, quando si osservano paesaggi naturali, si registra un aumento delle **onde alfa**

(associate a rilassamento e attenzione diffusa)

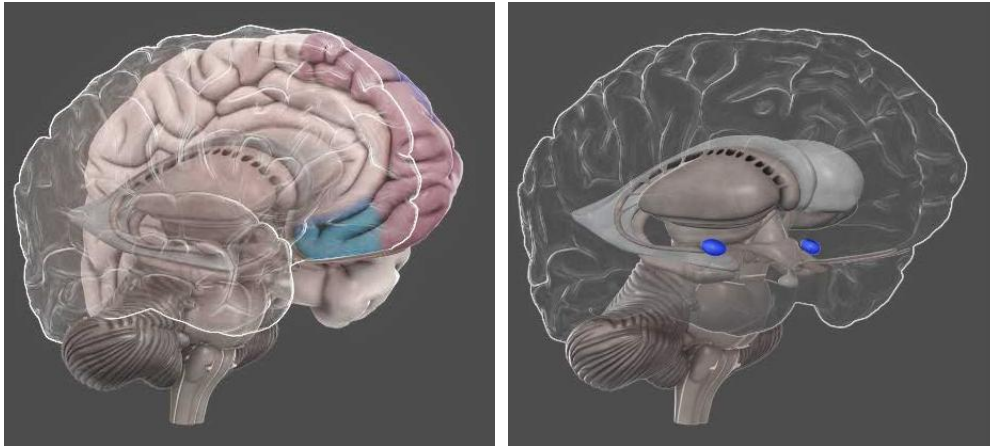


Ambienti naturali



Attivazione di **amigdala** e **corteccia prefrontale ventromediale**

(pattern: emozioni positive)

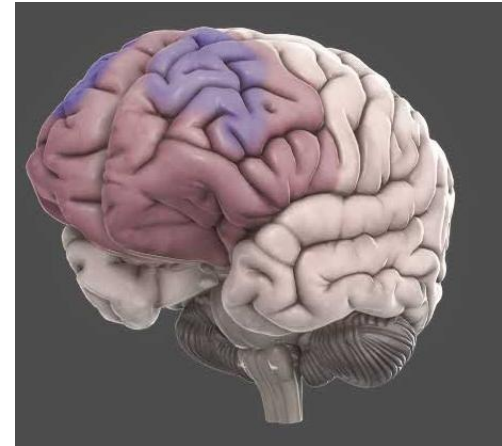


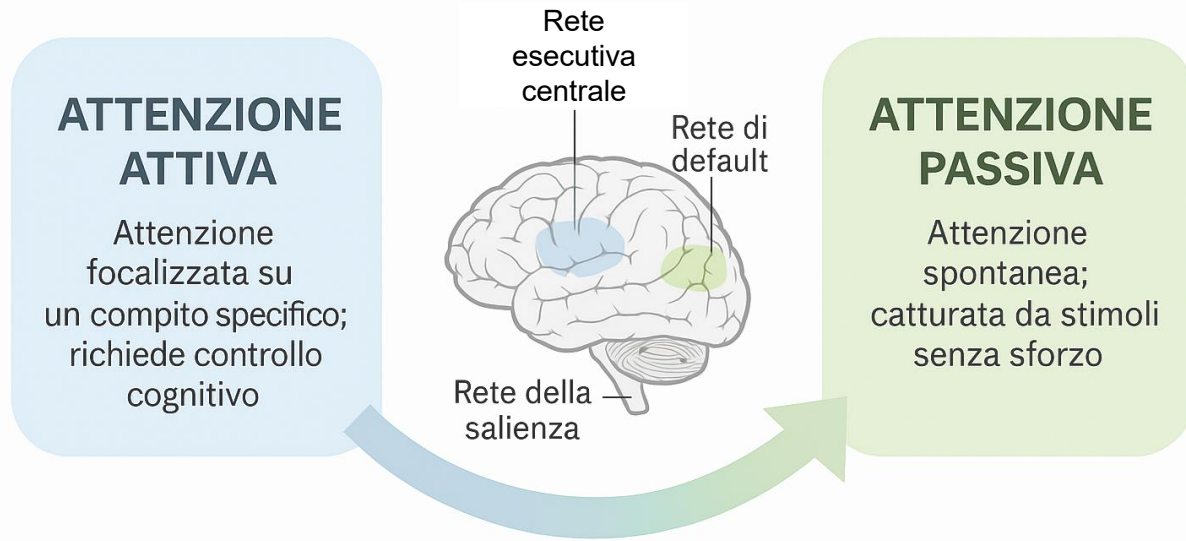
Ambienti artificiali



Attivazione della corteccia prefrontale dorsolaterale

(controllo razionale)





La Natura facilita il ri-equilibrio funzionale tra le reti neurali del nostro cervello

“Gen Z”, “Gen α”, e perdita del contatto con l’ambiente

- Diminuzione del tempo trascorso all’aperto: -50% negli ultimi 20 anni.
- Amnesia generazionale di “come la Natura dovrebbe essere”
- Aumento del tempo davanti agli schermi: 7-9 ore/giorno (!)
 - Impoverimento percettivo
 - Influenza negativa sullo sviluppo della connessione alla Natura
 - Difficoltà a trovare rigenerazione in Natura

... aggravata da perdita dell'ambiente stesso

Research Article

One Ecosystem 8: e111973

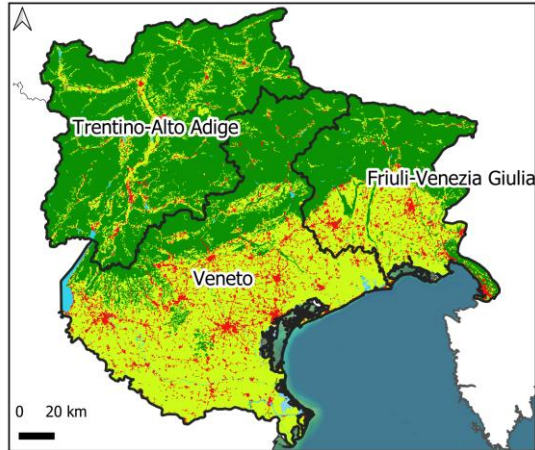
<https://doi.org/10.3897/oneeco.8.e111973> (29 Dec 2023)

The influence of naturalness of the landscape structure on children's connectedness to Nature in north-eastern Italy



Land Cover Class

- Urban, artificial areas
- Rural, agricultural areas
- Natural and semi-natural areas
- Water bodies



PRS score vs. NI

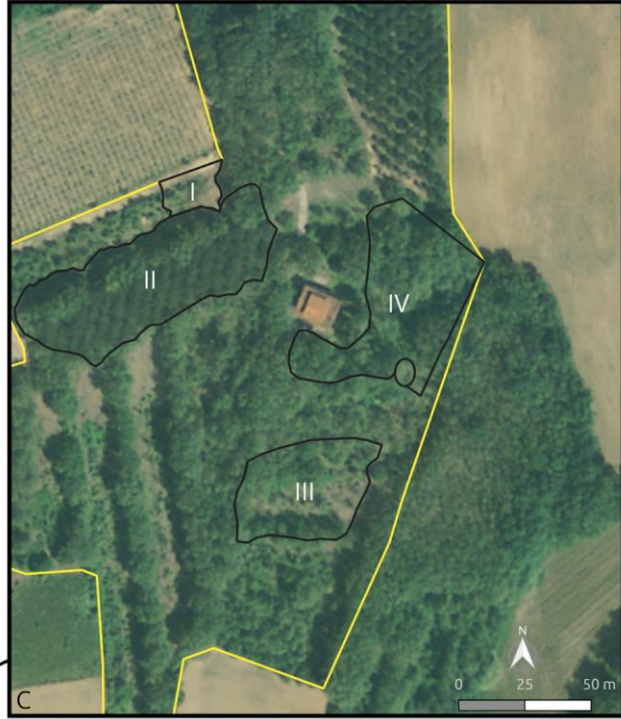


A=ambiente naturale
B=cortile scolastico

NI = *naturalness index*

Eppure la Natura stimola
effetti misurabili
sulla salute e il benessere

Struttura dell'ecosistema → combinazione complessa di meccanismi effettori



Patch I



Patch II



Patch III

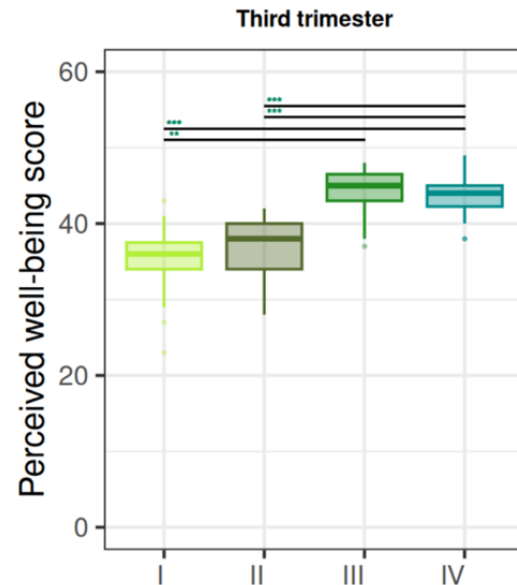
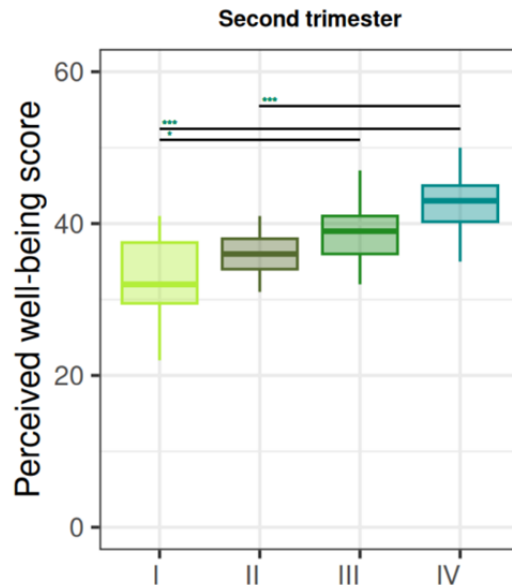
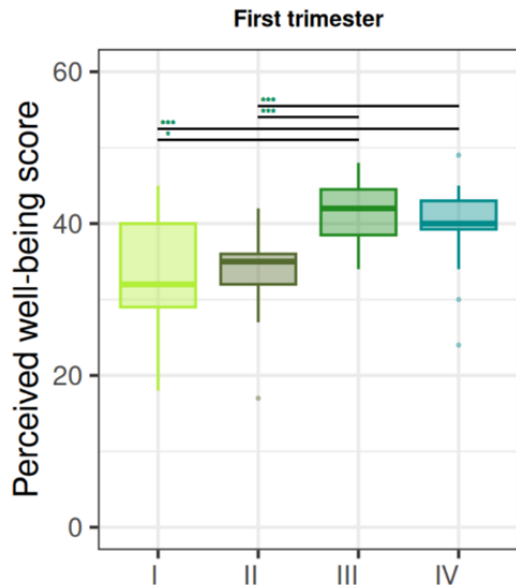


Patch IV



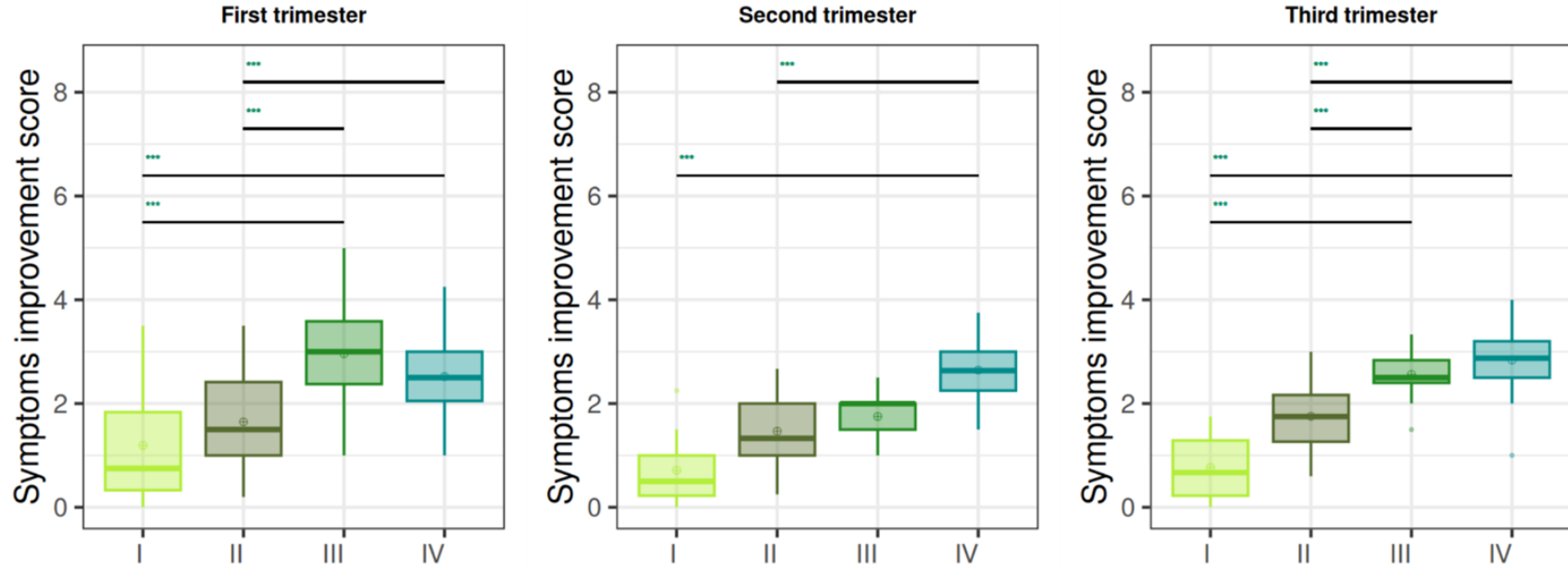
La **struttura** e la **biodiversità** dell'ecosistema influenzano la salute umana

- Effetti psicologici



La **struttura** e la **biodiversità** dell'ecosistema influenzano la salute umana

- Effetti sui sintomi in condizioni patologiche croniche



La “Natura terapeutica” diventa un’opportunità...



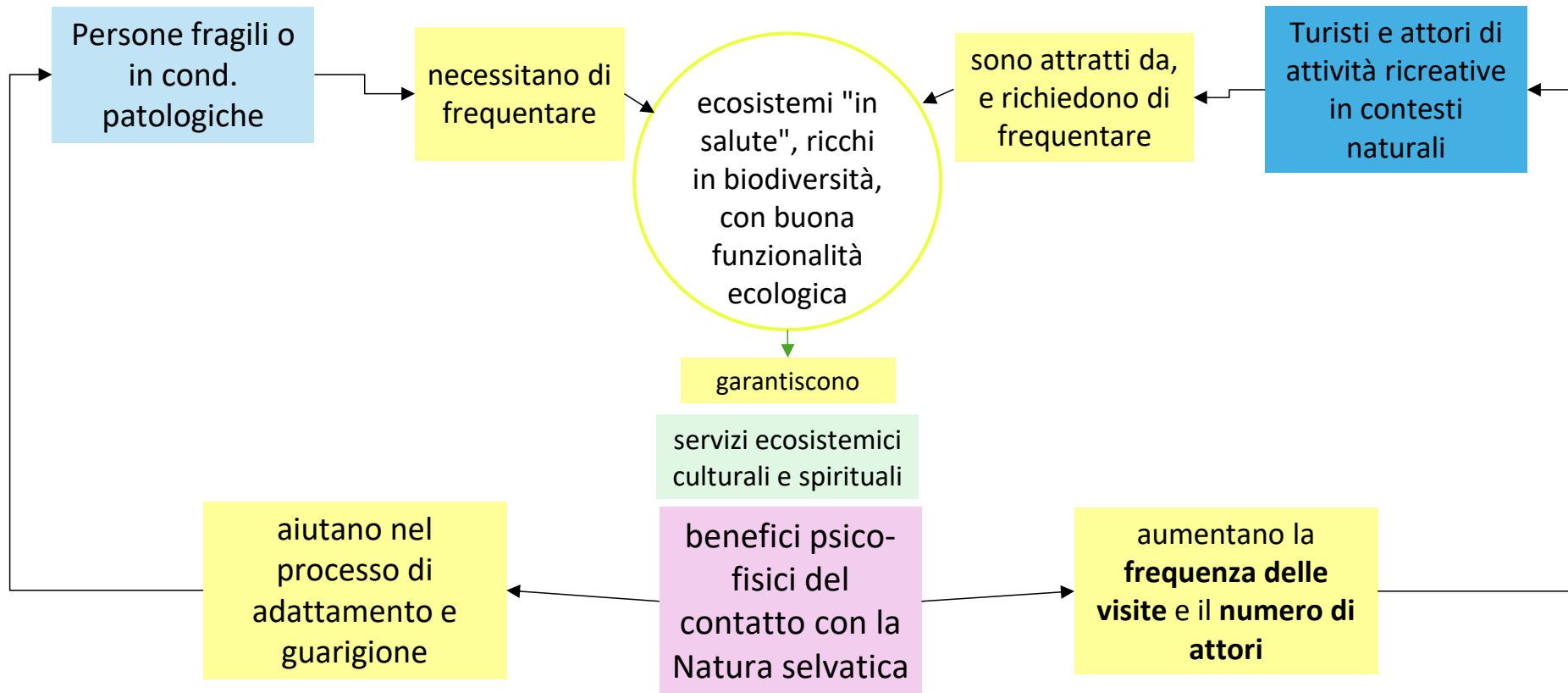
...ma quando le iniziative di "immersione in Natura", "mindful walk", "bagni di foresta", si moltiplicano e si diffondono senza controllo...



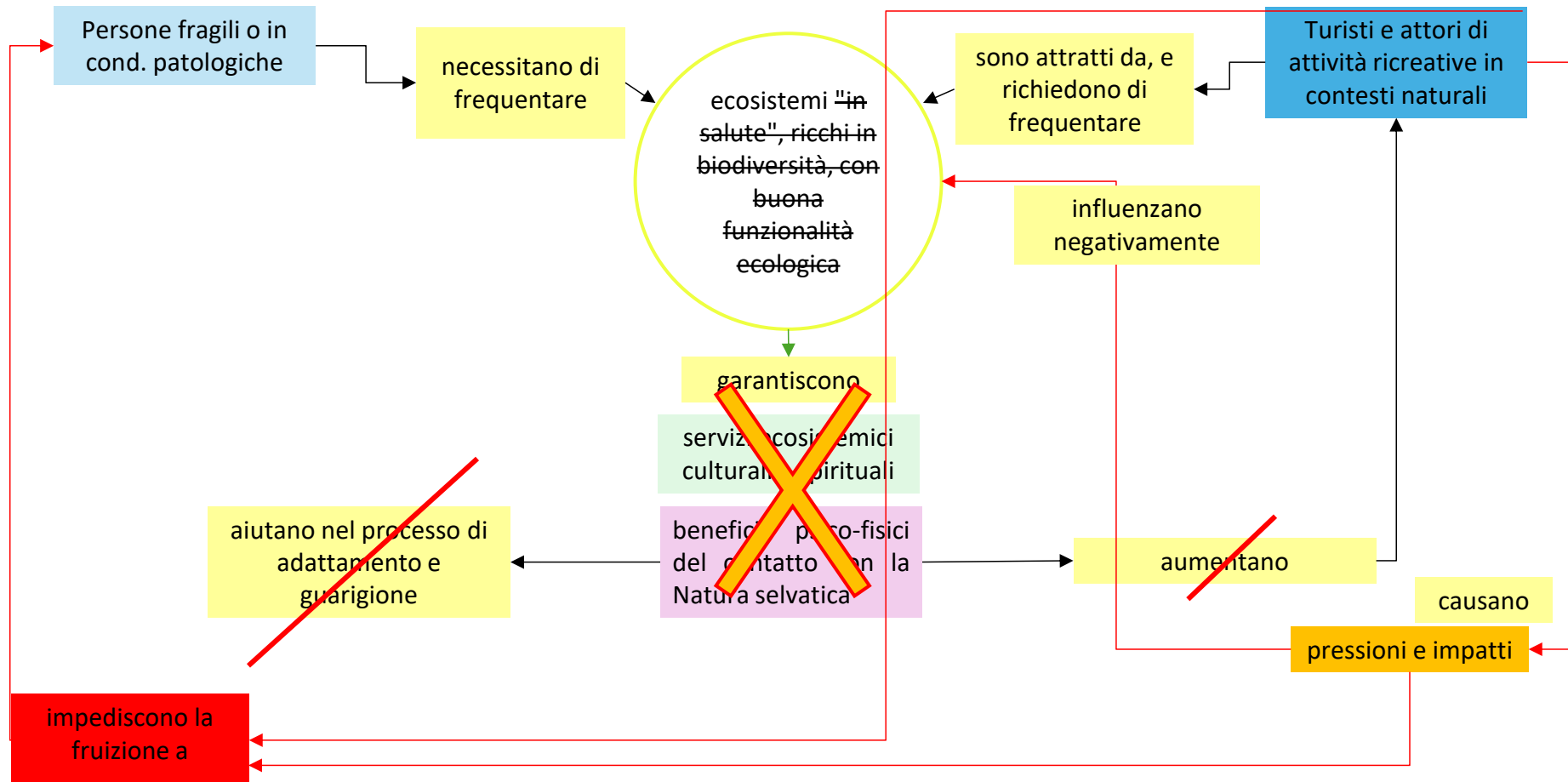
Alto rischio di impatti negativi



Paradossi e retroazioni



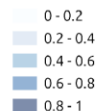
Paradossi e retroazioni



Urgente bisogno di implementare **sistemi di monitoraggio (e gestione) delle pressioni** sugli ecosistemi, **prima** di interventi ricreativi, educativi, terapeutici



naturalness index



0 25 50 m



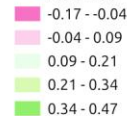
vulnerability



0 25 50 m



combined



0 25 50 m

- Collaborazioni interdisciplinari, equipe transdisciplinari
- Apprezzare la complessità, rispettare spazi e tempi naturali
- Abitudine al pensiero sistemico
- Scelte e decisioni mirate, coraggiose, monitorate



Grazie!



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talkingecology.com