

Novel Approach to Riparian Vegetation Monitoring

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Despite their significance, riparian ecosystems often face mismanagement, with riparian forests cut by local authorities to mitigate flood risks, disregarding their broader functions and services. This issue is exacerbated by societal desires to maintain 'clean' riverbanks

Ecosystem Services by Riparian Vegetation

Pest control

Riparian vegetation provides a habitat for beneficial pollinator and pest-control agents

Carbon storage

Plants take up and store carbon dioxide from the atmosphere

Corridors

For species movement to connect hotspot area

Microclimate control

Overhanging branches help to keep water cool

Flood mitigation

Reducing water velocity

Buffer capacity

Soil microbes help to break down pollutants, particularly nitrate

Sediment and chemical runoff

Surface water flow is slowed by riparian vegetation enabling sediment and pollutants to be filtered out

Erosion control

Root system consolidate banks

Habitat

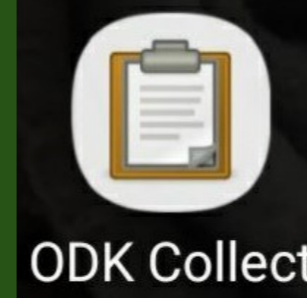
Trees provide shade, habitat and food for wildlife

No Ecosystem Services!

There is a need for increased public awareness and more information on the state of riparian vegetation!

The **RiVe method** is a standardized approach for citizen scientists that aims to raise awareness and assess the state of riparian forests at local scale.

Parameters to be recorded in the RiVe format



The RiVe method is accessible to non-experts while maintaining ecological significance. Collected parameters and the sub-index of invasiveness offer valuable informations in effective sustainable management of river corridors.

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