

The role of trees in soil evolution and erosion

Global scientific cooperation



My name is Pavel Samonil, I am soil scientist, geomorphologist, forest and disturbance ecologist from the Czech Republic (94 papers and 2,250 citations on WoS).

In the years 2024-2026, I am solving a scientific project

A global model of treethrow forms and the role of tree mortality in carbon storage

- We create a global species- and habitat-specific model of root plate (toppling) size. It will help assess slope dynamics in forest landscapes based on tree mortality rates.
- Currently 2,600 cases in the Global Treethrow Database - Czech Republic, Panama, Papua New Guinea, Sri Lanka, Puerto Rico, Poland, Slovakia, Bulgaria, Washington-USA, Maryland-USA, Virginia-USA.
- Data are collected using a digital forms, one case can be measured and sent to the Database in about 3 minutes (see below).
- In 2024 we plan to get as many measurements as possible. In 2025 we will prepare synthetic study.

We are asking for your help with measuring uprooted trees in your natural or managed forests. We offer financial compensation (3 EUR/case) and co-authorship of the synthetic publication (≥ 20 cases measured).

(If you want reimbursement, contact us before data collection, we will work out the details)

Global model of tree uprootings

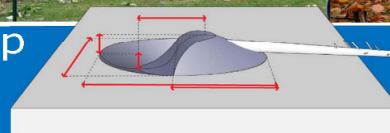


We need your help

Why

Role of trees in soil and landscape formation requires attention • In natural forests, uprooted trees rejuvenate the soil, limit erosion and runoff from the landscape • In cultivated forests, the management limits the natural mixing of the soil, intensity erosion and aggravates drought.

How



1. Download Survey123-FieldApp to your mobile for free
2. Open the app, „continue without login“
3. Click the QR code icon, scan the QR code
4. Record data in the form (Czech, English)
5. When you are online, send the data to the database, thanks!

Contact us: www.pralesy.cz, samonil@vukoz.cz
Methodical video: <https://youtu.be/SPvbOtmjs3g0>

Don't hesitate to contact me if you want to join: samonil@vukoz.cz