

About my work and team here is a brief information:

- We hope to popularise the Romanian peats
- The team has two national projects regarding the protection of the peats and the counting
- We are focusing more on the protection of the peat than on its exploitation

The Romanian peatlands, exploitation or conservation?

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The peatlands coverage in Romania is over 7000 ha after Pop and of about 6000 ha after Taylor, occupying the 34th place in the world regarding which represents 0,03% from the country's surface. They are concerted in 436 deposits having a stock of over 82.500.000 m³. After the same author from all the peatlands 171 are eutrophical, having a surface of over 5700 ha, with a peat stock of over 55.000.000 m³, representing the largest surface and the rest of 265 are oligotrophical peats, having smaller surfaces, being concentrated in the boreal level of the spruce fir forests from the Romanian Carpathians. The "low" peats or eutrophical were formed on the hydrophilic vegetation (*Phragmites*, *Thypha*, *Carex*, *Juncus*), the vastest surfaces being found in the Ecedea Plains (The Crasna Basin), in the Ciucului Basin, Gheorgheni, Bilbor-Borsec, and at the springs of Olt and Mures. The "high" peats, or oligotrophical named by locals "tinoave", "molhasuri" or "mlaca" were formed on the moss vegetation from the *Sphagnum* and *Eryophorum* genus. The largest surfaces are found in the Apuseni Mountains (the Springs of Somesul Cald, Somesul Rece, on Ariesul Mare and Mic), in the Dornelor and Sucevei Basin, in Tara Oasului and Maramuresului, in the Calimani Mountains, the Semenic Mountains and the superior Basin of Sebes. Because the surfaces covered by peats in Romania are relatively low, the exploitation of this deposit was made since the beginning of the XIXth century (1880), the first usages being medical, as mud baths, being used the peats from the Dornelor Basin and the "vitriolic" peat from Stoboru, this having the largest contained of sulfur (7,15) from the world and a pH of 0,1-2,0, because of the free H₂SO₄, formed in this captive peat, which was used in the human medicine for gynecological affections. In the same period the peat was used as fuel (1872 at the blacksmith of Baia de Aries, and the chemical factory from Budapest). After 1950 the peat exploitation has extended for fuel being used the eutrophical peat from the exploitation from Fagaras, Miercurea Ciuc and Dornei, and also the oligotrophical from Poaiana Stampei and Calatele. The usage of peats in horticulture was made only after 1975 especially the eutropical peats from Calatele and Poiana Stampei. A tendency in the communist period was the draining of the peat swamps and turning these in agricultural lands, as a result the loss of the peat surface with about 1000 ha destroying the plastical and faunistical biodiversity characteristic to these biotope. In the Romanian peats there is a great forestry and animal biodiversity, which preserves relicts from the glacial period. In the eutropical peats many species reach the southern frontier of the world spread (*Meesea hexasticha*, *Paludella squarrosa*, *Dryopteris cristata*, *Betula humilis*, *Salix starkeana*, *Stellaria longifolia*, *Viola episila*, *Pedicularis sceptrum-carolinum*, *Achillea impatiens*, *Cnidium dubium*, *Spirea salicifolia*, *Evonimus nana*, *Carex dioica*, *Saxifraga hirculus*, *Polemonium coeruleum*, *Swertia perennis*, *Ligularia sibirica*, or the southern points in Europe (*Calamagrostis neglecta*). Others reach the most western spread from the world (*Achillea impatiens*, *Evonimus nana*). We can also find a several relicts plants (*Tofieldia calyculata*, *Sesleria coerulea*, *Eriophorum gracile*, *Swertia perennis*, *Evonimus nana*) and endemical (*Armeria alpina*, ssp. *borcensis*, *Ribes heteromorphum*). In the oligotropical "tinoave" are found a lot of glacial relicts some of them constituting way point towards south, as biogeographical formations. So the world southern limit in "tinoavele" from Romania is reached by: *Sphagnum coulfricanum*, *Helodium lanatum*, *Paludella squarrosa*, *Dryopteris cristata*, *Betula nana*, *Vaccinium oxycoccos*, *Viola epipsila*,