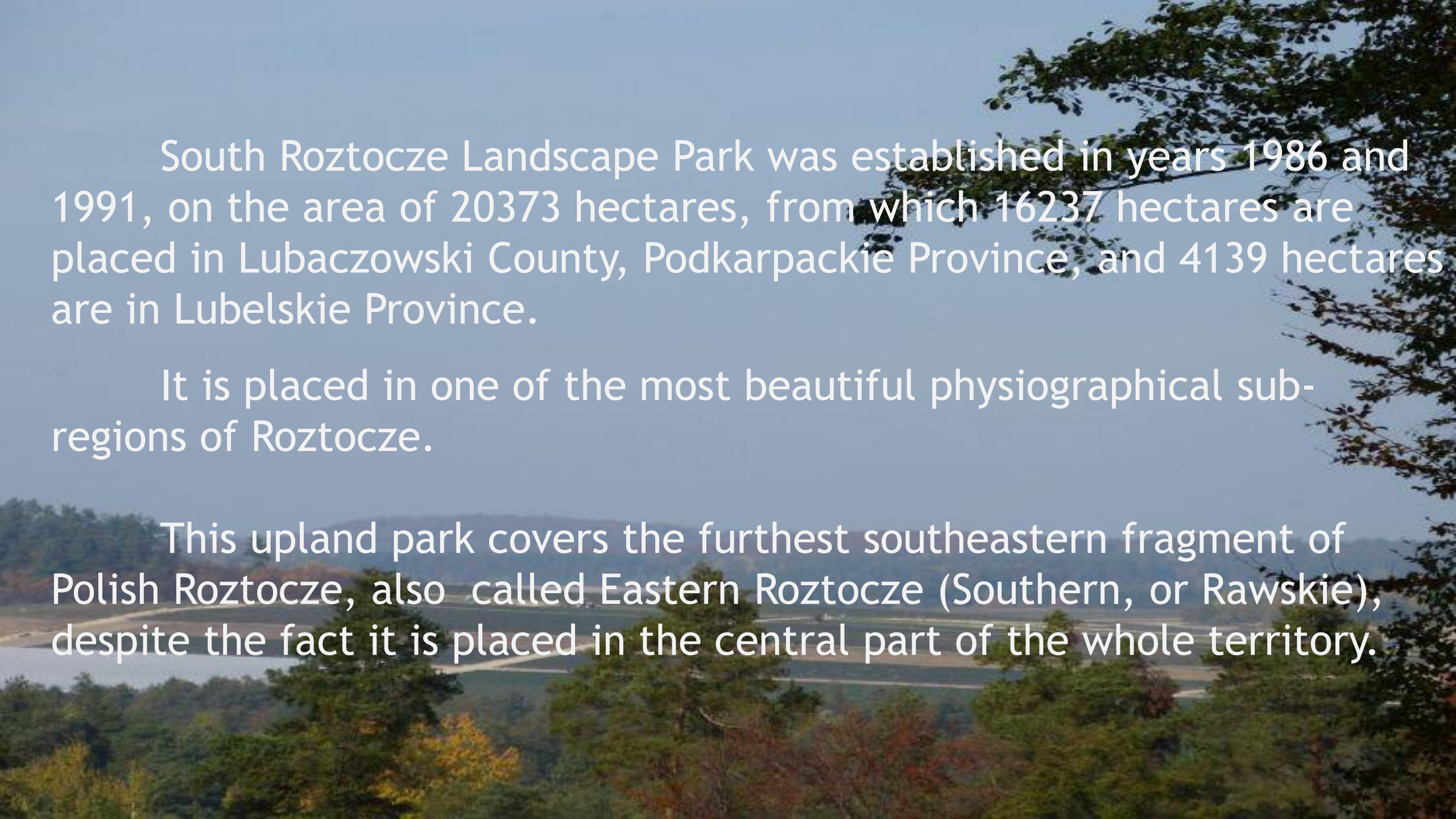


Forests in Poland and Europe. Characteristics and management.

South Roztocze Landscape Park





South Roztocze Landscape Park was established in years 1986 and 1991, on the area of 20373 hectares, from which 16237 hectares are placed in Lubaczowski County, Podkarpackie Province, and 4139 hectares are in Lubelskie Province.

It is placed in one of the most beautiful physiographical sub-regions of Roztocze.

This upland park covers the furthest southeastern fragment of Polish Roztocze, also called Eastern Roztocze (Southern, or Rawskie), despite the fact it is placed in the central part of the whole territory.

The main goal of the park is to protect:

- dense, mixed forest complexes with a big addition of admixture, and in some regions with the dominance of Beech and , to a lesser degree, Fir;
- habitats of mountain plants;
- forms of land relief and hydrosphere of Rawskie Roztocze;
- traces of clashing influences of the Western and Eastern, cultures mainly in form of church monuments;
- World War II remains, numerous bunkers and fortifications;

**Bunker from of Molotov's fortifying line
During Second World War**



Roztocze grows up as an upland ridge with small hills separating the Vistula River valley and the Bug River dale.

It is the borderland for:

- **waters flowing in different directions;**
- **two geographical lands;**




GEOLOGY

Unusual geological border runs across southeastern areas of Eastern Roztocze .

With an almost straight line it separates the tectonic plate of Eastern Europe, or “old Europe” (Baltica) from gradually up built as “overlap”, much younger and creased parts of Western Europe. Most probably, it happened 400 millions of years ago, on a turn of Silurian and Devonian periods - in the Paleozoic, during the drift of continental blocks (according to Wł. Pożaryski).

Roztocze ridge was been separated at the end of Tertiary period as a result of tectonic forces that caused creasing of the Carpathian Mountains.



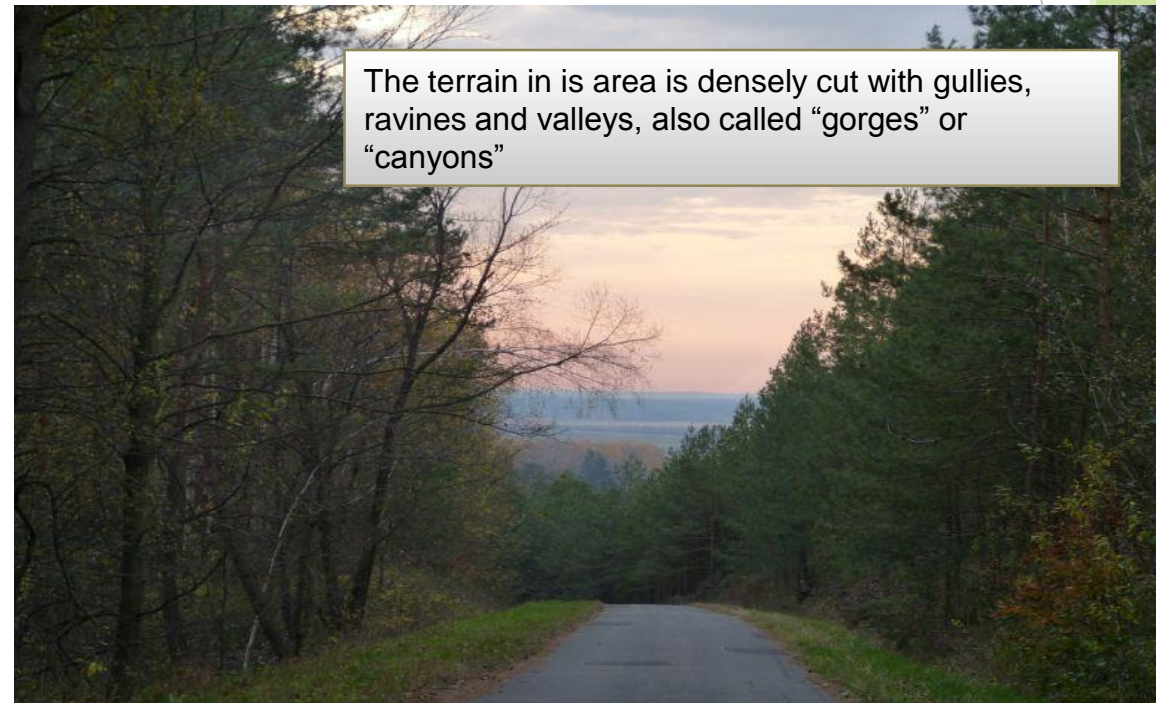
Today Eastern Roztocze is an upland land,
where the highest elevations
in the whole Roztocze are placed: including Długi
Goraj (391,5 meters above sea level)

Land relief was developed mainly under the influence of a glacier, after which Scandinavian boulders (granite erratics) and glacial sediments were left.

Slopes of elevations underwent strong erosion under its influence, especially, high density gully one the in a triangle between Horyniec Zdrój, Werchrata and Nowe Brusno.

Characteristic traits of this land are table hills and limestone monadnocks of the eldest relief, developed in the layers of limestone and Badenian sandstones.

The highest monadnock hillocks Długi Goraj, Wielki Dział (389,5 meters above sea level), Krągły Goraj (388,7 meters above sea level) are covered with a few-metre thick layer of reef limestone .



The terrain in this area is densely cut with gullies, ravines and valleys, also called "gorges" or "canyons"

“Świątynia Słońca” a monument of non-living nature.



In an old quarry old limestone boulders overgrown with various species of mosses and lichens are laying, including known to tourists “Diabelski Kamień”(Devil’s Stone)

On Brusno Mountain (365 meters above sea level) a limestone mine is placed. Folds in this limestone allow to read evolutionary processes taking place in them and raising of this terrain from Miocene sea. Masters of stonecutting since the first a half of XVI age had been making ingenious grave stones and crosses out of them.



In the park you can also find an Austrian-German-Russian war graveyard from the time of First World War and traces of Basilian monastery.



Waters

The park is lying within the borders of hydrographic unit called Lublin cretaceous. Water bearing carbonate layers with a slot character are dominant here. The volume of water bearing layer is really varied, from only a few to 100 meters. The river system of the park is poor.



FLORA

The most precious plant communities of Southern Roztocze are forest communities, occupying about 67% of the park. A characteristic forest community here is the Carpathian beech. Developed in typical form, it can be met in the area of Hrebennie, Nowiny Horynieckie, and Werchrata. There are a few mountainous species growing in the undergrowth.



In the area of the park, fertile forest habitats of **Tilio - Carpinetum**, with big participation of periwinkle are dominating. Its position belongs to one of the most fertile in the country.

Less fertile habitats are occupied by forests with mixed coniferous and deciduous participation. Only in the area of Dębin and Huty Złomy, on dune formations fresh coniferous forests are growing. Here, in lower elevations between dunes, in headwaters area of Tanwia, transitional and high peats have developed.

To the singularity of this park belong:

➤ Scheuchzeria;

➤ Periwinkle;

➤ English ivy;

➤ Sundew;

➤ Broad-leaved orchid;

➤ Turk's cap lily;

➤ *Lycopodium clavatum*;

➤ Stiff clubmoss;

➤ *Euphorbia Amygdaloides*;

➤ Brown sedge;

➤ Lesser butterfly orchid

FAUNA

In the landscape park we can meet many rare and protected animals. Carpathian beeches are habitats of boreal elements of fauna, like Ural owl. To the representatives of southern and southeastern element we can include: Collared and Red-breasted flycatchers. Representatives of western European element are red deer, roe-deer, boar, hare, mole.

Forest areas is the place of existence of protected species such as: lesser spotted Eagle, honey buzzard, black kite and woodpeckers. Areas surrounding the pauds of Hrebenne are breeding spots for water and water-mud birds . Moor buzzard, kite and osprey have been observed here.



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