

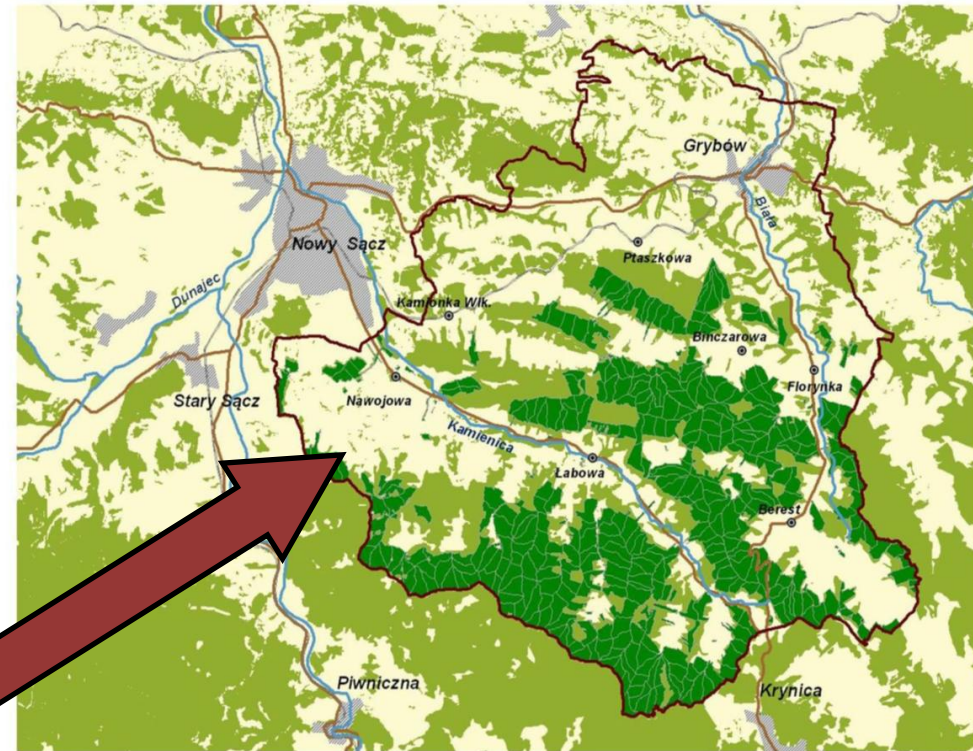
Forest in Poland and Europe. Characteristics and management.



**The forest district
of Nawojowa**



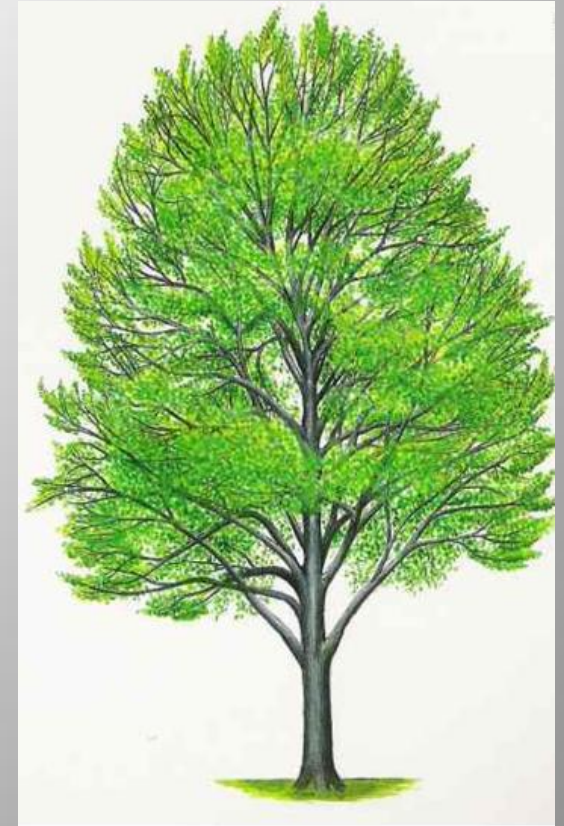
The location of Forestry Commission of Nawojowa



The forest district of Nawojowa

The Forest district office of Nawojowa is located in the area of Beskid Sądecki and Beskid Niski, in a basin of Biała and Kamienica rivers that are located in mountainous terrain at the height of 400 to 1100 meters above sea level. The total area of the forests owned by the State Treasury is managed by the forest district office of Nawojowa and equals 12 373 hectares. It also supervises the areas of forests which are not the property of the State Treasury and constitute 7770 hectares. Afforestation rate of these areas is about 55% and is twice as much as national average. The forest type is 95% mountain forest, created by stands of beech-fir mixed with sycamore, spruce, pine, birch, larch.

The beech-fir stands are of natural origin, while pine, spruce and larch come from artificial forestation.



Beech tree

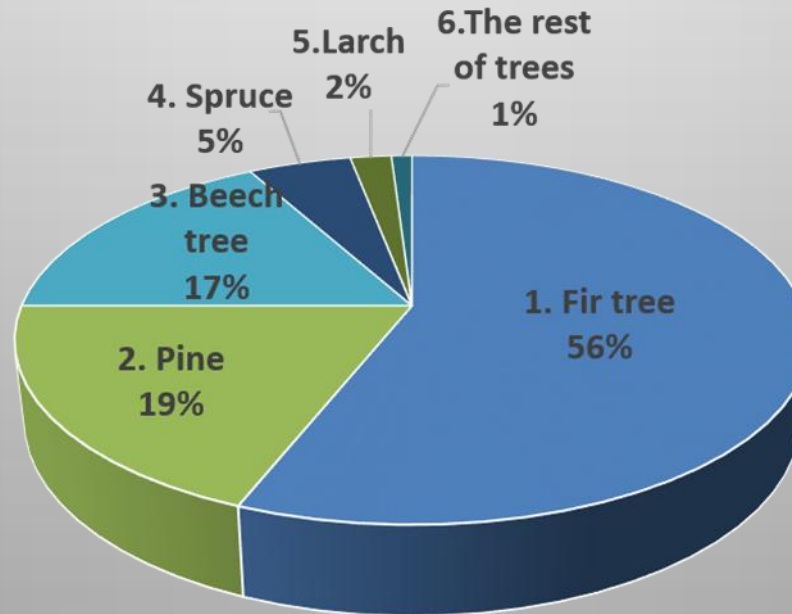


Forests

The whole area of the forest district of Nawojowa constitute protective forests-primarily soil and water-protective.

We distinguish two forest floors :

- the foothills (up to 530 meters above sea level)
- the lower zone of mountain forests (more than 530 meters above sea level)



Hierarchy of the Forest district office of Nawojowa

Minister of the environment

General authorities of state forests

Regional directors of national forests in Cracow

Forest district office of Nawojowa

Forestry administration
region Królowa

Forestry administration
region Berest

Forestry administration
region Feleczyn

Forestry administration
region Łabowa

Forestry administration
region Bogusza

Forestry administration
region Kotów

Forestry administration
region Barnowiec

Nursery farm in Feleczyn

Forestry administration
region Roztoka

























Forestry administration
region Florynka

Forestry administration
region Kamianna

Forestry administration
region Nowa Wieś

Forestry administration
region Homrzyńska

Flora and fauna

Plants	Mammals	Birds	Reptila	Amphibia	Insects
<p>snowdrop</p> 	<p>Red deer</p> 	<p>ural tawny</p> 	<p>smooth snake</p> 	<p>fire salamander</p> 	<p>Scarce Swallowtail</p> 
<p>wood anemone</p> 	<p>European wild boar</p> 	<p>black stork</p> 	<p>adder</p> 	<p>Carpathian newt</p> 	<p>hermit beetle</p> 
<p>maianthemum bifolium</p> 	<p>roe deer</p> 	<p>black woodpecker</p> 	<p>anguis fragilis</p> 	<p>newt</p> 	<p>Rosalia longicorn</p> 
<p>lunaria rediviva</p> 	<p>Brown bear</p> 	<p>lesser spotted Eagle</p> 	<p>grass snake</p> 	<p>yellow-bellied toad</p> 	<p><i>Carabus variolosus</i></p> 

Nursery farm in Feleczyn

It produces hundreds of thousands of seedlings, especially fir. In the areas where natural regeneration is missing, artificial regeneration is conducted.

A few million forest tree seedlings are produced in the nursery. They are mainly fir, beech, spruce, larch, sycamore, ash trees, elm and other species.

A large part of seedlings is sold to other forest district offices and they are exported to Slovakia and the Czech Republic. It's becoming more and more popular to sell seedlings to small customers.





Wood

The trees in the forest district of Nawojowa are older than average in all State Forests, the age of the trees is about 80 years old.

The cutting age in the forest district of Nawojowa :

- 140 years - oak
- 130 years - fir
- 100 years - larch, sycamore, maple
- 80 years - spruce, birch, hornbeam

Average data from forest district of Nawojowa:

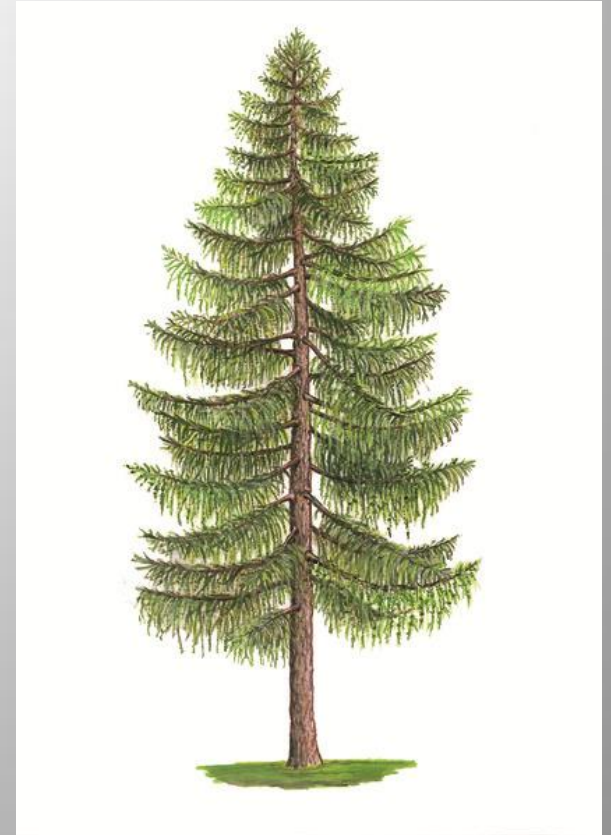
- Wood supply - 4 476 422 m³
- Forestry assets - 374,4 m³/ ha
- Logging - approx. 15 000 m³ (per year)



The forest farming

The way of forest management in a district of Nawojowa has a character of a „semi-natural” forest breeding. It is based on the use and support of the powers of nature in the scope of using natural regeneration.

- **The district of Nawojowa has:**
 - 84 ha excluded seed stands of fir with the best features in Poland
 - 25ha excluded seed stands of beech
- **There were selected and recognized:**
 - 18 mother trees of fir
 - 9 mother trees of beech
 - 3 mother trees of wild cheery



fir tree



The farm protection

- **Popradzki Landscape Park**
- **European ecological network Natura 2000** – special area of birds protection „Beskid Niski” and special areas of habitat protection : „Nawojowa” (bats protection), „Biała Tarnowska” (fish protection, especially timonthy and reintroduced Atlantic Salmon), „Ostoja Popradzka” (forest with natural character, extensively used mountain meadows, headwaters areas and natural valleys of large mountain rivers)
- **Natural monuments**
- **Ecological reserves „Uhryń”, „Barnowiec”, „Łabowiec”**

RESERVE	FOREST DISTRICT	COURSES PROTECTION
BARNOWIEC	NAWOJOWA	Protection of forest stands of beech-fir of about 160 years old which are characteristic for virgin Carpathion forest.
ŁABOWIEC		
UHRYŃ		Protection of forest stands of beech-fir which are characteristic for virgin Carpathion forest and are 230 years old.

NATURAL MONUMENTS

NAME OF MONUMENTS AND THEIR HISTORY



*Rocks and caves „**Wierchomla nad Kamieniem**” also known as „**Diabli kamień**” –a group of rocks with a surrounding forest stand.*

It covers an area of 4ha, it consists of separate blocks or big rocky outcrops, being a characteristic element of a landscape. According to a legend, 3 daughters, who despite of their dying mother's request, went to a party to Wierchomla were turned into rocks



*„**Buk Hrabski**” – single trees with a surrounding forest stand.*

It covers an area of 0.3ha with a beautiful exhibit of beech tree. Oral tradition says that this tree was selected by the owner of the forests area of Nawojowa, forester Adam count Stadnicki. From a young age a beech tree was especially taken care of at the request of the Count.



*„**Buki Ciołkiewicza**” – two splendid beeches.*

These are two impressive trees of beech. They owe their name to a forester Mr. Stanisław Ciołkiewicz, who isn't alive any more and who saved these trees from cutting many years ago.



*„**Jedlica Daglezja**” –a splendid douglas with the surrounding forest stand.*

There are 5 douglas trees in one place. A splendid one is surrounded by smaller ones with broken limbs.

The curiosity of a place is that an impressive douglas tree is protected by the other douglas trees which took over unfavourable environmental conditions (especially cold winds), and they are less shapely and damaged.

Natura 2000

Special areas of birds protection

Beskid Niski - is characterized by the biggest in Poland numerical strength of lesser spotted eagle and ural tawny. It is also a sanctuary of golden eagle, black stork, white-backed woodpecker and white-necked woodpecker and corncrake.

Special areas of habitat protection

Poprad sanctuary – it's a big and well preserved area of forest with natural character, extensively using mountains meadows, headwaters areas and natural valleys of large mountain rivers (Radziejowa and Jaworzyna Krynicka range).



lesser horseshoe bat

- **Nawojowa**- bat sanctuary which include a manor house created at the end of XVI century and there is a breeding colony of lesser horseshoe bat together with an area of the feeding ground of these mammals.
- **Łabowa** - it covers an area situated on both sides of the Kamienica river, which is a shelter (churches) and a place of feeding ground for bats.
- **Biała Tarnowska** - important for protecting fish, especially timothy and reintroduced atlantic salmon. The upper section of “Biała” is one of the most important areas in Poland for all three types of gravel habitats, part of which is in the territorial forestry commission of Nawojowa.



Adam count Stadnicki



Adam count Stadnicki

Count Adam Stadnicki, lived from 1882-1982. He was a Forester, patriot, nature lover and the owner of forests and sawmills in the Beskid Sądecki. After graduating from forestry in Munich in 1904 and serving practices in the forests of Count Zamoyski in Zakopane he took up forest management in the forests of Nawojowa-Szlachtowa which he inherited. To preserve the original image of the Carpathian Forest, founded four nature reserves on behalf of count Stadnicki in Sadecczyzna Region. Reserves were famous amongst professors of the Jagiellonian University:

Sokołowski, Szafer, Hryniewiecki.

During interwar count Stadnicki gave 20 hectares of his forest in Pieniny for National Park formation. After the war, as a delegate of the Department of Conservation conducted by professor Szafer, he examined the conditions of the Tatra forests. In his estate he led sustainable forestry. He introduced new tree species: the Eastern Carpathian Larch and Douglas fir.



Palace Stadnickich in Nawojowa



Curiosities ☺ :

- The oldest living fir trees are over **300 years** old and reach **50m** in height.
- There are also species from other climatic zones eg. **douglas fir, giant fir, thuya**.
- In many places you can come across old and virgin Carpathian forest.
- During World War II these forests were a place of shelter for guerrillas, which was commemorated by monuments with commemorative plaques on Ostra and Hala Łabowska.
- The forest of **Beskid Sądecki** are one of four facilities in Poland where large predators like bear, wolf and lynx (which are typical of the forests of central Europe), dwell constantly.
- Altitude of the highest point is 1083m above the sea level peak "Peak of the Stone"



Peak above Stone



Something about as

Anna Jurecka

Aleksandra Rybczyk

Angelika Zając

We study in the first class of technical landscape architecture in the school called „Zespół Szkół Ponadgimnazjalnych im. Wincentego Witosa” in Nawojowa.

The presentation was created under the direction of

Joanna Hołownicka-Plaszczyk



Literature

- Colletive work, *Pomniki przyrody w gminie Nawojowa*, Koło ekologiczne ZSR CKP w Nawojowej Nawojowa 2000
- Colletive work, *Leśny Kompleks Promocyjny Lasy Beskidu Sądeckiego* wyd. RDLD w Krakowie
- Colletive work, *Obszary chronione w lasach Małopolski* (atlas-przewodnik) RDLD w Krakowie
- Colletive work, *Plan urządzenia lasu dla Nadleśnictwa Nawojowa obręb Nawojowa*. Opisanie ogólne lasów Nadleśnictwa wyd. Biuro Urządzania Lasu i Geodezji Leśnej Oddział w Krakowie
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Information obtained during discussion with Deputy Forester Ms Danuta Kmak and other members of Forest District office of Nawojowa.

