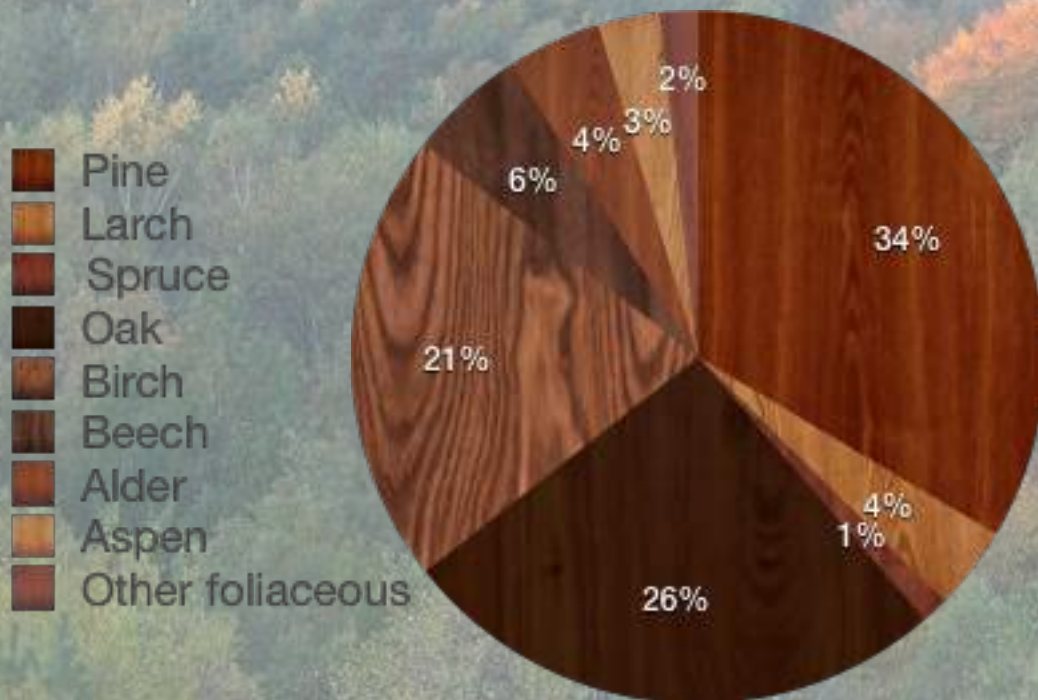




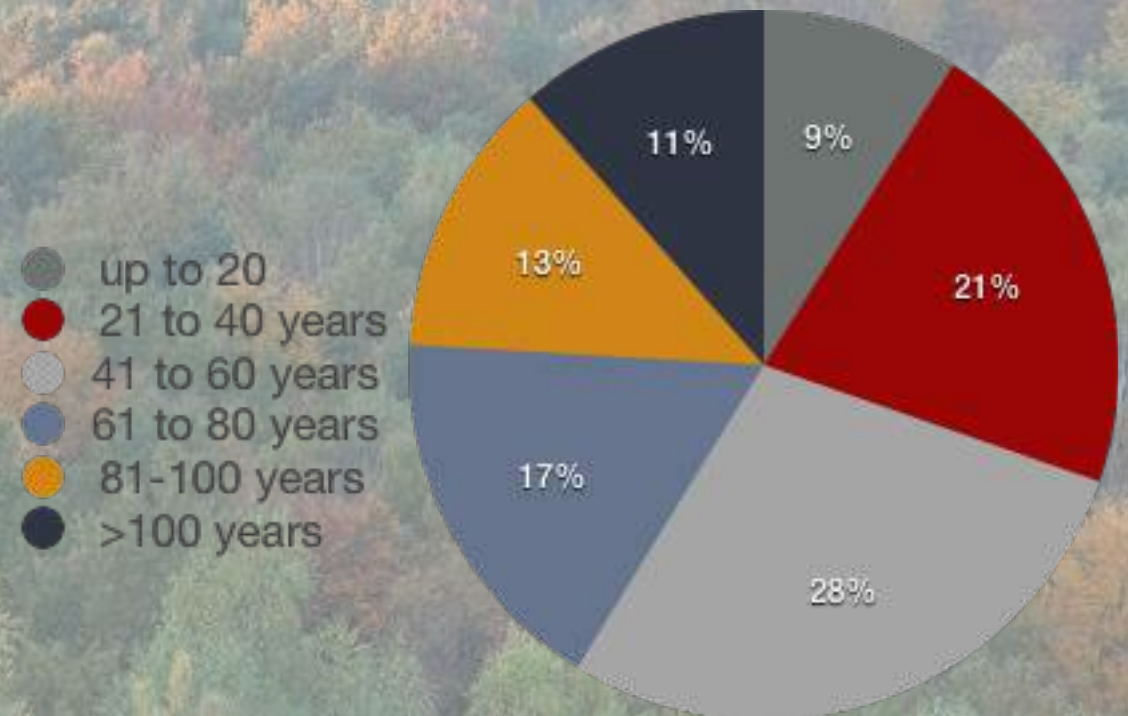
**Silesian forest case study.
Threats today's forest are
facing.**

Characteristics of Silesian Forest District.

SFD was formed in 1974. It covers the surface of 64,400 ha, of which 14,500 ha is forest. In the area there are 31 protected species of plants.



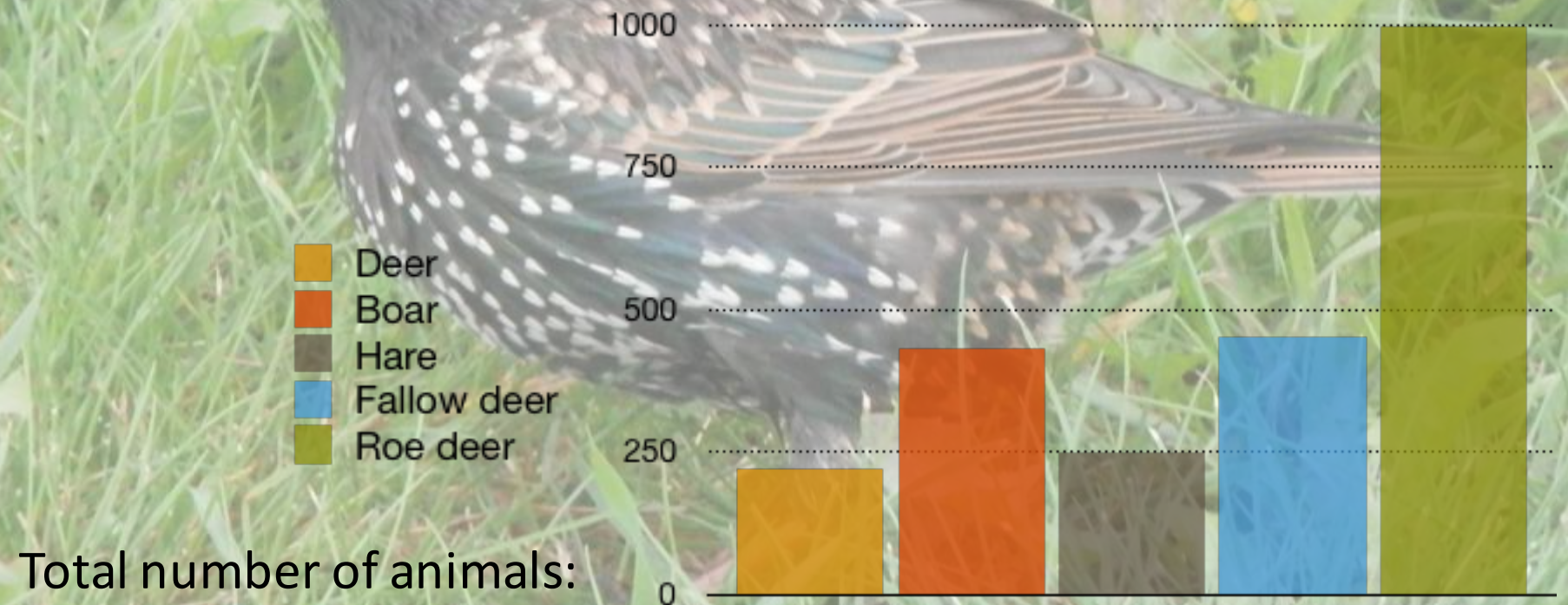
Stand composition 2015



The age structure of the stand 2015

Animals

In Katowice Forest District there are 80 protected species. In 2013, unique 201 anthills of *wood ant* and *Formica polyctena ant* were catalogued. The Wildlife Rehabilitation Centre “Lesne Pogotowie” is located there. It has rescued a lot of native fauna.





Budget

The forests are often wrongly believed to be underfunded and dedicated too little money by the State. This is not actually true. The issue of funding is not a problem for the forests, as, according to Polish regulations, they have to finance themselves, in the way that does not expose the ecosystem to destruction and unsustainable exploitation.

Forest arrangement

The presence of human being in forest's economy focuses not only on destructive activity, but also on stimulation of controlled forest's development. The Forest's Plan is made for the next 10 years. It consists of such nursing treatments as:

- Soil treatment- scarifying the ground and removing weeds,
- Early cleaning - removing intrusive trees,
- Late cleaning - thinning the forest, removing trees with defects.

Human's involvement in forests' structure

Nowadays media and the general public, who are regarded as infallible and trustworthy, find human the greatest plague for the forests. The forests are considered to be facing destruction, abused and neglected by people who contribute to their gradual extinction. This opinion seems to be reasonable and wise, but after the analyses our team conducted, it appears to be groundless. Effects, that superficially harm forests have positive long-term influence. Moreover, more damage is caused by the nature itself, when the forests are left without human's involvement and support. Forests need intervention and support of man who takes care of them.

Human vs. Nature

It is not obvious that the contact between the nature and the man is mutually beneficial. Losses resulting from human activity are incomparably lower than damage inflicted by the nature.

Crimes	Number of cases
theft of wood 1154 m ³	347
poaching	30
other	4 203

Climatic factor	Surface of affected forest
drought	500 ha
fire	321.32 ha
hurricane	600 ha

Fires



What is the meaning of fires for the forests? People think that fires are very destructive and harmful for the woods while this is not entirely true. Apart from many obvious drawbacks there are a lot of positives such as: fertilizing, replacement of species, rejuvenation of the stand.

Early warning system consists of:

- 66 watch towers
- 1000 hydrants
- 3 planes
- 3 helicopters

The climate change influences the forests.

Global warming does not have negative impact on the woods, because they have a natural ability to adapt to the new conditions.

Because of climate changes forests have to undergo the process of adaptation to new patterns of temperature and rainfalls. They also have to face extreme climate phenomena which occur more often, the acidification of the soil, the loss of nutrients and higher concentration of ozone.

Mining damage

The effects of the extraction of minerals, are not always negative. Subsidence which are side effects of underground mining contribute to forming new ecosystems. Because of the legal regulations they have to be reclaimed within 5 years after closing mines. The process is connected with backfilling them with waste material from dumps and turning them into forested areas. As the result of the process a new tree stand is formed.

The wood

Wood is a very important raw material. Greater use of forest's bioenergy and wood as raw materials results in faster and more profitable mitigation of climate change. Wood is an irreplaceable raw material. It is evaluated that nowadays wood has about 30 000 uses.

Gradation of pests



A massive threat for the forest is pests gradation. Mostly insects and fungus. Foresters monitor the wood's all year long and health status and estimate population condition of more important pests. The populations of leaf-eating pests is confined by several methodes:

- Mechanical – cutting an infected tree, pheromone traps
- Biological – it rests on fighting pests using their natural enemies
- Chemical – spraying with apartaury installed on airplanes and helicopter

Ecological actions

"Drzewko za makulaturę" – the campaign organised in different Polish cities. For the given amount of waste paper we are given a seedling.

Car Free Day – 22nd of September.

"Clean the world"- children in kindergardens and primary schools are cleaning forests.

Conclusions

Summing up all the arguments presented above, we hope that we were able to present a completely different, from the widely accepted yet misleading, view on human-forest interactions. Although we should always care about the environment and promote pro-environmental ideas, we should also consider all aspects of the problem, instead of repeating slogans and buzz words. This is why people mistakenly consider human activities in forests to be harmful and unnecessary. Furthermore, the superficially harmful actions always have their other side, which often turns out to be not so bleak, as they might seem. There is a noticeable symbiosis between human and forest, because each side has a positive influence on the other.

Sources

- <http://www.katowice.lasy.gov.pl>
- <https://pl.wikipedia.org/>
- <http://www.lasy.gov.pl/>
- <https://www.mos.gov.pl/>
- All photos from own library.
- Interview with chief forester Bolesław Bobrzyk.
- Silesian forest management plan.

Authors

Oliwia Skapczyk, Julia Dybowska, Filip Wylęgała,
1st Grade of the 8th Secondary School in Katowice

