Forest fire protection in Poland and Europe



Forests of Poland

• **Polish forests** cover about 30% of Poland's territory, and are mostly owned by the state. Western and northern parts of Poland as well as the Carpathian Mountains in the extreme south, are much more forested than eastern and central provinces. The most forested administrative districts of the country are: Lubusz Voivodeship (48,9%), Subcarpathian Voivodeship (37,2%), and Pomeranian Voivodeship (36,1%). The least forested are: Łódź Voivodeship (21%), Masovian Voivodeship (22,6%), and Lublin Voivodeship (22,8%).Forest in Poland occupy the poorest soil. Coniferous type accounts for 54.5%, whereas broadleaved type accounts for 45.5% (out of that, alder and riparian forests account for 3.8%). A number of forested zones are now protected by the Polish government and, in many cases, they have become tourist destinations. Over the years, many of the largest Polish forests have been reduced in size, and that reflected on the structure of forest inhabitation.

Forest percent share of land area



Forest Fire Danger Map



prepared by the Forest Fire Protection Department (on basis of the method of Forest Research Institute) in 42 prognostic zones, daily updated from April to September.

European forests

- The main natural vegetation cover in Europe is mixed forest. The conditions for growth are very favourable. In the north, the Gulf Stream and North Atlantic Drift warm the continent. Southern Europe could be described as having a warm, but mild climate. There are frequent summer droughts in this region.
- Probably 80 to 90 percent of Europe was once covered by forest. It stretched from the Mediterranean Sea to the Arctic Ocean. Though over half of Europe's original forests disappeared through the centuries of deforestation, Europe still has over one quarter of its land area as forest, such as the broadleaf and mixed forests, taiga of Scandinavia and Russia, mixed rainforests of the Caucasus and the Cork oak forests in the western Mediterranean. During recent times, deforestation has been slowed and many trees have been planted. However, in many cases monoculture plantations of conifers have replaced the original mixed natural forest, because these grow quicker.
- In temperate Europe, mixed forest with both broadleaf and coniferous trees dominate. The most important species in central and western Europe are beech and oak. In the north, the taiga is a mixed spruce-pine-birch forest; further north within Russia and extreme northern Scandinavia, the taiga gives way to tundra as the Arctic is approached.

Forest percent share of land area



What is Forest Europe?

FOREST EUROPE (The brand name of the Ministerial Conference on the Protection of Forests in Europe) is the pan-European voluntary high-level political process for dialogue and cooperation on forest policies in Europe. FOREST EUROPE develops common strategies for its 47 signatories (46 European countries and the European Union) on how to protect and sustainably manage their forests. Since 1990, the collaboration of the ministers responsible for forests in Europe has had a great economic, environmental and social impact on the national and international level. FOREST EUROPE has led to achievements such as the guidelines, criteria and indicators for sustainable forest management.

With the aim of agreeing on how to manage forests in Europe, FOREST EUROPE process periodically hosts ministerial level conferences where ministerial commitments and resolutions are adopted. The political decisions and resolutions made under FOREST EUROPE are voluntary, and by endorsing these commitments countries show their willingness and interest to protect and sustainably manage their forests.

Commitments endorsed by the ministers serve as a framework for implementing sustainable forest management in the European countries, adapted to their national circumstances and done in a coherent way with the rest of the region, and strengthen international cooperation at the same time.

FOREST EUROPE is involved with other global and regional processes and initiatives dealing with issues of highest political and social relevance related to forests. Slovakia currently holds FOREST EUROPE co-chairmanship together with Spain. At the 7thFOREST

EUROPE Ministerial Conference the Slovak Republic took over the chairmanship (held by Spain since the Oslo Ministerial Conference until the Madrid Ministerial Conference). At the beginning of 2016 the Liaison Unit Bratislava started to operate, taking over the work from the Liaison Unit Madrid.





Forest fires

• Every year, devastating forest fires take place in Europe and around the world, destroying thousands of hectares of forests and affecting population. When the scale of a fire exceeds the capacity of a country to extinguish it, the EU Civil Protection Mechanism can be activated to provide a rapid and effective response.





Forest fire protection in Europe

- The European Commission's Emergency Response Coordination Centre (ERCC), the operational heart of the EU Civil Protection Mechanism, monitors forest fire risk and incidence across Europe around the clock using national monitoring services and tools such as EFFIS (the European Forest Fire Information System).
- Before the beginning of the forest fire season, the ERCC organises meetings with all countries participating in the EU Civil Protection Mechanism to exchange information on the state of preparedness for the upcoming season. Over the summer period, the ERCC and countries at high risk of forest fires are in contact on a weekly basis. Portugal, Spain, France, Italy, Greece and Croatia are the most fire-prone countries in Europe.
- When forest fires occur and when national capacities to respond are surpassed, European countries can send assistance in the form of water-bombing aircrafts and helicopters, fire-fighting equipment and personnel. To provide a joint and coordinated response, they channel the assistance and exchange real-time information through the EU Civil Protection Mechanism. Additionally, the Mechanism can co-finance the transport of assistance to the affected area.
- For the 2016 forest fire season, the European Commission co-financed the stand-by availability of a heavy firefighting airplane, the Buffer-IT, which was deployed in Cyprus, France and Portugal for a total of 20 days, performing more than 75 operational flight hours and 212 water drops.

- The EU Civil Protection Mechanism has been activated more than 69 times since 2007 to respond to forest fires inside and outside Europe, including for advisory missions.
- In 2016, the Mechanism was activated nine times to respond to forest fires, including in both France and Portugal in August, where the Buffer-IT firefighting plane was deployed, as well as in Israel in December, where firefighting planes from Cyprus, Greece, Croatia, Italy and France were deployed.
- In January 2017, the EU Civil Protection Mechanism was activated following a request for assistance from the Government of Chile. The EU supported the national response to the worst forest fires in the history of the country. Three ground forest firefighting modules from Portugal, Spain and France, the latter under the voluntary pool, were deployed in Chile, along with a EUCP team of nine experts.
- In addition, since 2012 the satellite mapping service of the European Commission has been activated 25 times, producing satellite maps for forest fire related emergencies.

Forest fire protection system in Poland

The system contains, among other, the following solutions in the field of fire protection of forest area:

- 1. Criteria and principles of classification of forest stands and forested areas to particular classes of forest fire risk,
- 2. The methods of assessment of forest fire risk (including the forecasting of the fire risk of considering the actual weather forecast Szczygieł 1991, Wiler 2000),
- 3. The principles of the information-warning activity,
- 4. The organizational-technical background of preparation of the organizational units of state forests for fire suppression in the fields of:
- the observation-warning system of fire detection, containing:
- the network of permanent observation (468 lookout towers, including 150 units equipped with TV cameras),
- fire control patrols,
- airplane patrolling,
- alarm-command points,
- the network of alarm-command communication, the set of technical means:
 - access roads and fire access roads,
 - fire equipment bases,
 - water supply points (5733),
 - forest aviation bases (22)
 - means of activity in case of forest fire.



Materials:

- https://en.wikipedia.org/wiki/Forests_of_Poland
- <u>https://en.wikipedia.org/wiki/Europe</u>
- <u>http://foresteurope.org/foresteurope/</u>
- <u>http://ec.europa.eu/echo/what-we-do/civil-protection/forest-fires_en</u>
- <u>http://www.fao.org/docrep/article/wfc/xii/0009-b3.htm</u>

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