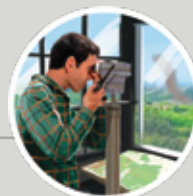


- 1 Measuring the moisture content of forest litter**
Almost every forest fire starts as a surface fire, and the primary combustible material is dry conifer needles. For this reason, the moisture content of pine litter is measured twice a day.
- 2 Meteorological stations (nearly 150)**
Based on measurements of atmospheric conditions and the moisture content of litter, the level of fire risk is determined daily. This, in turn, determines the readiness level of the fire prevention system.
- 3 Fires**
Poland ranks third in Europe (after Spain and Portugal) in terms of the number of forest fires, with several thousand occurring each year. However, thanks to an efficient fire protection system, the average area of an individual fire is small – less than 0.3 hectares in forests managed by the State Forests.
- 4 Fire lookout towers (over 700)**
This is where the forests are monitored to detect smoke as quickly as possible and report it to the forest district office. Increasingly, the monitoring is done by cameras rather than people.
- 5 Alarm and dispatch points ('PADs' in Polish)**
This is where staff map the location of the fire based on data from the lookout towers. The fire department is alerted, and a State Forests skid unit is sent to the place of the incident.
- 6 Patrol vehicles with skid units (over 340)**
These vehicles are equipped with firefighting equipment, a water tank and a pump. They patrol the forests, extinguish fires in their initial phase, and deal with smoldering ground after fires have been put out.
- 7 Vehicle crews**
They are fully trained and equipped with specialised firefighting equipment. The crews cooperate with firefighters at the sites of fires.
- 8 Fire departments**
Cooperating with firefighters is an investment in safety. That is why the State Forests spends several million zlotys a year to purchase firefighting equipment for volunteer fire brigades and state fire departments.
- 9 Fire access roads (over 53,000 km)**
To ensure that fire engines can reach the sites of fires, trees are marked throughout the forest road network. These forest roads must meet the relevant technical parameters.
- 10 Water intake points (over 11,000)**
These natural and artificial reservoirs are marked and adapted for water intake by fire departments.
- 11 Firefighting equipment base**
Each forest district has a reserve of portable firefighting equipment (backpack water pumps, fire beaters, shovels, etc.).
- 12 Aircraft**
More than 40 aircraft and helicopters patrol the forests and put out fires by dropping water. They are stationed in 30 or so forest air bases.
- 13 Firebreaks (over 15,000 km)**
These are ploughed strips of soil free of combustible plant materials to limit the spread of flames.
- 14 Information boards**
It is far better to prevent fires than to extinguish them. With this principle in mind, foresters educate the public about fire safety in forests.



A key parameter

Foresters take pine needle samples to measure the water content of the litter. This key parameter determines whether fires will occur and spread, and it is on that basis that foresters assess the level of fire risk and whether monitoring should be carried out in the lookout towers on a given day.



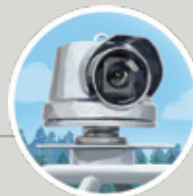
Keeping watch

Atop the lookout towers, more than 30 meters above ground, are booths from which watchers monitor the forest for smoke. Upon detecting smoke, they determine the direction in which the fire is located and radio this information to the emergency and dispatch point.



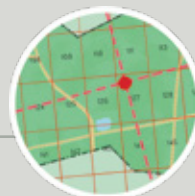
Always at the ready

The alarm and dispatch point is where foresters coordinate activities when a fire is detected. They determine the exact location of the fire, dispatch patrol vehicles with skid units and supervise the firefighting operation itself. Each alarm and dispatch point is equipped with a radiophone and a map to determine the location of the fire.



Monitored areas

Due to advances in technology, fire lookout towers are increasingly equipped with cameras. The images they record are displayed on monitors in the forest district office. The most modern systems also have an automatic smoke detection function.



Precision shot

A map of the surrounding forests hangs on the wall of each alarm and dispatch point. Foresters can also access a digital version of the map via an IT system. The map is plotted to show the direction in which smoke was noticed from two lookout towers. This method allows foresters to pinpoint the location of the fire where the lines intersect.



A safe road

Fire access roads are forest roads that can be used to reach the site of a fire quickly and easily. They are passable and well-maintained, and each one is marked with a number painted on a tree. This facilitates orientation during firefighting operations.

FIRE PROTECTION

in the State Forests



Check the level of fire risk



Learn about the EU-funded project



How do foresters protect the forests? Find out more here



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Las Państwowe



Foresters are constantly improving the forest fire prevention system. The main goal is to detect smoke as quickly as possible, determine the location of the fire and take immediate action. Thanks to this, most fires are extinguished in their initial phase. Each year, the State Forests spends more than 140 million zlotys from its budget to maintain this system.