



Forest fire protection in Poland and Europe

How were we working? What have we learnt?

We have met the head of Forest Ecosystems Protection Department Marcin Pawelec and Jan Widelka, who are responsible for protection of forests in the region of Małopolska. They gave us some basic information and sources to learn about forest fire protection.

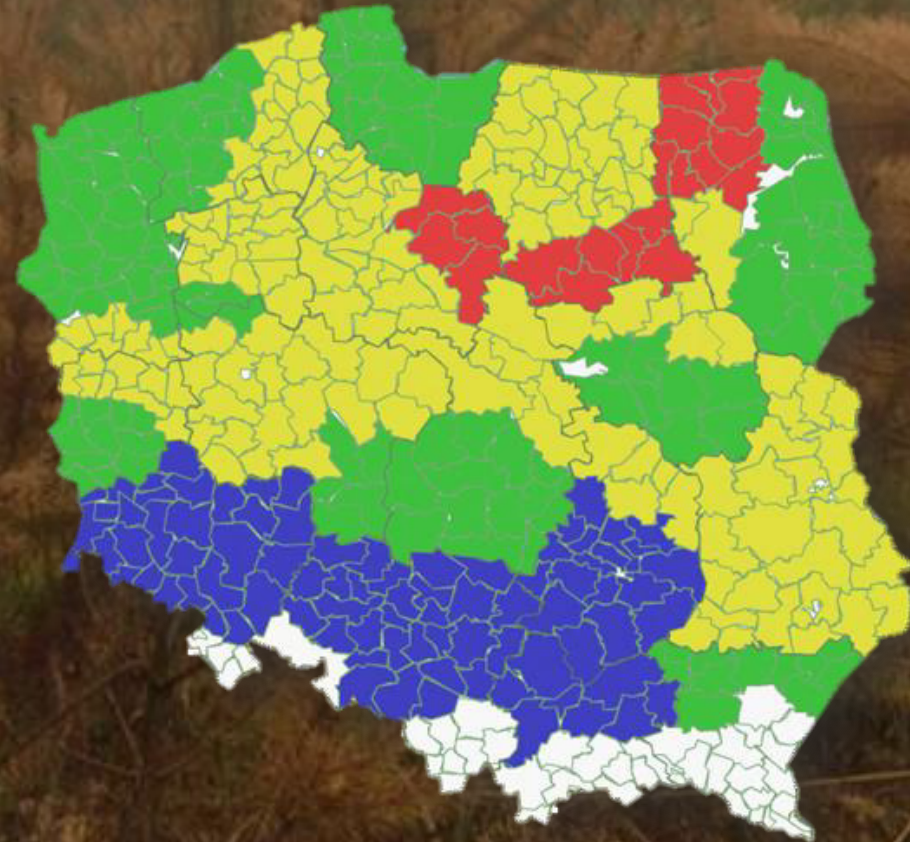
We have also been to The Czerna Forest, which was burning on 27th March this year.



Photo of Jan Widelka with Kamila and Jakub.

Why is Małopolska so much fire protective?

It's mainly because of frequent winds, heavy rain forests and mountain location. Małopolska is ranked as less likely to burn. In our region there are few deciduous forests, which are more susceptible to fire. It's common in our forests that there is deficiency of single-species stands.



MAP KEY:

Big risk

Medium risk

Small risk

No risk

Region unforecasted

Prevention from forests conflagration

In Poland 3766 ha of forests were burnt in 2015. Over half of conflagrations in Poland were caused by arsons. That is what we are doing to prevent it:

- Creating new laws in the domain of forest fire protection
- Education and expanding public awareness
- Caring about fire protection while exploitation of public forests
- Creating fire protective zones
- Training and schooling forest workers



Protective zone

(source: <http://bloglesniczego.erys.pl/>)

What is fire protective zone?

System of forest stands of the different width subjected to specialistic economic and orderly treatments or deforested surfaces and purified to mineral layer.

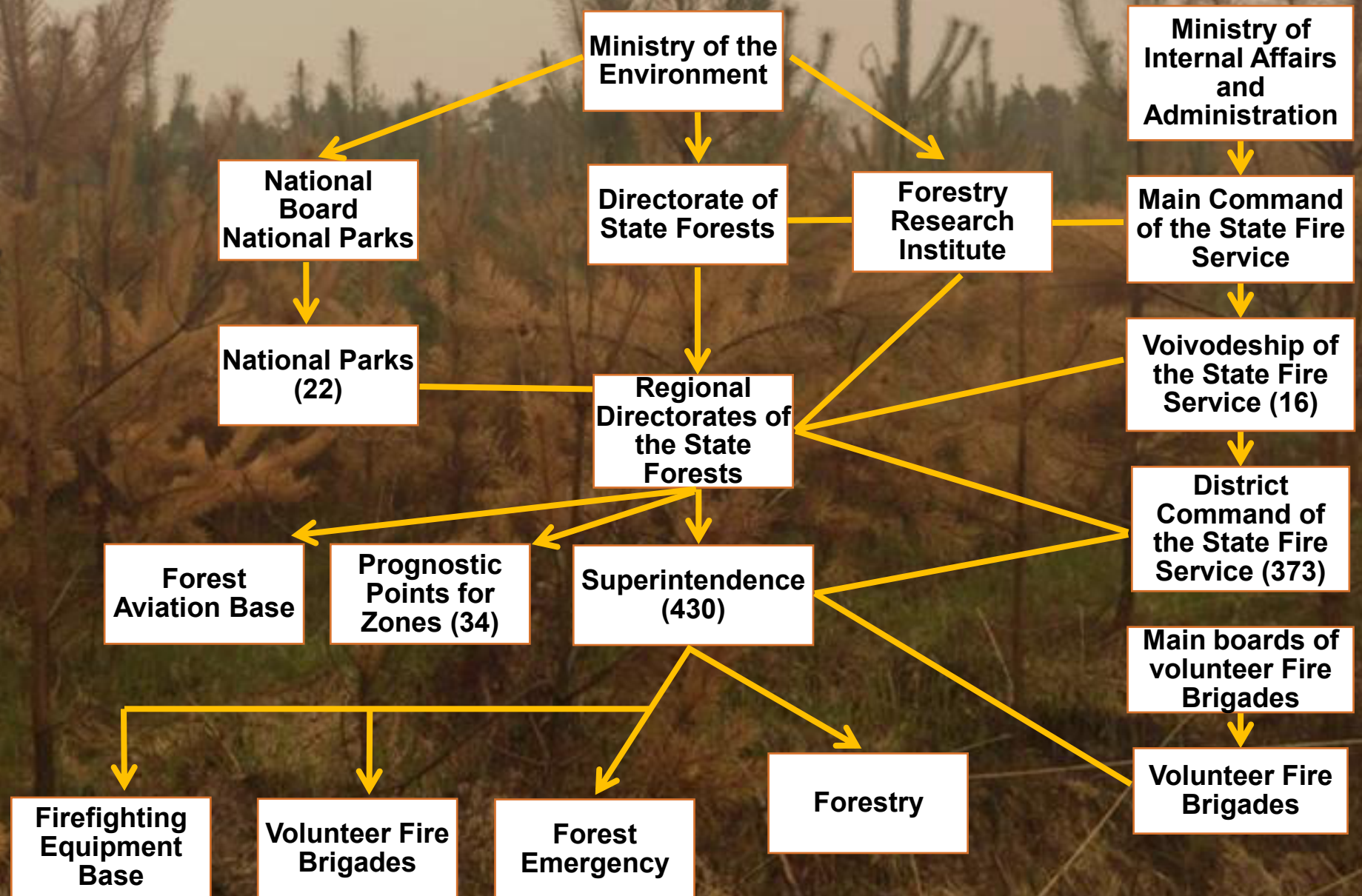
That's the official definition. In practice it is a one-meter wide zone, near railway tracks, that prevents sparks that could cause fire. It is made of sand or other minerals and incombustible materials.

This is necessary. Its lack was the reason of the biggest conflagration in Poland, which took place in Kuźnia Raciborska in 1992. Since that time we have learnt that these zones are fundamental to prevent forests from fire.



Responsibility of management and maintenance of fire protective zones is on the side of owners of railways and managers of industrial factories. The photo above shows Railroad Guards that we accidentally met on the train to The Czerna Forest. That was a perfect opportunity to ask them some questions.

Structure of forest fire protection in Poland



Ordinance of Ministry of Internal Affairs and Administration

(from 16 June 2003)

Section 9, § 35 affects on liability of forest owners, which are:

- 1) Organisation of observation and patrolling forests and alarming about fire
- 2) Water supply to fire fighting
- 3) Upkeeping roads designated to fire fighting
- 4) Marking water tanks
- 5) Maintaining equipment facilities
- 6) Creating fire protection plan



*"If you see a fire, call 998 or 112"
sign near the entrance to The
Czerna Forest.*



*On the left;
Signs about firefighting
roads in The Czerna
Forest*

*On the right:
Information about fire
protective water reservoir
near The Czerna Forest*

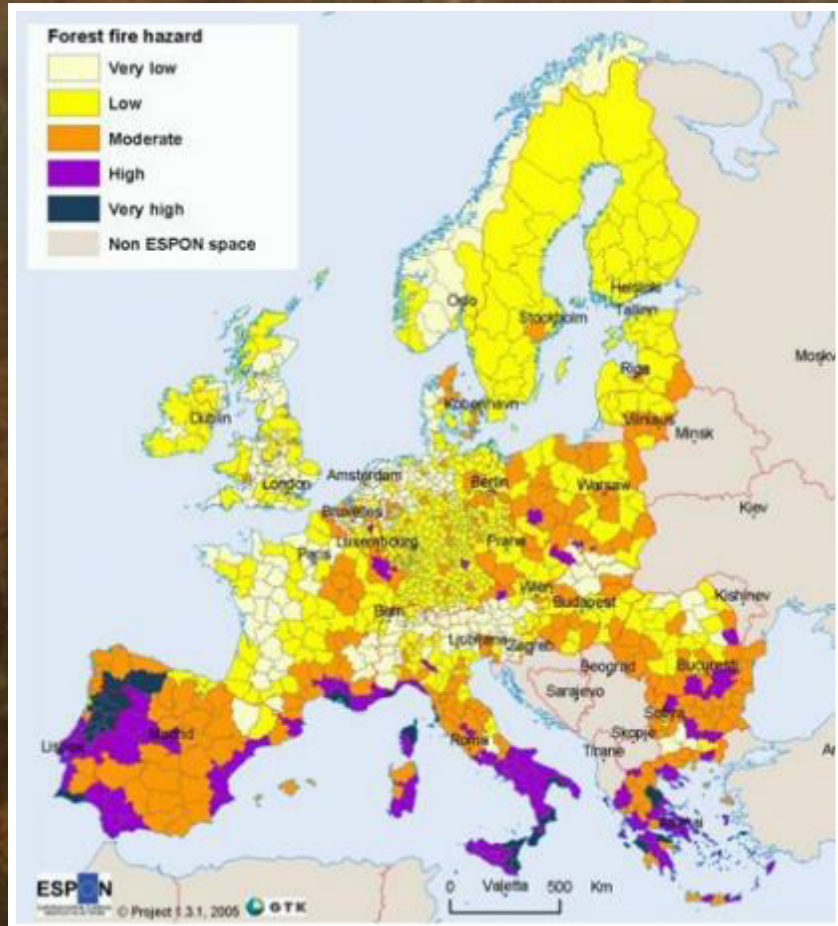


There is a restriction that says that on every 300 ha, there have to be at least two containers of water, with capacity over 50 000 liters each.

The owner or administrator of a forest has to place information and a cautionary sign about fire danger near the entrance.

Paragraph 36 is about firing meadows and similar places. It forbids setting up fire near woods and smoking.

Statistics about conflagrations in Poland (2015)



Source: ESPON

Forests area:

29% (in European Union: 34%)

Forests in potential danger of conflagration:

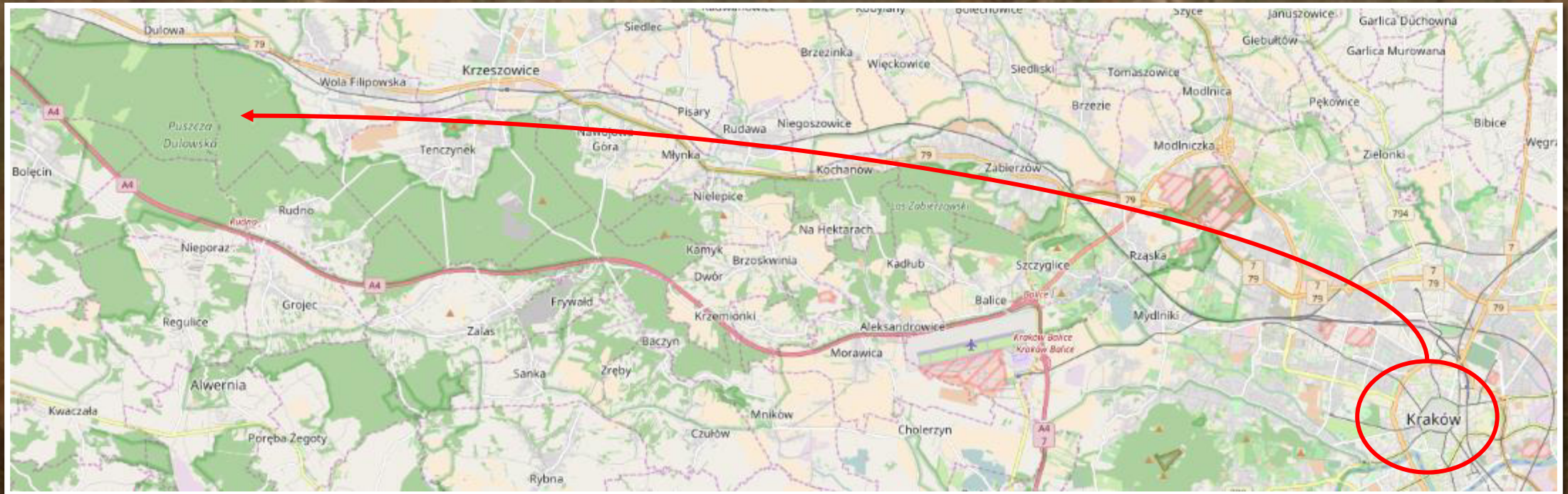
83% (in EU: 65%)

Amount of conflagrations:
8292

Burnt field:
3766 ha

Percentage of arsons:
42%

Case of fire in the Czerna forest



We travelled about 40 kilometers to meet local woodsmen and to study the case of the recent conflagration.

This is what we saw:





The photos show the burnt part of The Czerna Forest. The season of the forest conflagration is officially unknown, but the woodsmen told us that most probably that was arson.

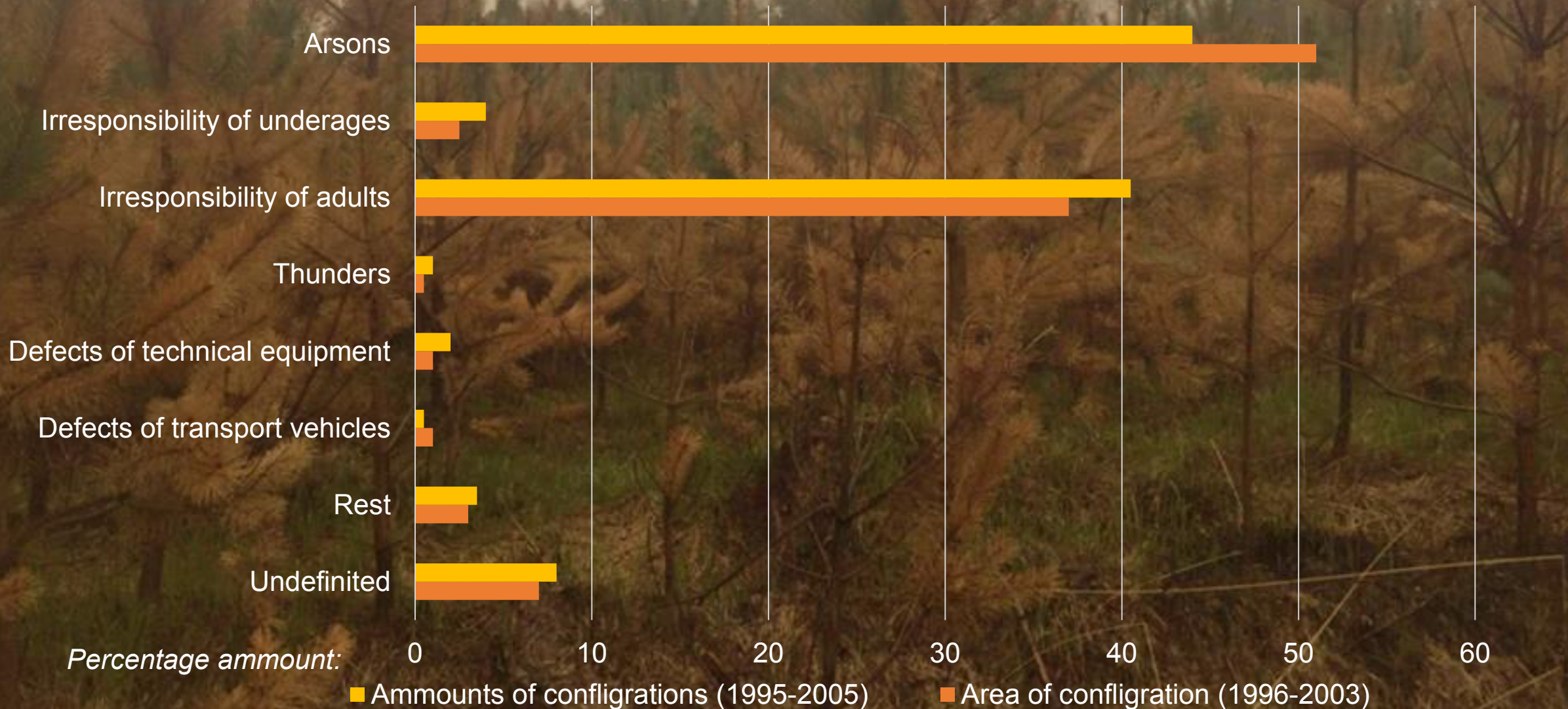
Consequences of forest conflagration

After conflagration the whole ecosystem is destroyed, this is a disaster. The cost of one hectare of forest renovation is about 10,000 złotych (it's 2,500€).

How long does it take forests to recover?

It depends on the age of a forest, because recovery time is proportional to its age – complete recovery of a 100 year-old forest would take 100 years. The burnt part of The Czerna Forest was a 7 year-old cultivation of pines. Fortunately, that's not such a long time.

Reasons for forest conflagrations



Our recapitulation

We were shocked that over half of conflagrations were caused by arsons. We never thought that they could be the main reason of this disaster. We checked fines for arsons: if the loss is over one milion złotych (it's something about € 250,000) the arsonist goes to prison for 1-10 years. If the conflagration was deadly, the penalty is decisively bigger, but there is no word about forests specifically. Mr. Jan Widelka, the head of Forest Ecosystems Protection Department, told us that firefighters sometimes are burning forests for money. We were astonished and horrified!

But in general, we are satisfied with the Polish forest fire protection. The system is very thoughtful and it works fine. A woodsman from Czerna said that when he got to the site of a conflagration, after the whole action had been finished, he was content with the firefighters' rescue operation.

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SOURCES

- The main source of our presentation was knowledge of the people mentioned in the presentation.
- **„Atlas – przewodnik: Obszary chronione w lasach małopolski”** published by Regionalna Dyrekcja Lasów Państwowych w Krakowie
- **„Thematic Forest Dictionary”** by Elżbieta Kloc
- **„Słownik Ochrony Środowiska i Ochrony Przyrody”** by Krzysztof Czekierda
- **„Ochrona Lasów przed Pożarami”** by Karol Wiler and Paweł Wcisło