

**MINISTRY OF AGRICULTURE, FORESTRY AND WATER
MANAGEMENT
- Directorate of Forestry -**

According to the provisions of the Law on Ministries ("Off. Gazette RS" number 16/11) :

Directorate of Forestry is responsible for professional activities including forest policy, forest preservation, promotion and use of forests and wildlife, the implementation of measures to protect forests and wildlife, control of seeds and seedlings in forestry, inspection supervision in the field of forestry and hunting performed in accordance with the law and other statutory duties.

Institutions which implement measures for forest protection

Institutions responsible for making, implementation and control measures for forest protection	Institutions that provide professional support (certain jobs are entrusted by <u>contracts</u>)	Entity who directly implement measures to protect forests
Ministry of agriculture, forestry and water management - Directorate of Forests -	Institute of Forestry, Beograd	Users of forest - public enterprises
Provincial secretariat of agriculture, water management and forestry of AP Vojvodina	Institute of Lowland Forestry and Environment, Novi Sad	Forest owners (legal person and physical persons)
	Faculty of Forestry, Beograd	

COMPETENCES OF FORESTRY SECTOR

Competences of the forestry sector in the area of forest protection against abiotic and biotic factors are defined by the provisions of:

1. Law on Forests ("Off. Gazette of RS" No. 30/10, 93/12),
2. Low on Plant Health ("Off. Gazette of RS" No. 41/09),

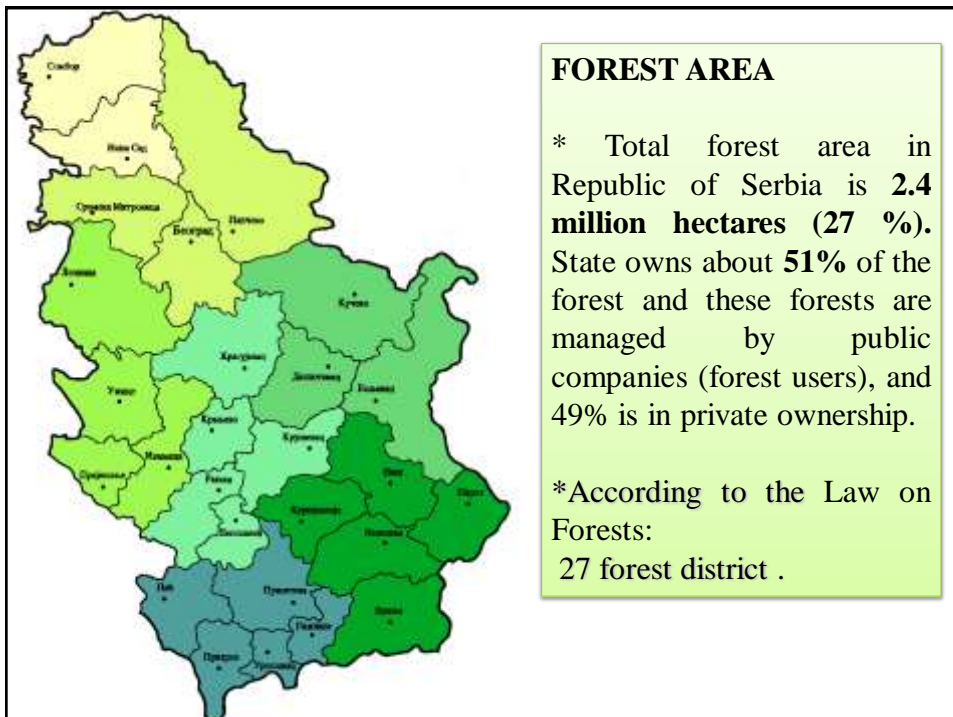
According to Law on Forests :

Forest owners and users are legally obliged to enforce preventive measures and suppression against biotic and abiotic factors.

According to Low on Plant Health :

Forest owners and users (PE) are legally obliged to enforce preventive measures and suppression against biotic factors.

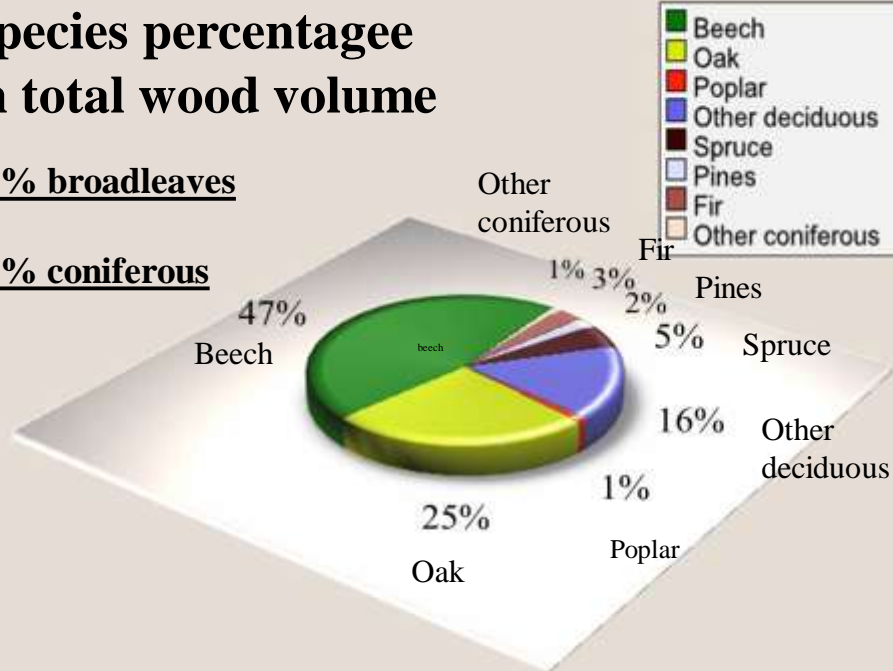
According to the Law on Plant Health, Directorate of Forestry has inspection supervision competences over implementation of this law's provisions, with the exception of quarantine organisms on the border.



Species percentagee in total wood volume

90% broadleaves

10% coniferous



Main biotic factors in coniferous forests

Mycosphaerella pini
N.F. *Dothistroma pini*



Heterobasidion annosum
Syn. Fomes annosus
(Annosum root rot)



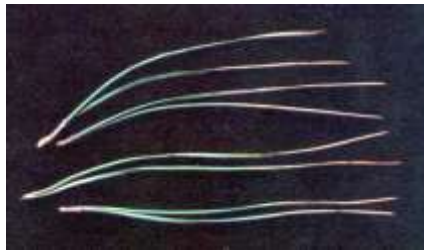
Armillaria species (Armillaria root disease)



Main biotic factors in coniferous forests

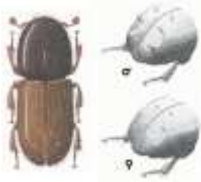


Mycosphaerella pini,
Sphaeropsis sapinea
Lophodermium pinastri



Main biotic factors in coniferous forests

Bark beetles – Scolytidae spp.



Main biotic factors in coniferous forests

Picea spp.

Ips typographus

Pityogenes chalcographus

Polygraphus polygraphus)



Abies

Pytiokteines curvidens,

Cryphalus picea,

Pinus spp.

Ips sexdentatus

Also:

Rhyacionia buoliana

Pissodes spp.

DROUGHT in 2012.

Drought in 2011. and 2012.

-extremely hot , with very little rainfall .

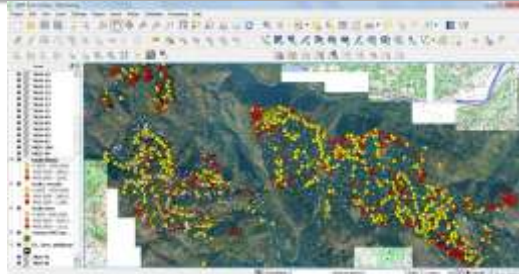
-It was recorded drying of forests on larger areas. **Stressed trees.**

-sanitary felling (about 200.000m3 in the area of Serbia)



Monitoring in National park “TARA” – 2014 -climate change-stressed trees-

Pheromone traps:
1.200 On 6.000 ha



Types	Number of caught beetles
<i>Ips typographus</i>	8.751.963
<i>P.chalcographus</i>	24.580.024
<i>P. curvidens</i>	15.350
<i>Ips sexdentatus</i>	4.206
<i>T. lineatum</i>	6559



Main biotic factors in forest protection broadleaves forests

Beech
(*Cryptococcus fagisuga*)



Main biotic factors in forest protection
broadleaves forests

Constantly monitoring : DEFOLIATORS

Erranis defoliaria - mottled umber

Operophtera brumata - winter moth

Archips xylosteana - brown oak tortrix

Aleimma loeflingiana - yellow oak button

Eudemis profundana - diamond-back marble

Tortrix viridana - oak leaf roller moth

Lymantria dispar - gypsy moth



Main biotic factors in forest protection

- Broadleaves forests -

Gipsy moth

- Lymantria dispar



1997. For exsample
450.000 ha, Foray 48B



Monitoring of outbreaks of Gypsy Moth in the Republic of Serbia was implemented since 1862. Hitherto there have been 18 outbreaks

No.	Year		Duration of outbreak
	Begin	End	
1.	1862.	1865	4
2.	1870.	1875.	6
3.	1882.	1885.	4
4.	1889.	1894.	6
5.	1898.	1900.	3
6.	1906.	1908.	3
7.	1911.	1914.	4
8.	1922.	1926.	5
9.	1930.	1935.	6
10.	1939.	1942.	4
11.	1947.	1949.	3
12.	1953.	1957.	5
13.	1963.	1966.	4
14.	1970.	1973.	4
15.	1984.	1987	4
16.	1995.	1998.	4
17.	2003.	2007	4

Last, no. 18:
2010. – 2014.

**The Convention on
Long-range
Transboundary Air
Pollution**

**Additional monitoring of
the state of health by the
grid of bioidication parcels
in accordance with
CLRTARP
Convention and its ICP
Forests program.**



