

MONITORING OF FOREST FIRES IN RUSSIA

Total – 1108 million hectares

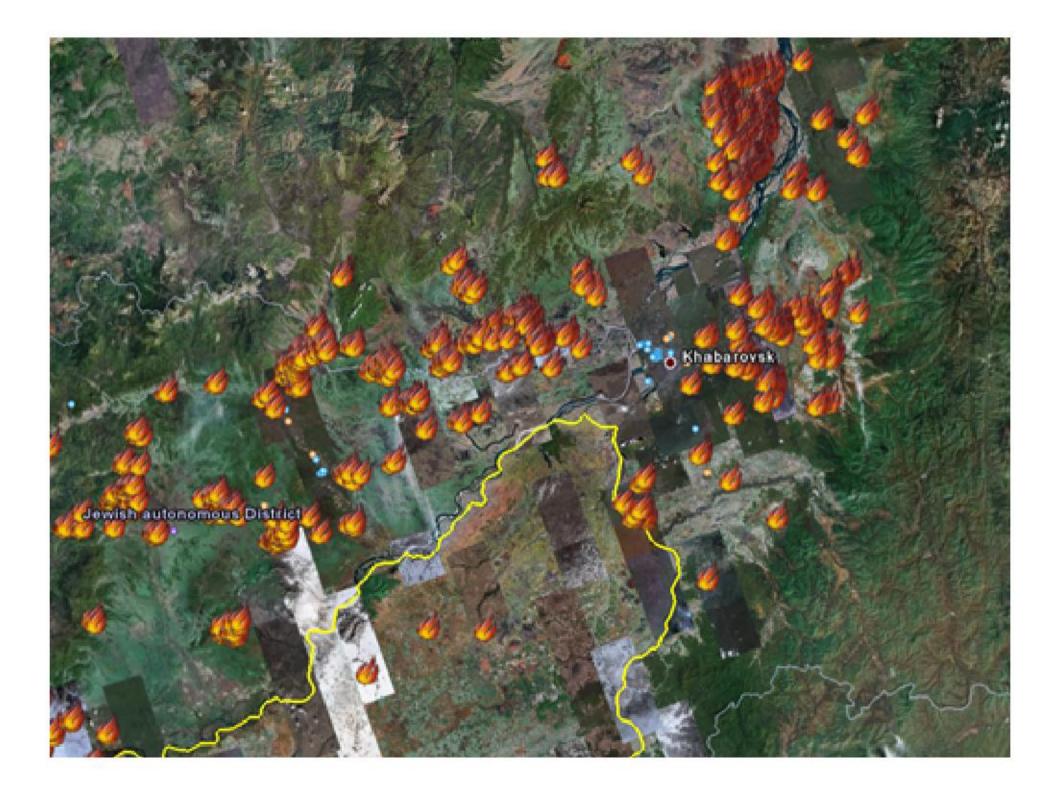
Land monitoring - 84 million hectares

Space monitoring - 558 million hectares

Aviation monitoring – 466 million hectares

FOREST FIRES IN RUSSIA IN 2007- 2008

Subventions, billion rubles Area covered by fires during	2008 17	2007 12
fire season, hectares	2 446 222	1 312 280
Forest area	1 551 653	852 270
Covered by crown fires	41 245	46 538
Unforested area	894 569	460 010
Total number of fires during		
fire season	25 339	16 953
Direct damage – 10 billion rub (2008)	oles, total – 25 l	billion rubles









CAUSES OF FIRES IN LAST 3 DECADES:

LOCAL POPULATION - 64.8 %

LIGHTNING - 16.0%

BURNINGS ON AGRICULTURAL LANDS - 7.5%

EXPEDITIONS - 0.9 %

ACTIVITIES OF OTHER ENTERPRISES - 5.0 %

UNKNOWN - 3.1 %

BURNT-OUT-FORESTS, DEAD STANDS, WASTE PLOTS OF LAND AND GLADES ACOUNT FOR (million hectares):

1961 1966 1973 1978 1983 1988 1993 1998 2003 70.6 53.6 34.9 68.4 36.8 35.0 43.9 28.0 30.1



MAIN ACTORS OF FIRE FIGHTING SYSTEM IN RUSSIA:

State power organs of Russian Federation subjects:

- organize the development and implementation of wildland fire preventing plans, fire arrangement of forest fund;
- -provide for the preparedness of organizations involved in forest protection and forest users for fire danger season;
- -approve annually in advance operational plans of wildland fire fighting;
- -establish the order to involve population and fire prevention machinery, transport and other means to wildland fire suppression;
- -create reserve of fuel and other material resources for fire danger season;
- -organize fire suppression in the forest fund on the territory of Russia's subject;
- -assist organizations responsible for forest protection and forest users in construction and repairing of fire roads, airfields and landings, in providing fuels for firefighters;
- -organize the conduction of fire-prevention propaganda, media response to fire situation and rules of fire safety;
- -use powers in administrative control and supervision for pursuing fire requirements including on the right of ways along federal automobile roads and railways and also transmission and communication lines, main oil and gas pipelines adjacent forests;
- -provide for coordination of all works on fire fighting on the territory of subject of Russian Federation and if necessary create special commissions.

Rosleskhoz:

- -approves the norms of fire suppression systems and assets which citizens and legal entities must have;
- -approves the normative expenditures for forestry and forest fire suppression per hectare of forest land;
- -organizes forest protection with land and air methods in the frames of its competence;
- -implements a set of actions to protect forests and suppress fires;
- -arranges the prohibition of forest visits by population and transport and also conduction of some works on determined sites of the forest fund.

Rosselkhoznadzor:

- -since June 2008 controls and supervises local authorities;
- -supervises state of fire in forests, curbs forest use in accord with federal laws;
- -controls activities on forest protection;
- -supervises forest fire-prevention organization (roads, fire lines, landing facilities, etc.);
- -controls development and maintaining of forest fire prevention and suppression systems and assets;
- -accumulation of fuels and oils stocks during high fire danger period;
- -fire danger monitoring in forests, availability of fire suppression plans;
- -implementation of other measures of fire safety in forests.

Ministry of Emergency:

- -supervises fire situation and organizes fire extinguishing on the objects and in communities (also along federal automobile roads, railways and transmission and communication lines, oil and gas pipelines adjacent forests);
- -provides for methodological guidance, coordination and control of preparation and implementation of actions to eliminate the consequences of possible urgent situations activated by forest and peat fires;
- -provides for the public informing on undertaken actions to eliminate the consequences of possible emergency situations and measures on fire safety in fire danger season.

Ministry of Internal Affairs:

- -prevents population and transport from visiting forests;
- -provides for legal regime and law and order in the zones of emergency;
- -provides for administrative suppression of law breaking in the frames of Ministry's Authority.

Ministry of Defense:

-organizes and conducts in the armed forces activities to prevent and eliminate emergency situations connected to forest and peat fires;

-organizes fire-preventive protection of the armed forces' objects as well as foresees the provision of special machinery, military troops in case of emergency situations.

Prosecutor General's Office of Russian Federation:

-organizes supervision in pursuing the laws on environment protection, atmosphere, reserves, rational land use, subsoils, forests, waters, wildlife, and also the legislation on sanitary wealth of the population, radiation safety and protection against natural and anthropogenic emergency situations;

-supervises the legality of environment protection documents issued by federal ministries and other organizations;

-supervises the legality and completeness of measures taken by controlling and law enforcement organs in detection and suppression of ecological law breakings.

Roshydromet:

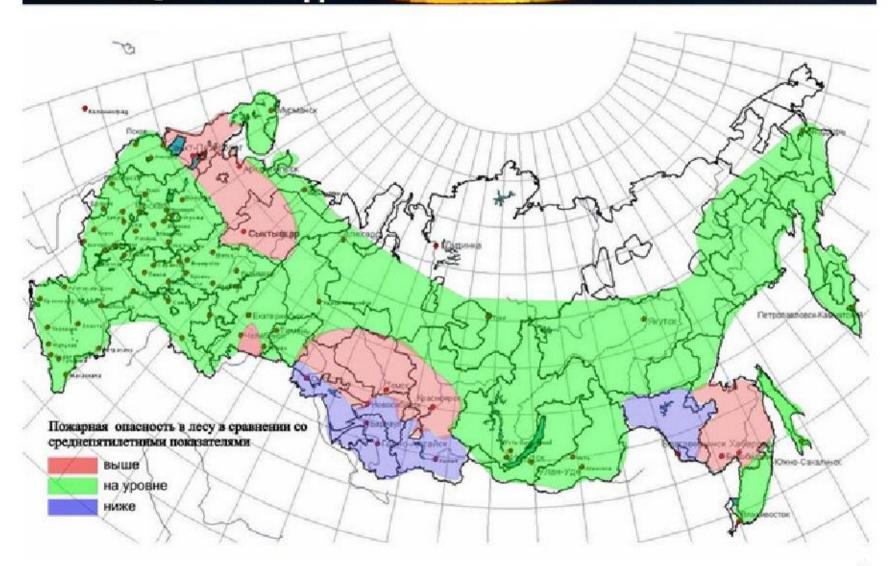
- -organizes development of detailed weather forecasts for fire danger period;
- -conducts constant monitoring of environment state in Russia.

Russian Railways:

-provides for, if necessary, transportation of forces and assets operating in actions on preventing and elimination of emergency situations activated by wildland fires;

-provides for fire safety of railway vehicles and fire protection of railway objects and nearby territories against the emergency situations activated by wildland fires.

Прогноз пожарной опасности в лесу: август 2007 года



Вероятностный прогноз температур и осадков: август 2007 года

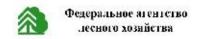


Duration of fire season fluctuates from 90-100 to 200-250 days subject to geographic location of the area.

Usually in average 23% of fires is registered in May, 28% in June, 31% in July, 13% in August and 5% in September.

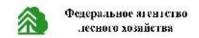
In 2008 the highest burning was registered in 13 regions of Russia including Yakutia, Amur region, Zabaikalski and Khabarovsk Krais.

Прогноз пожарной опасности в лесу на апрель - май 2008 года. • калинин рад • Сықтывкар Петропавловск-Кай Пожарная опасность в лесу в сравнении со среднепятилетними показателями выше Южно-Сахалинек Улан-Уде Апикское на уровне ниже





Прогноз пожарной опасности в лесу на июнь, июль, август 2008 года. Петропавловск-Ка Пожарная опасность в лесу в сравнении со среднепятилетними показателями выше Ожно-Сахалинек на урфвне ниже Source: Rosleskhoz



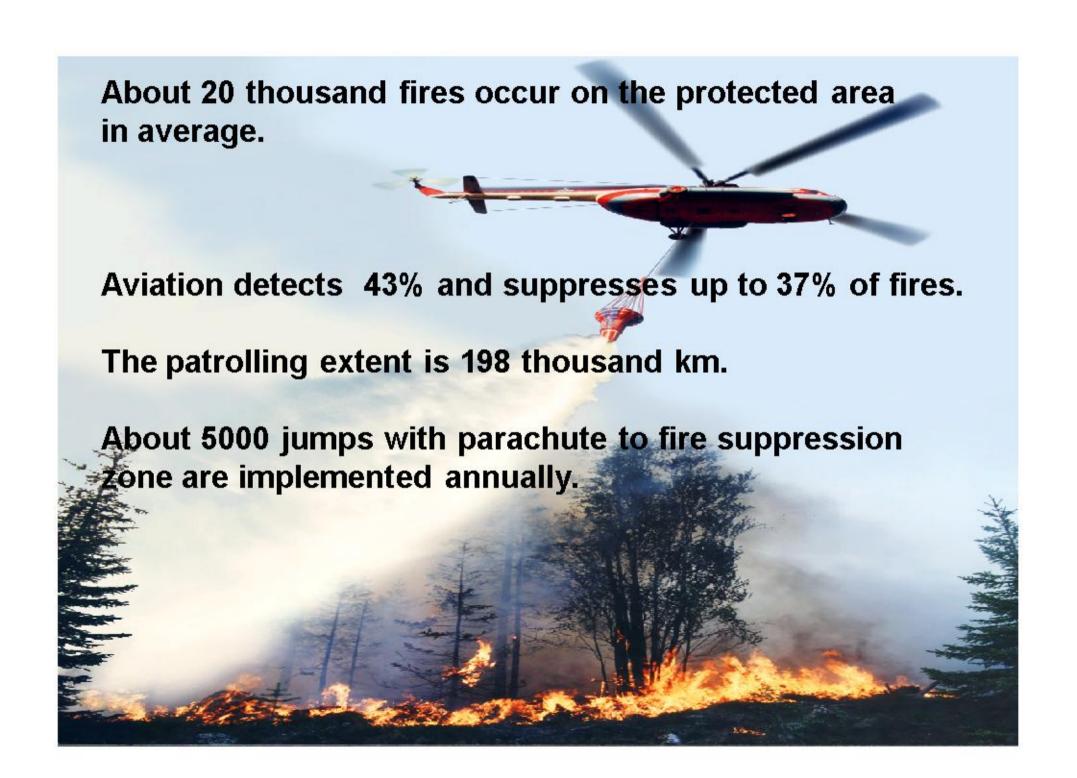


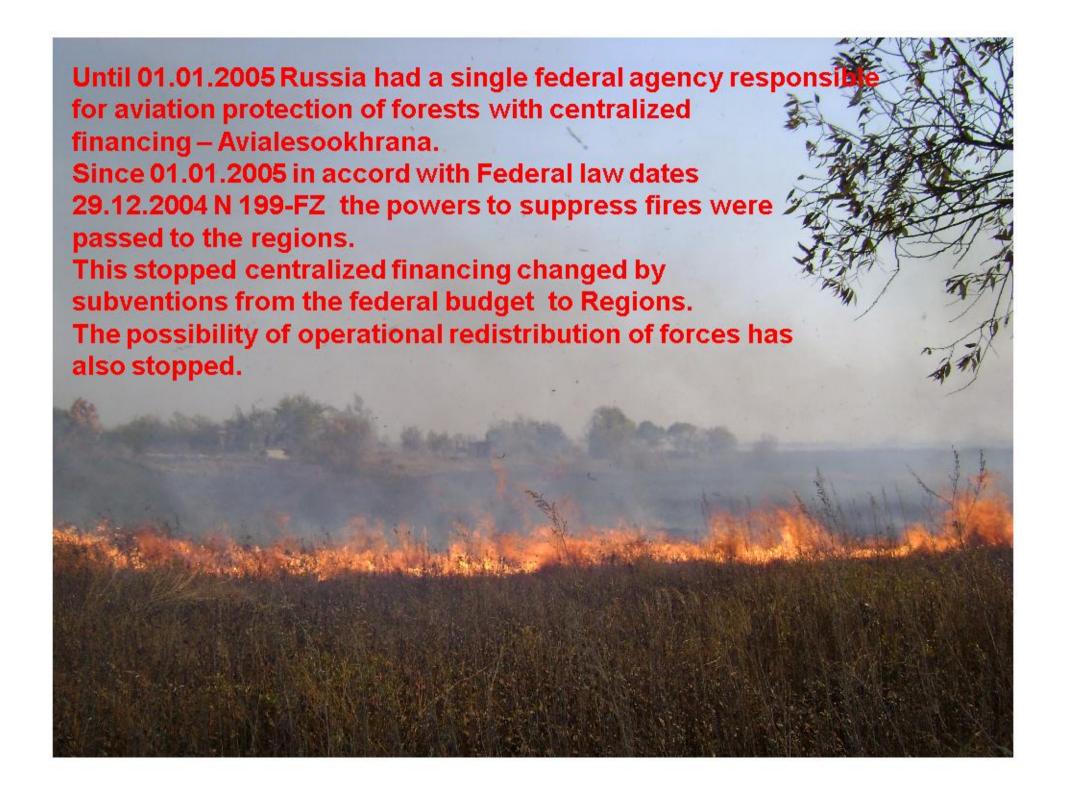
Прогноз пожарной опасности в лесу на июнь, июль, август 2008 года. Петропавловск-Как Пожарная опасность в лесу в сравнении со среднепятилетними показателями выше Ожно-Сахалинек на урфвне ниже



Main task of aviation protection:

timely detection and operational suppression of forest fires on the small areas of difficult access





Avialesookhrana in 2006

24 airbases – affiliates (299 subdivisions);

103 air vessels;

5 base airports;

67 landing areas;

10 store houses of federal reserve

453 - pilots-observers

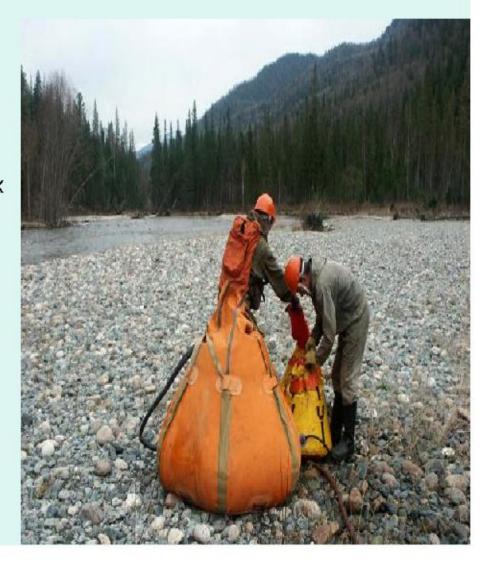
971 - Workers of aviation complex

1625 - jumpers

1339 - paratroopers

6500 -Personnel of

-Avialesookhrana

















Today, in Russian Far East:

There are 947 villages, endangered by wildland fires. 411 (56.6%0 from them have no fire teams at all.

The greatest number of such settlements are in Jewish autonomous region (77.7%), Amur region (63.6%), and in Sakhalin (62.2%).

Besides, 290 (31%) of settlements, endangered by wildland fires, are not equipped with fire barriers and 14 of them have no telephone communication.

Зависимость показателей обнаружения лесных пожаров авиацией, площадей тушения и от налета ВС на примере работы Красноярской базы



Отсутствует информация о готовности сил и средств пожаротушения



Source: Rosleskhoz

	Area of fire, hectares		
Source of information	Forested land	Unforested land	
Information system of remote monitoring	140	98	
Region of Russia	0	0	

6.05.2007

There is no information from the region

According to remote syste fires runs on area of 238 hectares

Today, it is admitted that fire fighting system founded on new Forest code, does not work.

There is a try to create new centralized forest fire coordination centers in Vladimir,

Krasnoyarsk, Khabarovsk. But this will demand money, changes of Forest code Federal budget.

It is admitted that it is economically irrational to establish forest fire systems in every region of Russia.

Priority directions of information system development

Creation of Rosleskhoz united information system

Monitoring remote methods development



Introduction of GIS technologies

Introdcution of international systems of evaluation and criteria of forest condition

Creation of a system of information operational interconnection with regions of Russia

There should be a high interest of the international community in supporting the preservation of the multifunctional role of forests and other vegetation — including the wetlands — by efficient fire management.

The Regional Central Asia Wildland Fire Network, together with its neighbouring networks (Baltic, Northeast Asia) may provide an arrangement suitable for developing cooperative efforts and synergies.

Ways to achieve goals:

Adopting enabling approaches, forming partnerships and activating participatory mechanisms;

Building capacity among partners;

Monitoring and evaluating process and learning from each other's successful practices through networking and the use of modern information technologies;

Developing international cooperation to facilitate the active participation at all levels of government and all relevant partners in decision-making, policy formulation, implementation and evaluation, and resource allocation.

