United Nations
Economic Commission for Europe

Food and Agriculture Organization
of the United Nations

ECE/TIM/SP/18

Geneva Timber and Forest Study Papers

FOREST AND FOREST PRODUCTS COUNTRY PROFILE

RUSSIAN FEDERATION

UNITED NATIONS

ECE/TIM/SP/18

Geneva Timber and Forest Study Papers, No. 18

FOREST AND FOREST PRODUCTS COUNTRY PROFILE

RUSSIAN FEDERATION

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UNITED NATIONS
New York and Geneva, 2001

Note

The designations employed and the presentation of material in this publication do not imply the expression of any opinion whatsoever on the part of the secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries.

Abstract

This *Forest and Forest Products Country Profile,* prepared by national experts, contains information concerning the forest resources of the Russian Federation and a description of trends and developments taking place in the forest sector and of the areas in which forestry activities have taken place over the past decade. For the forest sector, as for other branches of the Russian economy, the period has been marked by the implementation of radical reforms necessitated by the changeover from a centrally planned to a market economy and by efforts to promote sustainable development in forest management. The country profile contains tables, statistical data, diagrams, graphs and a brief analysis of the evolution of the forest sector, and data relating to the principal categories and volumes of goods and services in the forestry sector. Most of the figures cited are based on official data drawn from the State survey of Russia's forest resources as of 1 January 1998 and from the State statistical survey for the preceding financial year (in most cases, 1998). Detailed information will be found in the appendices, which contain updated replies to the ECE/FAO questionnaire (TBFRA-2000) as well as information relating to specially protected forest areas furnished in accordance with the questionnaire prepared in the framework of the Pan-European process.

ECE/TIM/SP/18

UNITED NATIONS PUBLICATIONS

Sales No. E.00.II.E.22

ISBN 92-1-116762-0

ISSN 1020-2269

FOREST AND FOREST PRODUCTS COUNTRY PROFILE

RUSSIAN FEDERATION

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Preface by the Secretariat

The Timber Section in Geneva has been preparing and issuing profiles of the forest and forest products sector in ECE member countries for over 15 years. The profiles are prepared in consultation with national experts and include statistical and other information available in Geneva. The emergence of a new group composed of countries in transition from a centrally planned to a market economy brought a new urgency to the work. Today it is widely recognized that there is a need to make available internationally a complete and comparable data set for these countries that would include basic statistical data, with a long-term time element where possible, as well as up-to-date and reliable information on the status of institutional reform. Among other things, these country profiles will provide a starting point for the analysis of the outlook for these countries in the context of the next study of European forest trends and prospects (EFSOS).

Profiles have already been issued for Albania (ECE/TIM/73), Armenia (ECE/TIM/SP/8), Bulgaria (ECE/TIM/SP/1), Belarus (ECE/TIM/SP/5), the Czech and Slovak Federal Republic (ECE/TIM/64), Estonia (ECE/TIM/74), Hungary (ECE/TIM/66), Lithuania (ECE/TIM/SP/3), Poland (ECE/TOIM/67), Romania (ECE/TIM/65), Russian Federation (ECE/TIM/SP/14), Slovenia (ECE/TIM/SP/2), Republic of Moldova (ECE/TIM/SP/13) and Ukraine (ECE/TIM/SP/4). Other transition countries will be covered as fast as resources allow,

The profiles have been prepared by national correspondents, who express their opinions in a personal capacity. The data are from national official sources or the ECE/FAO database.

The profile for Russian Federation has been prepared by the following authors from the All-Russian Forest Resources Research and Information Centre (VNIITslesresurs): A. N. Filipchuk, V. V. Strakhov, V. A. Borisov, V. I. Yerusalimsly, F. Y. Dyakun, V. V. Sdobnova, L. E. Kurlovich, A. A. Borodin, O. L. Orlova, E. M. Shalimova and I. A. Vukolova under the editorship of Professor A. N. Filipchuk on the basis of official data of the Russian Federal Forestry Service, the State Committee on Environmental Protection, the Ministry of Natural Resources and other ministries and departments. The Secretariat would like to express its profound gratitude to the authors for the excellent work. The profile has been prepared on the basis of the guidelines drawn up by the Planning and Statistical Section of the Policy and Planning Department of FAO.

Symbols and abbreviations used

-	nil or negligible
..	data not available
m	metre
km	kilometre
m^3	cubic metre
km^2	square kilometre
m^2	square metre
t	tonne
thou.	thousand
ha	hectare
1,000 ha	one thousand hectares
mill.	million
bill.	billion
ECE	Economic Commission for Europe
UN	United Nations
FAO	Food and Agriculture Organization
GFRA	Global Forest Resource Assessment
GULF	State survey of forest resources
OOPT	Specially protected natural territories
VNIITslesresurs	All-Russian Forest Resources Research and Information Centre
TBFRA-2000	Temperate and Boreal Forest Resources Assessment 2000

Forestry Country Profile

Introduction

This country profile contains the available information on forests in the Russian Federation and on the main categories and volumes of goods and services in the forestry sector, and describes trends and developments in that sector as well as the principal areas of forestry management activity in the last decade of the twentieth century. For the forestry sector, as for other branches of the economy, the period has been marked by the implementation of radical reforms accompanying the changeover from a centrally planned to a market economy. The process was accompanied by many negative phenomena, such as the breakdown of long-established ties between the republics of the former USSR, inflation, a decline in the standard of living affecting the bulk of the population, significant losses in industrial, scientific and technological potential, etc. Cutting volumes and outputs of the principal categories of forest products for Russia as a whole diminished by a factor of 2 to 3 as compared with the pre-reform level.

The data on the forestry sector submitted by the Russian Federation for TBFRA-2000 were essentially based on figures drawn from the State survey of 1993 and are today in need of updating. In preparing this country profile, the authors have endeavoured to give objective assessments of the present condition of Russian forests, taking into account the differences between the national (Russian) system of land classification and the classification adopted by ECE/FAO for the purposes of TBFRA-2000. Most of the figures given are based on official data of the State survey of forest assets as of 1 January 1998 and on Government statistics for the preceding financial year (in most cases, 1998). Some figures were arrived at on the basis of calculations or expert estimates.

1. National survey and global forest resource assessment

The first assessment of the planet's forest resources was conducted in 1947. Only a few general indices describing forest areas and timber stocks were included. The first complete survey of the planet's forest resources was undertaken in 1980, a first assessment of forests in boreal and temperate zones being conducted at the same time. A second cycle of GFRA, including a separate section devoted to forests in boreal and temperate zones (TBFRA-2000), was completed in 2000. At the time of submitting its information for TBFRA-2000, Russia had at its disposal the results of the 1993 State survey of forest resources, and it was these that it presented to ECE/FAO. Today, the results of the 1998 survey have been published and the 2000 survey has been completed. Considering the size of Russia's forests it is undeniable that the Russian data for TBFRA-2000 require updating. The accuracy and completeness of information concerning the forests of the planet as a whole will, to a great extent, depend on the quality and reliability of the Russian data.

Differences between systems of land classification used in different countries are very substantial. The key concept upon which assessments are based is that of "the forest". This concept serves as the basis for inventories and surveys in most countries. Russia has several descriptive concepts for "the forest", but Russian forestry management and GULF operate with quantitative indicators that reflect a traditional system of classifying forest assets according to the type of land on which they are found (figure 1). All land included in *Lesnoy Fond* (Russia's forest resources) is divided into two major categories – forest and non-forest land.

The authors felt that the Russian concept closest to that of "the forest" as used in the 1990 ECE/FAO terminology was that of "wooded forest land". Other terms that seemed to be descriptive of similar concepts were selected for other ECE/FAO categories and the respective values were entered in the TBFRA-2000 data base. A classification of land and a new conceptual apparatus were developed for the purposes of TBFRA-2000 (table 1).

Table 1
Total area by main classes in Russian Federation (for TBFRA-2000, ECE/FAO)

Class of land	Area million ha
Total (geographical) area of country	1,709.8
Inland water	72.0
Land area	1,637.8
Forest and other wooded land	886.5
Forest	816.5
Other wooded land	70.0
Other land	751.2

The "forest" and "other wooded land" classes are further subdivided according to the following characteristics:

- "naturalness" (forest undisturbed by human activity; semi-natural forest; planted forest);
- availability for wood supply (coniferous, broadleaved, bamboos, palms, mixed available/non-available for timber production);
- origin (high forest, coppice).

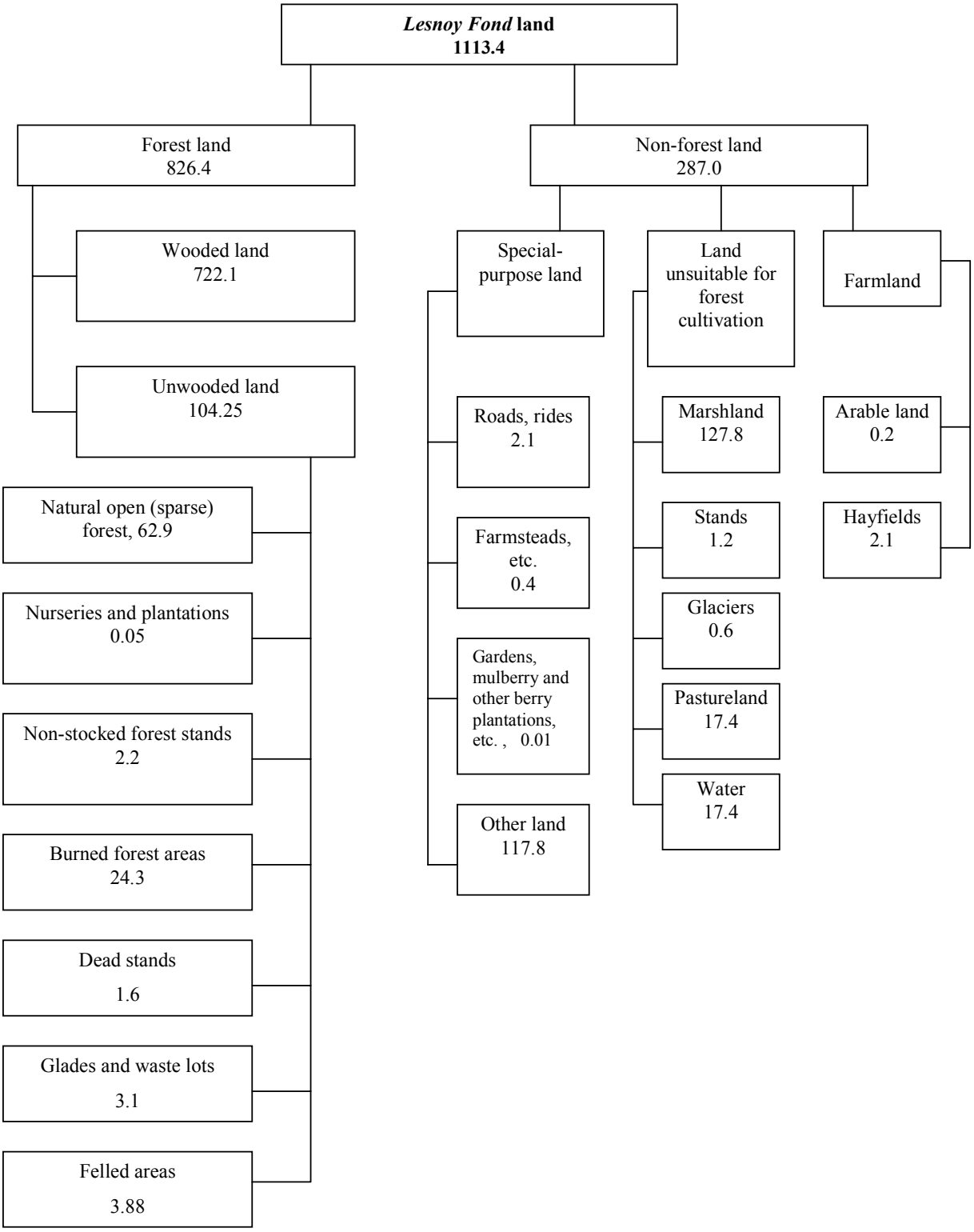
Information was also requested on various aspects of the qualitative and quantitative condition of forests and other wooded land. This information is given in table form for each country of the boreal and temperate zone (25 tables; the Russian data for 1998 will be found in Appendix 1) under 5 headings:

- general information on forest resources
- biological diversity and protection status
- wood supply and carbon sequestration functions
- forest condition
- protective and socio-economic functions.

Each term employed in the TBFRA-2000 methodology was supplied with a definition in accordance with which the country data were submitted.

The ECE/FAO classification differs substantially from the Russian classification of categories of forest assets land (*Lesnoy Fond* land). No Russian definition corresponds fully to the category "forest and other wooded land". The figures of the Russian State survey therefore had to be entirely recalculated in conformity with the ECE/FAO classification. This took several months of work by a group of highly qualified specialists. Special methods were developed for calculating areas and stocks for coniferous, broadleaved and mixed stands, increment, biomass and other parameters used in the TBFRA-2000 methodology. The accuracy and reliability of the calculated figures could not, unfortunately, be checked because Russian forests are not inventoried by statistical methods and there are no permanent testing areas. To create test areas specially for the purpose of verifying the data submitted for TBFRA-2000 would have been too costly an undertaking.

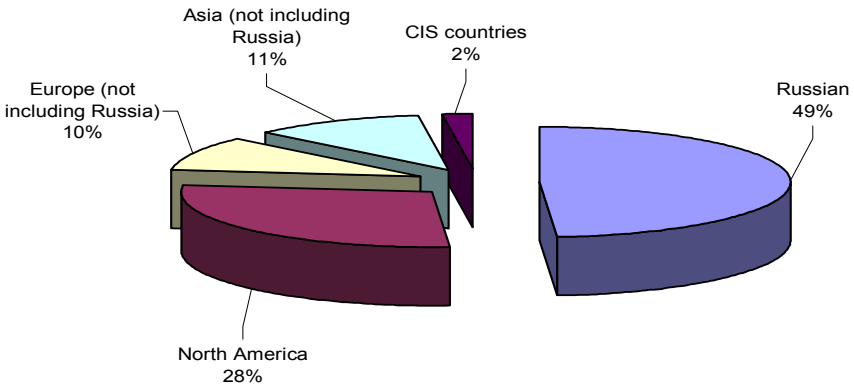
Figure 1
Categories of *Lesnoy Fond* land according to the State survey of 1 January 2000, million ha (Russian classification)



Russia's forests account for 48.6% of total area and 51.1% of the total forest stock of the boreal and temperate zones (figure 2). The figures are slightly lower (46.1% and 48.7%, respectively) using the Russian land classification system.

The woodedness of Russian territory corresponds to 49.9% (or 51.1% counting "other forest land"); the average area of forest per capita is 5.53 ha, or 6 ha counting "other forest land". These figures, too, will be slightly lower if the Russian method is used.

Figure 2
Distribution of forests in boreal and temperate zone countries (ECE/FAO, 2000)



In Russia, coniferous forests occupy 416.4 million ha of land and stocks amount to 63.7 billion m^3 (more than half the coniferous forests of the boreal and temperate zones are concentrated in Russia). Predominantly broadleaved forests occupy 67 million ha, stocks amounting to 16.9 billion m^3. The relative percentages of coniferous, broadleaved and mixed forest by area are 51%, 8.2% and 40.8%, respectively.

Since the Russian State forest survey is conducted on the basis of the national methodology, the terms "coniferous forest" and "broadleaved forests" do not correspond to the terms used in the FAO method. We have no category such as "mixed forest". All data supplied for TBFRA-2000 had to be prepared by the analytical method. Given the vast territory occupied by Russia's forests, any attempt at verification using test areas or remote-indication data appears to be ruled out.

It will be noted that between 1990 and 2000 the total area of Russia's forests fell from 822 million ha to 816.5 million ha. This is due to changes in the method of conducting the GFRA. Whereas for GFRA-1990 Russia had included its "wooded land" figures in the category of "forest and other forest land", the data submitted for TBRA-2000 were recalculated in conformity with the new methodology. According to the Russian classification, the area of wooded land is becoming larger every year.

What did happen over the past decade was a decline in the area of forest available for exploitation. In Russia this indicator fell from 573 million ha to 525.2 million ha. This implies that priorities in the sphere of forest utilization have really begun to shift in the direction of protection and conservation. In Russia, as in most countries of the boreal and temperate zone, increasingly large forest areas are being withdrawn from exploitation and given protected-area status.

In contrast to many other countries, all forests in Russia are State-owned and managed by "forest management boards" (93) or "forest management units" (leskhoz) (approximately 2,000). Management plans for each board or unit are drawn up at intervals of 10 to 15 years.

A clear predominance of tree stands older than 80 years - "mature" and "over-mature" stands according to the Russian classification and terminology – is observed in Russian territory as a whole. Age class percentages were arrived at entirely by analytical methods because this information is not gathered for purposes of the State survey; accordingly, these figures may not be entirely accurate.

The average annual increment for Russian forests is approximately 1 m^3/ha.

2. Management of Russian forests

The history of forest management in Russian goes back 200 years. In 1798, the Forest Department was founded by an order of Emperor Paul I. The forest management structure created at that time proved so successful that its central principles have been upheld to this day. Under the legislation in force, State control in the field of the utilization, regeneration, protection and conservation of forests in the territory of the Russian Federation is exercised by the President of the Russian Federation, the Government of the Russian Federation, organs of executive power of subject entities within the Federation, and specially empowered State forest management organs.

In accordance with the Forestry Code of the Russian Federation, all forests on *Lesnoy Fond* land as well as those on Ministry of Defence land are owned by the Federation. Federal law allows parts of *Lesnoy Fond* land to be transferred into the ownership of subject entities of the Russian Federation. Civil law and the Forestry Code guarantee the right of citizens to free access to *Lesnoy Fond* forests and to forests not managed by *Lesnoy Fond*. Plots of *Lesnoy Fond* forest may be made available to citizens and legal entities for use on the basis of leases, rights of use free of charge, concessions and rights of short-term use.

The Federal Forestry Service controls 94% of the total area of the Russian Federation's forests, the rest being controlled by other ministries and departments (table 2).

Table 2
Information on *Lesnoy Fond* and on forests not forming part thereof
(according to GULF-1998 figures)

Item	Area of *Lesnoy Fond* land and forests not forming part thereof, 1,000 ha			Timber growing stock, million m^3
	Total	Forest land	Other wooded land	
Total	1,178,554.4	881,974.2	774,250.9	81,863.69
Lesnoy Fond	1,172,322.3	877,006.9	769,785.4	81,334.14
Including under the control of				
Rosleskhoz (Federal Forestry Service)	1,110,567.8	823,561.7	718,662.1	74,321.61
Goskomekologiya (State Committee on Environmental Protection)	18,850.4	11,696.9	10,894.5	1,404.72
Ministry of Agriculture	42,515.8	41,395.8	39,919.2	5,555.93
Ministry of Education	388.3	352.5	309.6	51.88
Forests not forming part of *Lesnoy Fond*	6,232.1	4,967.3	4,465.5	529.55
Including under the control of				
Ministry of Defence	4,890.9	3,868.2	3,453.8	418.55
Municipalities	1,341.2	1,099.1	1,011.7	111.00

3. Information available on Russian forests

Forest Survey System

Forest assets in different parts of Russia have been studied with different degrees of precision and detail (figure 3). Forest management has been introduced in 60% of *Lesnoy Fond* territory; elsewhere,

forests have only been studied by simplified methods, such as observation from the air in the 1950s and 1960s and interpretation of photographs taken from the air or from space. The greatest precision is achieved in respect of forests in the intensive forest management zone; data for *Lesnoy Fond* land in parts of Siberia and the Russian Far East where no major cutting projects are in progress and none are planned for the near future are the least precise.

Figure 3
Chart showing the extent of information available on Russian forests

The existing system of forest survey operations includes the State forest survey, the State forest cadaster, forest monitoring and forest management.

State forest survey (forest accounting)

The State survey of forest resources (GULF) is conducted with a view to ensuring the rational utilization, protection and conservation of forest resources, forest regeneration, systematic monitoring of quantitative and qualitative changes in forest resources, and the provision of reliable information concerning forest resources to organs of State power of the Russian Federation, organs of State power of subject entities of the Russian Federation, local self-government organs and interested citizens and legal entities. GULF data are used in the preparation of the State forest cadaster.

The basic materials used in conducting the State survey are forest management data, which are updated in time for each survey. They include data on logging, new forest plantations, forest fires, forest areas damaged by diseases or pests, and other changes in stand areas and stocks. Before 1999 the survey was carried out once every five years because of the need to obtain consolidated figures for each region, territory and republic in time for the start of a new five-year plan. Today, in view of the radical changes that have taken place in Russian society and of the need for access to up-to-date information, the survey is conducted annually. It is executed by the All-Russian Forest Resources Research and Information Centre (VNIITslesresurs). GULF figures are official and are published in the press.

State forest cadaster

The State forest cadaster contains information on ecological, economic and other quantitative and qualitative indicators of *Lesnoy Fond* forests. Data from the cadaster are used in connection with State management of forests, its organization, transfers of forest land to non-forest land for purposes unrelated to the conduct of forest management and the utilization of forest resources, sequestration of *Lesnoy Fond* land, determination of amounts payable for the use of forest resources, and assessment of the economic activities of forest users and persons engaging in forest management.

Forest monitoring

Forest monitoring is a system of observing, assessing and predicting the status and evolution of forest assets for purposes of State management in the field of the utilization, protection and conservation of forest resources, the regeneration of forests and the enhancement of their environmental functions.

Forest management

The basic information for all forest survey activities is at present obtained in connection with forest management. The success of all forest survey operations and the consolidation of data for different regions, subject entities of the Russian Federation, separate economic regions and Russia as a whole depend on the volume and quality of forest management operations. Forest management includes a system of measures designed to ensure the rational utilization of forest assets, to improve the efficiency of forest management activities, and to apply unified scientific and technological policies in the sphere of forestry.

Forest management throughout the territory of *Lesnoy Fond* is carried out by specialized State forest management organizations in accordance with a unified system and procedure established by the Federal forest management service. In particular, forest management includes the inventorization of forest assets with a view to determining the species and age class composition of stands, their condition and their qualitative and quantitative indicators.

Forest management operations are carried out in the same territories at intervals of 10 to 15 years. In areas of Siberia and the Russian Far East with minimal economic activity (i.e. on approximately 40% of total *Lesnoy Fond* territory), simplified forest survey methods are used (visual observation from the air or interpretation of photographs taken from the air or from space).

4. Forest resources

Growing stock

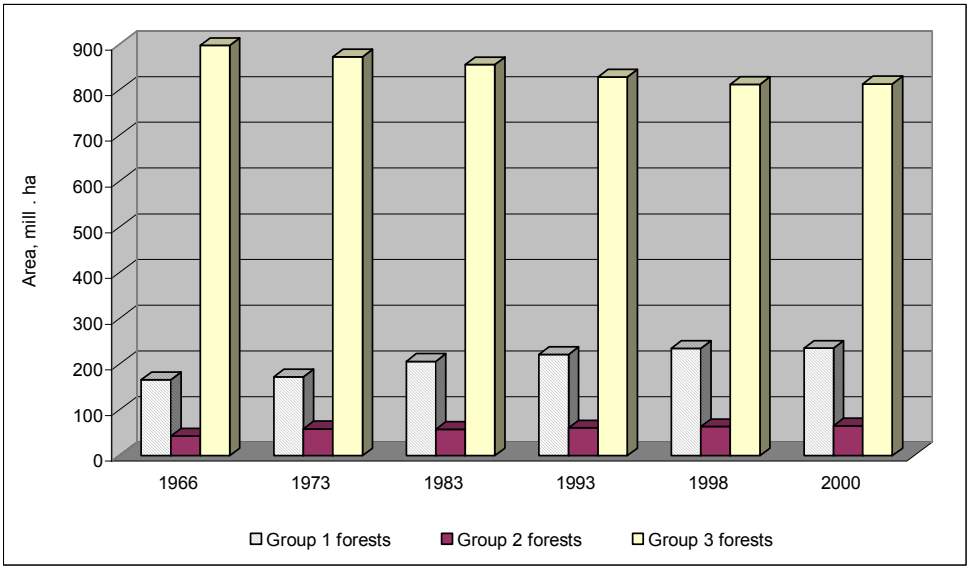
Relatively favourable natural conditions for forest growth exist in almost 60% of Russia's total land area. Conditions for the growth of coniferous forests are met in 67% of all forest land, 17% of forest land being covered by coniferous open stands. Taiga and tundra zones account for 78% of *Lesnoy Fond* land.

As of 1 January 2000 the total area of *Lesnoy Fond* land was 1,113 million ha. This figure is relatively constant, any slight variations being due to transfers of forest land to industrial construction or agricultural use.

All Russian forests are divided into three groups according to their economic value and functional particularities. Group 1 includes forests whose functions are predominantly those of water conservation, protection, hygiene and health, and air improvement. Group 2 consists of forests in areas of high population density, whose function is both protective and, to a limited extent, industrial, as well as those with insufficient timber resources and subject to strict conditions of forest use; and Group 3 includes forests in densely wooded areas, which are predominantly earmarked for exploitation and whose purpose is to provide the economy with a continuous supply of timber without detriment to the forests' protective properties.

Group 1 forests extend over 235 million ha (21% of total), those in Group 2 over 65 million ha (6%) and those in Group 3 over 813 million ha (73%). A trend towards the enlargement of the area occupied by Group 1 forests has maintained itself over the past few years (figure 4). This process clearly points to Government priorities shifting towards policies designed to preserve and develop the forests' environmental conservation functions.

Figure 4
Evolution of areas occupied by forests in Groups 1 to 3



The predominant species (larch, pine, spruce, cedar (siberian pine), oak, beech, birch, aspen and others} occupy over 90% of wooded land (figure 5). Other species (pear, chestnut, walnut, Manchurian walnut and others) account for less than 1% of the land, the remainder being taken up by shrubs (dwarf cedar, *Betula fruticosa* Pall. birch and others). The principal forest-forming species are grouped under the headings of "Conifers" (area 509.6 million ha, stocks 57.5 billion m^3), "Hardwoods" (area 17.5 million ha, reserves 1.9 billion m^3) and "Softwoods" (area 122.1 million ha, reserves 13.4 million m^3).

Figure 5
Map of predominental forest species

Stands with predominental larch, found principally in parts of Siberia and the Russian Far East over an area of 263 million ha, account for the largest area and stocks in the Conifers group (over 50%). Pine stands occupy 116 million ha and spruce stands 76 million ha (table 3).

Table 3
Evolution of areas occupied by principal forest-forming species, 1,000 ha

Principal forest-forming species	Year of Survey			
	1988	1993	1998	2000
Conifers				
Pine	113,563.9	114,326.1	115,246.9	116,178.0
Spruce	78,810.0	75,866.3	76,262.3	76,378.6
Larch	277,897.8	263,348.1	263,160.6	263,121.8
Cedar (siberian pine)	40,166.0	39,797.6	39,657.8	39,521.9
Hardwoods				
Oak (high forest)	3,761.0	3,808.0	3,618.9	3,566.0
Oak (coppice)	3,198.7	2,971.3	3,036.1	3,105.5
Beech	698.5	701.3	731.6	734.1
Softwoods				
Birch	85,531.0	87,732.5	93,006.0	94,800.3
Aspen	17,711.4	18,907.9	19,788.0	20,085.8

Roughly half of the Hardwoods area is occupied by stone birch (*Betula ermanii Cham.*), which grows in the Far East. The most valuable species in this group are oak and beech, which account for approximately a quarter of the group's area. In the Softwoods group 94.8 million ha are taken up by birches and 20.1 million ha by aspens.

Mature and over-mature stands account for roughly one-half of the Conifers area. According to GULF-2000 figures, young stands account for 18.2% of the whole Conifers area, medium-aged stands for 22.6 %, maturing stands for 10.1% and mature and over-mature stands for 49.1%. In the Hardwoods group, young stands account for 10.8% of the area, medium-aged stands for 24.9%, maturing stands for

10.9% and mature and over-mature stands for 53.4%. In the Softwoods group, young stands account for 20.9%, medium-aged ones for 33%, maturing ones for 10.9% and mature and over-mature ones for 35.2%.

The trend towards a rise in the proportion of mature stands in Russian forests has intensified over the past few years owing to the decline in principal cutting.

More than half of all Russian forests are growing on permafrost soil in Siberia and the Russian Far East. This explains their low productivity. Only 55% of the total forest area is of interest from the point of view of exploitation, but the major part of these 55% (in the European North and along the Trans-Siberian railway) have been seriously depleted as a result of extensive exploitation over the past century.

Table 4
Evolution of the forest age structure (in 1,000 ha)

Principal forest-forming species	Year of survey			
	1988	1993	1998	2000
Conifers	526,103.8	507,708.2	508,684.2	509,626.8
Young stands	86,472.2	88,511.5	90,734.2	92,884.7
Medium-aged stands	99,239.5	111,830.8	115,295.9	115,285.7
Maturing stands	49,862.5	48,233.5	51,198.8	51,226.4
Mature and over-mature stands	290,529.6	259,132.4	251,455.3	250,230.0
Hardwoods	17,096.9	17,286.5	17,498.3	17,504.0
Young stands	2,159.8	2,021.6	1,917.7	1,894.0
Medium-aged stands	4,277.9	4,284.0	4,376.4	4,364.7
Maturing stands	1,892.4	1,849.6	1,890.8	1,903.7
Mature and over-mature stands	8,766.8	9,131.3	9,313.4	9,341.6
Softwoods	109,679.6	113,211.1	119,711.9	122,119.0
Young stands	23,481.1	24,442.1	25,360.0	25,442.2
Medium-aged stands	35,796.9	37,407.3	39,017.8	40,320.7
Maturing stands	12,580.9	12,092.2	13,076.5	13,360.6
Mature and over-mature stands	37,820.7	39,269.5	42,257.6	42,995.5
Total principal forest-forming species	652,880.3	638,205.8	645,894.4	649,249.8

According to GULF-2000 data, total timber stocks of principal forest-forming species were 74.64 billion m^3, including g 42 billion m^3 mature and over-mature.

For the country as a whole, average timber stocks per 1 ha are as follows: in mature and over-mature stands, 137 m^3; in forests available for wood supply, 167 m^3.

The average annual increment is 871.45 million m^3, or 1.34 m^3 per 1 ha of wooded land.

Non-wood assets/resources

Forest assets are used for both wood and non-wood production. Secondary forest products, secondary forest uses and hunting hold a particularly significant place in the daily lives of local people, which are heavily dependent on the forests. Raw materials for industrial use, for use as animal feed, and for decorative arts and crafts are traditionally counted among secondary forest products. Industrial raw materials are represented for the main part by tannins and natural dyes. The most widespread type of animal feed is vitamin flour obtained from needle-bearing conifer twigs and used as a feed supplement for large horned cattle.

The possibilities for the industrialization of forest-derived food products are enormous (table 5).

Table 5
Stocks of forest "by-products" in Russian Federation

Product	Stocks, 1,000 t	
	Biological	**Commercial**
Wild berries	9,485	4,746
Cranberry	2,132	1,074
Bilberry	3,021	1,508
Blackberry	2,618	1,309
Blueberry	1,020	509
Raspberry	240	120
Cloudberry	453	226
Nuts	2,751	–
Cedar/siberian pine	1,038	–
Dwarf cedar	1,713	–
Fungi/mushrooms	4,326	2,163
Birch sap	785,302	7,853

Specially protected natural territories

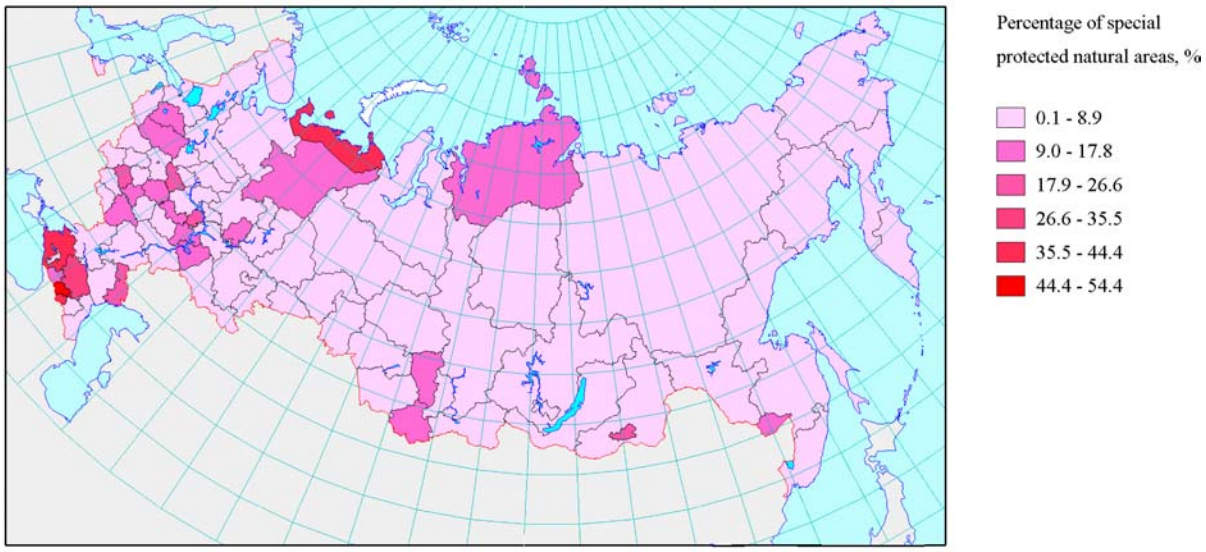
The system of specially protected natural territories (OOPT) plays an important role in the preservation of typical and unique natural landscapes, the diversity of flora and fauna and other valuable components of the natural and cultural heritage. Under the Specially Protected Territories Act of 14 March 1995 (Act No. 33-F3), "the concept of OOPT shall apply to sectors of land or water and the airspace above them containing natural objects or systems of special interest from the environmental, scientific, cultural, aesthetic, recreational or health points of view that have been wholly or partly withdrawn from economic use by decisions of organs of State power and have been placed under a special protection regime". The Act recognizes the following categories of OOPT (Appendix 2):

- State nature reserves, including biosphere reserves;
- National parks;
- Nature parks;
- State-protected nature areas;
- Natural monuments;
- Arboretums and botanical gardens; and
- Health parks and spas.

Other categories of OOPT (green belts, municipal forests, city parks, monuments of horticultural and landscaping art, genetic reservations, etc.) can be established by the Government of the Russian Federation, organs of executive power of subject entities of the Russian Federation, or local authorities. These categories are by no means always taken into account at the Federal level, and reliable information concerning them can only be obtained from local (district level) sources.

In all, OOPT account for around 5% of the *Lesnoy Fond* area. They are irregularly distributed over Russian territory (figure 6).

Figure 6
Map showing the distribution of OOPT over Russian territory



State nature reserves are the most traditional form of territorial protection of natural sites having the greatest importance from the point of view of the preservation of biodiversity. By the beginning of 2000, 99 State nature reserves with a total area of 33,170,258 ha had been created in the Russian Federation. They are located in 18 republics forming part of the Russian Federation, 4 territories, 35 regions, one autonomous region and 7 autonomous districts. Under the law, State nature reserves have the status of nature conservation, scientific research and environmental study institutions.

The Russian system of State nature reserves is recognized everywhere in the world. Twenty-one of Russia's nature reserves have international status as biosphere reserves, 7 fall within the scope of the Convention for the Protection of the World Cultural and Natural Heritage, 10 come under the Convention on Wetlands of International Importance (chiefly as a waterfowl habitat), and four have received Council of Europe diplomas. Most of our State nature reserves are placed under the control of the State Committee on Environmental Protection.

Areas containing natural objects and systems of special value from an ecological, historical or aesthetic viewpoint which are intended for environmental, educational, scientific or cultural use in connection with organized tourism are given the status of national parks. By the beginning of 2000 Russia had 35 national parks with a total area of 6,924,497 ha. Thirty-four of the national parks are managed by the Federal Forestry Service, while one (*Losinyi Ostrov*) is under the control of the Government of the City of Moscow.

Regional nature parks are a relatively new category of OOPT. They are recreational nature conservation areas under the control of subject entities of the Russian Federation whose land (or water) areas contain natural objects or systems that have considerable ecological or aesthetic value and are intended for nature conservation, educational or recreational use. The nature parks system is still being developed; at present their number in the whole of Russia stands at 22.

State-protected nature areas are areas of land or water of special importance for the conservation or regeneration of natural systems or their components and for the maintenance of the ecological balance. They perform territorial environmental protection functions; in them, limitations are imposed on certain forms of economic activity and on the utilization of natural resources. Of the 65 existing Federal-level State-protected nature areas, 55 are managed by the Department for the Protection and Rational Utilization of Hunting Resources of the Ministry of Agriculture and 10 by the State Committee for Environmental Protection.

A further 4,000 or so regional-level protected areas are controlled by territorial organs of the Hunting Department referred to above, the Federal Forestry Service, the State Committee for Environmental

Protection, organs of the State Committee on Fisheries and organs for the protection of mineral resources within the Ministry of Natural Resources.

Natural monuments are unique and irreplaceable natural systems and objects of natural or artificial origin of value from the ecological, scientific, cultural or aesthetic point of view. Natural monuments are graded Federal-level or regional-level depending on the environmental, aesthetic or other value of the natural objects or systems protected.

Russia has 28 Federal-level natural monuments, of which 18 are managed by the Federal Forestry Service and 10 by the State Committee on Environmental Protection.

Like State-protected nature areas, OOPT in this category are mostly found at regional level. In all, their number is greater than 7,500. They are controlled by various Ministries and departments.

The Russian Federation has 153 spas offering balneological, climatological and mud-bath treatments. A significant proportion (52) are located in the Northern Caucasus.

5. Forest utilization

Principal cutting

The traditional form of forest utilization is timber production by principal felling in over-mature and mature stands. Many different grades of timber valued on both the domestic and world markets are produced in Russian forests.

The optimum volume of principal felling is arrived at on the basis of a scientifically established norm known as "allowable cut". For the past few years the annual allowable cut figure has been greater than 500 million m^3, including 300 million m^3 in the Conifers group. The ratio between the volume of actual cut and that of allowable cut (figure 7) defines the state of all parts of the forest sector. Although, for the first time in a number of years, an increase in the volume of timber produced was recorded in 1999 (1998: 80 million m^3, 1999: 111 million m^3), only 20% of allowable cut was actually felled. This points to the presence of a deep structural and financial crisis in the forest sector of the economy.

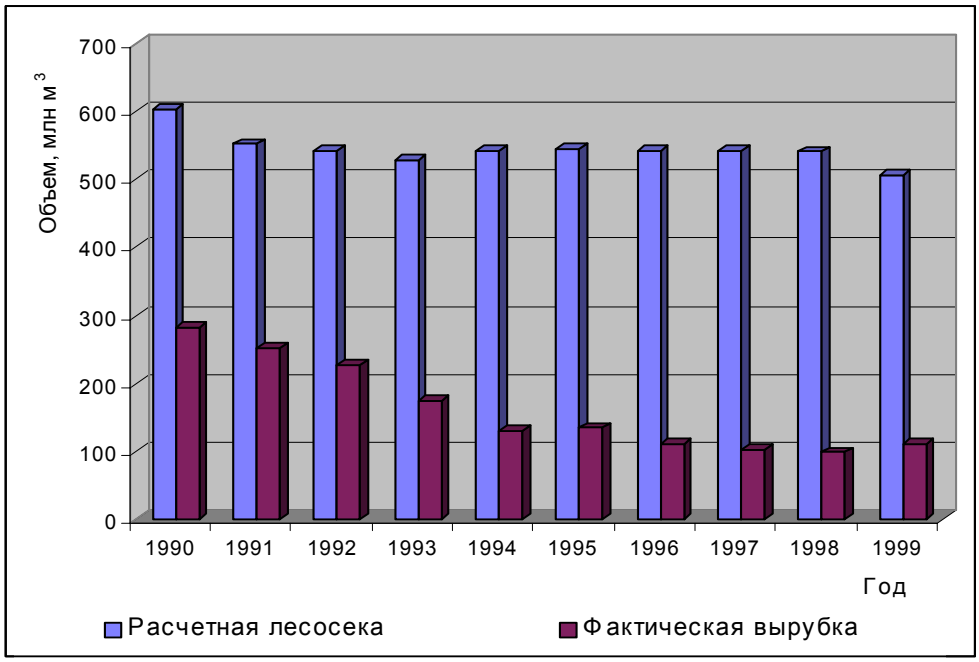
Since 1988, the greatest decline has been observed in cutting, sawing and the production of chipboard. The principal cause has been an abrupt drop in the utilization of timber products on the domestic market. Against this background, foreign trade in timber products has tended to improve. In 1997, 17.5 million m^3 of round timber, 4.2 of sawn timber, 971,000 m^3 of (pulp) cellulose and 1,434,000 tonnes of paper and cardboard were exported.

Side by side with declining outputs and the continuing restructuring of the wood industry towards the production of goods of higher technical quality, production has been shifting to regions with a high level of timber consumption, located closer to foreign markets for transport purposes. Economic considerations of this kind are turning forests in north-western, northern, central and western parts of the country into priority areas from the point of view of the development of forest utilization.

It should be noted that as a result of growing environmental requirements the allowable cut was reduced between 1993 and 2000 for by 7% for forest stocks as a whole and by 10% for the Conifers group (figure 7). The allowable cut (principal cutting) established for 1999 was 507 million m^3.

Figure 7
Evolution of allowable and actual principal cut, 1990-1999

Positive trends in forest utilization over the past years include a considerable reduction in timber



losses. Volumes of incomplete cutting fell by a factor of nearly 1.9, while areas remaining uncleared after felling were almost halved. Relative losses per m^3 of cut timber also diminished. There was an appreciable reduction in the amount of technical damage caused to forest assets in the process of cutting.

The Forestry Code provides that the principal forms of forest utilization shall be by lease of parcels of forest land and by purchase of standing timber at auction. In a number of regions where the demand for standing timber exceeds the supply, forest users are beginning to compete for the right to obtain leases of parcels of forest land. The impetus to adopt market-economy method generally comes from new forest users not previously involved in this type of activity.

Today there are in Russia around 3,500 specialized timber cutting, sawing and processing enterprises owned by the State and about 33,000 private companies engaged in timber cutting, wood processing and trade in timber products. Most of these organizations and companies have been set up in the basis of the organizational structure of the forest industry of the former USSR. Many enterprises form part of joint stock companies (*Roslesprom*, the *Rossiyskie Lesopromyshlenniki* corporation, etc.).

Leaseholders are under obligation to conduct felling in such a way as not to hamper regeneration or to cause damage to water or other natural resources. They must carry out forest maintenance and regeneration operations. The Federal Forestry service and its local organs are responsible for monitoring the activities of leaseholders.

By 2000 the percentage of cutting by forest users who had purchased parcels of forest at auctions had reached 25% and cutting by leaseholders 46%. A total of 1,925 parcels of forest (68 million ha) with a total annual output of 102.6 million m^3 of timber are under lease. The volume of cutting in parcels under lease has been set at 20% of the allowable cut.

Intermediate cutting

Intermediate cutting includes maintenance felling, selective felling for forest regeneration and forest health purposes, and other felling in low-value stands as well as felling of trees and shrubs which are losing their environmental protection functions. It is conducted with a view to growing highly productive

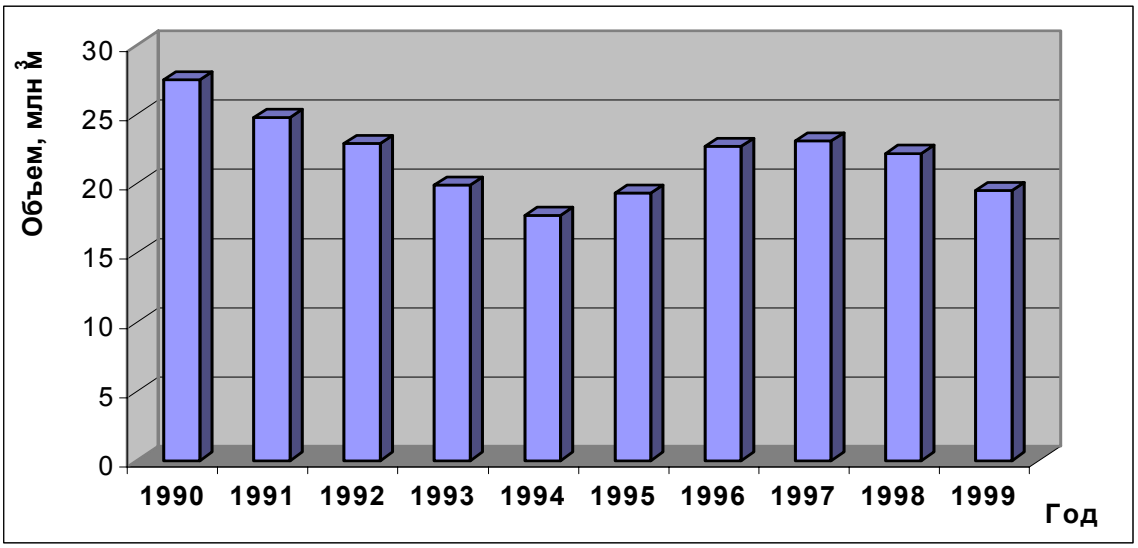
stands of valuable tree species and improving the quality and health of forests. Reductions in maintenance and forest health fellings may lower the quality of the Russian forest in general.

In 1999, the volumes of intermediate cutting and other fellings were 19.5 and 11.1 million m^3, respectively (figure 8).

Figure 8
Evolution of volumes of intermediate cutting

Under Russian forestry law, forms of forest utilization other than cutting, may be conducted in Russian forests, viz.:

Tapping for soft resin;



Production of byproducts (stumps, bast, bark, birch bark, fir, needle-bearing spruce and pine twigs);

Secondary uses (hay mowing, cattle grazing, bee-keeping, gathering and conserving wild fruit, fungi, berries and industrial raw materials, moss, forest litter plus surface humus, fallen leaves, reeds, etc.); and

Use for the purpose of hunting as a sport or for commercial hunting.

Non-wood plants, including edible, medicinal, industrial, melliferous and fodder plants, hold an important place among the forests' raw-material resources. Outputs of edible forest products are shown in table 6.

The principal species of wild berries are cranberry, bilberry, blackberry, blueberry, raspberry and cloudberry.

The most valuable nut-bearing species is cedar. Cedar forest occupies about 40 million ha of the Russian Federation's surface. Cedar is the principal nut-bearing species in the taiga of Western Siberia, Eastern Siberia and the Russian Far East. Special nut-growing areas of cedar forest in which felling for wood supply is prohibited began to be set aside in 1953 with a view to maximum conservation. Today, more than 10.5 million ha of cedar forest are designated as nut-growing areas.

Stands of cedar brushwood are common in mountain regions of Eastern Siberia and the Russian Far East. They occupy about 25 million ha.

A further valuable food product are fungi, of which there are more than 30,000 varieties. About 3,000 varieties of pileate fungi, over 200 of them edible, occur on Russian territory.

Table 6
Output of edible forest products

Product	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Wild fruit and berries, t	26321	28503	7690	2442	2094	624	806	560	780	643
Of which cranberry, bilberry, etc., t	1081	2968	700	617	564	184	224	128	245	164
Nuts, t	828	1149	139	244	451	218	132	154	74	352
Mushrooms/Fungi, t	1299	1328	221	383	173	133	52	110	213	215
Raw materials for industrial production of medicinal goods	3363	3380	2081	982	524	563	693	579	510	510
Birch sap, t	24774	19506	10093	4360	1032	1211	1125	475	374	444
Fruit and vegetable concentrate, barrels	33927	27339	30912	15413	7652	5015	3624	2701	3094	1437
Saleable honey, centners	4200	4400	3270	2994	1971	2845	2231	2290	2135	2177
Bee swarms at end of year, pces.	55942	59625	51182	43133	36554	35802	31477	30594	28234	..

Another valuable non-wood forest product is birch sap. Of the approximately 40 varieties of birch that occur in Russia, the two varieties principally used for the production of birch sap are the "hanging" or "pendulous" birch and the "fluffy" or "pubescent" birch. Under the general rules governing forest byproducts in Russia, tapping for sap in mature stands intended for principal cutting is allowed provided it is done not less than 5 years before felling takes place.

Wooden decorative articles made by folk craftsmen have been in considerable demand over the past few years. Many such goods are exported abroad.

Recreational forest use

Recreation is an important form of forest use. Forests accessible to visitors – nature parks, nature reserves, municipal forests, etc. – are set aside for this type of utilization. All *Lesnoy Fond* land, both wooded and unwooded (rivers, lakes, rocks, alpine meadows, roads and paths, etc.), can be regarded as recreational territory.

"Recreational use" means the utilization of the forest's valuable properties for leisure purposes. Under the Forestry Code, forest users may adapt selected areas of forest for cultural and health purposes, rambling and the exercise of sports provided they conserve the forest and natural landscapes and comply with rules governing fire prevention and forest health.

6. Forest regeneration and protective forest cultivation

The overwhelming majority of Russian forests are natural; only 3% of wooded land was artificially planted.

The marked decline in timber cutting has caused major territorial and structural changes in forestry activities aimed at forest regeneration, protection and conservation. This is particularly true of forest regeneration, which is generally conducted in felled areas (table 7).

Table 7
Principal indicators relating to volumes of forest regeneration and forest planting operations

Indicator	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999
Forest planting, 1,000 ha	348	331	335	393	356	332	274	237	232	227
Planting protective forests on agricultural land, ha	89,838	91,173	75,741	65,936	60,465	44,141	18,498	20,586	16,049	25,604
Of which: for the purpose of:										
Protection of ploughland	28,788	57,471	10,840	9,129	6,794	5,493	2,099	1,762	1,779	1,943
Prevention of erosion	61,050	33,702	30,610	27,747	25,315	21,835	12,209	12,339	13,409	15,912
Protection of pastureland	0	0	34,291	29,060	28,356	16,813	4,190	6,485	861	7,749

In 1999, in addition to the operations listed in table 7, our forestry experts constructed 397 km of agricultural roads, conducted forest drainage over an area of 4,928 ha, carried out maintenance and repairs of the forest drainage network over an area of 137,620 ha, produced 606,128 tonnes of seeds, established genetic plant-selection units over an area of 390 ha, and grew 1,711.1 million units of planting stock.

7. Forest protection and conservation

Prevention of forest fires

Areas of *Lesnoy Fond* land graded as fire hazard groups I and II (low-risk areas in terms of fire) account for 32.7% of the total, those in group III (medium-risk) for 30.3% and those in groups IV and V (high and extra-high fire risk) for 37%. The annual statistical average of forest areas traversed by fire is approximately 1 million ha, with considerable variations depending on the year's climatic conditions.

Fires occur most commonly in lowland areas; they account for about 90% of the total area affected by forest fires.

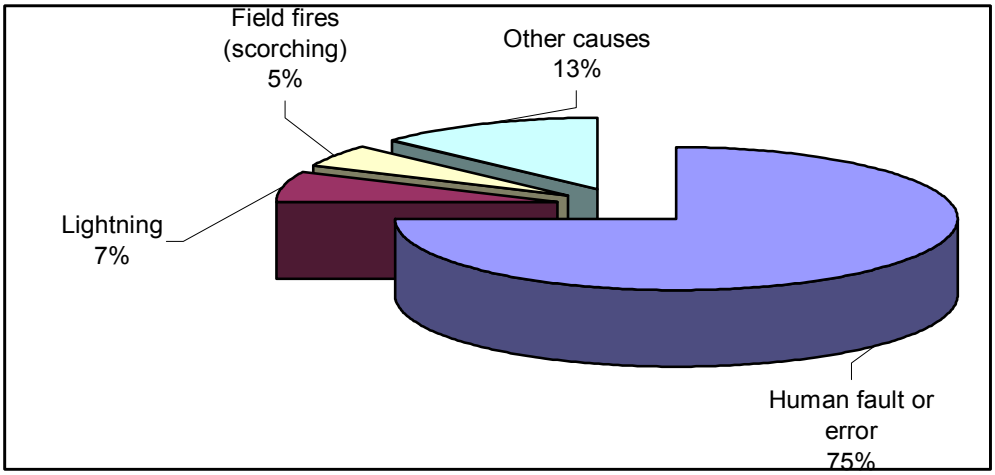
Between 17 000 and 36 000 forest fires occur each year in Russian forests.

In certain years the incidence of forest fires rises considerably. The total area traversed by fire was 1 453,000 ha in 1972, 1,127,000 ha in 1976, 1,628,000 ha in 1989, 1,366,000 ha in 1990, 1,854,000 ha in 1996 and 4,269,000 ha in 1998. The figure for 1999 was 752,000 ha (figure 9). Stands covering an area of between 53,000 and 313,000 ha are destroyed by forest fires each year.

Figure 9
Evolution of forest fires in Russia, 1989–1999

The main causes of forest fires are man-induced factors (human fault or field scorching) or natural factors (lightning). An analysis of forest fires shows that 75% are due to human fault, 5% to field scorching, 7% to lightning and 13% to other causes (figure 10). In some years, 40% or more of forest fires occurring in Siberian and Far Eastern regions are caused by storms.

Figure 10
Principal causes of forest fires



Forest fires due to human fault occur most frequently in areas with a developed infrastructure. In 1999, 81% of all fires in forests managed by the Federal Forestry Service were due to this cause.

The Forestry Code provides that protection against forest fires shall be carried out by land and from the air. The total area placed under active land and air protection is 751.2 million ha. More than 100,000

persons are employed in the land forest-fire service; there is a network of specially equipped fire stations (with motorized fire cisterns, special forest firefighting units, four-wheel-drive fire engines, tractors, bulldozers, high-pressure pumps, fire extinguishers, hand-held equipment, etc.), observation towers and masts, some of which are equipped with long-range television.

Air protection against forest fires is the responsibility of *Avialesookhrana*, a centralized air firefighting agency with a network of 18 air bases, four with their own aircraft. The agency's air fleet includes over 90 aircraft and its organizational structure comprises 187 air sections, 31 air groups, 37 emergency units and 9 mechanized units. In all, 294 aircraft are used for forest protection purposes. The air fire-protection service employs a total of 3,700 persons.

Protection of forests from pests and diseases

Damage caused to forests by pests and diseases is of a local nature; the area of damage in any one year does not exceed 0.03% of the total wooded area. An average of 2.7 million ha of forest land a year is considered to be actively affected by harmful insects or diseases (figure 11). The area of dead forest where mortality can be ascribed to this cause varies a great deal; on average, it stands at around 60,000 ha (figure 12). In some years (1996), the area of forest mortality during peak infestation or disease periods has risen to 198,000 ha.

Figure 11
Evolution of forest areas actively affected by pests or diseases
and volume of protective measures taken

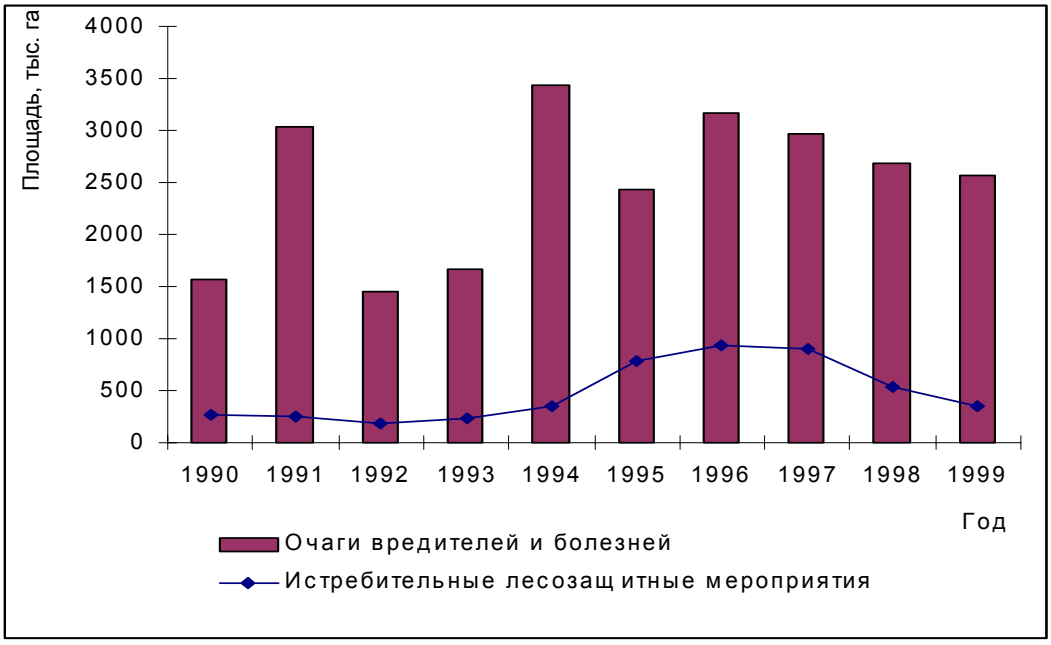
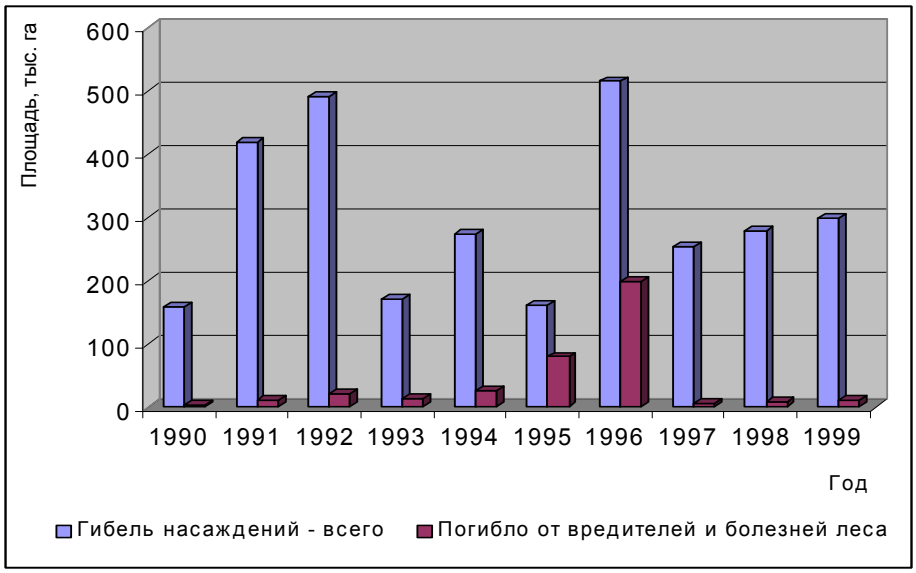


Figure 12

Evolution of forest mortality due to pests and diseases



Protective measures are undertaken with a view to stabilizing the health of stands. Insect extermination measures in specially affected areas are conducted over more than half a million hectares a year. Biological methods using bacterial or viral preparations account, on average, for 55% of the area treated (table 8).

Table 8
Volume of forest protection measures

Methods used	1995	1996	1997	1998	1999
Biological, 1,000 ha	542	767	859	644	458
Chemical, 1,000 ha	513	414	348	149	148

Monitoring of forest health is conducted annually over an area of 13.4 million ha with a view to ensuring early identification of any changes in forest health and prompt prediction of future developments. Protective measures are carried out by 25 regional centers and 12 forest protection stations, as well as by regional and local forest protection departments and specialists.

Expeditions to investigate forest health are conducted each year over an area of between 10 and 12.2 million ha. Their object is to determine the scale of the spread of diseases and mass proliferation of pests with a view to taking the necessary protective measures. This work is done by specialists from the Russian Forest Protection Centre.

Radiation contamination of forests

The total area of *Lesnoy Fond* land polluted by cesium-137 as a result of the *Chernobyl* disaster at present equals approximately 1 million ha; land polluted by radionuclides is found in 130 forest management units (leskhoz) located in the territories of 23 subject entities of the Federation (table 9). The state of the polluted areas is kept under constant monitoring. Special measures are taken to reduce the radiation doses to which forest workers and the population at large are exposed and to prevent secondary environmental pollution.

Table 9

Lesnoy Fond land polluted by radionuclides

Polluted by	*Lesnoy Fond* land, 1,000 ha	Forest land, 1,000 ha	Other wooded land, 1,000 ha	Timber stocks, million m^3
Cesium-137 (between 1 and 5 Ci/km^2) or strontium-90 (0.15-3 Ci/km^2)	953.2	889.4	816.9	128.40
Cesium-137 (5-15 Ci/km^2) or strontium-90 (3-10 Ci/km^2)	96.6	91.9	89.6	14.09
Cesium-137 (15-40 Ci/km^2) or strontium-90 (10-25 Ci/km^2)	28.7	27.5	27.1	1.68
Cesium-137 (more than 40 Ci/km^2) or strontium-90 (more than 25 Ci/km^2)	3.2	3.0	2.2	0.27
Total area polluted by radionuclides	1081.7	1011.8	935.8	144.44

Conclusion

The importance of forests to human life is being reassessed all over the world. Only a short time ago, forests were regarded by society merely as a source of natural resources, a supplier ot logs, timber materials and woody biomass. By the last decade of the 20th century forests were already beginning to be viewed as a source of social and cultural wealth and a new strategy of sustainable development – that is to say, of economic prosperity without damage to nature – was beginning to be developed in their respect.

The concept of sustainable forest development largely corresponds to the principle upon which Russia's forest management has been founded since the days of Peter the Great. This principle, formulated in terms reflecting a gradual process that has taken the best part of three centuries, is incorporated in Russian forestry law and in the documents regulating the activities of the State forest management authority. It reads as follows: "To ensure sustainable (non-depletive) and continuous utilization, regeneration, protection and conservation of Russia's forests".

The forest supplies many human needs. It is a human habitat, a source of numerous ecologically pure foodstuffs, of physical and psychological well-being. It is therefore central to the conservation of the environment and to the natural regulation of the vast majority of processes taking place in nature. It is the natural foundation without which mankind could not survive.

The conservation and multiplication of the country's forest assets can be attained by stable forest management. The forest economy must ensure the rational utilization of forest resources and forest functions and properties of present and future usefulness to humankind by ensuring a proper balance of the interests of different population groups, industries and forest management organs in the utilization of forest assets in all regions, including wood and non-wood resources, in processing their products and in developing the necessary economic structures in order to safeguard the employment of all groups of the population without damage to the forests' ecological properties and their biodiversity.

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APPENDIX 1

APPENDIX 2

Protection arrangements	Nature Reserves
1. Full title	State Wilderness Area
2. Applicable IUCN category	I
3. Underlying law	Russian Federation Specially Protected Natural Areas Act, No. 33-FZ, 14 March 1995
4. Principal objectives of these protection arrangements 4.1 What is the objective of introducing these arrangements? 4.2 Indicate the grounds for introducing these protection arrangements as set forth in official texts	"The preservation of unique and characteristic natural sites and features, noteworthy natural formations, specimens of flora and fauna and their genetic resources, the investigation of naturally occurring processes in the biosphere and the monitoring of changes in the status of the biosphere […] environmental education of the general public" (Preamble to the Act)
5. Main types of work prohibited	"Specially protected natural sites and features (land, water, subsoil, flora and fauna) within State wilderness areas shall be taken entirely out of exploitation … Natural resources and immovable property within State wilderness areas shall be taken entirely out of circulation (may not be alienated or otherwise transferred from one person to another)…" (Article 6 of the Act)
6. Main kinds of work required or encouraged	Activities undertaken with a view to: (a) maintaining natural sites in their naturally occurring condition, restoring natural sites and elements thereof and preventing changes … (b) the maintenance of appropriate sanitary and fire-prevention conditions; (d) ecological monitoring (d) environmental monitoring; (e) the conduct of scientific research are permitted.
7. How does this accord with the actual situation?	Well
8. How are the current arrangements rated?	Positively
9. Area covered by these arrangements	Total: 33.2 million ha
10. List of areas in which these arrangements are in effect (indicating the name of each, their total area and the respective areas of forest and other woodland)	Separate list appended (a question mark after a percentage sign indicates that no precise figures are available for the time being)

List of Wilderness Areas (Zapovednics)

1. Azas -- 300,390 ha (1976). Republic of Tuva, 52º25' N, 97º30' E. Lowland and mountain larch, cedar, pine etc. Forest cover ratio: 68%.
2. Altai -- 881,238 ha (1932). Republic of Altai, 51º40' N, 88º00' E. Forest, subalpine, alpine and patchy lower steppe belts. Forests of silver fir, cedar/silver fir, cedar and larch. Forest cover ratio: 45%.
3. Astrakhan (biosphere) -- 63,400 ha (1919). Astrakhan oblast. Sectors: Damchiksky, 45º40' N, 47º55' E; Trekhizbinsky, 46º00' N, 48º30' E; Obzhorovsky, 46º15' N, 49º00' E. Willow galleries. Forest cover ratio: 5%.
4. Baikal-Lena -- 659,900 ha (1986). Irkutsk oblast, 54º00' N, 108º00' E. Wooded steppe, upland taiga, sub-goltsy and goltsy belts. [Light and dark***] Coniferous forest (cedar, silver fir, larch, spruce); along the river valleys, poplar and Chozenia willow. Forest cover ratio: 86%.
5. Baikal -- 165,724 ha (1969). 1º20' N, 105º15' E. [Dark***] Coniferous (silver fir, cedar, spruce) and valley forests, alpine meadows. Forest cover ratio: 68%.
6. Barguzin -- 374,322 ha (1916). Republic of Buryatia, 54º00' N, 109º40' E. Sparse larch forest; in the middle altitudes, [dark***] coniferous forest (silver fir, cedar). Forest cover ratio: 59%.
7. Basegi -- 37,935 ha (1982). Perm oblast, 58º30' N, 58º10' E. One sector with original taiga forest in a sub-zone of the central taiga on the border with the southern zone. Mountain [dark***] coniferous forest of spruce and silver fir, northern taiga mountain silver fir/spruce with some cedar, a belt of sparse forest and elfin-wood with grassy clearings. Forest cover ratio: 87%.
8. Bastak -- 91,038 ha (1997). Jewish Autonomous Oblast, 48º N, 132º E. Coniferous and broad-leaved forest dominated by cedar with a significant proportion of linden. Forest cover ratio: 30% (?).
9. Bashkir -- 49,609 ha (1930, 1958). Republic of Bashkortostan, Burzyan district, 53º20' N, 58º00' E. Pine, pine/broad-leaved and small-leaved forests, mountain steppe on the summits and crests. Forest cover ratio: 81%.
10. Belogorye (formerly Les na Vorskle) -- 2,131 ha (1925). Belgorod oblast, 50º40' N, 35º45' E. Four sectors, three of steppe and one of forest: typical insular mountain oak-forest in the southern part of the forested steppe. Forest cover ratio: 20% (?).
11. Bogdinsk-Baskunchak -- 18,478 ha (1997). Astrakhan oblast, 48º10' N, 46º50' E (up to 150 m). Typical semi-desert plant communities (polynya, saltwort, some Gramineae). Forest cover ratio: 0%
12. Bolon -- 103,600 ha (1997). Khabarov district, 49º30' N, 136º30' E. Larch with underbrush of ovalleaf birch. On the benches surrounding Lake Bolon, broad-leaved forest (ash, elm, linden, poplar, cedar). Forest cover ratio: 20% (?).
13. Bolshaya Kokshaga -- 21,405 ha (1993). Mari El, 56º30' N, 47º20' E. Boundary of southern taiga and broad-leaved forests (pine, birch, oak, elm). Sub-zone of broad-leaved/coniferous forest. Pine forests, spruce groves, secondary small-leaved forests. Northern limit of distribution of floodwater-inundated oak groves. Some areas of high-yielding floodwater-inundated oak groves. Forest cover ratio: 95%.
14. Bolshekhekhtsyrsk -- 45,123 ha (1963). Khabarovsk district, 48º15' N, 134º45' E. Amur River region cedar/broad-leaved forest. Forest cover ratio: 93%.
15. Bolshoi Arkticheskiy -- 4,169,222 ha (1993). Taimyr Autonomous Area, 74º N, 89º E. Sectors: Dikson - Sibiryakova Is, Karskoe More (Kara Sea) Is, Pyasinsky, Gulf of Middendorf, Nordenskjold Archipelago, Nizhnyaya (Lower) Taimyr, Chelyuskin Peninsula. Polar desert zone; Arctic tundra sub-zone. Forest cover ratio: 0%.
16. Botchinsky -- 267,380 ha (1994). Khabarovsk district, 49º N, 140º E. Unique natural sites of indigenous cedar/broad-leaved forests on the boundary with the northern taiga. Lowland larch, [dark***] mountain conifers (spruce, white fir), oak, alder, willow, Chozenia willow and other forests. Forest cover ratio: 87%.

17. Bryansk Forest -- 12,186 ha (1987). Bryansk oblast, 52º30' N, 34º00' E. Unique natural sites in the broad-leaved/coniferous forest sub-zone. Pine, spruce/pine/oak and small-leaved forests. Forest cover ratio: 84%.
18. Bureya River -- 358,444 ha (1987). Khabarovsk Territory, 52º00' N, 134º30' E. Forests of larch, spruce, thickets of creeping cedar, mountainous tundra. Lowland poplar/willow forests. Forest cover ratio: 78%.
19. Upper Taz River -- 631,308 ha (1986). Yamalo-Nenets Autonomous Area, 65º00' N, 82º00' E. Natural sites of northern taiga [dark***] coniferous forest of spruce, cedar and larch, also pine forests. Forest cover ratio: 83%.
20. Visim -- 13,507 ha (1971). Ekaterinburg oblast, 57º20' N, 59º40' E. Indigenous mountain taiga forests of silver fir and spruce, boggy spruce stands, pine/birch forests. Forest cover ratio: 96%.
21. Vitim -- 585,021 ha (1982). Irkutsk oblast, 57º30' N, 17º00' E. Natural sites in the Stanovoe Massif, northern Trans-Baikal region. Forests of larch, pine, and mixed; thin stands of spruce; thickets of creeping cedar. Forest cover ratio: 51%.
22. Vishera River -- 241,200 ha (1991). Perm oblast, 60º30' N, 58º00' E. Mountainous northern and central taiga forest of Siberian spruce, Siberian fir, convulvulus, juniper. Forest cover ratio: 75%.
23. Volga-Kama -- 8,024 ha (1960). Republic of Tatarstan. Sectors: Raifsky (3,900 ha), 55º55' N, 48º45' E., and Saralovsky (4,200 ha), 55º20' N, 49º15' E. Spruce/fir forest, pine groves, stands of oak. Forest cover ratio: 90%.
24. Voronezh -- 31,053 ha (1927). Voronezh and Lipetsk oblasts, 51º50' N, 38º40' E. Insular forest massif in the wooded steppes of the Oksko-Donskaya (Oka and Don River) depression. Forest cover ratio: 92%.
25. Voroninsky -- 10,819 ha (1994). Tambov oblast, 52º30' N, 42º40' E. Wooded steppe. Forest cover ratio: 82%.
26. Galichya Gora -- 231 ha (1925). Lipetsk oblast, 52º50' N, 38º00' E. Sectors: Galichya Gora, Morozova Gora, Bykova Sheya, Plyushchan, Vorgolskoe and Voronov Kamen. Unique natural sites where forest, steppe and cliff meet. Forest cover ratio: 48%.
27. Gyda Peninsula -- 878,174 ha (1996). Yamal-Nenets Autonomous Area, 72º00' N, 75º00' E. Sectors: Shokalskogo Is, Yavai Is, Olenii, Rovny and Proklyatie Is, northern parts of the Gyda, Mamont and Olenii peninsulas. Arctic tundra sub-zone. Willow copses. Forest cover ratio: less than 1%.
28. Dagestan -- 19,061 ha (1987). Republic of Dagestan: sectors: Sarykumsk dunes, 43º30' N, 45º40' E, and Kizlyarsky Gulf, 44º40' N, 47º00' E. Forest cover ratio: 0%.
29. Far Eastern Maritime -- 64,316 ha (1978). Primorsky (Maritime) Territory, 43º00' N, 132º00' E. Borad-leaved and coniferous/broad-leaved forests and rich grassy communities where the broad-leaved forests meet. Forest cover ratio: 5% (?).
30. Darvinsky -- 112,630 ha (1945). Volgograd and Yaroslavl oblasts, 58º40' N, 38º00' E. Boggy pine stands. Forest cover ratio: 69%.
31. Daurskoe -- 45,752 ha (1987). Chita oblast, 50º00' N, 116º00' E. Sectors: Main, Torei, Tsasuchei, Chakhalan, Kukhu-Khidan, Ereldzhin. Mixed grass/Gramineae, tansy/Granmineae steppe. Forest cover ratio: 0%.
32. Denezhkin Kamen -- 78,192 ha (1946, 1991). Sverdlovsk oblast, 60º20' N, 59º30' E. Forest covers 70,000 ha. Mountain taiga [dark***] coniferous forest (spruce, fir, cedar). At altitudes of 600-700 m, a solid belt of cedar forest. Forest cover ratio: 90%.
33. Dzerzhinsk -- 237,806 ha (1992). Republic of Buryatia, 54º50' N, 111º30' E. Predominantly borad-leaved forest. Forest cover ratio: 71%.
34. Dzhugdzhir -- 859956 ha (1990). Khabarovsk Territory, 57º00' N, 137º00' E. Central taiga country (larch, spruce, creeping cedar). Forest cover ratio: 64%.

35. I.I. Sprygin Reserve, Zhigulevsk -- 23,140 ha (1927). Samara oblast, 53º20' N, 49º45' E. Predominantly linden, aspen, aok and pine forest. Forest cover ratio: 94%.
36. Zeya -- 99,390 ha (1963). Amur oblast, 54º10' N, 127º20' E. Middle/southern taiga boundary. Larch and [light***]coniferous taiga. Stands of spruce, creeping cedar. Forest cover ratio: 97%.
37. Ilmensky -- 34,380 ha (1920). Chelyabinsk oblast, 55º10' N, 60º15' E. Predominantly larch, pine, birch. Forest cover ratio: 80%.
38. Kabardino-Balkar (highlands) -- 81,507 ha (1975). Kabardino-Balkar Republic, 43º10' N, 43º00' E. Among the indigenous varieties are birch, pine, grey alder. Forest cover ratio: 4%.
39. Kavkazsky -- 280,355 ha (1920). Krasnodar Territory, Adygei and Karachai-Cherkes republics, 43º45' N, 43º40' E. Oak, beech, maple, hornbeam, silver fir, pine, pear, plum predominate. Annex: Khosta yew and boxtree grove, on the spurs of the Bolshoi Akhun. Forest cover ratio: 61%.
40. Kaluga national forest -- 18,533 ha (1992). Kaluga oblast, 53º30' N, 35º30' E. Reserve of unique national forest. Oak, maple, linden, ash, elm predominate. Forest cover ratio: 93%.
41. Kandalaksha -- 70527 ha (1932). Murmansk oblast and Republic of Karelia, 66º33' N, 33º30' E. Sectors: 'Seven Islands' archipelago with the adjacent mainland shoreline, Ainovy Is, Gavrilovsky Is, the northern group of islands including the *luotos* (rockfalls) in Kalandaksha Sound, Porya Bay with the associated islands and mainland areas, Veliky Is. Multifarious maritime forest at a variety of stages of development (pine, spruce, birch). Forest cover ratio: 16%.
42. Katun River -- 150,079 ha (1991). Republic of Altai, 49º30' N, 86º00' E. [Dark***] Mountain taiga coniferous forest, cedar/spruce/fir and larch. Forest cover ratio: 43%.
43. Kedrovaya Pad (Gorge) -- 17,897 ha (1916). Primorsky (Maritime) Territory, 42º40' N, 130º50' E. Coniferous/broad-leaved forest. Forest cover ratio: 70%.
44. Kerzhenets 46,940 ha (1993). Nizhegorod oblast, 56º30' N, 45º30' E. Southern taiga. Combination of features of the taiga with young oak groves. Forest cover ratio: 87%.
45. Kivach -- 10,880 ha (1931). Republic of Karelia, 62º30' N, 33º30' E. Central taiga forest (pine, spruce). Forest cover ratio: 84%.
46. Komandorsky Is -- 3,648,679 ha (1993). Koryak Autonomous Area, 55º00' N, 166º00' E. Steep-cliffed islands. Forest cover ratio: 0%.
47. Komsomolsk -- 64,278 ha (1981). Khabarovsk Territory, 50º30' N, 137º30' E. Coniferous forest, marshes, meadows. Forest cover ratio: 73%.
48. Koryak -- 327,156 ha (1995). Koryak autonomous Area, 60º00' N, 166º10' E. Seaboard forest tundra. Thickets of creeping cedar. Forest cover ratio: 10% (?).
49. Kostomukshsky -- 47, 569 ha (1983). Republic of Karelia, 64º30' N, 30º20' E. Forest and marshy landscapes. Forest cover ratio: 62%.
50. Kronotsky peninsula -- 1,142,000 ha (1934). Kamchatka oblast, 54º30' N, 160º-162º E. Forests (stone and Ermans birch, Komarov poplar, Chozenia willow, larch) and dense bush. Forest cover ratio: 64%.
51. Kuznetsky Alatau -- 412,900 ha (1989). Sakhalin oblast, 44º00' N, 146º00' E. Kemerovsk oblast, 55º00' N, 89º00' E. Sectors of wooded steppe and deciduous taiga. Forest cover ratio: 61%.
52. Kurilsk -- 65,364 ha (1984). Sakhalin oblast, 44º00' N, 146º00' E. More than 70% wooded (coniferous, [dark***] coniferous, broad-leaved; stone birch and creeping cedar flourish). Forest cover ratio: 74%.
53. L.G. Kaplanov Reserve, Lazo -- 120,000 ha (1935). Primorsky (Maritime) Territory, 43º10' N, 134º00' E. Seaboard grassy and scrubby growth, secondary oak stands, forest with cedar, spruce, stone birch, broad-leaved species. Forest cover ratio: 98%.
54. Lapland (biosphere) Reserve -- 278,436 ha (1930). Murmansk oblast, 68º00' N, 32º00' E. Northern taiga and mountainous tundra. Forest cover ratio: 55%.

55. Magadan -- 883,805 ha (1982). Magadan oblast, 72º N, 103º E. Sectors: Seimchan, 63º45' N, 152º50' E, Cholomdzhinsky, 60º00' N, 148º20' E, Koninsky, 59º00' N, 152º00' E and Yama River, 60º00' N, 153º30' E. Taiga and a sector of vestigial plantations of Siberian spruce in the Yama River valley, marshes. Forest cover ratio: 60%.
56. Malaya Sosva River -- 225,562 ha (1976). Khanty-Mansiisk Autonomous Area, 62º00' N, 64º00' E. Central taiga, highland marshes. Forest cover ratio: 83%.
57. Mordovia -- 32,148 ha (1935). Republic of Mordovia (sic), 54º45' N, 43º20' E. Pure and mixed pine forest on sandy soil, water-meadows. Forest cover ratio: 96%.
58. Nenets -- 313,400 ha (1997). Nenets Autonomous Area, 69º00' N, 54º00' E. Arctic and typical tundra with moss and lichen communities. Forest cover ratio: 0%.
59. Lower Svir River -- 41,615 ha (1980). Leningrad oblast, 60º30' N, 33º00' E. Coniferous forest, marshes. Forest cover ratio: 55%.
60. Nora River -- 211,168 ha (1998). Amur oblast, 53º00' N, 130º00' E. Thriving magnolia vine, berry bushes. Forest cover ratio: 40% (?).
61. Nurgush -- 5,918.5 ha (1994). Kirov oblast, 58º15' N, 48º20' E. Coniferous/broad-leaved valley forests, large marshy areas. Forest cover ratio: 93%.
62. Oka River -- 55,722 ha (1935). Ryazan oblast, 54º50' N, 40º30' E. Mixed and broad-leaved forest, southern taiga pine stands, floodwater-inundated oak groves, water meadows. Forest cover ratio: 89%.
63. Olekminsk -- 847,102 ha (1984). Republic of Sakha (Yakutia), 58º00' N, 122º00' E. Central taiga pine and larch forest, spruce/fir forest, cedar stands, rocky tundra. Forest cover ratio: 87%.
64. Orenburg -- 21,653 ha (1989). Orenburg oblast, 54º50' N, 40º30' E. Sectors: Aituarsky steppe, 6,800 ha, 51º20' N, 57º00' E, Burtinsky steppe, 4,500 ha, 51º20' N, 56º30' E, and Talovsky steppe, 3,200 ha, 50º50' N, 55º00' E. Predominantly virgin steppe, isolated stands of birch and aspen. Forest cover ratio: less than 2%.
65. Vrangel Is -- 2,225,650 ha (1975). Chukotsk Autonomous Area, 71º00' N, 180º00' E. Arctic desert. Forest cover ratio: 0%.
66. Pasvik -- 14,727 ha (1992). Murmansk oblast, 69º00' N, 29º00' E. A patchwork of northern taiga pine and birch forests. Forest cover ratio: 44%.
67. Pechora/Ilych Rivers -- 721,322 ha (1930). Komi Republic, 62º15' N, 58º00' E. Central taiga ([dark***] coniferous forest of Siberian spruce, fir and cedar) and mountainous tundra. Forest cover ratio: 87%.
68. Pinega -- 51,522 ha (1974). Arkhangelsk oblast, 64º40' N, 43º20' E. Northern taiga sub-zone; spruce/pine/larch forests (covering over 90% of the territory). The "shipyard" larch grove has been preserved since the time of Peter the Great. Forest cover ratio: 87%.
69. Lake Polisto -- 36,026 ha (1994). Pskov oblast, 57º10' N, 30º30' E. Natural highland marsh sites. Forest cover ratio: 20%.
70. Poronaisk -- 56,694 ha (1988). Sakhalin oblast, 49º10' N, 144º00' E. Green, mossy, {dark***] coniferous forest (spruce, fir, stone birch) and meadow plants. Forest cover ratio: 63%.
71. Volga region forest steppe -- 8,308 ha (1919). Penza oblast, 53º00' N, 45º00' E. Sectors: Poperechnoe steppe, Kuncherovsky forest steppe, Ostrovstovsky forest steppe, Borok, source of the River Sura. Isolated stands of Tatar maple, buckthorn, bird cherry. Forest cover ratio: 90%.
72. Oka River benches -- 4,945 ha (1948). Moscow oblast, 54º55' N, 37º30' E. Pine stands and broad-leaved forest on the left bank of the Oka River. Typically regional pine forest on sandy soil, local steppe flora. Forest cover ratio: 93%.

73. Sura River region -- 9,025 ha (1995). Chuvash Republic, 55º00' N, 46º30' E. Southern taiga pine, small- and broad-leaved forest with alder groves in the broad-leaved forest zone. Forest cover ratio: 90%.

74. Putorana -- 1,887,251 ha (1986). Taimyr and Evenk Autonomous Areas, 73º00' N, 95º00' E. Northern taiga sub-zone. Sectors of Gmelin larch forest. Forest cover ratio: 10%.

75. Redya River -- 36,922 ha (1994). Novgorod oblast, 57º18' N, 30º55' E. Extensive area of southern taiga sphagnum bog. Forest cover ratio: 9%.

76. Rostov -- 9,465 ha (1995). Rostov oblast, 46º30' N, 43º00' E. Sectors: Ostrovnoi, Starikovsky, Krasnopartizansky, Tsagan-Khak. Arid steppe. Forest cover ratio: less than 2%.

77. Sayano-Shushenskoe (biosphere) -- 390,368 ha (1976). Krasnoyarsk Territory, 52º20' N, 91º30' E. Taiga, steppe, subalpine and alpine meadows. Forest cover ratio: 58%.

78. Severo-Osetinsky (North Ossetia) -- 29,151 ha (1967). Republic of Northern Ossetia-Alania, 42º45' N, 43º55' E. Mountain forest, alpine meadows, snowfields. Forest cover ratio: 20%.

79. Sikhote-Alinsky -- 390,184 ha (1935). Primorsky (Maritime) Territory, 45-15' N, 136º15' E. Mountain and lowland forest. Forest cover ratio: 95%.

80. Sokhondo Peak -- 210,985 ha (1973). Chita oblast, 49º45' N, 111º00' E. Wooded steppe with larch and birch, taiga with [light and dark***] conifers (cedar, spruce, silver fir). Forest cover ratio: 83%.

81. Stolby -- 47,154 ha (1925). Krasnoyarsk Territory, 55º50' N, 92º50' E. [Light and dark***] Coniferous forest (pine, larch, silver fir, cedar). Spruce, spruce/silver fir, birch and aspen forests in the valleys. Forest cover ratio: 98%.

82. Taimyr -- 1,781,928 ha (1979). Taimyr Autonomous Area, 72º-74º N, 98º-103º E. Intersection of the Arctic, true (moss and lichen) and southern (scrubby) tundra and forest tundra. There are rwo isolated forest masses, the Ary-Mas (15,600 ha) and the Lukunsky (9,000 ha) within the reserve, the northernmost sparse larch forest (Gmelin larch) in the world (72º37' N). Forest cover ratio: 0.2%.

83. Teberda -- 84,996 ha (1936). Karachai-Cherkes Republic, 43º15' N, 41º30' E. Beech, oak, [dark***] conifer (pine, fir, spruce) forest, subalpine and alpine meadows. Grey alder in the flood plain. Forest cover ratio: 32%.

84. Tigiretsky range -- 40,693 ha (1999). Altai Territory, 51º00' N, 82º30' E. Mountain taiga country on the slopes of the Tigiretsky range; predominantly cedar forest, segments of untouched taiga and vestiges of Tertiary era flora (Asarum Europaeum, Asperula odorata, Stachys sylvatica etc.). Red Book-listed species include 14 animals and 28 plants. Forest cover ratio: 50% (?).

85. Tunguska -- 296,562 ha (1995). Evenk Autonomous Area, 64º30' N, 102º00' E. Natural taiga sites. Wild rosemary and larch forests with Gmelin larch, pine stands, bogs. Forest cover ratio: 88%.

86. Ubsunur Basin -- 39,640 ha (1993). Republic of Tuva, 51º10' N, 96º00' E. Five sectors: Tsugaer-Els, Ular, Yamaalyg, Aryskannyg and Mongun-Taiga. Desertified steppes with sectors of pine forest. Sparse forests of larch and cedar and mountain steppes are still to be found on the southern slopes of the Eastern Tannu-Ola range. On the southern slopes of the Sangilen massif there are mountain taiga forests, mountain steppes and meadows. Forest cover ratio: 66%.

87. Academician V.L. Komarov Reserve, Ussuriisk -- 40,432 ha (1932). Primorsky (Maritime) Territory, 43º40' N, 132º15' E. Coniferous/borad-leaved forest. Forest cover ratio: 99%.

88. Ust-Lena (Lena River estuary) -- 1,433,000 ha (1985). Republic of Sakha (Yakutia), 73º30' N, 124º00' E. Some patches of shrub willow. Forest cover ratio: 0%.

89. Khakasia -- 125,124 ha (1999). Republic of Khakasia, 52º00' N, 88º50' E and 54º00' N, 90º00' E. Mountain taiga country on the northern slopes of the Western Sayan, pine/larch forests. Forest cover ratio: 69%.

90. Lake Khanka -- 37,989 ha (1990). Primorsky (Maritime) Territory, 45º00' N, 132º15' E. Four sectors, one of Mongolian oak. Forest cover ratio: less than 1%.

91. Khingan -- 93,995 ha (1963). Amur oblast, 49º00' N, 130º30' E. Broad-leaved and coniferous forest, meadows, marshes. Forest cover ratio: 36%.
92. Khoper River -- 16,178 ha (1935). Voronezh oblast, 51º10' N, 41º45' E. Southern boundary of the wooded steppe sub-zone. Floodwater-inundated and mountainous oak groves, predominantly from supplementary shoots. Unique 90-year-old plantations of black alder. Some pine grown. Forest cover ratio: 77%.
93. Central Forest -- 24,462 ha (1931). Tver oblast, 56º35' N, 33º00' E. Quasi-virgin southern taiga forests of spruce and broad-leved species and the upland marshes of the Valdai hills.Forest cover ratio: 85%.
94. Central Siberian -- 972,017 ha (1985). Krasnoyarsk Territory, Evenk Autonomous Area, 62º00' N, 91º00' E. Central taiga [dark***] coniferous forest (cedar, spruce, fir). Forest cover ratio: 93%.
95. Professor V.V. Alekhin Central Chernozem (Black Soil) Reserve -- 4,334 ha (1935). Kursk oblast, 51º40' N, 36º15' E. Segregated sectors: Streletsky steppe, Kazatsky steppe, Bukreevy Barmy, Barkalovka. Wooded steppe sub-zone. Forest species: oak, linden, maple, ash, elm etc. Forest cover ratio: 35%.
96. Chernye Zemli (Black Soil) -- 121,901 ha (1990). Republic of Khal'mg Tangch-Kalmykia, 46º30' N, 43º00' E. Arid steppe and semi-desert. Forest cover ratio: 0%.
97. Shulgan-Tash -- 22,531 ha (1958). Republic of Bashkortostan, 53º05' N, 57º55' E. Eastern fringe of the broad-leaved forest zone. Oak groves and mixed broad-leaved forest in the foothills, more scattered oak woods at higher altitudes. Forest cover ratio: 93%.
98. Yugansk -- 622,886 ha (1982). Khanty-Mansi Autonomous Area, 60º00' N, 73º30' E. Central taiga sub-zone. Spruce/cedar forests, pine stands. Forest cover ratio: 61%.
99. Southern Urals -- 254,000 ha (1978). Republic of Bashkortostan, Chelyabinsk oblast and Mezhgorye City, 54º30' N, 58º30' E. Central mountain [dark***] coniferous (fir, spruce), pine and secondary broad-leaved forests. Forest cover ratio: 80% (?).

Protection arrangements	National Parks
1. Full title	National Parks
2. Applicable IUCN category	II
3. Underlying law	Russian Federation Specially Protected Natural Areas Act, No. 33-FZ, 14 March 1995
4. Principal objectives of these protection arrangements 4.1 What is the objective of introducing these arrangements? 4.2 Indicate the grounds for introducing these protection arrangements as set forth in official texts	"National parks shall be nature-conservation, environmental education and research institutions encompassing … natural sites and features of especial environmental, historical and aesthetic value … " (article 12 of the Act)
5. Main types of work prohibited	"Special conservation arrangements of differing stringency shall be established in national parks, depending on their natural, historical, cultural and other characteristics." "Any activity that may damage the natural sites, features of the plant and animal life, or cultural and historical features of the national park, or which runs counter to its goals and purposes, shall be prohibited, including: … (f) primary timber harvesting, trail-clearing, resin-tapping …(Article 15, paras. 1 and 2 of the Act)
6. Main kinds of work required or encouraged	National parks shall be responsible for preserving natural sites, unique and landmark natural areas and features and historical and cultural features; the environmental education of the general public; the restoration of damaged natural, historical and cultural sites and features, etc. (Article 13 of the Act)
7. How does this accord with the actual situation?	Well
8. How are the current arrangements rated?	Positively
9. Area covered by these arrangements	Total: 6.9 million ha (35 national parks)
10. List of areas in which these arrangements are in effect (indicating the name of each, their total area and the respective areas of forest and other woodland)	Separate list appended

List of National Parks

1. Alania -- 54,926 ha (1998). Republic of Northern Ossetia - Alania, 43º00' N, 43º40' E. Pine/birch forest (similar to those in the taiga zone). Forested, alpine and subalpine highland belts. Forest cover ratio: 15%.
2. Alkhanai -- 138,234 ha (1999). Aginskoe Buryat Autonomous Area, 51º50' N, 113º00' E. Larch/pine/birch mountainous taiga on the slopes and spurs of the Dahurian range. Forest cover ratio: 30% (?).
3. Bashkiria -- 92,006 ha (1986). Republic of Bashkortostan, 52º51' - 53º12' N, 56º22' - 57º10' E. Broad-leaved, small-leaved and pine forest. Forest cover ratio: 78%.
4 Valdai -- 158,472 ha (1990). Novgorod oblast, 57º25' - 58º21' N, 32º45' - 33º38' E. Unique lake and forest site. Forests dominated by spruce and pine, many cultivated species (birch groves, grey alder stands). Forest cover ratio: 85%.
5. Vodlozero Lake -- 468,340 ha (1991). Republic of Karelia and Arkhangelsk oblast, 62º08' - 63º36' N, 36º15' - 37º35' E. Boundary of the northern and central taiga sub-zones. Indigenous forest formations of pine, spruce and larch. Western limit of distribution of the Siberian larch. Forest cover ratio: 51%.
6. Zabaikalsky -- 269,116 ha (1986). Republic of Buryatia, 53º26' - 54º09' N, 108º32' - 109º54' E. Coniferous forest (pine, cedar, creeping cedar, larch, fir). Forest cover ratio: 68%.
7. Zyuratkul -- 88,249 ha (1993). Chelyabinsk oblast, 54º30' - 55º10' N, 58º50' - 59º20' E. Spruce/fir forest, stands of birch and aspen. Forest cover ratio: 86%.
8. Kenozersky -- 139,663 ha (1991). Arkhangelsk oblast, 61º36' - 62º15' N, 37º47' - 38º33' E. Central taiga sub-zone. Predominantly coniferous forest (pine). Forest cover ratio: 75%.
9. Kurshskaya Kosa -- 6621 ha (1987). Kaliningrad oblast, 54º57' - 55º17' N, 20º32' - 20º58' E. More than half the park is covered in man-made forest (chiefly pine). Forest cover ratio: 69%.
10. Losiny Is -- Moscow and Moscow oblast, 55º47' - 55º55' N, 37º40' - 38º01' E. Broad-leaved/spruce forest sub-zone. Forest cover ratio: 81%.
11. Mari Chodra -- 36,593 ha (1985). Mari El Republic, 55º58' - 56º18' N, 48º14' - 48º38' E. Coniferous/broad-leaved forest. Forest cover ratio: 92%.
12. Meshchera -- 118,900 ha (1992). Vladimir oblast, 55º17' - 55º49' N, 39º57' - 40º38' E. Broad-leaved/spruce forest sub-zone. More than half the wooded land is pine forest. Forest cover ratio: 54%.
13. Meshchersky -- 103,014 ha (1992). Ryazan oblast, 54º30' - 55º22' N, 39º50' - 40º17' E. Flooded and marshy land, mixed forest with a preponderance of oak and spruce. Forest cover ratio: 40%.
14. Nekchinsky -- 20,753 ha (1997). Republic of Udmurtia, 57º00' N, 54º00' E. Natural taiga-type vegetation, mixed forest and wooded steppe. Some stands of mature pine. Forest cover ratio: 79%.
15. Nizhny (Lower) Kama -- 26,542 ha (1991). Republic of Tatarstan, 55º41' - 55º52' N, 51º45' - 52º41' E. Three sectors. Convergence of the broad-leaved/spruce and broadleaved forest sub-zone with the meadow steppe sub-zone.
16. Orlovsky Forest -- 84, 583 ha (1994). Orel (Orlovsky) oblast, 53º07' - 53º32' N, 35º06' - 35º48' E. Largest forest in the oblast. Coniferous forest predominates. Forest meadows. Forest cover ratio: 40%.
17. Paanajarvi -- 104,473 ha (1992). Republic of Karelia, 66º09' -66º27' N, 29º40' - 30º40' E. Northern taiga sub-zone. Forest cover ratio: 74%.
18. Pleshcheevo Lake, or Pereslavsky Nature and History Park -- 23.515 ha (1988). Yaroslavl oblast, 56º38' - 56º53' N, 38º36' - 38º59' E. (137 - 222 m). Forest, meadow, marshland and aquatic ecosystems. Forest cover ratio: 64%.

19. Pribaikalsky (Baikal Region) -- 418,000 ha (1986). Irkutsk oblast, 51º43' - 53º50' N, 103º43' - 107º57' E. Steppe, wooded steppe (with some pine and larch), sub-taiga pine, mountainous taiga pine and larch, and also cedar and sub-goltsy/tundra communities. Forest cover ratio: 68%.
20. Pyshma River Region Sandy-soil Forests -- 49,171 ha (1993). Sverdlovsk oblast, 56º54' - 57º20' N, 63º34' - 63º41' E. Two separate sectors (forest tracts). Unique natural site of pine forest on the benches above the flood plain of the Pyshma River. Forest cover ratio: 88%.
21. Elbrus Mountains Region -- 101,200 ha (1986). Kabardino-Balkar Republic, 43º03' - 43º30' N, 42º26' - 42º54' E. Alpine and subalpine meadows, a belt of subalpine scrubby vegetation. Forest cover ratio: 9%.
22. Russian North -- 166,400 ha (1992). Vologda oblast, 59º43' - 60º18' N, 38º09' - 39º05' E. Preponderantly coniferous forest (spruce, pine). Forest cover ratio: 70%.
23. Samarskaya Luka -- 127,985 ha (1984). Samara oblast, 53º08' - 53º26' N, 49º11' - 50º10' E. Eastern European wooded steppe and steppe pine forests, broad-leaved forests, steppes and floodwater-inundated vegetation. Forest cover ratio: 40%.
24. Sebezh -- 50,021 ha (1996). Pskov oblast, 56º20' N, 28º20' E. Southern taiga coniferous forest with some broad-leaved species, low-altitude flatland bogs. Forest cover ratio: 41%.
25. Smolenskoe Poozerye -- 146,161 ha (1992). Smolensk oblast, 56º20' N, 28º20' E. Broad-leaved/spruce forest sub-zone. Species of larch predominate. Upland sphagnum bogs. Forest cover ratio: 74%.
26. Smolny -- 36,385 ha (1995). Republic of Mordovia (sic), 54º43' - 54º53' N, 45º05' - 45º38' E. Pure and mixed pine forest, stands of linden and oak. Some marshland. Forest cover ratio: 92%.
27. Sochi -- 193,737 ha (1983). Krasnodar Territory, 43º24' - 44º07' N, 3909' - 40º29' E. Mountainous broad-leaved forest. Forest cover ratio: 94%.
28. Taganai -- 56,843 ha (1991). Chelyabinsk oblast, 55º33' - 55º08' N, 59º34' - 60º02' E. Spruce and spruce/fir forest. Forest cover ratio: 91%.
29. Tunkinsky -- 1,184,662 ha (1991). Republic of Buryatia, 51º04' - 52º02' N, 100º38' - 103º48' E. Mountainous tundra, highland meadows, mountain taiga and taiga-type mountain steppe communities. Forests preponderantly of cedar, larch and pine. Forest cover ratio: 64%.
30. Ugra -- 98,623 ha (1997). Kaluga oblast, 53º40' N, 35º48' E. Intersection of steppe and wooded steppe zones. Forest cover ratio: 43%.
31. Khvalynsk -- 25,514 ha inc. (1994) Saratov oblast, 52º15' -52º49' N, 47º29' - 48º21' E. The forests on the slopes of the Khvalynsk mountains constitute mixed oak/linden and pine/broad-leaved stands. Forest cover ratio: 90%.
32. Chavash Varmane -- 25,199 ha (1993). Chuvash Republic, 53º09' - 53º27' N, 47º10' - 47º20' E. Southern belt of the broad-leaved forest zone. Some sectors of virgin forest with pine, spruce, oak, linden, ash etc. remain. Forest cover ratio: 93%.
33. Shoria -- 411,737 ha (1989). Kemerovo oblast, 52º09' - 53º04' N, 87º50' - 89º14' E. Communities with cedar and fir predominate in the forests. Forest cover ratio: 90%.
34. Shushensky bor (Shushen Forest) -- 39,178 ha (1995). Krasnoyarsk Territory, 52º39' - 53º21' N, 91º01' - 92º02' E. Two sectors. Western Sayan mountainous taiga. Pine stands (thin strips of woodland on sandy soil), depressions between the dunes with pine/birch forests, lake/marshland sites. Forest cover ratio: 83%.
35. Yugyd va -- 1,891,701 ha (1994). Komi Republic, 63º23' - 65º45' N, 57º30' - 61º42' E. Northern taiga pine and [dark***] coniferous forest, subalpine elfin-wood and meadows, mountainous tundra and goltsy. Forest cover ratio: 51%.

Protection arrangements	Natural Monuments
1. Full title	Natural monuments
2. Applicable IUCN category	III
3. Underlying law	Russian Federation Specially Protected Natural Areas Act, No. 33-FZ, 14 March 1995
4. Principal objectives of these protection arrangements 4.1 What is the objective of introducing these arrangements? 4.2 Indicate the grounds for introducing these protection arrangements as set forth in official texts	"The preservation of unique, irreplaceable, environmentally, scientifically, culturally and aesthetically valuable natural sites and naturally occurring or man-made features." (Article 25 of the Act)
5. Main types of work prohibited	"All activities entailing a degradation in the state of preservation of a natural monument shall be prohibited on the land on which such monuments stand and within the limits of protected zones therein" (Article 27, para. 1, of the Act)
6. Main kinds of work required or encouraged	Work to preserve the natural monuments
7. How does this accord with the actual situation?	Well
8. How are the current arrangements rated?	Positively
9. Area covered by these arrangements	See Remark
10. List of areas in which these arrangements are in effect (indicating the name of each, their total area and the respective areas of forest and other woodland)	See Remark

Remark: In all, Russia has 7,500 recognized natural monuments. There are no figures giving their aggregate extent or the size of the associated protected zones. In 1998, a total of 28 natural monuments were acknowledged to be of Federal significance: they total 19,351 ha. There are 1,760 natural monuments, in area totalling 937,100 ha, on land officially registered as forest.

Protection arrangements	Nature Reserves
1. Full title	State Nature Reserve
2. Applicable IUCN category	IV
3. Underlying law	Russian Federation Specially Protected Natural Areas Act, No. 33-FZ, 14 March 1995
4. Principal objectives of these protection arrangements 4.1 What is the objective of introducing these arrangements? 4.2 Indicate the grounds for introducing these protection arrangements as set forth in official texts	"The preservation or restoration of natural sites or components thereof and the maintenance of the environmental balance" (Article 22 of the Act)
5. Main types of work prohibited	"Any activity within a State nature reserve shall be permanently or temporarily banned or restricted if it is contrary to the objective of creating the reserve or damages natural sites or components thereof " (Article 24, para. 1, of the Act)
6. Main kinds of work required or encouraged	"On State nature reserves inhabited by small, indigenous ethnic communities, natural resources may be used in ways that protect those communities' ancestral habitat and preserve their traditional way of life" (Article 24, para. 4, of the Act)
7. How does this accord with the actual situation?	Well
8. How are the current arrangements rated?	Positively
9. Area covered by these arrangements	Total: 12.8 million ha (for the 65 reserves of Federal significance) and 46 million ha (45 reserves of regional significance)
10. List of areas in which these arrangements are in effect (indicating the name of each, their total area and the respective areas of forest and other woodland)	Separate list appended (a question mark after a percentage sign indicates that no precise figures are available for the time being)

State Reserves of Federal Significance

1. Agrakhansky -- 39,0000 ha (1983). Republic of Dagestan, 43º40' N, 47º30' E. Agrakhansky Gulf and peninsula. Forest cover ratio: 0% (?).
2. Altacheisky -- 60,000 ha (1984). Republic of Buryatia, 51º00' N, 107º20' E. Forest (pine, birch and mixed), bowls between the hills that have turned to steppe, sectors of steppe and meadowland. Forest cover ratio: 60% (?).
3. Badzhalsky Range -- 275,000 ha (1987). Khabarovsk Territory, 51º10' N, 137º00' E. Larch and spruce forest. Forest cover ratio: 60% (?).

4. Bairovsky -- 57,000 ha (1959). Omsk oblast, 56º00' N, 67º30' E. Western Siberian wooded steppe. Forest cover ratio: 22%.
5. Barsovy -- 106,000 ha (1959). Primorsky (Maritime) Territory, 43º20' N, 131º30' E. Half-encircling the Kedrovaya Pad (Gorge) Wilderness Area. Forest cover ratio: 50% (?).
6. Belozersky -- 17,800 ha (1968, 1983). Tyumen oblast, 55º45' N, 67º30' E. Western Siberian wooded steppe with isolated stands and extensive areas of birch and aspen forest; meadows, bogs. Forest cover ratio: less than 10%.
7. Vaspukholsky -- 93,205 ha (1990, 1993). Khanty-Mansi Autonomous Area, 61º40' N, 67º00' E. Central taiga sub-zone on the western Siberian plain. Bogs and swampy forest. Forest cover ratio: 50%.
8. Verkhnee (Upper) Kondinskoe -- 241,600 ha (1971). Khanty-Mansi Autonomous Area, 61º40' N, 64º00' E. [Light***] coniferous forest and extensive boggy sites. Forest cover ratio: 70% (?).
9. Voronezh -- 23,000 ha (1958). Voronezh oblast, 51º45' N, 39º30' E. Adjoins the Voronezh Wilderness Area. Forest cover ratio: 91%.
10. Dautsky -- 74,900 ha (1986). Karachai-Cherkes Republic, 43º40' N, 41º50' E. The forested slopes of the Greater Caucasus. Forest cover ratio: 80% (?).
11. Elizarovsky -- 76,600 ha (1982). Khanty-Mansi Autonomous Area, 61º30' N, 68º00' E. Willow, osier, aspen and scrub. Forest cover ratio: 30% (?).
12. Elogui -- 747,600 ha (1987). Krasnoyarsk Territory, 62º30' N, 87º00' E. Pine forest on sandy soil with reindeer moss. Forest cover ratio: 80% (?).
13. Franz-Josef Land -- 4,200,000 ha (1994). Arkhangelsk oblast, 80º N, 55º E. Arctic desert. Forest cover ratio: 0%.
14. Ingush -- 44,900 ha (1983). Republic of Ingushetia, 42º50' N, 45º00' E. Beech and pine/birch forests. Forest cover ratio: 90%.
15. Kabansk -- 18,000 ha (1974). Republic of Buryatia, 52º15' N, 106º35' E. Marshy delta of the Selenga River. Forest cover ratio: less than 2%.
16. Kamennaya (Rocky) Steppe -- 5,232 ha (1996). Voronezh oblast, 51º N, 40º40' E. Man-made forest plantations, Forest cover ratio: 60% (?).
17. Kanozero -- 65,660 ha (1989). Murmansk oblast, 66º50' N, 34º20' E. Spruce and pine forests along the shores of Lake Kanozero. Forest cover ratio: 15% (?).
18. Kizhsky -- 50,000 ha (1988). Republic of Karelia, 62º00' N, 35º00' E. Forest with elm, linden, black alder. Forest cover ratio: 46%.
19. Kirzinsky -- 119,800 ha (1958). Novosibirsk oblast, 54º40' N, 78º00' E. Birch and aspen forest. Forest cover ratio: 30% (?).
20. Kletnya -- 50,000 ha (1983). Bryansk oblast, 53º15' N, 33º00' E. Sectors of broad-leaved forest. Forest cover ratio: 50% (?).
21. Klyazma River -- 21,000 ha (1978). Ivanovo and Vladimir oblasts, 58º33' N, 41º47' E. Forest, marsh and meadowland ecosystems. Forest cover ratio: 90%.
22. Kunovatsky -- 220,000 ha (1976, 1985). Yamal - Nenets Autonomous Area, 65º00' N, 66º00' E. Two sectors: Kunovatsky (147,000 ha) in the River Kunovat basin, and Bolsheobsky (73,000 ha). Northern taiga floodwater-inundated and water-divide coniferous (spruce, pine, larch, cedar) and small-leaved (birch, aspen, alder) forest. Forest cover ratio: less than 10%.
23. Kurgan -- 31,000 ha (1976, 1985). Kurgan oblast, 54º20' N, 63º40' E. Sectors of pine forest with birch and aspen, meadows, bogs. Forest cover ratio: less than 5%.
24. Lebediny -- 400,000 ha (1984). Chukotsk Autonomous Area, 64º20' N, 169º00' E. Tundra-type vegetation. Creeping cedar, alder, poplar, Chozenia willow. Forest cover ratio: less than 5%.

25. Malie Kurily (Lesser Kuriles) -- 45,000 ha (1983). Sakhalin oblast, 43º40' N, 146º40' E. Encompasses the islands of Shikotan, Zeleny, Yury, Tanfilyeva, Polonskogo and Anuchin. Single-species stands and isolated patches of mixed forest: spruce and stone birch, thickets of Kurile bamboo. Forest cover ratio: 40% (?).
26. Meklektinsky -- 102,500 ha (1988). Republic of Kalmykia - Khal'mg Tangch, 45º30' N, 46º00' E. Western portion of the Caspian depression. Forest cover ratio: 0%.
27. Murmansk Tundra -- 295,000 ha (1987). Murmansk oblast, 68º10' N, 35º30' E. Sectors of marshland and birch elfin-wood. Forest cover ratio: less than 5%.
28. Murom -- 62,700 ha (1964). Vladimir oblast, 55º45' N, 42º10' E. Forest cover ratio: 15% (?).
29. Mshinskaya Marshes -- 60,500 ha (1976). Leningrad oblast, 59º00' N, 30º00' E. Sectors of southern taiga forest (full-grown larch, immature ash stands). Forest cover ratio: 20% (?).
30. Nadym -- 546,000 ha (1986). Yamal - Nenets Autonomous Area, 66º00' N, 72º00' E. Sparse woodland (larch, spruce, pine, cedar) on the drained sectors. Forest cover ratio: 15% (?).
31. Nenets -- 440,000 ha (1985). Nenets Autonomous Area, 68º40' N, 53º30' E. Forest cover ratio: less than 5%.
32. Lower Ob River -- 128,000 ha (1985). Yamal - Nenets Autonomous Area, 66º30' N, 70º00' E. Sparsely wooded sectors. Forest cover ratio: less than 1%.
33. Olonets -- 27,000 ha (1986). Republic of Karelia, 61º00' N, 33º00' E. Forest cover ratio: 50%.
34. Oldzhikansky -- 159,800 ha (1969, 1988). Khabarovsk Territory, 52º00' N, 136º30' E. Forest cover ratio: less than 5%.
35. Orlovsky -- 121,500 ha (1999). Amur oblast. Forest cover ratio: no data.
36. Priazovsky (Azov Region) -- 45,000 ha (1958). Krasnodar Territory, 45º30' N, 37º45' E. Forest cover ratio: less than 1%.
37. Remdovsky -- 64,020 ha (1985). Pskov oblast, 58º30' N, 27º50' E. Forest, mossy and cranberry bogs. Forest cover ratio: 50% (?).
38. Ryazan -- 36,000 ha (1987). Ryazan oblast, 54º30' N, 41º05' E. Forest cover ratio: 40%.
39. Samur -- 11,200 ha (1982). Republic of Dagestan, 41º50' N, 48º30' E. Sectors of shoreline and lowland liana forest, desert-type vegetation. Forest cover ratio: 50% (?).
40. Saratov -- 44,300 ha (1983). Saratov oblast, 51º25' N, 46º50' E. Steppes. Forest cover ratio: less than 1%.
41. Sarpa Lakes -- 19,600 ha (1987). Republic of Kalmykia - Khal'mg Tangch, 47º00' N, 45º30' E. Dry steppe country. Forest cover ratio: less than 1%.
42. Severozemelsky (Northern Territory) -- 421,701 ha (1996). Taimyr Autonomous Area, 80º N, 100º E. Arctic desert. Forest cover ratio:)%.
43. Siisky -- 43,000 ha (1963, 1983, 1988). Arkhangelsk oblast, 63º32' N, 41º32' E. Coniferous forest (pine stands with Boletus albidus, pine/bilberry, spruce). Conservation of rare and valuable animal species. Forest cover ratio: 93%.
44. Sovietsky -- 100,500 ha (1986). Republic of Chechnya, 42º50' N, 45º40' E. Forest cover ratio: 20% (?).
45. Sochi -- 48,450 ha (1993). Krasnodar Territory, 43º50' N, 37º30' E. Forest cover ratio: approx. 60%.
46. Starokulatkinsky -- 20,200 ha (1984). Ulyanovsk oblast, 52º40' N, 47º35' E. Steppe. Growths of young conifers, middle-aged oak groves. Forest cover ratio: less than 5%.
47. Stepnoi -- 103,800 ha (1997). Omsk obalst, 54º40' N, 75º20' E. Wooded steppe with isolated stands of birch/aspen. Twenty-four shallow (fresh-water and saline) lakes. Forest cover ratio: less than 5%.

48. Sumarokovsky -- 36,600 ha. Kostroma oblast, 57º40' N, 41º25' E. Mixed forest. Forest cover ratio: 40% (?).

49. Sursky -- 22,200 ha (1985). Ulyanovsk oblast, 54º30' N, 46º45' E. Mixed forest. Forest cover ratio: 40% (?).

50. Tlyarata -- 83,500 HA (1986). Republic of Dagestan, 42º00' N, 46º15' E. Forest cover ratio: 25% (?).

51. Tomsk -- 46,900 ha (1988). Tomsk oblast, 58º00' N, 83º00' E. Commercial forest areas in the green zones, category I and II woodland. Protected breeding areas. Forest cover ratio: ?.

52. Tofalar -- 132,000 ha (1971). Irkutsk oblast, 54º00' N, 97º20' E. Southern Siberian mountain taiga (cedar and larch). Forest cover ratio: 70% (?).

53. Tuloma -- 33,700 ha (1988). Murmansk oblast, 68º40' N, 32º20' E. Forest cover ratio: 10% (?).

54. Tumnin --143,100 ha (1967, 1987). Khabarovsk Territory, 49º30' N, 140º10' E. Forest with some Mongolian oak. Forest cover ratio: 20% (?).

55. Tyumen -- 53,600 ha (1958). Tyumen oblast, 57º35' N, 65º40' E. Wooded land (pine, birch, aspen), lakes and marshes. Forest cover ratio: 80% (?).

56. Udyl -- 100,400 ha (1988). Khabarovsk Territory, 52º00' N, 140º00' E. Extensive marshy areas adjoining Lake Udyl. Forest cover ratio: 10% (?).

57. Ust-Vilyuisky -- over 1 million ha (1986). Yakut-Sakha Republic, 64º00' N, 126º0' E. Forest. Forest cover ratio: 78%.

58. Frolikhinsky -- 109,200 ha (1976). Republic of Buryatia (55º30' N, 110º00' E. Spruce/cedar/larch forest. Forest cover ratio: 50%.

59. Khanka -- 49,000 ha (1963, 1984). Primorsky (Maritime) Territory, 45º00' N, 132º15' E. Three sectors: Zhuravliny (32,500 ha), Rechnoi (15,700 ha) and Ostrov Sosnovy (800 ha). Forest cover ratio: 10%.

60. Kharbinsky -- 163,900 ha (1987). Republic of Kalmykia - Khal'mg Tangch, 47º00' N, 46º30' E. Dry steppe country. Forest cover ratio: 0%.

61. Khekhtsyrsk -- 107.000 ha (1987). Khabarovsk Territory, 48º15' N, 135º20' E. Forest cover ratio: 80% (?).

62. Khingan-Arkhara -- 52,800 ha (1958). Amur oblast, 49º30' N, 130º20' E. Forest cover ratio: 80% (?).

63. Tsasuchei Forest -- 57,900 (1982). Chita oblast, 50º00' N, 115º40' E. Island forest on the slopes of the Onon valley. Vestigial Krylov pine. Forest cover ratio: 70% (?).

64. Zeiss Glacier -- 29,900 ha (1958). Republic of Northern Ossetia - Alania, 42º50' N, 44º30' E. Broad-leaved beech/hornbeam, also pine and oak forest along the flanks of the mountains. Forest cover ratio: 40% (?).

65. Tsimlyansk -- 44,900 ha (1983). Rostov oblast, 47º50' N, 42º35' E. Non-zonal combination of psammophile steppe and vestigial forest. Forest cover ratio: 15% (?).

66. Yaroslavl -- 14,300 ha (1958). Yaroslavl oblast, 57º55' N, 40º35' E. Forests and marshes along the banks of the rivers feeding into the Gorkovsky reservoir near Kostroma. Forest cover ratio: 70%.

Protection arrangements	Nature Parks
1. Full title	Nature parks
2. Applicable IUCN category	V
3. Underlying law	Russian Federation Specially Protected Natural Areas Act, No. 33-FZ, 14 March 1995
4. Principal objectives of these protection arrangements 4.1 What is the objective of introducing these arrangements? 4.2 Indicate the grounds for introducing these protection arrangements as set forth in official texts	"The conservation of natural sites and features of significant environmental and aesthetic value for nature-protection, educational and scientific uses" (Article 18, para. 1 of the Act). "The development and introduction of effective methods for the protection of nature and the maintenance of the environmental balance while the parks are used for recreational purposes." (Article 18, para. 3c, of the Act)
5. Main types of work prohibited	"Activities entailing an alteration in the natural landscape as it has evolved over history, any diminution in or loss of the environmental, aesthetic and recreational qualities of the park, or a violation of the conservation arrangements for historical and cultural monuments, shall be prohibited within nature parks" (Article 21, para. 3, of the Act)
6. Main kinds of work required or encouraged	Nature parks shall afford conditions permitting (mass and other) leisure activities and shall conserve recreational resources (Article 18, para. 3b, of the Act)
7. How does this accord with the actual situation?	Well
8. How are the current arrangements rated?	Positively
9. Area covered by these arrangements	There is no complete register of nature parks kept at the Federal level: under the Act (art. 18), they are nature-protection and recreational facilities operating under the authority of the constituent entities of the Russian Federation
10. List of areas in which these arrangements are in effect (indicating the name of each, their total area and the respective areas of forest and other woodland)	A list of 22 nature parks in different constituent entities of the Russian Federation (name of park and constituent entity) is given below. The area of known parks ranges between 16 and 32,000 ha

List of Nature Parks in Russia

1. Belukha - Republic of Altai
2. Berezovsky Bor (Pine Forest) - Volgograd oblast
3. Beringia - Chukotsk Autonomous Area
4. Bolshoi Tkhach - Adygei Republic
5. Bukovaya Roshcha - Kaliningrad oblast
6. Bystrinsky - Kamchatka oblast
7. Zavolzhye - Chuvash Republic
8. Kondinskie Ozera (Kondinsky Lakes) - Khanty-Mansi Autonomous Area
9. Lenskie Stolby - Sakha Republic (Yakutia)
10. Malaya Izluchina Dona (River Don Small Meander) - Volgograd oblast
11. Momsky - Sakha Republic (Yakutia)
12. Nalychevo - Kamchatka oblast
13. Numto - Khanty-Mansi Autonomous Area
14. Ozero Dzheka Londona (Jack London Lake) - Magadan oblast
15. Ostrov Moneron (Moneron Is) - Sakhalin oblast
16. Primorsky (Maritime) - Arkhangelsk oblast
17. Samursky - Republic of Dagestan
18. Sibirskie Uvaly (Siberian Downs) - Khanty-Mansi Autonomous Area
19. Siine - Sakha Republic (Yakutia)
20. Ust-Vilyuisky (Vilyui River Delta) - Sakha Republic (Yakutia)
21. Khasansky - Primorsky (Maritime) Territory
22. Yuzhno-Kamchatsky (Southern Kamchatka) - Kamchatka oblast.

Protection arrangements	Spas and Resorts
1. Full title	Spas and resorts
2. Applicable IUCN category	V
3. Underlying law	Russian Federation Specially Protected Natural Areas Act, No. 33-FZ, 14 March 1995; 1997 Forestry Code
4. Principal objectives of these protection arrangements 4.1 What is the objective of introducing these arrangements? 4.2 Indicate the grounds for introducing these protection arrangements as set forth in official texts	"Spas and resorts shall be identified with a view to the rational use and conservation of their natural medicinal resources and therapeutic properties " (article 31, para. 2, of the Act). "Forestry activities must be so conducted as to ensure the preservation and enhancement of environment-forming, water-conservation, protective, health and hygienic, therapeutic and other useful qualities of the forests in the interests of human health … [and the] preservation of features of the historical, cultural and natural heritage." (Code, art. 54).
5. Main types of work prohibited	"Activities that might result in a deterioration of the quality [of a spa or resort] or in the depletion of [its] natural resources and features with therapeutic properties shall be prohibited within the boundaries of spas and resorts" (art. 32, para. 1, of the Act)
6. Main kinds of work required or encouraged	Activities to ensure that current operations can continue
7. How does this accord with the actual situation?	Well
8. How are the current arrangements rated?	Positively
9. Area covered by these arrangements	Spas and resorts (resort health-protection area woodland, zones 1 - 3) occupy 533,000 ha
10. List of areas in which these arrangements are in effect (indicating the name of each, their total area and the respective areas of forest and other woodland)	

Some facts about the Timber Committee

The Timber Committee is a principal subsidiary body of the ECE (UN Economic Commission for Europe) based in Geneva. It constitutes a forum for cooperation and consultation between member countries on forestry, forest industry and forest product matters. All countries of Europe; the former USSR; United States of America, Canada and Israel are members of the ECE and participate in its work.

The ECE Timber Committee shall, within the context of sustainable development, provide member countries with the information and services needed for policy- and decision-making regarding their forest and forest industry sector ("the sector"), including the trade and use of forest products and, when appropriate, formulate recommendations addressed to member Governments and interested organizations. To this end, it shall:

1. With the active participation of member countries, undertake short-, medium- and long-term analyses of developments in, and having an impact on, the sector, including those offering possibilities for the facilitation of international trade and for enhancing the protection of the environment;
2. In support of these analyses, collect, store and disseminate statistics relating to the sector, and carry out activities to improve their quality and comparability;
3. Provide the framework for cooperation e.g. by organizing seminars, workshops and *ad hoc* meetings and setting up time-limited *ad hoc* groups, for the exchange of economic, environmental and technical information between governments and other institutions of member countries that is needed for the development and implementation of policies leading to the sustainable development of the sector and to the protection of the environment in their respective countries;
4. Carry out tasks identified by the UN/ECE or the Timber Committee as being of priority, including the facilitation of subregional cooperation and activities in support of the economies in transition of central and eastern Europe and of the countries of the region that are developing from an economic point of view;
5. It should also keep under review its structure and priorities and cooperate with other international and intergovernmental organizations active in the sector, and in particular with the FAO (Food and Agriculture Organization of the United Nations) and its European Forestry Commission and with the ILO (International Labour Organisation), in order to ensure complementarity and to avoid duplication, thereby optimizing the use of resources.

More information about the Committee's work may be obtained by writing to:

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