International Forest Fire News (IFFN) No. 32 (January – June 2005, 96-98)

Minutes of Thematic Sessions at the International Workshop: *New Approaches to Forest Protection and Fire Management at an Ecosystem Level* 9-12 September 2003, Khabarovsk, Russian Federation

Thematic Session # 1
Forest Fire Information and Data Processing

Chair: E.A. Lupyan

This thematic session was attended by 17 participants, including representatives from the MNR's Central Office and Territorial Bodies, research and civil society organisations.

Presentations covered a variety of issues related to information management/support, satellite monitoring data processing and appropriate use for purposes of early detection of forest fires and inventory of burned areas; forest fire simulation based on the example of the software designed for the Gassinsky Model Forest; the availability of up-to-date GIS-based forest inventory and planning documents in the Far East Federal District. The session also reviewed the GEF Project of Fire Management in High Biodiversity Value Forests in the Amur-Sikhote-Alin Ecoregion.

Recommendations:

1. Define the legal status of the information obtained from satellites, and have regulations on its use under the forest fire early detection system;
2. Finalise the forest fire classification to include the term *catastrophic* therein;
3. Incorporate into the GEF Project of Fire Management in High Biodiversity Value Forests in the Amur-Sikhote-Alin Ecoregion another information management/support element (sub-element) to be called *Forest Fire Information and Data Processing*, including the following aspects:
   - setting up a specialised IS for the Project;
   - emphasising the information accessibility and openness;
   - providing the Project with data from Russian and international systems of forest fire monitoring;
   - preparing additional mapped data for the areas under 1st group forests and test areas with their composition to be defined based on an analysis of test regions information. Recommend that the Gassingsky Model Forest be used as a test area;
   - developing operational methods of estimating the potential impact of recorded fires based on monitoring data and simulated fire behaviour;
   - arranging for collection and processing of satellite high and medium resolution data for assessing the burned areas, including their retrospective assessment based on remote sensing data for 15 to 20 years;
   - producing methods for assessing the degree of forest disturbance using satellite data of various resolutions and forest inventory documents for assessing the impact and prescribing interventions to restore particularly valuable forests in the ecoregion;
   - designing information products through satellite data processing for assessing the areas or volumes of forest use (including illegal logging) in 1st group forests;
   - review the proposals on the status and arrangements of information sharing among forest users.

Thematic Session # 2
New Forest Fire Management Technologies
Chair: V.V. Furyaev

The thematic session was attended by 15 participants, including representatives from the MNR's Central Office and Territorial Bodies, research and civil society organisations as well as from the US Forest Service.

The session included presentations and discussions focused on the following aspects:

1. Fuel management and prescribed burning (Moderator: E. Valendik)
2. Fire Use (Moderator: J.G. Goldammer)
3. Applications of Forest Fire Research Outputs (I. Ivanova, D. McRae)
4. Fire Fighting (Moderator: W. Bushnell)

Recommendations:

To the end of effective forest fire management, conservation of forest biological resources and their diversity, it is necessary to address the following policy issues of management and research.

To have cost-efficient fire management, it is necessary to:

1. Shift from the policy of fighting absolutely all fires towards the recognition of the positive role of fire in boreal forest ecosystems.
2. Make a post-fire forest inventory and assess the post-fire dynamics of ecosystems under 'no-fighting' regimes which would allow to identify the conditions where fire plays a positive role.
3. Build the zoning of forests upon fire environmental/economic impact assessments with due regard to the trends in the forest-formation processes.
4. Adopt a federal legal tool to allow burn-out of forest areas (prescribed burning) in order to reduce the threat of intensive fires (in the vicinity of settlements, high value forests, etc.).
5. Introduce identifiers for forests involved into management activities. Its objective is to optimise fire management so that it could ensure biological resource conservation and targeted reforestation processes.
6. Establish the following four regimes of forest protection against fire:

    a) Enhanced protection. It is meant for areas where forest fires present a potential threat for sites of national economy and those of defence designation, i.e. where fires can cause maximum losses. Apply a system approach to raise the fire resistance of the forests in protected areas.

    b) Permanent protection. It is intended for developed and intensively managed areas, including areas of historical and cultural value (national parks, nature reserves).

    c) Limited protection. It is to be used in reserved forests and means enhanced protection of certain parcels with natural resources of particular value (oil deposits, etc.).

    d) Episodic protection. It is to be applied to protect an area only during seasons of extreme fire danger.

    Assignment of specific areas to one of the protection regimes is to be approved by the federal body upon agreement with the public authority of the Subject of the Russian Federation.

The four regimes should have different levels of financing, equipment, staffing and skills, and other economic and technical parameters.

Such a system may reduce costs of fire fighting and preserve the natural role of fire in the biological resource development process.

Research Priorities:

1. Study the ecosystem impact of vegetation fires as a natural permanent agent affecting ecosystems;

2. Identify boundary conditions of fire natural impact on forest biological resources and their diversity;
3. Develop a scientific framework for long-term prediction of fire impact on forest biological resources and principles for economic assessment of natural positive and negative impact of fires on ecosystems and the biosphere as a whole.

Thematic Session # 3
Improved Forest Fire Management Arrangements in the Region and the Roles of Parties Involved
Chair: E.P. Kuzmichev

The thematic session was attended by 32 participants, including representatives from the MNR, international and non-governmental organizations, research institutions, and public authorities of the Subjects of the Russian Federation.

It was noted that the problem of Russian forest protection against fire is of global importance since it affects the biosphere and the world economy of the forest sector.

The session reviewed the existing forest fire management scheme. This scheme is comprised of the following main elements: administrative, regulatory/legal, engineering, social, information, and education/public awareness.

The presented MNR's draft Forest Fire Management Concept, for the first time, includes the principles of the Government's forest fire policy incorporated on a system basis. The document describes the goals and objectives of the forest fire policy, principles, strategy, and mechanisms of this policy implementation.

Upon discussion of the draft Concept, the participants agreed that after its finalisation, this document may serve as a basis for an up-to-date organizational scheme of fire management allowing to consolidate efforts of managers of all levels and the public.

The MNR and the Workshop participants invite all stakeholders to take part in discussing and finalizing this document.

It is impossible to improve the scheme of forest fire management and straighten the roles of its participants unless a relevant regulatory and legal framework is developed, and first of all – the federal Forest Code. The session participants reviewed the draft Forest Code submitted to the Government of Russia, and expressed the opinion that it should reflect the following requirements:

- distinct division of powers in the area forest fire control among the Subjects of the Russian Federation and municipal entities;
- the Article setting forth obligations of the Forest Guard officials should include a provision about the need of public awareness activities – to assign the coordination and managerial powers in the area of fire control to the executive authorities of the Subjects of the Russian Federation and support them with adequate financial resources.

<u>Recommendations</u>:

1. The Forest Code should provide for the establishment of a State Forest Fire Service.
2. To revise the scheme of financing the costs of forest fire control activities, make it compliant with the distribution of powers by authority level, ensure adequate financing to secure fire safety. To preserve the system of *leskhozes* as basic management entities in charge of forest fire prevention and control.
3. To approve the establishment of Regional Forest Fire Centres.
4. To develop a system of fire management for specially protected natural areas.
5. To improve the system of interrelations among the public authorities and municipal entities in the area of forest fire management, including fire prevention, control, detection and punishment of those to be blamed for fire occurrence. To develop a mechanism of public involvement in management decision-making and the development of schemes of forest fire management in the region.

6. To draft special regulations to define the procedures for fire prevention information activities among general public, officials of the authorised bodies and other federal executive bodies.
7. To recommend that in 2004, the MNR should hold a special workshop to discuss this issue under the FOREST Project. The thematic session recommends developing a forest management strategy, including forest fire management in areas of traditional nature resource use. To provide for involvement of indigenous peoples of the North and the Far East in management decision-making.
8. To recommend introducing long-term forest lease arrangements as a basis for a responsible approach to forest fire prevention.

Thematic Session # 4
New Technologies for Illegal Logging Control
Chair: V.V. Dmitriev

The thematic session was attended by 12 participants, including representatives from the MNR's Central Office and Territorial Bodies, research and civil society organizations.

The session participants reviewed the following issues:

1. Illegal logging and its impact on biodiversity conservation and the threat of forest fire occurrence.
2. The MNR's proposals towards addressing the problem of illegal logging: the MNR's decisions and initiatives in the area of voluntary forest certification, illegal logging control, timber labelling and the establishment of a chain-of-custody system.
3. Voluntary forest certification and international requirements to the chain of timber supply from the stump to the end consumer.
4. The experience of the Khabarovsk and Primorsky Krays, Jewish Autonomous Oblast and the WWF in illegal logging prevention and timber flow control in the Far East.
5. Prospects for implementing a pilot project of timber labelling and tracing in the Khabarovsk and Primorsky Krays, and the Jewish Autonomous Oblast.

Recommendations:

1. It is agreed to support the MNR's initiative of illegal logging control, and introduction of timber labelling and voluntary forest certification.
2. It is proposed to pilot a system of labelling and chain-of-custody for valuable species timber under the GEF Project and the Sustainable Forestry Pilot Project in the Khabarovsk and Primorsky Krays, and the Jewish Autonomous Oblast.
3. In the course of the GEF Project preparation, to provide for consultant services contracts and contracts for goods and services needed to implement the proposed activities.
4. It is also recommended to include a set of measures required for timber labelling and chain-of-custody practices into the Sustainable Forestry Pilot Project in the Khabarovsk Kray.
5. To prepare the pilot with due regard to the regional specifics and prospects for the introduction of labelling and tracing the sources of timber in the Far East Region.
6. In order to implement the planned activities, it is necessary to streamline the system of the MNR's cooperation and interagency coordination with other authorized agencies, the distribution of powers among the federal authorities and the Subjects of the Russian Federation in the area of forest protection and forest resource use oversight, timber labelling and chain-of-custody control.
7. In order to implement the planned activities related to timber labelling and chain-of-custody, it is necessary to improve the forest and its related legislation.