

North American Forestry Commission Fire Management Study Group

30th Annual Meeting

**September 16-19, 1996
Sault Ste Marie, Ontario
Canada**

Hosted by:

**Natural Resources Canada
Canadian Forest Service
Great Lakes Forestry Center**

and

**Ontario
Ministry of Natural Resources
Aviation, Flood and Fire management Branch**

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**North American Forestry Commission
Fire Management Study Group
30th Annual Meeting**

Minutes

Welcome

The group was welcomed to Canada by David Terrell on behalf of Dr. Edward Kondo, Director General of the Canadian Forest Service, Great Lakes Forestry Center. He presented an overview of the recent CFS reorganization and the forestry research program at the GLFC. The group was welcomed to Ontario and Sault Ste Marie by Trevor Woods, Acting Director of the Ontario Ministry of Natural Resources, Aviation, Flood, and Fire Management Branch. He summarized the OMNR fire management program and local features of interest.

Wildland Fire '97

A progress report on Wildland Fire '97 was presented by Al Simard, on behalf of Conference Chair Rick Clevette (Appendix 3). The report summarized the progress of logistical arrangements and indicated that early interest was quite high. The conference would comprise four parts: 2nd International Fire Conference, FireExpo (trade show), FireInfo (poster session), and WorldFire (global fire programs). Planning and organization for each component was well under way and on schedule with no major unresolved problems. The NAFC-FMSG was invited to hold a special meeting as part of the conference; four alternative objectives were presented.

Country Reports

The remainder of the first day was devoted to activity reports from Mexico, the United States, and Canada (Appendices 4-6). This section summarizes the country reports.

Mexico

The report from Mexico is divided into three parts.

- Operations (fire statistics, prevention, detection, suppression)
- International cooperation (United States, Canada, distinguished service award)
- Research (prevention, suppression, rehabilitation, publications, and training)

In 1996, a total of 9,256 fires burned 248,765 ha. These are 18% higher and 20% less than in 1995, respectively. Measures of suppression effectiveness all showed improvement relative to 1995. Time series data showed the general trend of effectiveness during the past 15 years. Fire statistics were presented by state, cause, and land cover. A total of 292,000 person-days were

spent in fire suppression by personnel from SEMARNAP, other federal departments, National Defence, and volunteers.

A wide range of prevention activities were summarized, including: distributing 4 million prevention pamphlets, 58,900 national radio spots on 479 stations, constructing 8,170 km of firebreaks, teaching 626 fire courses to 18,750 students, and organizing 1.4 million volunteers into fire crews. Many activities were coordinated among federal, state, and local authorities, agencies, and associations. Regional meetings were held to evaluate the 1996 fire program.

There were several joint projects with the United States. Two Mexican fire specialists were assigned to a helitack crew on the Sequoia National Forest for 3 months. The cross-border agreement between fire agencies in Sonora and Arizona continued working well. Joint fire suppression and fuel management courses were held. Mexico has benefited significantly from such courses and expressed its appreciation for the assistance of the U. S. Forest Service.

Some joint projects were also conducted with Canada. Three technicians received 3-month assignments in British Columbia. An automated weather monitoring system was installed. Two technicians were trained to operate the Resource Management System. Resource limitations precluded establishing a North American Fire Information System. It is hoped that it will be possible to allocate additional resources to continue and increase joint projects with Canada.

Jesús Benjamin Cardeña Rodríguez was nominated for a Distinguished Service Award. He headed the delegation from Mexico from 1983 to 1990. He instituted several joint projects between Mexico, the U. S., and Canada. With his complete support, fire management in Mexico received a high priority.

Prevention research focussed on using GIS systems to define areas of high fire risk. They also found that prescribed fire could be used to reduce fire risk in most areas that were studied. A study of fire suppression strategy affirmed the effectiveness of national assistance for fire control. Research is currently under way to compare the cost-effectiveness of fire retardants. Experiments have been established to study different methods of rehabilitating burned areas. Several studies are continuing at a lower priority, including: use of GIS systems, evaluating fire effects in tropical ecosystems, developing fire growth models, and fire-danger rating.

University training of fire researchers continues, although somewhat diminished. This is important for the continuation of fire research. Several technical short courses were given at various levels. The First Forest Science Conference was held Sept 23-25, 1996. A national conference on forest fires has been proposed.

United States

The report from the United States was presented by three organizations.

- US Forest Service (Fire and Aviation Management, Fire Research),
- Department of the Interior,
- National Association of State Foresters.

The 1996 fire season began with floods in the Northwest and record fire activity in the southern plains. The National Interagency Fire Center began 7-day operations on February 10 - the earliest on record. In the spring, severe drought and record temperatures in the Southwest resulted in an extreme fire situation; nearly all available airtankers were mobilized to this region.

By early summer, fire activity had shifted northward to the Great Basin. Escaped fires were reported in all western regions. In early August, a total of 36 large fires were being suppressed. In mid August, the situation worsened to 48 major fires, with resource demand exceeding capacity. At that point, the military were brought in and additional fire crews were trained as firefighters. Three airtankers and four crews were mobilized from Canada to assist during the height of the emergency. By the end of August, 85,313 fires had burned 5,380,398 acres (130% and 270% of normal, respectively).

By mid-September, increased relative humidity, cooler temperatures and some precipitation permitted significant progress on most large fires. The season ended with requests for logistics support for two hurricanes.

Accomplishments of several fire research projects were reported. FARSITE simulates fire behavior across varying fuel and terrain, under changing weather and fuel moisture conditions. It is used to project the spread and intensity of prescribed natural fires. The Wildland Fire Assessment System generates daily national maps of observed and forecast fire-weather and fire-danger elements. The maps are distributed through the world-wide web.

The Fire Effects Information System comprises is a computerized encyclopedia on fire ecology. Essays on more than 1,000 species of plants and animals are disseminated through the world-wide web. Meteorology for Fire Severity Forecasting uses statistical and dynamic models to produce medium-range (15 days), extended (30 days) and seasonal (90 days) forecasts of selected fire-weather elements. The maps are distributed through the world-wide web.

FireSat, proposed by NASA, is intended to monitor burning in the boreal forest on a global scale. It will produce weekly maps showing fire locations and monthly maps of fire emissions. The International Boreal Forest Research Association, Stand Replacement Fire Working Group organized a conference on Fire in Ecosystems of Boreal Eurasia and conducted an experimental crown fire in central Siberia. A series of crown fires is planned for northern Canada to study

extreme fire behavior; a whole watershed fire is planned for Alaska in 1998 to study fire and hydrological processes.

Department of the Interior (DOI) agencies with land management responsibilities include: the Bureau of Indian Affairs (BIA), the Bureau of Land Management (BLM), the Fish and Wildlife Service (FWS), and the National Park Service (NPS). Together, these agencies manage more than 200 million acres, mostly in the western US.

The BLM and US Forest Service are developing a coordinated ecosystem management plan for lands within the Columbia River Basin. The BLM is developing demonstration projects that use GIS for fire planning. All DOI agencies are implementing the Wildfire Prevention Analysis and Planning process to identify high-risk areas, select mitigation methods, and develop budget options.

Educational materials are being developed to increase public understanding of the management changes resulting from allowing fire to assume a more natural role in managing landscapes. Four interagency prescribed fire management teams were created to provide technical assistance in planning and implementing ignited or natural prescribed fires. The FWS established a dedicated prescribed fire crew to help wildlife refuges conduct prescribed fires. Initial success has led to proposed expansion to three to five crews next year.

During the past 5 years, 33 fire research projects have been undertaken by the DOI at a cost of \$5.7 million. Fifteen projects have been completed to date; a majority of the remaining projects are on schedule. The projects span a broad range of fire issues, including: fire danger, fire physics, fire behavior, fire ecology, fire management, fuel management, fire economics, and fire information systems.

The DOI and USFS are implementing recommendations from the 1995 Federal Wildland Fire Policy and Program Review. Agencies have reviewed current policies for compliance with review recommendations. Action items that do not require funds are being implemented immediately; action items requiring additional preparatory work have been staffed.

Cooperative agreements have been signed to share aircraft and crews among agencies and States. BLM and USFS fire staffs in the Northwest were combined to reduce costs. A new cooperative agreement among the BLM, all 50 States, and the National Weather Service was signed. The agreement combines resources to better serve the public and participating agencies.

The National Association of State Foresters reported that in 1995, the most severe fire weather was in the Eastern US. They noted a fire on Long Island, NY that received national notoriety when several homes were lost. In 1996, the western US was experiencing severe fire weather and numerous disastrous fires. Eastern crews were pressed into action early and often. A coalition has been developed to lobby for additional federal funding for city and town fire departments to address fire in the wildland/urban interface.

Canada

The report from Canada was presented by three organizations.

- Canadian Forest Service
- Canadian Interagency Forest Fire Center
- Canadian Committee on Forest Fire Management

The Canadian Forest Service focused on a reorganization from nine establishments to ten science & technology networks. The fire research network includes three nodes at Victoria BC, Edmonton Alberta, and Sault Ste. Marie Ontario. It comprises 24 research staff and a budget of \$2.5 million. The network business plan includes research on the fire environment, fire effects, fire management, climate change, and the role of fire in sustainable forestry.

The Northern Forestry Center developed a fire-information system to automatically produce daily fire-weather maps for the ASEAN region and disseminate them through the world-wide web. A prototype Regional Atmospheric Modeling System was adapted to provide hourly forecasts of fire-weather variables for test areas. A forward-looking infrared system was adapted to enabling real-time evaluation of retardant drop effectiveness. The experience of initial attack crew leaders was used to develop containment estimates for fires in the western boreal forest. A bibliography on fire in the wildland/urban interface was compiled.

At Sault Ste. Marie, research continued on the effect of projected climate change on fire activity and the impact of fire on the carbon budget. A fire-growth model was developed that incorporates vertical variation of flame intensity, flame tilting, sloping fuels, multiple flames, and radiative heat transfer theory. A disturbance study indicated that the diversity of different taxonomic groups varies in response to disturbance, but that habitat specialists from different groups react similarly. Three burns were conducted to study fire behavior and fire effects in red and white pine ecosystems.

At the Pacific Forestry Center, a fire-behavior field guide was developed to supplement computer-based systems. A wildfire ignition probability system was developed that provides hourly and daily ignition probabilities of typical human firebrands in three BC forest types. A system (SCORCH) has been developed to predict fire-induced tree mortality in western Canada. An inventory of wildfire and prescribed-fire smoke emissions was completed.

A workshop on fire activity in Canada reviewed fire activity trends, possible causes, and recommended responses. Although the workshop could not conclude that fire activity had actually increased recently, if the climate changes as projected, average fire danger and consequent fire activity will be significantly higher than it is today. Four policy issues were identified by the workshop.

- Wildland fire has a relatively minor role in the National Forest Strategy.

- Declining budgets and escalating fire regimes risk the failure of fire management systems and the point of onset and extent of degradation are not known.
- Stable support for fire management requires consensus among many stakeholders.
- There is inadequate knowledge and technology to support policy development.

The Canadian Interagency Forest Fire Center (CIFFC) reported that 5,797 fires had burned 1.7 million ha (both 30% below the 10-year average), as of August 28. To date, 12% of all fires had received modified response; these had accounted for 65% of the total area burned.

The season began with abnormally wet and cool weather across the country. From April through early June, only one-half of the normal number of fires were reported and a record low 2% of the normal area had burned.

The fire season abruptly began with a vengeance on June 12. Fire danger had risen rapidly to extreme in central Canada when 700 lightning fires were reported during a 4-day period in Ontario and Québec. The area burned during that week (380,000 ha) was 10 times normal. At the height of the situation, a record 126 "problem" fires were reported. This resulted in a major interagency (including the US) resource mobilization to Ontario and Québec. Area burned continued well above-normal throughout the month, due to escaped fires in these two provinces.

Fire danger decreased to moderate and then low as the summer progressed, except for isolated high areas in the west. Fire occurrence gradually decreased from two-thirds to half of normal; area burned averaged half of normal. Although there was notable lightning activity in BC, the fires were controlled with little difficulty. Significant area burned was reported in the Northwest Territories, Québec, and Newfoundland during August. However, most interagency resources had been demobilized by mid August; at that time, air tankers and firefighters were mobilized to the U.S.

The Canadian Committee of Forest Fire Management reviewed the 44-year history of the group, its organizational structure, and its accomplishments. However, the Canadian Council of Forestry Ministers had directed that the CCFFM merge with CIFFC. The process is currently under way, with expected completion within one year.

The education subcommittee has been merged with the CIFFC training working group. The research and development committee reported progress on or completion of: a foam workshop, hose and coupling standards, sponsorship of a trade show, and specifications for long-term retardants. The task group on fire economics is progressing towards a consensus on one key issue to be addressed by a national fire-economics analysis project.

A CCFFM brochure was produced in both official languages. A standard was developed for fireline workwear and acceptance balloting was in progress. A wildland/urban interface group was established jointly with the Canadian Association of Fire Chiefs. A \$25,000 research &

development fund has been established to support projects of interest to the CCFFM.

Study Tours

1. On day one, the group took a trip on the Algoma Central Railroad to Agawa Canyon. They viewed Great Lakes forest types, fall scenery, and local forestry operations as the train passed near the 1946 Mississagi fire area.
2. On the morning of day two, the group visited the Ontario Ministry of Natural Resources, Fire, Flood & Aviation Branch. Fire management in Ontario was explained and fire management systems were demonstrated.
3. On the afternoon of day two, the group visited the Canadian Forest Service, Great Lakes Forestry Center. An overview of the center's fire research program was followed by a visit to a jack pine site that had been burned to as part of developing the Canadian Fire Behavior Prediction System

Old Business

1. A progress report was presented on the 2nd International Wildland Fire Conference.
 - Wildland Fire '97 will consist of several components: a conference, a trade show, a poster session, and global fire programs.
 - Dates were moved to May 1997 to avoid conflict with other conferences.
 - 15,000 announcements were mailed to 80 countries and 200 registration requests have been received.
 - The program will consist of four sections: keynote, social perspectives, economic perspectives, and ecological perspectives.
 - Financial sponsorships have been slow coming in to date.
 - A draft program was distributed.
2. Four agenda items were suggested for an NAFC-FMSG meeting at Wildland Fire '97.
 - Presentation of Distinguished Merit Awards (approved)
 - Signing a tri-lateral agreement among member countries (possible bi-laterals are US/Mexico border agreement and Canada/Mexico fire information system)
 - A media session with delegate heads (approved)
 - Discussion session to prepare conference recommendations (review possible topics)
3. A draft of the revised FMSG brochure was tabled. It is scheduled to be distributed at Wildland Fire '97. New fire photos were sought from all delegations. All delegations agreed to review the draft by October 15 and send comments to CIFFC. It was decided that author names would not appear on the cover. The FMSG would seek funding from the NAFC to produce 3,000 copies.

4. The possibility of joint meetings with other NAFC groups was discussed. It was decided that one observer from the country in which the meeting was being held would be the best approach as joint meetings are more difficult to organize. Two recommendations will be submitted to the NAFC: 1) that reports of all NAFC groups be distributed among the groups and 2) group meeting schedules be distributed among all groups.

5. The importance of Forest Fire News was reaffirmed. Resource limitations make it difficult for Canada to continue producing the publication. The U.S. agreed to examine the possibility of producing FFN and the FMSG will apply to the NAFC for publication funds.

6. Mexico submitted a candidate for the distinguished service award. Canada and the U.S. will submit candidates in time for consideration prior to Wildland Fire '97.

New Business

1. It was decided to reinstate the tradition of having the representative from the country in which the NAFC meeting is being held represent the FMSG. The U.S. will, therefore, represent the FMSG at the next NAFC meeting in Asheville, North Carolina.

2. Mexico views the FMSG as very important. However, funding bi- or tri-lateral projects is difficult. The FMSG should approach the NAFC for possible funding support.

3. Establishment of a FMSG home page on the World-Wide Web was discussed. Although it was agreed that this was a good idea, a lead agency was not identified.

4. The next meeting is scheduled for the first week of November, 1997 in the Northeastern U.S.

Sincere appreciation was expressed to the Ontario Ministry of Natural Resources, Flood, Fire and Aviation Management Branch and the Canadian Forest Service, Great Lakes Forestry Center for their excellent meeting arrangements, most informative tours, and warm hospitality provided at this year's meeting.

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List of Attendees

Mexico

Ing. Oscar Cedeño Sanchez
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**North American Forestry Commission
Fire Management Study Group
30th Meeting
September 16-19, 1996
Sault Ste Marie, Ontario Canada**

Agenda

Monday, Sept. 16

1700-1900	Registration
1900-2100	Icebreaker

Tuesday, Sept. 17

0900-0930	Opening/Welcome
0930-1000	Wildfire '96 report
1000-1030	break
1030-1200	Mexico Report
1200-1330	lunch
1330-1500	U. S. Report
1500-1530	break
1530-1700	Canada Report

Wednesday, Sept. 18

0800-1700	Algoma Central Railroad Trip through Agawa Canyon
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Thursday, Sept. 19

0900-1200	Visit Ontario Ministry of Natural Resources, Aviation, Flood, & Fire Management Branch
1200-1330	lunch
1330-1630	visit Canadian Forest Service, Great Lakes Forestry Centre - fire research

Friday, Sept 20

0830-1000	Review existing activities
1000-1030	break
1030-1130	New proposals
1130-1145	Next meeting
1145-1200	Close

2ND INTERNATIONAL WILDLAND FIRE CONFERENCE Vancouver, BC - MAY 25-30, 1997

Progress Report to

North American Forestry Commission - Fire Management Study Group

1. The conference dates have changed from the fall of '96 to May of '97 at the request of numerous national and international groups.
2. The 1st and 2nd announcements have been mailed out to 15,000 and 7,000 potential delegates, respectively, in more than 80 countries.
3. Requests for registration packages have been received from more than 200 potential delegates. This is a very high return request rate on 1st and 2nd announcements.
4. The steering committee for the conference is functioning well although workloads, budgets, and other commitments have limited the time and money available for participating in meetings. Nonetheless, the committee has made several important decisions:
 - a) Wildland Fire 97 is the umbrella event with several components
 - Fire Conference '97 (2nd international fire conference)
 - FireExpo '97 (a trade show)
 - FireInfo '97 (a poster session)
 - WorldFire '97 (global fire programs)
 - b) Wildland Fire '97 is now a 5-day event.
 - c) Simultaneous translation from English into French and Spanish will be available
5. Fire Conference '97 - 2nd international wildland fire conference
 - a) Fire conference program
 - Keynote speakers
 - Social perspectives
 - Economic perspectives
 - Ecological perspectives
 - b) FireInfo '97 - information exhibit and poster session
 - at the conference facility
 - 60 booths and 80 posters

- soft-sell/ research
- c) WorldFire '97 - global perspective on fire programs
 - Last day of the conference
 - UN and World Bank participation
 - Global fire programs, collaboration
- 6. FireExpo '97 - a fire equipment trade show
 - a) three days - open to delegates only on Wednesday
 - b) being organized by a consortium of companies
 - c) hard-sell equipment and services
 - d) live demos, technical sessions, and hands-on
- 7. Financial sponsorships are slow coming in to date
 - BC Forest Service
 - CFS
 - CIFFC
 - NWCG
 - International Wildfire Association of BC (FireExpo)

The conference is currently in a deficit position and is seeking financial assistance. The organizers would appreciate any and all support.

- 8. Registration packages should be available and mailed by the end of October.
- 9. Early registration will be \$450 Canadian; late registration will be \$550.

Request to the NAFC-FMSG From the Wildland Fire '97 Steering Committee

The Conference Steering Committee would like to extend an invitation to the NAFC-FMSG to hold a special meeting of the NAFC-FMSG in Vancouver during the '97 conference. The meeting might include the following agenda items:

- 1. Presentation of Distinguished Merit Awards to recipients from the three NAFC member countries. This would be held during one of the main social events.
- 2. Signing a tri-lateral agreement between the three NAFC member countries. Potential areas include: exchanging resources?, personnel?, technology?, research?, information?, or services?. The NAFC-FMSG could select an area that is important to wildland fire management in the three countries and that is not already covered under an existing agreement.

3. A small media session could be organized that would have the three delegate heads discuss the role of the NAFC and the FMSG, the cooperation that has been extended to date, and future opportunities.
4. The NAFC-FMSG could lead a discussion session that could review the recommendations to the UN from the Russian fire conference in Shushenskoye. This session could endorse, modify, or augment, those recommendations into a set of recommendation related to wildland fire on a global scale. This session could be held on the Thursday and might be attended by a select group of individuals attending the conference - most likely country representatives.

**2nd International Wildland Fire Conference
Preliminary Program at July 30, 1996**

DRAFT BASED ON EMAIL

Question re: timing of talks? will there be time left for questions?

DATE/TIME	TOPIC	SPEAKER	STATUS
MONDAY MAY 26			
09:00-09:10	Welcome	Rich Clevette	OK
9:10-9:15 9:15-9:20 9:20-9:25	Welcome and Challenge to the Conference	Dr. Yvan Hardy (Canada) Jack W. Thomas (US) Dr. Mary Jo Lavin (US)	NC NC NC
9:30-9:45	Where Have We Come Since the Last International Conference	Dennis Dube (Canada)	OK
09:45-10:15	BREAK		
	Keynote Session	Chair: Phil Cheney	OK
10:15-10:45	Wildland Fire and Sustainable Development	tba	tba
10:45-11:15	Criteria and Indicators of Successful Fire Management	Dr. Albert Simard (Canada)	OK
11:15-11:45	Opportunities and Challenges to Implementation	Dr. Johann Goldammer (Germany)	OK
	QUESTIONS?		
12:00-14:00	Opening of Exhibit and Lunch in Exhibit	WHO TO OPEN?	
	Social Perspectives	Chair: Dr. Robert Lee	OK
14:00-14:30	Culture/History of Global Fire	Steve Pyne (US)	Invited
14:30-15:00	Wildland/Urban Interface	Gui Nehinin (Ivory Coast) Bob Martin (US)	NC NC
15:00-15:30	Arson	Ronaldo Soares (Brazil)	NC
15:30-16:00	Human Health	Sergei Dusha-Gudym (Russia)	NC
16:00-16:30			
16:30-17:00			
17:00-17:30	QUESTIONS ?		
17:30-19:30	Evening Social in Exhibit/Poster Area		

DATE/TIME	TOPIC	SPEAKER	STATUS
TUESDAY MAY 27th			
	Economic Perspectives	Chair: Dr. Peter J. Murphy	OK
08:35-09:00	Economic Impacts of Fire on Sustainable Development	tba	tba
09:00-09:30	Wood Supply	Darrell Errico (BC)	NC
09:30-10:00	Values at Risk/Damage Appraisal, Wildfire Threat Analysis	Rick Sneewujat (Australia)	NC
10:00-10:30	BREAK		
10:30-11:00	Fire Economics	Dr. Armando Gonzales-Caban (US)	NC
11:00-11:30	Afforestation of Arid Lands	Dr. David Nahmias (Israel)	NC
11:30-12:00	QUESTIONS ?		
12:00-14:00	Lunch in Exhibit/Poster Area		
	Environmental Perspectives	Chair: Dr. Ann Barutka	OK
14:00-14:30	Natural Role of Fire	tba	tba
14:30-15:00	Biodiversity/Endangered Species/Wildfire	Per Christensen (Australia) Neil Burrows (Australia) Brian Van Wilgen (S. Africa)	NC NC NC
15:00-15:30	Atmospheric Emissions/Climate Change	tba either David Packham (Australia) or Dr. M.O. Andeae (IGBP) or Dr. Dave Sandberg (US)	NC
15:30-16:00	Forest Health	tba	tba
16:00-16:30	Use of Fire	W. Trollope (S. Africa)	NC
16:30-17:00			
17:00-17:30	QUESTIONS ?		
17:30	Function in Exhibit Area		

DATE/TIME	TOPIC	SPEAKER	STATUS
WORLD DAY FRIDAY MAY 30th			
	Global Programs	Chair: Dr. Jahann Goldammer	OK
08:35-09:00	Promoting Awareness: International Decade for Natural Disaster Reduction	Dr. Olavi Elo (Geneva) OR Dr. F. Wolfgang Eder (France)	NC
09:00-09:30	FAO/ECE/ILO Team of Specialists on Forest Fire	Dr. Ricardo Velez (Spain)	NC
09:30-10:00	Funding Agencies (World Bank, EU/GTZ, ITTO, CIDA, USAID)	Jorge Najera (Geneva)	NC
10:00-10:30	BREAK		
10:30-11:00	Global Fire Information Network (GEMINI)	Peter Anderson (Canada) Bryan Lee (Canada)	NC
11:00-11:30	Global Approach to Satellite Based Wildfire Mapping: Examples from Russia and Alaska	Brian Stocks (Canada) Don Cahoon (NASA/US) G. Korovin (Russia) A Sukhinin (Russia) E. Kashiske (US)	OK
11:30-12:00	QUESTIONS?		
12:00-13:30	LUNCH (ON OWN) ?		
	Multilateral Collaboration	Chair: Guillermo Julio	OK
13:30-14:00	Mexico: NAFC/FMSG: 35 Years of Progress Through Partnership	Ing. Oscar Cedeno Sanchez (Mexico) Denny Truesdale (US) Dr. Al Simard (Canada)	NC NC OK
14:00-14:30	Chile: Modernizing a Fire Organization	Fernando Maldonado (CONAF)	NC
14:30-15:00	Training Cooperation: Belarus (Canada/US/World Bank)	Ed MacAulay (Canada) Lyuedema Krasko (Botswana)	NC NC
15:00-15:15	QUESTIONS		
15:15-15:30	Concluding Statements		