North American
Forest Commission:
Sharing Over
A Half Century
Of Experience

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The NAFC's First 50 Years: An Overview

Since 1958, Canada, Mexico and the United States—the three partners in the North American Forest Commission (NAFC)—have worked together diligently and strategically to shape forestry policy, support forest-related activities, and exchange scientific and technical information on issues of mutual concern to the forest sector of all three nations.

The NAFC is one of six regional forestry commissions in the world established by the United Nations Food and Agriculture Organization (FAO) Conference. Despite having no fixed budget, offices or full-time staff, the NAFC has been successful due to the willingness of the FAO and the three countries' national forestry agencies to provide the financial and human resources that support the work carried out.

Central to the NAFC's accomplishments are its working groups, which tackle policy, management and research matters of interest to all three countries. The seven groups active today are made up of members from government, universities, non-government organizations (NGOs) and the private sector. The responsibility of NAFC chair rotates among the three countries, changing every two years. Full Commission meetings are held biennially, which means that 25 sessions have taken place in the NAFC's first 50 years.

Over the past 50 years, the NAFC has facilitated innumerable formal and informal exchanges between its members—exchanges that would not have occurred otherwise. From working group meetings, study tours and field trips to the official Commission and FAO sessions, the bilateral and trilateral sharing of knowledge and experience is seen as a key value of the Commission.

Moreover, the country reports delivered at every Commission session by the heads of the three forest agencies now stand as a unique archive: an information-rich resource highlighting the state of forests and forestry in North America over the past 50 years.

Over the decades of relationship-building and collaboration, the NAFC has developed a robust, widely integrated network. This is a significant advantage, and one that means the NAFC is well positioned to continue helping its member countries tackle ongoing forestry issues together in the coming years.

North American Forest Commission: Sharing Over a Half Century of Experience



CANADA • UNITED STATES • MEXICO

Contents

Introduction
In the Beginning
How the NAFC Is Organized and Operates
Responsibilities within the NAFC
Meetings
The NAFC's Main Functions4
What has the NAFC accomplished in its four focus areas?
Technical Issues Considered by the Commission
The NAFC Country Reports8
The NAFC Working Groups
Fire Management Working Group
Forest Insect, Disease and Invasive Plants Working Group
Forest Genetic Resources Working Group
Silviculture Working Group
Atmospheric Change and Forests Working Group
Forest Inventory, Monitoring and Assessment Working Group
Watershed Management Working Group
Integrated Working Group Meetings
The First Integrated Working Group Meeting
The Second Integrated Working Group Meeting
The Value of the North American Forest Commission
in the past 50 years
and on into the next 50 years
ANNEX 1:
FAO Conference Resolution No. 27/59:
North American Forestry Commission (1959)
ANNEX 2:
North American Forest Commission Biennial Sessions
ANNEX 3:
History of the North American Forest Commission Working Groups 27
ANNEX 4: Technical Issues Discussed by the North American Forest Commission 28
ANNEX 5:
Summary of Major Issues Identified in Country Reports, 2000–2010 30

Introduction

The North American Forest Commission (NAFC) was established by the United Nations Food and Agriculture Organization (FAO) Conference in 1958.

For the last 54 years, its three member countries—Canada, Mexico and the United States—have worked together to:

- formulate policy based on scientific and technical knowledge;
- encourage and support bilateral and trilateral activities and cooperation among the member countries; and
- exchange information and provide advice on technical practices.

In that time the Commission has demonstrated its value in a wide range of ways, from influencing national policies in wildfire management and forest assessment to facilitating hundreds of productive contacts between scientists and managers in NAFC countries.

As an independent evaluation of the organization concluded in 2006, the "NAFC provides a valuable technical forum for the three member countries, and beyond, generating knowledge that can inform forest-related policy and practice in the member countries."

In the Beginning

The NAFC is one of six regional forestry commissions established by the FAO between 1947 and 1958.

Annex 1 includes the FAO Conference resolution that established the Commission.

Countries may elect to join any regional commission in which they have territory. Mexico, for example, belongs to both the NAFC and the Latin American and Caribbean Forestry Commission. The U.S. also belongs to the same two commissions, as well as to the Asia-Pacific Forestry Commission.

REGIONAL COMMISSION	YEAR OF FIRST MEETING	NUMBER OF MEMBER COUNTRIES (2010)
European Forestry Commission	1948	40
Latin American and Caribbean Forestry Commission	1949	32
Asia-Pacific Forestry Commission	1950	33
Near East Forestry Commission	1955	28
African Forestry and Wildlife Commission	1960	49
North American Forest Commission	1961	3

The NAFC held its first meeting in Mexico City in July 1961. Since then it has held a session every two years—in all, 25 sessions during the first 50 years. The first eight meetings took place in capital cities. The rest have been in non-capital cities, mainly to facilitate field trips out to various forest ecosystems.

Annex 2 provides a complete list of the NAFC's 25 sessions to date, including the host country and city, date, and name of the chair.

How the NAFC Is Organized and Operates

From the start, the NAFC was never intended to be a large entity. It has no fixed budget, no offices and no full-time staff. Rather, it operates with the financial and human resource support provided by the governments of its member countries and by the FAO.

The NAFC's organizational structure includes the following players:

- Commissioners (four) Three of these are the heads of the national forestry agency in each country. The fourth is the head of the FAO Forestry Department.
- **Bureau of Alternates** (BOA) (four) Three of these individuals are appointed by each country Commissioner. The fourth is appointed by the FAO and fills the role of NAFC Secretary.
- Working groups (currently seven) The number of working groups has fluctuated over time. They are established by the Commission to work on technical, policy and research issues of interest to all three member countries.

The Reporting Hierarchy

The NAFC reports to the FAO Committee on Forestry (COFO), which in turn reports to the FAO Conference, the governing body of the FAO.

The COFO Executive Committee is six in number, made up of the chairs from each of the six regional forestry commissions.

Responsibilities within the NAFC

Commissioners – The Commissioners have overall responsibility for guiding the work of the NAFC.

The NAFC chair is rotated among the three countries. The country to host the next biennial Commission session assumes the role of chair on both the Commission and the BOA for two years.

Bureau of Alternates (BOA) – The BOA members are responsible for looking after the business aspects of the NAFC, developing the agenda for Commission meetings, monitoring and coordinating the activities of the working groups, and making recommendations to the Commission.

Working groups – Working groups are typically made up of two or more members from each country who may be from government, universities,

non-government organizations (NGOs) or the private sector. These groups keep the BOA informed of their work, and submit reports for consideration at the Commission's formal biennial sessions. The chair of each working group usually attends these sessions.

Over the years, working groups have come and gone in response to changing needs and priorities (see **Annex 3** for a full list). The seven NAFC working groups to this point in 2012 are:

- Fire Management (established in 1961)
- Forest Insect, Disease and Invasive Plants (originally Forest Insect and Disease, 1961)
- Forest Genetic Resources (originally Forest Tree Improvement, 1963)
- Silviculture (1976)
- Atmospheric Change and Forests (1984)
- Forest Inventory, Monitoring and Assessment (1998)
- Watershed Management (2002)

Meetings

The Commission sessions are planned two years in advance and operate under a set of rules of procedure (http://www.fs.fed.us/global/nafc/). Meetings of the BOA and working groups are more ad hoc, convened as needed by their members.

The NAFC's Main Functions

The resolution establishing the NAFC specified the four main functions of the organization:

- 1. Formulate policy at the regional level and coordinate its implementation
- 2. Facilitate bilateral activities
- 3. Exchange information
- 4. Advise on technical practices and action, generally through subsidiary bodies.

What has the NAFC accomplished in its four focus areas?

Function 1: Formulate policy at the regional level and coordinate its implementation

The NAFC's original goal of formulating and implementing policy on the "regional plane" for North America was—as early experience showed—somewhat more idealistic than realistic.

For a brief period around 1970, the NAFC did make some region-focused policy recommendations, such as, "The Governments of Canada and the USA should take steps to dedicate and manage arctic lands for wildlife." In practice, however, very few official NAFC reports have included reference to specific regional policies.

Nevertheless, the NAFC has had an influence on national policies and programs in its three member countries and on global policy issues.

For example, high-quality scientific and technical work carried out by the NAFC's working groups has helped shape a number of country policies in the areas of fire management, forest inventory and assessment, and others.

Recent Commissioners have held the view that developing common positions on key international policy issues falls outside the NAFC's mandate. The Commission has therefore intentionally avoided contentious issues such as timber trade between the U.S. and Canada, and the prospect of creating a legally binding global instrument on forests. These matters are dealt with in different venues where other government agencies lead the discussions.

Where the NAFC does contribute to global policy discussions is through COFO. Every Commission report includes recommendations addressed to the FAO, in particular about priorities in the FAO's largely policy-oriented program of work.

The NAFC is a forum where the heads of the three national forestry agencies can exchange views on forestry issues and policy constructively and objectively.

Function 2: Facilitate bilateral activities

The NAFC has facilitated many connections between the three member countries, especially at the working group level. Hundreds of successful contacts between scientists and managers in NAFC member countries have been made over the years—certainly more than would have occurred without the NAFC.

Indeed, every Commission report for more than 50 years cites North American (regional scale) activities carried out within working groups.

Some groups have been more active than others in this respect. The most common activities have been scientific exchanges among researchers, and study tours organized by one of the three member countries for scientists or forest managers from the other countries.

Although most working group activities aim for trilateral collaboration, the NAFC mandate includes scope for bilateral activities to support specific objectives. For example, in 1984 the Commission stressed the value of closer Mexico/USA cooperation concerning forest fire management "similar to that between the United States and Canada." Since then, collaboration between the U.S. and Mexico has increased substantially, such as in the area of training in forest fire-fighting.

The NAFC has facilitated many exchanges between its member countries that would not have occurred otherwise.

Function 3: Exchange information

Function 4: Advise on technical practices and action, generally through subsidiary bodies

Almost from the beginning, the NAFC took steps to establish effective means of fulfilling these two overlapping functions. Many of the arrangements, processes and tools it adopted early on to promote information exchange and technical collaboration are still used today. For example:

 Working groups made up of specialists from each country address thematic issues.

- Study tours and field trips are organized, often by working groups, to address specific issues.
- Country reports (or "statements") are delivered at each Commission session
 by the head of the forest agency in each country on the "state of forests" or
 the "state of forestry" in the country.
- Technical reports are prepared for consideration at each Commission session (for most sessions, one technical report is prepared by each country).
- The Commissioners also review the work of the FAO and make recommendations directed to the FAO-COFO (Committee on Forestry).

As the examples above show, most technical exchange in the NAFC occurs in the working groups. As a result of an evaluation of the NAFC carried out in 2005–2006, the Commission has made new efforts to improve the exchange of information between working groups. Two integrated working group meetings have since been held, one in the U.S. and one in Canada, with representatives of all working groups participating.

The NAFC has established many arrangements, processes and tools to promote information exchange and technical collaboration among its member countries.

Study tours have been regularly sponsored by the Commission or its working groups since the NAFC began—about 50 over the years. One-day field trips with a focus on a specific theme have also been a part of each Commission session since the late 1970s.

Technical Issues Considered by the Commission

Throughout the history of the Commission, countries have prepared papers on topical technical issues, presenting them at NAFC sessions for discussion by the Commissioners and other participants.

A list of all technical issues discussed by the Commission since 1961 is provided in **Annex 4**.

Several priority themes have been addressed on a recurring basis. Notable among them: "criteria and indicators for sustainable forest management" from the mid-1990s through the mid-2000s; and climate change during the past 10 years. The main topics of discussion have also gradually shifted over time, from those with an industry focus to those with a more environmental focus in recent years.

The NAFC Country Reports

From the start, the NAFC "country reports" have been an important way to share information about the state of forests and forestry in the three countries. There is probably no other archive like this—one that contains systematic reports by the head of forestry in each of these three countries over this 50-year period.

At every biennial NAFC session, each Commissioner gives an overview of the key forestry issues in his or her country. A sample of these issue overviews, for the period 2000–2010, is summarized in **Annex 5**.

In 2006, the format of the country reports was modified to minimize repetition of issues from year to year. (Major issues are, by definition, not those that can be quickly resolved.) A better approach, the BOA felt, was to have each Commissioner select one or two policy or program issues of concern and make a more focused presentation on those. The intent was to stimulate policy-level discussion about forestry matters throughout the Commission.

The NAFC's country reports provide a unique archive of reporting by the head of forestry in Canada, Mexico and the U.S. over a 50-year period.

Differences in priorities expressed by the heads of the three national forestry agencies tend to reflect differences in their organizational mandates. For example:

- Translating science into policy is a recurring theme for the Canadian Forest Service.
- Reforestation is a top priority for Mexico's National Forest Commission of Mexico (CONAFOR).
- Building rural economies is a key role for the U.S. Forest Service.

Interestingly, many of the issues and concerns raised by the heads of the national forest agencies about 40 years ago are not all that different from the matters raised in recent years.

In 1972, for example, the Chief of the U.S. Forest Service expressed concern over the change in the ability of that country's foresters "to recognize and meet the public's needs." The Assistant Deputy Minister of the Canadian Forest Service expressed a similar concern, saying, "The economic circumstances in which the forest manager operates have deteriorated, and there is much increased public awareness of the environment." These issues have persisted, as **Annex 5** shows, having been identified in country reports as recently as 2008 and 2010.

The NAFC Working Groups

Working groups are the heart and soul of the NAFC. Over the years, 18 have been established. Seven remain active today, three of which were established at the Commission's first two sessions.

The activities and achievements of the current working groups during the period 2000–2010 are summarized below. The groups are presented in the order they were created, from earliest to most recent.

Fire Management Working Group

The Fire Management Working Group was established in 1961 at the first NAFC session. It has long been a very active group with an impressive list of accomplishments. Among these:

- The working group has developed several trilateral and bilateral memorandums of agreement. These have included:
 - a Mutual Assistance Agreement between Canada and the U.S. in 1968
 - a Mutual Assistance Agreement between the U.S. and Mexico in 1969
 - a Wildfire Protection Agreement between the U.S. Department of Agriculture and the Department of the Interior and the Secretariat of Environment, Natural Resources, and Fisheries of the United Mexican States for the Common Border, signed by Mexico and the U.S. in 1998
 - a memorandum covering many aspects of forestry, signed by natural resource officials in Mexico and Canada in 1990 and renewed in 1996. (As a follow-up to this agreement, a letter of intent concerning cooperation on forest fire information technology was signed between Mexico and Canada in 1999, supporting the Mexican Forest Fire Information System.)
 - a letter of intent to strengthen cooperation for the development of joint activities for the response to forest fires, signed in 2012 by the Canadian Interagency Forest Fire Centre Inc. and the National Forestry Commission of the United Mexican States

Official languages of the Commission

At its first meeting in 1961, the Commissioners established English and Spanish as the official languages of the NAFC.

At the 20th session of the Commission in 2000, French was added as an official language at the request of Canada.

Because of cost, not all NAFC meetings make interpretation of proceedings available in all three languages.

However, since 2000, all NAFC reports have been translated and distributed in English, French and Spanish.





The meeting of the NAFC's working party on forest fires¹ in 1963 provided the occasion to exchange gifts of Smokey the Bear and Mexico's Oso Simón. *Left to right:* R. Garduño of Mexico; M. Huberman, FAO; Edward Cliff, Chief of the U.S. Forest Service; and J.C. Macleod of Canada. (Source: *Unasylva* No. 68, 1963.)

- The Fire Management Working Group is unique in the ways it has extended its work outside North America. The working group has co-sponsored four international wildland fire conferences in: Boston, U.S.; Sydney, Australia; Vancouver, Canada; and Madrid, Spain. The fifth international Wildland Fire Conference took place in 2011 in South Africa, with sponsorship from the NAFC, the European Commission, AfriFireNet, and the local South African organization, Working on Fire (WoF).
- In 2004, the Fire Management Working Group helped organize the Pan-American Wildland Fire Conference in San Jose, Costa Rica, together with the Latin American and Caribbean Forestry Commission. This conference was attended by all three NAFC Commissioners and by 20 other heads of national forestry agencies from countries throughout the Western Hemisphere. The conference endorsed the San Jose Declaration on Wildland Fire, which went on to be endorsed by over 100 countries at the Third Forestry Ministerial Meeting hosted by the FAO in 2005.
- Capacity-building has been a core function within the working group.
 For example, Incident Command System (ICS) courses from beginner to advanced levels have been conducted throughout Mexico. Dramatic

¹ The Working Party on Forest Fires name was later changed to Fire Management Working Group.

improvement of the local response to wildfires in areas affected by Hurricane Wilma in the Yucatán Peninsula was achieved through the training, technical assistance and interagency coordination provided and supported by the Fire Management Working Group.

- The working group has conducted more than a dozen international study tours since 1963.
- All three countries have representation on the working group from the scientific research arms of their respective fire organizations. Numerous presentations of ongoing fire research and technology have been made to and by the group's members.
- Working group meetings over the last few years have reflected the Commission's desire to have broad representation. For example, the 2009 meeting in California brought together 25 attendees from four countries and two states within the U.S., representing 11 different agencies.

Forest Insect, Disease and Invasive Plants Working Group

The Forest Insect and Disease Working Group was established at the first NAFC session in 1961 with the purpose of promoting the protection of North American forests through (1) the prevention and eradication of invasive forest insects and diseases and (2) the maintenance and improvement of tree and forest health. In 2008, the Invasive Plants Working Group merged with the Forest Insect and Disease Working Group to become the Forest Insect, Disease and Invasive Plants Working Group. This has been an active and productive working group for 50 years. Among its accomplishments:

- By the time of the second NAFC session, the working group had completed
 a comprehensive review of diseases and insects impacting forests in the
 region, and produced two papers: one describing 28 diseases and the other
 describing 37 insects.
- Over the years, the working group has published many practical guides, including Forest Insects of Mexico, Mistletoes of North America, Forest Diseases of Mexico, and Forest Health of North America.
- The working group has developed regulations and procedures for controlling insects and diseases both in North America and in other

regions. In the late 1980s, for example, the group collaborated with the Atmospheric Deposition (as it was then called) and Silviculture working groups to develop measures for managing the gypsy moth at the regional level. The group also collaborates directly with the North America Plant Protection Organization.

 Technical information exchanges dealing with specific pests or disease have included such topics as: forest health monitoring for *Ips confuses* (the piñon bark beetle); biological controls for *Erythrina* gall wasp; dwarf mistletoe management; and information about sirex woodwasp, brown spruce longhorn beetle, Asian longhorned beetle, emerald ash borer and sudden oak death.

Forest Genetic Resources Working Group

The Forest Tree Improvement Working Group was established at the second NAFC meeting in 1963. Its name was changed to Forest Genetic Resources Working Group in 1994. This group is dedicated to the conservation of forest genetic resources and their practical uses.



Members of the Forest Genetic Resources Working Group with guides and technical staff from lxtepiji, Oaxaca, posing in a stand of *Pseudotsuga menziesii*, 2009.

In 1965, the Forest Genetic Resources Working Group identified 17 specific tasks it wanted to accomplish. By 1970 it had completed 12 of those. The group then identified 24 new tasks and by 1980 had completed 16. Among its accomplishments:

- During the 1970s, the working group led an initiative to conserve endangered germplasm of North American trees. As part of this work, a tree seed centre was established in Mexico, and the group reached out to the Latin American and Caribbean Forestry Commission to provide technical assistance on similar efforts.
- In the late 1990s and early 2000s, the working group collaborated with the Silviculture Working Group on issues of common concern in tropical and sub-tropical forests. Scientific articles were published on species conservation of *Picea*, *Pseudotsuga*, *Pinus radiata* and *Pinus pinceana*.
- A current priority for the working group is climate change adaptation and mitigation, in collaboration with the Latin American Forest Genetic Network.
- Examples of activities sponsored by the working group include:
 - the first North American Forest Biology Workshop held in Mexico in 2000;
 - an international symposium on Silviculture and the Conservation of Genetic Resources for Sustainable Forest Management, held during the World Forestry Congress in Canada in 2003; and
 - a symposium on Potential Effects of Global Warming on Silviculture and Genetic Resources, held in Mexico in 2004.
- The working group also helped organize the IX Mexican Congress on Natural Resources in 2009.
- Publications by the working group include the first World Directory of Forest Geneticists and Tree Breeders in 1965, revised and published by the International Union of Forest Research Organizations (IUFRO) in 1977 and again by the U.S. Forest Service in 1998; and 12 jointly published research papers in the past 10 years, each with more than two authors from the group representing at least two different member countries. The Forest Genetic Resources Working Group has also made recommendations to the Commissioners and to forest managers for better management and conservation of genetic resources. (To access these publications, go to www.fs.fed.us/global/nafc/.)

Silviculture Working Group

The Silviculture Working Group was established in 1976 to address silvicultural practices in the region, with a special focus on "subjects of particular relevance to the tropics." At the time, deforestation in tropical forests was becoming a global issue and receiving widespread attention. The working group was endorsed by the FAO Committee on Forest Development in the Tropics, which was active from the late 1960s until the early 1990s. Among the group's achievements at that time:

- It produced a number of publications, including: *Directory of Tropical Silviculture*, *Useful Trees of the Tropical Region of North America*, and the *Tropical Tree Seed Manual*. (To access these publications, go to www.fs.fed.us/global/nafc/.)
- It sponsored a number of workshops, such as the symposium on Environmental Impacts of Forest Development in Tropical Mexico.

The working group's focus on tropical forests was re-affirmed by the Commission on several occasions in the 1980s and 1990s. However, noting that limiting the focus to the tropics was not consistent with the NAFC's wider regional mandate, the Commission directed the group in 2002 to broaden its work to include temperate and boreal forests. In 2006, the NAFC approved that new mandate for the working group.

The Silviculture Working Group has been very active in recent years, taking the lead in a "cross-cutting initiative on forest sector competitiveness"—a priority identified by the NAFC during the first integrated meeting of all working groups in 2007. The goal is to foster competitiveness and diversification in the forest sector by examining the role of the forest in the forest industry value chain, optimizing wood fibre value in global markets, and undertaking related interdisciplinary research.

When discussing this new mandate in 2008, the Commission expressed concern that "competitiveness" was a very broad topic encompassing many social, economic and ecological dimensions that ranged far beyond silviculture. However, the Commission agreed to let the working group explore this important topic in collaboration with other working groups. At the 2010 Commission session, the chair of the Silviculture Working Group proposed, and the Commission approved, holding a workshop titled "Adding Value to North American Forests" as part of the Society of American Foresters Convention in 2010.

Atmospheric Change and Forests Working Group

The working group on Atmospheric Change and Forests was established in 1984 when acid rain was a major global issue. The focus in the early years was on "atmospheric deposition." The mandate of the group was not to undertake original research, but to serve as a focal point for synthesizing and distributing information, working "chiefly by correspondence." At the next Commission meeting in 1986, the group was also asked to consider broader climate change issues.

Most of the working group members are scientists whose interests have evolved over the years to include the broader aspects of climate change. Representatives of this working group have made presentations and led the discussions related to climate change at several NAFC commission meetings.

Currently the working group has four primary objectives:

- Promote the collection, exchange and dissemination of information and techniques in the field of monitoring forest health and evaluating the effects of atmospheric changes on forests.
- Prepare publications on the state of the health of forests in North America based on the monitoring of forest health conditions in the three countries.
- Foster international cooperation on the detection and effects of atmospheric changes on forests.
- Foster communication with other NAFC working groups and other regional forestry commissions of the FAO.

In the early 1990s, reported activities included the exchange of technical information. For example:

- From 1994 through 1996, the working group continued collective research
 in several areas: assessment of pollution on forests in western and eastern
 U.S. and Central Mexico; filter pack monitoring at Desierto de los Leones
 National Park; and passive ozone monitoring at several sites in Mexico.
- In the late 1990s and into early 2000, the working group developed and translated a paper and pamphlet on passive ozone monitoring. In that same time period, the working group coordinated a project to examine the impact of carbon dioxide and methane emissions on the atmosphere in North America.

On several occasions throughout the working group's history, the Commission and the BOA have encouraged the working group to interact and collaborate with other working groups. This has occurred with mixed success. At the first joint meeting of all working groups, the need for more collaboration on ecosystem resilience and monitoring with respect to climate change was one of the two major issues of common interest identified for future NAFC emphasis. The Atmospheric Change and Forests Working Group agreed to take the lead in charting the way ahead for the NAFC on this large and complex task.

At the 25th session of the NAFC in 2010, where communications related to climate change were the focus of the meeting, the Commission agreed to the value of assessing water, carbon and biodiversity in the region. The Commission also suggested that the Atmospheric Change and Forests Working Group meet with the Watershed Management Working Group.

Forest Inventory, Monitoring and Assessment Working Group

The NAFC's member countries worked to revise their inventory processes in the late 1990s and early 2000s. At the same time, the FAO was encouraging neighbouring countries to collaborate at the regional or sub-regional level to ensure consistency in their contributions to global forest resource assessments.

In 1998, the BOA, together with the FAO, organized a North American workshop on forest assessments, which took place in Salt Lake City in the U.S. One of the recommendations resulting from that workshop was for the NAFC "to establish a study group on forest inventory and monitoring to provide a formal mechanism for collaboration at the regional level."

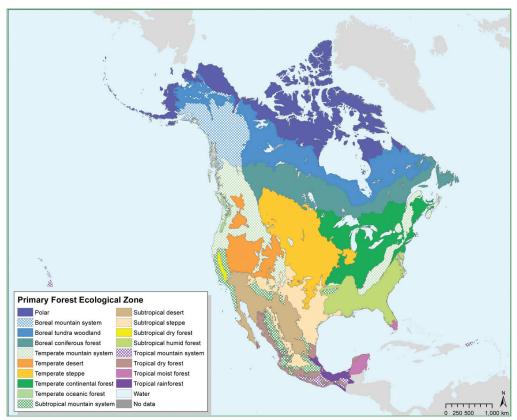
The BOA agreed with this recommendation and proposed a new working group at the 19th session of the NAFC in 1998. There, the Commissioners endorsed the proposal and a new working group was established. Its goal was to "collaborate and share information on approaches, interests and methods; to learn from each others' experience; and to adopt common approaches at some level in order to create as much consistency as is reasonable across all three countries to support assessments which span national boundaries." The Commission went on to note the potential for such a group to support the work of other working groups in monitoring issues around forest fires, insect and disease outbreaks, migratory species habitat, and other matters.

The Forest Inventory, Monitoring and Assessment Working Group first met in 2000, with a focus on gaining a common understanding of the forest inventory processes in each country. This evolved into a number of steps taken to share methodologies and to agree on standardized definitions and terminology, consistent with the FAO's Global Forest Resource Assessments. In 2004, the group made its first regional report on forest resources. And, by 2007, the group had marked significant progress toward a spatially defined North American forest inventory, using the FAO ecological reporting framework and common North America-wide protocols to facilitate data exchange, evaluation and assessment.

With the support of the BOA, database experts from all three countries met in 2009 to begin work on a database management system to support a regional forest assessment, and to develop the next stage of this project. The group also worked to ensure that the three countries used consistent approaches when reporting their 2005 and 2010 Forest Resource Assessments to the FAO.



Average wood volume by ecological zone within the NAFC countries, 2004. (Source: Gillis, M., Smith, B., Sandoval, A., Hirvonen, H. and Haddon, B. (2004). North American Regional Assessment of Forest Resources. Distributed at the XXII Session of the North American Forest Commission.)



North American forests by ecological zone, 2011. Projection: Lambert Azimuthal Equal Area. (Source: Poster created on November 3, 2011, by the NAFC Forest Inventory, Monitoring and Assessment Working Group in cooperation with the Commission on Environmental Cooperation.)

Watershed Management Working Group

The Commission endorsed this new working group in 2002, whose mandate is to promote sound management of watersheds in all NAFC countries by sharing methodologies, experiences and information, and by stimulating collaboration and scientific exchange. Increasing demands on watersheds, combined with increasing population growth, have raised concerns over how to sustain forested watersheds.

The group has been slow to get organized, hindered by retirements of key staff and some difficulty in finding a stimulating project that would be equally engaging to all three countries. The first meeting was held in 2006, when a charter was developed. This was subsequently approved by the BOA in 2007. In March 2008, a work plan was developed with guidance from the NAFC liaison.

At the 25th session of the NAFC, the Commissioners agreed that the work plan for the Watershed Management Working Group should be further developed in the context of the upcoming integrated working group meeting (2010), given the importance of this issue to all three countries. The Commissioners noted that the large-scale perspective of the proposed work by the Atmospheric Change and Forests Working Group complemented the local perspective of the Watershed Management group, which would make the collaboration between the two more relevant.

As well, the Commissioners recommended that the Watershed Management Working Group focus its efforts on key areas of common interest to the three countries.

Since then the working group has been trying to expand its membership, putting emphasis on recruiting bilingual members, and to schedule a series of projects of common interest to the three countries.

Integrated Working Group Meetings

The First Integrated Working Group Meeting

In response to the 2005–2006 NAFC evaluation finding that working groups needed to communicate with each other more effectively, the BOA convened the first integrated meeting of all working groups in March 2008, in Ballston Virginia, U.S. More than 60 people attended, representing all groups.

Following presentations on the activities of each group, smaller groups identified a number of issues common to two or more groups.

Two priority issues were identified, for which it was recognized that multiple groups needed to work together:

1. *Ecosystem resiliency*: Especially in view of climate change, it was agreed that forest ecosystems throughout the region are at risk, and cross-border and cross-disciplinary approaches are needed. Participants agreed that, in an ideal world, researchers and managers would be able to contribute to and

draw from regional databases, maps, assessments and studies. Working toward this end was therefore adopted as a goal. The Atmospheric Change and Forests Working Group offered to take the lead in presenting this issue to the Commission. This was done at the 2008 session.

2. Forest sector competitiveness: Throughout the NAFC region, declining demand for traditional forest products is forcing industries to restructure and is affecting local and national economies (trends that have worsened since the meeting in 2007). It was suggested that the NAFC could potentially play a role in identifying problems and developing solutions that cut across national borders and disciplines. The Silviculture Working Group offered to take the lead in presenting this issue to the Commission. This was done in 2008 and 2010.

The Second Integrated Working Group Meeting

Building on the need for improved communication among all working groups and the BOA, a second integrated meeting took place in October 2010 in Ottawa, Ontario. In all, 32 people attended, representing all working groups. Participants reviewed working group mandates, committed to finalizing two-year work plans and agreed to standardized reporting templates that best demonstrate the NAFC's impacts. Most importantly, participants identified common activities for potential collaboration by working groups on cross-cutting themes.

Ideas for potential collaborations included:

- the Forest Insect, Disease and Invasive Plants Working Group and the Forest Genetic Resources Working Group cooperating on initiatives concerning the effects climate change on the future habitat of the Monarch butterfly;
- the Silviculture Working Group and the Fire Management Working Group cooperating on the use of fire as a silvicultural tool; and
- the Watershed Management Working Group and the Atmospheric Change and Forests Working Group discussing opportunities for conducting mutually beneficial work on the risk of the effects of climate change on watersheds and water supplies.

Integrated working group meetings have greatly helped improve the exchange of information between the NAFC's individual working groups.

The Value of the North American Forest Commission

...in the past 50 years

Among the FAO's regional forest commissions, the NAFC is something of an anomaly, having only three country members and being largely working group based rather than policy dialogue based. This is not to say that policy as a topic does not exist in the NAFC. Quite the opposite is true.

Over the past decades, the joint research undertaken by the heads of the forest agencies in the three countries has been critical to informing a shared understanding of the threats to, and opportunities for, our respective forest sectors. It's this process that has led to policy responses on an ongoing basis.

Of course the work of science and scientists requires patience, and this is particularly so in the study of forests and forestry. It takes a long period, for example, to analyze and understand with confidence observed or suspected changes in tree genetics and in forest landscapes. The public mind, on the other hand, attunes mostly to dramatic events and fast-moving news stories. It is therefore not surprising that the steady efforts of the NAFC and its working groups have not gained a high profile in terms of public awareness.

Thanks to the NAFC, North America's three countries have a robust, well-integrated structure through which research resources can be deployed to tackle issues of mutual concern.

Nevertheless, as this brief retrospective of the organization shows, the steady, focused and cost-effective trilateral work between Canada, Mexico and the United States has paid substantial dividends in several important ways.

While the three NAFC countries do not coordinate forest policy on a continental basis, the heads and senior staff of the respective forest services and their scientists now have a track record of over 50 years of close liaison. That connection has

proven invaluable, creating many opportunities among the countries to dedicate research support to areas of shared interest and concern—areas such as fire, pests and silviculture. Numerous accomplishments at the working group level have greatly improved our mutual understanding of large-scale forest dynamics and the management responses that best address the challenges those dynamics pose.

In the absence of the NAFC, this research would not have taken place and the networks of scientists that it has supported would not have been developed. Thanks to the NAFC, North America's three countries have a robust, well-integrated structure through which resources can be deployed to issues that either did not exist several years ago or have grown in urgency today. Wildland fire, climate change, and invasive insects and diseases are just a few examples.

...and on into the next 50 years

North American economic and trade integration can be expected to strengthen in the coming decades. At the same time, challenges to ecosystem-based management will likely grow, too, as economic, social and environmental pressures on the natural land base increase.

Fortunately, the NAFC is well positioned to continue providing the relevant, science-based input that will help its member countries respond to whatever forest sector changes come their way—in the spirit of mutual support that has been so well fostered over the past half century.

ANNEX 1:

FAO Conference Resolution No. 27/59: North American Forestry Commission (1959)

THE CONFERENCE

Having noted the desire of the Governments of Canada, Mexico and the United States of America to establish a North American Forestry Commission wherein forestry matters of general interest to the three countries could be discussed in a more carefully considered, systematic and coordinated manner than can be achieved under existing informal arrangements,

Understanding that the servicing of the proposed Commission's activities would be undertaken largely by the Member Governments of the Commission, and consequently that its establishment should not result in substantial claims against the regular budget of the Organization or the time of its staff members,

Decides therefore to establish under Article VI of the Constitution a North American Forestry Commission whose statutes shall be as follows:

- 1. The function of the Commission shall be to advise on the formulation of forest policy and to review and co-ordinate its implementation on the regional plane; to facilitate such bilateral activities as the Member Nations of the Commission might agree shall be carried out within its framework; to exchange information and, generally, through special subsidiary bodies, advise on suitable practices and action in regard to technical problems and make appropriate recommendations in relation to the foregoing.
- 2. Membership in the Commission is open to all Member Nations and Associate Members of FAO whose territories are situated wholly or partly in the region concerned as defined by the Organization or who are responsible for the international relations of any non-self-governing territories in that region. Membership shall comprise such eligible nations as have notified the Director-General of the Organization of their desire to be considered as members.

- 3. Any Member Nation of the Organization and any Associate Member that is not a member of the Commission considered but has a special interest in the work of the Commission may, upon request communicated to the Director-General of the Organization, attend sessions of the Commission and of its subsidiary bodies and ad hoc meetings as observer.
- 4. Nations which, while not Member Nations or Associate Members of the Organization, are members of the United Nations, may be invited on their request to attend in an observer capacity meetings of the Commission, in accordance with the provisions adopted by the Conference of the Organization relating to the granting of observer status to nations.
- 5. The Commission shall report and make recommendations to the Conference through the Director-General of the Organization, it being understood that copies of its reports, including any conclusions and recommendations will be circulated to interested Member Governments and international organizations for their information as soon as they become available.
- 6. The Commission may establish such subsidiary bodies as it deems necessary for the accomplishment of its task, subject to the availability of the necessary funds in the relevant chapter of the approved budget of the Organization.
- 7. The Commission may adopt and amend its own rules of procedure, which shall come into force upon approval by the Director-General subject to confirmation by the Conference.

Decides further that a first session of the Commission shall be held at a time and place to be determined by the Governments of Canada, Mexico and the United States of America in consultation with the Director-General.

ANNEX 2: North American Forest Commission Biennial Sessions

Session	Host Country	Host City	DATE	CHAIR
1	Mexico	Mexico, D.F.	July 24–29, 1961	Enrique Beltràn
2	Canada	Ottawa	July 17-22, 1963	L.Z. Reusseau
3	USA	Washington, D.C.	October 18-22, 1965	Edward P. Cliff
4	Mexico	Mexico, D.F.	October 2-7, 1967	Noè Palomares
5	Canada	Ottawa	September 15–20, 1969	A.W.H. Needler
6	USA	Washington, D.C.	March 27-31, 1972	Edward P. Cliff
7	Mexico	Mexico, D.F.	February 4–8, 1974	Jesus Vasquez Soto
8	Canada	Ottawa	February 23–27, 1976	R. J. Bouchier
9	USA	San Juan	February 13–17, 1978	John R. McGuire
10	Mexico	Pátzcuaro	February 18–22, 1980	C. Càrdenas
11	Canada	Victoria	February 16–19, 1982	F.L.C. Reed
12	USA	El Paso	February 21–24, 1984	Max Peterson
13	Mexico	Chetumal	February 3–7, 1986	L.J. Casataños M.
14	Canada	Sault Ste. Marie	October 14-17, 1987	J.C. Mercier
15	USA	San Diego	February 6–9, 1990	F. Dale Robertson
16	Mexico	Cancun	February 10–14, 1992	Manuel Mondragòn y Kalb
17	Canada	Jasper	September 26–30,1994	Yvan Hardy
18	USA	Asheville	November 18–22, 1996	Michael Dombeck
19	Mexico	Villahermosa	November 16–20, 1998	Victor Villalobos
20	Canada	St. Andrews	June 12–16, 2000	Yvan Hardy
21	USA	Kailua-Kona	October 22-26, 2002	Dale Bosworth
22	Mexico	Veracruz	October 25-28, 2004	Manuel Reed Segovia
23	Canada	Vancouver	October 23-24, 2006	Jim Farrell
24	USA	San Juan	June 9–13, 2008	Abigail Kimbell
25	Mexico	Guadalajara	May 3-7, 2010	Juan Manuel Torres
26 [planned]	Canada	Quebec City	May 8-12, 2012	Tom Rosser

ANNEX 3:

History of the North American Forest Commission Working Groups

This table shows the session when each working group was established or abolished.

	Session number and date																								
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
WORKING GROUPS	1961	1963	1965	1967	1969	1972	1974	1976	1978	1980	1982	1984	1986	1987	1990	1992	1994	1996	1998	2000	2002	2004	2006	2008	2010
Forest Fire Management																									
Forest Insects, Disease and Invasive Plants																									
Tree Improvement/ Forest Genetic Resources*																									
Wildlife and Recreation																									
Forest Engineering																									
Wildlife																									
Outdoor Recreation																									
Forest Remote Sensing																									
Silviculture																									
Multiple-Use Forestry																									
Atmospheric Change (& Climate Change)																									
Multilingual Vocabulary																									
Light-frame Structures																									
Neotropical Migratory Birds																									
Forest Products																									
Forest Inventory, Monitoring & Assessment																									
Watershed Management																									

^{*} The Forest Genetic Resources group was called Forest Tree Improvement up until 1994. Working Groups were called "Study Groups" between 1972 and 2002.

ANNEX 4:

Technical Issues Discussed by the North American Forest Commission

2010	Communicating about forests and climate change
2008	Forestry sector outlook for North America Forests and energy
2006	Forests and climate change
2004	Forest environmental services Certification of sustainable forest management Forest resources assessments
2002	Criteria and indicators for sustainable forest management Forest plantations Watershed management
2000	Urban forestry issues in North America and global linkages Alien species harmful to North American forests Carbon sequestration in the context of North America
1998	Criteria and indicators for sustainable forest management Forest-related traditional knowledge Forest resource assessment and monitoring
1996	Integration of forestry science and policy NAFTA impacts on the forest sector: update Criteria and indicators for sustainable forestry
1994	The effects of NAFTA on wood products industries Coordination of strategies to preserve biodiversity on a continental scale Criteria and indicators of sustainable forest management
1992	Global forestry convention as a means to encourage forest development Watershed management New perspectives on managing the U.S. national forest system
1990	Tropical deforestation Pollution and atmospheric deposition Global climate change
1987	Remote sensing Non-wood forest products Biotechnology

1986	Agro-forestry Arid land development Gene resource conservation
1984	Housing and light-frame wood construction The management of forest cover on arid lands
1982	Energy, woody biomass and forestry Spruce budworm control
1980	Integration of forestry in rural development Establishment of medium-scale forest industries
1978	Organization of wood producers in Mexico Cooperatives in woodlot management Forestry practices in small wood ownerships
1976	National forest development program in Mexico Natural resources planning through legislation in the USA The Cooperative Pollution Abatement Research Program (CPAR) in Canada
1974	Forestry in rural land use planning in the U.S. Rural development in the forest areas of Mexico The impact of forest mechanization on social structures Training programs for logging systems in Mexico Silvicultural systems for major forest types
1972	Forest industry practices and environmental quality Management of forests for environmental quality Applications of remote sensing in forestry
1969	Forest inventory methods Multiple-use management of forest lands Forestry education
1967	Forestry education Forest development in the tropics
1965	Report on the regional study on wood resources
1963	Wildlife as a forest crop Recreational use of forest lands
1961	Forest fires International trade in forest products Regional study of wood resources and requirements

ANNEX 5:

Summary of Major Issues Identified in Country Reports, 2000–2010

YEAR	CANADA	MEXICO	USA		
2000	Public input on new National Forest Strategy "Government online" initiative Science and technology emphasis First Nations Forestry Program Partnership with Costa Rica to build support for a new global forest mechanism	New programs launched to support sustainable forest management Progress on a new national forest inventory Big increases in federal funding for forestry Increased valuation of forest goods and services Trade balance in forest products still in deficit More protected areas established	Current focus on three challenges: Roadless area conservation Building consensus on Criteria and Indicators (Montreal Process) Education needed to build public support for forest management		
2002	 Science and technology emphasis Progress on new National Forest Strategy New dialogue process "Forest 2020" "Government online" update 	CONAFOR established, responsible for management SEMARNAT remains responsible for policy Long-term forest plan through 2025 adopted PRODEFOR and PRODEPLAN implemented New national forest inventory launched	Current focus on three challenges: Fire (huge issue, consuming 50% of Forest Service budget) Healthy Forests' initiative Collaborative approaches emphasized in managing public forest lands		
2004	New National Forest Strategy adopted New national forest inventory completed Impact of mountain pine beetle and Asian longhorned beetle Collaboration with industry on innovation Fire	CONAFOR making a difference Payment for environmental services Federal financial support to forest owners to improve forest management New Federal Sustainable Forest Development Law emphasizes community participation	Current focus on four challenges: • Fire and fuel build-up • Invasive species • Unmanaged recreation • Loss of open space		

YEAR	CANADA	MEXICO	USA			
2006	 Managing innovation is needed in a knowledge-based society Canada has lost its competitive edge as an international fibre supplier; hence the need for innovation to remain competitive Research priorities realigned in partnership with forest industry, better policy focus 	 CONAFOR has led big changes, with better forest management and 3 million ha reforestation National System of Forest Planning introduced New national forest strategy launched with 25-year horizon; focus on ejidos as a good model 	U.S. Forest Service centennial celebration Climate change causing increase in fire and pests Research and active forest management are the keys to climate change adaptation			
2008	The new National Forest Vision and Strategy will focus on two key issues: Climate change mitigation and adaptation Transformation of the forest sector through partnerships, investments, market expansion	Vivir major is new government initiative to promote human welfare in Mexico ProArbol is the major forestry initiative to promote reforestation, payment for environmental services, and sustainable forest management	Fire, forest health and invasive species continue to be high priorities New focus areas include: Climate change adaptation and mitigation Water quality How people relate to forests ("kids in the woods")			
2010	Bioenergy has potential to help transform the forest sector and lead economic recovery Partnerships are critical to a successful future in the forest sector, between government, private enterprise, academic research and education	 ProArbol continues to be the key program CONAFOR budget has increased 20 times since its founding, making a huge impact in Mexico New national forest and soils inventory is providing important information Mexico working hard on climate change issues 	National vision for forests includes the following: • Forests are vital for our future. • We must adapt to climate change. • Forest management can restore forest health. • Forest restoration can restore rural economies. • Work must focus at the landscape level with all partners.			

NORTH AMERICAN FOREST COMMISSION: SHARING OVER A HALF CENTURY OF EXPERIENCE

Canada, Mexico and the United States are the three partners in the North American Forest Commission, or NAFC. Set up by the United Nations Food and Agriculture Organization (FAO) in 1958, the NAFC has worked energetically and productively over the past 50 years to pursue forest- and forestry-related policy, research and knowledge exchange activities of mutual interest to all three countries.

Through this network, the heads and senior staff of our three national forest services and their scientists have achieved an impressive track record of long and close liaison. Many opportunities to pursue research on a range of topics of shared interest have arisen—from wildland fire and watershed protection to resource assessment and forest pest management.

This booklet serves as both a summary NAFC retrospective and "state of the NAFC now" update. It provides background information about the Commission's establishment and structure, as well as an account of its key activities today, its past and ongoing accomplishments, and the value it represents to North America's three major countries.







