SIGNIFICANT WG FINDINGS/ACTIONS

**FRA** – Brad Smith (U.S.), Alberto Sandoval (Mexico) and Simon Bridge (Canada) will attend the FRA 2005 Main Report release in New York on February 14, 2006. The WG concurs with FRA Advisory Group finding in January 2006 that the next FRA Main Report (2010) must have appropriate country review prior to printing and release (Appendix III). The WG suggests that the KOTKA V National Correspondents and AG representatives be a starting point for a limited review team for the next FRA.

**CEC** – Members of the WG will review the Commission on Environmental Cooperation (CEC) Strategic Plan for opportunities to cooperate and share findings with Simon Bridge (Canada) for use in making contact with CEC members.

**NAFC Working Group Review** – There will be an NAFC Working Group Review in Mexico the week of February 14, 2006. Alberto will use notes from Inventory and Assessment Working Group meetings to update on our activities.

**Brazil/Central America NFI Tour in Mexico** – Mexico/FAO will host a tour for Brazil, Columbia and 8 Central American countries the week of February 20-25, 2006. Alberto will inform Canada and US on how this proceeds. Canada and US are willing to provide further consultation if deemed useful.

**Update of WG Poster and Powerpoint on joint NFI project** – Mark Gillis (Canada) will coordinate update data table by end of May revising the Vera Cruz format. Products will use the FAO/NAFC Ecozones [posted to WG website] and highlight collaboration and benefits. This information will be available for October NAFC meeting. Brad Smith (U.S.) will update funding proposal in support of joint DB activities and contact Zhulang Zhu at EROS about the metadata for the existing FAO Ecozone shapefile. Funding proposal delayed to 2007.

**WG Website** – Inventory and Assessment website has been updated with current working group membership and web links. Mark Gillis (Canada) will provide a shapefile for FAO/NAFC Ecozones and it will be posted on the web site.

**Remote Sensing** – With the addition of a remote sensing component to FRA 2010, the WG feels strongly that review materials must be made available well in advance (at least 1 or 2 months) of KOTKA V to thoroughly review opportunities and proposals. Alberto Sandoval (Mexico) will provide a position paper for the WG by March 2006. Brad Smith will contact Zhulang Zhu at EROS about the metadata for the existing FAO Ecozone shapefile and documentation of its development.

Given the uncertainty of the future of Landsat (see Day 3 discussion), the WG recommends that scientists from the respective NFIs evaluate the suitability of MODIS and other hyper-spectral platforms to deliver wall-to-wall coverage of land cover data.

**WEB Services** – Wim Ibes (U.S.) will establish contacts with Mexico and Canada to share information on web services and review opportunities for collaboration. Given Wim’s schedule, Ty Wilson (U.S.), Alex Song (Canada), and a Mexico representative will form the core group and develop proposal outline by March 2006.

### Upcoming Meetings/Events

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
<th>Location</th>
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<tbody>
<tr>
<td>FRA 2005 Main Report release</td>
<td>Feb 14, 2006</td>
<td>New York, NY</td>
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<tr>
<td>NAFC WG Review, Mexico</td>
<td>Feb 14-16, 2006</td>
<td>Guadalajara, Mexico</td>
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<tr>
<td>NFI Demo Tour [10 SA/CA countries]</td>
<td>Feb 20-25, 2006</td>
<td>Guadalajara, Mexico</td>
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<tr>
<td>Canadian Forest Inventory Committee Mtg.</td>
<td>June 5-9, 2006</td>
<td>Banff, Alberta</td>
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<tr>
<td>23rd Session of NAFC</td>
<td>October 2006</td>
<td>BC, Canada</td>
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<tr>
<td>FIA Science Symposia</td>
<td>October 2006</td>
<td>Monterey, CA</td>
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<tr>
<td>Next NAFC Inventory WG meeting</td>
<td>Jan 22-26, 2007</td>
<td>Punta Nizuc, Mexico</td>
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### THE MEETING

**Day 1**

**From last meeting in Peterborough Ontario [June 2005]**

**CEC**- Simon Bridge has replaced Harry Hirvonen and will investigate CEC contacts in Montreal. Meeting in Guadalajara next week to review NAFC Working Groups. Alberto Sandoval (Mexico) will attend and provide information for the WG and follow up with CEC on working group efforts. WG members will review the CEC Strategic Plan for collaboration opportunities and provide information to Simon Bridge (Canada) and Alberto Sandoval (Mexico).

**Poster**- Target of September 2006 for completion of poster and update of Powerpoint presentation. Countries will update table data by end of May revising the Vera Cruz tables. Products will use the FAO/NAFC Ecozones [posted to WG website] and highlight collaboration and benefits.

**Website**- Brad Smith (U.S.) updated the NAFC WG website with current working group membership and web links. Mark Gillis (Canada) will provide a shapefile for FAO/NAFC Ecozones and it will be posted on the web site.

**Country updates on current status:**

**US (Greg Reams)**- The revised US national inventory began in 1999 based on a 1999 Strategic Plan. Scheduled for full implementation in 2003, funding shortfalls have delayed completion until at least 2007. National inventory program is currently active in 46 States collecting 130 core variables on cycles ranging from 5-10 years by State depending on level of collaboration. Recent activities include interest by North American Carbon Program [NACP] to get consistent aboveground tree biomass which would be a common link to all three countries NFIs. The Bureau of Land Management is in need of better information summarizing rangeland at strategic scales. FIA and NRI [Natural Resources Inventory for agricultural lands] could be funded to gather the missing data using systematic grid approach. The next US national data compilation will be in early 2007 with a test run in April 2005.

**Mexico (Alberto Sandoval)**- Mexico’s NFI began in 2004 based on a 2001 Strategic Plan. Monitoring is now mandated by law and must serve national, state, and management inventory needs in a compatible way. A unified land classification system has been developed and field work on 25,000 plots nationwide is now 60% complete. Mexico expects to finish most field work this year and produce the first report of the new NFI for the President in 2006. Once completed,
the NFI will not begin an immediate resample but rather take a thematic approach of remeasuring to study specific issues [invasives, fire, etc]. Powerpoint presentation available.

Mexico has been using Landsat but is now concerned about its longterm status. SPOT has been used but has poor infrared sensor. Also looking at Indian satellites but this source is more expensive. NAFC should take a position on satellite imagery needs for NFIs.

A meeting in Guadalajara February 20-25, 2006 will demonstrate the Mexican NFI approach to Brazil, Columbia, Nicaragua, Honduras, Costa Rica and other Central American countries [10 countries total].

Canada (Mark Gillis)- Canada has no legislation requiring an NFI and must constantly sell the value-added aspects for survival. We have been successful and to date have 70% completion of field work, 39% completion of photo work, and 21% completion of satellite work. Powerpoint presentation available.

Day 2

NFI Databases- Countries made presentations on the current state of NFI database efforts. Updates presented by Sharon Woudenber (U.S.), Mark Gillis and Alex Song (Canada) and Alberto Sandoval and Arturo Victoria (Mexico). Powerpoint presentations available.

Field trip- Field Trip to Santa Rita Experimental Range hosted by University of Arizona. Information available at http://cals.arizona.edu/SRER/

Day 3

Biodiversity- John Shaw (U.S.) made an excellent presentation on Aspen and Juniper species distribution modeling for the Interior West and provided some insights into biodiversity monitoring with NFI data. John is working with the Climate Change folks at Northern Arizona University on the project. Powerpoint presentation available.

Web Services- Wim Ibes (U.S.) made an excellent presentation on Web Services to the group and shared his thoughts on opportunities for collaboration. Powerpoint presentation available. The driver for this is the need for a report using the 3 countries data. Simple project to link the DBs from 3 countries to produce Gross area and forest area by Ecozone. Basic process is 1) define the request, 2) define the output, and 3) write the code.

With a multi-country report as a driver using links to the three NFI DBs, representatives from the 3 countries will determine:
1. What needs to be done
2. Who will work on it
3. How much time is needed to develop/write the application
4. How much would it cost in salaries for the project
This information should be prepared for review by the WG by March 1, 2006

Remote Sensing - The National Forest Inventory (NFI) programs of Canada, Mexico and the United States work strategically to improve inventory tools, techniques and data that are applicable to North America and collaborate through the North American Forestry Commission (NAFC). Each country uses Landsat TM to classify forest land and changes in the distribution of forests over time.

Until recently the continuity of the Landsat program has been in question. In December of 2005, NASA committed to replacing the current Landsat satellite with a new Landsat satellite and naming USGS with management oversight of the data stream. The approximate date of launch of the satellite is still unkown. NAFC is pleased that NASA has committed to extending the life of
30-m Landsat data through it’s commitment to build and launch a replacement to the current Landsat satellite. However, the exact launch date is uncertain.

Given the uncertainty of Landsat’s future, the WG recommends that scientists from the respective NFI’s should be evaluating the suitability of MODIS and other hyper-spectral platforms to deliver wall-to-wall coverage of land cover data.

Appendix I – Meeting Agenda

| NAFC Inventory Monitoring and Assessment Working Group Annual General Meeting |
|-----------------------------|-----------------------------|
| *February 6-8, 2006, Tucson, Arizona* |
| Sheraton Tucson Hotel and Suites, +01 520 323 6262 |

**Monday, February 6**

1:00 pm  Welcome, Introductions, logistics  Brad Smith, Mike Wilson

1:30 pm  Review last meeting tasks  Poster, website, funding proposal, CEC  Team Members [10 min. each]

2:30 pm  Break

3:00 pm  Status of country NFI implementation  US, Mexico, Canada  Greg Reams, Alberto Sandoval Uribe, Mark Gillis

4:00 pm  Revise agenda for remainder of meeting  Team Members

**Tuesday, February 7**

9:00 am  Introduce Country Database reps  Team Members

9:15 am  US database overview  Sharon Woudenberg

*10:15 am  Break*

10:30 am  Canada database overview  Alex Song

11:15 am  Mexico database overview  Alberto Sandoval, Arturo Victoria

12:00 noon  Lunch

1:00 pm  Field Trip  Mike Wilson

**Wednesday, February 8**

8:30 am  Approaches to Biodiversity  John Shaw

9:30 am  Introduction to Web Services  Wim Ibes

10:15 am  Break

10:30 am  Exchanges (between NFIs, WG, etc)  Group

11:00 am  Gobal reporting, FRA issues, KOTKA Advisory Group update  Brad Smith

12:00 noon  Lunch

1:00 pm  BIN items-  Group

1:45 pm  Upcoming meetings, opportunities.  Group

2:00 pm  Next steps, adjourn

**NOTES:**
Sheraton Tucson Hotel and Suites, 5151 E. Grant Road, (520) 323-6262
Room Block name: "North American Forestry Commission."
Arrangements: Vicki M. Berrett, (801) 625-5406, vberrett@fs.fed.us
Appendix II – Meeting Participants

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Wim S. Ibes
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wimibes@pillarapplications.com
Paul Drichi [Uganda] chaired. Mr. Greg Reams from USA. was elected as co-chair and will serve as chair of the sixth meeting of the AG.

**FRA 2005** - Information of FRA 2005 is around the year 2000 (global area weighted average) with 65% from field inventories, 32% from remote sensing survey alone and rest 3 percent from expert estimates. The 229 country reports used different methods were used to provide information at three reference points (1990, 2000 and 2005). About 47% of the country reports used linear inter and extra-polation method, 27% assumed no change, 14% used models, 10% used past deforestation rates and only 2% used regression time series analysis. About 800 persons including 172 officially nominated National Correspondents contributed to the process. A need was expressed to consider Deputy National Correspondents to improve continuity of reporting in the future.

**Report release** - Mette Wilke presented the key findings of FRA 2005 to the AG group and expressed her sincere thanks to all the members of the AG, national correspondents, associated institutions and agencies for their efforts and valuable contributions. The main report is scheduled to be released in February during UNFF session in New York in February 2006.

**Report review** - AG members requested that the draft reports be provided to them and NCs for review. This request was declined due to paucity of time to print the report by Feb 15, 2006. However another suggestion of GA was accepted that FRA will include review in its future process of development of the final reports and establish review teams for this purpose.

**Report presentations** - Mette informed the AG members that FRA 2005 results will also be presented in the “Regional Forestry Commission” meetings which are due before June 2006 (except North American Forestry Commission due in October 2006). The feedback from these meetings will be considered by the Expert Consultation at Kotka (Kotka V).

**Thematic Reports** - Thematic Reports on Bamboo (Mexico participating), Water, Fire, Ownership, Pests, Mangroves (Mexico participating) and Planted Forests (U.S. participating) are nearly complete. US is participating in planted forests report.

**Kotka V (11-16 June 2006, 5 working days, in Kotka, Finland):**

**Main objectives of the Kotka V Expert Consultation**
- Evaluate FRA 2005: country reporting process, variables, information gaps, network of country correspondents, dissemination of results;
- Assess the need for implementing an independent study using remote sensing as complementary tool to validate some of the estimates at regional and global levels (primarily forest area and changes over time) and to gather information on forest area change dynamics, [possible partnership with UNEP, University of South Dakota]
- Enhance collaboration with other forestry related reporting processes and organizations.
- Provide guidance for FRA 2010 (process and content).

**Organisation** - The meeting will be organized by FAO/METLA/UNECE.

**Participants** - About 40 national delegates, members of the AG, about 20 representatives from international organizations, academia and NGOs, and members of FRA/UNECE Secretariat.

**Background documents** -
(a) Process for FRA 2010
(b) Development of Thematic Reports
(c) Independent Remote Sensing
(d) Beyond FRA 2010
(e) Networking among NCs

**Next meeting of the AG** - The next meeting of the AG should be organised between Kotka V expert consultation and COFO 2007. Tentatively November 2006.
Appendix IV- Request for Funding from the NAFC Bureau of Alternatives
Inventory, Monitoring and Assessment Working Group

Project Title: Using the FAO ecological framework to report on the status of the major forest ecosystems of North America through shared national inventory database linkages

Project Participants: Greg Reams1, Mark Gillis2, Simon Bridge2, Alberto Sandoval Uribe3, Joe Kapron4, Alex Song2, Micheal Wilson1, Brad Smith1, Patrick Miles1.

1 USDA-Forest Service. 2 NRCan - Canadian Forest Service. 3 CONAFOR, Mexico. 4 Ontario Ministry of Natural Resources

Background: A key initiative identified by the Working Group is to develop and validate a common North American inventory, monitoring and assessment database linkages for reporting purposes. This integrated forest information would be based on new NFI inventory and monitoring data of the three countries. This linked assessment would produce refined snapshot of the state of the major forest ecosystems of North America using an ecological reporting framework rather than one based political or jurisdictional boundaries. Basic cross-walks and integrating protocols have been established for data sharing and evaluation and assessment, continental-wide interpretive maps about the nature of North America forests and must now be refined. This project is essential in a longer-term goal to develop and implement common North American-wide protocols to facilitate data exchange, evaluation and assessment among the three NAFC countries. This project also direct addresses a primary objective of the Commission - to report on forests from a North American perspective.

Need for NAFC Seed Money: A draft proposal outlining research and field activity for selected sites within Canada, USA and Mexico has been prepared. It outlines products, timelines, partnerships and results expected. Costing for implementation through 2010 is estimated at $300 K (U.S. dollars). Current need is $25,000 to fund to a workshop of key scientists is now needed to facilitate development of a new protocol based on now in place national forest inventories for the three countries. The requested money would also allow development of a demonstration poster and strategic follow-up meetings with potential partners. Much effort has already been expended in developing preliminary results based on existing data and protocols. A powerpoint slide summary of the current will be updated.

Impact of Not Carrying Out Activity: Currently, an integrated North American assessment of the status of our forests is not possible. Data exchange and analyses across country boundaries is not possible due to differing monitoring protocols, collection methods and attributes compiled. This situation will continue without initiatives such as this proposal. The Working Group’s objective is to have a demonstration poster and refined protocol and report available for distribution in October 2007. Without seed monies to further analyse and scrutinize the various country data sets, the objective of identifying increased sharable data across counties cannot be met. Thus, an opportunity to profile key work of the NAFC would be lost.

Total Funding Requested (SUS): (Summer, 2007): $25,000
This project will serve to provide the essential background information on data compatibility, options for integration or for cross-walks among attributes or data necessary for the Working Group to produce a refined approach for determining the status of the forests of North America

Workshop would determine:
- revised common attributes possible for North American assessment
- revised options for cross-links among national inventory attributes
- revised methods for linking datasets to ecological framework
- revised tables of appropriate attributes by FAO ecological region

The workshop will require the services of facilitators to keep the process moving efficiently toward the desired goals.

Date Funding Requested: April, 2007