



FOREST BIOMETRICS RESEARCH INSTITUTE

4033 SW Canyon Road
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A Non-Profit Research Corporation since 2002
For the advancement of research, education and service in forest biometrics

January 28, 2018

To: All FBRI Contributing Organizations
From: Jim Arney, President
Subject: Release of FPS Version 7.53 – Moving into 2018 Activities

First, thank you for the ongoing support to allow us to provide the best technology, methods and software tools available in the forest industry. As many of you observed in our 2017 FBRI Annual Meeting, we are building a broader and stronger support team for your forest management operations.

In January, **Dr. Dan Opalach** joins FBRI as a fully involved senior forest biometrician. Dan comes with 28 years of experience in forest biometrics, management and academia. He recently served as the Chairman of the FBRI Board before stepping down to take on this new role. He will be highly visible in all of our development, support and documentation of FPS methods and tools. He will also be available to assist and advise FBRI organizations individually, upon request. This expands our professional team to three with Brock Purvis and Jim Arney.

Brock Purvis continues to provide direct technical support and practical advice on an “as-requested” basis to all FBRI supporting organizations. Brock provides monthly written summaries of general problems and solutions back to our Board. These summaries become high ranking priorities in all of our software updates, development and documentation projects. Brock interacts directly with our team and Board on a weekly, if not daily, basis on all aspects of inventory, site, growth and planning technologies provided by FBRI.

Richard Zabel continues as our business manager and direct interface to each of you for all support services of FBRI. His attention to detail and insight into trends in our forestry profession help guide our suite of workshops, software releases, webinar topics and expanding library of documentation. From our corporate office, shared with Western Forestry & Conservation Association, he maintains all of our databases, software source code, and corporate documentation. All of these resources are stored in duplicate off-site by our business manager.

Release of FPS 7.53 – As you may recall, in January 2016, FBRI initiated the User-ID 3 or 4-digit identity for each forestry office of our supporting organizations. This was part of the 12-digit Activation Key for the FPS software releases. This shift in policy enabled two very important factors: 1) Anyone may download the full functionality of the FPS software suite (which by default, runs in “Demo” mode only); and, 2) your ongoing investment in FBRI methods and tools may not be captured and used by outside entities without their comparable investment to yours. [FPS-753-Download-and-Installation](#)

It is your unfaltering support in shared databases and funding which has created the most robust species library of site, taper and growth dynamics found anywhere on this continent. FBRI is unique in both structure and mission when compared to all other research, technical services or educational organizations, public or private, in the North American forest sector.

Moving forward into 2018, we have committed to the following workshops and activities:

- 1) January 16 – **FBRI Board meeting** at the World Forestry Center, FBRI / WFC Corporate Office from 8:00am to 5:00pm. Board of Directors, Dan Opalach, Richard Zabel and Jim Arney. Planning for SAF Convention – Exhibits, Handouts, Presentations.
- 2) January 22 – Meetings in Moscow, Idaho, with FBRI Fellowship recipients and College faculty. Jim Arney, Dan Opalach, Halli Hemingway, Mark Kimsey, Silas Whitley, Alistair Smith, Patrick Whalen, Paul Buckland (IEP) and Don Patterson (Stimson).
- 3) February 7 & 8 – Forester’s Forum at Coeur d’Alene Resort, Idaho. Brock Purvis, Dan Opalach and Jim Arney. “*The History of Inventory Techniques*” – Jim Arney, 10am, Feb. 8. “*Estimation of Site Index Across the Forested Landscape*” – Jim Arney, 2pm, Feb. 8.
- 4) March 13 & 14 – FPS Inventory Methods Workshop, DoubleTree Hotel, Portland, Oregon. Dan Opalach, Brock Purvis and Jim Arney.
- 5) March 15 & 16 – Timberlands Management – Legal Implications of State-by-State Restrictions for Wildlife, Watershed and Silviculture. Portland, Oregon The Seminar Group. Jim Arney, participant to verify that FPS Planning Methods conform with State regulations..
- 6) April 9 – **FBRI Board Meeting**, World Forestry Center, Portland. Finalize grant requests to USDA – SBIR Program and Endowment for Forestry & Communities. Jim Arney and Dan Opalach.
- 7) April 24 to 25 – Two-day FPS Site Grid Workshop, University Inn, Moscow, Idaho. Day One – Field exercise felling and measuring “10-meter” site trees. Day two – building the macro-site forest-wide SiteGrid stratification. Jim Arney, Dan Opalach, Brock Purvis, Mark Kimsey, Halli Hemingway and Patrick Whalen.
- 8) April 26 – One-day Forest Inventory Essentials in 2018 – University Inn, Moscow, Idaho. Overview of the building blocks which constitute a robust working forest inventory. Jim Arney, Dan Opalach, Brock Purvis and Mark Kimsey.
- 9) April 30, May 1 & 2 – BIA Inventory / Silviculture Workshop, Colville, Washington. Open to all tribal foresters in the Western Region. Hosted by BIA and FBRI. Jim Arney, Dan Opalach, Brock Purvis, Kelly Hetzler.
- 10) June 4 to 7 – Intertribal Timber Council Symposium, Ocean Shores, Washington. Panel presentations on stand-based inventory and LiDAR. Dan Opalach, Brock Purvis, Jim Arney and Ken Borchert.
- 11) June 17 to 19 – Western Mensurationists Meeting, Flagstaff, Arizona. Dan Opalach and Jim Arney.

12) Sep. 20 & 21 – FPS Forest Planning Workshop, DoubleTree Hotel, Portland, Oregon. Emphasis on linkages of Stand-based inventory to Planning, LP versus Binary Search planning system comparisons, and reporting long-term Cash Flows. Jim Arney, Dan Opalach, and Brock Purvis.

13) Oct. 3 to 7 – SAF National Convention, Portland, Oregon. Exhibit Booth #611 reserved with four attendees registrations (Dan Opalach, Brock Purvis, Ken Borchert, Brian Sharer, assisted by Jim McWhorter, Jim Arney and other Board members)..

14) Oct. 5 & 6 – SAF National Convention, Portland, Oregon. FBRI Presentations:

Submission #1: SAF ID # 7 – accepted January 4, 2018

“Separating Macro-Site (Site Index) From Micro-Site (Silviculture)”

Traditional site index methods (total height over age) are no longer adequate for classifying forest productivity. Silviculture has expanded beyond single species, even-aged treatments across large expanses and types of forest ownership. Early height growth of young plantations significantly exceeds expectation from traditional site curves. Growth models based on traditional height/age curves are biased for most silvicultural regimes not identical to the original silviculture applied. These effects have large implications for yield capacity, taxation and cash flow. A new, more robust macro-site definition is presented with results from a large research database in the west.

Submission #2: SAF ID # 11 – accepted January 11, 2018

“Forest Planning and Inventory – The Linkage is the Real Story”

Forest planning requires detailed and current information about all aspects of the forest resource. Forest plans are only as robust and reliable as the ability of the planning system to utilize these data. This information is provided most consistently by maintaining a robust stand-based forest inventory database. Silvicultural decisions are typically based on, and applied to, individual stands. Detailed within stand vegetation structure, species composition and spatial distributions are primary drivers to future growth and yield expectations. Wildlife, watershed, recreational and cultural attributes are primary constraints acting against individual silvicultural projections. Topography, soils, climate and accessibility define the range of yield and cash flow possibilities. Many current planning efforts fall short when attempting to find and define these linkages to the inventory. An integrated inventory to planning approach has been developed and applied which addresses each of these linkages.

15) Nov. 13 – **FBRI Board Meeting**, World Forestry Center, Portland, Oregon. 8am to 5pm.

16) Nov. 14 – **FBRI Annual Meeting**, DoubleTree Hotel, Portland, Oregon. 10am to 3pm. All contributing organizations and open to public.

Background - We have 71 supporting organizations as of the end of 2017 and a long list of consulting foresters who use FPS in their day to day business (see FBRI website list).

The Forest Biometrics Research Institute was initiated and established by Forest Biometrics LLC on August 14, 2003 as an IRS 501 (c) 3 not-for-profit forestry research and services organization with a mission to serve the forestry profession. This was made possible by funding from the USDA Small Business Innovative Research (SBIR) grant program through a series of grants over five years.

Through continuing annual support from the forest community, FBRI has expanded and enhanced its research and services to become the pivotal reference point in biometric methods and tools as demonstrated in its 15 year growth from inception in 2002. All of this will become more readily apparent as we progress through the goals as set out by the FBRI Board for 2018.

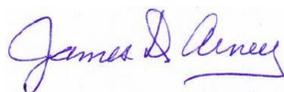
FBRI is unique in providing on-demand, no fee, technical support, but also, FBRI provides biometric methods and tools beyond anything provided from any other source, public or private. Only FBRI provides: a) a fully integrated forest management system; b) the Taper Class system for tree volume based on over 19,000 felled trees in 26 species; c) the Cash Card methodology for quantifying early silvicultural growth response; d) the 10-meter site capacity method to localize soils, growing seasons and precipitation; e) the FPS individual tree growth model; and, f) the FPS spatially-explicit forest-wide planning model.

As is becoming increasingly well documented nation-wide, this FBRI depth and breadth of Research & Development in active support of the forestry profession is not happening anywhere else in forestry to the degree which is occurring in FBRI.

- *“In the committee’s opinion forestry research capacity is at a crossroads, if not a precipice.”* This was a quote from the 2002 National Research Council Report on forestry research and development. Little has changed outside of FBRI from that assessment.
- *“The paucity of innovation stems from a decline in research and development funding and a subsequent drop in R&D capacity.” “Re-building the research and development capacity of the U.S. forest sector requires fundamental changes.” “The sector needs new models and a new culture of enterprise.”* The U.S. Endowment for Forestry and Communities calls for working with partner organizations to lead a sector-wide commitment to implement their 2017 Report recommendations and foster American leadership in forest sector innovation. This Report was released in November 2017.
- The Director of the USDA Small Business Innovative Research (SBIR) grant program called me in November to inquire about our status and probability for new partnerships in forest sector applied research and development going into 2018.

The FBRI Mission is to provide each forest manager with the Knowledge, Methods and Tools to *“make reliable and defensible management decisions with confidence”*. Part of this comes from providing and maintaining *“the most widely used, full integrated forest management system”* in the profession.

Best in 2018,



James D. Arney, PhD, President