Forest Biometrics Research Institute

FOREST BIOMETRICS RESEARCH INSTITUTE

4033 SW Canyon Road Portland, Oregon 97221

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

June 12, 2017

To FBRI Supporting Organizations:

The FBRI Board of Directors met on Monday, April 24, in the Western Forestry & Conservation Association office at the World Forestry Center in Portland, Oregon. The agenda for the Board meeting is located in Attachment A. It was a rather lengthy meeting, but for the sake of brevity, in this letter I will only report on what I believe to be the more interesting items. If you have questions on anything shown in the agenda, feel free to contact me, or any one of the other Directors. Our contact information is provided in Attachment B as well as on the Institute's website at http://fbrinstitute.org/board-and-staff.

For several years, the Board has discussed the need to enter into a contract with a second biometrician to work closely with Dr. Arney. During the Board meeting last November 14, 2016, the Directors voted to expedite the signing of a contract with a second biometrician and moved it forward to 2017. Dr. Arney acted quickly and distributed the FBRI Senior Forest Biometrician position announcement on January 23. The Board received four letters of interest and resumes prior to the March 11 deadline. I will cut to the chase—the Board selected one of the applicants to fill the position. Dr. Arney was directed to contact this individual and begin the process of negotiating the details an independent contractor agreement. The Board expects this process to go smoothly. Under the best of circumstances, the new biometrician will start working for FBRI on October 1. However, we are prepared to wait until January 1, 2018, if that is the date this individual requires to make the transition to the Institute. In any event, the Board will send an announcement introducing this individual to our Supporting Organizations prior to the Annual Meeting on November 14, 2017, in Portland. Until that announcement is released, the Board asks for your patience, as we must keep this a confidential matter until all the details have been fleshed out and the independent contractor agreement is signed by both parties.

As you know, Dr. Arney released the new Universal Library and FPS 7.50 in March. Brock Purvis, FBRI Technical Support, reported to the Board that many organizations have downloaded the software and are in the process of testing it on their inventories. The FPS 7.50 Universal Library is highly sensitive to localization of site classification and early stand

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silviculture on each working forest. This capacity is only invoked if the local forester applies the FBRI CASH Card and 10-meter SiteGrid technologies imbedded in FPS. Dr. Arney conducted a workshop on June 6 – 7 in Corvallis to step users through the field and office procedures to localize the FPS 7.50 Universal Library to their working forests. If you missed this workshop stay tuned and look for an announcement for one to be held next year. Most likely, FBRI will continue to offer this workshop annually for the foreseeable future. While I'm on the topic of workshops, I must mention that Jim conducted a FPS Inventory Workshop on March 29 – 30 in Portland. The focus of that workshop was year-end reporting with the transition to the FPS 7.50 Universal Library. The workshop was unique with respect to previous FPS workshops because it detailed the specific steps to produce a year-end forest inventory report with the objective of establishing a reference point for the transition to the new FPS 7.50 Universal Library. I have heard from attendees that this was an outstanding workshop due to Jim's focus on the specific steps needed to produce the desired reports. I plan to attend next year's inventory workshop so I can personally benefit from Jim's new approach to teaching this material.

I am pleased to report to you that Dr. Arney will be speaking at the 2017 Western Mensurationists Meeting June 18 – 20 in Vancouver, B.C. The title of his talk is *Measuring Site Growth Capacity using the FPS 10-meter Site Method*. The Board has been encouraging Jim for several years to attend key industry meetings and conferences to "get the word out" about FPS and the innovative technologies that have been integrated into the software. FPS is a very special suite of software tools (including forest inventory, growth and yield, and forest planning) with attributes and features that can help forest managers make decisions regarding the resources they are charged with managing. The Board is convinced that such exposure will lead to (1) increased interest in FPS, and (2) new members and their contributions that will enhance annual revenues and fund the Institute's projects and long-term goals.

I am also going to attend the Western Mensurationists Meeting with Jim. Certainly, I am looking forward to hearing the talks but I am looking forward to discussions with attendees between presentations to tell them first-hand about the significant developments that have occurred at the Institute over the past two years. Together, Jim and I should be able to cover a lot of ground during those three days in Vancouver. Additionally, following the meeting, Jim has made arrangements for us to meet with key managers and executives of timber companies in B.C. to provide them with a comprehensive overview of the new Universal Library and FPS 7.50. Our goal is to get B.C. companies to join the Institute, which is a key objective of the Board.

In my last letter, I reported on the Board's decision to fund a FBRI Doctoral Fellowship at the University of Idaho. Here is the link to the University's web site that describes the program:

http://www.uidaho.edu/cnr/students/graduate-students/cnr-fellowships

The Board is funding the Fellowship because it is an avenue for developing forest biometricians with the skill set necessary to become a FBRI biometrician. It is clear to the Board that we must make efforts to support the education of biometricians who could eventually be hired by FBRI to work on FPS, support our clients, and further the mission of FBRI. We have yet to award this Fellowship to a graduate student for the 2017 – 2018 academic year. This is an incredible opportunity for a promising student at this point in time because Dr. Arney has agreed to serve on this individual's graduate committee. If you know someone who may be a candidate for this Fellowship, please direct him or her to the University of Idaho's web site so they can learn more about the program.

Prior to the Board meeting in April, I received an email from one of our members who suggested that the Board should consider having Dr. Arney's work on the development of the new Universal Library reviewed by an independent analyst. It resulted in a very good discussion that I will share with you given the Board's interest in this topic.

The concept of having Dr. Arney's work reviewed is very good indeed. This view is shared by every member of the Board and Jim. In fact, we have discussed the need for such reviews for many years. To address this need, the Board and Jim have taken the following key actions to date:

- Jim's publication of *Mathematics of Trees: Analysis of the FPS Universal Library* was a huge step in providing foresters and biometricians with <u>documentation</u> on the model's architecture, components, reliance on nonparametric statistical methods, and underlying database of stem-mapped permanent plots. I have made my way through ½ the textbook, and it has really helped me understand and appreciate Jim's approach to model development.
- The Institute is seeking to hire a contract Senior Forest Biometrician to work with Dr.
 Arney. (Recall my comments above regarding this matter.) The Board is looking
 forward to having this individual under contract because this position will work closely
 with Jim and provide a level of <u>cooperative model development and review</u> that has not
 been possible in the past.
- FBRI and the University of Idaho have initiated the FBRI Doctoral Fellowship Program. (Once again, recall my comments above regarding this matter.) FBRI is contributing substantial resources to this program so the University can develop the next generation of biometricians needed to move FBRI forward in the decades to come. Most importantly, the Board expects these graduate students to <u>publish noteworthy papers</u> on aspects of FPS including its distance dependent architecture, 10-meter site, use of nonparametric regression, and other innovations employed by Dr. Arney in building the model and universal library.

The Board is confident that the above listed actions will accomplish the reviews needed to ensure that the various components of FPS are rigorously tested, implemented properly, and, where appropriate, published in journals to benefit the science of forest biometrics. Sure, this will take time, but these actions will lead to a level of review and model transparency that are critical to the long-term success of FPS.

This year's Annual Meeting will be on Tuesday, November 14. It's a great venue for you to network with resource professionals that rely on FPS for forest inventory, growth and yield, and forest planning. It also provides you with an opportunity to discuss issues that are relevant to your organization with one or more of the Institute's Directors. But, most importantly, this is the place to learn first-hand from Dr. Arney what the Institute has accomplished during the year, and what the work plan looks like going forward. If you want to register for the Annual Meeting, contact Richard Zabel at richard@forestbiometrics.org. A notice will also be distributed to FBRI Supporting Organizations and clients as we get closer to the meeting.

Thank you for your continued support of FBRI. We have a very enthusiastic and professional user community, and your active participation in the Institute is critical to our direction and success. Come to the Annual Meeting and let us know what is on your mind. If for some reason you can't attend the meeting, contact Jim, me, or anyone on the Board of Directors and tell us about your interests and concerns.

Best regards,

Dan...

Daniel Opalach, PhD, RPF Chairman, Forest Biometrics Research Institute (707) 668-4418 dopalach@greendiamond.com

Attachment A

Forest Biometrics Research Institute (FBRI) Board of Directors Meeting Western Forestry & Conservation Association Office Portland, Oregon

April 24, 2017 Scheduled 8:00 am – 5:00 pm

<u>Call to Order at 8:00 am Monday — Dan Opalach</u>

- Take attendance
- Request for modifications and/or additions to the agenda

Minutes from Previous Meeting

- Review/approval of meeting minutes from November 14-15, 2016—Richard Zabel
- Recall:
 - o FBRI Board Resolution to merge Montana and Oregon corporations
 - o FBRI Board commitment to offer University of Idaho PhD Fellowship
 - o FBRI Board advertisement for Senior Forest Biometrician in 2017
 - o Arney Board addendum items from November 14, 2016 (attached page)

Financial Status—Richard Zabel

- Profit & Loss Statement through March 31, 2017
- Annual 2016 2022 Budget presented, potential revisions later in the Agenda

Review Technical Support Log and Activities to date – Brock Purvis

• Correspondence and activities related to FPS 7.50 Universal Library transition

Status of FPS 7.50 Universal Library release March 17, 2017 and Workshop – Jim Arney

Spreadsheet and Summary of Organizations making updates (attached)

Coffee Break 10:00am - Transition to Action Items and Long-term Planning

Board Action Items for Year-end 2016

- Sign Final Resolution to Merge Montana Entity into Oregon Attorney McMullan
- Status of PhD Graduate Program with University of Idaho Dr. Alistair Smith
- Review and Selection of FBRI Senior Biometrician (announcement closed March 11)
- Plan for Marketing FBRI in 2017 and beyond
 - o Publications, Webinars, Website items, Presentations, Exhibit Halls
 - o Targeted on-site visits to major corporations and regions at manager level
 - o Promotion of regional SiteGrid cooperative projects among organizations
 - Promotion of new Nelder plot installations in multiple regions and species
- Review and/or Revision of FBRI Five-year Budget Plan based on previous Items

Attachment B

FBRI Contact Information

<u>Name</u>	<u>Position</u>	<u>Phone</u>	Email Address
Dr. Jim Arney	President/Biometrician	(406) 649-0040	jdarney@forestbiometrics.com
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Mr. Jim McWhorter	Director	(360) 263-0677	jmcwhorter@terraverdeinc.com
Dr. Dan Opalach	Director/Chairman	(707) 668-4418	dopalach@greendiamond.com
Mr. Brock Purvis	Technical Support	(406) 541-0054	brock@forestbiometrics.org
Mr. Brian Sharer	Director	(360) 904-3504	bsharer@finitecarbon.com
Mr. Marc Vomocil	Director	(541) 929-2477	marc@starkerforests.com
Mr. Richard Zabel	Secretary/Treasurer	(503) 226-4562	richard@westernforestry.org