

# Forest Health Monitoring Program Monthly Update October 2015

## WHAT'S NEW

**The U.S. Forest Service** is in the process of determining how we want to use digital technology in the future. Innovative use of digital technology and social media are key tools to accomplish our mission and connect people to the Forest Service. We are starting development of a digital strategy to meet our digital technology needs. As a substantial user of digital technology we want to make sure you have the opportunity to **make your voice heard by completing the Digital Strategy Survey**. The 20-minute survey includes sections on business requirements; web services; accurate, complete and shareable data; social media; and mobile technology. Responses needed by Nov. 6, 2015. [Link to the Digital Strategy Survey](#)

## UPCOMING EVENTS

(Items beginning with \* indicate a new listing or new information)

**October 28-29, 2015.** Logan, UT. Restoring the West Conference 2015. This annual conference to be held at Utah State University in Logan, UT addresses prominent science and management issues in the western U.S. This year's theme will be "Fire ecology and restoration in the Interior West" and will feature aspen and cohort forest communities, as well as other vegetation zones. Check the [Restoring the West](#) website as details continue to be posted in the coming months.

**November 3-7, 2015.** Baton Rouge, LA. Society of American Foresters 2015 National Convention. The theme of the convention is *Recreating Forestry: The Confluence of Science, Society, and Technology*. The 2015 call for presentations is currently posted. The deadline for presentation submissions was March 31, 2015. The deadline for poster submissions was **September 30, 2015**. For complete information about the convention, visit the [Society of American Foresters convention website](#).

**\*December 8-10, 2015.** Portland, OR. 2015 Forest Inventory and Analysis Science Symposium. The US Forest Service, Forest Inventory and Analysis (FIA) Program is pleased to announce the 2015 FIA Science Symposium. The theme of the 12<sup>th</sup> biennial Science Symposium is *Pushing Boundaries – New Directions in Inventory Techniques & Applications*, emphasizing the development of innovative approaches to incorporating non-traditional approaches and uses of inventory information. The Symposium brings together international forest scientists, managers, and stakeholders to share insights on a

wide variety of topics, including contemporary issues, science policy, mensuration, geospatial products, and inventory methods. Online registration for the Symposium is now open. Early registration ends **November 6, 2015** and registration closes **November 20, 2015**. Information about hotel reservations is also available. Reservations at the Portland Marriot Downtown Waterfront must be made by **November 9, 2015** to receive the discounted group room rate. For more information about the symposium, visit [the symposium website](#) or contact Sharon Stanton ([sharonMstanton@fs.fed.us](mailto:sharonMstanton@fs.fed.us)).

**May 16-19, 2016.** Chicago, IL. Gene Conservation of Tree Species: Banking on the Future. Early Alert! The USDA Forest Service is sponsoring a workshop that will bring together a mix of land managers, conservation and restoration practitioners, researchers, and non-governmental organizations who share the goal of conserving tree species. The workshop will include invited and contributed presentations and posters, and a field trip hosted by The Morton Arboretum. More information including the call for papers and posters is available at the [workshop website](#).

## UPCOMING WEBINARS

(Items beginning with \* indicate a new listing or new information)

**\*Learn at Lunch Live Webinar: Aspen Response to Drought and Climate Change in the 21<sup>st</sup> Century.** (Sponsored by the Utah State University Forestry Extension, and Utah Division of Forestry, Fire, & State Lands) Speaker: Dr. William Anderegg (Department of Biology, University of Utah). Recent elevated dieback of aspen after severe droughts in the 2000s has prompted concern about the future of aspen in a changing climate. Dr. Anderegg will give an overview of what we know and don't know about drought stress on aspen physiology and mortality, and what this means for the future of aspen forests in a changing climate. No registration is required! 1 CEU is available from the following organizations: International Society of Arboriculture, and Society of American Foresters. This webinar will be conducted at **12:00 p.m. (MST)** on **October 20, 2015**. To access this free webinar, visit [the webinar information site](#) for more details. Plan to access the site a few minutes early.

**The Sustainable Forest Roundtable** offers periodic webinars. For information about accessing past and future webinars, please visit [the Webinar Portal for Sustainable Forests](#).

**\*Webinars offered by the U.S Forest Service Remote Sensing Applications Center (RSAC)** include three varieties. The lightning talks (**Lightning Talk**) are very short presentations that will last approximately 15 minutes; they will focus on specific geoprocessing tasks and are designed to provide concise and useful information in a very efficient manner. The Awareness Sessions (**Awareness**) are designed to build your knowledge base on the particular topic and enable you to further explore the technology with realistic expectations. The Technical Training Webcasts (**Technical**) are designed to provide you with the technical skills and

tools to complete remote sensing geoprocessing tasks. **Note: If you don't have access to the Forest Service Intranet, the registration links will not work. Please email Brent Mitchell ([brentmitchell@fs.fed.us](mailto:brentmitchell@fs.fed.us)) to make accommodations.**

- **[The Terrestrial Ecological Unit Inventory \(TEUI\)](#)** - (**Technical**) The Geospatial Toolkit v5.1 is an ArcGIS 10.0 and above extension used to stratify landscapes and analyze environmental characteristics with geospatial data. In this course you will learn the basics of using TEUI to access geospatial data, generate statistics and visualize them with graphs and tables, design a sampling scheme, and characterize map units. This webinar will be conducted from **10:00 am – 4:00 pm (Mountain Time) on October 20<sup>th</sup>, 2015**. [Click here to register or for additional information](#).
- **[Mapping Features using Historical Aerial Imagery](#)** - (**Awareness**) This one-hour awareness webinar includes information for obtaining and preparing historical aerial imagery that can then be used to map features and collect historical data. The workflow presented in this webinar was developed for the Cumulative Soil Impact Mapping project, where historical imagery was used to map soils that had been damaged by heavy equipment during timber harvests and fire suppression activities. This workflow may be relevant for many other projects that require the use of historical aerial imagery for mapping features. This webinar will be conducted from **10:00am – 11:00am (Mountain Time) on October 22<sup>nd</sup>, 2015**. [Click here to register or for additional information](#).
- **[Lidar Derivatives: Raster Geoprocessing and Analysis](#)** - (**Technical**) This 1-day webinar focuses on how to use lidar derivatives for various analyses. Lidar derivatives such as canopy height, canopy cover, and digital elevation models can be used in analyses to derive or predict additional characteristics of the forest and landscape. These may include forest stratification (stand delineation), habitat suitability models, or modeling stream networks. This webinar will be conducted from **10:00am – 4:00pm (Mountain Time) on October 29<sup>th</sup>, 2015**. [Click here to register or for additional information](#).
- **[Overview of the New “Existing Vegetation Classification, Mapping and Inventory Technical Guide \(EVTG\)” Training Modules](#)** - (**Awareness**) Mapping activities are key to helping to fulfill the Forest Service’s Mission. To provide national standards and guidelines to the agency for conducting such activities, Ecosystem Management Coordination managed the development of a new version of the [Existing Vegetation Classification, Mapping and Inventory Technical Guide \(EVTG\)](#). RSAC assisted with the development of the new EVTG and has also put together two awareness modules in the form of online tutorials for Sections 3.1 and 3.2 within Chapter 3 which is the Mapping portion of the EVTG. This Awareness session will provide an overview of what is covered in each of the module’s and some additional information about key concepts and elements of vegetation mapping activities that will help you understand how to prepare for a vegetation mapping project. This webinar will be conducted from **10:00am – 12:00pm (Mountain Time) on November 4<sup>th</sup>, 2015**. [Click here to register or for additional information](#).
- **[Using NAIP Imagery for Resource Applications](#)** - (**Awareness**) This 1-hour awareness session focuses on describing characteristics common to NAIP imagery, and providing some guidelines and examples for using NAIP imagery in

resource applications. The types of NAIP image products available, where and how you can acquire them, and how you can use NAIP imagery in some of your own resource projects will also be described. This webinar will be conducted from **10:00am – 11:00am (Mountain Time) on November 5<sup>th</sup>, 2015**. [Click here to register or for additional information](#).

- [Introduction to Image Interpretation](#) - (**Technical**) This 1-day hands-on webinar will provide users with the basic concepts of aerial photography, where to get it, how to interpret it and how to extract information from it. In addition, the course will provide users with knowledge of free tools available for information extraction from high resolution imagery in ArcMap – namely we will be using the Image Sampler and Canopy Cover tools. This webinar includes lectures, demos and hands-on exercises and will be conducted from **10:00am-4:00pm (Mountain Time) on November 19<sup>th</sup>, 2015**. [Click here to register or for additional information](#).
- [Using Fusion \(with lidar data\)](#) - (**Technical**) Fusion is a lidar visualization and analysis software suite developed by the Silviculture and Forest Models Team of the Pacific Northwest Research Station. Fusion is readily installed and will run on corporate hardware. This course is designed to assist users in understanding their Lidar data through display, visualization and interactive measurements. Ultimately you will learn how to extract GIS information products from the lidar data that are easily integrated into your geospatial workflow. This webinar will be conducted from **10:00am – 4:00pm (Mountain Time) on December 3<sup>rd</sup>, 2015**. [Click here to register or for additional information](#).
- [Large Lidar Acquisition Processing – Advanced Workflows](#) - (**Technical**) This one day webinar will explore the complexities, and potential work-flows, for processing large lidar datasets to extract canopy structure metrics in the form of seamless ArcGIS raster products. Participants will walk away with the tools and knowledge to apply the workflow to their existing lidar datasets. This webinar will be conducted from **10:00am – 4:00pm (Mountain Time) on December 8<sup>th</sup>, 2015**. [Click here to register or for additional information](#).
- [Introduction to Python for Geoprocessing](#) - (**Technical**) The objective of this one-day introductory workshop is to help participants get started scripting in Python to streamline their geospatial workflows. The course will introduce fundamental concepts and explore a variety of Python data structures, methods, applications and resources. Participants will have the opportunity to apply their knowledge in a set of technical exercises representing simple GIS workflows using *arcpy* with an emphasis on raster geoprocessing. This webinar will be conducted from **10:00am – 4:00pm (Mountain Time) on December 10<sup>th</sup>, 2015**. [Click here to register or for additional information](#).

## Job Opportunities

**The University of Georgia, Warnell School of Forestry and Natural Resources** is currently advertising for an assistant professor position in forest pathology. This is an academic year (9-month, 0.75-EFT), tenure-track, 0.50-

EFT research, 0.25-EFT teaching appointment offered at the rank of Assistant Professor. This position reports directly to the Dean of the Warnell School of Forestry and Natural Resources (Warnell School). The successful candidate will be expected to develop an active research program based on extramural funding. Individuals with experience in fungal pathogens, introduced pathogens, genomic and genetic approaches, and/or field diagnosis and management of forest diseases are especially encouraged to apply. The successful candidate will also be expected to teach or co-teach forest health and protection at the undergraduate level, and develop graduate level courses in their area of expertise. The successful candidate is also expected to help further develop the Warnell School's Forest Biology program, advise/mentor undergraduate professional students, serve on Senior Project/Thesis advisory committees, direct/mentor graduate students, serve on School/University committees, and actively participate in professional /scientific societies. Applicants must have a Ph.D. degree, at least one degree in forestry or a related natural resource management field, and appropriate training and experience in plant pathology. Evidence of research productivity and the potential to attract external research funding is required. The person must also demonstrate the ability and commitment to teach undergraduate and graduate courses, and be able to successfully mentor students. [Georgia](#) is well known for its quality of life, both in terms of outdoor and urban activities ([www.georgia.gov](http://www.georgia.gov)). The [University of Georgia](#) ([www.uga.edu](http://www.uga.edu)) is a land/sea grant institution comprised of 16 schools and colleges, and is located <90 miles from Atlanta. Enrollment is about 35,000 undergraduate, graduate, and professional students. The [Warnell School](#) is a professional school with 60 faculty, 350 undergraduates, and 210 graduate students ([www.warnell.uga.edu](http://www.warnell.uga.edu)). The School offers Bachelor of Science, Master of Forest Resources, Master of Natural Resources, Master of Science, and Doctor of Philosophy degrees in the areas of Forestry, Fisheries and Wildlife, Natural Resource Recreation and Tourism, and Water and Soil Resources. The School has a 740 acre (300 hectare) forest <10 minutes from campus and 23,000 acres (9,200 hectares) of forestland across the state for teaching and research. A research group from the [U.S. Forest Service Southern Research Station](#) ([www.srs.fs.usda.gov](http://www.srs.fs.usda.gov)) is located next door on campus. To ensure full consideration, candidates must submit a single PDF file including a cover letter, curriculum vitae, statement of teaching and research interests, unofficial transcripts of all college-level work, copies of up to three recent publications, and contact information for 3 references. Review of complete applications will begin on **December 1, 2015** and continue until the position is filled. Individuals considered for potential interviews will be required to submit official college transcripts and 3 letters of reference. University policy requires all candidates to consent to a background investigation ([www.hr.uga.edu](http://www.hr.uga.edu)). Finalists will be required to provide a signed consent form authorizing the University to conduct a background check. The background investigation will be conducted on a post offer/pre-employment basis. The starting date is negotiable, but no later than August 2016. Send applications electronically as a single PDF file to: Dr. Campbell Nairn, Chair, Forest Pathology Search Committee, Warnell School of Forestry and Natural Resources, University of Georgia, Athens, GA 30602; [nairn@uga.edu](mailto:nairn@uga.edu). *The University of Georgia is an Equal Opportunity/Affirmative Action employer. All qualified applicants will receive consideration for*

*employment without regard to race, color, religion, sex, national origin, disability, gender identity, sexual orientation, or protected veteran status.*

## **PUBLICATIONS OF INTEREST**

1. **Filip, Gregory M.; Bronson, Joshua J.; Chadwick, Kristen L.; Filip, Jeremy B.; Frankel, Susan J.; Goheen, Donald J.; Goheen, Ellen M.; Mori, Sylvia R.; Saavedra, Angel L.** 2015. Precommercial thinning in mixed-species conifer plantations affected by *Armillaria* and *Heterobasidion* root diseases in west-central Oregon and Washington: 30-year results. *Forest Science*. 61(5): 914-925.
2. **Iannone, B.V.; Oswalt, C.M.; Liebhold, A.M.; Guo, Q.; Potter, K.M.; Nunez-Mir, G.C.; Oswalt, S.N.; Pijanowski, B.C.; Fei, S.** 2015. Region-specific patterns and drivers of macroscale forest plant invasions. *Diversity and Distributions*.21:1181-1192. DOI: 10.1111/ddi.12354
3. **Potter, K.M.; Conkling, B.L.** 2015. Forest health monitoring: national status, trends, and analysis 2014. . General Technical Report SRS-209. Asheville, North Carolina: U.S. Department of Agriculture, Forest Service, Southern Research Station. 190 p. available online on the [Southern Research Station website](http://www.srs.fs.usda.gov/pubs/49266). (<http://www.srs.fs.usda.gov/pubs/49266>)

## **FOR MORE FHM INFORMATION**

Visit the [FHM homepage](#) and the [Forest Health Portal](#)  
or access both via the [USDA Forest Service homepage](#)