

Forest Health Monitoring Program

Monthly Update

June 2018

WHAT'S NEW

Get to know FHM. This month get to know the **cooperative relationship with State partners.** FHM has been a cooperative program from the beginning. An important partnership exists between the U.S. Forest Service and the National Association of State Foresters. State participation has been and continues to be vital to the success of FHM. Here are some important examples of how State employees participate in and contribute to FHM.

- Active roles on the FHM [Management Team](#).
- Participating in FHM national workshops, actively contributing to development of FHM focus and effectively communicating information.
- Partners in aerial survey activities. While participation takes a different form from State to State, activities may include sharing responsibility for locating and contracting for appropriate aircraft, making observations, ground checking, and editing and summarizing data.
- Exploring specific issues affecting forest ecosystems via Evaluation Monitoring projects.
- Preparing or sharing responsibility for preparing the [Forest Health Highlights](#), annual reports highlighting the most important forest health issues in each State.
- Providing contacts for analysts with questions about specific issues in a State.

To find the coordinator for any State, contact the appropriate regional State representative on the [Management Team](#).

Swiss Needle Cast (SNC) Story Map - In 2018, an aerial survey to map stands with moderate and severe SNC damage was conducted from British Columbia to northern California. SNC is caused by the native fungus *Nothophaeocryptopus gaeumannii* and affects only Douglas-fir. Symptoms are yellowing and premature needle loss. The host-pathogen interaction is unique, because of the intensity of the disease in the Pacific Northwest where both the fungus and its host tree are native. Foliage loss does not directly kill trees, but can reduce tree volume growth by more than 50 percent and decrease long-term survival. SNC also alters wood properties which can lower the value of certain lumber products, hinder the development of stand structure and wildlife habitat, and limit stand management options. The disease is present wherever Douglas-fir grows but has become particularly damaging to Douglas-fir forests near the Pacific Ocean. A [story map](#) describes the disease and results of the 2018 survey. For more information about this survey or electronic data, please contact Ben Smith (U.S. Forest Service) at bsmith02@fs.fed.us.

UPCOMING EVENTS

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

August 5-10, 2018. Mt. Sterling, OH. The 6th International Workshop of the Genetics of Host-Parasite Interactions in Forestry. The workshop is titled *Tree Resistance to Insects & Diseases: Putting Promise into Practice*. The call for abstracts for oral and poster presentations is now open. The due date for abstracts was January 21, 2018. Lodging reservations needed to be made by February 1, 2018. For more information contact the [workshop web site](#). Because the size will be limited to 110 participants, for planning purposes please contact Richard Sniezko (rsniezko@fs.fed.us) or Jennifer Koch (jkoch@fs.fed.us) and specify if you plan to attend, may attend, or will not attend but want to be on the Tree Resistance mailing list. Sending this email is not a commitment to attend the meeting.

UPCOMING WEBINARS

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

June 12, 2018 at 1:00 p.m. Eastern time. Promoting Urban & Community Forestry through Staffing, Volunteer Groups, Tree Boards, & Ordinances. (Sponsored by Southern Regional Extension Forestry) Speaker: Dr. Brian Wolyniak (Urban and Community Forestry Educator, Southwestern Pennsylvania, Penn State University Extension). The success of community forests relies on good management by municipal staff, volunteer groups, and tree boards framed around well-written ordinances. This presentation will explore the role of these components in promoting a healthy community forest. Discussion will include the role Extension educators can play in promoting community forestry through educational programs as well as by direct assistance to communities in the development of effective ordinances and establishment of tree boards. Examples will be provided along with resources on how to promote and develop effective community forestry programs. No pre-registration is required! CEU applied for: Society of American Foresters – 1 hour Category 1 credit; New York Logger Training - .25 hour NYLT TLC Credit. CEU available: International Society of Arboriculture – 1 hour ISA Certified Arborist credit. To access this free webinar, visit the [webinar information site](#). Plan to join the webinar 15 minutes early.

***June 19, 2018 at 12:00 p.m. Mountain Daylight time. Balsam Woolly Adelgid: The Smallest and Biggest Reason to Reconsider the Importance of Subalpine Fir.** (Sponsored by Utah State University Forestry Extension) Speakers: Dr. Fred Hain (Professor Emeritus, North Carolina State University) and Dr. Steve Cook (Professor, University of Idaho). Forest Service staff have noted widespread and rapid subalpine fir mortality across forests in western Idaho and Utah. The non-native, invasive balsam woolly adelgid (BWA), *Adelges piceae* Ratzburg, was confirmed as the primary insect responsible for large areas of subalpine fir mortality in Utah on September 6, 2017. This webinar will provide background on the current status of the true fir host type in Utah and beyond. Webinar content will explain biology, ecology and movement of BWA and how this insect kills trees. We will also discuss practical skills for field identification and current management options. Drawing on our current collaborative efforts, the webinar will close with a

question answer session hosted by several entomologists. CEU available the day of the webinar: To register for this free webinar symposium, visit the [webinar registration site](#). Plan to join the webinar 15 minutes early.

Past webinars from the Learn at Lunch Live Webinars series sponsored by the Utah State University Forestry Extension are available for viewing at the following [website](http://forestry.usu.edu/videos-conferences-webinars/webinars/index) (<http://forestry.usu.edu/videos-conferences-webinars/webinars/index>).

*Webinars and other information from **The National Academies of Sciences, Engineering and Medicine study, *The Potential for Biotechnology to Address Forest Health***, are posted on the [study web site](#). Visit the web site for more information.

*Webinars and other information about **Citizen Science and the U.S. Forest Service** are posted on the [Citizen Science web site](#). Visit the web site for more information.

*Webinars offered by the U.S Forest Service Geospatial Technology and Applications Center (GTAC) include three varieties. The lightning talks (**Lightning Talk**) are very short presentations that will last approximately 15-30 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 geospatial tasks. **GIS** listed after presentation type indicates GIS training. **RS** listed after the presentation type indicates remote sensing training. **Note: If you don't have access to the Forest Service Intranet, the registration links will not work. Please email what class you want to take to (geotrainingadmin@fs.fed.us) and they will register you manually.**

- **June 14, 2018 at 10:00 am – 12:00 pm (Mountain Time) [Introduction to Forest Service Geospatial Resources](#) (**Awareness – GIS**) [Forest Service Only](#)** This course is for people who are new to the Forest Service or new to GIS and need to learn about the geospatial data, protocols, and platforms available in the Forest Service. PLEASE NOTE: This course will not teach you how to use specific GIS software. If you are new to GIS, we recommend you take the GSTC ArcGIS 10.3 Quick Start class, or the Introduction to ArcGIS Online course.
- **June 19, 2018 at 10:00 am – 4:00 pm (Mountain Time) [Survey 123 Form Creation](#) (**Technical - GIS**) [Forest Service Only](#)** Create survey forms for the Survey123 app using the Survey123 web application and Survey123 Connect. Create simple smart forms with relevant questions and drop down lists. Customize the look of your form. Analyze resulting survey data and create AGOL map. A Forest Service ArcGIS (AGOL) account and Survey123 Connect software are required for this course.

Audience: Forest Service employees ready to move their paper and electronic forms into Survey123.

- **June 28, 2018 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 – Editing](#) (Technical - GIS)** This class demonstrates editing environment in ArcGIS Desktop 10.3. You will be exposed to the new editing environment. The course covers editing attribute data, performing spatial edits, and creating new data (digitizing). The hands on exercises teach basic editing functionality.
- **July 11, 2018 at 10:00 am – 4:00 pm (Mountain Time) [Collector for ArcGIS in the Forest Service](#) (Technical - GIS) **Forest Service Only**** This introductory webinar covers GPS data collection using the Collector app on a tablet or smart phone. You'll need a smart phone or tablet, WI-FI for your device to connect to, and a Forest Service ArcGIS Online account for this course. See [course description](#) for more details. *Outside partners are welcome to join the class if certain requirements are met.
- **July 18, 2018 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 – Advanced Editing](#) (Technical - GIS)** NEW Course! Participants will learn how to work with the Advanced Editing Toolbar in ArcMap; practice using geodatabase topology to find and fix errors; and automate editing through a vertical integration tool that aligns Forest Service data with existing reference data.
- **July 19, 2018 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 – Geoprocessing](#) (Technical - GIS)** Do MORE with your data! The Analysis toolbox puts POWERFUL tools right at your fingertips. This course covers 19 of the 21 tools in the Analysis toolbox found right in ArcMap. Whenever you need to solve a spatial or statistical problem, look to the Analysis toolbox.
- **July 24, 2018 at 10:00 am – 4:00 pm (Mountain Time) [Introduction to ArcGIS Online](#) (Technical - GIS) **Forest Service Only**** This course covers how the Forest Service administers ArcGIS Online using roles and privileges, and how we leverage Forest Service data in this WebGIS platform. Participants will learn how to use AGOL to create simple web maps, create and manage groups, create a Story Map Journal web app, and learn how to work with ArcGIS Collector. Included in the course is an optional lesson on further exploring Story Maps by creating a Tour App. **Note: This is not an introductory course for ArcGIS Desktop. If you are interested in an introductory training in ArcGIS, please see our ArcGIS 10.3 Quick Start course.
- **July 25, 2018 at 10:00 am – 4:00 pm (Mountain Time) [Survey 123 Form Creation](#) (Technical - GIS) **Forest Service Only**** Create survey forms for the Survey123 app using the Survey123 web application and Survey123 Connect. Create simple smart forms with relevant questions and drop down lists. Customize the look of your form. Analyze resulting survey data and create AGOL map. A Forest Service ArcGIS (AGOL) account and Survey123 Connect software are required for this course. Audience: Forest Service employees ready to move their paper and electronic forms into Survey123.
- **July 26, 2018 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS Pro for ArcMap Users](#) (Technical - GIS) **Forest Service Only**** New Course! **USFS organizational account for AGOL and ArcGIS Pro required, see other info for more details** This course is designed as a crosswalk

between using ArcGIS Desktop and ArcGIS Pro. This course provides a hands on introduction to participants of Pro's new user interface and project management. Participants will walk through common workflows previously performed in ArcMap/Catalog such as navigation, editing, analysis, sharing, symbolizing, creating a layout, geoprocessing, importing maps and data, and querying. ArcGIS Pro is a projects based application. A project contains maps, layouts, layers, tables, tasks, tools, and connections to servers, databases, folders, and styles. Projects can also incorporate content from your organization's Portal or ArcGIS Online accounts.

PUBLICATIONS OF INTEREST

1. Bontemps, A.; Wright, J.; Sniezko, R.; Savin, D.; Schmitt, J. 2018. Using historical provenance test data to understand tree responses to a changing climate in sugar pine (*Pinus lambertiana*). In: Schoettle, A.W.; Sniezko, R.A.; Kliejunas, J.T., eds. 2018. Proceedings of the IUFRO joint conference: Genetics of 5-needle pines, rusts of forest trees, and Strobosphere: 2014 15-20, Fort Collins, CO. Proc. RMRS-P-76. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. p. 99.
2. Kinloch, Jr, B.B.; Sniezko, R.A.; Savin, D.P.; Danchok, R.; Kegley, A.; Burton, D.; Dunlap, J. 2018. Patterns of variation in blister rust resistance in sugar pine (*Pinus lambertiana*). In: Schoettle, A.W.; Sniezko, R.A.; Kliejunas, J.T., eds. 2018. Proceedings of the IUFRO joint conference: Genetics of 5-needle pines, rusts of forest trees, and Strobosphere: 2014 15-20, Fort Collins, CO. Proc. RMRS-P-76. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. pp. 124-128.
3. Munck, I.A.; Bonello, P. 2018. Modern approaches for early detection of forest pathogens are sorely needed in the United States. *Forest Pathology*. 2018; e12445. <https://doi.org/10.1111/efp.12445>
4. Potter, K.M. 2018. Do United States protected areas effectively conserve forest tree rarity and evolutionary distinctiveness? *Biological Conservation*. 224:34-46. DOI:10.1016/j.biocon.2018.05.007.
5. Sniezko, R.A.; Danchok, R.; Long, S.; Savin, D.P.; Kegley, A; Mayo, J.; Hill, J. 2013. Growth and survival of sugar pine though age 25 in six progeny tests on sites of low to high blister rust hazard in southwest Oregon. In: Browning, J., Comp. 2013. Proceedings of the 60th annual western international forest disease work conference. 2012 October 8-12., Tahoe City, CA. Cottage Grove, OR: U.S. Department of Agriculture, Forest Service, Dorena Genetic Resource Center. pp. 167-170.
6. Sniezko, R.A.; Danchok, R.; Savin, D.P.; Kegley, A.; Long, S. 2018. White pine blister rust infection dynamics over 25 years in sugar pine (*Pinus lambertiana*) progeny tests on six sites rated as low, mid, and high rust hazard in southern Oregon, U.S.A. In: Schoettle, A.W.; Sniezko, R.A.; Kliejunas, J.T., eds. 2018. Proceedings of the IUFRO joint conference:

Genetics of 5-needle pines, rusts of forest trees, and Strobosphere: 2014 15-20, Fort Collins, CO. Proc. RMRS-P-76. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. p. 223.

FOR MORE
FHM
INFORMATION

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