

Forest Health Monitoring Program Monthly Update May 2017

UPCOMING EVENTS

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

June 5-9, 2017. Bangor, Maine. 18th International Boreal Forest Research Association Conference. The theme of the conference is “Our Boreal, Our Future: The Science, Policy and Practice of addressing change. Check the International Boreal Forest Research Association [web site](#), for **important updated information**.

***June 13-15, 2017.** Lafayette, IN. The Thousand Cankers Disease Research & Management Operational Meeting. The purpose of the meeting is to receive and review all survey, research and regulatory activity of the impacted states and agencies. A goal is to determine and suggest direction for thousand cankers disease (TCD) research, management and regulation. Invitation goes to all states and agencies impacted in some manner by TCD. At the end of meeting, state regulatory people and others will discuss update/changes to quarantines and management practices and suggest research direction. If you have a research topic or other topic you feel would benefit the meeting, please let Liz Jackson (jackson@purdue.edu) and Phil Marshall (PMarshall@dnr.IN.gov) know as the goal is report on all information related to TCD. The Courtyard by Marriott in Lafayette is the meeting site and the meeting is in conjunction with the Walnut Council National Meeting June 11-14. **The hotel reservations date is extended to May 18.** Use Walnut Council to get the meeting rate for the rooms. There is **NO Registration Fee** for the TCD meeting. There is an additional charge if you want to attend the Walnut Council banquet on Tuesday June 13. An updated TCD meeting agenda and hotel and travel information is available at [the TCD website](#), [the National Plant Board website](#) or [the Hardwood Tree Improvement & Regeneration Center website](#).

June 19-22, 2017. Edmonton, Alberta, Canada. The 11th North America Forest Ecology Workshop (NAFEW). Hosted by the University of Alberta, the theme will be: *Sustaining Forests from Restoration to Conservation*. There will be a special session on the great North American aspen transect, as well as sessions on resilience, thresholds, forest understory, climate change/disturbance, and modeling complexity, and more! The conference will include one-day in-conference field trips to see both natural and industrial landscapes. Further details and regular updates can be found at the [conference web site](#).

October 24-26, 2017. Park City, Utah. 2017 Forest Inventory and Analysis Science Stakeholder Meeting: Doing more with the Core. The US Forest Service, Forest Inventory and Analysis (FIA) Program is pleased to announce the 2017 FIA Science Stakeholder Meeting. The theme of the 13th biennial Science Stakeholder Meeting is Doing More with the Core, emphasizing innovation around how FIA analyzes, augments, and delivers information derived from its central data collection operations. 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. The first call for presentations is available. Presentation abstracts are due **May 5, 2017**. For more information about the meeting including lodging, call for papers, author standards, and manuscript guidelines, visit [the meeting web site](#).

***October 24-26, 2017.** Knoxville, TN. Oak Symposium: Sustaining Oak Forests in the 21st Century through Science-based Management. This symposium is the third in a series that began in 1992 and continued in 2002. The purpose of the symposium is technology transfer of state-of-the-art management and research for sustainability of oaks in the Central Hardwood Region. Topic to be covered by invited speakers are prescribed fire, silviculture, economic markets, forest health, and climate change of upland oak forests. There will be a poster session (abstracts accepted until **July 15, 2017**), and a field tour to showcase collaborative research among the University of Tennessee (UT) Forest Resources Research and Education Center, the UT Tree Improvement Program, and the USDA Forest Service Southern Research Station. For complete information about the symposium including lodging and registration, visit the [conference website](#).

November 15-19, 2017. Albuquerque, New Mexico. The 2017 Society of American Foresters National Convention. For complete information about the convention as it becomes available, visit the [convention web site](#).

UPCOMING WEBINARS

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

***Learn at Lunch Live Webinar: Managing Trees During Drought Conditions.** (Sponsored by the Utah State University Forestry Extension)
Speaker: Dr. Heidi Kratsch (State and Area Horticulture Specialist, University of Nevada Cooperative Extension). This presentation will outline the impacts of drought on trees and the multiple strategies needed to protect them. During periods of drought, the knee-jerk response in many communities is to remove all lawn areas in the name of water conservation. If trees in those landscapes had been dependent on lawn irrigation to survive, they will suffer. Dr. Kratsch will focus on proper irrigation of trees, with and without surrounding turf areas, and how to manage irrigation of trees throughout their life cycle for good health. She will also discuss tree selection for long-term urban forest resiliency. 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. (MDT) on May 9, 2017**. To access this free webinar, visit [the registration site](#). Plan to access the site a few minutes early.

***Climate Change and U.S. Forests.** (Sponsored by Southern Regional Extension Forestry and Forest Service Office of Sustainability and Climate)
Speakers: Dr. David Reidmiller (Director, National Climate Assessment U.S. Global Change Research Program); Dr. Margaret Walsh (Senior Ecologist, USDA, Office of the Chief Economist); Dr. James Vose (Senior Research

Ecologist, U.S. Forest Service, Southern Research Station); Dr. Dave Peterson (Senior Research Biologist, U.S. Forest Service, Pacific Northwest Research Station). Every four years, the U.S. Global Change Research Program conducts a National Climate Assessment for major resource sectors in the United States. The current Assessment is now in progress. A team of scientists working on the Forest sector has developed an early draft report describing major issues and potential management responses. Your feedback on this early draft is needed to inform completion of the report. Please join us to get a preview of the Forest sector report, ask questions, and provide comments. No pre-registration is required! CEU applied for: New York Logger Training – 0.25 hour NYLT TLC Credit; Society of American Foresters – 1 hour Category 1 Credit. This webinar will be conducted at **2:00 p.m. (EDT) on May 11, 2017**. To access this free webinar, visit [the webinar information site](#) for more details. Plan to join the webinar 15 minutes early.

***Weather Variability and Its Impacts on Forest Health.** (Sponsored by Southern Regional Extension Forestry / Forest Health and Invasive Species Program) Speakers: David Coyle (Southern Regional Extension Forestry and University of Georgia); Steve McNulty (USDA Forest Service, Southeast Regional Climate Hub); Jennifer Moore-Myers (USDA Forest Service, Southeast Regional Climate Hub). This webinar will discuss the impact weather and climate have on forest health and productivity. We will discuss short- and long-term impacts of droughts, floods, winds, and ice on insect and fungal populations and damage in southern forests. North America has experienced some intense weather events in recent years, with the drought that occurred in fall 2016 in the Southeastern U.S as the most recent example. This drought contributed to forest fires that ravaged forested areas across the region, particularly in the Gatlinburg, TN area. In 2015, Hurricane Matthew brought flooding to much of the Carolinas, and previous hurricanes have impacted natural areas in the same way. An ice storm in 2014 caused severe damage to timber in several Georgia counties. There is no doubt weather plays a major role in forest health and productivity. This webinar will cover the impacts of weather and climate on forest health and productivity, resistance and susceptibility to pests, and how we can better manage forests to deal with future weather-related issues. No pre-registration is required! CEU available: Georgia Master Timber Harvester – 1 hour CLE – Environmental Credit; Mississippi Professional Logging Manager – 1 hour Other Credit; Society of American Foresters – 1 hour Category 1 Credit; Texas Pro Logger Program – 1 hour Other Credit. This webinar will be conducted at **1:00 p.m. (EDT) on May 15, 2017**. To access this free webinar, visit [the webinar information site](#) for more details. Plan to join the webinar 15 minutes early.

2017 Digital Mobile Sketch Mapping (DMSM) Training. (Offered by the Forest Health Assessment and Applied Sciences Team [FHAAS] and the Geospatial Technology and Applications Center [GTAC]) **This training is intended for aerial surveyors**, regardless of background or prior experience using DMSM. Cross-training between surveyors and desktop tool users is also encouraged. The training is a hands-on, technical, day-and-a-half long training on the Digital Mobile Sketch Mapping (DMSM) system. In addition to giving participants an introduction to the structure and purpose of DMSM, this exercise-driven course will guide you through a project workflow with DMSM.

Day 1 of the training will focus on the Android tablet and the DMSM application and will include setup and data collection procedures. Day 2 is a half day, and will focus on the ArcMap Add-In, DMSM Desktop Tools, and teach participants to use these custom editing tools in ArcMap. Contact Nolan Cate (ncate@fs.fed.us) for information about prerequisites for the training. The training will be offered twice (they are both the same training and you are not required to go both, but please register for one):

Offering 2 [Register here](#)*

May 17: Tablet/DMSM app

May 18: Desktop Tools

**(For state-partners and non-FS personnel, you will not be able to access this link, please contact Nolan Cate ncate@fs.fed.us to get registered for the course)*

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 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. **RM** 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 Brenna Schwert (bmschwert@fs.fed.us) directly to make accommodations.**

- [ArcGIS 10.3 Quick Start](#) (**Technical - GIS**) Participants will learn how to get started using ArcGIS Desktop's primary applications, ArcMap and ArcCatalog. The course covers fundamental GIS concepts and basic functionality to view and manipulate display properties. The hands on exercises teach basic viewing functionality and GIS data types and their properties. **10:00 am – 4:00 pm (Mountain Time) on May 9-10, 2017**
- [ArcGIS 10.3 Geodatabases](#) (**Technical - GIS**) Participants will learn how to create a File Geodatabase, and import existing data, how to create attribute domains, and edit table-attribute values that are linked to those domains; and how to create Topologies. These topologies will be used to verify the vertical integration of spatially coincident feature classes. **10:00 am – 4:00 pm (Mountain Time) on May 11, 2017.**
- [Introduction to ArcGIS Online](#) (**Technical - GIS**) ****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. Participants will learn how to create simple web maps, create and manage groups, create a Story Map Journal web app, and learn how to work with ArcGIS Collector. This course also covers how to administer ArcGIS

Online and how roles and privileges relate. Included in the course is an optional lesson on further exploring Story Maps by creating a Tour App.

10:00 am – 4:00 pm (Mountain Time) on May 16, 2017

- [ArcGIS 10.3 Cartographic Tools](#) (**Technical – GIS**) Participants will learn how to work with various cartographic related properties in ArcGIS. The course covers how to set Layer and Data Frame properties, work with Layer files, assign classification symbology, work with labeling and annotation, and create a final map product. **10:00 am – 4:00 pm (Mountain Time) on May 17, 2017.**
- [ArcGIS 10.3 Editing in SDE](#) (**Technical - GIS**) In a multiuser editing environment, SDE is used to centrally store data and user edits without duplicating data. Versioning allows you to avoid the creation of redundant data while maintaining data snapshots and alternate views. In this webinar, you learn basic concepts and Forest Service workflows of versioning and techniques used to maintain database performance. This course will provide an overview of ArcGIS SDE geodatabases and discuss different methods of editing in a multi-user / SDE environment. **10:00 am – 4:00 pm (Mountain Time) on May 18, 2017.**
- [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 (digi). The hands on exercises teach basic editing functionality. **10:00 am – 4:00 pm (Mountain Time) on May 23, 2017.**
- [Introduction to Forest Service Geospatial Resources](#) (**Awareness - GIS**) NEW! 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. **10:00 am – 12:00 pm (Mountain Time) on May 24, 2017.**
- [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. **10:00 am – 4:00 pm (Mountain Time) on May 31.**
- [ArcGIS 10.3 Quick Start](#) (**Technical - GIS**) Participants will learn how to get started using ArcGIS Desktop's primary applications, ArcMap and ArcCatalog. The course covers fundamental GIS concepts and basic functionality to view and manipulate display properties. The hands on exercises teach basic viewing functionality and GIS data types and their properties. **10:00 am – 4:00 pm (Mountain Time) on June 6-7, 2017.**
- [ArcGIS 10.3 Working with Tables](#) (**Technical - GIS**) Participants will learn how to work with tabular information in ArcGIS. The course covers how to use different commands and functions within tables, query attribute data, and join and relate tables. Suggested Background: The prerequisites for this class are the Quick Start course or basic GIS skills (Participants must be open projects, load data, understand Data Frame and Layer properties, and be able manage GIS data in ArcCatalog). **10:00 am – 4:00 pm (Mountain Time) on June 14, 2017.**

- [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. **10:00 am – 4:00 pm (Mountain Time) on June 15.**
- [Introduction to ArcGIS Online](#) (**Technical - GIS**) ****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. Participants will learn how to create simple web maps, create and manage groups, create a Story Map Journal web app, and learn how to work with ArcGIS Collector. This course also covers how to administer ArcGIS Online and how roles and privileges relate. Included in the course is an optional lesson on further exploring Story Maps by creating a Tour App. **10:00 am – 4:00 pm (Mountain Time) on June 22, 2017.**
- [ArcGIS 10.3 – Spatial Statistics](#) (**Technical - GIS**) Participants will learn the basics of Spatial Statistics and ways in which you can explore spatial data using the Spatial Statistics toolset. This course covers measuring the distribution and relationship of spatial features and any significant patterns that may exist. Participants will also learn how to analyze patterns in spatial data and identify locations of statistically significant spatial clusters and/or dispersion. **10:00 am – 4:00 pm (Mountain Time) on June 27, 2017.**
- [ArcGIS 10.3 – Spatial Analyst](#) (**Technical - GIS**) ArcGIS Spatial Analyst provides a broad range of powerful spatial modeling and analysis capabilities. You can create, query, map, and analyze cell-based raster data; perform integrated raster/vector analysis; derive new information from existing data; query information across multiple data layers; and fully integrate cell-based raster data with traditional vector data sources. **10:00 am – 4:00 pm (Mountain Time) on June 28, 2017.**

Job Opportunities

The California Department of Forestry and Fire Protection is seeking a Senior Environmental Scientist (Forest Pest Management Specialist) to cover the northern region of the State. The specialist will work with private landowners, forest industry, homeowners, local and state governments, land managers and others in the identification and recommendations for control of forest insects, diseases and other forest health issues, conduct surveys and monitoring of native and exotic pests, do public outreach, training and education and a variety of other forest health related activities. The position is based at the northern regional headquarters in Redding, California, and is one of four regionally based forest pest management specialists. [Applications and further information](#) about the position can be found at the following address: <https://jobs.ca.gov/CalHrPublic/Jobs/JobPosting.aspx?JobControlId=63226>. All application materials must be submitted by the close of business on **May 12, 2017**. To be considered eligible for the position all applicants must take an online exam for Senior Environmental Scientist that rates the applicants educational and job experience and places the individual on a list of eligible applicants. The online exam [online exam](#) can be found at the following web

address: <https://jobs.ca.gov/>. For any questions or if you want any further information please contact Tom Smith (California Department of Forestry and Fire Protection) at 916-599-6882 or tom.smith@fire.ca.gov.

PUBLICATIONS OF INTEREST

1. **California Pest Council.** 2017. [2016 California forest health highlights](#). 29 p. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd538676.pdf or click on the title above.
2. **Eastern Forest Environmental Threat Assessment Center.** 2017. Forest ThreatNet, the March/April edition of the Eastern Forest Environmental Threat Assessment Center's newsletter. Available online: [The Forest ThreatNet](#).
3. **Hastings, J.M.; Potter, K.M.; Koch, F.H.; Megalos, M.; Jetton, R.M.** 2017. Prioritizing conservation seed banking locations for imperiled hemlock species using multi-attribute frontier mapping. *New Forests*. 48(2):301-316. DOI: 10.1007/s11056-017-9575-7.
4. **Hauff, Rob; King, Cynthia, contacts.** 2017. [Hawai'i forest health 2016 highlights](#). 6 p. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd538482.pdf or click on the title above.
5. **Potter, K.M.; Crane, B.S.; Hargrove, W.W.** 2017. A United States national prioritization framework for tree species vulnerability to climate change. *New Forests*. 48(2):275-300. DOI: 10.1007/s11056-017-9569-5.
6. **Potter, K.M.; Jetton, R.M.; Bower, A.; Jacobs, D.F.; Man, G.; Hipkins, V.D.; Westwood, M.** 2017. Banking on the future: Progress, challenges and opportunities for the genetic conservation of forest trees. *New Forests*. 48(2):153-180. DOI: 10.1007/s11056-017-9582-8.
7. **Smith, Sheri; Cannon, Phil; Bakke, David, contacts.** 2017. [Pacific Islands forest health 2016 highlights](#). 8 p. Available online: https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd538481.pdf or click on the title above.

FOR MORE FHM INFORMATION

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