

Forest Health Monitoring Program Monthly Update June 2019

WHAT'S NEW

Get to know FHM. This month get to know the new [Forest Health Monitoring Reporting web page](#) associated with the [FHM main web site](#). Have you ever wanted to find out what information has been published in the FHM annual national reports about a specific topic? Are you interested in drought, fire, fragmentation, crown condition, or lichens? Maybe you are interested in information about abiotic influences, whitebark pine, beetle infestation, or other insects and diseases. The [FHM reporting web page](https://www.fs.fed.us/foresthealth/publications/fhm/fhm-annual-national-reports.shtml) (<https://www.fs.fed.us/foresthealth/publications/fhm/fhm-annual-national-reports.shtml>) is now available and allows users to search all published FHM national report chapters online by entering a title word or keyword in the search box. Chapters, including the evaluation monitoring project summaries, from the FHM reports since the 2004 report are available. All the FHM annual national reports can be accessed as well. The reporting web page also provides access to other FHM publications, evaluation monitoring project information, archived Monthly Updates, and links to related digital resources. Current and archived State Highlights are available from the [FHM main web site](#). Take some time to explore the variety of information available from the FHM Program!

UPCOMING EVENTS

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

SAVE THE DATE! February 25-27, 2020. Raleigh, North Carolina. **The National Forest Health Monitoring (FHM) Workshop.** To be held at the Nature Research Center at the North Carolina Museum of Natural Sciences in downtown Raleigh, NC. This will be a working meeting that will draw State and Federal cooperators together to discuss forest health issues and make recommendations about the future direction of the FHM Program. Please save the date now; the agenda, and lodging and travel materials will be available as soon as possible. For further information, please contact FHM National Program Manager, Tom Eager at teager@fs.fed.us or 202-572-0387. Watch future *Monthly Updates* for updated information.

October 30-November 3, 2019. Louisville, Kentucky. The 2019 Society of American Foresters National Convention. The call for presentations is now available. The deadline for presentation and proposals for professional development seminars and workshops was March 31. The deadline for science

flashes and posters is **August 31**. For complete information about the convention as it becomes available, visit the [convention web site](#).

***November 19-21, 2019.** Knoxville, Tennessee. 2019 Forest Inventory and Analysis Science Meeting: Celebrating Progress, Possibilities, and Partnerships. The USDA Forest Service, Forest Inventory and Analysis (FIA) Program is pleased to announce the 2019 FIA Science Meeting, hosted by the U.S. Forest Service Southern Research Station and the National Council for Air and Stream Improvement, Inc. (NCASI). The theme of the 14th biennial Science is *Celebrating Progress, Possibilities, and Partnerships*, emphasizing innovation in maximizing use of the FIA “annual” sample design; development of delivery tools to meet client needs and take advantage of ever-expanding options for data visualization and communication; assuring data continuity and tools that support a variety of land management and National Forest System planning needs; integrating more powerful and efficient monitoring technologies and statistical techniques into established analysis lines; and supporting FIA’s expansion into areas such as enhanced timber product monitoring, improved carbon/biomass estimates, enhanced ownership study, land cover/use research, urban inventory, monitoring of Interior AK, and small area estimation. The Symposium brings together international forest scientists, managers, and stakeholders with regional, national, and international inventory and monitoring missions. The **second** call for organized sessions, presentations, and demonstrations (digital engagement including applications, tools, databases, websites, storymaps, digital poster) is available. The deadline for **oral presentation abstracts is June 28, 2019** and for **digital engagement abstracts is August 30, 2019**. Abstract must be submitted [online](#). Note that submitted abstracts will be distributed digitally at the meeting. Meeting presenters are encouraged to more fully document their contributions by submitting an extended abstract for inclusion in a General Technical Report to be published shortly after the conclusion of the meeting. Extended abstract submission details will be provided to all authors and made available on the meeting website. For more information, contact the meeting organizers at fa_science@fs.fed.us or visit the [symposium web site](#).

***January 8-10, 2020.** Valparaiso, Chile. 2020 World Conference on Natural Resource Modeling. This conference is organized annually by the Resource Modelling Association and brings together scientists, stakeholders, and students interested in mathematical modeling of renewable and exhaustible resources. The theme of the 2010 conference is *Decision support methods for natural systems at risk*. Early registration is open until **November 29, 2019**. The deadline for abstracts is **October 15, 2019**. For complete information, visit the [conference web site](#).

UPCOMING WEBINARS

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

***June 11, 2019 at 11:00 a.m. Eastern time. Forest Resources of the United States, 2017 – Supporting the 2020 RPA Assessment** (Sponsored by USDA Forest Service) Speaker: Sonja Oswalt (USDA Forest Service, Southern Research Station, Forest Inventory and Analysis). The nation's forest land area remains stable, but the composition and distribution of those forests is changing. The data supporting this assertion, along with other information on the status, condition, and trends in the nation's forest resources, are available in the USDA Forest Service's recently released report Forest Resources of the United States, 2017, and originate from the USDA Forest Service Forest Inventory and Analysis (FIA) Program. The report is a supporting document to the upcoming 2020 Resources Planning Act (RPA) Assessment that is mandated by Congress every 10 years. The Forest Resources of the United States report guides public and private investment dollars through forest health programs, recreation, tourism industries, and harvesting operations. This webinar will review some of the key findings, in addition to highlighting the scope of information available in the report and associated data tables. The report found that U.S. forest area – including lands covered by forest as well as the small woody species that grow in arid regions – has plateaued at 822.5 million acres. National forests managed by the USDA Forest Service account for 19% of the nation's forests. These forests are aging, with most tree stands more than 60 years old. Tree volume on national forest lands has continuously increased over the past decade with the exception of the Rocky Mountain region, which has experienced a decline due to wildfires, drought, and pine beetle infestation. Wildfires, insects, and disease are among the largest threats to forests and woodlands in the country. Increased accessibility from the country's expanding road network means that more people have the ability to avail themselves of the resources and benefits provided by forests, but also results in forest fragmentation that can impact forest health. No pre-registration is required! CEU applied for: New York Logger Training – Trained Logger Certification (NYLT-TLC) - .25 hour NYLT TLC Credit; Georgia Master Timber Harvester – Continuing Logger Ed. (GaMTH CLE) – 1 hour CLE Continuing Logger Ed Credit; Society of American Foresters – Certified Forester Education (SAF-CFE) - 1 hour Category 1 Credit; Certificate of Participation. To access this free webinar, visit the [webinar information site](#) for more details. Plan to join the webinar 15 minutes early.

***June 11, 2019 at 12:00 p.m. Mountain time. Remediating Compacted Soils Compromised by Urban Construction.** (Sponsored by the Utah State University Forestry Extension and The Treefund) Speaker: Dr. Nina Bassuk (Professor & Program Leader, Urban Horticulture, Cornell University). The effects of urban development write a profound signature on the landscape. Soils are inevitably compacted and regraded or paved over. We have developed techniques that can remediate these degraded soils and provide a long-term solution towards creating a sustainable landscape post construction. When

paving is not involved, we developed the ‘Scoop and Dump’ method soil remediation and have followed its effects over 12 years of practice, measuring soil health and plant growth over the long term. Briefly, it involves incorporating significant volumes of compost with a backhoe to create veins of compost for root growth and drainage in previously compacted soil. Moreover, this compost injection feeds the microorganisms which aid in soil aggregate formation the release of nutrients. This low impact solution to improving degraded soils holds real promise to help green the urban environment. CEU available: Society of American Foresters – 1 credit; International Society of Arboriculture – 1 credit; Landscape Architecture – 1 credit if viewed live. To register for this free webinar, visit the [webinar registration site](#). For more information about the continuing education credits, visit the [continuing education credit information site](#). Plan to join the webinar 15 minutes early.

***June 12, 2019 at 1:00 p.m. Eastern time. Planning in the Wildland-Urban Interface.** (Sponsored by USDA Forest Service National Urban Forest Technology & Science Delivery Team) Speakers: Miranda Mockrin (USDA Forest Service), Joe DeAngelis (American Planning Association), and Molly Mowery (Wildfire Planning International). The wildland-urban interface (WUI) - the area where human development borders or intermingles with forests or other wildlands - has grown rapidly over the last several decades. The WUI is also the area where communities are at increased risk to wildfire. With more communities located partially or entirely within the WUI, the need for planning guidance has become clear. In this webinar, Miranda Mockrin will present data on national WUI extent and growth (1990-2010), sharing trends in WUI expansion and a national WUI data set that planners and others can use for their work. Joe DeAngelis will introduce two recent publications from the American Planning Association that discuss the role of land use planning in community wildfire resilience. Molly Mowery will share community-based planning solutions from across the country that address current and future development in the WUI. Together, the speakers will address what community planners, urban foresters, and other allied professions need to know to tackle WUI challenges. No pre-registration is required! CEU applied for: Georgia Master Timber Harvester – Continuing Logger Ed. (GaMTH CLE) – 1 hour CLE Continuing Logger Ed Credit; Society of American Foresters – Certified Forester Education (SAF-CFE) - 1 hour Category 1 Credit; International Society of Arboriculture (ISA) – 1.25 hour ISA Management Credit; International Society of Arboriculture (ISA) – 1.25 hour ISA Certified Arborist Credit; International Society of Arboriculture (ISA) – 1.25 hour ISA Municipal Specialist Credit. CEU available: American Planning Assoc (AICP-CM) – 1 hour AICP – CM credit; Certificate of Participation. To access this free webinar, visit the [webinar information site](#) for more details. Plan to join the webinar 15 minutes early.

***June 25, 2019 at 1:00 – 4:45 p.m. Mountain time. Special 4-hr Webinar: Dealing with the Triple Threat Invasion – Cheatgrass, Medusahead, & Ventenata.** (Sponsored by the Utah State University Forestry Extension and The Southern Rockies Fire Science Network & Bayer) Invasive annual grasses

such as cheatgrass (*Bromus tectorum*), medusahead (*Taeniatherum caput-medusae*), and ventenata (*Ventenata dubia*) are devastating western natural areas and rangeland at a landscape scale. These grass invasions favor further invasions while eliminating desirable vegetation and wildlife habitat. Further impacts include: a continuous bed of fine fuel associated with an increase in frequency and intensity of rangeland wildfire; significant reduction or elimination of desirable perennial species; reduced forage quality for wildlife and livestock; increased risks for wildlife and pollinator species; and resulting wildfires that are a threat to humans, wildlife, property and infrastructure. Speakers will address all of these points, including current management tools for the “triple threat”, highlighting recent research conducted in multiple western states. CEU available: Society of American Foresters – 1 credit; International Society of Arboriculture – 1 credit; Landscape Architecture – 1 credit if viewed live. To register for this free webinar, visit the [webinar registration site](#) or if you are in Logan, Utah, [attend in person](#). **Note: on June 26 there will be a [field tour](#).** For more information about the continuing education credits, visit the [continuing education credit information site](#). Plan to join the webinar 15 minutes early. Speaker schedule:

1-1:15: Gloria Edwards, Southern Rockies Fire Science Network
1:15 – 1:45: Post fire impacts on families, Surprise Speaker
1:45 – 2:15: Overview of the invasive annual grass problem in the Great Basin, Tom Monaco, USDA-ARS Forest & Range Research Lab, Utah State University
2:15-2:45: Biology, impacts and management of *Ventenata dubia*, Tim Prather, Department of Plant Sciences, University of Idaho
2:45-3:00: BREAK
3:00-3:30: Working toward management solutions for invasive bromes, medusahead, and ventenata, Corey Ransom, Associate Professor/Extension Weed Specialist, Utah State University
3:30-4:00: Environmental benefits of restoring natural areas and rangeland, Shannon Clark, Postdoctoral Researcher, Colorado State University
4:00-4:30: Controlling annual grasses from a ranching perspective, Justin Hossfeld, Agricultural Management Specialist, Out West, LLC, Dayton, WY
4:30-4:40: Q & A; Wrap up

*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 12, 2019 at 10:00 am – 12:00 pm (Mountain Time) [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 13, 2019 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.
- **June 18, 2019 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.5 – Advanced Editing](#) (**Technical - GIS**)** 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.
- **June 27, 2019 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.

PUBLICATIONS OF INTEREST

1. **Gaydos, D.A.; Petrasova, A.; Cobb, R.C.; Meentemeyer, R.K.** 2019. Forecasting and control of emerging infectious forest disease through participatory modelling. *Phil. Trans. R. Soc. B* 374, 20180283. (doi:10.1098/rstb.2018.0283)
2. **Potter, K.M.; Escanferla, M.E.; Jetton, R.M.; Man, G.; Crane, B.S.** 2019. Prioritizing the conservation needs of United States tree species: evaluating vulnerability to forest insect and disease threats. *Global Ecology and Conservation*. 18(2019):e00622.
3. **Riitters, K.; Costanza, J.** 2019. The landscape context of family forests in the United States: anthropogenic interfaces and forest fragmentation from 2001 to 2011. *Landscape and Urban Planning*. 188:64-71.

FOR MORE FHM INFORMATION

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