Forest Health Monitoring Program
Monthly Update
July 2019

WHAT'S NEW

Get to know FHM. This month get to know the **aerial survey efforts** of FHM. Aerial detection surveys are used to collect data on insect, disease, and other visually conspicuous disturbances to forests. These data are available online and can be used to evaluate conditions at multiple spatial levels: local, State, and national. Aerial surveys are often a partnership between Federal and State personnel. The U.S. Forest Service's Forest Health Protection Program and the Aerial Survey Working Group, which was an outgrowth of FHM, have assembled national standards for data collection and reporting that allow the data collected across the country to be compatible for analysis. Participation in aerial surveys may take different forms from State to State, with State and Federal personnel sharing responsibility for locating and contracting for appropriate aircraft, making observations, ground checking, and editing and summarizing data. The Forest Health Assessment & Applied Sciences Team (FHAAST) has developed methods and tools for improving aerial survey data collection. Tools will be discussed more next month. Aerial survey data are available online.

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 on the **workshop webpage**. Please check the site periodically for updated information. You may also contact Chris Asaro (FHM South Regional Program Manager) at christopher.asaro@usda.gov or 404-347-2718 with questions.

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 has been extended to July 15, 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 fia_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)

***July 16, 2019 at 12:00 p.m. Mountain time. Spotted Lanternfly & Other Invasive Landscape Tree Pests.** (Sponsored by the Utah State University Forestry Extension and Utah State University Integrated Pest Management Group) Speaker: Dr. Lori Spears (Assistant Professor and Cooperative Agricultural Pest Survey [CAPS] Program Coordinator, Utah State University). Spotted lanternfly is an invasive planthopper that is native to parts of Asia and was first detected in the U.S. in Pennsylvania in 2014. Spotted lanternflies feed on a wide range of host plants, including grapes, fruit trees, hops, and hardwood ornamental trees. This presentation will cover the biology, identification, and possible control options for spotted lanternfly and other invasive landscape tree pests, such as emerald ash borer and Asian longhorned beetle. CEU available if viewed live: Society of American Foresters – 1 credit; International Society of Arboriculture – 1 credit; or a letter confirming attendance at the webinar. To register for this free webinar, visit the **webinar registration site**. Plan to join the webinar 15 minutes early.

*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.**

- **July 18, 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.

- **July 23, 2019 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. The GIS data and map setup is also discussed. You will need a smart phone or tablet, an internet connection for setting up the device, and a Forest Service ArcGIS Online account. Note: If the link does not work, email (geotrainingadmin@fs.fed.us) that you want to take this class and they will register you manually.

- **July 25, 2019 at 10:00 am – 4:00 pm (Mountain Time) ArcGIS Pro for ArcMap Users (Technical - GIS) Forest Service Only** **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.

- **July 30, 2019 at 10:00 am – 4:00 pm (Mountain Time) ArcGIS 10.5 - Editing (Technical - GIS)** This class demonstrates editing environment in ArcGIS Desktop 10.5. 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.

- **August 6-7, 2019 at 10:00 am – 4:00 pm (Mountain Time) ArcGIS 10.5 - 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.

- **August 14, 2019 at 10:00 am – 4:00 pm (Mountain Time) ArcGIS 10.5 - Editing in SDE (Technical - GIS) Forest Service Only** 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.

- **August 21-22, 2019 at 10:00 am – 4:00 pm (Mountain Time) ArcGIS 10.5 - Managing Forest Service SDE Geodatabases (Technical - GIS) Forest Service Only** This course is intended for unit GIS Coordinators or SDE Managers who are responsible for their ArcSDE Geodatabases. The class covers the skills needed manage ESRI ArcSDE geodatabases in the Enterprise Data Center (VDC) and Natural Resource Management (NRM) environments. Management includes loading data, coordinating access to the data, assuring the database is maintained by analyzing, rebuilding indexes and managing versions owned by other users. Users attending this class must have knowledge of ESRI geodatabases, familiarity with editing in a geodatabase and the responsibility for spatial data administration. If these are your job duties, this course is for you.

- **August 28, 2019 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. The GIS data and map setup is also discussed. You will need a smart phone or tablet, an internet connection for setting up the device, and a Forest Service ArcGIS Online account.

Job Opportunities

The U.S. Forest Service, Southwestern Region (R3), currently advertising a Supervisory Entomologist/Plant Pathologist Position (GS-0414/0434-13). The position serves as Zone Leader for New Mexico Zone of Forest Health Protection (FHP) and is responsible for providing long-range planning, program direction, coordination, evaluation of program activities and staff supervision; and professional assistance to Federal & State agencies and other partners. Duties listed include:

- The incumbent serves as the recognized scientific expert in FHP, including forest insect and pathogen identification, detection, evaluation, prevention and control.
- Conducts special evaluations, often collaborating with research contacts, to gain additional specific knowledge concerning insect/pathogen biology, ecological relationships, parasitic effects, survey methodology, or new control techniques.
- Provides coordination and liaison between staff and Federal/State/private/Tribal and managers regarding technical assistance, federally funded projects, and special projects needs to meet program objectives. In this capacity, the incumbent formulates plans, and organizes, coordinates, and directs FHP activities on forest lands in cooperation with resource managers.
- Responsible for developing reports and publications such as insect and disease conditions, forest pest leaflets, and other special publications to meet state, private, federal, and tribal land managers' needs. Develops written guidelines requiring a high degree of judgment which are incorporated into various resource project plans.
- Participates inter-regionally with upper-level management and zone leaders in formulating regional policies, programs, and standards for federally funded forest insect and disease prevention, suppression and restoration projects.
- Supervises professional and technical employees: assigns work and establishes quality standards; conducts performance reviews; effects minor disciplinary measures; and provides for the developmental and training needs of subordinates.
- Demonstrates leadership in establishing and maintaining a work environment that is free from discrimination and creates a sense of inclusion and support for all employees in the workplace.

For additional information about position duties, please contact Joel McMillin at 928-556-2073, joel.mcmillin@usda.gov or Don Vandendriesche at 505-842-3429, don.vandendriesche@usda.gov.For additional information about the position, including how to apply, view the full vacancy announcement **(19-SVJUL-INTRDS-FS4131-G-MR)** on the USA Jobs web site. **The announcement opened Wednesday, 07/02/19, and is scheduled to close Friday, 07/12/19**. Applicants should call/email the HRM Contact Center (877-372-7248, option 2) with questions on the application process. *USDA is an Equal Opportunity Employer.*

PUBLICATIONS OF INTEREST

1. **Bohne, M. J.; Rutledge, C.E.; Hanson, T.; Carrier, N. C.; Teerling, C.; Weimer, J.; Hoebeke,, E.R.; Lilja, R.L.; DiGirolomo, M.F.; Dodds, K. J.** 2019. Utilizing prey captures by Cerceris fumipennis (Hymenoptera: Crabronidae) for a survey of Buprestidae (Coleoptera) in New England, USA. The Coleopterists Bulletin. 73(2): 369-379. Available online: (https://doi.org/10.1649/0010-065X-73.2.369)

2. **Hanavan, R; Heuss, M.** 2019. Physiological response of ash trees, Fraxinus spp., infested with emerald ash borer, Agrilus planipennis Fairmaire (Coleoptera: Buprestidae), to emamectin Benzoate (Tree-Äge) stem injections. Arboriculture & Urban Forestry. 45: 132-138.

3. **Jenne, J.L.; Egan, J.M.** 2019. Mid-level summary of mountain pine beetle infestations and management throughout the northern region from 1909-1945. Forest Health Protection 19-05. Missoula, MT: U.S. Department of Agriculture, Forest Service, Region 1. Available online: (https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/fseprd637257.pdf)

FOR MORE FHM INFORMATION

Visit the FHM homepage and the Forest Health Portal
or access both via the **USDA Forest Service homepage**