

Forest Health Monitoring Program

Monthly Update

September 2017

WHAT'S NEW

The FHM Management Team consists of the FHM National Program Manager, the FHM Regional Program Managers, a State representative from each of the FHM regions, a representative from the FHM research work team, the National Program manager of Forest Inventory and Analysis (FIA), and the Director of the Forest Health Assessment & Applied Sciences Team (FHAASST). You may contact members of the management Team for more information about FHM activities in your region. The list of the current FHM Management Team members and contact information can be found on the [Management Team page of the FHM web site](#).

UPCOMING EVENTS

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

***October 16-17, 2017.** Logan, UT, Utah State University. Restoring the West Conference 2017. The theme of this conference is *Forest Restoration: What's Working, What's Not?* A variety of forest restoration experts will present case studies and discuss their experiences with forest restoration. There will be two days of plenary sessions along with a poster session and evening social. For complete information about the conference including registration (deadline is **September 30, 2017**), housing, poster submission, and the agenda, visit 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. Presentation abstracts were due May 5, 2017. For more information about the meeting including lodging (make reservation by **October 2, 2017** to get the government rate), call for papers, author standards, and manuscript guidelines, visit [the meeting web site](#). Note that registration closes at midnight on **October 6, 2017**.

***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. Topics 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 were 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 (online registration closes **October 3, 2017**), visit the [conference website](#).

***October 24-26, 2017.** Anchorage, AK. 2017 Alaska Invasive Species Workshop. Sponsored by Alaska's Committee for Noxious and Invasive Pests Management (CNIPM) and the University of Alaska Fairbanks Cooperative Extension Service. For more information about the meeting as it becomes available, visit [the Alaska invasives web site](#). The organizers of this workshop are always open to talks about the detection and management of invasives outside of Alaska. Note lodging reservations must be made by **September 23, 2017**. Please contact Tricia Wurtz (U.S. Forest Service, Region 10) at twurtz@fs.fed.us, if you have questions.

October 31 – November 2, 2017. Wilmington, NC. Bottomland and Swamp Forests Symposium. Hosted by the North Carolina Forest Service and North Carolina State University. The objective of this symposium is to bring stakeholders, researchers, and other interested groups together to discuss the past and current research knowledge on bottomland and swamp forests. The symposium will include technical sessions, a poster session, and exhibits. A comprehensive field tour is also planned for November 2. The deadline for poster abstract submission was September 1, 2017. Authors will be notified on or before September 8. The deadline for making lodging reservations is **September 30, 2017**. For complete information about the symposium including registration, visit the [symposium web site](#) or click on the following shortcut URL (<http://go.ncsu.edu/bottomland>).

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](#).

August 5-10, 2018. Mt. Sterling, OH. SAVE THE DATE! 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*. 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)

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

***September 14, 2017 at 2:00 p.m. Eastern time. Drought and Invasive Species.** (Sponsored by Southern Regional Extension Forestry and USDA Office of Sustainability & Climate) Speakers: Jon Keeley (U.S. Geological Survey, Three Rivers, CA); Cynthia Huebner (U.S. Forest Service, Northern Research Station, Morgantown, VA); and Louisa Evers (Bureau of Land Management, Portland, OR). Drought creates the potential for invasive plant species to increase in diversity and abundance in a variety of ecosystems, often mediated by the occurrence of disturbances (wildfire, insect outbreaks). Because the frequency and magnitude of droughts will increase in a warmer climate, scientific information on drought effects is needed to inform management and planning to ensure long-term sustainability of forest and rangeland ecosystems. This webinar will explore (1) current issues related to the effects of drought on invasive species, (2) examples of drought-related impacts on ecosystems, and (3) management options for increasing resilience. No pre-registration is required! CEU available: Georgia Master Timber Harvester – 1 hour CLE – Environment Credit; Society of American Foresters – 1.5 hour Category 1 Credit.. To access this free webinar, visit the [webinar information site](#) for more details. Plan to join the webinar 15 minutes early.

***September 20, 2017 at 11:00 a.m. Eastern time. Adaptation Forestry Practices for Climate Change Mitigation: a Field Study.** (Sponsored by Eastern Seed Zone Forum) Speaker: Dr. Julie R. Etterson (University of Minnesota Duluth, Department of Biology). Please join the USDA Forest Service Reforestation, Nurseries, and Genetics Resources' Eastern Seed Zone Forum for its seventh discussion about what it will take to create seed zone guidelines to serve as tools for improved collaborations and partnership in the region. In this webinar, Dr. Julie Etterson will present the results of the first climate-informed restoration project in the US Great Lakes forests region. This area will likely experience some of the most dramatic effects of climate change in the continental U.S.A. Simulation modeling indicates temperate tree species that currently occur in the region at low abundance levels (e.g., *Quercus rubra*, *Q. macrocarpa* and *Pinus strobus*) will be well-adapted to future climate conditions, but also demonstrates that the natural colonization rates of these species cannot keep pace with the rapidly changing climate leaving many suitable niches unrealized. Dr. Etterson and her team tested the efficacy of within-range planting of climate adapted species sampled from more than one seed transfer zone. In 2013 and 2014 they planted a total of 4,400 seedlings in sixteen sites using both local and seed sources from further south or west where climate conditions are warmer and drier. For three years (2014-2016), they assessed survival, growth, and spring and fall phenology. They compared the fit of the data using four models that featured contrasting factors: (1) seed transfer zones, (2) forest types, (3) geographical position, and (4) climate variables. No pre-registration is required! CEU applied for: New York Logger Training – .25 hour NYLT TLC Credit; Society of American Foresters - 1 hour Category 1 Credit. To access this free webinar, visit the [webinar information site](#) for more details. Plan to join the webinar 15 minutes early.

***September 26, 2017 at 12:00 p.m. (MDT). Learn at Lunch Live Webinar: LANDFIRE – All Lands Data from Vegetation to Fuels: Planning, Engagement, and Feedback.** (Sponsored by the Utah State University Forestry Extension) Speaker: Henry Bastian (Natural Resource Manager, Department of the Interior Office of Wildland Fire, Boise, ID). This webinar, led by LANDFIRE Business Lead Henry Bastian, will cover more than a decade old program (LANDFIRE) at producing and updating land cover data products across all 50 United States and insular areas. Although many have thought of LANDFIRE as only a wildland fire data set, the rich array of data layers and databases (vegetation type, cover, and height; successional state and transition models and database; to national plot and polygon databases) have fundamentally improved information integration and decision support for managers, scientists, and leadership across fire, habitat, and natural resources management. This presentation will explore the past comprehensive suite of data that leads to the future in advancing data integration, partnerships in authoritative data sources, and improving mapping change with engagement and user feedback as a key tenant. Consistent wall-to-wall data provide a strong foundation for the future national remap project with the goal of improved data quality. Federal, State, Tribal, Researcher, Academics, and local managers are provided with a consistent data framework that can be used across multiple levels and efforts. No registration is required! 1 CEU is available from the following organizations for those that watch this webinar live: International Society of Arboriculture, and Society of American Foresters. To access this free webinar, visit [the registration site](#). Plan to access the site a few minutes early. Past *Learn at Lunch Live Webinars* are available for viewing at the following website <http://forestry.usu.edu/videos-conferences-webinars/webinars/webinars>.

***October 4, 2017 at 1:00 p.m. Eastern time. Fall Cankerworm Biology, Ecology, and Management in Urban and Rural Landscapes.** (Sponsored by Southern Regional Extension Forestry) Speaker: Ms. Laurie Reid-Dukes (Assistant City Arborist, City of Charlotte). The fall cankerworm, *Alsophila pometaria*, is a moth native to North America whose caterpillars are commonly called inchworms. While this defoliator generally remains at low abundances, occasional outbreaks may occur. Defoliation rarely hurts the tree, but may act as a stress agent if prolonged outbreaks occur. This webinar will cover the biology and ecology of cankerworms, as well as management strategies. Management in urban areas as well as in rural areas will be covered. No pre-registration is required! CEU available: Georgia Master Timber Harvester – 1 hour CLE – Environment Credit; Mississippi Professional Logging Manager – 1 hour Other Credit; Texas Pro Logger Program – 1 hour Other Credit; Society of American Foresters - 1 hour Category 1 Credit. CEU applied for: New York Logger Training – .25 hour NYLT TLC Credit. To access this free webinar, visit the [webinar information site](#) for more details. Plan to join the webinar 15 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 Geospatial Technology and Applications Center (GTAC)** include three varieties. The lightning talks (**Lightning talks**) 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.**

- **September 12, 2017 at 10:00 am – 4:00 pm (Mountain Time) [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.
- **September 13, 2017 at 10:00 am – 4:00 p.m. (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.
- **September 14, 2017 at 10:00 – 4:00 pm (Mountain Time) [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.
- **September 19, 2017 at 10:00 am – 4:00 pm (Mountain Time) [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).
- **September 20, 2017 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.
- **September 21, 2017 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 - Using Citrix for GIS Projects](#) (**Technical - GIS**) [Forest Service](#)**

Only Participants will learn how to use GIS data to analyze a vegetation project proposal and prepare information for a NEPA analysis. Students will use the Forest Service Data Center and Citrix programs that allow for inter-discipline collaboration, and provides a central repository for all the project data. This course covers the process of finding, creating, managing, and analyzing GIS data in order to prepare outputs for a collaborative Forest Service Project.

- **September 26, 2017 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 Thematic Data 1 – Development and Classification](#) (Technical - GIS)** Learn the fundamentals of raster data and imagery including data extraction and exploration techniques and how to perform image classification using the ArcGIS Spatial Analyst extension and the Image Classification toolbar. Students will become familiar with - remote sensing principles such as: Raster types, their resolutions and essential properties; Concepts of multi band imagery including the display and interpretation of Landsat 7 & Landsat 8 Imagery; Data extraction and exploration techniques such as classifications and reclassifications to create valuable thematic datasets for use in project analysis.
- **September 27, 2017 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 Thematic Data II – Analysis and Modeling](#) (Technical - GIS)** Participants will learn how to use GIS data to analyze a vegetation project proposal and prepare information for a NEPA analysis. Students will use the Forest Service Data Center and Citrix programs that allow for inter-discipline collaboration, and provides a central repository for all the project data. This course covers the process of finding, creating, managing, and analyzing GIS data in order to prepare outputs for NEPA specialist reports.
- **September 28, 2017 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.
- **October 3-4, 2017 at 10:00 am – 4:00 pm (Mountain Time) [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.
- **October 5, 2017 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.3 Data Driven Pages](#) (Technical - GIS)** Participants will learn how to create and manage multiple map pages using Data Driven Pages within ArcMap. This course covers how to arrange the base map layout needed for Data Driven Pages, how to setup and manage Data Driven Pages, how to use tools within the Data Driven Pages Toolset within ArcToolbox, and how to export map pages in various formats. Included in the course is an optional lesson on how to create a map book product using a Python script.

- **October 11, 2017 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.
- **October 18, 2017 at 10:00 am – 4:00 pm (Mountain Time) [Introduction to Forest Service Geospatial Resources](#) (Awareness - GIS) [Forest Service Only](#)** 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.
- **October 19, 2017 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.
- **October 24, 2017 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.
- **October 25, 2017 at 10:00 am – 4:00 pm (Mountain Time) [Collector for ArcGIS in the Forest Services](#) (Technical - GIS)** NEW Course! Bring your mobile device and get comfortable with the Collector App. The Collector for ArcGIS app is a map-based data collection application used to collect GPS data on a tablet or smart phone. This webinar covers both setting up hosted editable features and how to use the app to collect data. Demonstrations and field exercises included. Suggested audience has experience with GIS concepts, ArcGIS for Desktop, and ArcGIS Online (AGOL).
- **October 26, 2017 at 10:00 am – 4:00 pm (Mountain Time) [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.
- **October 31, 2017 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.

JOB **OPPORTUNITIES**

The U.S. Forest Service, Pacific Northwest Research Station is conducting outreach for a Research Plant Pathologist position (GS-0434-12 or -13). This position is a permanent position, and will be located in Corvallis, OR. The scientist will provide expertise to generate knowledge about the nature, causes, and consequences of large, rapid, or significant changes to ecosystems that potentially threaten societal values. The knowledge is used to develop and deliver innovative and effective strategies, methods, and tools so people can plan, manage, or mitigate the changes, causes, and consequences associated with threats to forest ecosystems. Personal research assignment: The scientist works as a regional and national expert to study the ecological roles and management of native and nonnative diseases that affect Pacific Northwestern tree and shrub species. The primary goal of the scientist's research is to gain understanding about the biotic agents and abiotic controls in these ecosystems to guide forest management in the development of policy and prescriptions that enable land managers to achieve a variety of integrated resource objectives. The scientist defines research objectives by frequent communication with partners and clients. The scientist develops, plans, and conducts studies on the ecology and management of forest tree diseases, forest declines, wood decays, and tree mortality. The causal agents include pathogenic fungi, wood decay fungi, and dwarf mistletoe, as well as abiotic factors involved in forest decline, climate-tree influences, and other forest disturbance processes. The scientist is continuously engaged in a broad range of interrelated studies designed to elucidate interactions in ecological systems and apply knowledge to conservation and management. The spectrum of disciplines needed to address broad questions in forest ecosystems and management requires a high degree of collaboration with scientists in other fields such as ecology, silviculture, soils, entomology, climatology, genetics, physiology, wood science, hydrology, wildlife, and social science. Principal areas of research are in temperate forests of coastal and interior Oregon and Washington dominated by Douglas-fir and other conifer species. The research assignment includes work that discovers, develops, and transfers knowledge pertaining to the biology, mitigation, and management of Sudden Oak Death, which is now found in coastal forests of southwestern Oregon and northern California. Anyone interested in further information or in receiving a copy of the vacancy announcement when it opens is advised to complete the Outreach Response Form attached to the online outreach announcement. Go to the [outreach web page](#) and search for TITLE = *res plant path* and ORGANIZATION = Pacific Northwest Research Station. PLEASE NOTE: The purpose of this Outreach Notice is to determine the potential applicant pool for this position and to establish the appropriate recruitment method and area of consideration for the advertisement (e.g., target grade and service-wide, region-wide government-wide, or DEMO). Responses received from this outreach notice will be relied upon to make this determination. Reply

date is **September 14, 2017**. *USDA is an Equal Employment Opportunity Provider and Employer.*

The U.S. Forest Service, Pacific Northwest Research Station, Forest Inventory and Analysis (FIA) is looking to fill a permanent, full-time (PFT) position via lateral transfer to the Portland Forestry Sciences Laboratory located in downtown Portland, OR. The full performance level of this Information Technology Specialist (DATAMGT) is GS-2210-11. This outreach will also be used to determine the potential applicant pool for this vacancy if approved to hire at a later date. This position is a member of the Portland Information Management team in the Forest Inventory and Analysis (FIA) work unit of the [PNW RMA Program](#). The incumbent will evaluate the effectiveness of Information Management technology and investigate problems and inefficiencies related to the data within a well-established database environment. The Incumbent will work on various teams that cut across many of the specialty areas within the FIA organization in order to resolve critical problems, and make recommendations for changes in processes, procedures, standards as it relates to data management. This is a non-supervisory position with very limited travel. The Information Management (IM) staff is responsible for expanding, compiling, and formulating the raw collected data into useful information from which the analysts and scientists can create reports and scientific studies. Information Management is also responsible for analyzing, developing and maintaining systems and applications to assist with FIA data collection, storage, analysis and presentation. This includes but is not limited to developing and managing large-scale database systems, handheld data recorders, and online data tools. The work involves a wide variety of application support functions which include: database administration, developing technical requirements for new or modified applications; analyzing and determining optimal hardware and software configurations; providing technical guidance in the design, coding, testing, and debugging process; assisting customers in installing applications; troubleshooting post-installation problems; developing and administering data standards, policies, and procedures; developing and implementing data mining and data warehousing programs; supporting or converting MS Access and Oracle databases and coordinating the technical support of deployed applications. Anyone interested in further information or in receiving a copy of the vacancy announcement when it opens is advised to complete the Outreach Response Form available with the [online outreach announcement](#). PLEASE NOTE: The purpose of this Outreach Notice is to determine the potential applicant pool for this position and to establish an appropriate recruitment method and area of consideration for the vacancy announcement (Region-wide, Service-wide, USDA-wide, Government-wide, and/or DEMO). Responses received from this outreach notice will be relied upon to make these determinations. Reply date is **September 15, 2017**. *USDA is an Equal Employment Opportunity Provider and Employer.*

The New Mexico State Forest Service is currently advertising for a forest Entomologist and Forest Health Program Coordinator. This is a permanent position located in Santa Fe, New Mexico. The purpose of the forest health specialist and forest entomology program manager position is managing the

Forestry Division's Cooperative Lands Forest Health Management Program. The position will conduct activities that assess and detect, prevent and suppress forest pest infestations and disease conditions on State and private forestlands in New Mexico. This position provides leadership, guidance, direct technical assistance, and other services to State and private land managers and landowners. This position is a critical first line of defense in regard to identifying unhealthy forest stands and watersheds, which left untreated, are very susceptible to wildland fire. This position gathers these data by discovery, identification and reporting of damaging pests. Discovery is accomplished by surveillance and/or planned surveys. This position is responsible for the annual forest insect and disease condition report and aerial survey maps that will be submitted to the U.S. Forest Service in September of each year. Approximately 10,000 acres of State and private forestlands are planned for ground survey annually. Systematic detection surveys of forestlands are conducted to augment discovery of pest problems obtained by field surveillance. Areas to be surveyed will be prioritized by coordinating with the U.S. Forest Service. Problem areas detected in aerial survey will be ground-checked wherever appropriate. In total, approximately 1,400,000 acres per year need to be surveyed aerially. [More information](#) including instructions for applying, is available by clicking on the link above. The position title is Forester Health Specialist and the job number is (EMNRD #59953). The job closes on **September 17, 2017 at 11:59 pm Mountain time**. *The State of New Mexico is an equal opportunity employer. Hiring is done without regard to race, color, religion, national origin, sex, sexual orientation, gender identity or expression, age, disability or any other characteristic protected by federal, state or local law. Reasonable accommodations provided to known disabilities of individuals in compliance with the Americans with Disabilities Act.*

PUBLICATIONS **OF INTEREST**

1. **Lesk, Corey; Coffel, Ethan; D'Amato, Anthony W.; Dodds, Kevin; Horton, Radley.** 2017. Threats to North American forests from southern pine beetle with warming winters. *Nature Climate Change*. doi:10.1038/nclimate3375.
2. **Pontius, Jennifer; Hanavan, Ryan P.; Hallett, Richard A.; Cook, Bruce D.; Corp, Lawrence A.** 2017. High spatial resolution spectral unmixing for mapping ash species across a complex urban environment. *Remote Sensing of Environment*. 199: 360-369. [Available online](#). (<http://dx.doi.org/10.1016/j.rse.2017.07.027>)
3. **Potter, Kevin M.; Conkling, Barbara L., eds.** 2017. Forest health monitoring: national status, trends, and analysis 2016. Gen. Tech. Rep. SRS-222. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Research Station. [Available online](#). (<https://www.srs.fs.fed.us/pubs/54586>)

4. **Rogers, P.C.** 2017. Guide to Quaking Aspen Ecology and Management. BLM-UT-G1017-001-8000. Salt lake City, UT: USDI, Bureau of Land Management. This field guide applies recent advances in aspen science for professional use. [Available online](#) in .pdf format. Hardcopy spiral-bound editions may be ordered by emailing Thomas Adamson, typing “Aspen Field Guide” in the subject line, and clearly indicating your mailing address.

FOR MORE
FHM
INFORMATION

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