

Forest Health Monitoring Program Monthly Update August 2019

WHAT'S NEW

Get to know FHM. This month get to know some **online tools available** to assist with forest health assessment. The [Forest Health Assessment & Applied Sciences Team \(FHAAST\)](#) has developed a variety of tools for analyzing forest health data and assessing forest health conditions. Two area of interest that have online tools are mapping and reporting, and forest vegetation simulator models. Mapping and reporting tools are available for GIS and spatial analysis, invasive species risk assessment, and remote sensing and image analysis. [GIS and spatial analysis](#) tools include use of the insect and disease database (including aerial survey), applications for use in data management and analysis (data and application development), and risk and hazard mapping (includes national insect and disease risk maps and national forest damage agent range maps). [Invasive species risk assessment](#) products include pest reports, introduction, establishment, susceptibility, risk assessments, hazard maps, and sample design tools. [Remote sensing and image analysis](#) products and tools include the national Individual Tree Species Atlas, individual tree species parameter maps, and the Forest Disturbance Monitor, a web-based forest disturbance data delivery system designed for integration with the insect and disease survey. [Forest vegetation simulator models](#) or the Forest Vegetation Simulator, is a family of models used for predicting forest stand dynamics such as tree growth, mortality, regeneration, management, disturbance, etc., throughout the United States. The [FHAAST](#) assessment and applied sciences web site also presents story maps highlighting various insect and disease issues.

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 8-9, 2019.** Utah State University, Logan, Utah. Restoring the West Conference 2019. In the West, upland forests protect the land that yields the water we all depend on for life. However, wildfires, forest pests, drought stress, outdoor recreation, poorly managed livestock grazing, timber harvesting, and unsustainable development can threaten watershed security, longevity, and resilience to disturbance. Despite these threats, there are many excellent examples of well-functioning watersheds in the West and in Utah that have been providing pristine water for over a century. If watershed managers, foresters, scientists, and others understand the correct ways to manage threats to watersheds we can continue to supply water for the millions of people and industries that depend on it. This conference will bring together water and land managers and scientists to share guidance, success stories, and research results to ensure that clean water availability is sustained in the Intermountain West. The conference will include two days of plenary sessions and an evening social including a poster session. This conference is organized and sponsored by Utah State University Extension Forestry and USU's Departments of Wildland Resources and Watershed Sciences in the Quinney College of Natural Resources, the Ecology Center, and the Western Aspen Alliance. For complete information about the conference, visit the conference web site [conference web site](#).

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 was 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)

*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.

- **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.
- **September 4-5, 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.
- **September 10, 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.
- **September 11, 2019 at 10:00 am – 4:00 pm (Mountain Time) [Intermediate ArcGIS Online](#) (Technical - GIS) [Forest Service Only](#)** ****US Forest Service organizational account for AGOL required, see other info for more details**** ****A general understanding of ArcGIS Online and GIS is assumed for this course**** This course will look at some of the more advanced options available in AGOL. A closer look at map and feature

services will be explored. An examination and exploration of the Living Atlas will be conducted. Lastly, an overview of the analysis tools and geocoding will be covered.

- **September 12, 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.
- **September 12, 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.
- **September 17, 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.
- **September 17, 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.
- **September 18, 2019 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.5 - 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. The Analysis toolbox has four toolsets. Extract. Overlay. Proximity. Statistics.

- **September 19, 2019 at 10:00 am – 4:00 pm (Mountain Time) [ArcGIS 10.5 - 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.
- **September 24, 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.
- **September 25, 2019 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 26, 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.

Job Opportunities

The U.S. Forest Service, Eastern Region (R9) State & Private Forestry, will be advertising a Regional Forest Health Monitoring Coordinator (GS-0401-12/13) position. This permanent full-time position will be located in the Eastern Regional Office in Milwaukee, Wisconsin. The grade level(s) for the vacancy announcement will be based on the response to outreach; the target grade for the position is GS-13. Forest Health Monitoring (FHM) is a national program designed to determine the status, changes, and trends in indicators of forest health conditions on an annual and long term basis. The program is implemented regionally and this position serves as the Regional Forest Health Monitoring Coordinator for the 20 states in the Eastern Region. The FHM program uses data from aerial surveys, ground plots, and other data sources to detect and monitor forest health indicators. It covers all forested lands through partnerships involving State Foresters, other state and federal agencies, tribal lands, and

academic groups. The position will work closely with the Forest Service Research and Forest Inventory & Analysis (FIA) program to collect and analyze data to determine changes in forest vegetation patterns, composition, and processes that have been altered by biotic and abiotic factors beyond natural causes or forest management practices and where these changes are located. The incumbent is the recognized expert, program authority, and principal advisor for the Eastern Region's Forest Health Monitoring program. Responsibilities include:

- Develops an annual program of work and plans for fully implementing and conducting the regional FHM program, including any interdisciplinary studies necessary to support the program. This includes identifying priority work, resources needed; recommending budget and personnel resources to meet program objectives and preparing annual regional reports that contribute to national reporting objectives.
- Participates on a national technical team comprised of the national and regional Forest Service and State FHM coordinators. Assists in setting national FHM program priorities and makes recommendations on funding evaluation monitoring projects and other program endeavors.
- Promotes and facilitates collaboration among the Forest Service, States, and participating organizations for the regional FHM program. Develops and administers financial agreements with cooperators and assures that program narratives address high priorities.
- Establishes a system to evaluate and monitor progress in accomplishing the regional FHM program. Determines needs, makes recommendations, and may institute changes to assure timely completion and integration of results.
- Serves as a regionally recognized authority on the aerial and ground survey monitoring and interpretation of forest health conditions, and provides advice, assistance, and counsel to the Region, other federal, state, and private forestry organizations which cooperate in the monitoring activities. Represents the Region in meetings, conferences, and negotiations with other federal and state agencies and with non-governmental organizations concerned with monitoring and assessment of forest health conditions.
- Assists with coordination of grants, agreements, and budget for the Eastern Region's Forest Health Protection program, as needed.

For additional information about position duties, please contact Susan Ellsworth, Assistant Director for Forest health and Economics, at 414-297-3021 or susan.ellsworth@usda.gov. If interested, please respond directly in the U.S. Forest Service [outreach database](#) through **August 31, 2019**.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of

program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202)720-2600 (voice and TDD). To file a complaint of discrimination, write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, DC 20250-9410, or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.

The U.S. Forest Service, Eastern Region (R9) State & Private Forestry, will be advertising a Regional Entomologist (GS-0414-12/13) position. This permanent full-time position will be located in the Eastern Regional Office in Milwaukee, Wisconsin. The position develops and leads a coordinated response to forest insect pest outbreaks and activities, and provides professional forest health assistance to Federal, State, other non-federal and tribal partners across the Region. The grade level(s) for the vacancy announcement will be based on the response to outreach; the target grade for the position is GS-13. The incumbent serves as the recognized expert, program authority, and principal advisor for the Eastern Region's entomology program. Responsibilities include:

- Directs the development of all aspects of complex major insect detection, evaluation, prevention, eradication, and suppression program including native and non-native bark beetles, wood borers, sucking insects and defoliators across all lands in the Eastern Region.
- Formulates and establishes policies, programs, and standards for forest health management.
- Fosters a strong working relationship with FHP field office staff and State forestry and agriculture forest health staffs to plan and implement a coordinated response to forest insect outbreaks, issues and activities across the 20 state region.
- Develops the regional response to new forest health issues, including forest insect pest introductions. Communicates with the Washington Office FHP staff to identify resources needed to respond to new pests, and serves as the regional representative on national planning teams dealing with new pest introductions.
- Collaborate with Canadian and Region 8 forest health colleagues to share information and develop and implement a consistent response to forest pests of common interest.
- Develops annual and long-term pest management programs. Develops work plans, budgets, and handouts. Assists in formulating, planning, organizing, and directing pilot projects and impact studies. Conducts special evaluations, routinely collaborating with university, Forest Service and USDA scientists to gain additional specific knowledge concerning insect biology, ecological relationships, parasitic effects, survey methodology, or new control techniques.
- Prepares plans designed to meet technical objectives and collaborates with FHP field office group leaders and FHP staff members to implement. Prepares technical reports and manuscripts of which incumbent is responsible for

technical adequacy and soundness of conclusions and recommendations. Serves as regional point of contact for all forest insect related information products.

- Provides technical assistance concerning forest insects to federal, non-federal, and tribal cooperators or refer, as necessary, such assistance to the appropriate FHP field office. Develops pest management alternatives by identifying and determining the present amount of damage caused, and exercises scientific judgment of a high order in evaluating the actual or potential seriousness of the infestation.
- Organizes, plans, and conducts forest insect related training programs, presentations, or seminars, for a variety of cooperators across the region. Presentations are customized to the specific needs and objectives of cooperators and involve summarization and presentation of complex scientific forest insect subject matter for new research developments in a concise, understandable manner.
- Assists with administration of grants, agreements, and budget for the Eastern Region's Forest Health Protection program, as needed.

For additional information about position duties, please contact Susan Ellsworth, Assistant Director for Forest health and Economics, at 414-297-3021 or susan.ellsworth@usda.gov. If interested, please respond directly in the U.S. Forest Service [outreach database](#) through **August 31, 2019**.

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The U.S. Forest Service, Eastern Region (R9) State & Private Forestry, will be advertising a Regional Wood Utilization Specialist (GS-0101/0401/1301-13) position. This permanent full-time position will be located in the Eastern Regional Office in Milwaukee, Wisconsin. The position works within the Forest Health Protection (FHP) staff area and, in coordination with the Regional Biomass Coordinator and others, provides overall leadership and coordination of the Eastern Region's wood utilization program, including primary and secondary wood processing, efficient utilization of urban tree removals, and partnerships to solve forest products related issues and support the forest products industry. The incumbent will serve as the recognized expert, program

authority and principal advisor for the Eastern Region's wood utilization program. Responsibilities include:

- Serves as a technical expert and a key source of information on forest products manufacturing technology for the primary and secondary wood products industry. Maintains networks with scientists who are experts in these fields to keep abreast of the latest trends and innovations in design, testing, manufacturing and waste management techniques.
- Formulates, plans, organizes, and directs pilot projects and impact studies to enhance primary and secondary wood processing and woody biomass utilization using multidisciplinary approaches, efficient utilization of urban tree removals, partnerships to solve forest health, forest management, and forest products related issues.
- Advances market development and utilization of wood products by supporting the expansion and acceleration of innovative technologies and strategies that promote the use of wood in the Eastern Region's economy to benefit forest health and reduce dependence on non-renewable options.
- Provides technical assistance concerning wood utilization options to field specialists, local and state organizations, non-governmental organizations, private landowners, and/or other Federal agencies.
- Administers the Forest Service's Wood Innovation Funding Opportunity program, which encourages the expansion and creation of new wood markets and products for trees in and around national forests.
- Develops and implements strategies to increase communication, cooperation, and collaborative problem solving within the forest products industry.
- Assists with administration of grants, agreements, and budget for the Eastern Region's Forest Health Protection program, as needed.

For additional information about position duties, please contact Susan Ellsworth, Assistant Director for Forest health and Economics, at 414-297-3021 or susan.ellsworth@usda.gov. If interested, please respond directly in the U.S. Forest Service [outreach database](#) through **August 31, 2019**.

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The U.S. Forest Service, State & Private Forestry and Pacific Northwest Research, Alaska Region, will be advertising an Entomologist (GS-0414-11/12/13) position. This permanent position will be located in the State and Private Forestry (S&PF) offices in Anchorage, Alaska. This is a unique opportunity since this position has dual Forest Health (75%) and Research (25%) functions. This outreach will assist in determining the area of consideration for advertising the permanent position. The position oversees biological technicians and permanent season staff (six staff located in Fairbanks, Anchorage and Juneau). The incumbent will also be drug tested and need to be certified to carry a firearm in bear country. This position reports directly to the Deputy Director of S&PF, located in Anchorage, AK. Key functions of the position include:

- Directs the development of all aspects of a complex major insect detection, evaluation, prevention, and suppression program such as spruce beetle, spruce budworm, gypsy moth, etc.
- Exercises scientific judgment of a high order to conceive and conduct special evaluations, collaborating with research, to generate information on insect biology, ecological relationships, parasitic effects, survey methodology, and new pest management techniques.
- Prepares plans designed to meet technical objectives, organizes assigned staff, collects field data, supervises field crews, processes and analyzes data, consults with other professionals, evaluates results, and makes recommendations. Prepares technical reports and manuscripts. Incumbent is responsible for technical accuracy and soundness of conclusions and recommendations.
- Provides site-specific, technical assistance concerning forest insects to land managers and written guidelines for incorporation into resource project plans. Develops guidelines for identifying levels of damage and exercises scientific judgment of a high order in evaluating the actual or potential risks of infestations. Where reduction of pest effects is possible, incumbent will develop effective, environmentally safe, and economically sound pest management options consistent with land management objectives.
- Organizes, plans, and conducts forest insect related training programs, presentations, and seminars, for Federal, State, and private stakeholders. Presentations are tailored to the specific needs and objectives of the requesting group. Summarizing complex scientific forest insect subject matter from new research in a concise and understandable manner.
- Develops a program of research that supports the entomological information needs of Forest Health Protection across Alaska. All study proposals and plans of work will be reviewed by the supervisor in consultation with scientists from PNW Research Station. Candidate studies can include field and laboratory investigations using retrospective, manipulative, and survey approaches. Products of the research will be submitted for publication in peer-reviewed scientific journals and other outlets. Research progress will be shared at relevant scientific conferences and technical meetings.

For additional information about position duties, please contact Debbie Hollen, Director of State and Private Forestry for Alaska & Pacific Northwest Regions, at debbie.hollen@usda.gov or 503-808-2340; or Tim Harrington, PNW Research Forester, at tim.harrington@usda.gov or 360-753-7674. If interested, please respond directly in the U.S. Forest Service [outreach database](#) by **September 13, 2019**.

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The Vermont Department of Forests, Parks and Recreation is recruiting for a Forester III in the field of Forest Health Protection. Major duties include managing the Forest Biology Lab, serving as a lead for identification and diagnosis of tree health problems, providing forest health information to a variety of audiences, and designing and conducting forest health and pest surveys. The person in this position will respond to public inquiries, develop pest management recommendations, supervise staff, coordinate co-workers and volunteers, prepare informational materials, make educational presentations, maintain records, prepare scientific reports, and collaborate with partners at the Vermont Agricultural and Environmental Laboratory and elsewhere. The position requires substantial knowledge of forest entomology/pathology. It also requires strong organizational, interpersonal, and communication skills, the ability to work both independently and collaboratively, and to work in laboratory and forested environments. Candidates must be willing to apply pesticides and travel occasionally out-of-state. This position is located in Randolph, VT. This is a permanent, full-time position. To view the full job specifications, or to apply, please visit the [Job Posting](#) page. Candidates **must apply online by August 18th** to be considered. For further information contact Barbara Schultz, Forest Health Program Manager, at barbara.schultz@vermont.gov or 802-777-2082.

PUBLICATIONS OF INTEREST

1. **Gray, Curtis A.; Runyon, Justin B.; Jenkins, Michael J.** 2019. Great Basin bristlecone pine volatiles as a climate change signal across environmental gradients. *Frontiers in Forests and Global Change*. 2: 1-14 (article 10). doi: 10.3389/ffgc.2019.00010
2. **DiGirolomo, Marc F.; Jendek, Eduard; Grebennikov, Vasily V.; Nakládal, Oto.** 2019. First North American record of an unnamed West Palearctic *Agilus* (Coleoptera: Buprestidae) infesting European beech (*Fagus sylvatica*) in New York City, USA. *European Journal of Entomology*. 116: 244-52. DOI: [10.14411/eje.2019.028](https://doi.org/10.14411/eje.2019.028).
3. **Dodds, Kevin J.; DiGirolomo, Marc F.; Fraver, Shawn.** 2019. Response of bark beetles and woodborers to tornado damage and subsequent salvage logging in northern coniferous forests of Maine, USA. *Forest Ecology and Management*. 450: 117489. DOI: [10.1016/j.foreco.2019.117489](https://doi.org/10.1016/j.foreco.2019.117489).
4. **Snieszko, Richard A.; Johnson, Jeremy S.; Savin, Douglas P.** 2019. Assessing the durability, stability, and usability of genetic resistance to a non-native fungal pathogen in two pine species. *Plants, People, Planet*. 00: 1– 12. <https://doi.org/10.1002/ppp3.49>

FOR MORE FHM INFORMATION

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