Forest Health Monitoring Program
Monthly Update
April 2022

WHAT'S NEW

The Forest Health Monitoring Program held the 2022 National Forest Health Monitoring (FHM) Workshop virtually on March 14-17, 2022. The theme is Climate Change and Accelerated Disturbance. Thank you to everyone who participated by presenting, listening, asking questions, and discussing the future path of the FHM program. The 4-day workshop included the following:

- A newcomers' session.
- 6 keynote presentations, 9 extended lightning talks, and 12 lightning talks relating to accelerated disturbances throughout the United States.
- 12 regional or State reports.
- 2 focus groups concentrating on how the FHM program should proceed with (1) the future of detection monitoring and (2) evaluation monitoring program strategic planning.
- Presentations about progress from the 2020 FHM National Workshop about (1) FIA-FHM integration, and (2) strategic reporting.
- From 150-200 participants on the TEAMS platform of the workshop
- Preparation of recommendations from the focus groups for the FHM management team to consider and act on.
- The workshop session recordings are available at this location. Click on the folder called *05_FHM_AnnualMeeting*. If you cannot access the files using this link, please contact Ryan Hanavan (Interior West Mega-region Manager) at ryan.hanavan@usda.gov.

Many resources (links to story maps, dashboards, and documents) were shared by presenters and participants. We will also be sharing those in upcoming Monthly Updates.

The FHM Reporting Sub-team invites you to complete a **survey** to tell us what **you** want from data delivery and reporting. In addition to completing the survey yourself, please send the survey link to land managers, policymakers, analysts, extension personnel, etc., anyone you view as an audience (analyst or consumer) of FHM's data and information. FHM recognizes the importance of being informed about the kinds of data and information that current and potential users want and need, and also the delivery of the data and information including format, availability, and timing. This is an opportunity to contribute to the reporting evaluation and planning process of the FHM program. We thank you for your participation and assistance with this effort. If you have any questions, please contact Kayanna Warren (Region 5) at kayanna.warren@usda.gov. (https://forms.office.com/Pages/ResponsePage.aspx?id=5zZb7e4BvE6GfuA8-g1Gl11ccMYFgm5Ngm1Nzo0RfEZURFVZNUxRVU9XTDc0UVRPQk5SUD BVRVdPMC4u)

Congratulations to the USDA Animal and Plant Health Inspection Service (APHIS) as the agency celebrates 50 years of service.

The following documents are now available at the indicated links:
- 2021 [Hawaii Forest Health Highlights](#)
- 2021 [Pacific Islands Forest Health Highlights](#)
- 2021 [California Forest Pest Conditions Report](#)

A new story map is available that provides information about the connection between forests and water. [Forests to Faucets 2.0](#) has an interactive map, and in general, is of interest to all who are interested in watersheds and drinking water. A new general technical report is also available. See Mack and others 2022 in the *Publications of Interest* section.

UPCOMING EVENTS

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

May 2-4, 2022. Mills River, NC (near Asheville, NC). 2022 Short Rotation Woody Crops International Conference. This conference, hosted by North Carolina State University, is a joint meeting of the Short Rotation Woody Crops Operations Working Group, the International Commission on Poplars and Other Fast-Growing Trees Sustaining People and the Environment (IPC) Environmental and Ecosystem Services Working Party (WP5), and the IUFRO Working Party 2.08.04 (Physiology and Genetics of Poplars and Willows). The deadline for abstract submission was December 1, 2021. Complete information about the conference including registration, the program, and lodging is available on the [conference website](#).

June 20-24, 2022. VIRTUAL MEETING. The North American Forest Ecology Workshop (NAFEW). This year's theme is *Turning Ecological Answers into Forest Management Actions*. NAFEW is placed firmly at the intersection of forest science and practice. Sessions will be addressing the following topics: Climate Change, Cumulative effects, Economics, Fire Ecology and Fire Response, Genetics and Adaptation, Insect disturbance, Silviculture, Social Science and Policy, Soils, Sustainable Forest Management, Vegetation, and Wildlife/Biodiversity. Featured speakers will include Deborah Dumroese, Forest Soils; Jill Johnstone, Boreal Forest Disturbance; David Lindenmayer, Biodiversity Conservation; and Eliot McIntire, Open Science/Open Models. Abstracts for oral and poster presentations were due Feb. 18, 2022. For complete information, visit the [workshop website](#).

June 26- July 1, 2022. Durham, NH. Foliar, Shoot, Stem and Rust Diseases of Trees. Jointly organized by IUFRO working parties *[Foliage, shoot and stem diseases](#)* (7.02.02) and *[Rust of forest trees](#)* (7.02.05). This working meeting will be held at the University of New Hampshire in Durham, NH. The deadline for abstract submission was extended to March 21, 2022. The deadline for early

registration is **April 15, 2002** and for late registration is **May 15, 2022**. Access complete available information about the meeting on either of the web links included above.

September 19-21, 2022. Gulf Shores, AL. Southeast Climate Adaptation Science Center (CASC) Regional Science Symposium: Sharing science to support climate adaptation. This symposium is intended for resource managers and researchers working in the southeastern U.S., including the U.S. Caribbean, on climate impacts and adaptation for fish, wildlife, habitat, and cultural resources; and decision makers and practitioners from state fish and wildlife agencies, natural resource and land management entities, federal natural and cultural resource agencies, Tribal Nations and Tribal organizations, and NGOs. Sessions are being planned on the following topics: Hydrologic Extremes; Nature-based Solutions for Climate Adaptation and Resilience; Cultural Resource Management; Monitoring for Changing Climate and Adaptation; Cultivating Coastal Resilience to Global Change; Current and Future Invasive Species; Climate Impacts & Adaptation for At-risk species; Changing Fire Management in the Southeast; Evaluation of Actionable Science and Adaptation Actions. For **complete updated information**, visit the symposium website.

November 15-17, 2022. Minneapolis/St. Paul, MN (tentative; at least a portion of the meeting will be offered virtually; the final decision about in-person attendance is still under consideration). 2022 Forest Inventory and Analysis (FIA) Stakeholder Science Meeting. The theme of the meeting is *Grow. Adapt. Regenerate: Monitoring and responding to global change to promote resilient and productive forests*. The FIA program is the only comprehensive inventory for the Nation's forests, and the sole source of strategic-level inventory and trend monitoring for the National Forest System, providing critical information to a range of scientific and industrial partners. This meeting draws a world-class group of partners, practitioners, and scientists with regional, national, and international inventory and monitoring missions. Maintaining the Forest Service's leadership in this area requires both regular consultation with FIA's users, as well as periodic technical exchange among scientists in fields such as data visualization, statistical inference, and remote sensing inventory techniques. FIA 2022 is hosted by the USDA Forest Service, Northern Research Station, FIA program and National Council for Air and Stream Improvement (NCASI). Specifically for this meeting presentations are invited that help advance the goals of the following: maximizing the value of the "annual" sample design both spatially and temporally; advancing the development of delivery tools to meet client needs and take advantage of ever-expanding options for data visualization and communication; assuring data continuity that supports a variety of land manager needs; integrating more powerful and efficient monitoring technologies and statistical techniques into established analysis lines; and, supporting FIA's expansion in areas such as enhanced timber product monitoring, improved carbon/biomass estimates, enhanced ownership study, land cover/use research, urban forest inventory, monitoring of Interior AK, and small area estimation. Please consider offering an organized session, presenting an oral presentation of your research, or a demonstration of your work during the Digital Engagement session (applications, tools, databases, websites, digital posters). **Abstract**

submissions are now open! Publication of Proceedings: Submitted abstracts will be digitally distributed at the meeting. Meeting presenters are encouraged to further document their contributions by submitting an article to a [special issue in Frontiers in Forests and Global Change](#) or an extended abstract for inclusion in a General Technical Report to be published shortly after the conclusion of the meeting. The deadline for the [Special Issue](#) was March 28, 2022. Proposals for an [Organized Session](#) are due **May 6, 2022**. The deadline for an [oral presentation/demonstration](#) abstract is **June 10, 2022**. For more information, please contact the meeting organizers: fia_science@fs.fed.us. Submit an abstract using the links above or by visiting the [symposium website](#).

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

*April 4-8, 2022 at 2:00 p.m. Eastern time. SCIENCEx Wildlife webinar series (Sponsored by USDA Forest Service Research and Development) The SCIENCEx webinar series brings together scientists and land management experts from across U.S. Forest Service research stations and beyond to explore the latest science and best practices for addressing large natural resource challenges across the country. The webinars are open to all audiences. Join early to secure a spot. Each session will contain three short thematic presentations followed by Q&A and discussion. Recordings of the events will be posted the [SCIENCEx webinar page](#).

CONNECTION INFORMATION

Zoom
https://usfs.zoomgov.com/j/16104530612
Meeting ID: 161 0453 0612
Password: USFS1905!

April 4, 2022 at 2:00 p.m. Eastern time. Wildlife: Management Tools
- Adapting to a changing climate: decision-support tools for co-managing wildlife and livestock on federal rangelands in the Northwest, presented by Anna Maher
- Biodiversity Conservation, Fire Resilience, and Climate Adaptation: Are we kidding ourselves?, presented by Patricia Manley, Kira Hefty, Katherine Zeller, and Nicholas Povak
- Applying the Resist-Accept-Direct (RAD) management framework to wildlife habitat and connectivity, presented by Katherine Zeller

April 5, 2022 at 2:00 p.m. Eastern time. Wildlife: Wildlife in Aquatic Systems
- Patterns and threats to biological diversity across the United States: Focusing on land use and climate change, presented by Rebecca Flitcroft

- Using the best available science to measure climate change vulnerability and inform management of aquatic species, presented by D. Max Smith, Katey Driscoll, Megan Friggens
- History, habitat, chemistry, climate and catastrophe – ingredients in the recipe for fish production in the Appalachians, presented by Andy Dolloff

April 6, 2022 at 2:00 p.m. Eastern time. Wildlife: Wildlife in Wetlands
- Weather, hydroregime, and breeding effort influence juvenile recruitment of anurans: Implications of climate change, presented by Katie Greenberg
- Changing climate and changing calling phenology of anuran communities, presented by Dan Saenz
- Can climate adaptive silviculture approaches save the moose in Minnesota?, presented by Deahn Donner

April 7, 2022 at 2:00 p.m. Eastern time. Wildlife: Pollinators for the Future
- The lazy lawnmower: A simple way to help native bees, presented by Susannah Lerman
- Pollinator Partners Across Landscapes (Pollinator PALs), presented by Kasten Dumroese, Deanna Williams
- Riparian shrubs, ungulates, and climate through the lens of native bees, presented by Mary Rowland, Sandy DeBano

April 8, 2022 at 2:00 p.m. Eastern time. Wildlife: Focal Species
- Factors influencing fine-scale space-use by fishers before, during, and after climate-induced tree mortality in the southern Sierra Nevada, presented by Rebecca Green, David Green, Eric McGregor, Kathryn Purcell, Craig Thompson, Kristine Pilgrim, Sam Wasser, Heath Smith, and Jennifer Hartman
- Linking robust spatiotemporal datasets to assess and monitor habitat attributes of a threatened species, presented by Chris Witt
- Mexican spotted owl habitat on tribal and non-tribal lands in the Sacramento Mountains, NM, presented by Serra Hoagland

*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. The courses are also divided into five categories. The categories are indicated after each web link in the list below as follows: **GIS-Desktop; GIS-Web; GIS-Mobile; Remote Sensing; and Data management**.

All class registrations can be accessed via the **CATALOG WEBPAGE**.

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 (SM.FS.geotraining@usda.gov) and they will register you manually.

- **April 12, 2022 at 10:00am – 4:00pm (Mountain Time) Collector and Field Maps – Data collection** (**Technical** - **GIS-Mobile**).
- **April 12, 2022 at 10:00am – 4:00pm (Mountain Time) ArcMap – Editing in SDE** (**Technical** - **GIS-Desktop**) **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 the 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.
- **April 12, 2022 at 10:00am – 4:00pm (Mountain Time) ArcGIS Pro – Quick Start in GIS** (**Technical** - **GIS-Desktop**) In this Quick Start in GIS students will learn the basics of GIS using ArcGIS Pro. This new version of our Quick Start in GIS utilized the newest GIS software from Esri, ArcGIS Pro. ArcGIS Pro is the eventual replacement for ArcMap and will be the recommended GIS software within the Forest service beginning sometime in 2022. In this webinar, students will watch 2 PowerPoint lectures about using and navigating ArcGIS Pro, followed by 3 exercises to home their skills.
- **April 13, 2022 at 10:00am – 4:00pm (Mountain Time) Lidar in ArcGIS Pro** (**Technical** – **Remote Sensing**).
- **April 13, 2022 at 9:00am – 12:00pm (Mountain Time) ArcGIS Field Maps Web Tools** (**Technical** - **GIS-Mobile**).
- **April 13, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Geoprocessing** (**Technical** - **GIS-Desktop**).
- **April 13, 2022 at 10:00am – 1:00pm (Mountain Time) Using BARC for BAER Support** (**Awareness** – **Remote Sensing**).
- **April 14, 2022 at 10:00am – 4:00pm (Mountain Time) ArcMap – Spatial Analyst** (**Technical** - **GIS-Desktop**). 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.
- **April 19, 2022 at 10:00am – 4:00pm (Mountain Time) Survey123 Form Creation An Introduction** (**Technical** - **GIS-Mobile**).
- **April 19, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Cartographic Tools** (**Technical** - **GIS-Desktop**) Participants will learn

how to work with various cartographic related properties in ArcGIS Pro. The course covers how to adjust symbology, work with Layer (.lyrx) files, create labels and annotations, and how to produce a final map product.

- **April 20, 2022 at 10:00am – 4:00pm (Mountain Time) Story maps** (Technical – **GIS-Web**) <u>**Forest Service Only**</u> Story maps have become a go to platform for interactive presentations. Using story maps you can create scrolling stories that capture an audience attention and allow for adding geospatial information as well as pictures, videos, and text. In this 3- or 4-hour course, we will explore how story maps work, what they are best suited for, and how to build one.

- **April 20-21, 2022 at 10:00am – 4:00pm (Mountain Time). ArcMap – Managing Forest Service SDE Geodatabases** (Technical - **GIS-Desktop**) <u>**Forest Service Only**</u> This course is intended for unit GIS Coordinators or SDE Managers who are responsible for their ArcSDE Geodatabases.

- **April 21, 2022 at 10:00am – 4:00pm (Mountain Time) Collector and Field Maps – Data collection** (Technical - **GIS-Mobile**).

- **April 21, 2022 at 10:00am – 4:00pm (Mountain Time) UAS Image Processing** (Technical – **Remote Sensing**). Unmanned aircraft systems (UAS) are useful tools for collecting very high resolution imagery of features and project titles. This one-day workshop will cover how UAS imagery is collected and what products can be created from it. Participants will learn how to use Agisoft Metashape to process UAS imagery to produce orthomosaics, point clouds, and other elevation products.

- **April 26, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Map Series** (Technical - **GIS-Desktop**) Participants will learn how to create and manage map pages using Map Series within ArcGIS Pro. This course covers how to arrange the map base layout needed for Map Series, how to aet up and manage Map Series, 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.

- **April 27, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Tables** (Technical - **GIS-Desktop**).

- **April 27, 2022 at 10:00am – 12:00pm (Mountain Time) Overview of Historical Aerial Photography** (Awareness – **Remote Sensing**).

- **April 27, 2022 at 10:00am – 1:00pm (Mountain Time) Understanding and Using MTBS Data** (Awareness – **Remote Sensing**).

- **April 27, 2022 at 10:00am – 4:00pm (Mountain Time) Collector and Field Maps – Data collection** (Technical - **GIS-Mobile**).

- **April 28, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Editing** (Technical - **GIS-Desktop**). This class demonstrates editing environment in ArcGIS Pro. You will learn about editing attribute data, performing spatial edits, and creating new data (digitizing). The hands-on exercises teach basic editing functionality.

- **May 3, 2022 at 10:00am – 4:00pm (Mountain Time). Introduction to WebGIS using ArcGIS Online** (Technical – **GIS-Web**) <u>**Forest Service Only**</u> This course covers the basics of using ArcGIS Online (AGOL).

Students will learn how to make a map in AGOL, how to work in groups, what roles are, and then how to take a map offline to use in the mobile app ArcGIS Collector. Finally, we will create a web app to view our completed web map.

- **May 4, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Geoprocessing** (**Technical** - **GIS-Desktop**) This course was designed to cover the standard geoprocessing tools contained within the Analysis Toolbox in ArcGIS Pro. The Analysis toolbox has five toolsets: Extract, Overlay, Proximity and Statistics. Students will also learn about new geoprocessing capabilities / tools found within ArcGIS Pro, that were not available in ArcMap.
- **May 4, 2022 at 10:00am – 4:00pm (Mountain Time). Pix4Dmapper** (**Technical** – **Remote Sensing**).
- **May 4, 2022 at 10:00am – 1:00pm (Mountain Time) Understanding and Using RAVG Data** (**Awareness** – **Remote Sensing**).
- **May 5, 2022 at 10:00am – 4:00pm (Mountain Time) Collector and Field Maps – Data collection** (**Technical** - **GIS-Mobile**).
- **May 10, 2022 at 10:00am – 4:00pm (Mountain Time) Survey123 Form Creation An Introduction** (**Technical** - **GIS-Mobile**).
- **May 11, 2022 at 10:00am – 12:30pm (Mountain Time). Forest Service Geospatial Resources** (**Awareness** – **Data Management**). **Forest Service Only** This class is a broad overview of the GIS resources available in the Forest Service. It is not a class on how to use specific software.
- **May 11, 2022 at 10:00am – 4:00pm (Mountain Time) Collector and Field Maps – Data collection** (**Technical** - **GIS-Mobile**).
- **May 11, 2022 at 10:00am – 4:00pm (Mountain Time) ArcGIS Pro – Quick Start in GIS** (**Technical** - **GIS-Desktop**) In this Quick Start in GIS students will learn the basics of GIS using ArcGIS Pro. This new version of our Quick Start in GIS utilized the newest GIS software from Esri, ArcGIS Pro. ArcGIS Pro is the eventual replacement for ArcMap and will be the recommended GIS software within the Forest service beginning sometime in 2022. In this webinar, students will watch 2 PowerPoint lectures about using and navigating ArcGIS Pro, followed by 3 exercises to hone their skills.
- **May 12, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Field Maps Web Tools** (**Technical** - **GIS-Mobile**).
- **May 17, 2022 at 10:00am – 11:00am (Mountain Time). ArcGIS Online Dashboard App Awareness Talk** (**Awareness** – **GIS-Web**) A dashboard is a view of geographic information that helps you monitor events or activities. Dashboards are designed to display multiple visualizations that work together on a single screen. They offer a comprehensive and engaging view of your data to provide key insight for at-a-glance decision making.
- **May 17, 2022 at 10:00am – 4:00pm (Mountain Time) Collector and Field Maps – Data collection** (**Technical** - **GIS-Mobile**).
- **May 18, 2022 at 10:00am – 4:00pm (Mountain Time). Intermediate Web GIS using ArcGIS Online** (**Technical** – **GIS-Web**) **Forest Service Only**.

- **May 18, 2022 at 10:00am – 4:00pm (Mountain Time) ArcMap – Using Citrix for GIS Projects** (**Technical** - **GIS-Desktop**) 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.
- **May 19, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS – 3D Analyst** (**Technical** - **GIS-Desktop**) This course seeks to highlight the 3D capabilities and functions available in ArcGIS Pro. Students will learn how to navigate and display data within a local 3D scene. Students will also learn how to extrude 2D features into 3D features, configure illumination settings, utilize exploratory 3D analysis tools, and run geoprocessing tools from the 3D Analyst Toolbox.
- **May 24, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Map Series** (**Technical** - **GIS-Desktop**) Participants will learn how to create and manage map pages using Map Series within ArcGIS Pro. This course covers how to arrange the map base layout needed for Map Series, how to aet up and manage Map Series, 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.
- **May 25, 2022 at 10:00am – 4:00pm (Mountain Time). ArcGIS Pro – Editing** (**Technical** - **GIS-Desktop**). This class demonstrates editing environment in ArcGIS Pro. You will learn about editing attribute data, performing spatial edits, and creating new data (digitizing). The hands-on exercises teach basic editing functionality.

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 and other information from **U.S. Forest Service, Southern Research Station, Science in Practice** are posted on the [Science in Practice](#) (https://www.srs.fs.usda.gov/webinars/science-in-practice/) website. These 30-minute webinars focus on practical takeaways for land managers. Visit the web site for more information. The web address can be copied into your browser.

PUBLICATIONS OF INTEREST

1. **Breshears, D.D.; Fontaine, J.B; Ruthrof, K.X.; Field, J.P.; Feng, X.; Burger, J.R.; Law, D.J.; Kala, J.; St. J. Hardy, G.E.** 2021. [Underappreciated plant vulnerabilities to heat waves](#). New Phytologist. https://nph.onlinelibrary.wiley.com/doi/10.1111/nph.17348

2. **Davis, G.A.; Lowrey, L.; Eckberg, T.; Hicke, J.A.; Smirnova, E.** 2022. [Characterizing balsam woolly adelgid infestations and associated tree mortality in Idaho](#). Journal of Forestry. https://doi.org/10.1093/jofore/fvac007

3. **Hudgins, E.J.; Koch, F.H.**; **Ambrose, M.J.**; **Leung, B.** 2022. [Hotspots of pest-induced US urban tree death, 2020-2050](#). Journal of Applied Ecology. https://doi.org/10.1111/1365-2664.14141

4. **Mack, E.; Lilija, R.; Claggett, S.; Sun, G.; Caldwell, P.** 2022. [Forests to faucets 2.0: connecting forests, water, and communities](#). Gen. Tech. Rep. WO-99. Washington D.C.: U.S. Department of Agriculture, Forest Service, Washington Office. 32 p.

5. **USDA Forest Service, State & Private Forestry.** 2022. [Western pine beetle](#). FS-1192. Revision of Forest Insect and Disease Leaflet (FIDL) 1 written by C.J. DeMars and B.H. Roettgering, 1982.

Job Opportunities

The U.S. Forest Service, State & Private Forestry, Southwestern Region, Forest Health Protection is currently advertising for two (2) permanent full-time Biological Scientist (GS-0401-11) positions; one located in Albuquerque, NM and one located in Flagstaff, AZ. The incumbent performs aerial forest insect and disease (FID) detection surveys, manipulates geographic information system (GIS) map bases, and edits, maintains, and assists with the reporting of aerial survey GIS data. Please see the [full announcement](#) on USAJobs for more information. **The open and closings dates are 04/04/2022 to 04/08/2022.** *USDA is an Equal Employment Opportunity Employer*

The USDA Forest Service, R5-Pacific Southwest Region, State & Private Forestry is outreaching for both a 120-day detail/temporary promotion and permanent full-time GS-0414-11/12 Forest Entomologist. The effective date for the 120-day detail/temporary promotion is anticipated to begin early May 2022. Responses to the outreach notice will be used to determine how the permanent vacancy announcement will be advertised, such as grade level(s) or whether the announcement will be open to non-federal applicants. Position Duties: The primary purpose of this position is to serve as Staff Entomologist for Federal and Tribal lands in Southern California. The incumbent works as a team member to conduct all aspects of a complex forest health protection program including detection and monitoring of pests, forest surveys and evaluations of pest conditions, recommendations for pest prevention, management and suppression, and coordination with land managers and researchers to ensure that forest health issues are appropriately addressed in plans, strategies, and

operations on federal lands. Professional knowledge of entomology, forest health, forest management and forest survey techniques are required to solve problems involving a wide scope of biological and environmental variables. The position also develops and maintains close liaison relationship with National Forest staff, state agency partners, tribal partners, and university colleagues to achieve mutually acceptable objectives, develop integrated strategic approaches for problem resolution, assess and craft policy and guidance, connect diverse funding and incentive opportunities, and coordinate project implementation across all lands with interested parties. Interested applicants should complete the Outreach form (attached to this Update as Attachment 1) and if interested in the temp promotion/detail, include a resume and send by e-mail to Stacy Hishinuma stacy.hishinuma@usda.gov by **April 15, 2022**. Please indicate your interest in the 120-day detail/temp promotion, permanent position, or both. You may direct questions to Stacy Hishinuma, US Forest Service, Pacific Southwest Region, Phone: (909) 361-0241, Email: stacy.hishinuma@usda.gov. *USDA is an Equal Employment Opportunity Employer*

The U.S. Forest Service, Southern Research Station is currently conducting outreach for a Research Ecologist, GS-0408-12/13. The Eastern Forest Environmental Threat Assessment Center (EFETAC) Research Unit (SRS-4854) plans to advertise a position for a permanent, full-time Research Landscape Ecologist, with the duty station in Asheville, NC. The successful applicant will join the highly innovative and productive EFETAC staff in Asheville and will report to the EFETAC Director. The mission of EFETAC is to generate knowledge and tools needed to anticipate and respond to environmental threats. The most serious threats to forests and the benefits they provide inevitably involve complex factors interacting across multiple spatial and temporal scales. The Center's challenge is to maintain a comprehensive and integrated research program to tackle these complex issues, while delivering knowledge to forest landowners, managers, decision-makers, scientists, and other interested audiences in timely, useful, and user-friendly manners. EFETAC operates as a part of the Southern Research Station's Center for Forest Assessment and Synthesis. More information about EFETAC's research, cooperators, and personnel can be found at [the EFETAC website](). Primary Duties: The scientist will develop studies consistent with the mission of the Research Unit at national, regional, and landscape scales, with particular emphasis on the southeastern US. The scientist will work with other researchers in the Unit and the rest of the Southern Research Station, National Forest System, and collaborators in the academic community, state and federal agencies, tribes, forest industry, and non-governmental organizations to develop appropriate research initiatives for new work in Southern ecosystems. The scientist's research will focus on broad scale conservation, forest planning, and leading collaborative landscape planning through decision support and geospatial technologies. These goals will require developing novel research to understand landscape patterns and how they are affected by natural and anthropogenic processes, synthesizing research from multiple disciplines to model the effects of various management practices and natural and anthropogenic disturbances across space and time, and developing decision-support tools for managers and policy makers. The scientist will develop studies of spatial and temporal patterns of forests, ecosystem services,

wildlife, and multiple threats to these resources across large landscapes and use existing techniques and models at various landscape and ecosystem management-relevant scales. The scientist will also develop new modeling approaches to study existing patterns and project future patterns. The scientist's research will incorporate ecosystem management, natural forest succession, and various disturbances including fire, invasive species, and climate change to develop landscape models of forest change as well as species, habitat, and forest restoration. The scientist will develop a collaborative research program that addresses the needs of land managers and conservation partners. A key component of the scientist's research program will include providing information and models that help land managers plan ecosystem management and restoration across multiple spatial and temporal scales. The scientist should be comfortable working in a highly collaborative environment and engaging in science-management integration with partners. They should also be able to use state-of-the-art tools such as GIS, remote sensing, spatial statistics, spatial modeling, decision science tools, and big-data approaches to achieve these objectives as well as a strong foundation in forest ecology and management. **Current U.S. Citizenship is required for employment in this position with the USDA Forest Service.** The purpose of this outreach notification is to determine the potential applicant pool that may be interested in the position. If you wish, please include a brief narrative, or resume, describing your experience and/or qualifications for the position. Those interested will be notified of the announcement with duties, qualifications required, and application instructions. Please complete the Outreach Response Form (attached to this Update as Attachment 2) and submit to ge.sun@usda.gov by **April 25, 2022**. You may also respond directly within the [outreach database](). Once the position is advertised, all responders who provide an email address will receive the link to this position at [USAJobs]().

The U.S. Forest Service, Rocky Mountain Research Station, [Forest and Woodlands Ecosystems (FEW) Science Program]() is currently conducting outreach for a Research Geneticist, GS-0440-11/12 position to be located in Moscow, ID. Major duties: The scientist will discover, develop, and deliver scientific knowledge and innovative technologies to sustain and enhance the health and productivity of western forest and woodland ecosystems. The science will support the themes of (a) discovering tree and population response to

disturbance; (b) building resistance and resilience to disturbance; and (c) adaptation to climate change. The scientist will develop and implement studies, conduct research, and transfer knowledge gained from studies to a local, regional, and international audiences through publications, field tours, and presentations. If you are interested in this opportunity, please complete the Outreach Response Form (attached to this Update as Attachment 3) and submit to Alison Hill (alison.hill@usda.gov) by **April 30, 2022**.

The U.S. Forest Service, State & Private Forestry, Eastern Region, Durham Field Office is currently conducting outreach for a Remote Sensing Program Lead, GS-0101-12; GS-0401-11/12 or GS-1301-12 position to be located in Durham, NH. This outreach is an early alert to inform potential applicants that the USDA Forest Service, Region 9, State and Private Forestry will soon be advertising a permanent, full-time Remote Sensing Program Leader. The position is located at the Durham Field Office in Durham, NH. If you are interested in this position please respond, since the responses to this outreach notice will help managers decide how to advertise this position. This position is a Remote Sensing Program Lead for the Forest Health Group at the Durham Field Office. The primary purpose of the position is to provide specialized and professional guidance, leadership, coordination, and program direction. This position is considered a subject matter expert and technical advisor to promote and facilitate the use of remote sensing data which is primarily obtained from satellite or aircraft sensors, including digital imagery and LiDAR to document forest health events in the northeastern United States. This individual in this position will serve as a member of a group of entomologists, pathologists, foresters, biologists, and a botanist that reports to the Forest Health Group Leader. The person will also work with the Regional Forest Health Monitoring Coordinator to incorporate forest health data collected at different scales into the Forest Health Monitoring Program. The Durham Field Office is one of three Field Offices of the [Region 9 State and Private Forestry Program](#). The field office delivers both forest health and forest management programs (stewardship, watershed, urban/community forestry) to the six New England states and New York. The Forest Health staff also provides assistance to two National Forests, and other federal sites managed by the National Park Service, Department of Defense, and the US Fish and Wildlife Service. The Forest Health staff also provides service to several Tribal Nations in the region. To express interest in

this position please respond either directly through the [Forest Service Employment Outreach System](#) or Contact Michael Bohne, [michael.bohne@usda.gov](#); 802-238-7516. The close date is **April 30, 2022**. When this job is announced the vacancy announcement for this position will be posted on the U.S. Government's official website for employment opportunities at [USAJobs](#). Once the announcement is posted, all who responded to the outreach notice will be contacted by email to let you know the vacancy announcement number so individuals who are interested in this position can submit their applications. *USDA is an Equal Employment Opportunity Employer*

FOR MORE FHM INFORMATION

Visit the FHM **[homepage](#)** and **[Forest Health Assessment and Applied Sciences](#)** or access both via the **[USDA Forest Service homepage](#)**. **Also visit** the **[Eastern Forest Environmental Threat Assessment Center](#)** (EFETAC) and the **[Western Wildland Environmental Threat Assessment Center](#)** (WWETAC) direct link or via the Pacific Northwest Research Station **[here.](#)**

OUTREACH REPLY FORM
GS 0414-11/12 Forest Entomologist
Please respond by <mark>April 15, 2022</mark>

Pacific Southwest Region
San Bernardino National Forest

Please return this form to:
Stacy Hishinuma at stacy.hishinuma@usda.gov

Name: _____

E-Mail Address: _____

Mailing Address: _____

Phone Number: _____

Agency Employed With: _____ USFS _____ BLM _____ OTHER: _____

Type of Appointment: _____ PERMANENT _____ TEMPORARY _____ TERM

_____ VRA _____ PWD _____ OTHER

Current Region/Forest/District: _____

Current Service and Grade, if applicable: _____

Current Position Title: _____

Where did you hear about this vacancy/outreach? _____

If not a current permanent (Career or Career Conditional) employee, are you eligible to be hired under any of the following special authorities?

_____ Person with Disabilities

_____ Disabled Veteran with 30% Compensable Disability

_____ Veterans Employment Opportunities Act of 1998

_____ Former Peace Corps Volunteer

_____ Veterans Recruitment Act

_____ Pathways Students and Recent Graduates

_____ Other: _____

Outreach Response Form
Research Landscape Ecologist, GS-0408-12/13
Duty Station: Asheville, NC

If you are interested in the position, <u>complete this form and send it via email</u>, by **April 25, 2022** to ge.sun@usda.gov. If you are not a current Forest Service employee or do not have access to email, please complete this form and mail to: Dr. Ge Sun, Project Leader, USDA Forest Service, 3041 E. Cornwallis Rd., Research Triangle Park, NC 27709.

PERSONAL INFORMATION

Name: _____

Address: _____

City, State, Zip:_____

Email: _____

Phone: _____

EMPLOYMENT

Are you currently a Federal Employee?　　　◯ Yes　　　◯ No

If Yes:

　　Name of your Agency & Location: _____

　　Current title/series/ grade: _____

　　Type of Appointment:　　◯ Permanent　　◯ Term　　◯ Temporary

If No:

　　Current Employer: _____

　　Current Position

　　Title: _____

　　Type of Appointment:　　◯ Permanent　　◯ Term　　◯ Temporary

If you are not a current permanent federal (career or career conditional) employee, please indicate below if you are eligible for other appointments under any of the following special authorities:

☐ Former Peace Corps/Vista Volunteer　　☐ Veteran's Employment Opp. Act of 1998

☐ Person with Disabilities　　☐ Veteran's Readjustment Act

☐ Student Employment Program　　☐ Reinstatement Eligibility

☐ Veteran with 30% Compensable Disability　　☐ Other: _____

Thank you for your interest!

USDA is an Equal Employment Opportunity Employer

OUTREACH NOTICE FORM

Rocky Mountain Research Station

Forest and Woodlands Ecosystems Science Program

Research Geneticist 11/12 (Moscow, ID)

If you are interested in this opportunity, please complete this form and send it by e-mail alison.hill@usda.gov. (Please include "***Research Geneticist 11/12***" on the subject line of your message.)

Please respond no later than **April 30, 2022**. The permanent position will be advertised on the OPM USA Jobs website www.usajobs.opm.gov shortly.

PERSONAL INFORMATION:

Name: **Date:**
Address: **Phone:**

Email:

Are you currently a Forest Service employee: YES ☐   NO ☐

Current title/series/grade/location/classification:
(e.g., Career, Career-Conditional, Excepted-ANILCA, Excepted VRA, etc.)

The United States Department of Agriculture (USDA) prohibits discrimination in all of 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 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.

REASONABLE ACCOMMODATION: The USDA Forest Service provides reasonable accommodations to applicants with disabilities. If you need a reasonable accommodation for any part of the application and hiring process, please contact the point of contact listed above. The decision on granting reasonable accommodation will be made on a case-by-case basis.