SUMMARY: The forest health fellow is responsible for working collaboratively with the U.S. Forest Service and American Forests to support participatory resistance-breeding activities for tree species that are threatened by insects and diseases (including ash, hemlock and beech) with the long term goal of restoration in areas of need in the Great Lakes Water Basin. The fellow will build networks of stakeholders and partners and engage in technology transfer activities, to advance the achievement of forest health goals through shared stewardship.

Responsibilities include:

1. Coordinate with land managers, researchers, nursery managers and restoration specialists to always have current state of knowledge of research & breeding program progress for all species.
2. Network to identify partners and their interests and capabilities (volunteers, land for plantings, facilities for propagation, seedling production, etc.).
3. Work with Communications staff and Holden Arboretum to develop communication tools for target and general audiences.
4. Organize and lead meetings, workshops and training sessions.
5. Interact with citizen science app developers to develop means for partners to use to report new resistant trees and provide annual updates.
6. Facilitate partners’ pre-breeding, breeding and restoration planting activities and coordinate with researchers (availability of seedlings, methods for clonal propagation, input on planting design for clone tests, etc.).
7. Maintain program database that includes all reports and updates of candidate resistant trees, selected resistant trees, clone banks, progeny tests, etc.
8. Work with partners to develop Material Transfer Agreements or Memorandum of Understanding when appropriate, prior to beginning projects.
9. Work with partners to assist in developing grant proposals and finding funding sources for priority projects.

REQUIRED EXPERIENCE: A minimum of at least five years of professional experience in forest health is required. A master’s degree will substitute for two years of experience. A PhD will substitute for five years of experience. Strong candidates for the position will have: (1) academic training in areas such
as tree genetics, silviculture, restoration ecology, forest pathology or entomology, (2) good quantitative analysis skills, particularly in terms of forest genetics and tree improvement work and (3) interest in participating in interdisciplinary, team-oriented research projects to help forest managers restore key species. Ability to publish in peer-reviewed journals is a plus. Knowledge of: (1) the threat of invasive insects and diseases (2) the impact resistance breeding can have on forest health and management of invasive insects and diseases (3) basic genetics, concepts of genetic diversity, genetic bottlenecks, ecology, natural selection and regeneration (4) the latest research on EAB/ash population dynamics, including the role of biocontrol (5) various hardwood plant propagation techniques – vegetative cuttings, bud grafting, hot callus grafting, seed stratification & germination (6) understanding of integrated pest management techniques

**REQUISITE EDUCATION OR CERTIFICATIONS:** Minimum of a bachelor’s degree in forestry, horticulture, genetics, entomology, pathology, natural resource management, environmental science or closely related field is required. Graduate degree in a relevant field is preferred.

**WORKING CONDITIONS:** The person hired for this position will work from the offices of the Holden Arboretum in Kirtland, Ohio and in both rural and urban forest settings in Ohio, Michigan and other locales. Periodic travel to locations of partnering organizations may be required.

**SPECIFIC RESPONSIBILITIES:**

A. **Planning Guided by Science** (15 percent)

Coordinate with NRS employees to receive training in setting up monitoring plots to monitor ash mortality and EAB populations, criteria for identifying lingering ash, ash seed collection, stratification and germination, ash hot callus and bud grafting and collection of lingering ash scion, for the purposes of training partners in these procedures. Maintain an open dialogue with partnering land managers, researchers, nursery managers and restoration specialists so they are aware of any modifications to processes and procedures and so that, at the same time, you are aware of the status of breeding programs status and progress.

B. **Planting and Monitoring** (20 percent)

Act as a liaison between NRS researchers and partners supporting field testing to make sure that all protocols, and processes related to pre-breeding, breeding and restoration planting are rigorously implemented and documented. Work with stakeholders to help them build long term ash management, conservation & breeding programs. Make sure that maintenance practices are performed in a regular and consistent manner and the integrity of the research is preserved through any transitions that may occur.

C. **Build Partnerships** (25 percent)

Build working relationships with interested professionals capable of supporting and promoting project work and with government partners whose cooperation is essential. Work with regional stakeholders on invasive insect and disease monitoring and control by participating in partnership with The Nature Conservancy, Lake Erie Allegheny Partnership and Holden in developing a regional invasive monitoring program, engage in public outreach to region-wide conservation organizations, non-profit groups and private landowners to facilitate monitoring and detection of insects and diseases, monitoring and detection of candidate resistant trees, and co-ordinate region-wide seed collection of specific tree populations to conserve germplasm, which could be used for future resistance screening.
D. **Advocacy & Funding** (10 percent)
Collaborate with colleagues and partners in preparing funding proposals to help perpetuate activities initiated under this Forest Health Collaborative or complementary ones being led by partner organizations.

E. **Project Management** (30 percent)
Perform the logistical work necessary to properly organize, communicate and preserve the Forest Health Collaborative’s findings and progress including, but not limited to, the establishment of a project website, building and maintaining a database of partners and their interests and capabilities and planning, meetings, workshops and technology transfers to insure the success of the project.

To apply, please send a brief cover letter outlining your background relevant to the project and a current CV detailing how you meet the minimum criteria with three potential references and their contact information to [https://workforcenow.adp.com/mascr/default/mdf/recruitment/recruitment.html?cid=db704977-d8c5-4be2-a36a-23f4002eddc0&ccId=19000101_000001&jobId=394441&source=CC2&lang=en_US](https://workforcenow.adp.com/mascr/default/mdf/recruitment/recruitment.html?cid=db704977-d8c5-4be2-a36a-23f4002eddc0&ccId=19000101_000001&jobId=394441&source=CC2&lang=en_US). This is a LIMITED TERM (not to exceed two-years) and GRANT FUNDED full-time position. It is subject to continuation based on funding and the employee will be terminated without right of appeal if funds are discontinued or are no longer available. This position is eligible for full-time benefits.