

## Allegheny Forest Health Collaborative Glossy Buckthorn Control Project

The High Allegheny Unglaciaded Plateau is home to the 515,000-acre Allegheny National Forest, significant PA State Forest and PA Game Commission holdings, and thousands of acres of large industrial and small family-owned forestlands. This ecoregion encompasses the largest block of core forestland in Pennsylvania – with high quality streams, unique ecosystems and habitats, and significant outdoor recreation and tourism value. It also serves as the beginning of the hardwood supply chain that makes Pennsylvania the number one hardwood producing state in the country, supporting more than 63,000 jobs, and providing over \$36 billion dollars per year in economic impact to the State's economy.

While the list of non-native invasive plants, pests and diseases that threaten the health and sustainability of US forests continues to grow (costing the US more than \$120 billion per year), one invasive species - **Glossy Buckthorn (*Frangula alnus*)** - has emerged as an immediate, significant, and rapidly increasing threat to Pennsylvania's forested Allegheny region (Figure 1). Glossy buckthorn is an expeditious invader and prolific producer of fruit/seeds, facilitating avian spread to new areas. The invasive plant rapidly overtakes the forest understory and very quickly impedes regeneration of desirable tree species and other native vegetation. While still considered an early detection, rapid response (EDRR) species in PA, there are sizable populations in the southwestern portion of the High Allegheny Unglaciaded Plateau ecoregion – primarily in Elk and Forest Counties, with satellite populations in McKean County. First introduced just 10 years ago, it is estimated that approximately 50,000 acres of the region are infested with glossy buckthorn. Left unchecked or treated by individual landowners in an uncoordinated, non-landscape approach, forestry professionals in the region agree that glossy buckthorn's growth patterns and characteristics have the potential to devastate and forever change the forest composition, and in turn, the forest health and economic viability of both the hardwood and outdoor tourism industries of the Allegheny region – and eventually in all of Pennsylvania's forestlands.

The Allegheny Forest Health Collaborative is working to develop a landscape level strategy to mitigate the spread of glossy buckthorn, while simultaneously working to eradicate the invasive from the epicenter of the outbreak, across the multiple private and public ownerships of the Allegheny region of Pennsylvania. Effective treatment involves multiple reentry to impacted areas, with herbicide application, mowing, controlled burn, or other proven measures, estimated at a cost of more than \$300 per acre per treatment. The goal of the project is to implement a cooperative, concentrated effort to identify, contain, control, and eradicate glossy buckthorn from Pennsylvania's high unglaciaded Allegheny plateau while there is still time to prevent catastrophic, long-term forest health and economic implications. **Professional forest managers familiar with the scope of the region's issue and experience in treating glossy buckthorn estimate that a successful large-scale treatment project will take at least six years to complete, and cost more than \$30 million dollars. The Allegheny Forest Health Collaborative (AFHC) seeks the support of Congressman Thompson in building awareness and securing federal funds to advance this critical effort.**

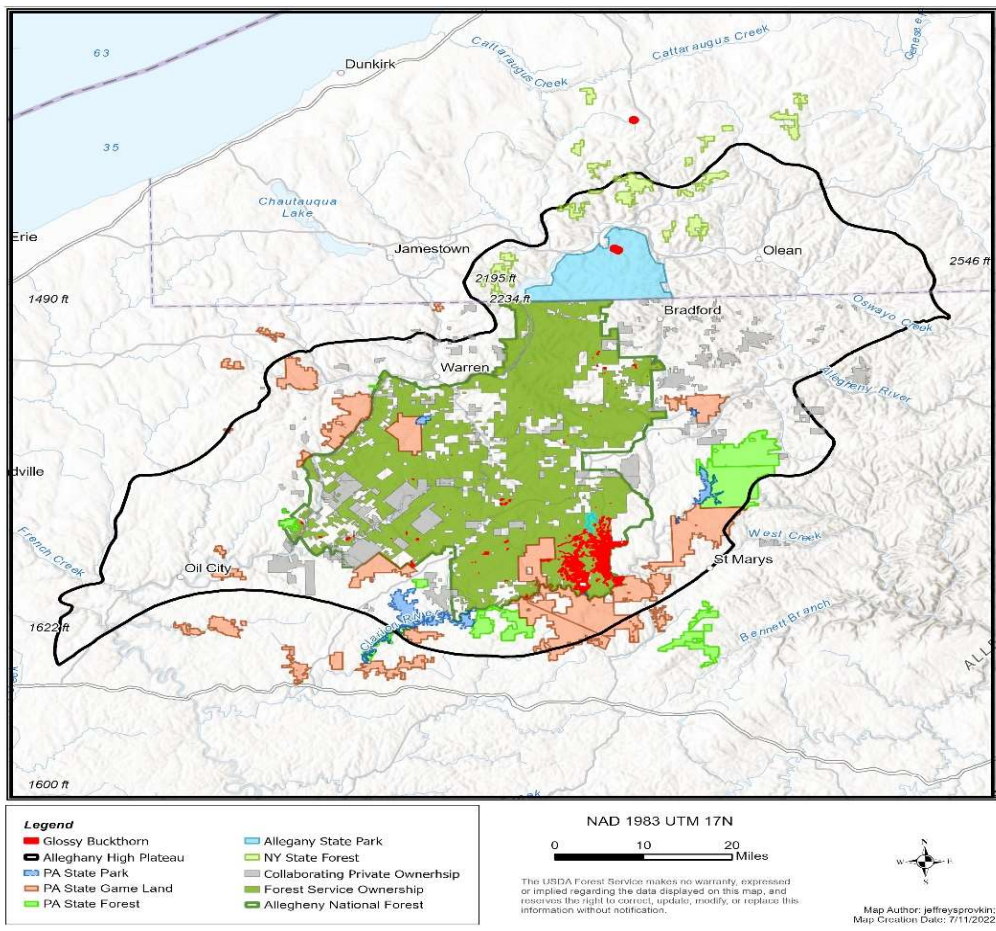
Collaboration across this geographic area is long-established and strong. The [Allegheny Forest Health Collaborative \(AFHC\)](#) was formally established in 2017 to connect intermingled ownerships and interests to collectively identify and address a multitude of emerging forest health issues across the landscape and across property ownerships, in effort to sustain healthy forest ecosystems for current and future generations. The AFHC has gained momentum as a leader in collaborative forest health efforts in Pennsylvania, with membership including over 60 federal and state landowners and managers, timber investment management companies, large and small private landowners, academia and researchers, NGO's, hardwood manufacturers, local and state officials, conservation organizations, and community groups. The AFHC has identified non-

native invasive plants as an urgent concern to native ecosystems of the High Allegheny Unglaciaded Plateau, with glossy buckthorn emerging through the ongoing work of the Collaborative as a critical priority forest health threat.

The glossy buckthorn control project will be directed by a steering committee comprised of AFHC partners with the specific expertise required to ensure a successful outcome, including public outreach and education, forest silviculture, invasive plants, project management and implementation, etc. The project will involve several phases and will be executed on a landscape level to include public and private landowners. Significant data exists outlining the infestation area; however more mapping will be necessary to determine exact ownerships and gaps in the current data. Public outreach, particularly to small private landowners, will be critical to achieve landscape control. Treatment will be administered using approved and effective methods identified by regional land managers, incorporating research from other states experienced in glossy buckthorn mitigation (MI, MN, WI). AFHC partners will provide funding and in-kind services to leverage federal dollars.

This project is important as it will address a potentially devastating threat to forest health in Pennsylvania, using a collaborative, landscape-level approach that can serve as a model for future efforts across the US.

**USDA UAS Allegheny High Plateau - Inventoried Glossy Buckthorn Distribution Allegheny National Forest**



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Figure 1: Known Glossy Buckthorn populations to date on the High Allegheny Unglaciaded Plateau and Allegheny National Forest