



FIA What is Forest Inventory and Analysis?

FIA is ...

The **Forest Inventory and Analysis** (FIA) program of the USDA Forest Service Research and Development Branch collects, processes, analyzes, and reports on data necessary for assessing the extent and condition of forests in the United States.

Mission

The FIA program has been in operation since 1930, and is tasked with an official mission to:

“make and keep current a comprehensive inventory and analysis of the present and prospective conditions of and requirements for the renewable resources of the forest and rangelands of the U.S.”

More Information

For more information on the FIA program and its components, visit the national FIA website at:

<https://www.fia.fs.fed.us/>

Data collected by FIA are used to determine how much forest exists on the landscape, where it exists, what kinds of trees are growing in the forest, who owns the forestland, how it is changing, how the trees and other forest vegetation are growing, and how much has died or been removed in recent years. This information can be used in a multitude of ways, by a broad spectrum of people to answer questions about wildlife habitat availability and condition, carbon accumulation, the health of the forest, availability of wood for human consumption, and to aid and support planning and decision-making activities undertaken by public and private enterprise. The FIA program combines this information with related data on insects, diseases, and other types of forest damages and stressors to assess the current health conditions and potential future risks to forests.

Background and Legislation

The FIA program concept is over 120 years old. The Organic Act of 1897, which established the National Forest System, included provisions for inventory and management of those lands. In 1928, the Forestry Research Act (McSweeney-McNary) directed the Secretary of Agriculture to make and keep current a comprehensive inventory and analysis of the Nation’s forest resources. The Resources Planning Act of 1974 (RPA, PL 93-378) amended the earlier research act. The Forest and Rangeland Renewable Resources Research Act of 1978 (PL 95-307) replaced earlier Forestry Research legislation but repeated the amendment contained in the RPA and further instructed the Secretary of Agriculture to:

“...obtain, analyze, develop, demonstrate, and disseminate scientific information about protecting, managing, and utilizing forest and rangeland renewable resources in rural, suburban, and urban areas”

The National Forest Management Act of 1976 (PL 94-588) directed the USDA Forest Service to:

“ensure research on and (based upon continuous monitoring and assessment in the field) evaluation of the effects of each management system...”

More recently, in 1999 (Farm Bill, Public Law 105-185) and again in 2014 (Farm Bill, Public Law 113-79), Congress directed the Forest Service to reevaluate its statewide inventory mission and to transition to survey each State annually rather than periodically, with the exception of Interior Alaska and U.S. associated islands of the Caribbean and Pacific Ocean. Additionally, FIA was directed to implement urban forest inventories, improve sub-state estimation precision, and improve the timber product output program among other provisions. In collaboration with partners, FIA developed strategic plans to fully transition into an annualized inventory and comply with other requirements.

Program Vision

The FIA program delivers current, consistent, and credible information about the status of the United States’ forests. Annualized data collection ensures a steady stream of incoming information related to forest resources and health. Summaries and reports detailing the health and productivity of each State are released every five years. FIA collects and analyzes a consistent core set of ecological data on all forests so that comparable information and trends exist for all regions and ownership categories. In each region, we collect additional data beyond the core set and customize analyses to address specific regional and local issues. Consequently, our information and trends are important indicators of the conservation and sustainable management of United States forests.



Photo 1: Portable Data Recorder used to record field data measurements (Photo by Sjana Schanning, NRS FIA)



Photo 2: Field crew measuring DBH (Photo by Ben Nurre, NRS FIA)

The FIA program utilizes new and emerging technologies to acquire data through remote sensing and field activities. We use experts from universities and elsewhere to augment our research and analytical capabilities, and to continually develop and enhance our inventory and monitoring techniques. Rigorous quality assurance procedures allow us to verify the accuracy of our estimates and validate our analytical results. Consequently, State, Federal, and international agencies, industries, environmental organizations, academic organizations, private landowners and consultants can rely on the credibility of our information to make critical land management, policy, and investment decisions.

Our partners are an integral part of our forest inventory and analysis activities. Without their contributions of personnel, funding, and continued support, the FIA vision would be unattainable.

Program Deliverables

The FIA program strives to meet the following needs for its key customer groups:

- Annual data collection
- Prompt public access to collected data
- State and regional reporting on a five-year basis
- Consistent data across political and administrative boundaries and land ownerships
- Current information that is consistent with historical information
- Data sets and analytical products that include a wide array of forest ecosystem parameters addressing the extent, productivity, and health of United States forests
- Data that can be post-stratified and analyzed in numerous ways
- Data that are readily available in summarized formats for use by a variety of audiences
- Reliable and credible data, as shown by fully documented data quality procedures and attributes
- Analysis and interpretations of data trends

FIA data and reports are available to the public in a variety of formats, including:

- Program features: <https://www.fia.fs.fed.us/program-features/>
- Online data access tools: <https://www.fia.fs.fed.us/tools-data/index.php>
- Geospatial Data Showcase: <https://fia-usfs.hub.arcgis.com/>

Customer Base

FIA has a broad and varied customer base that includes the following key groups:

- State and National forest policy decision-makers
- State foresters and State forestry agencies
- Universities and other academic institutions
- Industry and consultants
- Forest Service scientists and officials
- International bodies interested in global forest initiatives
- Environmental organizations
- Researchers
- Journalists
- Interested private citizens