First Public LFRDB Release Since 2016 Expands National Ecological Data

LANDFIRE Reference Database Adds More than 74,000 New Vegetation Plots in Major LF 2025 Milestone

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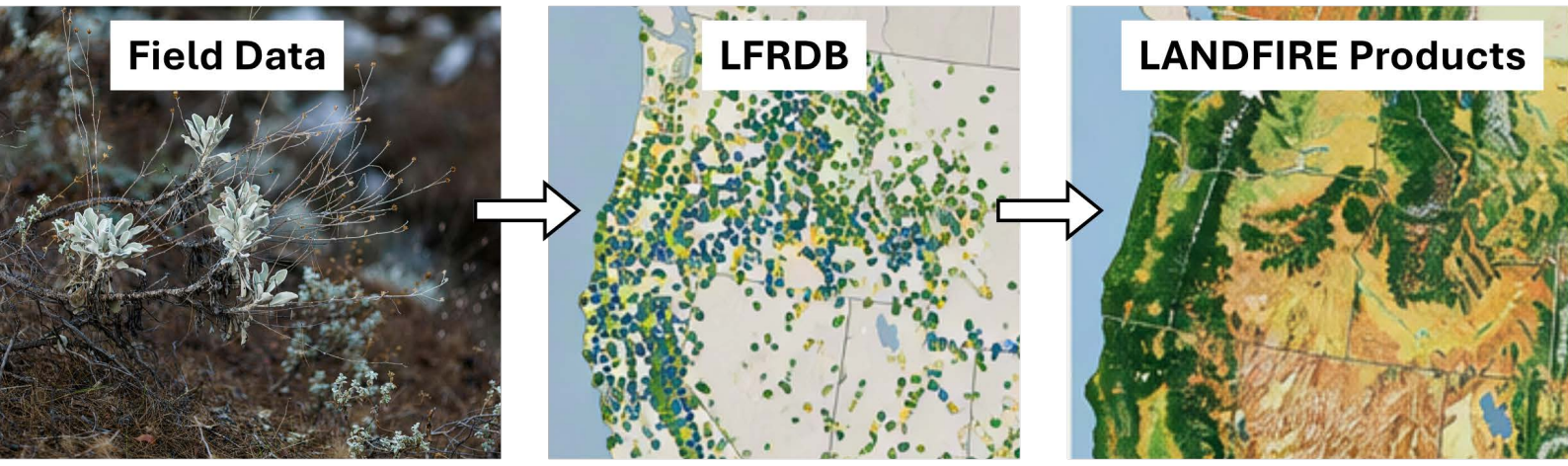
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The first public LFRDB release since 2016 added more than 74,000 vegetation plots, expanding nationwide ecological data coverage and providing land managers, researchers, and decision-makers with enhanced access to standardized reference information for science-based landscape management.

WHAT HAPPENED: With the LF 2025 product suite, LANDFIRE achieved a major milestone with the first public release of the LANDFIRE Reference Database (LFRDB) since LF 2016.

The release significantly expands one of the nation's most important collections of vegetation reference information, providing researchers, land managers, and partners with access to thousands of new field-based observations of vegetation from across the United States. The LFRDB is used as the primary training/validation dataset for LANDFIRE's machine learning vegetation and fuel mapping models across the United States.

A total of 74,073 new plots were added to the public LFRDB, substantially increasing the breadth and depth of ecological information available to support landscape assessments, vegetation mapping,



Field-sampled vegetation and fuel data from partner organizations are standardized in the LFRDB and used to develop and validate LANDFIRE products.

fuels characterization, habitat management, and wildfire planning. New data and plot locations span the conterminous United States, Alaska, and Puerto Rico. An additional 75,972 new plots were added to the program LFRDB. These additional records are not available to the public, however they expand the reference data used to train and validate LANDFIRE products, a process that makes LANDFIRE more accurate.

WHAT'S IN A PLOT RECORD?

- **Location and data source**
- **Plant species and percent cover**
- **Vegetation composition and structure**
- **Ecological System classification**
- **NVCS group assignment**
- **Fuel measurements, when available**

The newly released plots include detailed plant species characterization data and estimates of percent cover for individual plant taxa, providing a rich source of information for understanding vegetation composition and structure. To ensure consistency across the database, every new plot was processed through the LANDFIRE Auto-Keys and assigned both Ecological System and National Vegetation Classification System (NVCS) 2.0 Group labels. Development of a new plot autokey for NVCS 3.0 is ongoing.

The LF 2025 LFRDB release reflects the value of collaboration across the natural resource and scientific communities. The new data were sourced from several established ecological monitoring and data programs, including the Bureau of Land Management's Assessment, Inventory, and Monitoring (AIM) Program, the National Ecological Observatory Network (NEON), the National Park Service Inventory and Monitoring Program, the California Department of Fish and Wildlife, and the Ecological Society of America's VegBank repository.

By bringing these datasets together within a standardized framework, LANDFIRE enhances the accessibility and utility of vegetation information for a wide range of users. The LF 2025 release not only expands data availability but also strengthens the scientific foundation supporting natural resource management and conservation decisions nationwide.