

Data and methods for forest carbon fact sheets

Here are references and data sources used to compile the FRA forest carbon fact sheets:

- Trends in forest ecosystem carbon stocks (1990-2019) at the state level were obtained from the [USDA Forest Service Resource Update FS-227](#): “Greenhouse gas emissions and removals from forest land, woodlands, and urban trees in the United States, 1990-2018”. These data produce the 30-year trend lines in forest ecosystem carbon and the values of carbon stored in different carbon pools (e.g., soils, live trees, and dead wood).
- State-level CO₂ emissions were obtained from [EPA State CO₂ Emissions from Fossil Fuel Combustion](#), based on data from 2017. This data set allows statements like “Minnesota forests remove 14% of all CO₂ emissions in the state”.
- Values of carbon by ownership and carbon storage and sequestration (by 5-year age classes) were obtained from USDA Forest Service, Forest Inventory and Analysis Program using the [EVALIDator web-application, version 1.8.0.01](#), (Accessed 28 Aug 2020).
 - These measurements include the most recent data measured for each state. For states in the eastern US, the measurements generally represent the years between 2013 and 2019. For states in the western US, the measurements generally represent the years between 2007 and 2018.
 - The trend line in the carbon sequestration graph is a smoothed conditional mean line across the range in stand ages.
- Total forest area and land area for each state obtained from [USDA Forest Service Gen. Tech. Rep. WO-97](#): “Forest Resources of the United States, 2017: a technical document supporting the Forest Service 2020 RPA Assessment”.

Here are the data files used to compile the FRA forest carbon fact sheets, stored as Google Sheets:

- [State carbon trends](#)
- [Forest carbon by ownership and state](#)
- [Forest carbon by pool components](#)
- [Forest carbon by state, age, and total land and forest area](#)

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