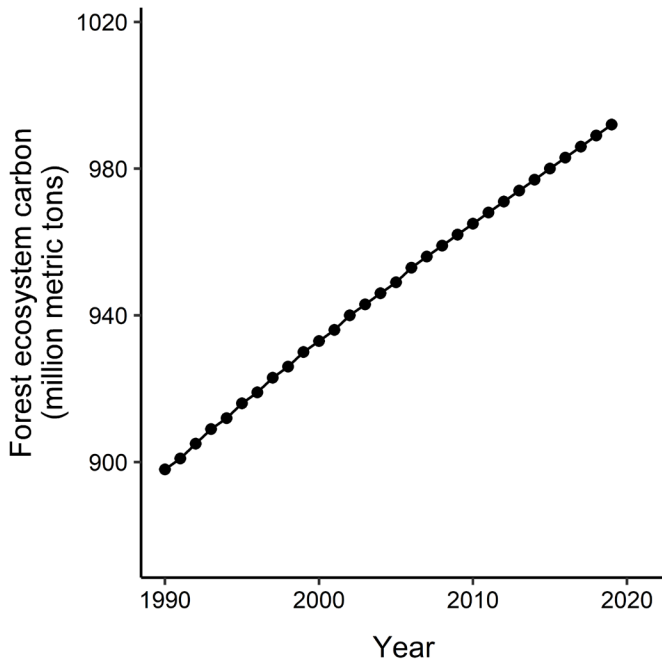
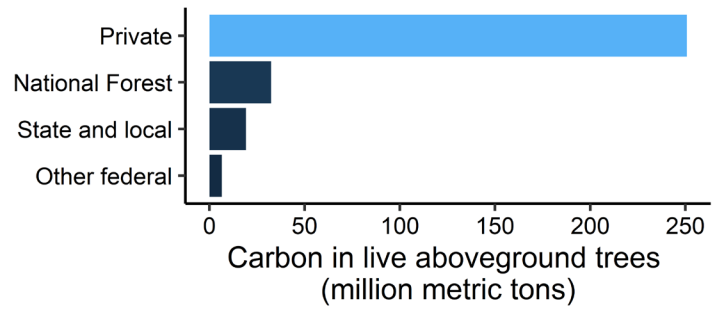




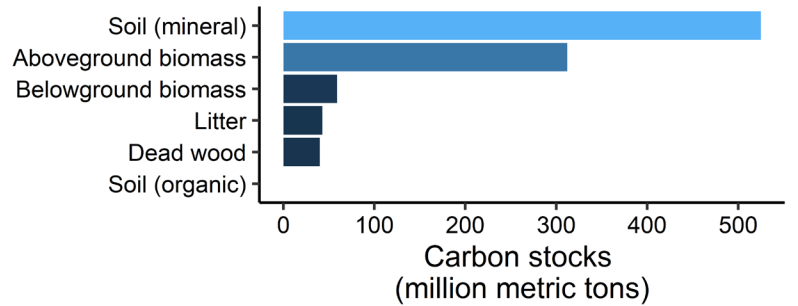
Trends in Missouri



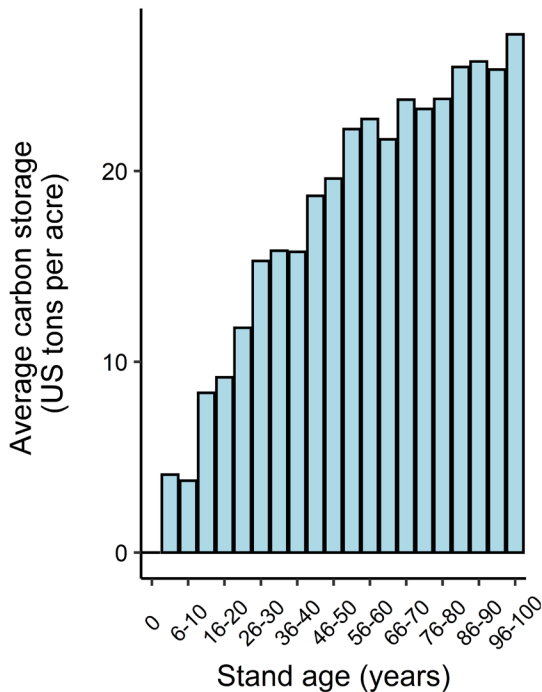
Carbon across MO ownerships



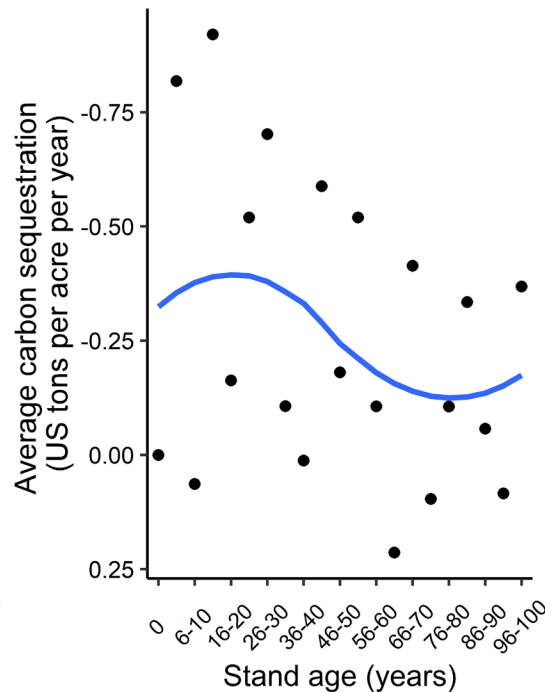
Carbon pools in MO forests



Carbon storage in MO



Carbon sequestration in MO



### Carbon Definitions

**Carbon pool:** a component of the forest that can gain or lose carbon over time

**Carbon storage:** the amount of carbon retained in a forest and/or carbon pool

**Carbon sequestration:** the process by which trees and plants use carbon dioxide and photosynthesis to store carbon as biomass

**Units:** Forest carbon is typically expressed in US tons per acre or metric tons (1 metric ton = 1.10 US tons)

## Quick Facts on Forest Carbon

- Missouri has 15.4 million acres of forests and is 35% forested.
- Missouri forest carbon stocks have increased by 10% from 1990 to 2019.
- Average carbon density in aboveground trees across Missouri forests is 22.5 US tons per acre.
- In Missouri, forests, urban trees, and harvested wood products:
  - Remove 8% of all CO<sub>2</sub> emissions in the state. (Across the US, this value is 14%.)
  - Store the equivalent of 30 years of all CO<sub>2</sub> emissions produced in the state.

Sources: Forest ecosystem carbon stocks obtained from [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". State-level CO<sub>2</sub> emissions obtained from [EPA State CO<sub>2</sub> Emissions from Fossil Fuel Combustion, 1990-2017](#). 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". Values of carbon by ownership and forest type obtained from USDA Forest Service, Forest Inventory and Analysis Program using the [EVALIDator web-application, version 1.8.0.01](#), years 2007-2019 (Accessed 31 Aug 2020).