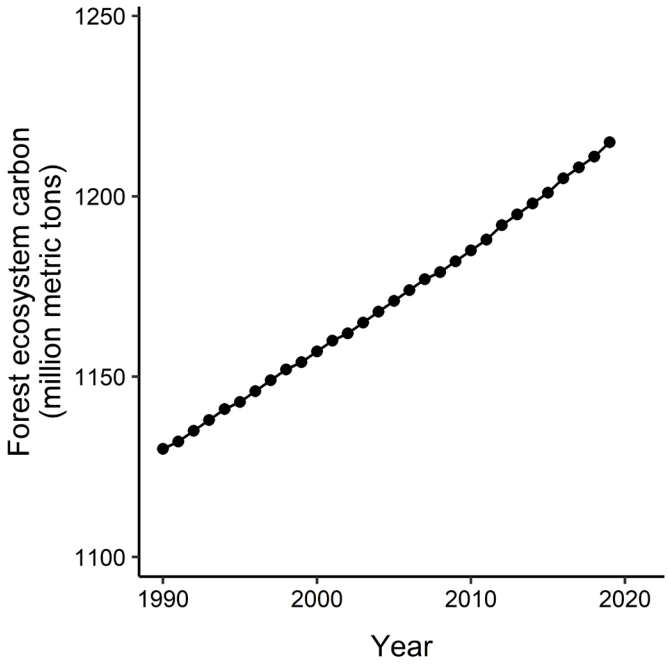
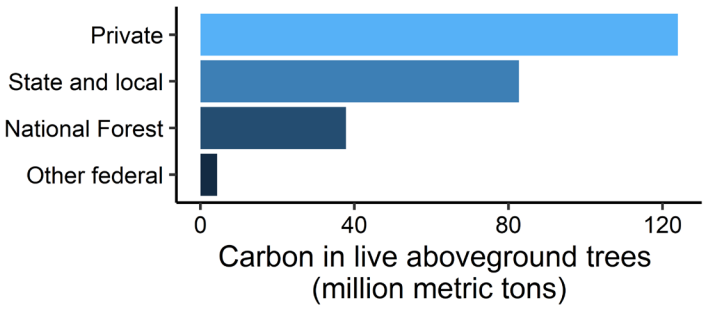
Forest Carbon Report: Minnesota

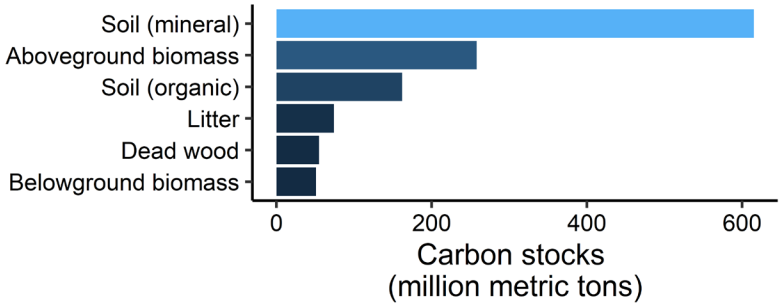
Trends in Minnesota



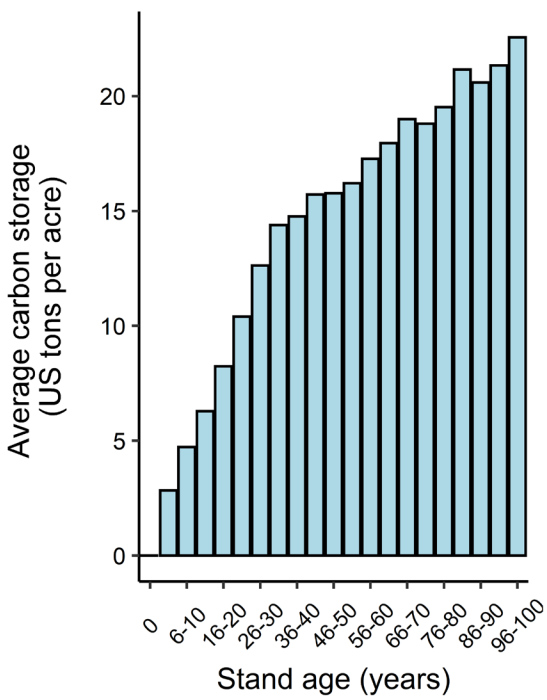
Carbon across MN ownerships



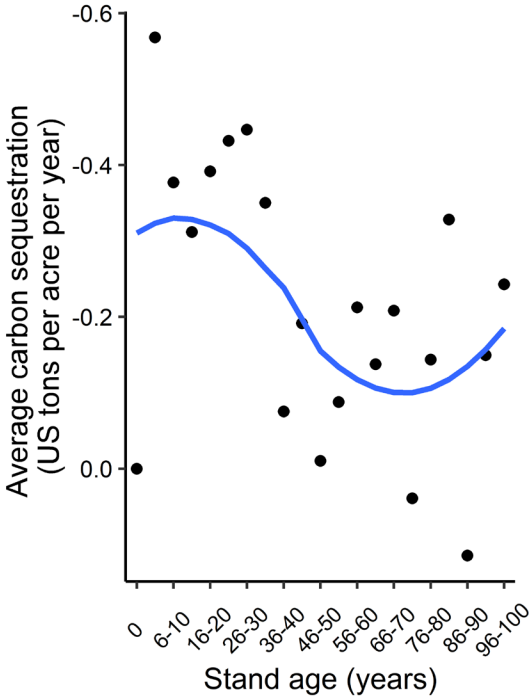
Carbon pools in MN forests



Carbon storage in MN



Carbon sequestration in MN



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

- Minnesota has 17.4 million acres of forests and is 34% forested.
- Minnesota forest carbon stocks have increased by 8% from 1990 to 2019.
- Average carbon density in aboveground trees across Minnesota forests is 15.5 US tons per acre.
- In Minnesota, forests, urban trees, and harvested wood products:
  - Remove 14% of all CO_2 emissions in the state. (Across the US, this value is also 14%.)
  - Store the equivalent of 50 years of all CO_2 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_2 emissions obtained from EPA State CO_2 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).