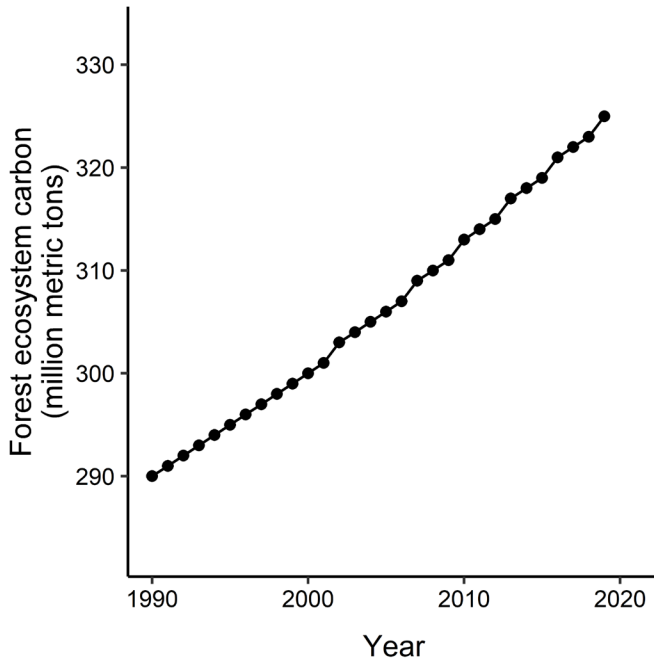
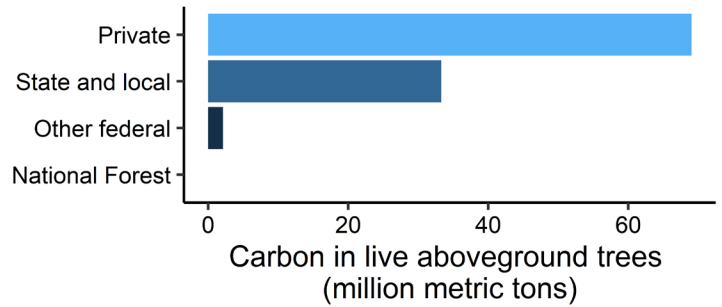




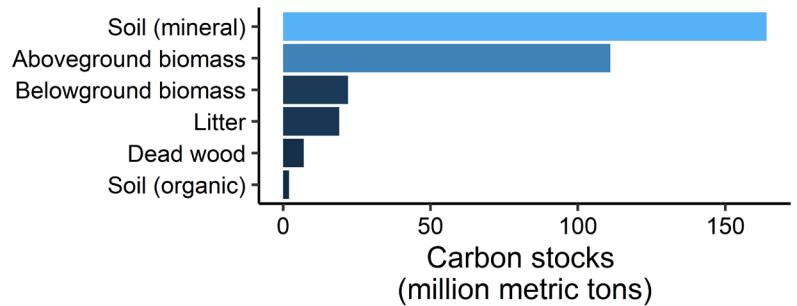
Trends in Massachusetts



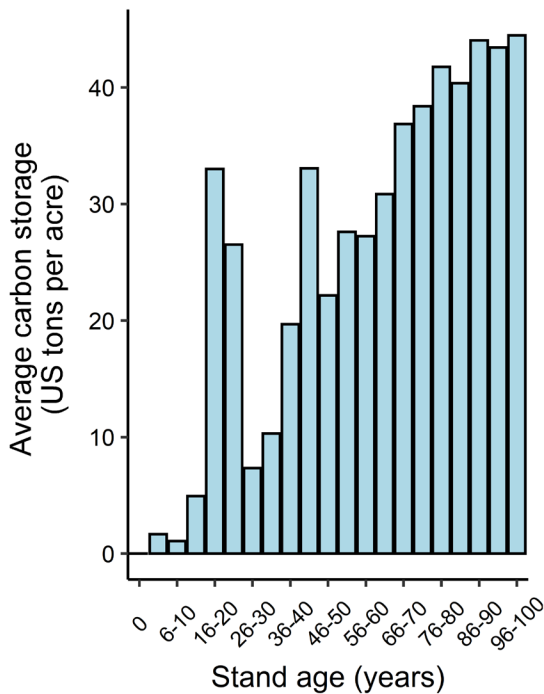
Carbon across MA ownerships



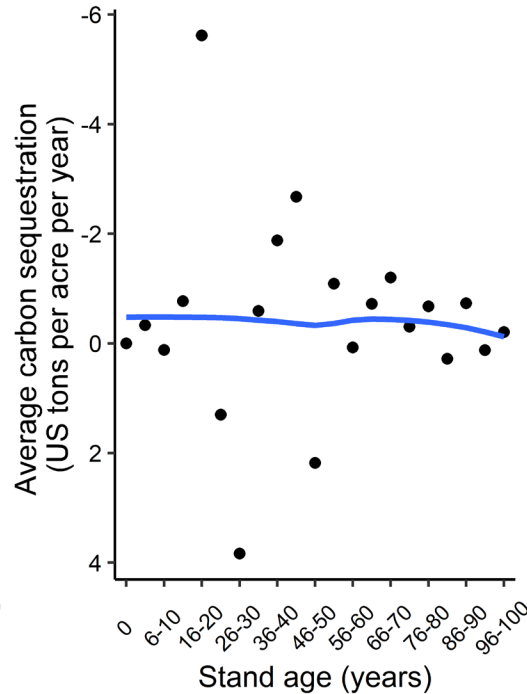
Carbon pools in MA forests



Carbon storage in MA



Carbon sequestration in MA



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

- Massachusetts has 3.0 million acres of forests and is 61% forested.
- Massachusetts forest carbon stocks have increased by 12% from 1990 to 2019.
- Average carbon density in aboveground trees across Massachusetts forests is 38.5 US tons per acre.
- In Massachusetts, forests, urban trees, and harvested wood products:
 - Remove 8% of all CO₂ emissions in the state. (Across the US, this value is 14%.)
 - Store the equivalent of 18 years of all CO₂ 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 CO₂ emissions obtained from [EPA State CO₂ 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).