

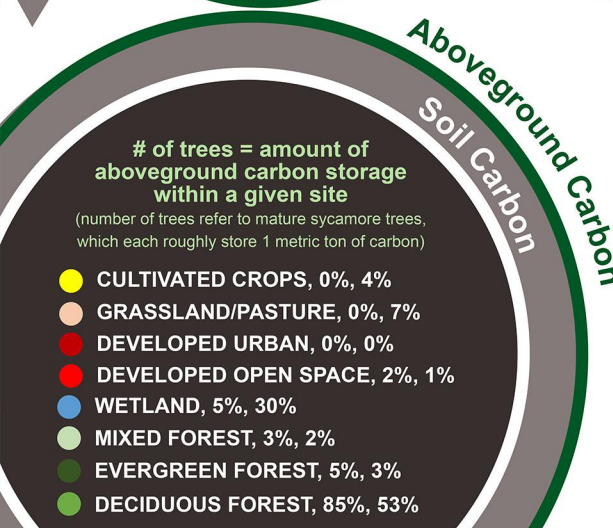
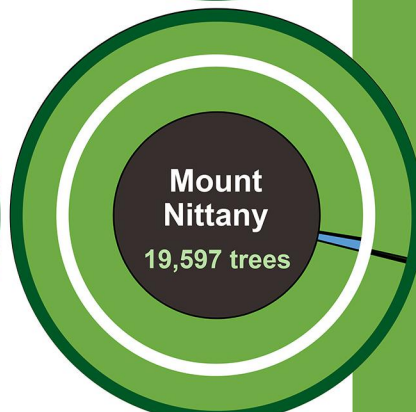
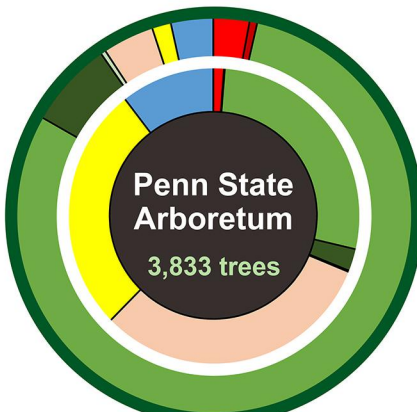
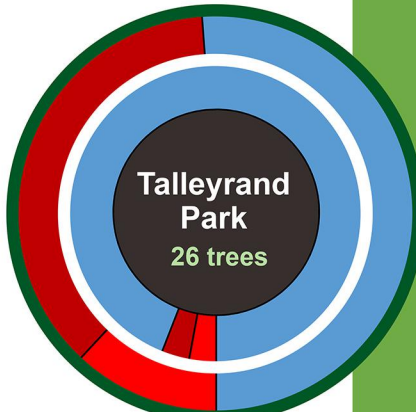
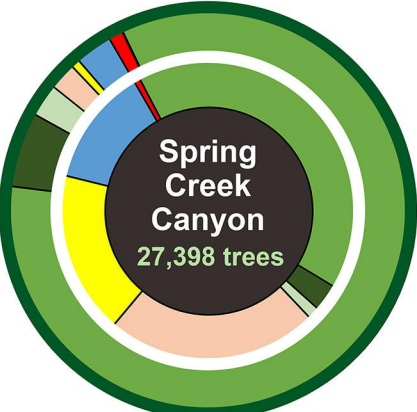
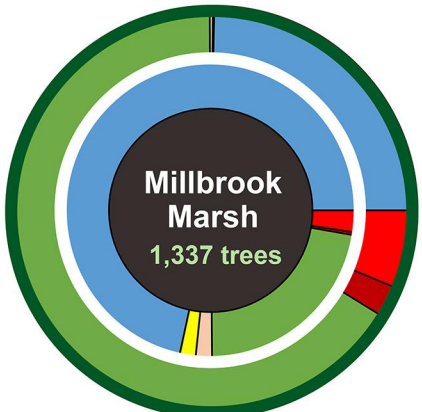
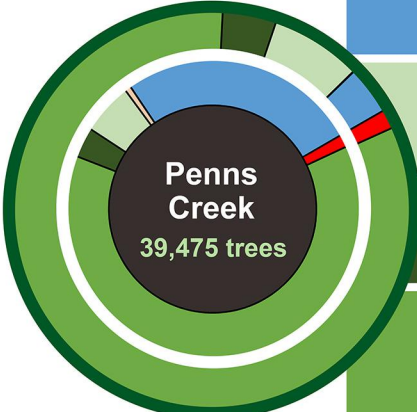
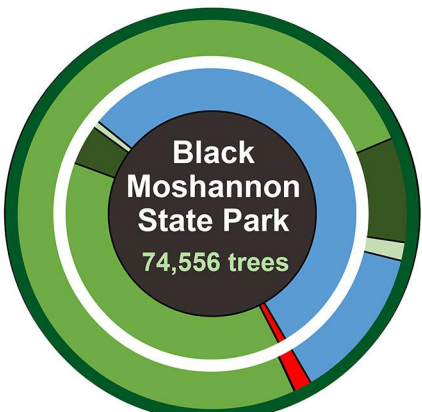
West

East

Large Area

Wet Area

Dry Area



### CARBON STORAGE

Greenhouse gases such as carbon dioxide are increasing in the atmosphere as a result of increases in anthropogenic activity. There is a pressing need to minimize the emission of carbon dioxide because studies have shown that this greenhouse gas is causing climate change. Here, we provide carbon storage estimates for nine sites within the Centre Region, organizing sites by geographic location (west to east) and by primary landscape features (i.e. large areas, wet areas, and dry areas). These features are critical for understanding how various landscapes have the ability to store carbon differently. The percent of carbon found in aboveground vegetation is represented in the outer circle (green) while the inner circle (white) surrounding each site name shows soil carbon percent. Each color within the two rings depict individual landcover types. Within the legend, the first percentage shows average carbon storage aboveground and the second percentage shows average carbon in soil for each landcover type, which are also depicted graphically as bars on the right. Forested and wetland ecosystems, in particular, serve as prominent carbon sinks and are therefore important environs for reducing effects of global warming.

AVERAGE ABOVEGROUND CARBON %

AVERAGE SOIL CARBON %

# A BREATH OF FRESH AIR

How Different Landscapes Reduce Carbon Dioxide by Storing Carbon

Pennsylvania State University - Created for Centred Outdoors

Tara Mazurczyk (Geog), Jesus Ruiz-Plancarte (Meteo), Peter Backhaus (Geog), Kyle Clark (ESM), Tim Gould (Ecology), Zheng Lin (Env Engr), Ramzi Tubbeh (Geog), Josh Wisor (ESM), Travis Young (Geog)  
GEOG 550 – Wetlands Ecology and Management – Robert P. Brooks, Ph.D. Instructor