

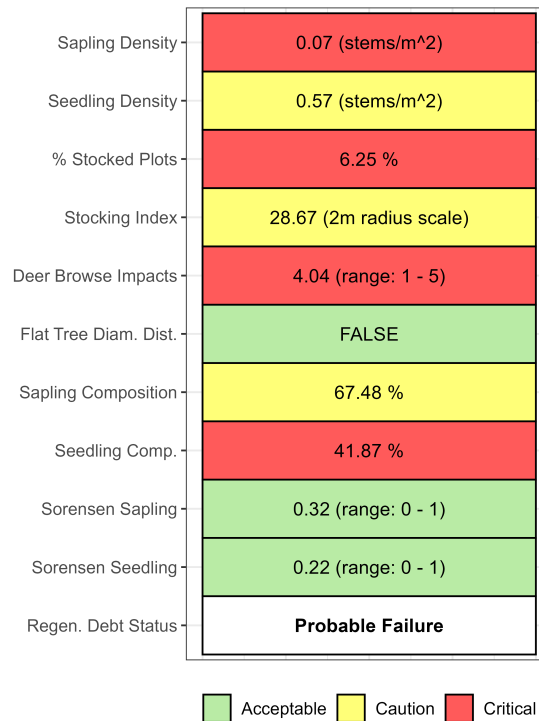


Figure 1. Regeneration Debt status for the most recent 4-year census (2021 – 2024) in Chancellorsville and Wilderness Battlefields in Fredericksburg & Spotsylvania National Military Park (FRSP). Flat Tree Diam. Dist. stands for Flat Tree Diameter Distribution. If TRUE, the density of small trees is lower than expected due to chronic regeneration failure. Sapling/Seedling Composition is the % of total stems composed of native canopy-forming species. Sorensen is a measure of how closely the regen. layer matches canopy composition. For more details on metric calculations, thresholds and assessment of status, see [Miller et al. 2023](#).

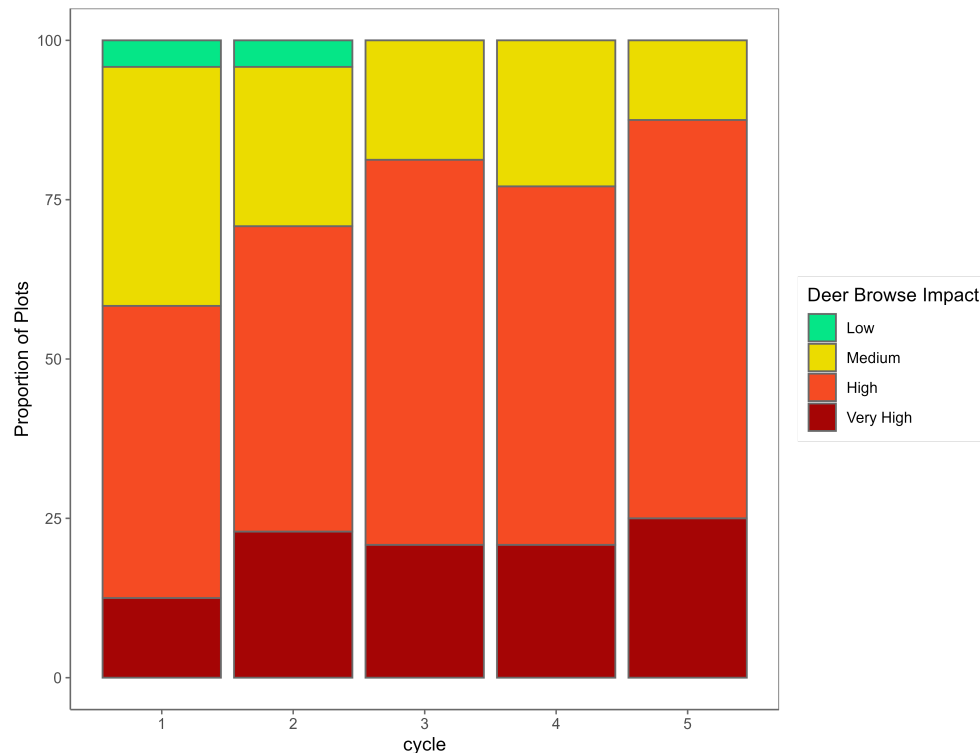
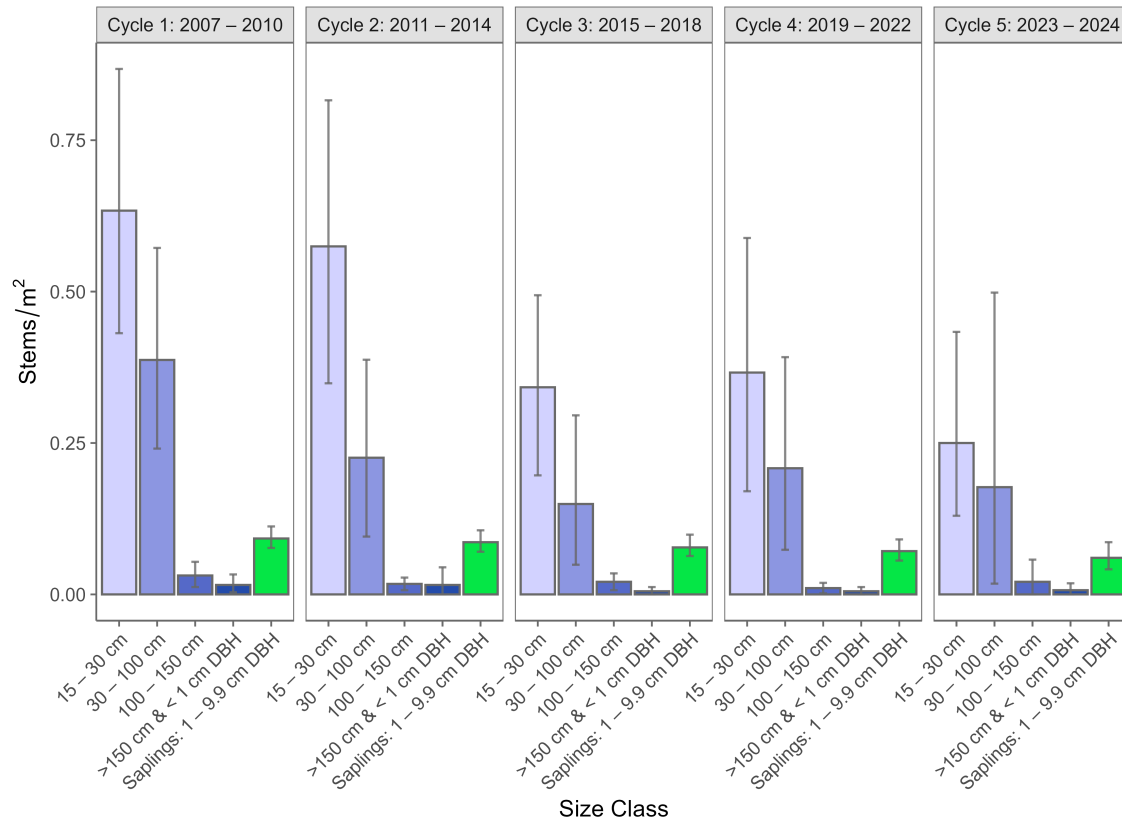


Figure 2. Deer browse impacts by cycle in Chancellorsville and Wilderness Battlefields in Fredericksburg & Spotsylvania National Military Park (FRSP). Cycle 1: 2007 – 2010; Cycle 2: 2011 – 2014; Cycle 3: 2015 – 2018; Cycle 4: 2019 – 2022; Cycle 5: 2023 – 2024. **Note that Cycle 5 is only partially complete.**



A.



B.

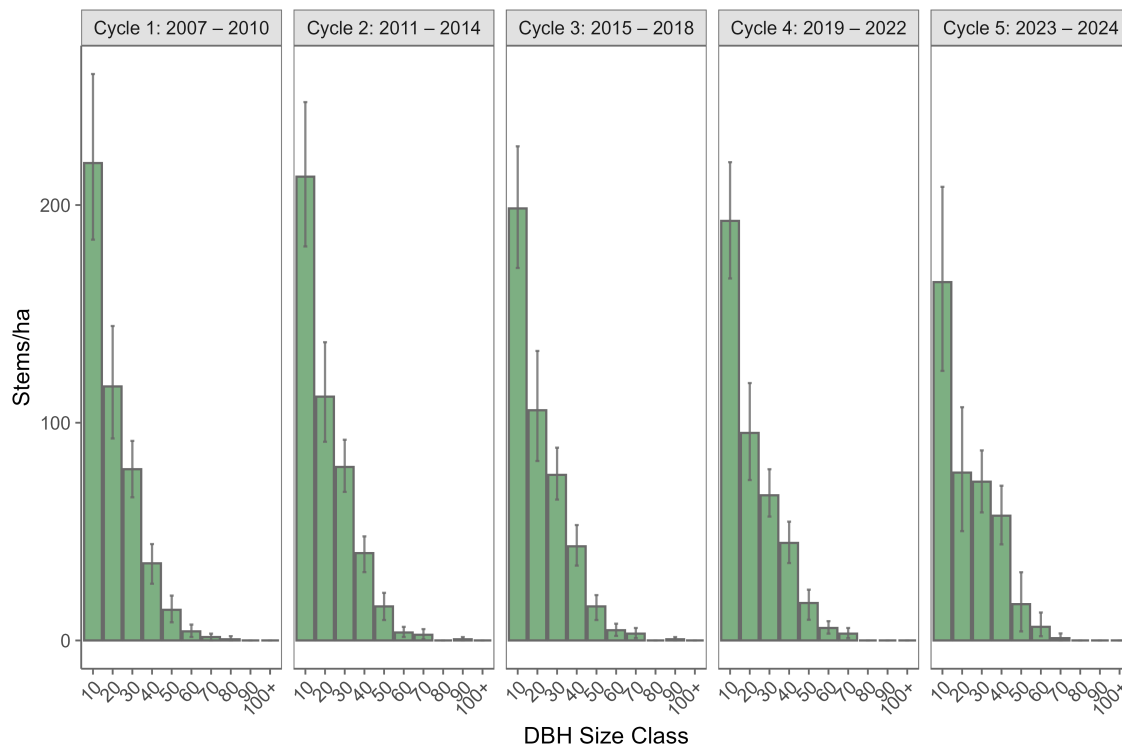


Figure 3. Stem density distributions by cycle in Chancellorsville and Wilderness Battlefields in Fredericksburg & Spotsylvania National Military Park (FRSP). Cycle 1: 2007 – 2010; Cycle 2: 2011 – 2014; Cycle 3: 2015 – 2018; Cycle 4: 2019 – 2022; Cycle 5: 2023 – 2024. **Note that Cycle 5 is only partially complete.** Figure A shows regeneration densities by size class. Figure B shows tree density by diameter at breast height (DBH) increments. Error bars are 95% bootstrapped confidence intervals to account for non-normal error. An asterisk denotes a linear DBH distribution that is indicative of long-term recruitment failure.

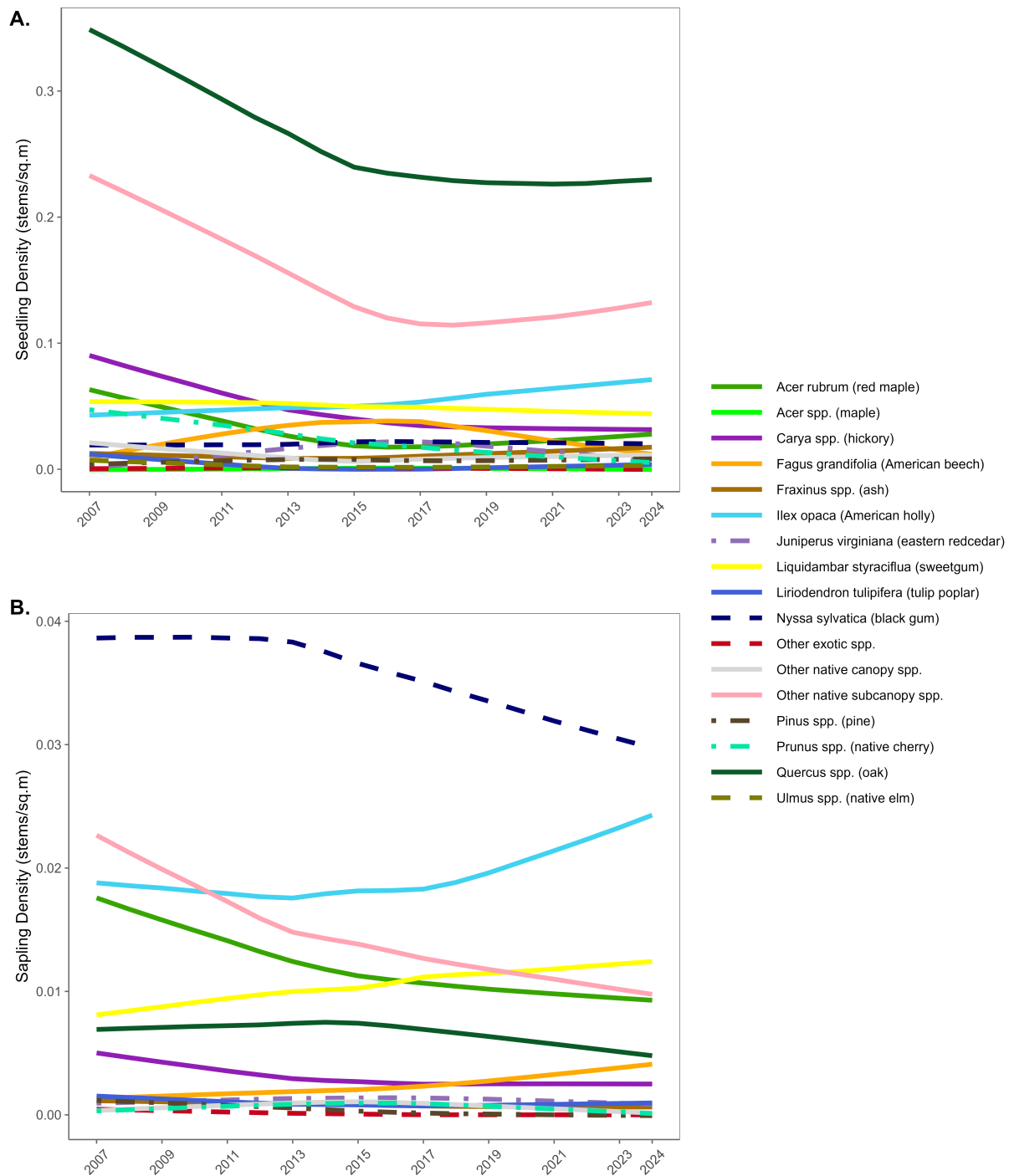


Figure 4. Loess smoothed changes in stem density for seedlings (A) and saplings (B) by species group and sample year in Chancellorsville and Wilderness Battlefields in Fredericksburg & Spotsylvania National Military Park. Specified loess span approximated a linear trend between consecutive sample events per panel.

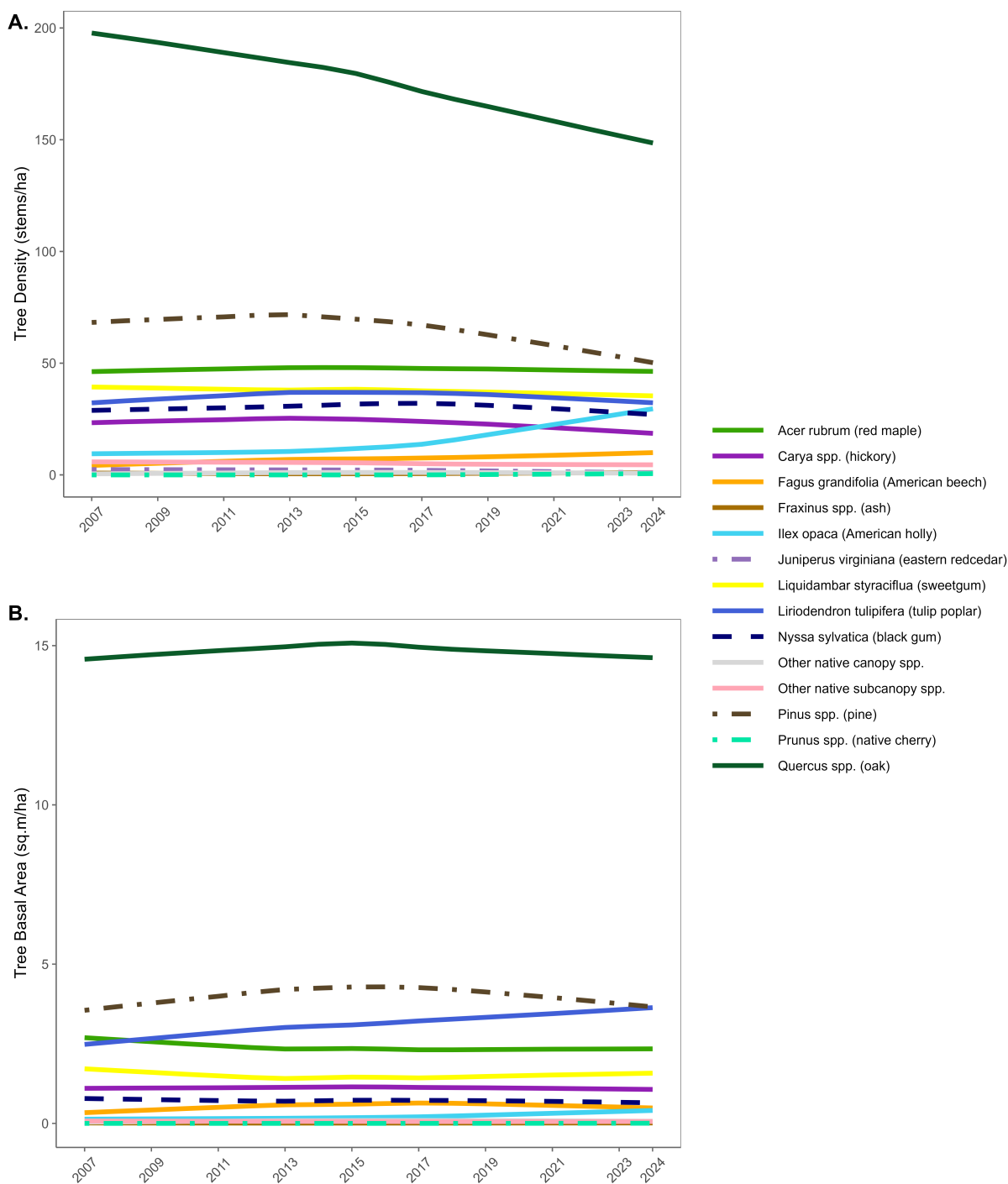


Figure 5. Loess smoothed changes in tree stem density (A) and basal area (B) by species group and sample year in Chancellorsville and Wilderness Battlefields in Fredericksburg & Spotsylvania National Military Park. Specified loess span approximated a linear trend between consecutive sample events per panel.

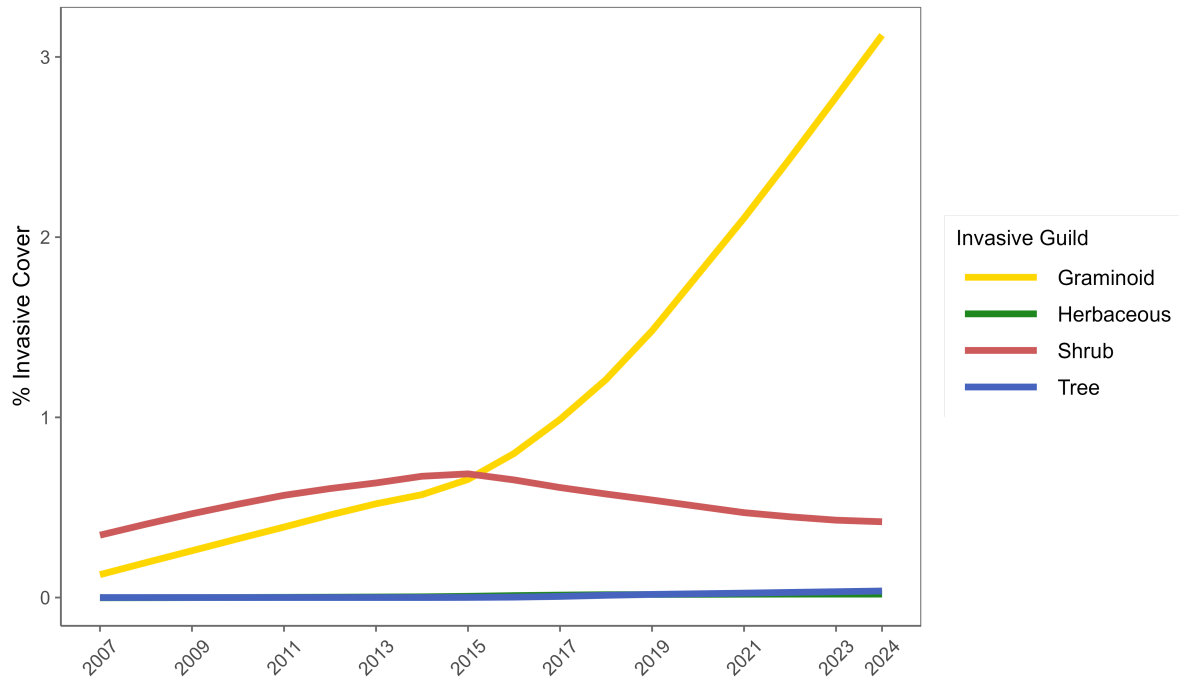


Figure 6. Loess smoothed changes in invasive plant percent cover by guild and sample year in Chancellorsville and Wilderness Battlefields in Fredericksburg & Spotsylvania National Military Park. Specified loess span approximated a linear trend between consecutive sample events per panel.