



Acadia National Park's Forests Regeneration Status is Secure

Introduction

Acadia National Park's (ACAD) forest regeneration status of 'Secure' means that the park has abundant seedling and sapling layers and show few concerning trends.

Main Findings

Acadia National Park (ACAD) is located in the Northeast Temperate (NETN) Inventory and Monitoring Network (Figure 1). ACAD's regeneration status is categorized as Secure. Figures 2 & 3 present trends of tree, sapling, and seedling measures. Figure 4 shows the stocking index for ACAD, and Figure 5 represents trends in tree basal area and density. To see the distribution of trees by diameter classes, see Figure 6. Finally, a full summary of regeneration status, native canopy trends, native sub-canopy trends, and exotic trends for 13 metrics can be seen in Table 1.

Management Suggestions

These findings underscore the critical importance of an integrated forest management approach that promotes an abundant and diverse regeneration layer. In most cases, this can only be achieved through long-term (i.e. multi-decadal) management of white-tailed deer and invasive plants. Small-scale disturbances that increase structural complexity may also promote regeneration where stress from deer and invasive plants is minimal. Without management intervention, forest loss may become a widespread pattern in eastern national parks and the broader region.

Source Publication and resources

Miller K., Perles S., Schmit J.P., Matthews E., Weed A., Comiskey J., Marshall M., Nelson P., Fisichelli N. 202X. Forests in eastern national parks face widespread regeneration debt. Ecological Applications.

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Links:

1. Managing Resilient Forests Initiative for Eastern National Parks

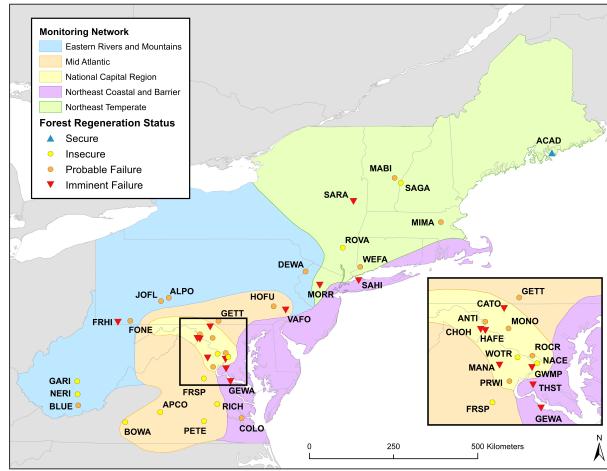


Figure 1. Map of parks included in regional regeneration project and forest regeneration status.

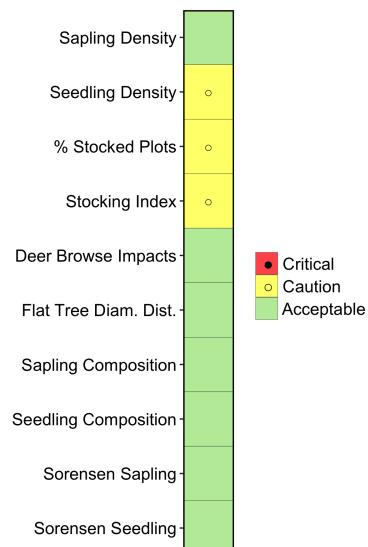


Figure 2. Regeneration status broken down by metric.

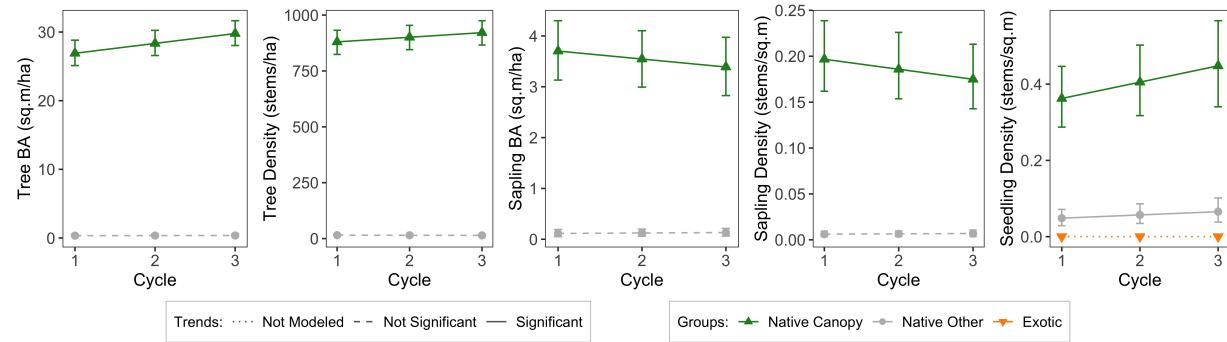


Figure 3. Trends in tree, sapling and seedling abundance by species group. Trends are based on change over time across three complete survey cycles: Cycle 1 spanning 2008 – 2011, Cycle 2 spanning 2012 – 2015, and Cycle 3 spanning 2016 – 2019.