

APPENDIX G: RESEARCH NEEDS

A key element of adaptive management is monitoring. Another element is that of research. Ongoing monitoring will identify needs for further research as the plan is implemented. At its inception; however, the plan can identify areas of concern that can be the subject of "research needs."

SOIL AND WATER

Determine effectiveness of riparian corridor prescription on terrestrial species dependent upon riparian resources.

Determine whether soil productivity is altered by acid deposition. If it is altered, where is this occurring, how does this affect management activities such as timber harvest and prescribed burning, does it affect mountaintop balds, and what are our options for mitigation or remediation?

TIMBER

Methods to enhance the regeneration of northern red oak, white oak and chestnut oak on more productive sites.

FOREST HEALTH

Determine rate of spread of noxious or invasive non-native plant species relative to road density or proximity to travel corridors.

Cultural practices necessary to successfully restore American chestnut once resistant planting stock becomes available.

Determine effectiveness of prescribed burning to restore and maintain woodlands, savannahs, and grasslands.

Determine effects of the loss of hemlock on riparian systems, including aquatic habitat.

ECOLOGICAL SYSTEMS

Identify best methods to expand red spruce within its former range, northern hardwood stands, and open areas.

Determine rate of spread of noxious or invasive non-native plant species relative to road density or proximity to travel corridors.

INDIANA BAT

Identify roost trees, maternity sites, summer foraging areas, fall swarming areas and other areas of the Forest used by Indiana bats. Characterize and quantify habitat at these sites to help identify additional sites and develop management strategies for the protection, maintenance, and recovery of the Indiana bat.

CLIMATE CHANGE

Identify vulnerable species and systems and identify tools to facilitate adaptation strategies.

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