Forest Blow Down on Alligator Hill – Which Path to Recovery?

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http://naturechange.org/2016/02/16/blow-down-on-alligator-hill-which-way-to-recovery/

The August 2 super storm that pummeled the Sleeping Bear Dunes National Lakeshore snapped thousands of hardwood trees like matchsticks. The damage is most visible on Alligator Hill, just west of downtown Glen Arbor.

Amidst the awe of the August 2 storm, a debate is underway about whether all the downed timber poses a forest fire risk to the National Lakeshore and to the Glen Arbor area. Glen Lake fire chief John Dodson worries that at some point in the future, the downed trees could dry out and pose a threat that his crew wouldn't be able to handle.

National Lakeshore Park officials say that they will not attempt to clear the downed trees. This was a natural occurrence. According to Deputy Superintendent, Tom Ulrich, "The fantastic northern hardwood forests that the settlers found here evolved with blow downs that happened with some regularity. Those blow downs have a role in the ecology of the area to provide that little window to allow a different aged structure to come up, habitat that isn't present elsewhere, species moving in that favor that kind of habitat."

While all concerned keep a wary eye on the fire hazards, Park staff sees a golden opportunity to educate visitors about what happened here on August 2, 2015, and the ecology of forest regeneration.

Topics Covered

Ecology; Forests; Weather; History; Habitat

Next Generation Science Standards

- K-ESS3-2. Ask questions to obtain information about the purpose of weather forecasting to prepare for, and respond to, severe weather.
- K-ESS3-1. Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
- K-ESS3-3. Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.
- MS-ESS3-2. Analyze and interpret data on natural hazards to forecast future catastrophic events and inform the development of technologies to mitigate their effects.
- HS-LS4-5. Evaluate the evidence supporting claims that changes in environmental conditions may result in: (1) increases in the number of individuals of some species, (2) the emergence of new species over time, and (3) the extinction of other species.
- HS-ESS2-2. Analyze geoscience data to make the claim that one change to Earth's surface can create feedbacks that cause changes to other Earth systems.

 HS-ESS2-6. Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.