

ALTER FOREST STRUCTURE TO REDUCE SEVERITY OR EXTENT OF WIND AND ICE DAMAGE

OBJECTIVE

Reduce severity or extent of wind and ice damage.

DESCRIPTION

During severe wind and ice events, forests with a large number of trees of the same age and height may experience greater damage than those with a diversity of tree sizes and ages. Therefore, in order to increase the resilience of the forest, it is important to increase its structural diversity or the number of layers. This usually means opening in the forest canopy gaps large enough to encourage the growth of young trees, while also maintaining older and/or larger trees. It is important that a forest has trees of many different heights, many different diameters, and many different species. This increases the number of pathways by which a forest can resist and recover from the impacts of disturbance. In addition to that, altering forest structure can also increase the forest's ability to store carbon by increasing the total number of trees growing in the forest.

EXPECTED RESULTS

Increased diversity of species and structure.

RESULT INDICATORS

Age of the trees [years]

INVOLVED ACTORS

Governments, forest experts.

EXPECTED TIMELINE FOR ACTION

- Medium term (5-10 years)

BEST PRACTICES

- Massachusetts – USA
- USA
- USA

CRITICALITIES

Maintain the forest diversity over time.

SCOPE OF THE ACTION

- Adaptation
- Mitigation

TYPE OF PROPOSED ACTIONS

- Green

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Other

CLIMATE IMPACTS

- Extreme temperatures
- Other

IMPLEMENTATION SCALE

- Association of municipalities
- Province
- Region / Country

SOURCE

<https://www.nrs.fs.fed.us/>