MANAGE FOR SPECIES AND GENOTYPES WITH WIDE MOISTURE AND TEMPERATURE TOLERANCES

OBJECTIVE

Favour current species that have wide ecological amplitude and can persist under a wide variety of climate and site conditions.

DESCRIPTION

Managing a variety of species and genotypes with a wide range of moisture and temperature tolerances can better allocate risks, rather than attempting to select species with a narrow range of tolerances that are best adapted to a specific set of future climate conditions.
Examples: planting or otherwise promoting species that have a large geographic range, occupy a diversity of site conditions, and are projected to have increases in suitable habitat and productivity; promoting long-lived conifers with wide ecological tolerances; identifying and promoting species that currently occupy a variety of site conditions and landscape positions.

EXPECTED RESULTS

Maintenance of the overall ecosystem function and health by gradually enabling and assisting adaptive transitions of species and communities in suitable locations.

RESULT INDICATORS

Humidity [kg/m³] or [g/m³]
Temperature [°C]
Number of species humidity tolerant
Number of species temperature tolerant
Number of genotypes humidity tolerant
Number of genotypes temperature tolerant

INVOLVED ACTORS

Scientist, natural manager, farmer, government.

EXPECTED TIMELINE FOR ACTION

- Medium term (5-10 years)
- Long term (> 10 years)

BEST PRACTICES

- USA
- Australia
- California

CRITICALITIES

Impact of climate change: increase of temperature and humidity.

SCOPE OF THE ACTION

- Adaptation

TYPE OF PROPOSED ACTIONS

- Green

SECTOR OF ACTION

- Agriculture / Forests / Land use
- Aquaculture / Fishing
- Biodiversity / Conservation of ecosystems
- Public health
- Water resource management
- Other

CLIMATE IMPACTS

- Change or loss of biodiversity
- Drought
- Extreme precipitation
- Extreme temperatures
- Fires
- Salinization and acidification of water
- Strong winds
- Other

IMPLEMENTATION SCALE

- Region / Country

SOURCE

https://adaptationworkbook.org/niacs-strategies/forest