



# Protecting our forests – actions for climate change

The boreal forests of the north are an important and iconic part of our landscape. These forests are home to thousands of species of plants, animals and insects, and provide food, medicines, and materials for the people of the region. Climate change will have an impact on forest ecosystems, but there are actions we can take to help protect these places and the resources we rely on.

## Identify Important Species and Important Areas

When deciding where adaptation efforts should go, communities may want to look at what species are most important to them and which might be the most at risk. Species might be considered important if they are a source of food, have traditional value or are part of the economy. At risk species could be ones that are already struggling, or those that are least able to withstand changing conditions. Important forest areas, like breeding grounds, important species habitat, economic areas, or traditional grounds, could be good places to create habitat protection plans or to update any measures that already exist. If forest fire is a threat to important areas, consider a FireSmart plan [www.firesmartcanada.ca](http://www.firesmartcanada.ca).



*Forest area near Eabametoong First Nation*

## Monitor

Monitoring allows us to gather information about the environment and the changes that are occurring. Monitoring activities can take many forms and can be directed at any aspect of the environment. It can be done by environmental stewards, researchers, and community members. Community-based monitoring is when a community decides what to monitor and implements a monitoring program with or without a researcher as a partner. When community members gather information on their own it is sometimes termed “citizen science”. Citizen science is a growing field thanks in part to the availability of apps and websites that make it easy to collect and share data. Citizen science is also a good way to engage people in environmental issues and encourage good stewardship. [iNaturalist.ca](http://iNaturalist.ca) is a good site that people in your community can use to share information as well as see what others have observed.

### Examples of what to monitor:

- species at risk
- leaf out/flowering times
- species abundance
- frog/bird songs
- tree diseases and insect outbreaks
- new/invasive species

## Protect and Improve Habitat

Healthy forests help support all species. Encourage good stewardship of forest areas and make sure that species have the habitat they need to live and thrive. Installing bird houses and bat boxes, or planting milkweed for monarch butterflies are common examples of how habitat can be improved for some species.

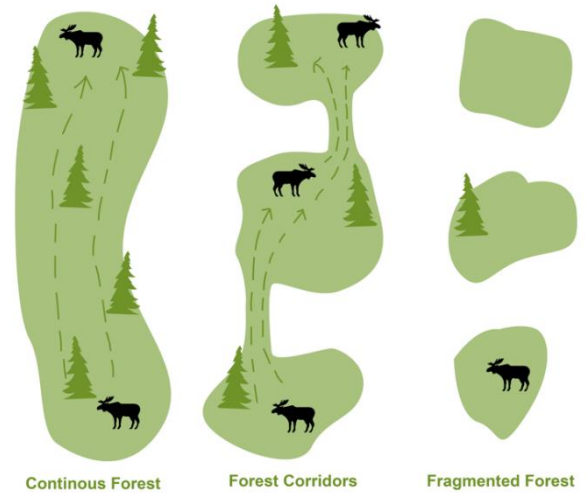


*These bat boxes were assembled by Mushkegowuk youth at Camp Chikepak to be brought back and used in their community*



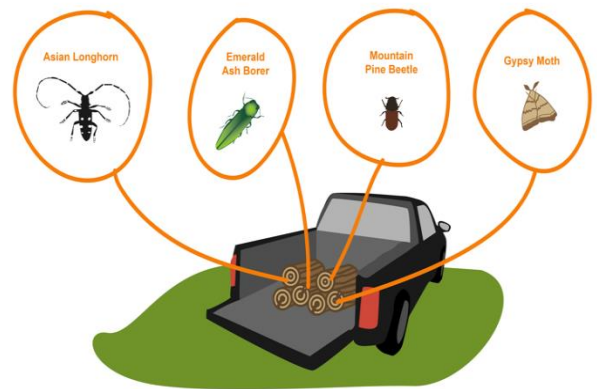
### Keep Forests Connected

As climate change alters the landscape, some species will have to move to new areas where the habitat meets their needs. A fragmented landscape (where patches of forest are disconnected from each other) makes it difficult for species to move into new places. Keeping forests continuous or maintaining corridors between forest landscapes can help species that need to move to new areas. Make land use planning decisions that keep forests connected. Since forests can span large areas and cross regional boundaries, decisions to keep them protected and connected may require cooperation between communities, industries, and governments.



### Prevent Invasive Species

Climate change is allowing forest pests to live in areas that they couldn't live in before. The first line of defense against invasive species is always prevention. People can take actions to prevent invasive species like not moving firewood (which could contain insect hitchhikers) from one area to another or planting native plants instead of the plants that are sold in greenhouses. Communities can also monitor for potential invaders in their area and have a control plan in place in case they arrive.



### Assisted Migration

Climate change is happening quickly, so quickly in fact that not all species will be able to keep up. Trees may be especially vulnerable to rapid change since they are long-lived and their seeds land and germinate quite close to the parent tree. Programs where humans help species move to new areas in response to climate change is called 'assisted migration'. Assisted migration could mean: moving a species within its current range (like planting tree seedlings in the northern end of their range), moving a species to an area just outside its current range, or moving a species far outside its current range.

*The movement of any species into a new location is not without risks. Species could become invasive or introduce pests and diseases. All risks need to be weighed carefully before using assisted migration.*



Forest are changing! Let's help them out: identify, monitor and protect important species and places, keep forests connected, prevent invasive species and assist vulnerable plants with assisted migration.