



# Step Outdoors

## 3. What Animals and Plants live in a Forest?

Have the students create a list of forest inhabitants. Using this list demonstrate a food web by connecting the various animal words by linking their relationships with one another. Eg. Predator-prey relationships



Have the students consider how the needs of these various animals are met within a forest. For example; a Squirrel, where is its shelter? What would it eat? Etc.

## 4. Why are trees important to wildlife and to humans?

Trees represent some of the oldest living organisms on the planet. Trees were instrumental in the development and support of civilizations. They form important links in the earth's overall functions by:

- Trees keep our air supply fresh by absorbing carbon dioxide and producing oxygen.
- In one year, a single tree can absorb as much carbon as is produced by a car driven 16,000 km.
- Shade trees can make buildings up to ten degrees cooler in the summer
  - Trees lower air temperature by evaporating water out of their leaves.
  - Trees cut down noise pollution by acting as sound barriers.
  - Tree roots stabilize the soil and prevent erosion.
  - Trees improve water quality by slowing and filtering rain water as well as reduce storm run off and the possibility of flooding.
- Trees provide food and shelter for wildlife.
- Trees renew our air supply by absorbing carbon dioxide and producing oxygen. Two mature trees can provide enough oxygen for a family of four.



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## 5. How many Trees make a forest?

**Forests** consist of trees with overlapping crowns forming 60% to 100% cover.

**Woodlands** are more open, with 25% to 60% cover.

**Savannas**, which are grasslands having widely spaced trees with anywhere from a minimum of 5 - 10 % cover to a maximum of 25 - 20% cover.

**Trees** are woody, single-stemmed, self-supporting, perennial plants at least 4.5 meters (15 feet) tall at maturity and at least 7.5 cm (3 inches) in diameter.

**Shrubs** differ from trees by their height and the fact that shrubs produce multiple stems closer to the base of the plant. The distinction between shrub and tree, however, is not always clear because a few shrubs can grow to heights typical of trees.

## 6. What is the difference between Deciduous and Coniferous Trees?

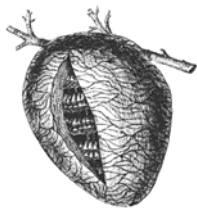
**Deciduous trees** are those trees which drop their leaves in the fall and re-grow them in the spring. Examples of Deciduous trees are American Elm, Trembling Aspen and Bur Oak.

**Coniferous Trees** or Evergreen trees, are trees in which the leaves remain green and on the tree all winter long. Examples are White Spruce and Jack Pine.



## ACTIVITY

1. **Forest Hike** - Take the group out on a hike through a forested area near you. Look for signs of animals that live in the forest, (nibbled twigs, scat, nests, burrows etc.) as well as various plants, bushes and trees many of these animals use for homes and food.



2. **Tree Planting Excursion** - Contact the Manitoba Forestry Association for information on acquiring tree seedlings and on planning your outing.

Manitoba Forestry Association,  
900 Corydon Avenue, Winnipeg, MB, R3M 0Y4  
Phone: 453-3182 email: [mfainc@mts.net](mailto:mfainc@mts.net)

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## 3. How to Make a Wax Paper Leaf Pressing

- Find a leaf on a tree you either know or would like to identify.
- Place the collected leaf between two layers of wax paper with plenty of room to trim and preserve the wax "seal".
- Cover the wax paper with a towel. The towel should not be a thick bath type but preferably a thin dish towel. Some people actually use paper towels.
- Turn the iron on medium dry heat and evenly iron over the towel which separates the iron from the wax paper. This heat actually seals the leaf between the wax paper sheets.
- Trim the wax paper specimen to fit a standard weight, three-ring sheet protector and insert it with a label. Keep your collection in a three-ring notebook binder.

**What You Need:** Wax Paper, Thin Towel, Warmed Iron, Leaf, Scissors

## EXTENSION

Discuss ways in which you can help keep forests in your area healthy.

**Build a Nest Box for Wildlife** - Plans are included to create and erect a Bat Box.

## REFERENCES

Information from the International Society of Arboriculture (ISA) website:  
[www.treesaregood.com/funfacts/funfacts.asp](http://www.treesaregood.com/funfacts/funfacts.asp)

Illinois State Museum Website:  
[www.museum.state.il.us/muslink/forest/htmls](http://www.museum.state.il.us/muslink/forest/htmls)

U.S. National Vegetation Classification system

Manitoba Forestry Association

North Dakota Department of Natural Resources - Bat Box Plans

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## Build a Little Brown Bat House

Bats are insect eaters and may eat over 1,000 insects each evening. They require a warm, moist environment which reaches 25 - 30 degrees C during the daytime.

Homes should be hung on trees, poles, or the sides of buildings which have a good open area on at least one side for bats to maneuver while flying. The best habitat is close to rivers, lakes, or marshy areas where insect populations are high. Nest boxes should be about 3 to 4 metres above the ground.

