



WORKSHEET

FOREST HEALTH INDICATOR: TREE AND CROWN CONDITION

Name: _____

Date: _____

Location: _____

Damage to trees by disease, air pollution, weather, or human activities can affect the health of forests and can also be an indication of overall forest health.

MATERIALS

Paper, pencils, chalk

METHOD

Count all the trees in the plot, marking the trees with colored chalk to help you keep track. Note trees that have one or more signs of disease or damage (see below). To count it as diseased or damaged, 10 percent or more of the tree should be affected. Calculate the percentage of all trees in the plot that have such signs.



Sign of Disease or Damage

What It May Indicate

Tree has ragged leaves with holes	Insects feeding on the leaves
Black or brown leaves	Stem or leaf disease
Spots or bumps on leaves	Insects and mites
Twisted or malformed leaves	Insects and disease, herbicides
Leaves changing color before fall	Trunk or root damage, drought, pollution
Branch decay	Unhealed wounds
Peeling or broken bark, holes in the bark	Trunk wound, canker disease, or damage caused by humans or animals
Dying branches on one side of crown	Root decay, root injury or internal stem disease, insect attack
Canker (a dead section of a trunk or branch)	Fungal infections
Splits	Broken branches
Hollows	Water entering through old wounds and supporting wood decay by fungi
Fungi or mushrooms growing on tree	Internal decomposition of wood by fungi
Green or brown spots on needles	Air pollution

RESULTS

Total number of trees with signs of disease or damage in plot: _____ (Value A)

Total number of trees in plot: _____ (Value B)

Percentage of trees damaged = Value A ÷ Value B x 100 = _____ percent

RATING

Good Less than 25 percent of trees have damage 3 Points

Fair 25–50 percent of trees have damage 2 Points

Poor Greater than 50 percent of trees have damage 1 Point

Overall Tree and Crown Condition rating for plot: _____

