



## **Tree Health**

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# Tree Health

## Field Work

Assess the health of the trees on the floodplain areas of the Wetland. It is important to note position in the wetland of the trees you are assessing.

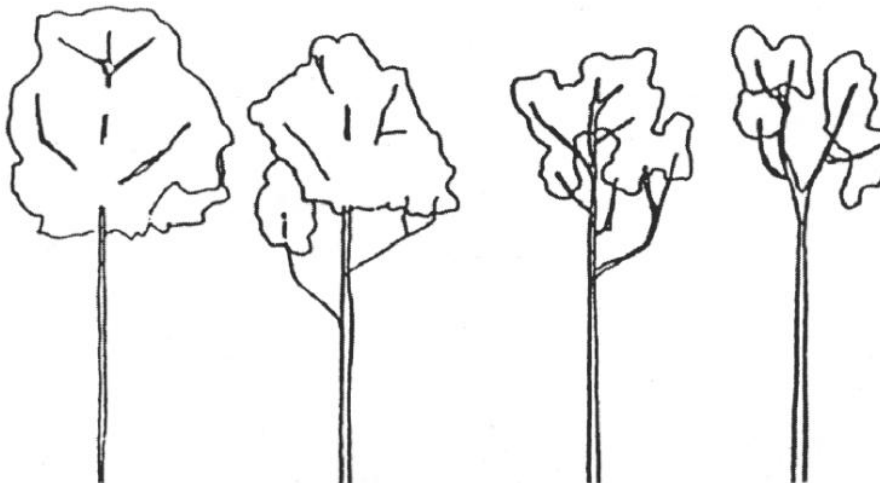
## Assessing Tree Health

A simple method for measuring the health of trees was developed for black box (*Eucalyptus largiflorens*) and mallee (*E. gracilis*). The method involves visual assessment of crown size, crown density, dead branches and epicormic growth (growth originating from the middle of branches). The four observations are each given a point score out of five (see below) resulting in a score out of 20. A score of 20 is a healthy tree with no visual signs of stress and a tree with a score of zero is dead.

Several trees in stands from several different areas in the wetland should be selected to represent the varying conditions in the wetland.

Ideally inspections should be done annually in late spring or early summer. In order to be able to make yearly comparisons it is important that the same trees are inspected every year.

### a. Crown Size



5 Points

4 Points

3 Points

2 Points

5 Points: Crown is wide and deep without any obvious faults.

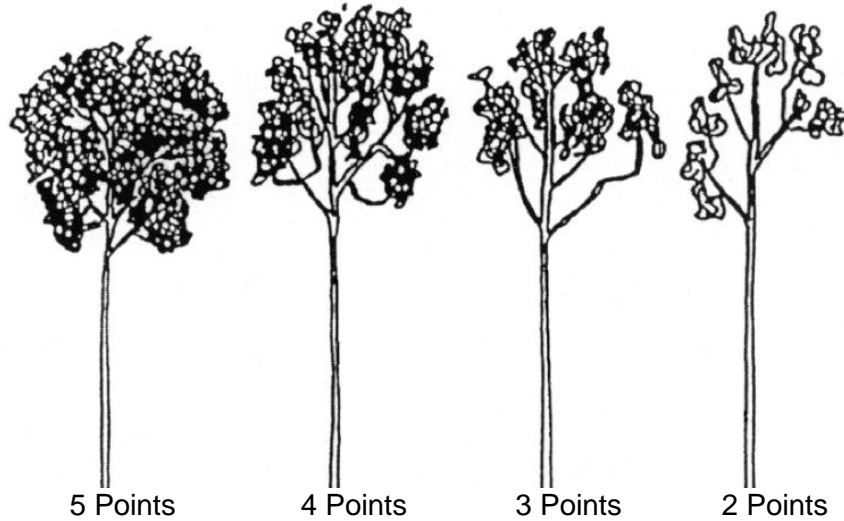
4 Points: Crown has easily observed but slight faults, such as lop sidedness or partially undeveloped.

3 Points: Obvious deficiencies in size and/or shape are present. The crown is considered to be satisfactory.

2 Points: Small, poorly shaped crowns that are considered unsatisfactory.

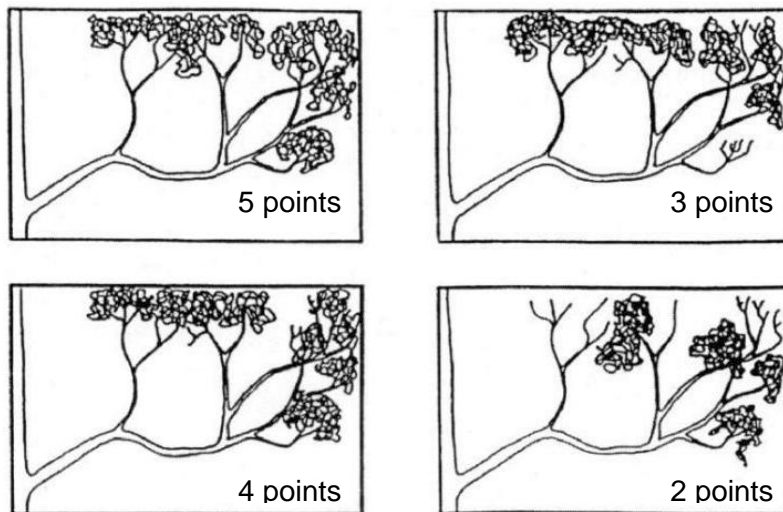
1 Point: Useless crowns, very small and ungainly.

b. Crown Density



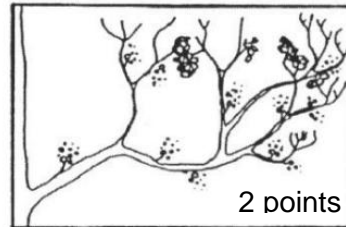
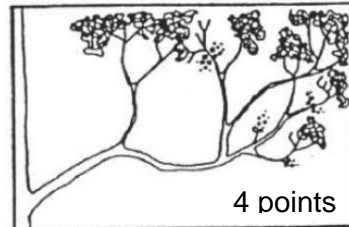
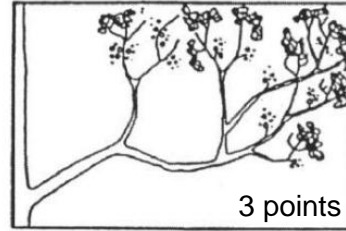
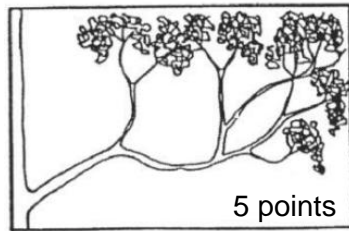
- 5 Points: Very dense leaf clumps with even distribution of clumps over the crown. Very little light penetrating the leaf clumps.
- 4 Points: Dense leaf clumps distributed unevenly over the crown.
- 3 Points: Clumps of average density with reasonable distribution, or dense clumps are unevenly spread.
- 2 Points: Clumps of leaves are sparse and poorly spread throughout the canopy.
- 1 Point: Very few leaves in the crown.

c. Dead Branches



- 5 Points: No visible dead branchlets or branches in the crown apart from thin twigs immediately inside the new development, and the lowest branches in the process of being shed.
- 4 Points: Dead branches are evident but not all over the crown.
- 3 Points: Small easily observed branches are dead but not all over the crown. Branches do not give the impression of seriously affecting the crown.
- 2 Points: Large and/or small branches are dead all over part of the crown with the obvious impression of serious branch death.
- 1 Point: Large and small branches dead over most of the crown. Crown is obviously dying.

d. Epicormic Growth



- 5 Points: No epicormic growth is present.
- 4 Points: Slight epicormic growth can be seen in part of the crown.
- 3 Points: Moderate epicormic growth is present over most of the crown.
- 2 Points: Epicormic growth is evident over most of the crown.
- 1 Point: Epicormic growth is evident over most of the crown and stem.

Health index scoring system (from Barrett 1999).

## Classroom

Display results in a graph or pie chart.

How does the health of trees relate to their position in the wetland complex?  
Are they near the wetland?

Assessment of Tree Health of a number of years may be carried out.