



WOODLAND DAMAGE

RECOGNITION OF CAUSE(I)

Aim

Woodlands may be susceptible to a number of damaging agents. Identifying the cause of damage at an early stage is important, before the impacts become an expensive or ecological problem. The aim of this guide is to provide information to help with the identification process.

Recognising causes of damage

- The following steps may help in assessing damage:
- A. Read the signs. In most cases the causes will be apparent on close examination. Some knowledge of site history will be useful.
 - B. If in doubt, use the questions below to help identify potential causes.
 - C. Check the individual descriptions to confirm damage type and assess the potential extent of the effects of the damage depending on the age class of tree (i.e. seedling, sapling, mature).

key:

- no effect
- no significant losses
- can cause significant economic loss but woodland can survive
- can cause complete loss of woodland

effects of damage type to woodland

No.	Question	Go to
1	How big are the trees?	
	•Seedling (young tree, below 1m high).	▶2
	•Sapling (young tree, 1–3 m high).	▶13
	•Mature (all older trees).	▶21

Seedlings

No.	Question	Y/N	Go to
2	Is seedling foliage brown, yellow or shrivelled?	Y:	▶environmental
		N:	▶3
3	Has bark been removed?	Y:	▶4
		N:	▶8
4	Are teeth marks visible on close inspection?	Y:	▶5
		N:	▶6
5	Size of teeth marks 1-2 mm	▶voles	
	Size of teeth marks 3-4 mm	▶rabbits	

Environmental damage



Signs: Trees may be damaged or stressed by a range of environmental factors including water-logging, nutrient deficiency, frost damage, lightning strikes and drought.



Insect damage



Signs: Main species affecting trees are large pine weevil on restocking sites, common weevil on ex farmland planting sites, aphids and moth larvae. Can all cause damage usually by defoliation.



Impacts: Woodland Damage(1)

No.	Question	Y/N	Go to
6	Has bark been rubbed off?	Y:	▶deer
		N:	▶7
7	Has bark been removed without any marks on underlying wood?	Y:	▶insects (large pine weevil)
		N:	other signs?
8	Have leaves and small shoots been eaten?	Y:	▶9
		N:	▶12
9	Are severed ends at a sharp angle and clean cut?	Y:	▶10
		N:	▶11
10	Have severed shoots been left uneaten?	Y:	▶hares
		N:	▶rabbits
11	Do severed shoots have a ragged end?	Y:	▶large herbivore
		N:	▶other signs?
12	Have only needles or leaves been eaten?	Y:	▶normally insects
		N:	▶birds

continued in Woodland Damage Recognition(2)

Field vole

Signs: Vole runs can be seen when grass is cut or after snow has melted.
Damage description: Removes bark of young trees and shrubs below level of surrounding vegetation. May cause damage higher up stem when snow provides cover.



Squirrels

Damage description: Can strip bark at a range of heights. Damage at base of tree can be similar to rabbits. Bark removed higher up stem will tend to be 1-2cm wide and several cm long.



Hares

Signs: Rounded and fibrous droppings larger than rabbit droppings. **Damage description:** Browses young trees – stems cut cleanly at a sharp angle. Cut stem usually left uneaten.



Rabbits

Signs: Rounded and fibrous droppings, often deposited in latrine areas in high numbers. Burrows and freshly dug earth often visible.
Damage description: Browses young trees – stems cut cleanly at a sharp angle. Bark stripping on young trees and on thin barked mature trees. Damage usually no more than 0.5m high but can be higher if snow cover allows higher access.

