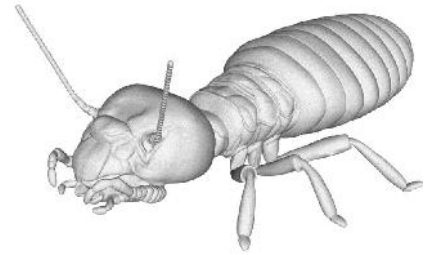


Useful Timber Pest Information

Information regarding prevention of timber pest infestation is helpful to all property owners. Every year timber pests contribute significantly to property damage in Australia. If left unchecked, a susceptible home can be damaged beyond repair in a matter of months. Routine checks and maintenance can help to minimise risk. As there are no 100% effective detection procedures, it is strongly advised that a professional pest controller is engaged if there are any concerns or evidence regarding the presence of timber pests on your property, and that regular pest inspections are undertaken on all buildings.



Termites

Termites are amazing insects that have mastered cooperation, affording them extraordinary achievements. Building mud skyscrapers, hollowing enormous trees, moving huge amounts of soil and of course, eating your house are all accomplishments boasted by this fascinating creature. Termites (or white ants) can seriously damage the structure of a house or building, they are not selective creatures – every property is vulnerable! Termites feed on wood and serve a crucial function in our environment by converting dead trees into organic matter. They have the ability to bite off and process very small fragments of wood and can cause serious structural damage if wood is attacked in a building.

Under favourable conditions a termite colony of 60,000 workers can consume about a metre of two by four in as little as four months. In other circumstances, it can take as long as six years for termites to cause noticeable damage. Termite activity may remain undetected even after serious damage has occurred. This activity may have gone unnoticed because:

- Swarms have been ignored by the current owner of the property
- Termite activity may be ongoing, but be hidden behind concealed surfaces such as walls or stored goods
- Termite activity typically occurs beneath the surface of a visible wood beam and cannot be detected until the damage has occurred

It is impossible to undertake a visual inspection 'looking inside' walls or through wooden beams. Invasive techniques would need to be applied if there was concern about the presence of a termite colony.

Subterranean termites live in nests called colonies that may live as deep as 6 metres below the soil surface. Termites use mud tubes to travel in search of food sources. A mature colony takes approximately five years to mature and may include up to 200,000 workers.

Termites hide. They avoid light and rarely come out into the open. Mud tubes running up walls, floors and other areas of a property are a reliable indication of termite presence. Termites travel from food sources (wood) back to their nests by way of these mud tubes which are commonly found in basements of infested homes or running from soil to the house. Another means of travel is through hollow wood. You would also find evidence of dried mud, because termites have left the area and moved to the next food source in the property.

Borers of Seasoned Timbers

There are many types of wood borers in Australia. Borers are the larvae of various species of beetles. The adult beetles lay their eggs within timber and when the eggs hatch, the larvae 'bore' through the timber which can cause significant structural damage. The larvae may reside totally concealed within the timber for a period of several years before passing into a dormant pupal stage. Within the pupal case they change into the adult beetle which cuts holes in the outer surface of the timber to emerge, mate and lay further eggs to continue the cycle. It is generally only through the presence of these access 'pinholes', frass and dust formed by the activity that their presence can be detected.

Where floors are covered by carpet, tiles, or other coverings, and where there is no underfloor access, it is often not possible to determine the presence of borers. This is particularly the case with the upper floors of a dwelling.

There are many types of wood borer. Those which are most often found in timber in houses and furniture usually belong to one of the following groups.

Lyctid borer (Powder Post Beetle)

- powderpost beetles mostly attack during the first 6-12 months of service life of timber
- produce a fine powdery dust, similar to talcum powder
- attack the sapwood of certain susceptible species of hardwood timber and can cause serious structural weakening in timber that has a high sapwood content
- as only the sapwood is destroyed, larger dimensional timbers (rafters, bearers and joists) are seldom weakened significantly; however, smaller dimensional timbers such as tiling or ceiling battens often have extensive sapwood content and its destruction may result in collapse

Anobium borer (furniture beetle) and Queensland pine borer

- attack furniture, structural timbers, flooring and decorative wood work
- favour old, well seasoned timber, especially softwoods such as Baltic pine or New Zealand white pine. However some hardwoods are susceptible
- these beetles are responsible for instances of flooring collapse
- attack by this beetle is usually observed in timbers that have been in service for 10-20 years or more and mostly involves flooring and timber wall panelling
- frass from exit holes is fine and gritty and wood attacked by these borers is often honeycombed.
- prefers cool, humid conditions

Timber Decay Fungi

Wood decay by fungi establishes growth in unsealed, split, exposed timbers, in poorly ventilated areas such as subfloors, and around wet areas. Removal of the moisture source is generally the most powerful defence. Fungal decay is attractive to white ants and if the problem is not resolved it is possible that the area may be subject to termite attack.

Brown Rot (Cubic Rot)

- brown rot fungi feed on the wood's cellulose, leaving a brown residue of lignin, the substance which holds the cells together. Infested wood may be greatly weakened, even before decay can be seen.
- advanced infestations of brown rot are evidenced by wood more brown in colour than normal, tending to crack across the grain.
- after it is dried, wood previously infested with brown rot will turn to powder when crushed.

White Rot

- white rot attacks wood; it breaks down both the lignin and cellulose causing the wood to lose its colour and appear whiter than usual
- wood affected by white rot generally does not crack across the grain; rather it will shrink and collapse when severely degraded
- infested wood gradually loses strength and become springy to the touch

Concrete Slab Homes

Where a concrete slab forms the foundation of a home, it is important that the edge of the slab is left exposed. Weep holes in between the bricks, found immediately above the slab, must also be left unobstructed. When garden beds, lawns and foliage, decking, pavers and paths conceal the slab it is possible for termites to move in undetected and attack framing timbers of a building. They may move all the way up to truss work and roof frames, by which time massive damage may have been affected. Like any building constructed on a timber frame, a home on a concrete slab should be maintained and regularly inspected to prevent timber pest infestation.

