

It's easy to become an expert on

TERMITES

The now-to guide

Confidently take on termites and win!

- You'd like to save the money — but not risk your home for the sake of a dollar?
- You'd also like to do it without poisons?
- This guide is practical help for homeowners who want to do a proper job, safely



By Ion Staunton, entomologist and author of text books used in the training of professional technicians. This How-to-Guide is written and illustrated for homeowners with a DIY attitude. 20180313



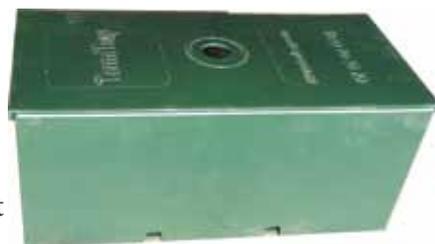
Are you ready to take on termites?

Until about 2002, termite control was exclusively a professional-only job. That changed when Ion Staunton developed and patented the DIY TermiTrap Colony Killing System. Following his advice in this Guide is the best help you can get.

What is a DIY system?

A system involves combining different activities and products to get a better and longer-lasting result than doing just one thing. Here is what you need:

MONITORS: Give termites something easier to find than your house. Our monitors are called TermiTraps. They sit ON the ground so they are the easiest to set, easiest to inspect and easiest to bait. (Also best value). The timber inside is Tassie oak which CSIRO says is most attractive to entice them in.



TermiTrap monitor

TREATMENT: Give termites something tasty and easy to take back to their nest. Our Tuckerbag Termite Bait is an IGR (Insect Growth Regulator) which is safe to humans, pets and wildlife... but kills the termites that do 99% of the damage to Aussie homes.



Colony Killer Termite Bait

INSPECTIONS: Termites don't want to be noticed. We tell you how you can inspect maybe not as well or better than the best pest professionals... but at a fraction of the cost! Inspect regularly so you don't get nasty or costly surprises.



DIY Inspection tools

ADVICE: The old saying "free advice is worth what you pay for it" is wrong. This How-to-Guide can help you save your home... and that's worth plenty! Our website: www.termikill.com.au has more info than this Guide and you can also phone us Freecall on 1800 20 30 20 or use our Free Termite Identification Service.

There's scientific backing for ON-the-ground monitors

In prehistoric times, termites found their food (timber) on the ground — fallen logs and dead trees. Today, termites follow the very same instincts, still finding their food above ground level — houses, sheds, fences, stock ramps, bridges, firewood heaps and wood you've kept in case it might come in handy.

A scientific paper written in 1979 by Santos described how 30 baits were placed on the soil and 30 baits were buried in the soil. All 30 baits ON the soil were found before any of those buried.

Ion confirmed this with his own tests of his prototype plastic Traps containing slats of *Eucalyptus regnans* or Tassie oak timber that were placed ON the ground. Termites discovered his ON-ground TermiTraps before any of the IN-ground monitors.

There were other immediately obvious benefits:

- Installation is just a matter of spreading them around. There is no digging.
- Inspecting is just a matter of a glance at the signal hole in the lid.
- Adding bait does not require the Trap to be opened which might disturb the busy termites.
- Traps can be cleaned out and reset and....
- They cost you less.

The subterranean termites that eat houses, etc, come out of the ground to find new food inside the house and well above ground level. It makes sense to give them plenty of opportunities to find timber above ground level where they are looking, in monitors that are easy for them to find while they are out searching.

You should get to know your enemy...



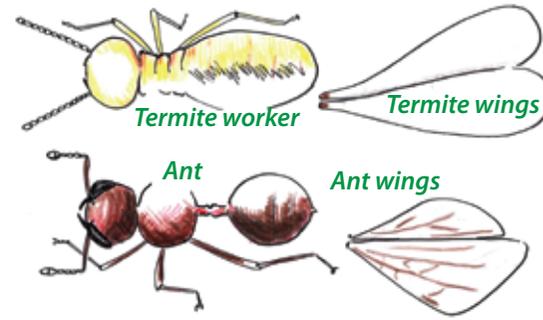
All soldiers have a dark head and black jaws that protrude in front... OR....



...the Nasute soldiers have no visible jaws but a pointed "nose" that can emit a defensive white globule



Nymphs are all white and are seldom seen in the workings unless it is very close to the nest.



Be sure they're termites not ants. The differences: Ant antennae have an 'elbow' and the thorax and abdomen are distinctly separate compared to the termite. Termite reproductives are the only insect with equal sized wings which they drop after landing because they have no further use for them.



Worker termites of all species are similar in appearance; pale heads and almost transparent abdomens. The larger young reproductive looks like a worker but with a longer body. Look closely to see eyes and developing wings. They can be found anywhere in the colony.

Reproductives swarm in early summer. Fore and hind wings are the same size and they drop them soon after landing. (10mm grid).



Termites protect themselves from ants by using a mud mixture to build tunnels, to block up splits and crevices and to control humidity. Their bodies lose moisture rapidly.



Why it works

Our system uses termite instincts against them...

- They are constantly scouting for food... so give them Traps to find instead of your buildings.
- They block up holes to contain humidity... so we gave them a hole to block which also tells us when they've arrived.
- They take food back to their nest... so give them a bait to take back instead.

Just found termites...or their damage?

1. Stop!

Don't disturb or investigate. Living, working termites constantly return to the main nest daily and they can take back the treatment instead of chewed wood. If you disturb them so badly they leave the timber, you lose that chance. They've probably been busy in the timber for months and won't eat much in the next week while you get info on your best options.



2. Look about!

They've come from somewhere.

If you can find a mound or a hollow tree or stump, your job is fast and easy.

What you do next depends on where you've found them.



There are various scenarios on the next page but first...

The crunch!

There are many species of termites but the *Coptotermes* (Coptos) and the *Schedorhinotermes* (Schedos) stand together as the biggest threat to Aussie homes.

Why?

They are everywhere but Tasmania and are therefore the main and constant threat to your home even though you may have found and dealt with one of the lesser termites.

Why constant?

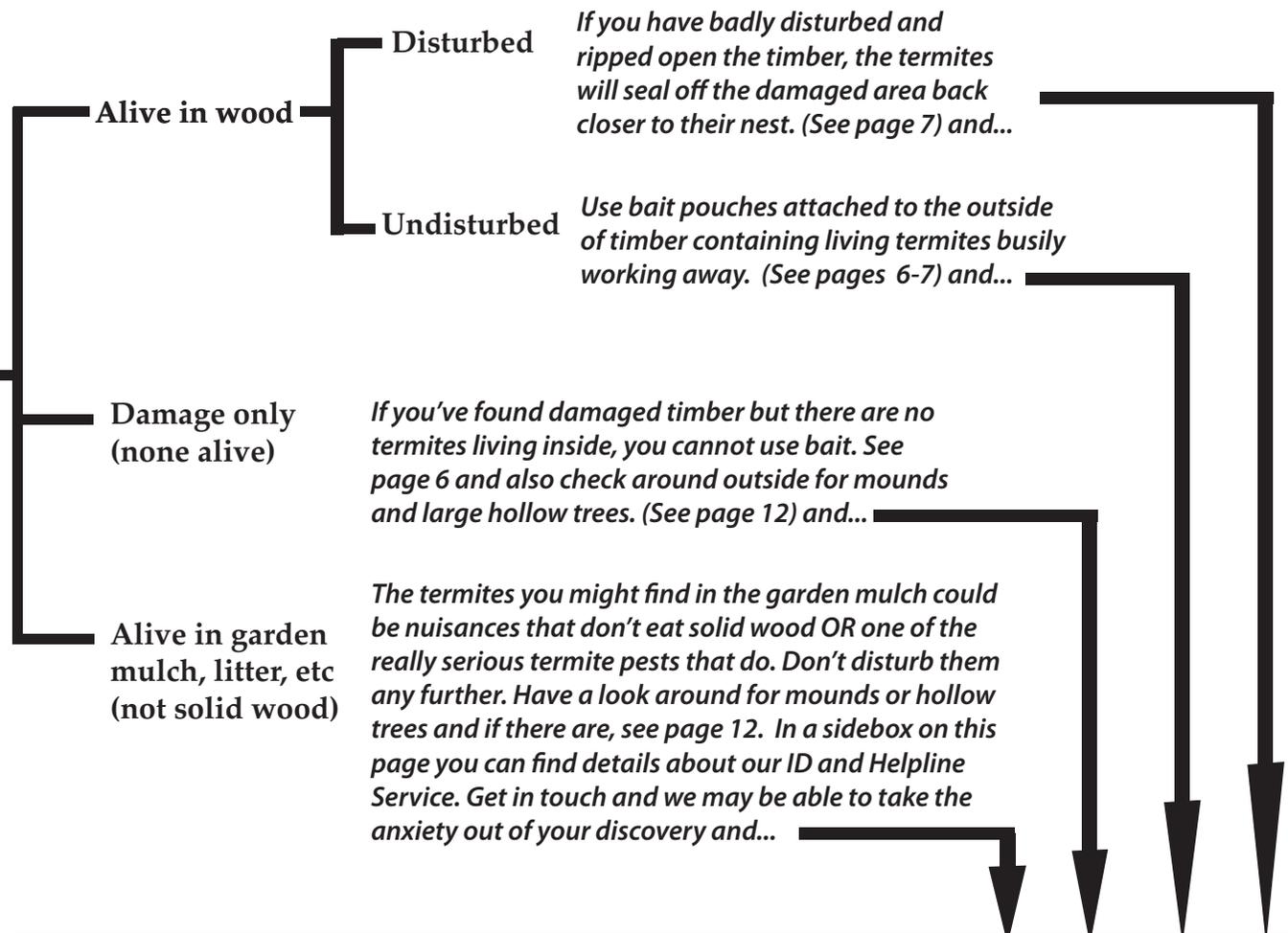
Because there are termite swarms every year in early summer. This means new colonies are developing all the time. If you bait and kill a Copto or

Schedo nest, it has proved they are in your locality and another nest is almost certainly "out there" building into a significant threat.

The best way to guard against Coptos and Schedos is to place a ring of TermiTraps around your home to intercept their scouts while they are still outside your buildings. Adding treatment bait to TermiTraps to kill colonies almost never fails (unless you do some digging or earthworks to sever their tunnels between the Trap and their underground nest.

Denial is not a defence.

Begin here



Our ID Service and Helpline
To help relieve your anxiety from wondering if they are nuisances, or to confirm that you should spend money on the serious pests, we offer this FREE service. Either Phone us on 1800 20 30 20 or, if you can get to our website, see the details of how you can send a photo or post us actual specimens. We need the soldiers which are the brown headed ones.

...you need to defend your home anyway
The two termites that do over 90% of the damage to Australian homes are found everywhere but Tassie. Which means the serious Coptos and Schedos are in your locality. The best defence against these two is to set plenty of Traps. It doesn't really matter if the termites you've found in mulch are nuisances and it doesn't really count even if you've baited and killed a nest that was attacking your home because, every year there are termite swarms and some of the reproductives will begin a new colony. It takes 2-4 years for a colony to build up numbers to become a serious threat, but because there are new nests each year, the one you've just killed is probably being replaced by another not that far away. **You should continuously have Traps out to intercept them, preferably before they find a way inside.** See pages 8-9.

Baiting termites

● If you've found live termites in garden mulch, leaf litter, etc....

You cannot bait them in such situations. You should go to pages 8-9 to read about aggregating them in a TermiTrap from which it is much easier to bait them. Place extra Traps in the area where you found them.

● Found damaged timber but no live termites?....

Baiting is impossible if there are no termites to take bait back to the nest. You should inspect adjacent timbers, even in adjoining rooms, to see if you can find other damaged timbers that contains live termites. If you can't, you should place TermiTraps around the house or other structures and wait for termites to be intercepted. And, thoroughly inspect your home every 3-6 months to ensure you find them as soon as they return (if they do) before significant damage is done. See pages 14-15.

● You've found more termites still happily eating away inside timber?

Offer them Tuckerbag Termite Bait which is easier for them to harvest than the wood they're eating.

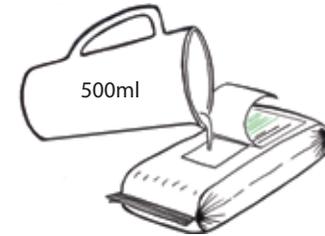
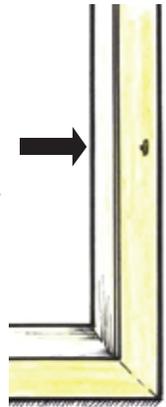
The principle of using an IGR bait treatment

Termite workers take chewed wood back to feed those in their nest. It is what they do. They prefer the IGR-laced bait to wood because it is easier to harvest.

When fed to the royals and all the nymphs, the Insect Growth Regulator in the bait inhibits the production of the outer shell so they cannot complete their regular moults — and they die.

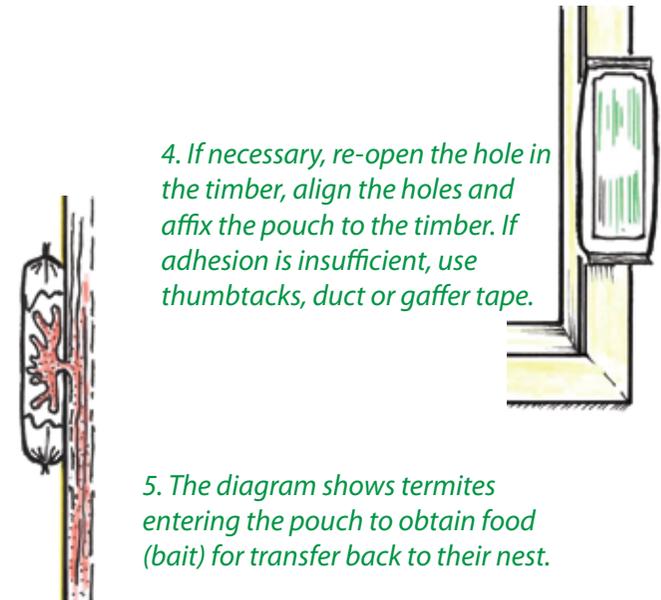
IGR baiting is slow but reliable. It is the most dependable way to kill termite nests that can't be found. Workers know their way "home" and this instinct or habit is our way to assist them in self-destruction. Multiple feeds are usually necessary. If the feeding goes on for weeks, often months, then slows down and finally stops, it is almost certainly because the colony has been killed. The initial, impulsive alternative of ripping open the timber so you can spray might kill a few thousand workers and soldiers, but the dead are replaced in about a week of egg production! The nest survives and they then attack from a new direction. Once you get them feeding, it almost never fails unless you dig and sever their connecting tunnels just below ground level or you let them run out of bait before the colony dies.

1. Make a small hole (5mm) into the timber where it is hollowed out and feels thin and soft using a small screwdriver or knife —no drills. If termites are inside...



2. ...peel back the green label on the pouch and add 500 ml of water. Allow 2 minutes before replacing the label.

3. Under the red label is a hole which is placed over the hole you've made into wide or narrow timbers. Being flexible, the pouch adapts to uneven surfaces such as in architraves or round posts. When you peel off the red label, the adhesive remains on the pouch so it will stick to the timber..



4. If necessary, re-open the hole in the timber, align the holes and affix the pouch to the timber. If adhesion is insufficient, use thumbtacks, duct or gaffer tape.

5. The diagram shows termites entering the pouch to obtain food (bait) for transfer back to their nest.

Treating termites that are eating timber...



1. The uneven, undulating surface of this window frame indicates it is hollowed out. Tap it and it sounds paper thin.



2. To check for life, make a small hole. If termites are in there, the soldiers will come to guard the opening while the workers begin repairs



3. Align the hole in the pouch over the hole in the timber and the termites will enter the pouch from the timber and begin taking the treatment back to the colony. Thumb tacks or duct tape may be needed if adhesion is insufficient.

Termites will only take bait if they can get to it in safety from inside timber they are already eating. Here's how...

Make a small hole (5mm) into the timber where it is hollowed out and feels thin and soft. Do not use a drill.

Wait a minute or so. If termites are inside, soldiers usually come to the opening to guard it until workers can repair it. If there is no life, leave it open and come back in an hour — or next morning. If the hole is repaired, you know they are still active and ready for baiting.

Re-open and enlarge the hole in the timber to 10mm just before you put the pouch in place.

After two weeks, check progress by peeling back and resealing the label to ensure they are feeding, then again when you estimate almost all the bait is gone.

Sometimes the veneer of timber is very thin (sometimes all they leave is the film of paint) If removing the initial pouch is likely to rip off the timber surface it could cause disturbance and damage so extensive the termites won't attempt to repair it... so they vacate. Instead of risking this, bait can be added to the initial pouch by taking off the label entirely, spooning out any excessive mud and spooning in bait from another wetted pouch. Carefully wipe clean the old pouch surface and reclose the hole with the label from the second or subsequent pouches.

The feeding process usually takes multiple pouches over a couple of months in summer. Longer if baiting is begun in winter because less moulting occurs over the cooler months. The more places you can get them feeding, the more bait is being transferred and the sooner it is successful.

Defending your home with TermiTraps

Install an an early warning system. Denial doesn't mean they're not out there somewhere... unless you live in Tasmania!

If you have found termites in garden mulch, place a few Traps in that area.

If you are currently baiting them in a timber structure, you should also place Traps around outside to support your efforts inside. There can be more than one colony and, if a colony you are currently baiting also finds a Trap outside, it gives them access to another bait source so the demise of the colony happens sooner.

There are 22 TermiTraps in a carton. There is no assembly, no holes to be dug. Just take them out of the carton and place them about 3 metres apart in your garden, and on paths and pavers around your home — virtually anywhere but the lawn. It's a 10-15 minute job that you only do once a decade or so. You buy bait only when you have termites to feed.

Don't complicate things for yourself. Just spread the traps around.

Where do you put them?

The subterranean termites that do serious damage to houses come up from the soil. The more Traps you have around, the more likely and sooner termite scouts will find one. Place the TermiTraps ON surfaces....



On the garden

scrape away the mulch and bed them onto the soil surface



On decorative gravel or stones

Scrape away the surface stones to bed the traps down to the soil; you want to make it easy for termites to seal the bottom opening of the trap against ants.



Over expansion joints in concrete floors and paths

Often there is a foam-filled gap between the path and the building wall. Any gap over 2mm is a threat.



Over gaps between pavers and slabs

Place the Trap so the two holes are to the wall. If you have a shed and termites have come up through an expansion joint, and if you can still find live ones, you can re-open the termite access hole in the gap and place a Trap over it.



Near piles of wood

Firewood and timber you are keeping in case it comes in handy is very desirable (and accessible to termites). Place 2-3 Traps closer together around these areas.

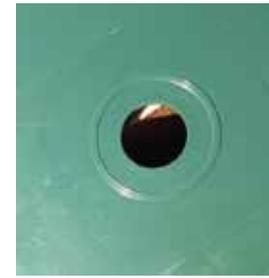


The termite view

Apart from the flange to hold the timber, the bottom is open. The two holes at the back allow termites to gain access when the Trap is flat on a concrete slab against a wall over an expansion joint at the junction.

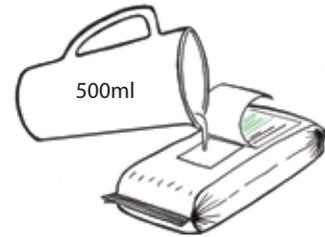
Inspecting your TermiTraps

You should walk around and check your TermiTraps at least once every 3 months, say the first week of spring, summer, autumn and winter. If you live in the tropics, check every two months. Look at the hole in the lid of each Trap to see if it is clear. If it is, keep walking. If the hole is blocked with a mud mixture, it is their “we’ve arrived” signal. Do not open the Trap lid; baiting is done through the hole. (See below).

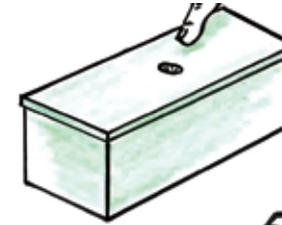


An open hole? Keep walking. A closed hole? Start baiting

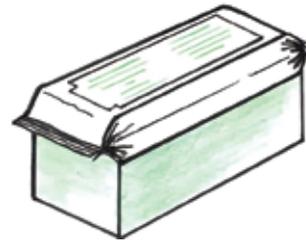
Baiting your TermiTraps



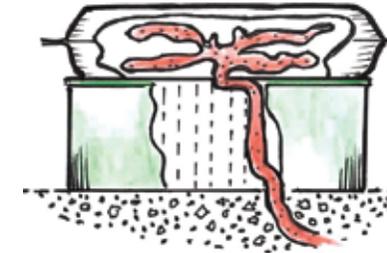
Peel back the green label on the pouch and add 500 ml of water.



Push in the mud in the signal hole using your finger or implement, then...



Align the holes and affix the pouch to the top surface of the TermiTrap.



This is how the underside can appear after treatment. Note how the plastic flange around the base has been sealed to the ground with mud to prevent ant invasion. Clean out the Trap, put in new timber and reset in case another colony is developing nearby.

After two weeks, check progress by peeling back the green label. You should see termites, white bait and some brownish mud mixture. When bait is almost gone it needs to be replaced. You can remove and replace the pouch with another.

Wait at least two weeks after the last sighted activity before removing the pouch and resetting the Trap.

Resetting your TermiTraps

Empty the remaining bait and timber into your garbage bin, hose or wash the plastic ‘brick’ clean. Replace the timber slats (available on-line or by phoning). Put your ‘sentry’ back on duty. If you’ve had a cluster of Traps together in a high-probability area, after a successful baiting, you can thin them out to even up your defence perimeter. The plastic is UV protected and guaranteed to last 10 years. It will probably last 15 or more. All you’ll need is new timber and more bait whenever there’s a new attack.



Termite identification

If you find live termites and you can catch a soldier, you may be able to ID it yourself using the info here and on the following page.

It's daunting if suddenly you are confronted with thousands of scurrying termites. They all appear white (which is why they are also called 'white ants', but among them there should be some with darker heads — the soldiers. Soldiers are the key to identification because of the variation in head shape, jaws, teeth on jaws or no jaws at all.

These photos help to explain.



There is one worker, two major soldiers and one minor soldier on a 10mm grid. Schedos are the only termite with two sized soldiers. See the jaws, visible from above.



These soldiers are Nasutes without visible jaws; their defence is chemical using a sticky white latex-like globule emitted through the pointy 'nose' Nasutes eat wood but they always build a mound which can be found and destroyed physically.

Fast and Free Identification

If you want us to identify them, send us a photo and a description of where you found them.

The Identification Service and Helpline is on our website and it is easy to attach a photo along with some details and your name and phone number so we can phone you with another question or two and then give you advice on what to do. Plenty of times we have told homeowners the insects were ants, psocids, or non-threatening species — and they've been very relieved to get the call!

A photograph should include a brown-headed soldier and it can be taken with a smartphone and emailed or Messaged to us.

If you don't do photography or Internet, catch some termites using sticky tape from your desk, put them in an ordinary envelope with your contact details and a short note, and post them. They may be a bit mangled sometimes but the heads usually survive well enough.

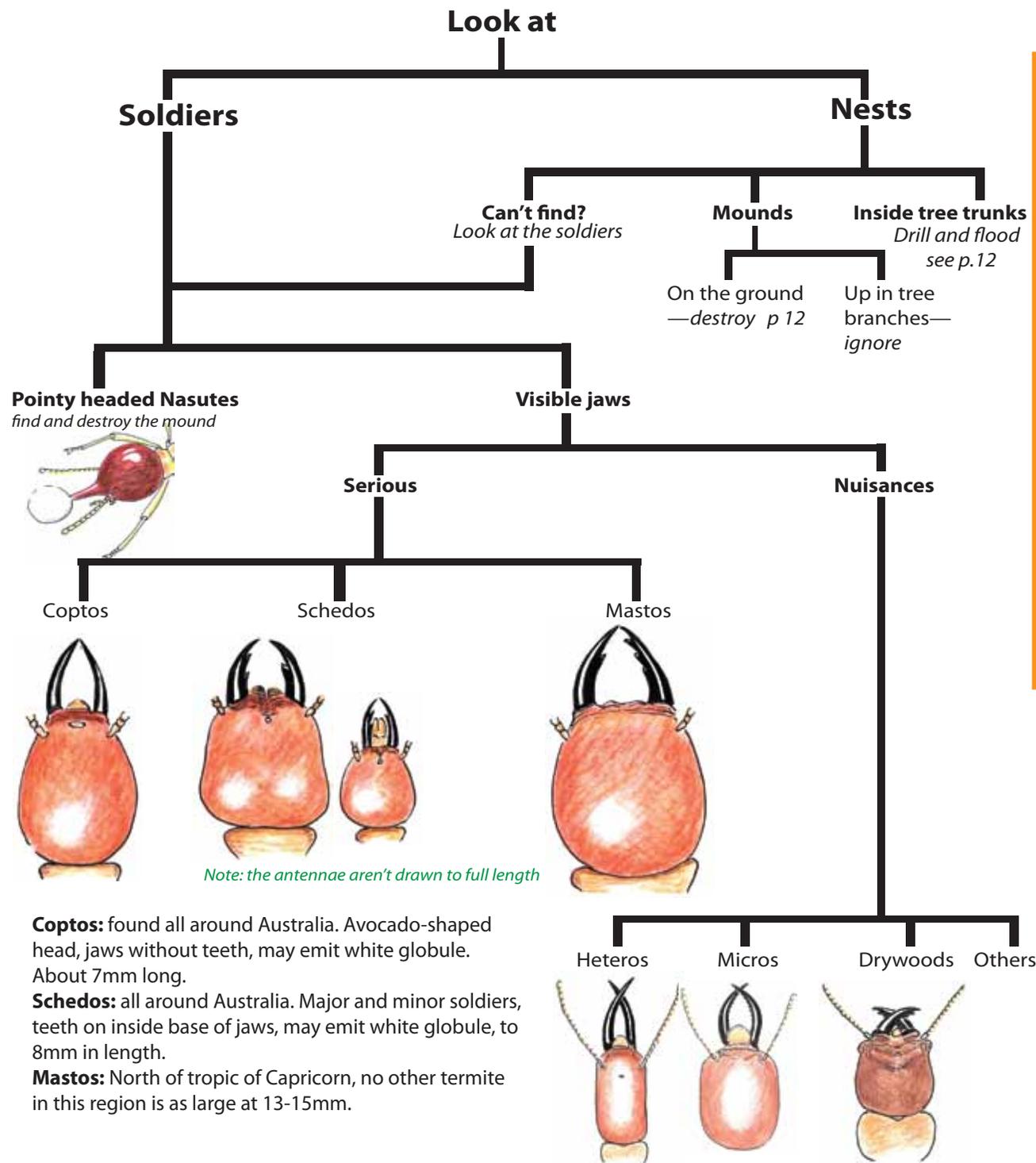
Our postal address:

Termikill P/L
Unit 7 14-28 Ivan St
Arundel Qld 4214



The nest on the left is Microcerotermes which has soldiers with jaws and they 'nibble' rather than devour solid timber. If you can reach it, destroy it. Right: this is a tunnel up a gum tree to a Nasute nest. Can't reach the nest? Just keep breaking the tunnels.

Next page is an ID chart based on soldiers' head and jaw shape and their nesting habits.



Coptos: found all around Australia. Avocado-shaped head, jaws without teeth, may emit white globule. About 7mm long.

Schedos: all around Australia. Major and minor soldiers, teeth on inside base of jaws, may emit white globule, to 8mm in length.

Mastos: North of tropic of Capricorn, no other termite in this region is as large at 13-15mm.

Additional Termite Information

Mastotemes darwiniensis or the Great Northern Termite eats timber faster than the Coptos and Schedos. Their range is generally north of the Tropic of Capricorn. ID is easy: no other termite in this region is as large, being 13-16mm long. The TermiTraps are great at intercepting them but you need a different chemical to kill them. **Masto soldiers** For more info see our website.



There are a few Drywood termite species which do not need contact with the ground, getting sufficient moisture from the humid air in the regions they live. Small colonies; sometimes in furniture, even picture frames or ornaments.

Heteros: all around Australia. Long, cylindrical heads almost the same length as the body, no teeth on jaws, 3-5mm total length. Most noticeable feeding on the weathered surface of fences, decking, etc.

Microcerotermes (Micros): Represented by at least one species over all Australia, some of which build mounds in the ground, atop posts, on the sides of trees. Mostly leaf-litter and grass eaters but some will eat sound, decaying or weathered timber. Soldier heads are cylindrical, thin jaws with fine teeth. 3-6mm depending on species.

Drywoods (Cryptos): Mostly found along the more tropical coasts although *Cryptotermes austrinus* is found in central Australia. Soldier heads are almost vertical at the front with short, broad jaws with teeth. They do not need contact with the soil for moisture. Small colonies; may be in furniture, even picture frames or ornaments.

Others: There are big ones that eat decaying timber, small ones that eat grass. In fact there are another 300 we haven't covered. You'd have to be pleased we decided not to confuse you with more pics.

If you can find a mound...

If you can find a mound nest, you should destroy it right away and save the time and expense of baiting.

Mound nests can be physically destroyed using a mattock or crowbar. Ants, lizards, birds and echidnas will be happy to give assistance.

Check your handiwork in a couple of days. If there is a repair attempt, you need to try a little harder; dig a little deeper.

There is no need to use an insecticide.



or a hollow tree...

If there is a hollow tree nearby, there is a good chance a nest will be inside the trunk. Drill a downward sloping hole about 25mm diam into the pipe. You may see termites in the fluting of the drill as you remove it.

Using a watering can, funnel and maybe a plastic tube, pour in 30-40 litres of a Permethrin or a Bifenthrin solution. (Buy a concentrate which is diluted with water). It will not kill the tree but they are insecticides and you should follow the safety directions on the label. (Available from most hardware stores).



The termites from brown nests you see up in the branches of trees are generally not interested in solid timber in houses (unless it is decay affected). Just keep removing the tunnels coming down the outside of the trunk if it makes you feel better.

More on mounds and other 'nuisances' ...

If the soldiers have a pointy head... like in this photo, they are Nasutes and they come from a mound. Look around, find and physically destroy it. Don't waste money on mound builders!



Most mound building termites eat dead grass or leaf litter, not seasoned timber. Even those, like some Nasutes that do eat solid timber are best killed off just by destroying their mounds. There's no point in baiting a mound nest. You know where it is — just take to it with a pick or mattock. Have a good look around for mounds.



Fence plasterers are nuisance termites (usually Heteros).

The termites that 'plaster' fences and old sleeper retaining walls with a very dry and fragile layer of 'mud' are not a significant pest. You can just spray these termites with a solution of either Permethrin or Bifenthrin. Buy the concentrate at your hardware store and follow the dilution directions on the label.



Some additional tips...

If placing Traps on the garden, scrape away some of the leaf litter or mulch so that the opening in the base is in direct contact with the soil. The same goes for placing Traps on gravel. The idea is to even out the surface to make it as easy as possible for termites to seal off the base to prevent ants getting inside.

If you want to turbo charge the termite attraction, a light sprinkle of a handful of organic potting mix on the soil before you place the Trap will help. (There's a lot of wood fibre in potting mix which will quickly decay — and decay attracts termites). Some say Gatorade or any sugary water will also boost termite interest.

If you place a Trap in a sheltered area that is protected from rain, occasionally slosh some water on or under it; termites are more attracted to timber with a little fungus on it.

Garden ants invading the Traps?

Buy some Ant-Rid from your supermarket, open the lid of the TermiteTrap and place one inside. It is non repellent to termites, but kills ants!



Inspecting your home for termites...

If you call in professionals to inspect, they are only going to check on the interior mouldings (skirting boards, window/door frames, etc), the roof trusses if they are not covered with insulation and the underfloor timbers. If there is no underfloor area because your home is built on a concrete slab, you have to ask yourself: what are they going to inspect that you can't?

You might even do a better job than many professionals because it's your home. They don't shift heavy furniture to look at the hidden skirting boards or shift things in the linen press and built-in wardrobes... but you will. And, you can do your inspection in the first week of spring and the first week of autumn when it's not too hot up in a roof or too cold under the house (if you have a suspended floor).

Inspection is like detective work; deductions of motive and opportunity. You know the termites come from the soil and work upwards. Once they get inside, all the timbers join up; studs to noggins to architraves to ceiling battens and roof trusses.



Your tools



Your tapper. Save bending and increase your reach. This is a piece of curtain rod and a round finial. (You could improvise with a putter).



Here are two typical holes in through walls; a weep hole and where the earthing cable from the meter box goes to ground.



Check every weep hole even (especially) those covered by creepers. Cut them back. You can stuff nylon insect screen into weepholes.



Look for uneven timber surfaces. Termites can just leave the paint! Listen for a hollow sound as you tap your way around the house.



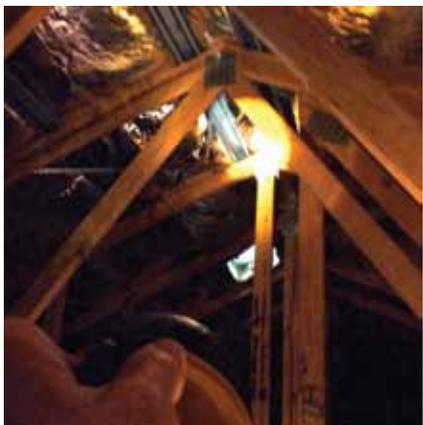
Always look at the gaps in joints. Termites fill the gaps with their 'mud' mixture



Whether the timber screen to hide the pool pump is pre-treated or not, termites can use it as a bridge to get across to the wall and through a hole behind the power point or up behind the downpipe to the eaves.

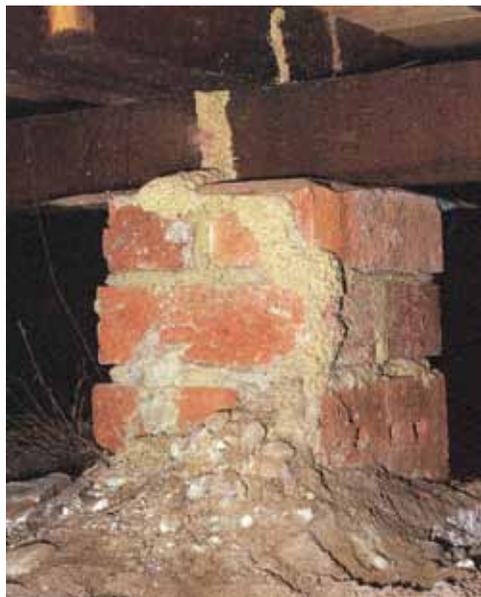


Stacking firewood on concrete saves it rotting on the ground but this is risky. This stack covers two weepholes and is only a handspan away from the soil. And as well, there is a gap between the wall and path.



Sarking and insulation will prevent you seeing all the roofing timbers but at least check the joints of the ones you can see and particularly over the wet areas: kitchen, laundry and bathrooms.

Under the house, you are looking for mud tunnels from the soil. The ant caps are not to stop termite progress but to ensure they come out into the open where you can see them.



Summary

You may have plenty of monitors around your yard and you may have killed off a colony or several. You may have physical and chemical barriers, but...

...since Captain Arthur Phillip had his first tent peg eaten by termites in 1788 they have found a million ways to get to wood from their nest in the soil.

If you inspect once or twice a year and don't find termites, that's a good result.

If you inspect and find termites, it is also a good result because you will have found them before really expensive damage has occurred.

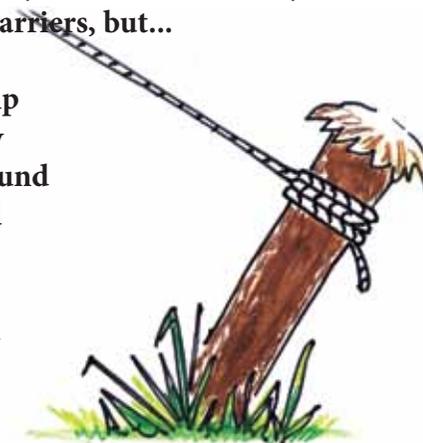
If you provide scouting termites with enough monitors that are easy for them to find...

...and if you look at those monitors and add bait once they're attacked...

...plus if you regularly inspect your house... just in case...

...you will be following a system to defend your home... forever!!!!

We are here to help. Phone us any time.



*You get better termite control
when you follow a system...*

The **DIY TERMITRAP** **COLONY KILLING SYSTEM**

- MONITORS:** Give termites something easy to find apart from your house. Our monitors are called TermiTraps, the easiest to set, easiest to inspect and easiest to bait. (Also best value).
- TREATMENT:** Give termites something tasty and easy to collect and take back to their nest. Our Tuckerbag Termite Bait is an Insect Growth Regulator (IGR) which is safe to humans, pets and wildlife... but kills the termites that do 99% of the damage to Aussie homes.
- INSPECTIONS:** Termites don't want to be noticed. Inspect regularly to ensure you don't get nasty or costly surprises. We tell you how you can do as well or better than many pest professionals... at a fraction of the cost!
- ADVICE:** The old saying "free advice is worth what you pay for it" is wrong. This How-to-Guide can help you save your home... and that's worth plenty! Then there's our website: www.termikill.com.au and you can also phone us Freecall on **1800 20 30 20** or use our Free Termite Identification Service.

Paying more doesn't kill termites any deader than dead!



*World firsts!! — Aust Patent Apps: 2012902586; 2013204887; 2013204958
Patent Apps in other countries*

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