



Australian Government
Department of Agriculture

Importing timber and timber products? What's inside?



Importing timber and timber products?



Know what's really inside

Australia enjoys freedom from many of the world's most damaging pests and diseases. There are many exotic pests and insects that could hitch a ride to Australia in timber, timber products, packaging and on cargo containers. If these pests establish in Australia they could have a detrimental impact on our agricultural and forestry industries, natural environment, food security and economy.

Protecting Australia's biosecurity is a shared responsibility between governments, industry and the community. As a buyer and importer you are responsible for making sure that all imported goods meet Australia's import conditions, including being free of exotic insects and pests.

Everyone in the supply and retail chain has a role in recognising and reporting any signs of pest activity in imported timber and timber products, including furniture.

To avoid delays and additional costs to your business make sure your overseas buyers, suppliers and manufacturers know what the import and biosecurity requirements are before you purchase and import your products.



Timber pest activity is not always obvious and may not be seen until long after an item is imported. Any signs of pest activity in imported timber products must be reported to the Department of Agriculture immediately.

What is a biosecurity risk?

Some of the more damaging pests that threaten our biosecurity include Asian Longhorn Beetle, Burnt Pine Longicorn Beetle, Japanese Pine Sawyer Beetle, termites, Asian Gypsy Moth, auger beetles, powder post beetles and wood wasps.

Many of these exotic pests arrive in timber and timber products in the egg or larvae stage and their presence may not be obvious. Pests sometimes go unnoticed for many years, until frass (sawdust-like substance) and holes appear.

Timber and plant pests often create a biosecurity risk by attaching themselves to cargo containers.

Product fillings and packaging such as straw, rice, sand, soil and wheat can also carry pests and diseases.

These products may also require an import permit.

The different seasons, especially the hotter months, increase the risk of exotic pests and insects hitching a ride on vessels and cargo.



Timber products

are all items made of timber, bamboo or cane including sawn timber, packaging, pallets, dunnage, toys, statues, ornaments etc. It also includes furniture that is made of timber or furniture that has a timber/ wooden attachment.



To avoid additional costs and delays to your business, check import conditions before purchasing timber products from overseas.

Keep watch for Australia's most unwanted

Information on Australia's most unwanted timber pests is provided in this booklet including:

- what they look like
- the time of year that they are most active
- their favourite conditions (temperature, light etc.)
- the impact they would have if established in Australia.

Keep this booklet handy when working around imported timber and timber products – whether they are being unloaded or while they are in storage.



Asian Longhorn Beetle

Anoplophora glabripennis

Adult beetles are 50-70 mm long, shiny black with about 20 white dots on their wing-covers. Antennae are black with white rings, and are much longer than the body.

Larvae are elongated and cylindrical with a reduced head and legs, and are 50 mm long at maturity.

Distribution: Southern China, Korea, Japan, Austria, France, Germany, Italy, Canada and USA.

When to look for it

All year but most likely to be seen in winter.

Preferred conditions or environment

Eggs are laid under tree bark in oval to round darkened wounds.

Larvae tunnel into the heartwood of the tree.

Adults emerge in summer from trees or timber from circular holes 9-11 mm in diameter and often leave piles of sawdust at the base of trees or in branch crevices. They live for 3-66 days and are strong fliers. Probable means of entry into Australia is in imported timber and wood used for packing materials from Asia. Hosts include standing trees and timber of many species including elm, willow, poplar, apple, plum and maple.

The beetle occurs in agricultural areas, disturbed areas, natural forests, planted forests, scrub/shrublands, and urban areas.

Impact

These beetles are very destructive and could potentially devastate Australia's hardwood forests, apple and pear plantations and parkland trees. It has the potential to damage timber, nursery, and tourism industries.

Asian Longhorn Beetle outbreaks began in China in the 1980's following major reforestation programs. Nowak et al. (2001) investigated the potential maximum impact of Asian Longhorn Beetle on urban trees in the United States. They predicted that this beetle could cause a loss of about a third of urban trees in the United States—more than a billion trees—with a compensatory value of nearly three quarters of a trillion dollars.



Burnt Pine Longicorn Beetle

Arhopalus ferus

Adult beetles range from 10-30 mm in length and are reddish brown to black in colour. The female's antennae are approximately half the length of their body with male antennae being three quarters the length.

Larvae are elongated and cylindrical with reduced heads and legs. They are 25 mm long at maturity.

Distribution: Europe, Northern Asia, Africa, South and South-East Asia and New Zealand.

When to look for it

Beetles fly during the summer months (November – March).

Preferred conditions or environment

Eggs are laid in groups of 5-50 in bark crevices on freshly burned or felled timber.

Larvae feed in cambium; tunnels oval in cross-section, up to 12 mm wide, loosely packed with frass and coarse wood particles.

Adult emergence holes are oval and average 6 mm diameter. Adults live for several weeks and can appear in large numbers. They are active dusk to dawn, attracted to light, and shelter in crevices during the day.

Burnt Pine Longicorn Beetles attack logs, stumps and standing, dead or damaged pine trees and, less commonly, Norway spruce. It is best known for its spectacular attacks of scorched trees following forest fires.

Impact

If introduced to Australia, the Burnt Pine Longicorn Beetle will have devastating effects on our forest and construction industries. Its larvae cause damage to pine tree timber used for construction by tunnelling in the wood, which significantly reduces the quality of the timber.



For further information on pests and insects that are a risk to Australia's biosecurity, see the Field Guide to Exotic Pests and Diseases of Forests and Timber which is available on our website daff.gov.au/forestpest.

The Pest and Disease Image Library (PaDIL) padil.gov.au is also a good source of information on pests and disease, and has detailed photos of the insect pests shown in this booklet.



Asian Gypsy Moth

Lymantria dispar

Adult females have white wings with dark markings and a wingspan of 50 mm or more. Adult males are greyish brown with a wingspan of about 38 mm.

Larvae are highly variable in colour with long hairs covering the body, two distinctive rows of large spots along the back, usually in five pairs of blue, and six pairs of red from head to rear.

Egg masses contain between 100–1000 eggs; covered with buff/yellowish scales, average 38 mm long, 20 mm wide.

Distribution: Northern Asia.

When to look for it

Larvae hatch in spring and moths fly during late summer to early autumn.

Preferred conditions or environment

The egg is the overwintering stage. The hatching of gypsy moth eggs coincides with budding of most hardwood trees.

Larvae (caterpillars) emerge from egg masses from early spring. The caterpillar stage lasts 8-12 weeks. Pupation occurs late June to early August and lasts 10-14 days.

Adult moths emerge from July to September and live one to three weeks, during which time they mate and lay eggs. Females can fly up to 40 km and die after laying eggs. Males die shortly after mating. Both are attracted to light.

They are most often found on forest products, shipping containers, cargo and ships structures. Larvae can survive a week without feeding. They spin silken threads and can disperse long distances on wind currents.

Impact

Causes significant damage to forests, horticultural and urban trees. Most impacts of gypsy moth are associated with the physiological stress to trees caused by defoliation, especially if it occurs several years in a row or in conjunction with drought. These effects include reduction in tree growth, crown dieback and tree mortality.



Report suspect insects or pest activity to the Department of Agriculture by phoning 1800 195 543.



Drywood Longicorn Beetle

Stromatium barbatum

Adult beetles reach between 12-28 mm long. They are reddish-brown to almost black in colour, and covered with fine hairs. Their antennae are close to the body length of females, and about 1.5 times the body length of males. Larvae are a creamy white colour and up to 38 mm long and 9.5 mm wide. They are elongated and cylindrical with a reduced head and legs.

Eggs are laid singly or in batches, in cracks and crevices of wood and timber products such as plywood. The eggs are white, oval and about 2 mm long.

Distribution: Thailand, Myanmar, Bangladesh, Nepal, India, Pakistan, Ceylon, Andaman, Nicobar, Bourbon, Seychelles, Mauritius and Madagascar.

When to look for it

Adults emerge in late spring to early summer.

Preferred conditions or environment

Larvae form irregular tunnels tightly packed with very fine powdery frass (sawdust-like substance). In heavy infestations tunnels can interlace so the interior of the wood is reduced to powder but exterior surfaces are left intact. It can take up to 10 years to emerge.

Most often detected in packing material, dunnage, furniture and sporting goods such as cricket bats and stumps.



Impact

This beetle poses a significant economic threat to Australia.

It has a host range of 350 species of seasoned hardwood and softwood timber and plywood including eucalyptus, pine, elm and oak. Unlike Australian longicorns, drywood longicorn can attack seasoned timber.



There is no single source of responsibility for biosecurity – everyone benefits, so everyone has a role to play.



Formosan Subterranean Termite

Coptotermes formosanus

These termites live in colonies, with soldiers being 12-15 mm long. The soldiers have hardened, scissor-like extensions on the front of their heads that they use to defend the colony from invaders. They are pale yellow and exude drops of milky fluid from the head when disturbed. Yellowish-brown winged forms are produced in early spring to midsummer.

Distribution: China, Taiwan, Japan, Sri Lanka, South Africa and USA including Hawaii.

When to look for it

Winged reproductive termites swarm in summer.

Preferred conditions or environment

Nests are built from a substance resembling paper; made in soil, wood, hollows or spaces between walls and floors – can be in places not in contact with the ground. They are most likely to enter Australia in nests in shipping containers or in timber.

There are more than 50 species of timber that are hosts to the termite, including oak, citrus, and cypress.

Impact

Formosan Subterranean termites are one of the world's most destructive termites. They cause severe damage to buildings and other timber in-service.



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Japanese Pine Sawyer Beetle

Monochamus alternatus

Adults range between 15-28 mm in length and 4.5-9.5 mm in width (females are larger than males). Their antennae are longer than their body [(1.3x (male); 2x (female))]. Their body colour is a distinctive brown with grey and orange markings. The thorax has a pair of distinct lateral spines. The adults can carry plant pathogens.

Larvae are white, opaque, legless grubs, averaging 43 mm in length, and wood boring.

Eggs are about 4 mm long, milky white in colour and sickle shaped.

Distribution: Europe, Northern Asia, South and South-East Asia.

When to look for it

Adult beetles usually emerge in early summer.

Preferred conditions or environment

Eggs are laid singly in weak or newly felled trees.

Larvae hatch and burrow into the timber causing significant damage. Pupation occurs within the timber.

Adult beetles emerge from the timber in summer.

Seventeen species of *Pinus*, including *P. densiflora*, *P. thunbergii*, *P. luchensis* (Japan) and *Pinus massoniana* (China), three species of *Picea* and one species each of *Abies*, *Cedrus* and *Larix* have been reported as hosts of the Japanese Pine Sawyer Beetle (Kobiashi et al. 1984).

Impact

This species can cause significant damage to forests. It can also carry the exotic pinewood nematode – a devastating microscopic worm-like pest known to kill pine trees.



Report suspect insects or pest activity to the Department of Agriculture by phoning 1800 195 543.



Lesser Auger Beetle

Heterobostrychus aequalis

Adults are 6-13 mm long with spines on the back of their wing covers. Their body is cylindrical, dark brown to black in colour. Their head is not visible when viewed from above.

Larvae are C-shaped, white with brown heads, and reach up to 15 mm long. Eggs are translucent white and approximately 1 mm in length.

Distribution: South and South-East Asia, Australasian – Oceanian, Africa, Europe, Northern Asia, USA and Canada.

When to look for it

Throughout the year but the warmer months are when most beetles emerge.

Preferred conditions or environment

Eggs are deposited within cracks/pores in timber or the female may bore actively into timber to lay the eggs. Likely mode of entry into Australia is through imported timber, dunnage (e.g. crates, pallets, gluts, skids and other packaging), furniture, artefacts, and souvenirs.

Impact

These beetles attack the sapwood component of green or seasoned hardwood timber species. This can result in significant damage to timber in-service, such as furniture, dunnage, artefacts etc.



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Powder Post Beetle

Lyctus africanus Lesne

Adult beetles are 6-13 mm long, are cylindrical and dark brown-to-black in colour. Their head is visible from above.

Larvae are 15 mm long, C-shaped, white with brown heads. There are 26 known valid species of powder post beetles.

Distribution: Africa, South and South-East Asia, Europe and Northern Asia.

When to look for it

Throughout the year but the warmer months are when most beetles emerge.

Preferred conditions or environment

The beetle's hosts include hardwood, freshly felled trees and green or seasoned timber. To develop it prefers wood with a moisture content of 8-32%. Its greatest activity will occur with 10-20% moisture. It would most likely come to Australia in wood that has been stored in timber yards or through manufactured goods, such as furniture.

Impact

Powder Post Beetle can cause damage to exposed wood in houses, furniture and panelling. This insect attacks the sapwood of wide-pored hardwoods that are usually less than 10 years old. They attack both raw timber and manufactured products which can result in significant damage to timber in-service such as furniture, dunnage, artefacts etc.



For further information on pests and insects that are a risk to Australia's biosecurity, see the Field Guide to Exotic Pests and Diseases of Forests and Timber which is available on our website daff.gov.au/forestpest.

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Western Drywood Termite

Incisitermes minor

These termites live in colonies and different specialised castes (forms) are present. Pale nymphs/immatures are most numerous, and do the work. Soldiers have hardened, scissor-like extensions on the front of their heads that they use to defend the colony from invaders. They are 11-12.5 mm long, have a pale yellow body with an orange-brown head. Yellowish-brown winged reproductive forms (called 'alates') are produced in early spring to midsummer.

Distribution: USA including Hawaii, Mexico, China, Japan and Canada.

When to look for it

Swarm in large numbers at dusk from early spring to midsummer.

Preferred conditions or environment

Nests are built from a substance resembling paper. Nests are not made in the soil but are located inside the wood, which is the food source. Frass (sawdust-like substance) is sometimes visible outside the nests, and are usually hard, hexagonal pellets less than 1 mm in diameter. They like dry wood (with moisture content <12%), and timber that is in-service.

Alates swarm in large numbers at dusk, fly and disperse in order to start new colonies.

They are most likely to come to Australia as nests built in timber (e.g. furniture, artefacts), dunnage (e.g. pallets, crates) or in yachts/boats.

Impact

The Western Drywood termite is a serious timber pest that can severely damage timber in-service, such as dunnage, artefacts, boats, furniture, houses etc.



Report suspect insects or pest activity to the Department of Agriculture by phoning 1800 195 543.



Wood Wasps (Sirex Wasp)

Adults grow up to 35 mm long, with two pairs of transparent amber coloured wings and usually with a metallic coloured thorax and abdomen although some have distinctive yellow/brown markings as well. Females have a long ovipositor (leading to the name “horntail”) up to 20 mm in length (to facilitate egg-laying into wood). Adults can be confused with other large native Australian wasps and the introduced species *Sirex noctilio*.

Larvae are 30 mm long, s-shaped, creamy white, legless, with a dark brown spine at the posterior end. They feed on fungus growing within timber. Eggs are laid deep inside the wood.

Distribution: Asia, Europe, Chile, USA, Canada and Russia.

When to look for it

Most adults emerge in summer.

Preferred conditions or environment

Larvae feed on wood decayed by a fungus growing within the timber. They make longitudinal tunnels 15-75 cm long (usually tightly packed with frass) from sapwood to heartwood and back. Wood decay (white rot) may be visible.

Adults emerge in summer from circular exit holes up to 8 mm diameter (this size may vary). They have pale yellowish halos, often visible around holes, and fly for considerable distances. Females usually lay eggs in weakened trees, often on freshly burned or cut logs. Adults occasionally emerge from timber used in houses or furniture.

They are most likely to enter Australia in pine logs, packing material and unseasoned dunnage (e.g. gluts, crates and pallets).

Impact

There are a number of exotic species of wood wasps in five main genera (*Sirex*, *Urocerus*, *Tremex*, *Eriotremex* and *Xeris*). *Sirex noctilio* is the only significant wood wasp pest species currently found in Australia. Wood wasps can attack and kill healthy trees and/or degrade wood leading to structural damage.



There is no single source of responsibility for biosecurity – everyone benefits, so everyone has a role to play.

Australia's import requirements



All importers need to be aware of and comply with Australia's import conditions. Import conditions are determined by scientific evidence, rigorous analysis and intelligence, and are vital to keeping unwanted pests and diseases out of Australia.

There are three steps to the quarantine process for importing timber and timber products.

1. Check the list of timber products on the department's website for the category your product sits under **daff.gov.au/timber**
2. Check the Import Conditions Database (ICON). ICON will list the import conditions your product needs to meet, based on the category you identified in step 1. **daff.gov.au/icon**
3. Complete and submit the permit application if ICON states that an import permit is required.

Pre-import treatment

It is more cost effective to have your timber and timber products, containers and packaging treated before they are imported to Australia.

Treatments for timber and timber products can include fumigation, gamma irradiation and heat. Fumigations carried out overseas must be done by an approved treatment provider to clear biosecurity on arrival in Australia. A list of approved fumigation providers can be found on the department's website at **daff.gov.au/treatmentproviders**.

Timber packaging and dunnage used to support and protect your goods can also carry exotic pests and diseases. There are a number of options for ensuring packaging meets import requirements:

- choose good quality timber packaging and check that there are no signs of insects or insect damage and no bark
- keep the timber packaging dry
- select only ISPM15 compliant timber (it will be stamped), or
- have the timber treated using either methyl bromide, sulfuryl fluoride, kiln drying, heat treatment, gamma irradiation, or by permanent preservatives.

Information on treatment rates is available at **daff.gov.au/timber**. Valid documentation must be presented to the Department of Agriculture.

Declaring

When lodging the details about your imported timber or timber products in the Integrated Cargo System (ICS), make sure that the details you enter are accurate. Incorrect details could see your goods held up unnecessarily for inspection, and you could incur additional costs. Incorrect details could also introduce an exotic pest or disease into Australia.

Failing to meet import requirements

If goods do not meet Australia's import requirements they will be stopped at the border and may be treated, exported or destroyed at the importer's expense – this can happen even if the goods were imported years earlier. If your products have not been pre-treated before they are exported to Australia, they may be subject to treatment here using methyl bromide, gamma, heat, or by other cleaning methods. This occurs at the importer's expense.



Report incursions

It is important that you do regular checks for insect or pest activity while your goods are in storage, even if your goods pass quarantine.

Things to look for include:

- insect or larvae activity
- the sudden appearance of holes
- a lot of fine dust or sawdust (frass) which keeps returning
- strange noises coming from the furniture.

If you suspect anything unusual in timber or timber products, contact the Department of Agriculture immediately on 1800 195 543. Failing to report a suspected incursion is an offence.



Frass is usually the first sign of timber pests.

Post-sale responsibility

If exotic insects are found in goods after sale, the department will attempt to trace these back to the importer for appropriate treatment. Future imports may also be subject to increased levels of inspection to ensure that they do not pose a biosecurity risk.



Timber pests could cause severe and widespread damage if they establish in Australia.

Building a better biosecurity system



The Department of Agriculture is reforming Australia's biosecurity system. If you are involved in the importing, cargo or logistics industries the changes we are making may affect you.

Australia's biosecurity system needs to be adaptable to meet new challenges posed by increased global trade, tourism, and climate change. It also needs governments, industries, businesses and the community working together to be successful.

Australia's biosecurity system isn't just about quarantine. Although our work at the border is an important element, our new approach enhances our management of biosecurity across the continuum - offshore, at the border and onshore.

Biosecurity reform will impact importers in different ways depending on what is being imported and what biosecurity risk it poses. For those importers who comply with Australia's quarantine requirements and who import lower risk commodities, the changes should result in lower levels of intervention and more efficient clearance through Australia's biosecurity controls. For some importers, nothing may change, while for others there may be an increased level of intervention.

Through biosecurity reform we are improving our industry partnerships, encouraging industries to be covered by emergency response cost sharing deeds and supporting the development of industry specific biosecurity plans.



Biosecurity is about keeping safe from harmful animal and plant pests and diseases.

Our biosecurity system minimises the risk of exotic pests and diseases entering Australia and harming the natural environment, our food security and economy.

Importantly, our management of biosecurity services will continue to be intelligence led, informed by scientific evidence, and the rigorous analysis of data.

Want to know more?

Keep up-to-date with changes to the biosecurity system and what it means for your business. Further information about our changes is available on the our website **daff.gov.au**.

Biosecurity Bulletin is also a good source of information about biosecurity activities that are relevant to your industry. *Biosecurity Bulletin* is available on our website at **daff.gov.au/bulletin**.

For further information on import conditions contact.

Timber and timber products – general importing inquiries

Email: timber.imports@agriculture.gov.au

Web: daff.gov.au/timber

Post border requirements

Phone: + 61 2 6272 5447 or + 61 2 6272 5622

Web: www.daff.gov.au/biosecurity



Report quarantine concerns

Report pest activity to 1800 195 543

Report illegal importing activity to the Red Line
on 1800 803 006

