

## Survey program close to the 50,000-mark



EHB Response Manager Jason Lette (centre) with field team staff. Survey work continues. Picture: Christie Van der Beeke.

### By Susan Hall

Since European House Borer (EHB) was first detected in Western Australia more than two years ago, rapid action has been taken to determine the extent and limit the spread of the potentially destructive pest.

While the search for EHB in WA is more than a numbers game, the statistics produced in the fight to beat the borer are impressive. In the past two years, Department of Agriculture technical staff have doorknocked more than 43,000 homes, completing more than 35,000 surveys. EHB Response Operations Manager Jason Lette said since the program began, every street between Geraldton and Esperance had been driven down and inspected twice. That activity will start again in April 2006.

"More than 100,000 hectares of pine plantations have been surveyed, and more than 4500 properties have had

actions carried out arising from surveys, with 90 affected sites being positively identified with the presence of EHB," said Mr Lette.

"We are currently working with the timber industry to clean up these sites, with about 77 sites completed so far. Our officers have removed more than 8,600 tonnes of affected and susceptible pine material."

The intense effort to control and eradicate the pest also includes a program to capture EHB while on the move.

"We have installed almost 900 trap poles, which act as a sacrificial nesting place for EHB, reducing the likelihood of it entering houses and other structures," Mr Lette said. "They are also used to conduct research, as the poles can be tested to determine if the pest is still in the area."

Mr Lette praised the community for its high level of support and assistance in the search for the borer.

WA – working to eradicate a pest

# Pest destroys timber

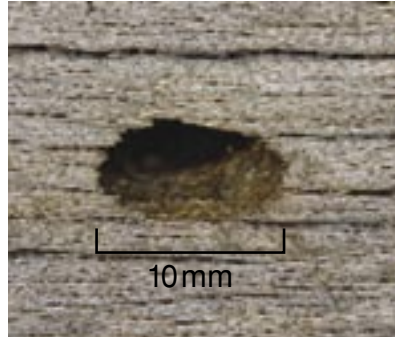
European house borer (EHB), *Hylotrupes bajulus* Linnaeus, is a destructive pest of pine. If allowed to become established it can cause major structural damage to buildings.

Timbers commonly used for structural purposes in Australia, including pinasta, radiata pine and southern pine, have

been shown to be susceptible to damage by EHB. The Borer generally infests roof timbers but is also known to infest architraves, door frames and timber articles such as pine furniture. Evidence of the pest can also be found in dead branches of living trees, trunks, dead trees and logs.



**Off-cut of timber exhibiting oval-shaped exit holes caused by emerging adult beetles.**



**Close-up of adult beetle exit hole.**  
– Picture not to scale (CD Pless and G Schweiger UT E&PP)



**Exposed larvae boring through timber.**  
– Picture not to scale (Clemson University USDA Cooperative Extension Slide Series)

## Some frequently-asked questions

### How did it get here?

The borer can live in timber for two to 12 years before it reaches maturity and emerges as a beetle. It probably came into WA in a piece of timber as a borer (larvae). EHB is found in Europe, the Middle East (Turkey), North Africa, South Africa, South America, the United States, China and Asia Minor. EHB was detected several times in Australia in the 1950s but those infestations were eradicated by fumigation.

### What kind of damage can it cause?

Currently, nearly all detections have been in dead branches and trunks of living pine trees, and in dead pine trees and logs. The risk is they will move from dead trees to pine in houses. The pest can infest roof timbers, architrave, door frames and timber articles such as pine furniture, packaging and pallets.

### How can pine be transported out of PMZs?

Please call the EHB Hotline on 1800 084 881 to speak with someone about your requirements and arranging a permit if necessary.

### How do I know if I'm in an affected area?

Affected businesses and homeowners will be notified by letter, or can check on our website.

### Where and how can we get rid of any untreated pine to reduce our risk if we can't move it?

Please call the EHB Hotline on Freecall 1800 084 881.

### Why should I report EHB?

Pine timber constructions, including houses, could be attacked and become structurally unsound and unsafe. If EHB becomes established it could cause immense problems for businesses, home owners and WA's pine industry.

### I am about to build, what should I put in my roof?

EHB only attacks untreated, seasoned pine. Treated pine and other roofing materials are not at risk from EHB. The building advice from the Department of Housing and Works is that if using pine for structural purposes, ensure it is treated. You should seek advice from your builder about the most suitable option for your home.



**Comparison of European House Borer and larvae with a five-cent piece.**

– Picture not to scale (Department of Agriculture, Western Australia)

**WANT MORE INFORMATION?** If you detect signs of EHB activity on your property or would like more

# How to find EHB

The most visible evidence to indicate the structural timber of a building or timber article is infested with EHB is the presence of:

- Adult beetles which are brownish-black to black and have a slightly flattened appearance. The beetle's wings are usually all black and may have distinctive white patches. The top surface of the first body segment behind the head has two raised, black, shiny knobs, like eyes. Adults are about 8-25mm in length with antennae about half as long as the body.
- Characteristic oval-shaped holes running with the grain on the surface of infested timber from which the adult beetle has emerged. Oval-shaped holes are about 5mm by 10mm in size.
- Frass, a mixture of fine powdery particles of wood dust and pellets of excrement, can sometimes be found on the floor below infested timber where adult beetles have emerged from holes.
- Galleries within the timber are formed by the boring larvae and are frequently tightly packed with frass. Galleries within the timber rarely break through the surface of the timber and therefore are seldom detected. However, long, blister-like swellings under the surface of the thin layer of uneaten wood caused by the tightly packed frass may be evident.



**Damage to a log caused by the European House Borer.**

*-(Department of Agriculture, Western Australia)*

Other evidence to indicate EHB timber infestation includes the presence of:

- A soft scraping sound made by the larvae as they feed, which can often be heard at night and may be audible from some distance.
- EHB larvae within the timber. Larvae are elongated and cylindrical in shape with an enlarged and flattened head. The length of larvae varies between 19-41mm and around 7.5mm wide at maturity. Larvae can be identified by a row of three small, black single-lens eyes on each side of the head.
- Batches of up to 120 eggs which are laid in crevices or cracks in timber.

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## New regulations now in force

**By Susan Hall**

New regulations have been introduced by the State Government to protect Australia from the European House Borer (EHB). EHB, which attacks untreated pine, has been found predominantly in dead pine trees and dead branches in two main clusters of Perth suburbs (Shire of Mundaring and Gnangara/Ellenbrook area), incorporating a total of 29 suburbs.

The regulations restrict movement of untreated pine in some areas in an attempt to limit the unintentional spread of EHB across Perth and to assist with the eradication of EHB from Australia.

"We are fortunate to have caught the incursion early and are confident that with the public's support we can continue to contain this unwanted pest," EHB Program Director, Lisa Christy said. "The only way we can achieve this is to limit the movement of untreated pine out of areas that could possibly contain affected materials. This will assist us in our aim of eradicating this serious pest from Western Australia."

Areas where EHB activity, which could be live larvae or beetles, has been found are classified as Priority Management

Zones (PMZs). Under the regulations, all properties within 100 metres of the affected property form a PMZ. To date 59 PMZs have been identified.

The movement restrictions will initially prohibit the movement of any untreated pine out of the identified areas, unless it has been fumigated and appropriately treated (a list of treatments available is on the internet at [www.fifwa.asn.au/europeanHouseBorer.htm](http://www.fifwa.asn.au/europeanHouseBorer.htm)). This includes pine firewood and other pine from the bush and plantations, as well as items made from untreated pine such as furniture, floorboards, cupboards and pallets.

"This means items such as untreated pine outdoor furniture cannot be moved outside a PMZ if you are moving house or selling the items, unless you have it treated," Ms Christy said.

People caught moving untreated pine from a PMZ can be fined between \$500 and \$2000. All property and business owners within a PMZ will receive a kit outlining what they should do to prevent the spread of EHB. The only disposal options available are having the pine chipped, burned, or sending it to a council waste site for deep burial.

# A case of mistaken identity

By Susan Hall

Members of the public are praised for being vigilant in the hunt for EHB in Perth; however this vigilance has led to mistaken identities of various bugs and beetles found in Australia.

Department of Agriculture entomologist Mike Grimm said the most commonly mistaken beetle is the Eucalypt Longicorn.

"The Eucalypt Longicorn is native to Australia and similar to EHB, exhibiting the same symptoms on wood, such as tunnelling and packing frass behind it," Mr Grimm said.

"The main difference is that the Longicorn eats only hard woods, whereas EHB is restricted to soft woods. It also attacks live woods, usually at a point of damage, whereas EHB will bore only into dead wood.

"Although the longicorn looks similar, it has antennae as long as the beetle, whereas antennae on EHB only comes about halfway down the body.

"Eucalypt Longicorn also has yellow patches on its back, rather than white and is brown in colour, unlike the black EHB."

The Click Beetle is also regularly confused with EHB.

"Most Click Beetles are slender and elongated in shape and range from about four to 50 millimetres in length. They are usually a drab brown in colour with no markings and have serrated antennae," Mr Grimm said.

Although very dissimilar to EHB, the Mole Cricket is still occasionally mistaken.

"As the Mole Cricket is rarely seen, people tend to see it as a new bug found in their home and draw a hasty conclusion that it may be EHB," Mr Grimm said.

"We ask householders to continue to be vigilant about any new pests found in their home and use this information to make a more informed assessment of what the bug could be."



**A state of confusion: The EHB (left) is commonly confused with the Mole Cricket (right) and the Longicorn (centre).** Images not to scale. (Dept. of Agriculture, WA).

## Long larval period a problem

EHB has a relatively long larval period of two to 12 years, mostly spent within the timber. This enables the pest to infest a range of coniferous woods undetected and has contributed to its spread to other parts of the world in timber and timber articles such as furniture. Adult EHB are considered to be strong fliers and can cover up to 200 metres to infest new areas. The pest is able to live in a wide variety of climatic conditions; however, it prefers temperate habitats and is usually found in coastal regions.

### Management

Members of the public should not collect or move untreated pine. EHB is a quarantine pest. The only effective treatment once infected is fumigation with approved fumigants applied by licensed pest control operators. Timber can be effectively treated prior to use.



**Exposed larvae boring through timber.**

– Picture not to scale (Clemson University USDA Cooperative Extension Slide Series)



Report any suspected EHB activity to the

Department of Agriculture - **Freecall Hotline**

**1800 084 881**

For more information visit [www.ehb.wa.gov.au](http://www.ehb.wa.gov.au)