



What is a Hollowhog?

The Hollowhog is a unique wood carving tool that has been specifically designed to create habitat for hollow dependent wildlife. Through extensive trialling in New South Wales, this Australian designed and manufactured tool has proven its ability to safely and quickly carve hollows in the toughest hardwoods.



What problems does the Hollowhog solve?

The loss of tree hollows throughout the landscape is well documented both here in Australia and in many other parts of the world. Hollows provide homes for at least 300 types of Australian animals including 17% of bird species, 42% of mammals and 28% of reptiles. Worldwide more than 1000 species are known to depend on hollows for nesting and roosting.

For many years dedicated individuals and organisations have been addressing the loss of hollows through the installation of nest boxes. More recently, trials of chainsaw carved hollows have been promoted as a solution for fauna that won't readily use nest boxes.

Internationally, other methods have been trialled to speed up the formation of natural tree hollows. Methods have included tree wounding and inoculation with fungi; a technique called coronet cutting in Europe that promotes the development of heartwood rot; and even the use of explosives to remove tree crowns in North America.

All of these solutions have inherent problems – whether ongoing maintenance and failure of nest boxes, excessive damage to living trees or long timeframes until hollows form.

Extensive research has shown that hollow dependent fauna have preferences for certain hollow characteristics – whether they are a natural tree hollow or artificial nest box. The main drivers for use of one hollow over another are thought to be:

- Hollow entrance size – many fauna prefer to squeeze through the smallest entry possible
- Thermal properties – tree hollows have been demonstrated to remain cooler on hot days and warmer on cool ones than thin-walled nest boxes. For some fauna this attribute is critical for their ability to survive in harsh conditions.
- Hollow cavity size – the internal cavity of a hollow needs to be large enough to accommodate either a single animal or multiple adults and their growing offspring.

The Hollowhog provides a new approach that solves each of the above issues and efficiently creates a large cavity through a small hole in a short space of time.

Carve living space for life

Hollowhog's design

The Hollowhog was specifically designed and tested with the following principals in mind. It had to be:

- Easy to use
- Safe to operate
- Durable and modular so that parts could be replaced as needed
- Able to be attached to readily available equipment
- Able to hollow out and carve in soft and hard wood with the minimum of effort and in the shortest possible time
- Able create a large cavity through a small hole with minimal damage to the living parts of a tree
- Able to solve a wide range of conservation issues
- Be usable by any capable and competent person

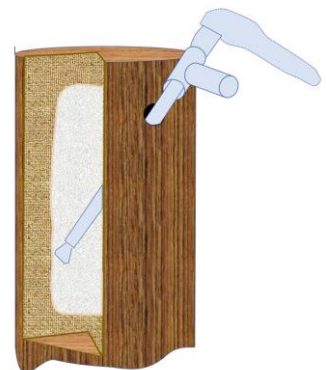
What can a Hollowhog do?

The Hollowhog efficiently and safely creates large internal cavities through small entry holes in both living and dead wood. No other damage to the tree's cambium (living tissue) occurs through the carving process meaning that there is little disruption to a tree's growth.

The Hollowhog creates a 50 mm entry hole and then progressively carves a larger and larger hollow of any dimensions up to about 600mm wide and long by 600mm deep. The hollow shape can be easily adapted to the size and shape of the tree limb or trunk that it is being carved in.

As an example, this 300mm long by 200 mm wide by 350 mm deep hollow was carved through a 50 mm entry hole in less than half an hour.

The entry hole size and shape can be targeted to any fauna species through either carving a larger entry hole or adding entry modifiers to reduce the size back down to as small as needed. There are many reports of larger more aggressive species displacing smaller hollow occupants where a hollows entrance is big enough for them to get in.



For small entry holes, to ensure that the tree does not close it over in the first few growing season, and to provide weather protection on vertical trunks, the installation of an entry modifier can be a real benefit. The tree will readily lock in the attached modifier after about a year's growth.



There are many variations to the size and shapes of hollows that can be achieved using the Hollowhog. The tool is just as efficient at making salvaged log hollows and habitat for ground dwelling fauna.

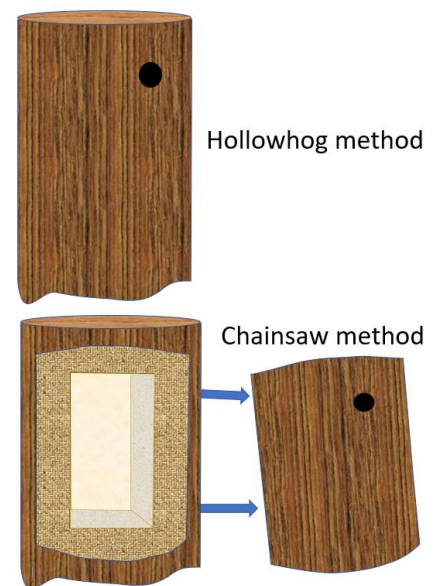


Is it safe to be carving into trees?

This is by far the trickiest question to answer, but, as has been demonstrated over the past few years through the carving of hollows with chainsaws, if certain precautions are taken it can be made a safe process. The best advice will always be to seek professional advice from an arborist about what volume of the trunk or limb can be safely removed without compromising a tree's structural stability. Research has been done in this area and professional advice from arborists who have been installing chainsaw carved hollows as well as installers of Hollowhog hollows should be consulted about how much of a limb or trunk's diameter can be removed. As an example, in some instances, installers are able to carve hollows up to about 200mm diameter in a 600mm diameter tree. There are many trees that continue to live for decades with far less than 70 % of their trunk diameter remaining, but as hollow carving is a relatively recent development, always err on the side of caution and always consult with a knowledgeable arborist for advice. There are now many arborists around Australia who have been installing chainsaw carved hollows.

Why not just use a chainsaw?

Chainsaw hollow carving has been happening now for the past few years and the hollows produced have been demonstrated to be used by fauna. The process though requires that a face plate, that is longer and wider than the hollow, is cut off the tree to allow for hollow excavation to occur. In general, this means removal of anywhere up to a 500mm wide by 600 mm long plate of the tree's living tissue for an average sized hollow. This plate is then glued and screwed back into place and a small entry hole cut for access, but the whole plate is now effectively dead wood. It can take many years for the plate to grow over in living trees, leaving it prone to splitting and cracking, rot, fire and termite attack. The good news is that trees do appear to continue to grow following chainsaw hollow carving.



By comparison, for an average sized hollow, the Hollowhog method leaves just the small 50mm entry hole and an intact surrounding living cambium. This means that it can be used in smaller diameter limbs than chainsaws including directly into the end of branch stubs and in any direction whether vertically up, down or anywhere in between. Arborists have been particularly keen on the Hollowhog's safety aspects. There are no spinning parts outside the hollow entry after about 30 seconds of carving.

The Hollowhog also provides the ability to tap into existing natural voids in a tree. Many Eucalypts have central pipes that have no entry point. The Hollowhog can be used to form the entry point and carve out a space around the pipe to suit.

Where can I get a Hollowhog?

For information on how to get a Hollowhog please contact:

Matt Stephens

0418 295 365

or

Info@hollowhog.com.au

I will be happy to provide a demonstration and training day.

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