

# TREE HOUSE CHALLENGE

THE 10th annual Expedition Class adventure by the Bookend Trust took ANDREW HUGHES and a team of scientists and tree climbers into the forests of Tasmania. They explored three major forest types in the best way possible... by climbing the trees and setting up a tree house to sleep amongst the birds and possums.



Students visited the Tree House Challenge campsite at Hollybank Reserve.

## A Possum Paradise

The challenge began in a dry eucalypt forest at the Hollybank Forest Reserve in the state's northeast. Tucked out of sight of all but the resident brush tailed possums and cackling kookaburras the team found a *Eucalyptus obliqua*, or stringybark, to set up home. Forest types are a slippery idea as one grades into another or varies based on the local conditions. But generally dry forests have a breezy open canopy, pricklier understory, lower rainfall profile and love a semi-regular fire. That means once or twice every century - not every year though.

**Things to explore:** Discuss the role of fire in different forest types. What does that mean for people living in or on the edge of forests? [www.forest-education.com/what-forest](http://www.forest-education.com/what-forest)

## Dark and Stormy

Week two saw the expedition shift from dry and crunchy to wet and soggy. At its most other-worldly, the temperate rainforest has a soft open floor and dark closed canopy. But these southern rainforests can also be tangled jungles that include the infamous endemic tree which is aptly named "horizontal". Tasmania has the largest tract of temperate rainforest in Australia and they are important refuges for many plants and animals. In the Tarkine basecamp Dr Alastair Richardson found some unusual forest dwellers under the ground, marked by their chimneys and mud pellets: two different species of freshwater burrowing crayfish. It's not all about the trees in a forest!

**Things to explore:** Chemicals released in fallen rainforest leaves inhibit plant

growth on the forest floor. Where else could seedlings get a start in life?

## Where the Giants Live

The wet eucalyptus forests of Tasmania are home to giants on a global scale. Several of the eucalypt species can grow taller than 80 metres but it's the *Eucalyptus regnans* that trumps them all. We spent the last two weeks of the expedition in the hills behind Geeveston climbing to the highest point of the expedition. Dr Sue Baker from UTAS brought measuring equipment in and we calculated our final treehouse to be 40m above ground and the tree to be just over 60m. The circumference was more than 10m at chest height.

**Things to explore:** Measuring the volume of a tree is a mathematical question. Find out more at [www.monumentaltrees.com/en/content/measuringvolume/](http://www.monumentaltrees.com/en/content/measuringvolume/)

## Housing Issues

Our tree house was actually a portable climbers' ledge designed right here in Tasmania by John Middendorf. John makes them for rock climbers but like many inventions it has been applied to new applications. In this case we used it because it could hang off a single point from a sturdy branch and could be erected and dismantled in a hurry. The materials used included aluminum tubing, a waterproof rain cover and ripstop fabric. More traditional and permanent tree houses are made from timber.



Yoav Bar Ness dismantling a hammock high in a tree.



*Eucalyptus regnans* dominate the skyline of a wet forest behind Geeveston.

**Things to explore:** Design your own tree house and justify what materials you will use and consider advantages and disadvantages for each material.

## Back to the treetops

To revisit the expedition and to learn more about the project, go to [www.expeditionclass.com](http://www.expeditionclass.com) and follow the links. The Tree House Challenge was an Expedition Class initiative by the Bookend Trust with support from the Pennicott Foundation, Forest Education Foundation, UTAS School of Biological Sciences, ICS Multimedia, Sustainable Timber Tasmania, Sea to Summit, The O4 Portalegde and Mercury NIE.

## Learning the Ropes

Learning new skills is part of any decent adventure. When your new skills stop you from plummeting from the tree tops to the forest floor, they're especially important. Starting with a basic overhand knot there are a few critical bits of fancy ropework to learn for climbing trees. Perhaps the most interesting knot we learnt during the expedition was called the "no-knot"! To secure the anchored end of the climbing rope it is wrapped around and around the trunk of a nearby healthy tree or other suitable anchor point. The "wraps" create friction against the trunk when the rope is tightened by the climber. Don't try this one without an experienced climber.

**Things to explore:** Learn three basic knots and try teaching them to a friend using verbal instructions only. [www.animatedknots.com](http://www.animatedknots.com)



A burrowing crayfish, Hollybank Reserve.



Andrew Hughes on his portable ledge above the forest floor.