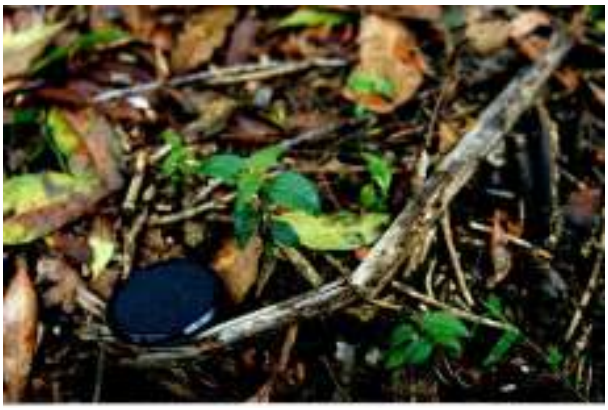
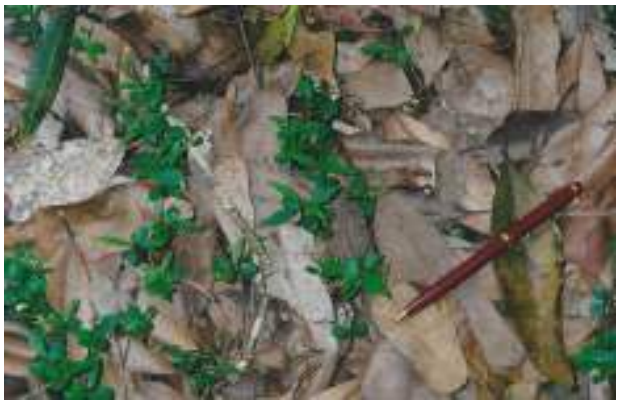
Habitat Restoration 2000 – 2025 Wallabies and fencing

Prior to 2000, when weeds were removed, naturally regenerating seedlings mostly grew to maturity.





Above left: Turpentine and fig seedlings

Above right: Coachwood tree seedlings

Plastic sleeves with bamboo stakes were initially used to protect young plants.

By 2003, protection of seedlings with plastic sleeves had become ineffective because the number of swamp wallabies had increased, and their browsing destroyed many young plants.

Below: Marjorie and Rolf Beck constructed plastic mesh cages to protect plants and added shade-cloth mats to suppress weeds. In a year this bluegum was twice the height of the cage.

We found that wooden stakes were eaten by termites so steel reinforcing rods (reo) were purchased by Ku-ring-gai Bat Conservation Society as replacements.

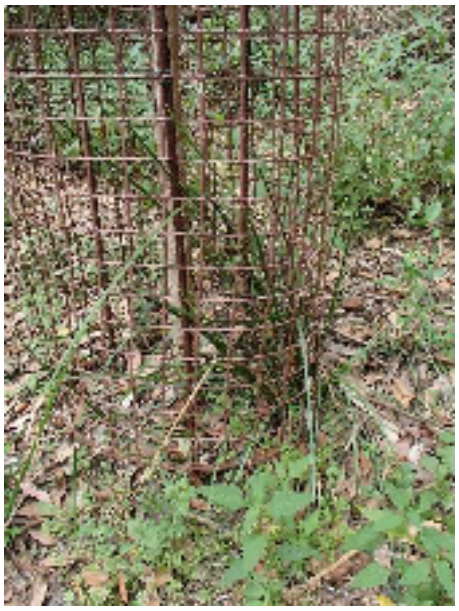
Left: Jocelyn and Jenny built more cages

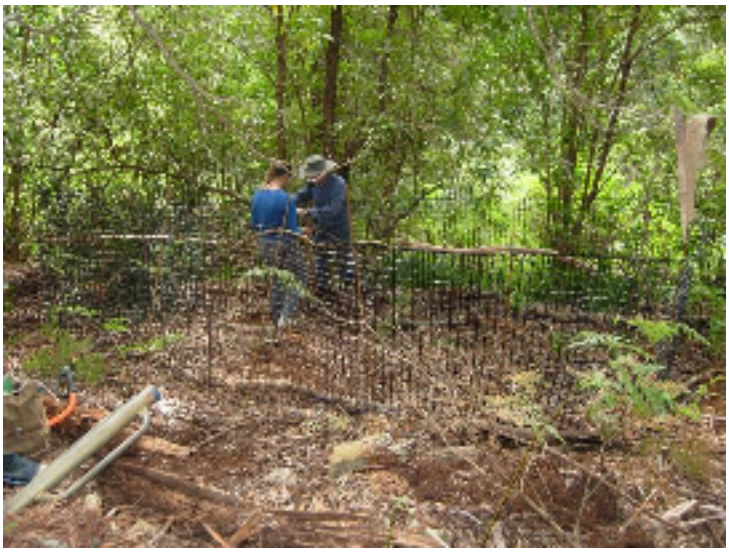
Right: Ken and Penny used the rammer to install the steel rods.

Left: Young healthy turpentine safe from wallabies

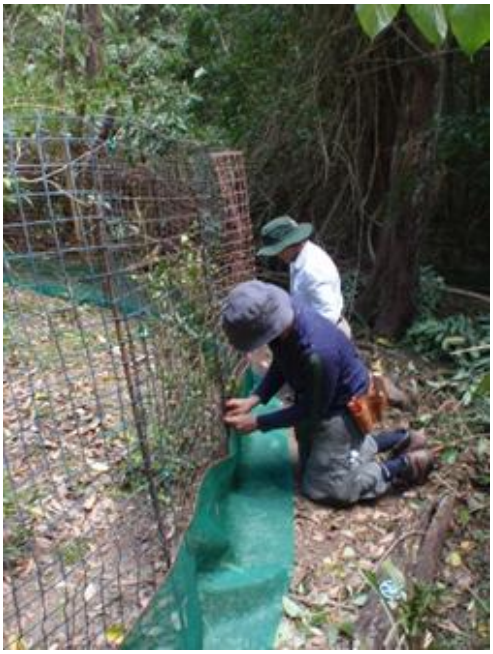
Right: As the trees grew above the cages, wallabies were able to reach up to browse new growth. Cary added another layer of mesh to protect this turpentine.

By 2011 we noticed native plants sprouting from around planted trees within the cages, so we decided to build exclosures.





Above: Jennah and Bruce construct the first exclosure.

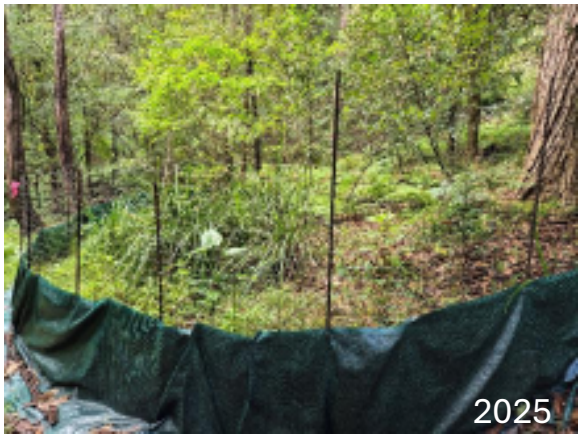


Would the wallabies jump into an exclosure?

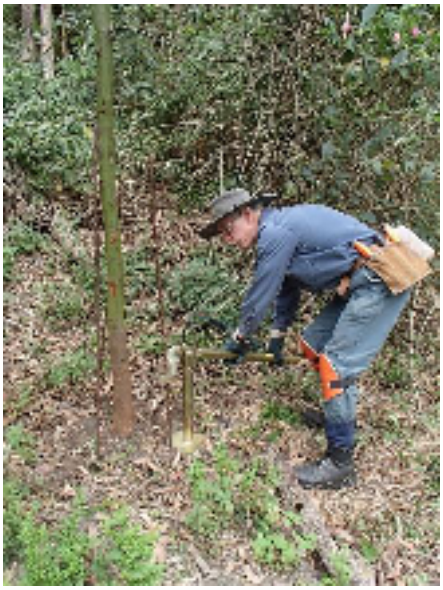
How could we prevent water dragons being caught in the mesh?

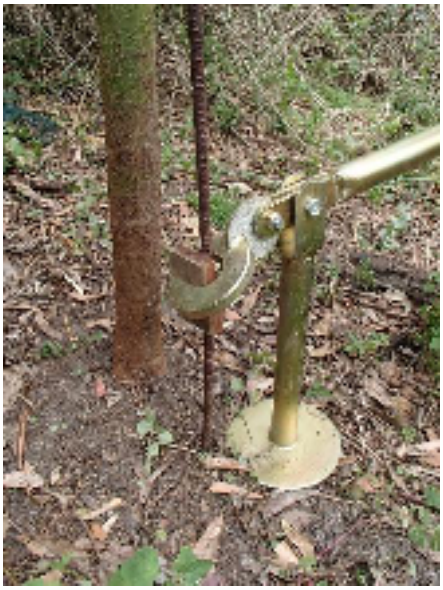
Further experimentation, led to effective exclusion with shade cloth or silt fence tied to the lower 0.5m of the fence and 0.3m across the ground to prevent brush turkeys from digging under.

Left: Harry and Jill secure the cloth to the fence.



Then we needed to remove cages built for individual trees, which were now no longer needed because the tree had grown beyond the reach of wallabies or were left within the new exclosures.





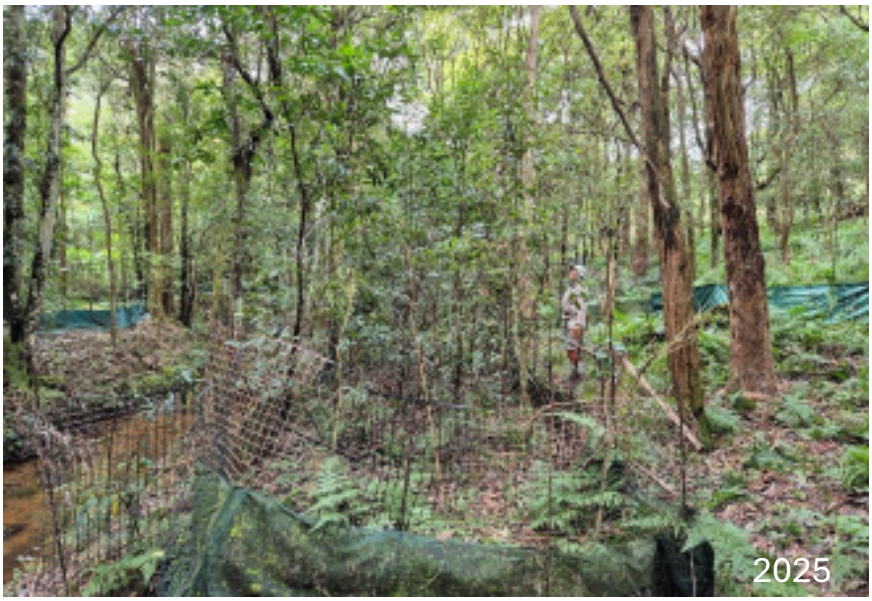
Bruce developed an adaptation, a hardwood block, to remove steel reo using an extractor designed for star pickets.

Beside Stoney Creek we built a long exclosure initially planted with long-stem coachwoods grown by Council's nursery.

This exclosure elongated by 2018

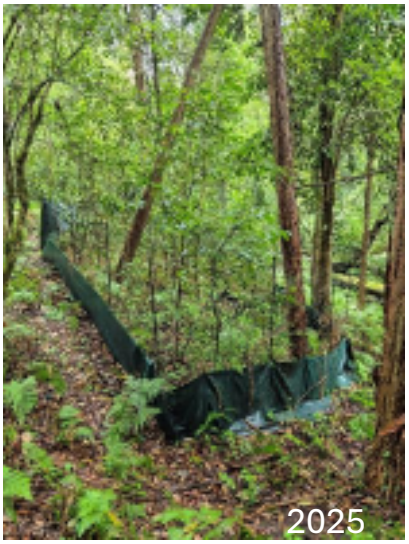
Despite having to repair the fences from fallen branches and floods the fences have mostly prevented wallaby browsing.

Some exclosures were completely destroyed by mature trees which fell during the extreme storm in 2019



By 2025, many young trees were over 3m tall and the understorey dense.

This moisture retaining habitat is important for the flying-foxes during extreme heat events.



Left: Exclosure S7 was built and planted in 2020. There has been strong growth of rainforest species in this exclosure.

Unfortunately, stormwater has caused the lean on one of the original turpentine trees.

Left: Compare the vegetation inside and outside this exclosure. The wallabies have plenty to eat outside while inside the native plants grow and set seed.

Young trees are now filling gaps in the canopy.

The advantage of this type of light weight fencing is that it can be built and repaired by anyone fit enough to move safely around in this steep valley.

Bushcare volunteers, with assistance from Ku-ring-gai Council's bushland staff, continue to maintain the exclosures and will build more to fill gaps in the tree canopy with young trees and enable regeneration of the understorey.

Map of wallaby exclosures in Ku-ring-gai Flying-fox Reserve in 2025

With good rain over the last 3 years, growth in the protected plots is now providing patches of moisture retaining vegetation for flying-foxes and other fauna. There is still plenty of food for the wallabies.

Bright green = boundary of reserve

Dark green circles are exclosures

White line = 2017 burn