

BACKYARD BLITZ

AuSSI Junior Landcare Blitz

In response to Cyclone Larry, the Blitz and Landcare teams restore a school grounds, devastated in the storm.



When Cyclone Larry swept through far north Qld earlier this year, the results were widespread and devastating. Crops and livelihoods were lost, and hundreds of people were without power, running water or a roof over their head. Of the 156 schools affected, Innisfail State High School was the worst hit – suffering severe water and structural damage. Ten classrooms had to be demolished.

It was an opportunity to restore the grounds in an environmentally sustainable manner, and demonstrate projects and alternatives for schools around Australia to incorporate into their own "backyards". Blitz was joined by a cast of hundreds – half the town arrived to help. Every spare tradesman; chippies, sparkies, earthmoving contractors, arborists and all of the local environmental volunteers, the Far North Queensland Natural Resource Management (FNQRM) were all coordinated by Landcare. The Federal government's Department of Environment & Heritage helped us out too and the Minister Ian Campbell attended to give it his support.

To Donate:

To read more about this amazing project - and the community, corporate and government support that made it happen - or to donate to the ongoing **Landcare for Larry Appeal** [CLICK HERE](#)

NOTE: *While the Landcare for Larry Appeal is still operational, the Premier's Tropical Cyclone Larry Appeal is in the process of being wound up and all funding rounds have now been closed.*

Design



Landcare asked us to design and build a garden for schools. Don Burke created the indigenous concept for the garden & a basic layout together with a series of options for the kids from Innisfail High to approve.

The design was then drawn up by Andrew Prowse and Andrew Pawsey.

Over four days we planned to build 100m of raised hardwood walkways through the forest areas; a huge indigenous wetland with water plants, native fish, frogs and invertebrates; a science lab/classroom with indigenous tick insect and beetle-breeding vivariums; a bird hide; outdoor performing arts amphitheatre; two barramundi raising tanks; a butterfly-breeding house and a series of bird, possum and bat nest boxes fitted with closed circuit TV cameras so they can be monitored from the science classroom; and plant over 2000 native rainforest plants.



[PHOTO GALLERY - CLICK HERE](#)

Adapting these plans to your garden

Make a detailed scale drawing of your area (eg 1:100) showing the location of the buildings and major features then incorporate the desired elements from our makeover. As your garden will be a different size you will need to estimate the amounts of materials you will require.

Note: On your plan show the locations of any services (water pipes, sewerage, power, phone, etc) so you can avoid damaging them during the makeover.

Permits and approval: check with your local council regarding regulations about earthworks and drainage. If you are changing existing levels or installing drainage ensure no water run-off is directed toward neighbouring properties. Any water entering the storm water system must be free from debris and sediment.

Nesting boxes: To make a nesting box we found a hollow log and then nailed a piece timber over one end and wire it between branches on the tree.

We also built different size nesting boxes from second hand form ply with a hinged top, lined with carpet. We installed a close circuit camera so that the students could observe nesting habits of the animals.



Boardwalk: All posts used in the boardwalk and stage area were either ACQ timber or hardwood. All bearers and joists were hardwood bolted to the posts and all decking was 30mmx140mm hardwood planks. This allowed us to span wider joist spacings.

The stage at the end of the boardwalk was built of posts bearers and joists with 15mm compressed FC sheeting as the decking material. This was predrilled and screwed to joists and after laid, the perimeter was cut to shape with a grinder.

Large hardwood posts were concreted in ground in the wetlands area. These posts were selected to give a rustic wharf appearance

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Butterfly House: We set out the area for the butterfly house and dug holes to suit a pre-manufactured steel frame and this was placed and concreted into position and covered with a low cover shade cloth.

Bird Hide: We constructed a bird hide using tea tree poles attached to the posts off our deck.

Aquaculture tanks: We installed two 5000 litre aquaculture tanks. We prepared the area by levelling and putting a 50mm thick layer of crusher dust screeded level. The tanks were laid on this. A pump system was then installed to maintain water flow.

Science room: We formed up and poured a concrete slab. We set out stirrups as we were required to use posts and beams in addition to the Solarspan to comply with cyclone building conditions. The beams were left exposed for aesthetic reasons.

Wetlands: We excavated hundreds of tonnes of earth to form the new wetland area and used this earth to form a bank for the grassy amphitheatre. We lined the wetlands with clay as a waterproof membrane and compacted it with a roller before adding the wetland plants and the water. The water was conditioned (pH) for the native fish that we released.

The downpipes from many of the school buildings have been redirected to both the fish breeding tanks and the wetland areas. All site water is retained and filtered through grassy swales.

To help with water conservation, dual-flush toilets were installed in the school.

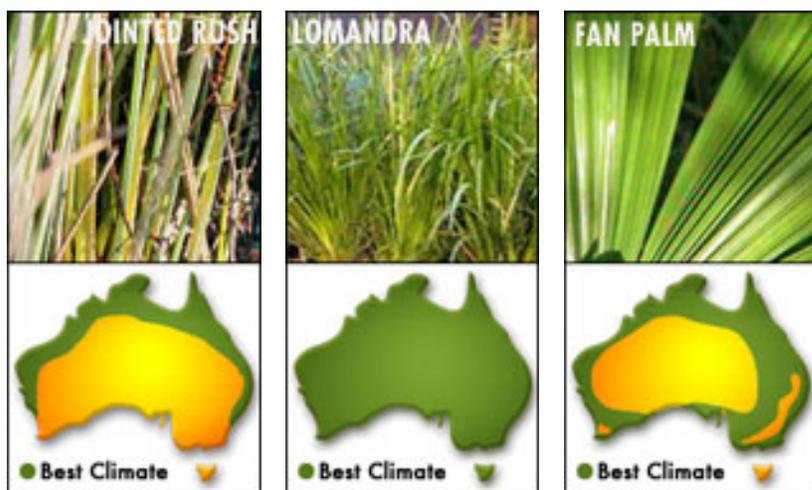


Plants

The 2000 or more plants we used were indigenous to the area and came from the nursery at Johnstone Council.

We planted food plants for the Cairn's birdwing butterfly (the climbing plant, *Aristolochia tagala*) and the Ulysses butterfly (*Melicope elleryana*).

These are some of the plants we used: Firewheel tree (*Stenocarpus sinuatus*), tuckeroo (*Cupaniopsis* sp.), Briar silky oak (*Musgravea heterophylla*), candlenut tree (*Aleurites mullucana*), rosy apple (*Phalaria clerodendron*), fan palm (*Licuala ramsayi*), pandanus (*Pandanus solms-laubachii*), brown tuckeroo (*Cupaniopsis flagelliformis*), native cardamom (*Homstedtia scottiana*), native ginger (*Alpinia caerulea*), jointed rush (*Baumea articulata*), slender mat rush (*Lomandra hystrix*), spiny headed mat rush (*Lomandra longifolia*) *Lomandra hystrix*, *Lomandra 'Tanika'*.



Product Details

- Most of the plants we used are readily available at, or can be ordered from nurseries. Nurseries can also advise on similar varieties suited to your area. You may need to contact specialist nurseries for some plants. Your local nursery should be able to provide you with contacts.
- Most other materials are available from large hardware stores or building or landscape suppliers.
- All tools used are commonly available for hire, including the mini loader, airless spray gun, concrete saw and the compression nail gun.

To Donate:

Landcare for Larry Appeal [CLICK HERE](#)

We would like to thank

Landcare Australia: www.landcareonline.com

Junior Landcare: <http://www.juniorlandcare.com.au>

Phone: 1800 151 105



The Department of the Environment and Heritage
Community Water Grants
Web: www.communitywatergrants.gov.au



Australian Government Water Fund

Community Water Grants

Australian Sustainable School Initiative (AuSSI)
Contact Australian Government Department of the Environment & Heritage
Web: www.deh.gov.au/aussi



Education Queensland, visit web: www.education.qld.gov.au

Westpac, visit web: www.westpac.com.au

Far North Queensland Natural Resource Management
(FNQ NRM Ltd), PO Box 1756, Innisfail QLD 4860
Phone: (07) 4043 8000 or visit web: www.fnqnrnm.com.au

Bondor supplied Solarspan insulated panels. For information on these panels and other insulated panel systems, visit web: www.solarspan.com.au
Windows supplied by Bradman's Windows; phone 0408 779 558

OzPoly provided water tanks and pumps. Fylost Roto-Plastics Pty. Ltd. trading as Ozpoly, Innisfail Industrial Estate, P.O. Box 772 Innisfail, Qld 4860, phone: (07) 3714 0444 or visit web: www.ozpoly.com.au

Coates Hire provided tools and machinery; phone 13 15 52 or visit web: www.coates.com.au/

Australian Insect Farm, PO Box 26, Innisfail, Qld 4860 provided stick insects; phone: (07) 4063 3860 or visit web: www.insectfarm.com.au

Mitre 10 helped with hardware; web: www.mitre10.com.au

Coles funded the purchase of plants; web: www.coles.com.au

Sony donated webcams; visit web: www.sony.com.au

Stainless steel supplied by Cumic Steel, 6 Gordon St, Innisfail, Qld 4860, phone (07) 4061 3022

Turf supplied and laid by Harden Park Lawns, PO Box 257, Edmonton, Qld 4869, phone (07) 4055 4632

Chris Callaja and team provided construction help; phone (07) 4063 2800

Our design by

Don Burke

Drafted by Pawsey and Prowse
Land Use Consultants & Landscape Architects
PO Box 1419, Cairns, Qld 4870; phone: (07) 4031 3310

For more Step by Step Constructions click here

