Lockyer Uplands Catchments Inc
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LUCI Update No 42 … January 2026

New year greetings and best wishes for a satisfying and productive 2026.

The many values of a well-managed farm dam

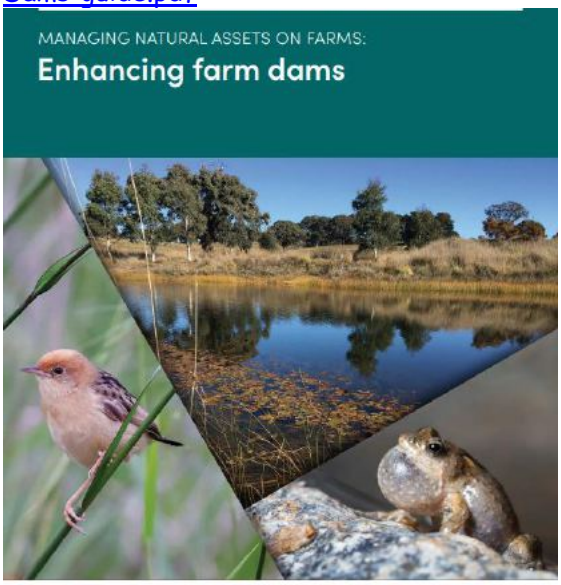
Australia has almost 2 million farm dams and it is heartening to hear from farmers who are realising the full value of good dam management.[1] In many cases, however, dams are poorly managed with compromised water quality and water loss through evaporation, and are emitters of methane and nitrous oxide gases and bereft of any native amphibians or bird activity.

A well-managed dam provides good water quality, which contributes to stock health and overall farm productivity, water persistence and thus security, a fire fighting asset and a valuable resource for native wildlife and ecosystem function.[2]

"Recent research shows that simple restoration strategies can lead to marked and rapid improvements in dam condition. Fencing keeps livestock from fouling the waterbody or becoming bogged in the mud at the water's edge. Ground cover plantings filter animal waste and sediments before they enter the dam and decrease soil erosion through root stabilisation. Trees planted around dams provide shade, lowering water temperatures and making it more palatable and healthier for livestock.

By comparing more than 100 well managed and unmanaged dams, research has found significant improvements in water quality within one to two years."[3] Enhancing dams is also an important tool in helping reduce methane emissions.

A very useful, easy to read guide on enhancing a dam can be found at … https://www.sustainablefarms.org.au/wp-content/uploads/2023/05/Enhancing-Farm-Dams-guide.pdf



Enhancing farm dams by controlling livestock access and increasing vegetation cover can have many benefits for water quality, water security and farm productivity, while also supporting biodiversity and ecosystem services. This management guide details the benefits of enhancing farm dams and provides guidance on how to undertake a dam enhancement project.

SUSTAINABLE FARMS

Researchers at Blue Carbon Lab explore how managing farm dams can benefit both farm productivity and native wildlife and "look to develop strategies that meet conservation outcomes at scale … such as establishing "biodiversity credit" policies to reward farmers who invest in improving the condition of their land." The Blue Carbon Lab website notes that researchers are seeking access to farm dams to further their research. The team will monitor your farm dam and provide you with an overview of your metrics. Further information on expressing interest can be found here.

[1] Farmers taking action
[2] Managing natural assets: Enhancing farm dams
Managing farm dams in private conservation areas.
[3] A rare win-win for climate, farming and biodiversity – if policymakers act

Conservation finds a place on-farm …by LUCI member Janne Dipple

We purchased our Morton Vale farming property in the Lockyer in 1997 for the purpose of commercially growing leafy green herbs and vegetables. At the time, the property was run down in every way — from the house and sheds to the commercial farming land, and the native flora and fauna.

From the outset, our vision for this farm was never solely about food production. We wanted to create a beautiful family space and bring life back into the environment we work with every day to produce food for Australians. I often wondered whether this is what the term *'sustainability'* in agriculture really means. It is a phrase used frequently and can carry many interpretations, but for us it simply means a functioning commercial enterprise that supports our family, our land, and the surrounding environment.

We began planting around our house with what we knew — general exotic garden plants. Unbeknown to us at the time, many of these were destined to fail on our heavy black clay floodplain soils, which crack deeply and retain heat during dry periods. Windbreaks died off, trees blew over, and once-thriving shrubs collapsed. Then I remembered something my father had always said: *plant the plants that grow well in the space — beauty comes naturally to plants that want to be there.* That moment began a journey of discovery, learning about our local Regional Ecosystem and the species best suited to it. Eventually, we sourced seed of *Melaleuca irbyana* — a native species local to our property — and had them grown by a specialist nursery.

Melaleuca irbyana grows in seasonally poorly drained soils and clay plains, where it historically formed low open forests and thickets. These ecosystems have been extensively cleared and are now recognised as an endangered ecological community under both Queensland and national conservation frameworks.

Melaleuca irbyana in flower.

These early plantings of *Melaleuca irbyana* became an integral part of our landscape. The re-establishment of this species on parts of the property was an intentional step toward restoring some of the ecological character that once defined the area, while continuing to farm productively alongside it.

Plantings of *Melaleuca irbyana* now maturing.

From that point, the property quite literally bloomed. As more locally endemic trees and shrubs were planted, birds began to return. The gardens required less intervention, and the microclimate around our house and sheds noticeably improved. While we still retain some non-endemic structural trees and shrubs, they work together with native plantings to provide shelter and stability. One important lesson for us has been that local native plants do not always thrive in isolation — particularly in landscapes like ours, where there are no trees beyond the fencelines. Support from larger exotic trees, buildings, and wind protection is often essential.

Once the microclimate changed, we noticed large numbers of tiny birds living in our garden. On closer inspection, we confirmed that these little birds were Zebra Finches (*Taeniopygia castanotis*). These small, active grassfinches are native across much of the Australian mainland and inhabit open grasslands, dry woodlands, and shrublands that provide abundant grass seeds and other food sources. Around 10–12 cm in length, Zebra finches are grey with distinctive black-and-white barring on the tail and rump, while males display chestnut cheek patches and red bills. Highly social birds, they live in flocks of dozens to hundreds and are well known for their characteristic calls.

Male Zebra finch. Photo Mitchell Roberts.

They forage primarily on the ground, feeding mainly on fallen seeds and occasionally insects, particularly when raising young. Strictly diurnal, they move nomadically in response to rainfall and food availability and require regular access to water. Breeding pairs form long-term bonds and construct dome-shaped nests from grasses, with both parents sharing incubation and chick-rearing duties.

The reintroduction of our *Melaleuca irbyana* community has allowed Zebra Finches to thrive in their native environment, with countless nests built throughout the trees. Seeing Zebra Finches nesting so abundantly within the regenerated *Irbyana* stands has reinforced our commitment to our planting approach.

Numerous Zebra finch nests in each M. irbyana tree.

We will continue planting local native species wherever possible, while occasionally using non-invasive exotics to create essential wind and frost protection so internal native plantings can survive. Located in the centre of intensive commercial farming, with no trees beyond our boundaries, these finches are a reminder that even small, practical conservation efforts within agricultural landscapes can deliver meaningful outcomes for native species.

LUCI's AGM/GM and Christmas party

Thirty-five members and supporters attended LUCI's 2025 AGM/GM and Christmas party held at the Flagstone Street State School. LUCI thanks the school for allowing us to hold our community event there. Following presentation of the president and treasurer reports, LUCI member Dougal Johnson chaired the election of office bearers for 2026. The full management committee for 2026 is:

President Diane Guthrie
Secretary Pam Murphy
Treasurer Ian Parsons
General members John Hopwood, Kath Finch and Jason Creamer

On behalf of LUCI members, Diane acknowledged the voluntary contributions of outgoing treasurer of four years, Penny Kidd, and outgoing secretary of 3 years, Fiona Watters. The AGM was followed by a

General Meeting at which members discussed the need for a review of LUCI's constitution, an increase in membership fees (now $22.50 per year) and project commitments for 2026. Members were invited to nominate topics for the three LUCI workshops in 2026. Suggested topics included fire frequency and management, seed collection for caring for land and creek and gully care. LUCI is already planning for one of these workshops (see upcoming events).

Thanks to Felicity Charles, our guest speaker, who presented her PhD research on "How does fire influence food resources for the notoriously picky Glossy Black Cockatoo". A very timely topic given the Glossy is one of LUCI's flagship species.

As a landholder association, the LUCI committee encourages members to provide input into LUCI directions, projects and activities and welcomes offers of help with the many tasks involved in LUCI's management. Feel free to contact LUCI's secretary or the LUCI office.

The Bunyas to Border (B2B) regional corridor project

Year 3 activities for the B2B are progressing well under B2B Coordinators Mitchell Roberts (On-ground Projects) and Chris Murphy (B2B Sustainability) and with our B2B partner High Country Koala Action Group (B2B Schools Wildlife Corridor tree planting). The B2B project, which LUCI manages, is funded through a partnership between the Great Eastern Ranges and International Fund for Animal Welfare (IFAW) as part of a broader effort to create Koala Climate Corridors to support wildlife adaptation and build resilience. The B2B landscape of interest stretches from the Bunya Mountains north to the Border Ranges in the south.

Mitchell is overseeing the implementation of a Glossy Black Cockatoo (GBC) Nest Site monitoring project in consultation with field ecologist Mike Barth. The GBC, listed as Vulnerable in Queensland and New South Wales, is one of B2B's eight target species for conservation. Lack of hollows is a limiting factor in the breeding success and, thus, survival of the GBC, an obligate hollow nester.

In this project, natural nesting sites and supplementary hollows (nest boxes) will be monitored at three sites along the B2B corridor to learn more about GBC breeding behaviour and success. Project sites include: one in the Killarney area where there is a known nesting site and sites at Egypt and Ravensbourne where there are known persistent GBC feeding and watering sites. Three types of nest boxes will be installed at each of the sites in early February with uptake monitored by local community groups. To date, there is little evidence on mainland Australia of GBC breeding success using supplementary hollows although good uptake and success has been observed with the GBCs on Kangaroo Island.

Two of the salvaged timber hollows to be installed as part of B2B's Glossy Black Nest Site monitoring project. Photos Kym Sparshott.

Two community workshops on GBC breeding and nesting behaviour presented by Mike Barth are planned for March (see upcoming events page 5 for further details). The GBC project has also received financial support from BirdLife Australia through its Community Grants program.

The first school to receive tree planting as part of B2B Schools Wildlife Corridor will

be Meringandan State School. This activity has received funding from Toowoomba Regional Council through their Environment Grant program. Dale Brouwer from High Country Koala Action Group (HCKAG) is progressing planning for the planting event to be held in late March. Discussions are also being held with Lockyer Valley Regional Council's Resilient Rivers team to collaborate on a school planting at Flagstone Creek State School.

We will continue to seek funds and support to further our tree planting program with private landholders and build on the more than 5,000 trees planted since 2023.

A B2B planting event in 2025 at Amaroo Environmental Education Centre. Photo Mitchell Roberts.

To ensure the B2B project is community-driven, LUCI has established a community reference group involving representatives from several community groups across the B2B corridor. The group will provide local knowledge and strategic inputs into B2B planning and delivery. For further information on B2B, contact Mitchell Roberts, B2B Coordinator

Friends of Dwyers Scrub

Ever considered volunteering for conservation? LUCI's Friends of Dwyers Scrub (FoDS) weeding group has been working in Dwyers Scrub Conservation Park for the past 10 years focusing on control of Cats Claw in the dry rainforest areas of the park. However, we need to boost our ranks. FoDS will be meeting at the Park on Sunday 8th February at 9:00am to discuss our plan for 2026. If you would like to come along and find out more about the Park and what is involved in the weeding project, you are most welcome. Contact LUCI office for more information.

Upcoming events …

- **LUCI Autumn Walk, Saturday 14th March, 8:30am-11:30am** at **a nature refuge property** at Townson with walk leader Martin Bennett. At around 950ha, the property features several ecosystems of basaltic origin: Ironbarks and Yellowbox; Ironbarks, Blue gums and Apples; a very interesting Heath and Rock Pavement; and deep gullies with Brushbox and Eucalyptus canopy with rainforest species. Book your place and further details contact LUCI walk coordinator Kath Finch.

- A community workshop on **Glossy Black Cockatoo Breeding and Nesting Behaviour** will be presented by ecologist Mike Barth as part of the B2B Corridor project. There is a choice of attending the workshop at either **Killarney on Saturday 21st March (venue tba) or at Ravensbourne (venue tba) on Sunday 22nd March.** Morning tea provided, bookings will be essential. For further information contact Mitchell Roberts, B2B Coordinator.

- **Fire management in grassy woodlands: Science and practice workshop** with UQ's Dr Annabel Smith and Danyel Wolff (Turner Family Foundation) who have been undertaking on-ground fire research over the past couple of years at Hidden Vale. Early April (date and venue tba). Learn how different natives and exotics respond to different fire regimes and applications for property management. Morning tea will be provided and attendance is free for LUCI members and $10 for non-LUCI members. Bookings will be essential. For further information contact LUCI.

Flora snippets by Martin Bennett

Melaleuca sieberi, Sieber's paperbark, is a tree to 15m tall, often growing as individuals on a sandy soil with a clay base and a very high-water table. At Spring Creek, it grows alongside *M. quinquenervia*, Broad leaved paperbark, *M. irbyana* Swamp tea tree, *M. bracteata*, Black tea tree, or on the coast in large communities. Leaves are alternate, light green and scented when crushed and green and small cream flowers are full of nectar for birds, mammals, and insects. The fruit is barrel-shaped, 3–5 mm in diameter, and contains very fine seeds. This species is listed under the Matters of Local Ecological Significance (MLES).

Sieber's paperbark leaves. Photo Martin Bennett.

Eucalyptus interstans, Narrow leaved pumpkin gum, has only been found in the Spring Creek area north of Gatton off the Gatton/Esk Road, within the Lockyer Valley. I have recorded 10 trees so far. They have a very restricted distribution in SEQ as well. The tree is to 30 m high with a smooth white, grey or grey-brown, bark shedding in large plates or flakes, revealing orange, cream, and grey bark underneath. It is a type of soft barked Grey Gum, with large falcate (sickle shaped) bluish leaves. The flower bud cap is thick and extended and the cream flower capsules have extended valves. *E. interstans* also grows on a sandy soil with a clay base and a very high-water table and is listed under the Matters of Local Ecological Significance (MLES).

Eucalyptus interstans exerted valves (left) and foliage and bark (right). Photos Martin Bennett.

… and a fauna snippet

Hypolimnas bolina or the Varied or Great eggfly butterfly is an attractive dimorphic species and a welcome visitor to my garden and revegetation area. The male is a velvet like black with blue and white markings, while the female is a series of browns, cream, and orange. Host plants include *Alternanthera denticulata* Lesser Joyplant, *Persicaria prostrata* Trailing Knotplant, *Pipturus argenteus* Australian Mulberry, Pseuderanthemum spp Love flower and several exotic plants.

Great eggfly male (left) and female (right). Photos Martin Bennett.

…and something to look out for…

Austropuccinia psidii, Myrtle rust, is a terrible rust that came to Australia unannounced and is affecting Myrtaceae species. Some species are affected a lot more than others, to the point that they are

now listed as Endangered and Critically Endangered. Some species in this family, such as *Eucalyptus Lophostemon,* are tougher than others, while Rhodamnia, Rhodomyrtus, Eugenia, Gossia and Backhousia have suffered poorly. Some species have fought back each season and overcome this dreaded rust, while others seem to have disappeared from some areas.

Example of Austropuniccia new spores. Photo Martin Bennett.

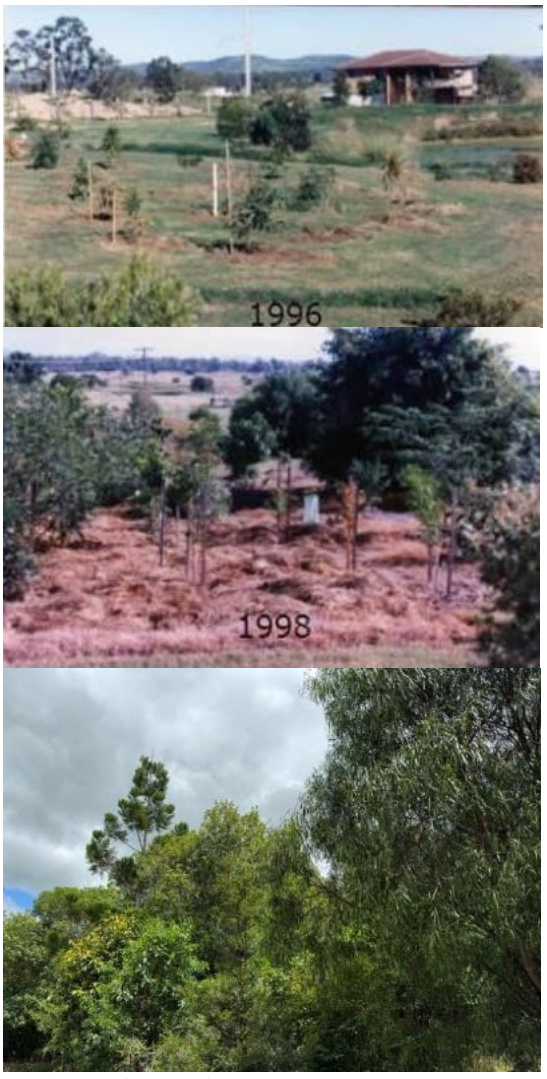
… and my own planting project - a dry rainforest

Plant holes were always dug a spade's width around, and 1-1.2m apart.[4] The closeness makes the plants shoot skywards. Pre-water the holes and allow the water to dissipate, then plant, firm the soil down. In my area, I always allow a bevelled top edge, like a bowl, this allows all the water you give that plant to go to that plant. You can use good quality water crystals but be sure to only use the prescribed amount as too much and the plant can be pushed out of its hole.

With Dry Rainforest, I use the hardiest pioneer species as a basis and infill with as many different species as I can source. Use emergent species like Crows ash, Yellow ash, Silky oak, fast growing species like Celerywood, Deep yellow wood, Tulipwood, and Maiden's wattle or, if you are in the Hickory or Sally wattle areas, use them. I often plant 3 of each species. While you're unlikely to plant the 350 species of Dry Rainforest plants, the more the merrier.

I used horse manure as a mulch as I had tons of it and it really enriched the ground as the microbes and worms processed it for me. You could use cow, or sheep manure. Later I topped up the mulch with grassy hay. I always spot sprayed in amongst the plantings to stop the grass.

I watered once a week for 6 weeks, then only if a plant looks like it needs it. In the time of good upright growth I would remove the lower branches, this allows more energy to feed that canopy.



My dry rainforest,often known as semi-evergreen vine thicket, Bastard scrub, or brush. Photo Martin Bennett.

[4] With a lot more age on me I have found a battery powered planting auger to prepare holes is way easier. You can auger your hole to the depth of a standard tube, a jumbo tube, or a pot and then add 50mm deeper for that bowl effect.

Interesting links to follow up…

Queensland continues to be a front runner along with Western Australia and New South Wales, in the threatened species (TS) habitat clearing stakes, according to the Australian Conservation Foundation (ACF). Together, these states account for 98% of the approved clearing of TS habitat (57,000ha), with the mining sector the major contributor in 2025. Clearing of TS habitat in 2025 was double that of 2024 and five times that of 2023. The ACF's CEO, notes that federally approved land-clearing was only the tip of the iceberg as most clearing for agricultural purposes was not previously assessed under national environment laws. Thus, the figures would not wholly reflect the scale of actual land clearing. Will the reform of the EPBC Act and the establishment of an Environment Protection Agency lead to stronger protections for TS habitats?
https://www.theguardian.com/environment/2026/jan/13/threatened-species-habitat-destruction-australia-15-year-high
With current temperatures soaring into record territory in some parts of the country, spare a thought for species such as flying foxes. With thousands of deaths from dehydration reported in some states this summer, flying foxes are like "the canaries in the coal mine" says Professor Welbergen, "providing an indication of what was happening to other animals as global heating increased the frequency and intensity of hot days and heatwave."
https://www.theguardian.com/environment/2026/jan/12/flying-foxes-die-in-their-thousands-in-worst-mass-mortality-event-since-australias-black-summer

For anyone interested in providing a supplemental water supply for arboreal species (e.g. gliders, koalas, birds), LUCI still has a handful of TREE TROFF® water stations available for willing landholders. If interested, contact Mitchell Roberts, B2B Coordinator

Staying on the topic of changing climate and temperature and the need for action on global, multiple fronts …
https://theconversation.com/the-world-lost-the-climate-gamble-now-it-faces-a-dangerous-new-reality-270392

"[E]volution to climate change is not something you expect on the time scale of a few 100 years. It's on the time scale of hundreds of thousands to a couple of million years." So says IPCC member and ecologist and refugee scientist Dr Camille Parmesan in this fascinating interview delving into her decades-long, detailed research into the impacts of climate change from a single species and its climate adaptive behaviours through to the need for adaptive decision-making to address potential climate scenarios. We need to rethink our approach to biodiversity.

This research highlights a changing climate dynamic with serious impacts on habitat sustainability and needs to be accounted for in future restoration scenario planning and assessments of minimum habitat requirements for threatened species.
https://www.sbs.com.au/news/podcast-episode/australias-trees-are-dying-faster-than-theyre-being-replaced/kzr9rae4y

For an uplifting read, a positive story on how a nation is addressing the climate challenge…
https://www.theguardian.com/environment/2025/nov/18/bhutan-pm-tshering-tobgay-first-carbon-negative-nation-climate-wellbeing

If you missed the event, you can view the Glossy Black Conservancy's August Showcase 2025 on Tech Meets Nature Showcase: How technology advances wildlife outcomes

Some of the blossoms spotted over the last few months …

The above two photos are the flowers of *Clerodendrum floribundum* Lolly Bush or Smooth Clerodendrum, a shrub or tree from 2-10m. It is a bee and butterfly attracting plant.

The photo below is the flower of *Jasminum simplicifolium* subsp *australiense* Stiff jasmine, a shrub or creeper found on the margins of rainforest or in dry rainforest, is a larval food plant or the moth *Palaeodes samealis* and its berries are eaten by the satin bowerbird.

REMINDER…

Renew your 2026 LUCI membership for $22.50 per person/per year. Join like-minded others and enjoy membership benefits such as guided flora walks, workshops, access to grant programs to support land management, loan of fauna monitoring equipment, newsletters, and more. Membership fee can be paid online but please also email with contact details to LUCI secretary

Lace monitor or Tree goanna, *Varanus varius*, is a member of the monitor lizard family found in eastern Australia.

Important numbers:

Wildlife carers Kath and Steph 0410 334 661 (available 24/7)

Bat Conservation & Rescue Qld Inc 0488 228134

Stay connected, it's healthy!

If you would like to share your stories and photos through the LUCI newsletter, we'd love to receive them at the LUCI office. Please let us know if you do not want to be included on the email list.
Newsletter Editor Diane Guthrie 0494 110 677.