Winter 2025 edition:

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Welcome to winter

Winter has well and truly arrived. But nature is still flourishing on our doorstep. This edition of the ‘Nature next door’ newsletter highlights continued work with our partners to secure more than 20,000 hectares of important habitat for some of our most threatened species. These green spaces are next door to our newest suburbs and will have lasting benefits for people and wildlife.

Even in the chilly depths of winter, critically endangered spiny rice-flower is blooming. This unique shrub, protected under the Melbourne Strategic Assessment (MSA) Program, is dioecious, meaning individual plants are either male or female. A relative of daphne, it can live for up to a century! Keep an eye out for other wildflowers brightening our grasslands, including swamp daisy.

In this edition, we include stories about a growing population of growling grass frogs in critical habitat across Victoria, precision drone technology tackling weeds in the Western Grassland Reserve, our progress securing conservation areas, the importance of planned burns and more.

We encourage you to share these stories with anyone who might be interested in learning about the MSA conservation areas and reserves being secured near Melbourne’s growing communities. If you know someone who would like to stay updated, they can sign up to the newsletter at the MSA Program.

The ‘Nature next door’ MSA Program is one of the Australia’s largest urban conservation programs, developed to ensure we balance the need for housing in Melbourne’s new growth areas with the need to protect threatened species found in these areas.

The program ensures that development within Melbourne’s urban growth areas follows strict Victorian and Australian environmental laws and streamlines the environmental approvals process, saving time and money. The program is delivered by the Victorian Government’s

Flowers in bloom at Kororoit Creek

Some of our most fragile native flowers are flourishing at MSA conservation areas. Kororoit Creek North Grassland, known as Conservation Area 2 under the MSA Program, was secured more than a year ago in Melbourne's growing western suburbs. Since then, on-ground conservation activities have delivered positive results.

Situated on Wurundjeri Country, Conservation Area 2 spans just over 41 hectares and is now permanently protected. In the first year of managing this conservation area, in partnership with Parks Victoria and Forest Fire Management Victoria, the MSA Program has delivered a range of conservation land management activities involving an ecological burn and weed management.

Conservation Area 2 supports one of our rarest ecosystems, Natural Temperate Grassland of the Victorian Volcanic Plain, of which less than 2% remains across its former range, and features high quality habitat to support species such as the golden sun moth and striped legless lizard.

The site contributes to a network of 36 conservation areas being established under the MSA Program within the urban growth boundary and connects with Conservation Area 15. Conservation Area 15 was established to protect growling grass frog habitat while high quality herb-rich native grassland occurs nearby within Conservation Area 3, Clarke's Road Grassland.

The Arthur Rylah Institute is leading an inventory survey for a detailed understanding of threatened species at the site. The survey provides baseline data for flora and fauna values at the site including Natural Temperate Grassland of the Victorian Volcanic Plain, striped legless lizard, and spiny rice-flower.

Land has now been secured in 18 of 36 MSA Program conservation areas.

Image credit: Dr Steve Sinclair

Precision weed control with drones

MSA Program partner Wyndham City Council is working to control invasive weeds inside the Western Grassland Reserve using remotely piloted aircraft systems — or drones.

This approach makes it easier to apply herbicide precisely and target dense infestations in difficult-to-reach areas across the reserve. Drones are particularly effective for smaller weed infestations in challenging terrains, such as rocky outcrops and steep slopes, where standard spraying methods are not practical.

Their ability to fly close to the ground ensures accurate herbicide application, minimising drift, and maximising effectiveness. The rapid adjustment of spray nozzles also enhances accuracy, ensuring herbicide is applied only where necessary, reducing waste, protecting surrounding vegetation and offering a more sustainable weed control process.

Drones reduce the need for excessive herbicide use and minimise the environmental impact on non-target species. This makes them an ideal tool for managing noxious weeds in sensitive ecosystems like the 15,000-hectare Western Grassland Reserve, west of Werribee.

The use of drones for weed control will positively contribute to the restoration and long-term health of the reserve's native vegetation. Overall, Wyndham City Council has completed vegetation surveys and weed control on more than 7,500 hectares of Western Grassland Reserve land using traditional and smart technologies.

Image credit: Vanessa Hutchins

Planning the use of fire to restore grasslands

Burns are an important part of managing grassy vegetation. Fire helps to promote fresh growth, provides space for many sensitive plant and animal species to thrive and makes weed control easier.

We work with our partners Forest Fire Management Victoria, Parks Victoria, Melbourne Water, Traditional Owners and scientists at the Arthur Rylah Institute to ensure burns are carried out safely, sensitively and effectively across the MSA Program area.

Applying fire in a carefully planned and controlled way reduces the risk of bushfire but also supports regeneration and ecological resilience. In 2024-2025, a huge team effort saw eight ecological burns delivered across 660 hectares of MSA Program area.

This included burns in the Western Grassland Reserve and Kororoit Creek Regional Park, as well as MSA conservation areas including Conservation Area 2 (Kororoit Creek North Grassland) and Conservation Area 10 (Truganina Cemetery Grassland).

At the start of the 2024-2025 burns season, DEECA's Forest Fire Operations Division formed a Biodiversity Mitigations Working Group to help protect nature and support planning, including Traditional Owners and representatives from Parks Victoria, the MSA Program and Arthur Rylah Institute. The group hosted a one-day workshop in February 2024 to consider implications of the ecological burn program on threatened species and communities.

Cultural burning is a way for Traditional Owners to connect with Country and enables the learning and teaching of practices that are thousands of years old. Traditional Owners from Wurundjeri Woi-wurrung Cultural Heritage Aboriginal Corporation, Bunurong Land Council Aboriginal Corporation and Wadawurrung Traditional Owners Aboriginal Corporation are key

As well as supporting burns led by Forest Fire Management Victoria, Wurundjeri's Narrap team and Wadawurrung's Wiyn Mirrup team have been involved in planning and leading burns for cultural and ecological purposes.

Forest Fire Operations is scaling up team planning, fuel break, and burn delivery resourcing as the MSA Program secures more land for conservation areas and reserves. To search planned burns locations, or subscribe to information about planned burns, visit Planned burning in Victoria.

Image credit: Bec Jack/DEECA

Home sweet (new) home for bandicoots

As part of the MSA Program's commitment to develop and implement a genetic rescue strategy for the nationally endangered southern brown bandicoot, eight members of the species were reintroduced to The Briars, Mount Martha on Victoria's Mornington Peninsula in 2024, in the hope of increasing numbers. Southern brown bandicoots have not been seen on the Peninsula for more than 20 years.

In 2016, Monash University conducted a genetic analysis of tissue samples collected from southern brown bandicoot populations on Quail Island in Victoria's Western Port, Cranbourne Gardens, and along Koo Wee Rup Swamp. The study identified low levels of genetic variation and restricted gene flow between populations. The results suggest that the sampled populations could be vulnerable to decline because of reduced fitness due to low genetic diversity.

The project is funded by the MSA Program and jointly supported by the University of Melbourne and independent research organisation, Cesar Australia.

The Briars team is also working with Deakin University whose researchers are studying the impact that bandicoots have on soil health, and fungal and plant communities.

Image credit: Sharon Start

Just add water

More than 160 growling grass frogs were detected in March spotlight surveys this year as part of a successful environmental watering project led by Melbourne Water for the MSA's Growling Grass Frog Program.

The MSA Program and its partner Melbourne Water maintain the frogs' habitat in a variety of water bodies. In all, the MSA Program will secure habitat for growling grass frogs along more than 140 kilometres of creeks and rivers in our growing suburbs.

O'Herns Swamp in the Merri Creek conservation area on Wurundjeri Country is an endangered seasonal herbaceous wetland that, when wet, supports these frogs and other threatened species. Frogs are an important part of a healthy ecosystem and can help to keep insect populations in check.

In the spring and summer of 2024-2025, Melbourne Water, in partnership with Yarra Valley Water, the City of Whittlesea and the MSA Program, filled the dry swamp to provide breeding conditions for growling grass frogs (affectionately known as 'growlers'). The challenge was to create a great breeding habitat for the frogs without leaving water in the seasonal wetland for too long.

Within two weeks of watering, ‘growlers’ made their way to the wetland, along with other creatures including the migratory Latham’s snipe. Wetland vegetation including a threatened swamp grass quickly emerged and provided perfect conditions for frogs to bask and breed.

In March spotlight surveys, growling grass frogs were spotted in and out of the water. Several were seen catching spiders and insects and going into cracks in the basalt soil. This is the first time that water has been pumped into a habitat wetland under the MSA Program, with all partners taking lessons from the exercise that will inform future watering projects.

Image credit: Dylan McLean/Ecology Australia

Explore our conservation projects

We acknowledge Victorian Traditional Owners and their Elders past and present as the original custodians of Victoria’s land and waters and commit to genuinely partnering with them and Victoria’s Aboriginal community to progress their aspirations.