



Turf Fund

Annual Report 2019/20

About Hort Innovation and the Turf Fund

Hort Innovation is the grower-owned, not-for-profit research and development corporation for Australia’s horticulture sector. We work closely with industry to invest the turf R&D and marketing levies, together with Australian Government contributions, into key initiatives for growers, through the Hort Innovation Turf Fund. We’re extremely proud of the work we do to help drive productivity, profitability and demand for turf growers, and for the horticulture sector at large.

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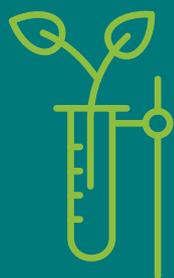
About the year

An intense and unpredictable year, 2019/20 certainly dealt challenges for the world, for Australian horticulture, and for Hort Innovation. There was ongoing drought, a devastating bushfire season, intense floods, the biosecurity threat of fall armyworm and, of course, the global and ongoing COVID-19 pandemic.

We encourage you to download a copy of the overarching Hort Innovation Annual Report 2019/20 at www.horticulture.com.au/annual-report-portal to better understand Hort Innovation’s responses to these events, and how the company was able to change its plans and priorities to best serve the sector.

Through it all, though, activity in the Hort Innovation Turf Fund remained strong. While some activities inevitably changed under COVID-19, it was still a solid year of investment. There was some \$746,000 invested in R&D for the industry, plus \$102,000 in marketing. Read on for an overview of what was delivered.

2019/20 Turf Fund snapshot



\$746,000

invested in R&D



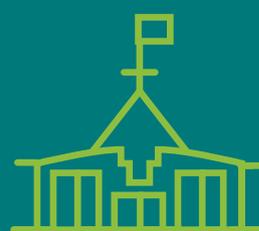
\$102,000

invested in marketing



14

active R&D
investments



\$505,000

in levies collected
by the government and passed
on to Hort Innovation for investment

Did you know?



3

Buffalo, couch and kikuyu are the three main varieties of turf produced in Australia, making up 33 per cent, 36 per cent and 19 per cent of production volume respectively



\$250M

Turf's production value remained relatively steady in the five years to 2018/19, at approximately \$250 million per year



38%

Queensland is the largest turf-producing state, with 38 per cent of total production volume, followed by New South Wales at 33 per cent

These facts and more can be found in the Australian Horticulture Statistics Handbook, which is delivered by Hort Innovation each year. The handbook is packed with horticulture statistical information and analysis for some 75 categories, for use by individual industries and the wider sector. The 2018/19 edition was released in early 2020 and, for the first time, features an interactive dashboard format for desktop users. See www.horticulture.com.au/horticulture-statistics-handbook.



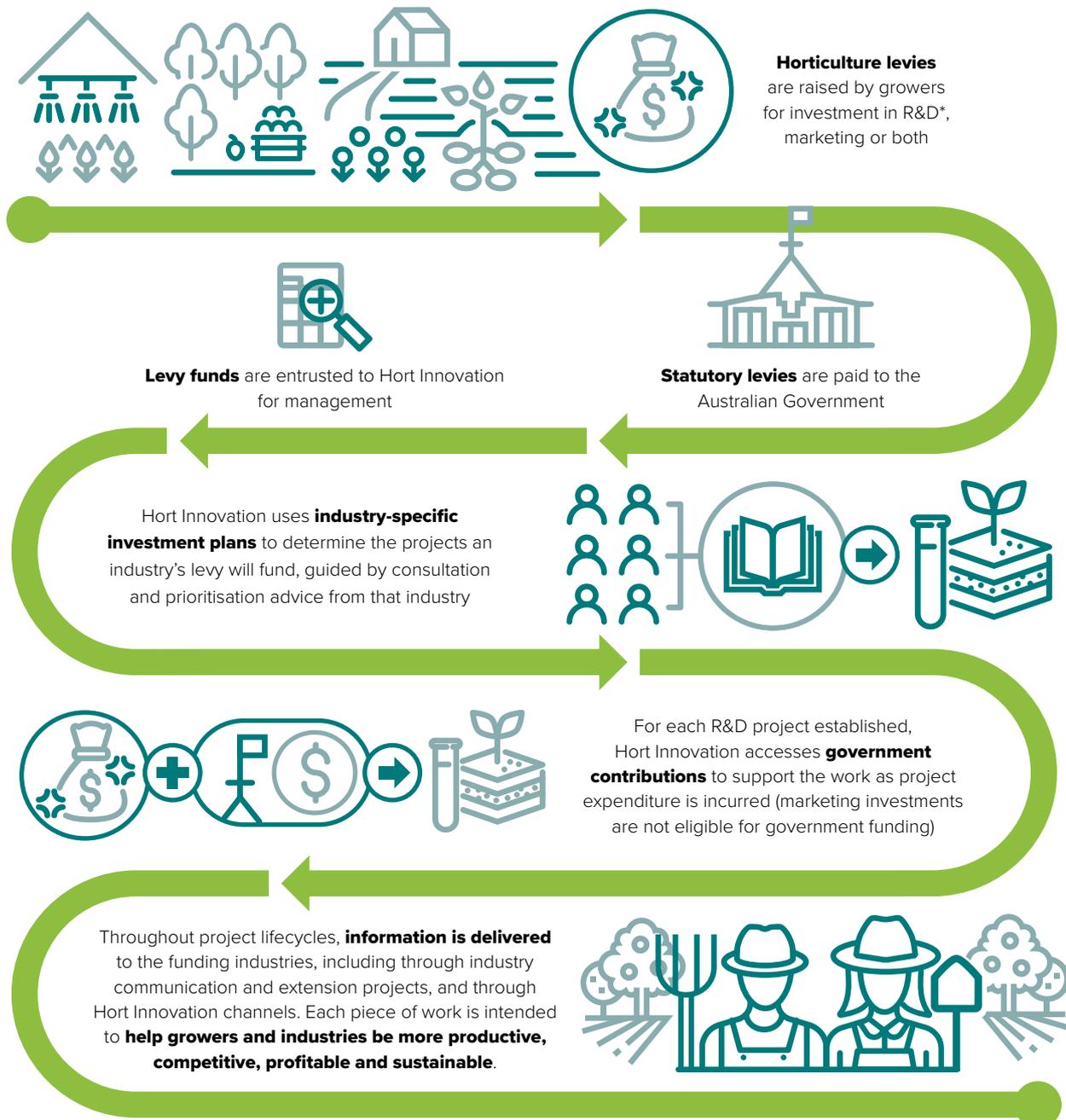
Just some of the things delivered for you during the year:

- ✓ **A range of evidence to support the benefits of living turf**, including its ability to keep urban areas cool, its protective properties in the face of bushfires and its economic benefits (see from [p7](#))
- ✓ **Case studies for turf growers**, demonstrating best management practices for reducing the environmental impacts of turf production – find them at www.bit.ly/tu16000
- ✓ **The industry communications program**, delivering the *Turf Australia* magazine, *Turf Australia E-News* newsletters, the industry website (www.turfaustralia.com.au) and more ([p9](#))
- ✓ **Preparation support for fall armyworm**, including emergency minor use permits and an educational podcast series, www.bit.ly/armyworm-podcast*
- ✓ **Information and data to assist through COVID-19**, including the new *Hort Innovation Insights* podcast (www.horticulture.com.au/webinars)*
- ✓ **A multi-pronged domestic marketing campaign**, which pivoted in response to the COVID-19 pandemic (see from [p11](#))
- ✓ **Investments in the Hort Frontiers strategic partnership initiative** to address longer-term and often complex issues and opportunities critical to the future of Australian horticulture – see www.horticulture.com.au/hort-frontiers*
- ✓ **Projects supported by grants** secured by Hort Innovation, ranging from cross-sector Rural R&D for Profit Initiatives to horticulture-specific work to aid in access to crop protection products – see the Hort Innovation Annual Report 2019/20 for more*

*These initiatives were delivered outside of the Hort Innovation Turf Fund and, in most instances, did not involve the industry levy

Making investments in 2019/20

The below diagram shows how Hort Innovation makes strategic levy investments on behalf of horticulture industries. The turf R&D and marketing levies were invested this way during the year, guided by the Turf Strategic Investment Plan and advice from the industry’s investment advisory panel.



To learn more about funding specific to the Hort Innovation Turf Fund, visit www.horticulture.com.au/turf. During the year, other sources of funding were also used to support activities for the benefit of Australian horticulture, including grant funding secured by Hort Innovation, co-investment dollars brokered through our Hort Frontiers initiative and centralised strategic levy reserves.

Investment planning and performance

During 2019/20, Hort Innovation continued to track investment expenditure against the Turf Strategic Investment Plan, while looking towards new developments in 2021. Access an at-a-glance copy of the current investment plan at www.bit.ly/turf-plan.

A performance analysis is coming

The industry's investment plan outlines key goals and outcomes for levy investment. With the plan due for renewal in 2021, Hort Innovation is undertaking a performance analysis to see how the industry has progressed against the current plan's ambitions. This will also help guide ongoing priorities for investment. Look for information to be published at www.horticulture.com.au/turf in 2021.

See how your levy investments align to the industry's current plan

You can see how investment expenditure in the Hort Innovation Turf Fund aligns to the industry's current strategic investment plan with the interactive analysis information available from www.bit.ly/turf-investment. The analysis shows the allocation of funding against each of the turf plan's outcomes, and gives an indication of the projects that are aligned to each outcome.

New ways of obtaining advice and setting priorities

In 2020/21, Hort Innovation will be implementing new ways of obtaining advice and setting priorities for industry investments. Renewed industry investment plans, plus new yearly (or as needed) program plans and new ways of consulting more broadly will mean more efficient investment and better outcomes for industry. Watch this space.





R&D project list 2019/20

NEW INVESTMENTS IN 2019/20

TU19000	Identification and management of mosaic viruses and secondary pathogens in buffalo turf
TU19001	2019 National Turf Conference and Women in Turf support*
TU19002	Turf NxGen program

* This flagged investment was both new and completed in 2019/20

ONGOING INVESTMENTS IN 2019/20

TU16002	National market development program for the Australian turf industry
TU16004	Australian turf industry communications program
TU17002	Improved capacity for integrated disease management of couch smut (<i>Ustilago cynodontis</i>) in turf
TU17005	Turf industry statistics 2017/18 to 2019/20
MT18011	Ex-post impact assessment^

^ This multi-industry project was a key monitoring and evaluation investment during 2019/20 – we encourage you to find the full details at www.horticulture.com.au/mt18011

INVESTMENTS COMPLETED IN 2019/20

TU16000	An environmental assessment of the Australian turf industry
TU17006	Economic, environmental, social and health impacts and benefits of the turfgrass and lawncare industries in Australia
TU17008	Conveying the benefits of living turf – a bushfire retardant
TU18000	Conveying the benefits of living turf – mitigation of the urban heat island effect
MT16002	Green industry growing leaders program
ST16008	AgVet collaborative forum

R&D report

Take a closer look at some of the key investments in the Hort Innovation Turf Fund during 2019/20. You can also visit www.horticulture.com.au/turf at any time to access information on new, ongoing and completed projects, and to download resources produced by levy investments, such as fact sheets and guides.

Identification and management of mosaic viruses and secondary pathogens in buffalo turf (TU19000)

NEW IN 2019/20

Key research provider: The University of Queensland

Beginning in 2019, this investment is helping the turf industry better understand the distribution and frequency of mosaic viruses in buffalo grass paddocks on turf farms across the country. The project team will ultimately deliver information on current strategies being used to manage the problem and how effective they are, so that particular methods can be recommended to turf growers.

The project team is looking at whether there is a correlation between the severity of infection and farm management practices such as the use of pesticides and fertilisers, irrigation methods and farm hygiene, and how seasonal and environmental factors can impact on yellowing, which is the key symptom of mosaic viruses.

An environmental assessment of the Australian turf industry (TU16000)

NOW COMPLETE

Key research provider: Infotech Research

This project, which ran from 2016 to 2019, benchmarked the turf industry's environmental performance and established a lifecycle assessment of turf through its installation. By improving knowledge of environmental impacts through this project, the industry is better equipped to plan and adapt operations to reduce them and provide improved sustainability outcomes. This information can also be used by growers and the wider industry to strengthen environmental performance and to talk about the environmental benefits of turf.

During the project, the team assessed 30 turf growing sites around Australia to produce the benchmarking report available at www.bit.ly/turf-benchmarking. This document can be used by industry participants to undertake their own measurements and make comparisons.

Meanwhile, the lifecycle assessment involved a review of five turf installation sites over one year. It showed that a well-maintained patch of turf is environmentally healthy, conserves natural ecosystems and will continue to sequester carbon dioxide from the atmosphere through the growth of soil organic matter.

The project produced an industry standard environmental product declaration (EPD) in line with global independently assessed standard ISO 14025. Once this is independently verified by a suitably qualified person under the ISO process, the EPD will be able to be used by the industry to declare its environmental performance credentials to customers.

Case studies were also produced as examples of good industry practice – these and other information from the project, including its full final research report, are available from www.bit.ly/tu16000.

Conveying the benefits of living turf – mitigation of the urban heat island effect (TU18000)

NOW COMPLETE

Key research provider: Seed Consulting Services

This research, which was conducted from 2018 to 2020, provides the turf industry with clear evidence on the benefits of living turf for mitigating the 'urban heat island effect', compared with the use of synthetic turf. This information can be shared with communities, developers and governments to help them better understand how to manage urban landscapes and select land surface types that encourage the development of cool, rather than hot, cities.

Continued >>

Across sites in New South Wales, Victoria and South Australia, the project team measured the thermal performance of five landscape coverings: irrigated and non-irrigated living turf, short and long pile synthetic turf, and bitumen.

The irrigated natural turf measured 4.9°C cooler than the baseline average surface temperature, while the cooling benefits of non-irrigated living turf depended heavily on seasonal rainfall. On average, non-irrigated natural turf was found to provide a moderate cooling effect of 1.3°C.

On the other hand, the long pile synthetic turf was one of the hottest surfaces in the landscapes, measuring nearly 11°C hotter than average – and in some instances, the surface temperature of synthetic turf was recorded at over 70°C.

The results also indicated that in areas with mixed ground covers such as playing fields, parks, and reserves there is a ‘borrowed cooling’ effect, such that the cooling benefits from living turf outweigh the warming effects of surfaces such as synthetic turf and bitumen.

A full summary and the project’s final research report are available at www.bit.ly/tu18000. Hort Innovation also distributed a media release on the project’s findings in September 2020, which you can read at www.bit.ly/heat-island-effect.

Conveying the benefits of living turf – a bushfire retardant (TU17008)

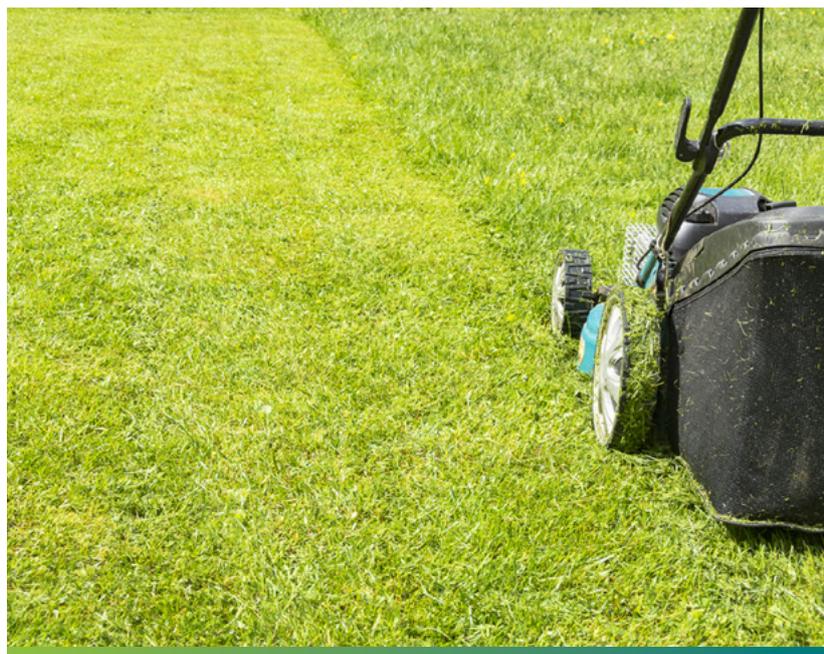
NOW COMPLETE

Key research provider: GHD

This project, which ran from 2019 to 2020, has provided proof that living turf can be used as a form of bushfire protection. The work found that watered and mowed lawns are highly resistant to fire ignition, helping create defensible spaces around buildings in fire-prone areas – important information that will help the turf industry promote the use of turf for the benefit of communities in bushfire planning and preparation, including the design and maintenance of buffer areas and protection zones. The project team found that turf’s benefit lies particularly in its resistance to ember attacks and flame encroachment.

Three fact sheets were developed to describe the bushfire protection benefits that living turf can provide, with one each for buffalo, couch and kikuyu varieties. These are available at www.bit.ly/bushfire-protection and can be used by the turf and landscaping industries to inform decision-makers about the benefits of living turf.

Full details of the project are also available at the link above, including a literature review that considers maintenance requirements to maximise the capacity of living turf to reduce fire spread.



Economic, environmental, social and health impacts and benefits of the turfgrass and lawncare industries in Australia (TU17006)

NOW COMPLETE

Key research provider: Balmoral Group Australia

Beginning and ending in 2019, this short investment delivered a picture of the direct and indirect benefits that flow from the production from turf, including from economic, environmental and human health and wellbeing perspectives. By consolidating current research, the turf industry is now equipped to better understand and communicate the wider benefits of the product it produces.

In particular, five areas were highlighted in which the turf industry adds value:

- » **Reduced maintenance costs** for well-managed turf compared to pavement and synthetic surfaces.
- » **Reduced greenhouse gas levels** from turf absorbing carbon dioxide during photosynthesis. The project estimated turf’s value in managing greenhouse gas level to be worth \$3/ha/year.
- » **Reduced costs for home cooling**, with irrigated turf lowering suburban air temperatures and enabling reduced spending on home cooling.
- » **Increased house rental values.** Houses with lawn were found to attract a rental premium, indicative of the range of mental, physical and social benefits valued by tenants.
- » **Increased willingness to pay for turf public areas.** This is the additional value placed on access to turf public parks and sports fields in local communities.

Continued >>

The total dollar value of turf's benefits was estimated for each of Australia's major capital cities from this work. For example, in Melbourne the five factors combined to add \$55.23/m² of turf, with the total benefit to the city, including home lawn, median strips, parks, roadside and sports fields, being worth \$6.02 billion per year.

The project's results have been incorporated into an interactive online database at www.balmoralgroup.us/turfau2019. Growers can request a log-in to this site by contacting communications@horticulture.com.au.

Separately, full details including the project's final research report can be found at www.bit.ly/tu17006.

Green industry growing leaders program (MT16002)

NOW COMPLETE

Key research provider: The Right Mind

From 2017 to 2019, this project delivered leadership education to participants from across the Australian nursery and turf supply chain who were motivated to further develop their leadership skills. The Growing Leaders Program was designed to develop leadership capability and capacity to transform the nursery and turf industries through vision, engagement, action, and leadership. It provided participants with positive exposure and networking opportunities with stakeholders from across the supply chain.

Case studies and learnings from industry participants are available at www.bit.ly/mt16002.

2019 National Turf Conference and Women in Turf support (TU19001)

NEW IN 2019/20 & NOW COMPLETE

Key research provider: Turf Australia

This project supported the 2019 National Turf Conference held in Sydney, which provided a valuable opportunity for growers, supply chain and other industry stakeholders to gather under one roof and gain insights into the latest R&D, marketing and on-farm innovation. A Women in Turf event was also held, which focused on developing the skills of women involved in the turf industry and providing opportunities to network.

Turf NxGen program (TU19002)

NEW IN 2019/20

Key research provider: Turf Australia

This investment was established to continue the industry's NxGen program, supporting annual NxGen forums into 2022. Unfortunately, due to COVID-19, the forum scheduled for August 2020 was postponed until 2021. When running, NxGen events encourage leadership development, communicate R&D and marketing information, and enable professional networking for people aged under 40 in the Australian turf industry, with the turf levy funding enabling a substantially reduced registration cost for delegates to support widespread professional development of the next generation of Australian turf growers.

When available, details on events will be shared through industry communication channels and at www.turfaustralia.com.au.

Australian turf industry communications program (TU16004)

Key research provider: Turf Australia

Ongoing through 2019/20, this project is responsible for keeping Australian turf growers and other industry stakeholders informed. It delivers up-to-date information on R&D, marketing and other resources to help support the profitability and sustainability of the industry.

A number of regular communication channels continue to be produced and maintained by this investment, including but not limited to:

- » The quarterly *Turf Australia Magazine*, available from www.turfaustralia.com.au/news/turf-industry-magazine
- » Monthly *Turf Australia E-News* newsletters, with past editions available at www.turfaustralia.com.au/publications/turf-newsletter
- » The Turf Australia website, www.turfaustralia.com.au
- » The Turf Australia social media program, which includes the Turf Australia Facebook page for turf growers, www.facebook.com/turfaustralia.



Turf industry statistics 2017/18 to 2019/20 (TU17005)

Key research provider: Turf Australia

This investment is tasked with providing accurate and reliable data for the turf industry. This information – including value, volume and other benchmarking statistics – is intended to allow turf growers and the broader industry to make timely and effective decisions in planning and resource prioritisation, as well as track market trends and industry performance.

Data is collected through annual production surveys coordinated by the Turf Australia team and state-based turf bodies. Snapshot reports are available through Turf Australia and also via the Hort Innovation Turf Fund website at www.bit.ly/tu17005.

National market development program for the Australian turf industry (TU16002)

Key research provider: Turf Australia

Beginning in 2018, this investment is designed to support the development of the Australian turf industry, and drive an increase in the value of turf.

It's assisting growers in developing their skills, knowledge and businesses through a range of extension activities, including delivering training and disseminating market research and R&D findings. It is also tasked with engaging the wider industry and key influencers, such as landscape architects and planners, while facilitating collaboration and engagement with and between key industry bodies.

Specifically, the project supports the role and activities of Turf Australia's National Market Development Manager, who provides project updates in regular market development reports in the levy-funded *Turf Australia* magazine.

Improved capacity for integrated disease management of couch smut (*Ustilago cynodontis*) in turf (TU17002)

Key research provider: The University of Queensland

This project is developing an improved integrated disease management plan for couch smut for the Australian turf industry. Its activities include research to better understand the fungus that causes the disease – including its distribution and transmission – as well as the evaluation of fungicides for its control, and a look at potentially resistant couch varieties and hybrids.

Marketing report

Hort Innovation is responsible for investing the turf marketing levy into a range of activities to drive awareness and use of Australian turf, under the Hort Innovation Turf Fund. Read on for a snapshot of activities and results from 2019/20.

The 2018/19 marketing program was focused on contributing to sustainable demand for Australian turf, working towards a five per cent increase in revenue for growers, as identified as a key industry priority in the Turf Strategic Investment Plan.

The key objective of the 2019/20 strategy was to increase demand for turf by educating, inspiring and reminding consumers of the benefits living turf provides. This was done via a range of activities including public relations, social media and digital communications, where fresh content and trusted voices were used to promote turf.

Public relations

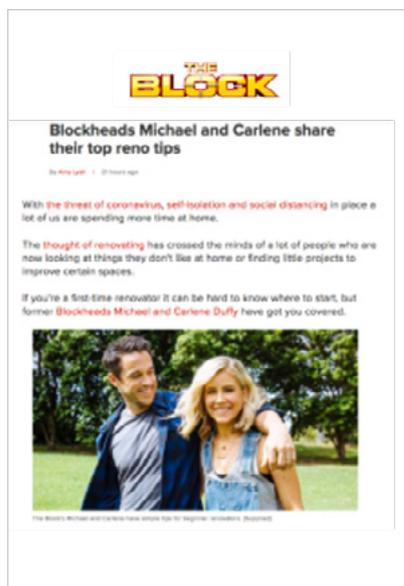
Over the course of the marketing campaign, 18 pieces of media coverage were secured across traditional and online media. This equated to 12.8 million opportunities for people to see turf-related content. Highlights included being featured in titles such

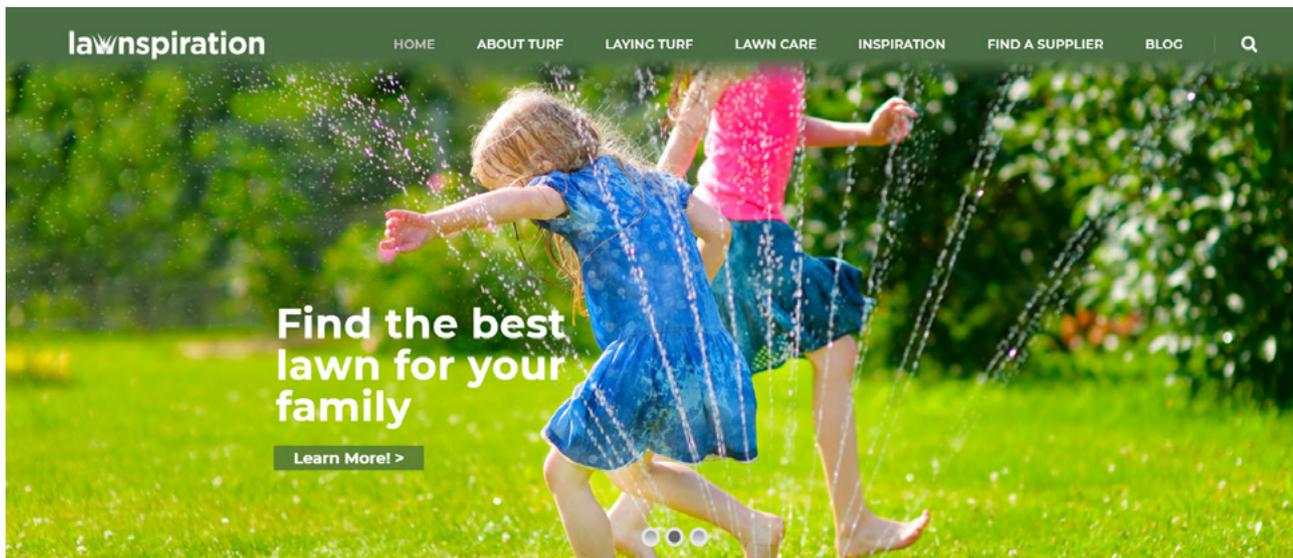
as *The Courier Mail*, *News.com.au*, *Home Beautiful* and *Realestate.com.au*.

Former *The Block* contestants and renovation and design experts Michael and Carlene Duffy were engaged by the campaign to be brand ambassadors. Using Michael and Carlene gave the campaign an additional hook, that appealed to the media and their respective consumer audiences.

Turf Australia was also engaged to assist with creating media pitch materials that promoted local turf growers and the industry, which resulted in the campaign securing profiling coverage in property and local media outlets.

Media pitches were adapted to align to current trends, such as themes of home maintenance during the unfolding COVID-19 situation. An example was a local case study which was sourced during the pandemic, featuring a Mount Martha homeowner who had taken backyard DIY sprucing to the next level, which drove strong media coverage.





Social media

The 2019/20 social strategy for turf focused on using the Lawnspiration Facebook page (www.facebook.com/lawnspiration) as the key channel to drive awareness and inspiration. A highlight of the social campaign was the 'Win a \$5,000 lawn makeover' competition which was initiated to encourage user-generated content and build engagement. The contest secured 1,100 entries with around 155,000 people seeing the content and an engagement rate of six per cent, well above the industry average of 3.6 per cent.

As a result of this activity and ongoing posts about the benefits of turf,

the Lawnspiration Facebook page fanbase grew by more than 1,905 people, which is more than double the growth achieved in the previous financial year (a 722 increase). In line with the target audience for the turf marketing campaign, men aged 25 to 44 represented more than half of all impressions on Facebook.

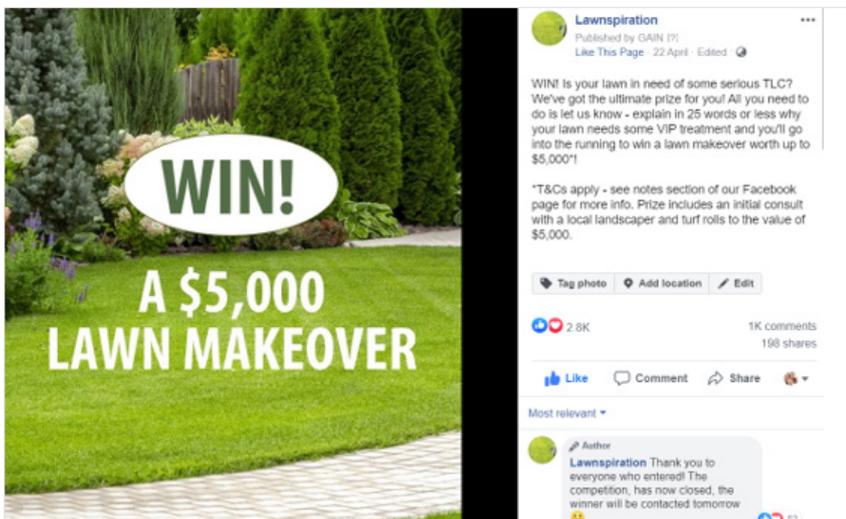
Facebook activity generated a 400 per cent increase in visits to the Lawnspiration website (www.lawnspiration.com.au) and delivered a click through rate of 3.5 per cent, which is five times greater than the industry average of 0.7 per cent. Top performing posts include before and after contrast images, pet related lawn tips and DIY tips.

Digital

The Lawnspiration website has been an effective tool in providing further inspiration, education and resources to make the process of selecting, laying and maintaining turf simpler for consumers. In 2019/20 there was 331 per cent increase in the number of people looking at the website and a 362 per cent increase in the number of pages viewed, indicating that they're spending more time looking at the website content.

In terms of demographics, website visitors are largely men at 79 per cent, with 21 per cent of site visitors being female.

By conducting a campaign on Facebook aimed at the target audience, an additional 2,500 people subscribed to the Lawnspiration e-newsletter. Three e-newsletters were shared to the database during 2019/20 containing valuable information on how turf can improve livelihoods backed up with information on its health, social and financial benefits. They also included inspiring lawn content such as before and after images and lawn care tips.



Financial statement

Financial operating statement 2019/20

	R&D (\$)	MARKETING (\$)	TOTAL (\$)
	2019/20 July – June	2019/20 July – June	2019/20 July – June
OPENING BALANCE	228,114	90,927	319,041
Levies from growers (net of collection costs)	403,678	100,881	504,558
Australian Government money	451,415	–	451,415
Other income*	3,013	829	3,843
TOTAL INCOME	858,105	101,710	959,815
Project funding	746,545	101,585	848,130
Consultation with and advice from growers	2,515	219	2,734
Service delivery – base	35,210	5,551	40,761
Service delivery – shared	50,558	7,970	58,529
Service delivery – fund specific	68,000	27,000	95,000
TOTAL EXPENDITURE	902,829	142,325	1,045,154
Levy contribution to across-industry activity	–	–	–
CLOSING BALANCE	183,391	50,312	233,703
Levy collection costs	39,672	9,957	49,629

* Interest, royalties

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