BREMER CATCHMENT ASSOCIATION INC.

around the bremer

December 2022

Special points of interest:

The next Meeting will be the

16th February

2023

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THE MANAGEMENT COMMITTEE OF THE BREMER CATCHMENT ASSOCIATION

WISHES ALL MEMBERS AND FRIENDS A SUCCESSFUL AND HEALTHY

2023.

Safety first despite improvement in farm

While on-farm deaths decreased in 2021, we must keep talking about farm safety to achieve our zero target as one life lost is one too many. Farm safety advocate Alex Thomas is continuing the conversation by changing the narrative and breaking new ground with her #PlantASeedForSafety initiative.

The annual report prepared by AgHealth Australia, funded by AgriFutures Australia, Non-intentional Farm Related Incidents in Australia 2021, found that there were 46 on-farm deaths from 1 January to 31 December 2021, compared to 58 on-farm deaths in the same period for 2020.

There has been a significant amount of work that has gone into increasing safety on-farm, from technology solutions to the ACCC Quad Bike Safety Standard, introduced in October 2020.

Tractor incidents were the leading cause of death with 10 fatalities

While it is encouraging to see the statistics heading in the right direction, we can't lose sight of the most important picture, which is that the statistics aren't just numbers, they represent human lives lost and the devastating impact that loss has across our farming communities. One life lost on-farm is one life too many.

According to the 2021 report, tractors, quad bikes and side-by-sides were the three most frequently reported agents of injury, collectively accounting for 56 per cent of the total on-farm deaths. Tractor incidents were the leading cause of death with 10 fatalities. There were nine quad bike deaths and seven side-by-side vehicle deaths.

Quad bike deaths decreased between 2020 and 2021 (from 14 to 9 incidents); however, the number of incidents involving tractors and side-by-sides have remained very similar. Age is another factor. In 2021, 27 fatalities were people aged 45 years and over and six were children aged 14 years and under. In 2020, there were 36 fatalities in people over 45 age and eight children aged 14 years and under.

The Research & Development Corporations, who fund research through the Rural Safety and Health Alliance (RSHA), are continuing to review the research data and explore ways to improve safety across our agricultural, fisheries and forestry industries.

RSHA Chair, Professor Lyn Fragar AO said the figures are a stark reminder that on-farm safety continues to be one of the biggest challenges for the agricultural sector but noted there are everyday practices we can implement to make our industry safer.

"Ensuring the safety features of tractors, quad bikes and side-by-sides are used, could significantly reduce the number of injuries from these machines. If a seatbelt is present use it (tractors/side-by-sides), fit an operator protection device (quad bike), always wear a helmet (quad bike/side-by-side) and never let children ride or be carried as passengers on quad bikes. It's simple practices that help protect people and children living and working on-farm," said Professor Fragar.

(From AgriFutures October Newsletter)

National Landcare Network Announcement

The Landcare movement, founded on sustainable agricultural principles, welcomes the Government's commitment to boost the productivity and profitability of the agriculture sector while delivering wider climate and environmental benefits.

The National Landcare Network (NLN), the peak representative body for community Landcare groups across Australia, welcomed the Federal Government's budget announcement last week of a $302 million investment into sustainable agriculture over five years.

NLN CEO Jim Adams said, "As a movement with its origins in sustainable agriculture and environmental stewardship, we are pleased to see investment which will support landholders' roles as stewards of Australia's agricultural lands, biodiversity and natural capital.

"Access to emerging environmental markets is critical for our members and we look forward to working with the government to help farmers continue to enhance agricultural sustainability, improve on-farm biodiversity and carbon opportunities," Mr Adams said.

As set out in its Australian Community Landcare Futures Framework **(https://www.nln.org.au/post/framework-announcement)** , The National Landcare Network is committed to building its leadership capacity with a focus on indigenous and community-based Natural Resource Management leadership for landholder participation in agricultural (carbon plus) market mechanisms and opportunities.

Mr Adams said, "We are well-placed to work with the government to assist famers and industry participants adopt climate-smart, sustainable agriculture practices and build engagement in markets through our trusted role in agricultural knowledge exchange.

Engaging effectively with carbon and biodiversity markets will ensure Australian agriculture remains competitive and drives sustainable outcomes that support the agriculture sector's vision for a $100 billion industry by 2030.

National Landcare Network

We are pleased to see investment which will support landholders' roles as stewards of Australia's agricultural lands, biodiversity and natural capital.

Innovative plastic mulch alternative set to increase crop water productivity by 30%

CSIRO's latest invention, TranspiratiONal, a spray-on polymer membrane will help farmers increase crop yield and save water, but with fewer inputs and less environmental impact.

With experts predicting we'll need to feed and clothe 9.7 billion people by 2050, agricultural production must undergo a radical transformation. CSIRO has developed a game-changing update to a decades-old technology that will enable the sustainable intensification needed to produce more food with fewer resources.
TranspiratiONal, a Sprayable Biodegradable Polymer Membrane (**SBPM**) technology and is CSIRO's response to this global challenge.
"The technology delivers the benefits of plastic mulch films, but without the environmental cost," said CSIRO Senior Principal Research Scientist Dr Keith Bristow, who is leading the project.

The world desperately needs a durable, cost-effective sprayable biodegradable polymer membrane technology to replace the petroleum-based plastic mulch films that are damaging our soils, water systems and cropping systems.
Farmers across the world have used plastic mulch films to intensify crop production since the 1960s. Applying a thin plastic film to rows of crops has proven short-term benefits, boosting yields by moderating soil temperature, maintaining soil moisture and reducing weed competition.
The CSIRO team believes TranspiratiONal is a worthy solution, and it's ready to be commercialised.
"The SBPM Technology is a water-based polyurethane dispersion that forms a membrane when sprayed onto the soil, which will disintegrate and biodegrade, leaving no toxic residue in the soil," explained Stuart.
"There is also the potential to be able to formulate the dispersion so the integrity of the membrane can be extended as required."

Field trials prove massive benefits for crop water productivity
Peer-reviewed irrigated field trials, carried out between 2015 and 2018, on cotton, sorghum, tomatoes and melons, confirmed a more than 30% increase in water productivity compared with bare soil treatments – as well as weed suppression.

Achieving CSIRO's initial target of using 10% less water with no yield loss in Australian irrigated agriculture would free up more than 1,000 gigalitres of water for growing additional crops or improving environmental flows. The potential is great, as even this conservative 10% improvement would deliver nearly one-third of the total volume of water to be recovered under the Murray-Darling Basin Plan.

Processing tomatoes field trial, Echuca VIC.

Giant Rats Tail Grass

Sporobolus pyramidalis

Family
Poaceae

Origin
Exotic

Declaration
Category 3 Restricted Matter (Biosecurity Act 2014)

Common Names
Rat's tail grass, Giant rat's tail grass, GRT, Parramatta grass, West Indies smut grass, Whorled drop seed

An upright and long-lived grass growing 90-200 cm tall and forming large tussocks. Its very long and narrow leaf blades (20-70 cm long and 3-10 mm wide) may be flat or somewhat rolled. Its elongated, pyramid-shaped, seed-heads (20-45 cm long and about 3 cm wide) have many short branches these seed-head branches are initially held closely to the stem, but as the seed-head opens they become stiffly spreading. Each of these branches bears numerous tiny flower spikelet (1.7-2.2 mm long).

Management of giant rat's tail grass and other weedy Sporobolus grasses

Weedy Sporobolus grasses aggressively colonise disturbed areas and overgrazed or weakened pastures. They can dramatically reduce pasture productivity, out-compete desirable pasture grasses and cause significant degradation of natural areas. Management of giant rat's tail grass and other weedy Sporobolus grasses requires an integrated approach involving prevention and control activities and the incorporation of pasture, land and livestock management considerations.

Best practice manual

This manual provides practical information to help landholders manage weedy Sporobolus grasses. The manual takes a strategic approach to weed management. A variety of common weed 'situations' are examined, and a 'best bet' strategy presented for each. These 'best bet' strategies are based on the latest research, and focus on achieving effective weed control in a cost-efficient way. Weed management is tackled in an integrated way. Chemical control is combined with best practice land management techniques to effectively control current infestations and prevent the spread of weeds to 'clean' country.

Green Swamp Mid Warrill Project Update

By Chris Gray (BCA Member)

Projects in the Mid Warrill have been occuring for the longest time at a property called 'Green Swamp'. Situated on the Cunningham Highway at Silverdale, weed management projects were addressed previously by the then Normanby Shire Council as mentioned in correspondence including The Queensland Times newpaper as far back as the late 1800's. [*Sat 18 Apr, 1891*]

The 'Green Swamp' property was originally selected and marked on survey plans as a water reserve to cater for drovers and their travelling stock on the nearby stock route. The land surrounding the swamp was much prized by local graziers for its ability to fatten cattle on the lush water couch grasses and ecologists alike enthusiastically mentioned the abundant bird life that called this wetlend oasis home.

Eventually this parcel however, following much trepidation and debate, was released to early selectors as freehold title and was held until recently by the descendants of the Kelly family whom occupied the original Silverdale Homestead that overlooked these rich alluvial Blue gum flats. The property originally consisted of approximately 200ac and was in the mid 1970's drastically changed when a man-made channel was cut through the centre of the swamp, draining it [its suspected] to make it more usable as a farming property. The value of the wetland in its natural state was perhaps not as appreciated then as it should have been.

Surely with the best of intentions, the decision to drain the swamp into one tributory instead of the original two, and after a series of natural flood events that followed the channel became the catalyst to increased erosion, land slips and an ever growing 'head cut' which now dominates the northern tributary exiting the property to the bordering Warrill Creek. A major tributary to the Bremer River [Warrill Ck] paralells a kilometre of 'Green Swamp' on its eastern boundary.

By identifying methods to slow and spread the water that seasonally engulfs this significant wetland environment, spreading the priceless resource across the land reduces the impact that previously created erosion and now simultaneously rehydrates the landscape, a process described by environmental leaders Peter & Stuart Andrews advocating the ideology behind Natural Sequence Farming proven in the Bylong Valley, NSW.

The most recent infrastructure project that supports the theory was implemented at Green Swamp in June 2022 co-funded with HLW. The installation of a leaky weir across the man made channel. [Picture 1.1] now completed, slows the cross water flow and has already significantly changed the landscape back to a more wetland environment, with noticibale increases in sedges growing around the waters edge and the reappearance of varied aquatic plants inhabiting the wetland environment. The area is now staying wetter longer, and bird surveys conducted before and after the weir installation by owners and members of the Fassifern Naturalists Group has witnessed the return of more birdlife into the swamp including a pair of Black Swans which raised 5 new cygnets this spring and return of cygnets this spring and return of Pelican's, Little Pied Cormorants and recently a large Black Neck Stork to name a few.

How southeast councils are working to improve Bremer River

One of South East Queensland's most important river catchments is being thrown a lifeline with local councils joining together to boost efforts to improve conditions in the Bremer River.

Launched as part of the Resilient Rivers Initiative, the Bremer River Catchment Action Plan will deliver a long term and strategic plan to combine the efforts and resources of all major stakeholders into one comprehensive strategy for the future.

South East Queensland councils have also contributed more than $2 million to the Resilient River Initiative to support the delivery of high priority projects, as identified by the Bremer River Catchment Action Plan and other across the region.

Former Brisbane Lord Mayor and Council of Mayors (SEQ) Chair, Cr Graham Quirk, said the Bremer River Catchment Action Plan represented the first step in a strategic and coordinated approach to future-proof the Bremer River.

"The Bremer River is not only vital for the Scenic Rim and Ipswich communities, but is a major contributor to the Brisbane River and our iconic Moreton Bay. It deserves a dedicated plan to ensure its social, economic and environmental value is not overlooked," he said.

The job of improving and protecting the Bremer River is too big for any one council or community group, only a coordinated approach can achieve this.

This plan will ensure the funds invested in the Bremer River Catchment deliver the biggest return for the community.

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