VICTORIA DROUGHT RESILIENCE ADOPTION AND INNOVATION HUB

Riverine Plains, as the Victoria Hub North East Node leader, is working closely with a wide range of organisations, farmer members, and community groups to deliver research, activities and resources that help build drought resilience across the region.

Through collaboration with groups such as the Goulburn Drought Resilience Plan Group, Landcare networks, Many Mobs and Towong Shire, Riverine Plains is helping to identify key community needs and develop targeted, locally relevant projects.

PROMOTION OF MENTAL HEALTH AND FARM SAFETY

Riverine Plains has a continuing focus on mental health and farm safety to support farmer resilience. Jenn Pegler, Murrumbidgee Local Health District, reminded farmers to "look after themselves and others" at the Riverine Plains In-season Update, which was especially relevant given the dry and frosted conditions experienced across the region during spring 2024. Riverine Plains also hosted the Rural and Remote First Aid practitioners to promote on-farm safety, training and equipment at various events and locations across the region.

Riverine Plains will continue to work with partners to strengthen connections and develop projects that build farmers' safety skills and resilience.

TIMELY INFORMATION FOR LIVESTOCK FARMERS

A prolonged dry period commenced in 2024 and Riverine Plains identified livestock feeding and management as key themes for farmers. In response, Livestock Production Co-ordinator with Elders, Rob Inglis, attended the August In-season Update to discuss feeding strategies to keep livestock in good condition. Riverine Plains Livestock Project Manager, Sophie Hanna, also actively supported farmers in the Towong Shire by delivering a number of targeted workshops and events.

Riverine Plains is continuing to work with Hub and other partners to upskill farmers in pasture management and its role in optimising livestock production.

IDENTIFICATION AND VALIDATION OF NEW TECHNOLOGIES

Riverine Plains worked with novel bioelectrical technology startup, Rainstick, through early-stage problem and market validation as part of the SCOUT project, supported by the Victoria Drought Resilience Adoption and Innovation Hub. Their technology merges First

Nations knowledge with modern bioelectrics to enhance seed germination, with a focus on using electricity to boost plant growth and improve crop yield. Riverine Plains is collaborating with Rainstick to understand if their technology can support seed germination in scaled cropping systems.

This early-stage technology validation was also supported by Hub partners, who shared information on canola varieties being currently sown in their geographies and the appetite to trial this technology in both canola and horticulture commodities.

Riverine Plains are also using field trials to validate the potential of microbial product Loam Bio to build soil carbon and system resilience.

FROST IDENTIFICATION AND MANAGEMENT

Riverine Plains provided resources to farmers about the options for managing the damaging frost event that occurred during the third week of September, 2024, which impacted many wheat, canola and barley crops. Riverine Plains also partnered with local farmers to host the Evan Moll Gerogery Field Day, providing an additional forum for farmers to further discuss the impact of these frost events. At the Gerogery Field Day, Elders Agronomist Sheree Hamson shared technical expertise on identifying frost and how to estimate the losses, as well as management options. At the field day, the mental health impact of the frost was also acknowledged and discussed.
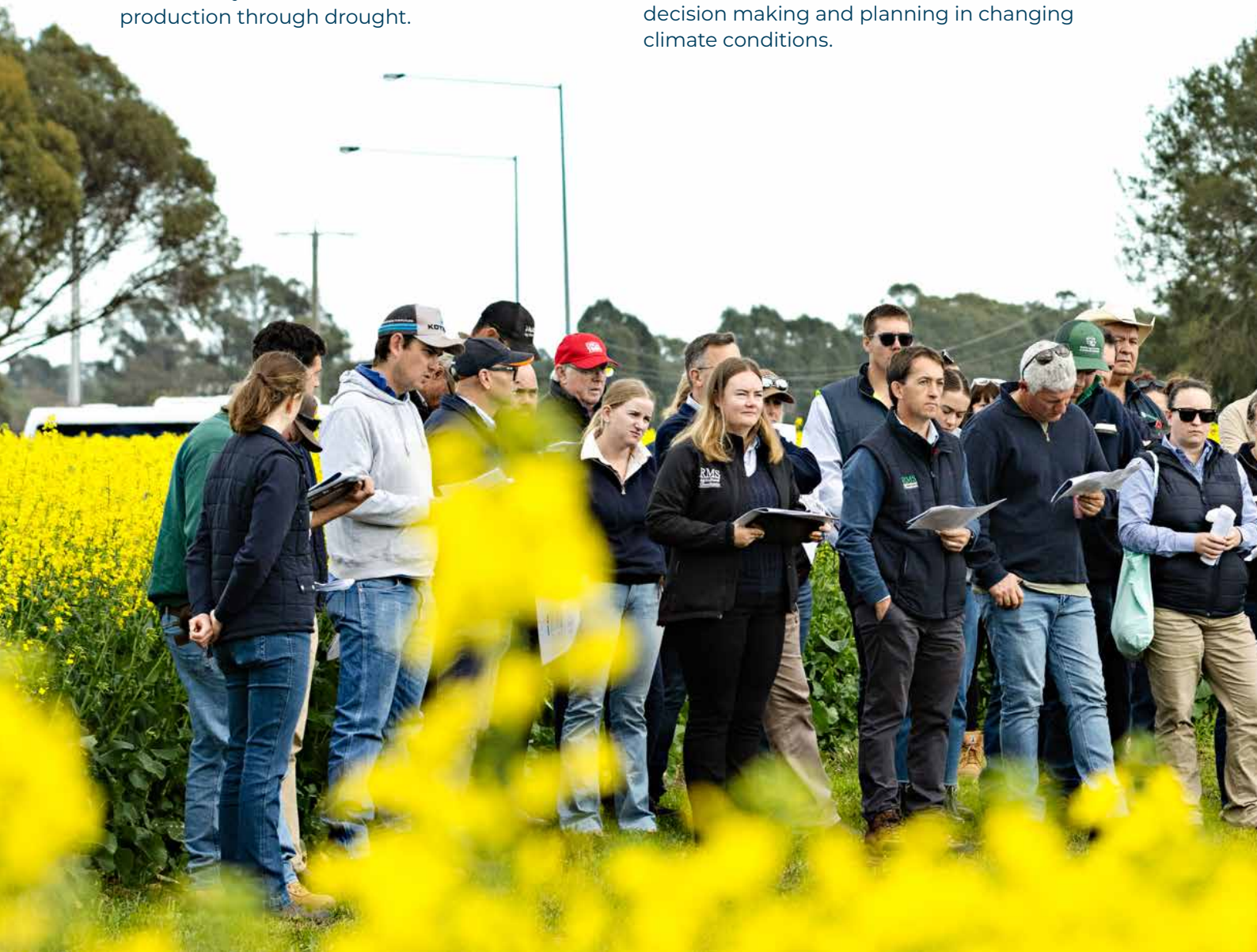
PEST MANAGEMENT AND CHEMICAL USE

Riverine Plains sought broad consultation to understand slug management in farming systems, while also exploring opportunities to reduce chemical use on-farm, to support increased system resilience and sustain production through drought.

As part of this work, Riverine Plains conducted a farmer survey, which generated 54 responses, with results analysed by Dr Michael Nash. The survey results are being used to develop a co-design project with partners including Birchip Cropping Group, Irrigation Farmers Network, Southern Farming Systems and VicNoTill, along with Dr Michael Nash.

BETTER WEATHER DATA FOR INFORMED DECISIONS

In 2024, the North East Node commenced a new project that leverages the significant investment in the Local Weather & Soil Moisture Network, while also collaborating with multiple farming system groups and the North West Node. The Farm Data: Local weather data for improved decision-making platform allows farmers to easily access local, real-time weather and soil moisture data for decisions such as spraying, harvesting, planting and insurance. During the project period, Riverine Plains collaborated with scientists (University of Sydney) and farmers to see how historical weather data and soil moisture data can be used to increase accuracy in weather models and forecasts, and improve decision making and planning in changing climate conditions.

SUMMARY

Riverine Plains, as the Victoria Hub's North East Node leader, is continuing to work on the following strategic goals to increase community resilience for future droughts:

- Increase farmer knowledge of pasture management and livestock production.
- Increased adoption of practices that build system resilience (eg, soil amelioration, stubble retention, rotational cropping, ground cover retention).
- Increased use of local climate information to make more informed decisions.
- Support events that bring members of the community together to strengthen and increase social community connections.
- Promote events that improve mental health and provide farmers with work, health and safety skills.
- Support farmers to build their business skills, to better understand the factors leading to a healthy business that can survive climatic variability.

For further information, please contact Riverine Plains Senior Project Manager, Kate Coffey by emailing kate@riverineplains.org.au.