New research to take aim at pinkeye

Dr Stephanie Bullen,
National Animal Health & Welfare Lead, Dairy Australia

A new Dairy Australia research project will examine the causes of pinkeye outbreaks and develop farm-ready guidance to support prevention and control.

The project will take a world-first approach to understanding why infectious bovine keratoconjunctivitis – known as IBK or pinkeye - outbreaks occur. It will investigate the multiple factors that contribute to the costly and debilitating disease on farm, and use genomics to identify the different strains of the bacteria Moraxella bovis that cause the disease and to determine whether some are linked to more severe outbreaks.

The project will deliver guidelines outlining key control strategies for farms across different regions. It is one of the initiatives in Dairy Australia's 2026-27 Annual Investment Plan.

The idea for the project came directly from dairy farmers.

"We were contacted by a couple of farmers who said they were having huge issues with this and just couldn't get a handle on it," said Dr Stephanie Bullen, National Animal Health & Welfare Lead at Dairy Australia.

Dairy Australia then validated the issue across the country using the 2025 Animal Husbandry and Genetics Survey, which asked farmers to identify their biggest animal health and welfare concerns. Pinkeye was ranked third, behind fertility and mastitis.

Discussion with farmers and vets confirmed it is a major issue. "A particular farmer I spoke to down in Tasmania said they are having such headaches with pinkeye on their farm, they're thinking about just buying in heifers, not rearing them anymore," Dr Bullen said. "And for me, that's major alarm bells. That's the tip of the iceberg."

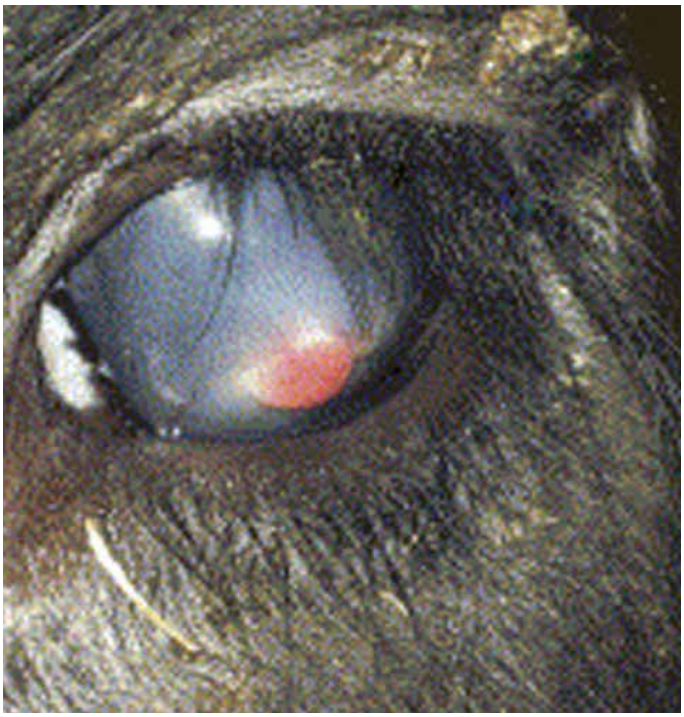
Pinkeye is a problem on dairy farms across Australia and on beef farms in southern areas. It is less of an issue for beef farms in northern Australia, as Bos indicus breeds are less susceptible to it.

Dr Bullen said in severe outbreaks, up to 80% of calves on a farm can be impacted. The disease is extremely painful for the animals, causing ulcers on the eye while impacting growth and liveweight gain. In severe cases, the eye needs to be surgically removed.

It also creates a strain on farmers. Managing an outbreak is relentless and labour-intensive, requiring farmers to treat calves daily, often during high-pressure times of the year.

A vaccine is available, but it targets only some of the strains of Moraxella bovis present in Australia.

Dr Bullen said the project aligns with her focus on delivering research that farmers can put into practice. During her 15 years in the dairy industry, she has led ground-breaking research into drench resistance in cattle that ultimately contributed to the registration of multi-active drenches for Australian dairy farmers.



The project will be led by Dr Barbara Brito Rodriguez from New South Wales Department of Primary Industries and the Elizabeth Macarthur Agricultural Institute and Professor John House from the University of Sydney, with support from several other research partner organisations. Dr Bullen says the research team is currently finalising the study design and is exploring options to expand the project to include beef farms as well as dairy farms.

In the first year, the team will work with five to ten farms to pilot data collection, including bacterial samples and information about farm management practices, such as animal feeding regimes, fly loads and animal breeds. The team will also develop a system for scoring eye lesions.

In the second year, the project will expand to collect this information from dairy farms across Australia.

Throughout the course of the project, researchers will use genomic sequencing to analyse bacteria collected from the eyes.

The project team will share findings as they emerge so that farmers can benefit from the information as soon as possible.

Dairy Australia's 2026-27 annual investments are closely aligned with the strategic priorities identified in the Dairy Australia Strategic Plan 2030. This research falls under Strategic Priority 2: Innovating for Future Success, which includes building herd productivity through healthier cows with fewer disease issues.

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