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# NATIONAL Poultry

## NEWSPAPER

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ACMF and other Australian representatives at the 11th International Symposium on Avian Influenza.

## ACMF at international symposium on avian influenza in Canada

AUSTRALIAN Chicken Meat Federation chief executive officer Dr Mary Wu recently attended the eleventh International Symposium on Avian Influenza in St. John's in Newfoundland, Canada.

This important event convened over 400 leading scientists, veterinarians, epidemiologists and industry experts to discuss the latest research findings and the potential future state of highly pathogenic avian influenza and to reaffirm the critical importance of integrating a One Health approach in responding to HPAI outbreaks.

Presentations and discussions showcased

significant progress in understanding and responding to HPAI in recognition of the 'virus' impact on the welfare and security of wildlife, domestic poultry, commercial livestock industries and overall public health.

Key topics included diagnostic advancements and mitigation strategies, which are particularly crucial given the virulence of circulating HPAI strains and the potential for further mutation.

The summit also addressed the risk posed by the extensive circumpolar movement of the virus in the sub-Arctic region through situational analyses

and global reports.

These discussions were particularly relevant for the Australian context as the only continent free of H5N1 and with no endemic HPAI strains, but with southernmost states in close proximity to the Antarctic region.

The increasing risk of wild bird spillover events into domestic poultry populations has been a core focus for the Australian government and commercial livestock industries.

Therefore, the symposium's emphasis on advanced diagnostic tools and vaccination strategies is especially pertinent in providing considerations for the

continued P2

## Leading courses, training and projects

POULTRY Hub Australia is proud to be leading the charge in strengthening the poultry industry through a combination of workforce development and strategic research.

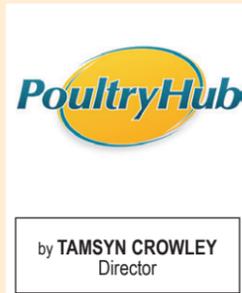
From upskilling future leaders through our online Poultry Nutrition course to mapping the structure and dynamics of the sector to support disease preparedness, our focus remains firmly on building a resilient, innovative and sustainable industry.

The online Poultry Nutrition course, developed by PHA, continues to gain momentum.

Designed to be flexible, accessible and grounded in real-world application, the course provides foundational knowledge in poultry nutrition, including modules on feed formulation, gut health, bird performance and the role of nutrition in animal welfare and sustainability.

It attracts participants from a wide range of backgrounds, creating a learning environment enriched by diverse perspectives.

Graduates of the course come away with not only practical skills and knowledge but also gain access to exclusive workshops that connect them directly



with leading researchers, nutritionists and peers across the industry.

These workshops provide an opportunity to dive deeper into key topics, ask questions and build long-lasting professional networks.

As feedback from recent participants highlights, the course is having a real impact.

It is equipping individuals with the tools they need to contribute more effectively within their roles and, in many cases, is opening new doors to career development.

It is also helping to address one of the industry's most pressing challenges – ensuring a strong and capable workforce for the future.

Training and development are only one part of the picture, however.

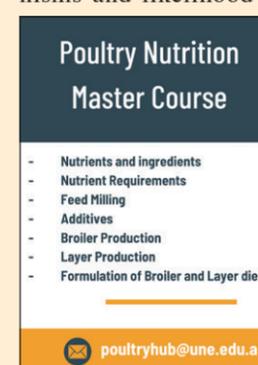
Poultry Hub Australia is also at the forefront of national research efforts aimed at improving understanding of the industry's structure and vulnerabilities.

In partnership with

the University of Adelaide, PHA is leading a project commissioned by the Department of Agriculture, Fisheries and Forestry to prepare a comprehensive report on the current structure and dynamics of the commercial poultry and ratite industries.

This work will enhance biosecurity by providing vital information about how the industry is organised and how birds and products move through the supply chain.

In particular, it will help improve understanding of the risk of introduction of highly pathogenic avian influenza, as well as the potential mechanisms and likelihood



The online Poultry Nutrition course continues to gain momentum.

of its spread.

To inform the report, PHA is engaging widely with the industry and is calling on producers, integrators and other stakeholders to participate.

The more detailed and representative the data collected, the stronger national preparedness will be.

This combined approach of building capability through education and strengthening systems through research is central to PHA's mission.

By investing in people and knowledge, Poultry Hub Australia is helping ensure the poultry industry remains adaptable, competitive and ready for future challenges.

For more information about the online Poultry Nutrition course, upcoming workshops or to contribute to the HPAI project, visit [www.poultryhub.org](http://www.poultryhub.org) or contact the PHA team.



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## Poultry Industry Calendar of Events

### 2025

**AUG 1-3** – AgriTech India Foodex, Bangalore, India. <https://agritechindia.com>

**AUG 12-13** – Agro Expo, Michigan, USA. <https://theagroexpo.com>

**AUG 12-14** – University of Arkansas Sanitation and Listeria Prevention Workshop, Arkansas, USA. [https://uada.formstack.com/forms/sanitation\\_listeria\\_lr](https://uada.formstack.com/forms/sanitation_listeria_lr)

**AUG 18-20** – National Safety Conference for the Poultry Industry, Florida, USA. <https://www.uspoultry.org/programs/education/seminar/>

**AUG 27-29** – Livestock Malaysia, Kuala Lumpur, Malaysia. <https://www.livestockmalaysia.com>

**SEP 14-17** – 20th European Symposium on the Quality of Eggs and Egg Products and the 26th European Symposium on the Quality of Poultry Meat, Zadar, Croatia. <https://eggmeat2025.com>

**SEP 23-25** – AgXchange Australia 2025, Gold Coast, Queensland. <https://agxchange.com.au>

**OCT 6-10** – 23rd WVPA Congress Kuching, Malaysia. <https://www.wvpac2025.com>

### 2026

**FEB 9-11** – APSS 2026, Sydney, Australia. <https://www.apss2026.com.au>

**How to supply event details:**  
Send all details to National Poultry Newspaper, PO Box 162, Wynnum Qld 4178, call 0450 672 553 or email [design@collins.media](mailto:design@collins.media)

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# Sustainable egg farming in Australia

■ How our egg farmers are reducing their environmental impact

SUSTAINABILITY can mean different things to different people.

Sustainability generally refers to the ability to meet the needs of the present without compromising the ability of future generations to meet their own needs.

It involves balancing environmental health, economic viability and social well-being to ensure long-term stability and prosperity.

Australia's egg industry plays a vital role in feeding the nation, producing over 6 billion eggs annually.

As the demand for affordable and nutritious food continues to grow, egg farmers are increasingly focused on sustainability – adapting their operations to ensure a minimal environmental footprint while maintaining high standards of animal welfare and food safety.

Sustainable egg farming is no longer a niche goal but a shared industry priority.

### Reducing emissions and energy use

One of the major sustainability challenges for any agricultural sector is carbon emissions.

Australian egg farms are implementing measures to reduce their energy consumption and transition to renewable sources.

Many producers have installed solar panels on sheds and in grading facilities, significantly reducing their reliance on fossil fuels.



**Egg Farmers of Australia**

by MELINDA HASHIMOTO  
CEO



In fact, some farms are now close to being energy self-sufficient, exporting excess power back to the grid.

Further reductions in emissions are being achieved through improved feed efficiency.

By fine-tuning hen diets and breeding for high-performing flocks, farmers can produce more eggs using fewer resources – less grain, less water and fewer emissions per egg.

### Waste management and circular practices

Egg farms generate waste, including manure, but rather than seeing this as a burden, many Australian producers have embraced circular economy principles.

Manure is now routinely composted and used as a nutrient-rich fertiliser for cropping farms, contributing to healthier soils and reducing synthetic fertiliser use.

Eggshell waste from processing plants is also being repurposed.

Some operations now crush and process shells into agricultural lime or feed supplements for livestock.

These innovations not

only reduce landfill but create additional revenue streams for farms.

### Water conservation

Water is a precious resource in Australia's often-dry climate.

Egg farmers are implementing efficient watering systems to reduce usage and waste.

Technologies such as nipple drinkers help ensure hens have access to clean water with minimal spillage.

Furthermore, many farms are capturing and

re-using rainwater, installing tanks and gutters to maximise collection and storage during wetter months.

### Land stewardship and biodiversity

Maintaining healthy farmland is essential to long-term productivity.

Australian egg farmers are investing in native tree plantings, rotational grazing systems in free-range settings and erosion control measures to preserve soil quality and encourage biodiversity.

These practices not only enhance the natural environment but also align with community expectations of responsible farming.

### Data, innovation, and certification

Sustainability gains are being driven by data and technology.

The majority of egg farms use sensors and software to monitor eve-

rything from temperature and lighting to feed and water use.

This precision agriculture approach ensures resources are used efficiently and animal welfare is optimised.

Moreover, many farms are certified under sustainability-focused assurance programs such as Egg Standards Australia.

These schemes provide transparency and build consumer confidence that eggs are produced responsibly.

Sustainability is not a buzzword in the Australian egg industry – it's an operational priority.

Through innovation, investment and collaboration, Australian egg farmers are working to ensure their practices benefit both the planet and future generations of producers and consumers.



Sustainable egg farming is no longer a niche goal but a shared industry priority.

## ACMF at international symposium on avian influenza in Canada

from P1 future direction of our national preparedness activities.

Particularly following the World Organisation for Animal Health ninety-second General Session of the World Assembly of Delegates on vaccination implementation and post-vaccination surveillance, there has been much food for thought and global examples to draw upon in informing the use of these tools.

Overall, the 2025 summit in Newfoundland was crucial for Australia's knowledge-building and prepared-

ness activities, helping to safeguard the poultry industry and maintain Australia's position as a leading producer of high-quality poultry products.

Having hosted the National Avian Influenza Summit in August last year, ACMF found the symposium to be an invaluable opportunity to gain both domestic and global perspectives on HPAI – helping to identify knowledge gaps, explore emerging research and inform future strategies to strengthen our national response.

ACMF

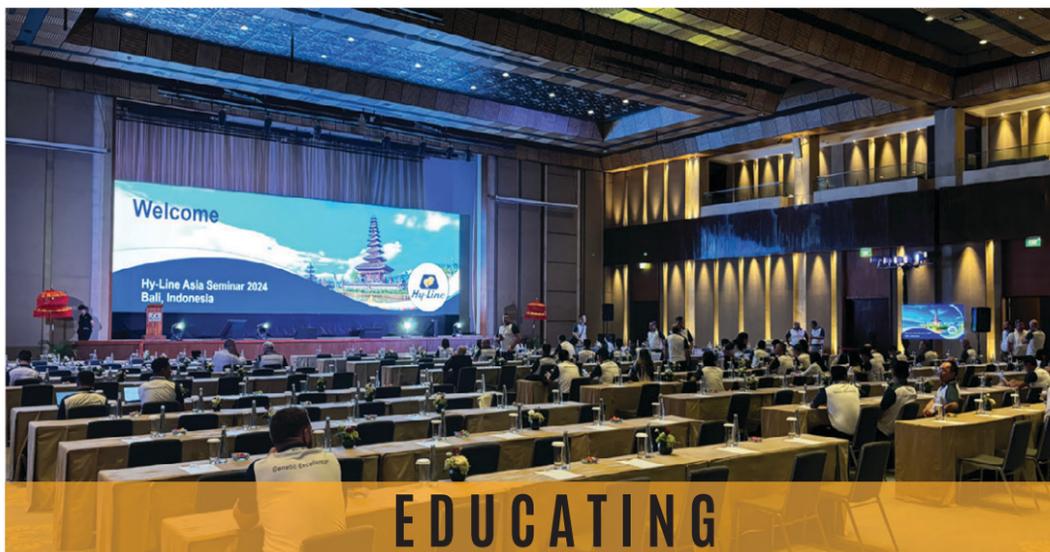


ACMF CEO Dr Mary Wu with Avian Disease Expert Dr David Swayne.

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# EXCITEMENT IS HATCHING AT SBA



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# Egg industry calls for nationwide egg stamping

AUSTRALIA'S commercial egg farmers have called for every egg sold in the country – including those from backyard chooks – to be marked with an identification stamp.

Currently egg stamping laws vary from state to state, with some suppliers being exempt from the practice.

But Egg Farmers of Australia chief executive officer Melinda Hashimoto warned that due to recent poultry disease outbreaks, every egg offered for sale should be stamped to allow authorities to trace them back to the commercial farm or backyard chook owner who sold them.

“We want every egg offered for sale in Australia – commercial or home-grown – to be stamped with a unique registration code for food safety and traceability purposes,” Ms Hashimoto said.

“Some states already require this.

“But currently, there are too many differing rules around Australia.”

Egg stamping involves an ink stamp being applied to each egg in order to trace it back to the farm of origin in the event of poultry disease outbreaks or food-borne illness in humans.

While most large commercial producers have their own trace-

ability systems, smaller farms or backyard chook owners who sell eggs at their local market, may not.

Ms Hashimoto said recent outbreaks of avian influenza and salmonella enteritidis in some states proved that compulsory egg stamping was highly desirable.

“To ensure traceability of all eggs sold for consumption, all states must introduce compulsory egg stamping, with no exemptions,” she said.

“This should apply to both commercial and backyard sellers.

“With the current disease threats, it’s no longer appropriate for a mix of old laws to continue in Australia.”

Food Standards Australia New Zealand is currently reviewing egg production standards.

On the back of the review, Ms Hashimoto said Egg Farmers of Australia wanted all state and territory governments to listen to the commercial egg sector and apply uniform egg stamping laws across the country.



EFA calls for every egg sold in Australia to be identifiable for traceability purposes.

# Promote hen welfare and egg production

AUSTRALIAN Eggs emphasises the importance of managing fowl behaviour to promote maximum hen welfare and egg production.

Injurious pecking is currently the most problematic behavioural issue the poultry industry is facing, with impacts on bird welfare including health and productivity.

As injurious pecking is found in non-beak-trimmed and also in beak-trimmed flocks, the promotion of more natural behaviours with extra environmental enrichment during the rearing period and the laying period is recommended.

## Beak trimming

Even though beak trimming is commonly used in egg production, beak trimming is heavily debated for animal welfare reasons because of the pain or discomfort caused to chicks during and after the trimming procedure.

According to Australian Eggs, managing aggression and cannibalism by way of beak trimming should be used as a last resort to prevent severe pecking and cannibalism.

Animal welfare groups and some regulatory bodies are advocating for the reduction or elimination of beak trimming.



Several European countries – including Denmark, Sweden, Norway, Finland and the Netherlands – have banned or restricted beak trimming.

Providing perches, litter and other objects to allow birds to engage in natural behaviours such as foraging can reduce boredom and aggression.

Feather pecking within the flock can quickly spiral into a damaging habit.

This unwanted behaviour among the birds can stem from various factors, including over-

crowding, boredom, stress or nutritional deficiencies.

## German-engineered Peckstones

Quadrant Farming Solutions now has available German-engineered and produced peckstones that can assist in minimising this destructive habit by reducing boredom and stress within the sheds and yards, while at the same time support healthy metabolism with the inclusion of Ca, Mg, Na and micro minerals.

The encouragement of species-specific behaviour – pecking, beak-grinding, hunting – is

enhanced using Peckstone, along with assisting improved bone structure and plumage in the flocks.

These new Peckstones are ideal for egg-laying hens throughout the rearing and laying periods, offering various grades to suit growth stages.

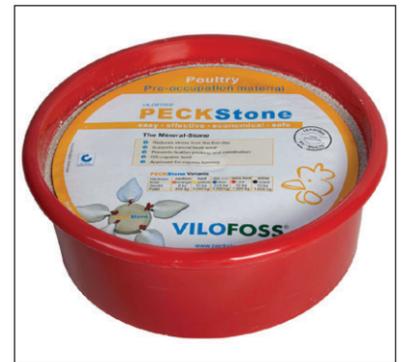
Peckstones are simple to install, easily obtained from Quadrant Farming Solutions and inexpensive – if used according to recommended application ratios, stones to number of birds and weekly ages of bird life throughout the laying period.

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**Stephen Howland**  
Managing Director  
Quadrant Farming Solutions  
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Feather pecking can stem from various factors, including overcrowding, boredom, stress or nutritional deficiencies.



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# Wannon Water solves pump blockage issue

WANNON Water provides water supply and wastewater collection and treatment services to over 30 communities in southwest Victoria.

It is their responsibility to supply fresh water from source to tap and to manage sewage to protect their community's health and wellbeing.

## The problem

In 2022, Wannon Water replaced some very old digester pumps at its Hamilton wastewater treatment plant, with new solids-handling pumps as part of an efficiency upgrade.

These new pumps, though equipped with rag handling technology, struggled to cope with the extra heavy loading of rags and stringy materials in the pumped media.

These new pumps were blocking two to three times per week.

## The solution

During discussions with Wannon Water about the issue, Hydro Innovations regional manager Graeme Spence recommended a trial with Gorman-Rupp's new 'Eradicator Plus' extreme duty solids handling technology, the latest in Gorman-Rupp's 'Super T Series' trash and sewage pump line-up.

Unlike other Gorman-Rupp technologies that are designed to clean the impeller and pass solids to the discharge, the Eradicator Plus cuts and tears items such as rags, wet wipes and rope that would clog other pumps.

Eradicator Plus pumps are equipped with a rugged heavy-duty continuous vane impeller constructed of G-R Hard Iron.

They also come standard with an extra-thick G-R Hard Iron wear plate that has an over-sized lacerating tooth designed to cut and shred organic solids before they enter the interior of the pump.

## The results

Wannon Water decided to trial the new technology.

At the time of writing, the new system had been in place for eight weeks without a single blockage, confirming the solids-handling capability of Gorman-Rupp's latest technology to handle these extreme applications.

The Eradicator Plus is available in three hydraulic sizes – 3", 4" and 6".

Because the system is an extension of Gorman-Rupp's proven Super T Series range, it will fit onto the same footprint as similarly sized 'standard' versions.

Upgrade kits are also available for those Super T Series asset owners who are experiencing increased occurrences of clogging.

For abrasive applications, Eradicator Plus pumps are available with high chrome impeller and wear plate.

## Product development

Gorman-Rupp first introduced its 'T Series' pump in 1963.

It was the first self-priming pump specifically designed for handling domestic sewage.

The pump needed to be able to prime and re-prime completely unattended, handle large solids and be safe and easy for operators to maintain.

It achieved all these things and was the dominant market leader in this field for 63 years.

In the year 2000, Gorman-Rupp released an upgraded version of this technology called the 'Super T'.

It was designed to fit onto the same footprint and be hydraulically identical so that existing customers could upgrade without any changes to their base arrangement or piping.

There were some significant internal upgrades though.

The new pump introduced an internal clearance adjustment system that allowed operators to adjust clearances in minutes, without the use of shims and without having to remove pump guards or open the pump.

Gorman-Rupp also added a double lip seal and an atmospheric vent to protect the bearings in case of a seal failure.

The seal oil chamber volume was increased to safeguard the seal when priming long suction lines, and pusher-bolt capability was added to the inspection cover-plate and the rotating assembly to help operators work on pumps that may not have been opened for five, 10 or more years.

As the use of 'flushable' wet wipes increased and water savings initiatives started increasing the solids to water ratio, pump blockages at sewage pumping stations, sewage treatment plants

and industrial manufacturing plants began to rise.

Gorman-Rupp met the challenge by introducing their 'Eradicator Solids Management System' in 2016.

The system is designed to continuously scrape stringy materials from impeller vanes to minimise the chances of blockages.

Not prepared to rest on its laurels, Gorman-Rupp then developed a pump that could handle materials that could cause blockages even to its Eradicator pumps.

The Eradicator Plus was the result of this research and development.

This technology is designed to cut, chop

and shred materials that could block other pumps.

To ensure longevity and reliability, these pumps come standard with stainless-steel shafts and hardened impellers and wear plates.

For extremely tough or abrasive applications, pumps are available with optional high chrome impellers and wear plates.

For further information regarding the extensive range of Gorman Rupp self-priming pumps and the services Hydro Innovations is able to offer to remedy your wastewater, sewerage, aeration and any pump issues, visit [www.hydroinnovations.com.au](http://www.hydroinnovations.com.au) or phone 02 9898 1800.



Wannon Water trialled the new technology, which has been in place for eight weeks without a single blockage, confirming the solids-handling capability of Gorman-Rupp's latest technology to handle extreme applications.

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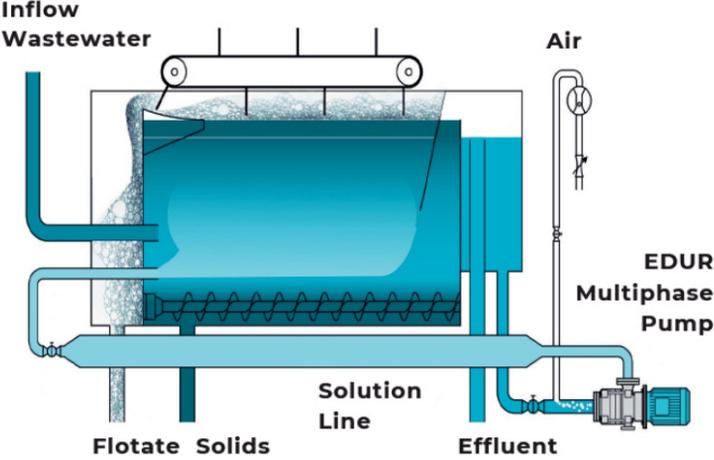
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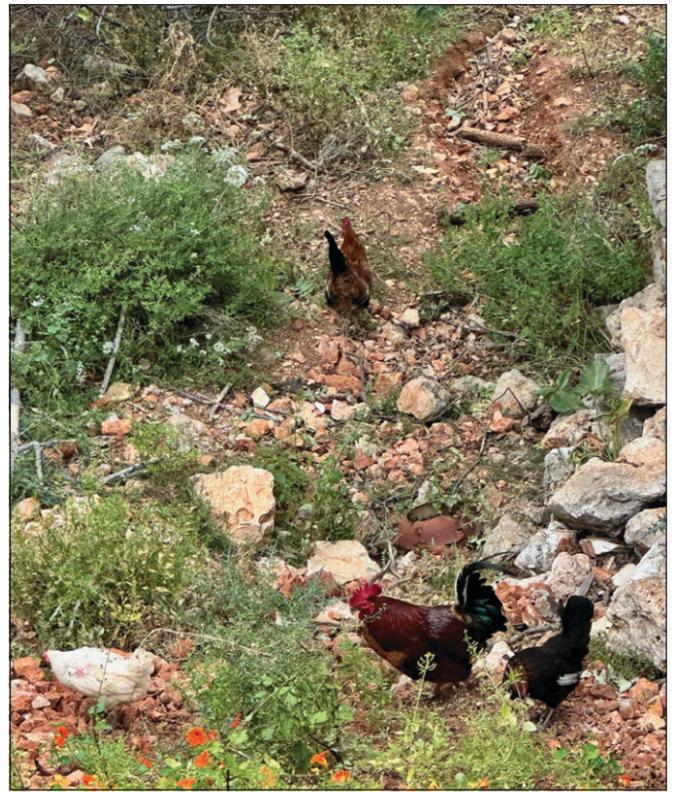
A proud gander protecting his girls.



A pair of free roaming turkeys and poult in Croatia.



A free ranging hen in Greece had her welfare needs seemingly wired. Life for her on the other side looked sparse and a bit rocky.



Happy free ranging rooster and his hens spotted by the author as he wandered around a Greek island in May.

## Recognising chickens as companions

WHILE wandering around Greek islands and Croatia a couple of months back, I was often delighted to come across free roaming poultry, including chickens, turkeys, ducks and geese.

What I was seeing of course were loosely housed and loosely kept domestic stock.

It was however refreshing for me because it's not something seen too often in Australia, certainly not in suburbia.

Local laws and the cunning killing habits of our long ago introduced foxes see to that.

While I recently encouraged good friend and former butcher Jamie to restart and refresh his long-departed father's backyard chook pen and stock it with three point of lay Hy-Line Brown pullets, I can't see them wandering the nearby busy gardens of the suburban Perth coastal neighbourhood where they are housed.

Yet he has, to his

Cant  
Comment  
by BRENDON CANT



credit, made massive adjustments to the chook pen's surrounding garden, so that his now much-loved girls can roam free, foraging in weedy patches and garden beds.

While he's getting a little frustrated that the only eggs in the three boxes he so carefully made and stashed with straw are fakes to encourage them to happily lay in the idyllic spaces so kindly provided, he needs to bide his time as his 'girls' must patiently also bide theirs.

It's all a matter of maturity, as I keep telling him.

All three of these beautiful brown birds, purchased from my good friend and vet-

eran chook farmer Ian Wilson of Fremantle Egg Company in Munster, have become virtual pets, following Jamie whenever he enters their little 'paddock' to pick lemons or top up their feed, or check – needlessly and prematurely – for eggs.

They are real characters and have become very welcome additions to the family home for him and his 96-year-old mother Shirley.

Aside from a canary – a good whistling Red Factor – the home had been devoid of animal life for many years.

In thinking about and indeed now writing about how positively backyard chickens can

improve the lives of the humans they share with, I am reminded of a recent SBS *Insight* program, which discussed the pros and cons of pet ownership.

One studio guest was a mum who told of her daughter having a pet chicken as a support animal.

Her daughter had some mental health issues and would take her pet chicken everywhere with her, including school.

While people are becoming more aware

of companion/support animals, they're usually exposed to dogs.

So some, the mum said, were more than a little surprised to learn of the chicken's role in comforting her daughter.

This says a lot really and goes to show what sentient and sensitive animals chickens are, and why they simply must be given the best possible lives while they so earnestly support us with their eggs and meat, and companionship too.



One of Jamie's much loved Hy-Line Brown hens tested the fence boundary before having a wing clipped.



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# Slow uptake of slow-growing broilers

EVIDENCE demonstrates that slow-growing broiler chickens experience significantly better welfare compared to their fast-growing counterparts.

Despite this, changeover to slow-growing strains in broiler production is slow.

The paper 'Stakeholder views on shifting UK chicken meat production to slower-growing broilers' examines, from stakeholder perspectives, factors that are limiting this transition.

Interviews were undertaken with representatives from broiler breeding and producer companies, assurance schemes, retailers, welfare charities and government bodies, as well as poultry veterinarians and welfare scientists, totalling 30 participants.

Despite broad agreement with welfare enhancements offered by slow-growing strains, concerns about de-

creased land use efficiency, increased cost and inability to meet carbon emission targets were widely expressed.

Slow-growing chickens require more resource and time input to produce the same quantity of meat, with producers articulating concerns about insufficient infrastructure, space and supply of slow-growing broilers to meet demand.

All respondents acknowledged probable environmental implications of a transition to slow-growing strains.

A consumer-citizen gap, in which citizens aspire to purchase higher welfare products yet consumer behaviour preferences affordable products, was highlighted.

Despite this, social licence remains a motivator for retailers.

The article highlights that trade-offs between welfare intentions, environmental sustainability,

pressure to meet net zero targets and consumer demand are likely stalling progress.

Industry representatives balance reputational risks against business risks, with consumers' behaviour clearly indicating a requirement for cheap chicken despite expressing intentions to purchase higher welfare products.

Participants within the welfare and science segment of the industry suggest that consumer expectations must change, and other positive impacts such as enhanced producer wellbeing, reduced disease and reduced antibiotic use will balance out sustainability concerns.

They suggest the food system needs trans-

formative change.

The authors highlight an urgent need for accurate economic and environmental modelling to guide the industry on the best way forward for production sustainability and chicken welfare alike.

Scan the QR code below for the full paper on 'Stakeholder views on shifting UK chicken meat production to slower-growing broilers'.

RSPCA Science Update



Scan for the full paper.



From UK stakeholder perspectives, decreased land use efficiency, increased cost and inability to meet carbon emission targets were widely concerning issues for changing over to slow-growing broiler breeds.

# Animals in research and education

RECENT focus in animal research has centred on replacement, reduction and refinement – the three Rs.

The extent of 'replacement' is affected by systemic challenges impeding researchers and funders to identify potential replacement options.

A review presented by Replacing Animal Research examines procedural barriers to replacement and suggests a practical 'replacement checklist' to support both researchers and funders.

The authors highlight that replacement should be considered in the initial study design phase of a project.

However, the current system requires replacement options to be considered only at the funding application stage.

Too often replacement options are reviewed as an after-thought in experimental models reliant on use of animals to answer a research question, rather than a priority of experimental design from the outset.

Researchers are expected to investigate a field in which they are likely unfamiliar – non-animal technologies and methods – with limited and non-specific guidelines on how to do so.

The authors highlight that the suggested systemic review approach is time-prohibitive and ineffective at identifying replacement options.

Likewise, funders are unqualified to deter-

mine whether sufficient interrogation of non-animal replacements has been conducted, resulting in animal-based methods being green-lighted when alternative options such as computer modelling, use of human tissues or established cell lines could have been appropriate.

The authors offer the replacement checklist to support researchers, funders and ethics committees.

The checklist incorporates six questions – what, where, when, who, how and why.

Guidelines on 'what' and 'where' to search and 'who' to approach guide investigation outside of traditional peer-reviewed research such as 'grey' literature, white papers, expert opinion and networks.

The question 'when' reminds researchers to remain up to date with the growing body of knowledge on replacement options.

Researchers should also demonstrate to relevant stakeholders 'how' their investigation was conducted and 'why' replacement methods were or were not suitable.

Scan the QR code below for the full study.



Scan for the full study.

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# Deep dive into innovative duck breeders



William Cook from Kent in England introduced the Buff Orpington to the world.



Silver Appleyards, as developed in Australia, have become one of the more popular exhibition breeds.

THE late 1800s saw the development of some of the more popular breeds of duck, at a time when breeders were striving to combine the characteristics of good table birds with high egg laying ability.

At that time, the table duck industry centred around two breeds – the Aylesbury and the Pekin – both of which have white plumage and therefore dress out as a clean carcass, with none of the obvious pin feathers that coloured breeds have.

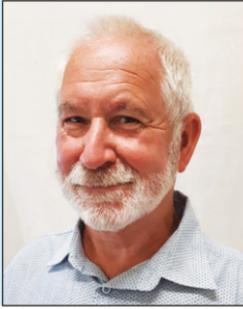
However, neither of those breeds were noted for high egg production, though the Pekin did have better laying ability than the Aylesbury.

Another breed that was available at that time was the Rouen, a French breed with the distinction of being almost identical in colour to the wild Mallard, the ancestor of almost all domesticated ducks – the one exception being the Muscovy, which is descended from a distinct species from Central and South America.

Though the Rouen grows to a similar size

## Rare Breeds

by GRANT ANDREWS



to the Aylesbury, its dark plumage and slower growth rate meant that it was not as popular as a table breed.

Around the same time, the first of the high egg laying breeds, the Indian Runner, was introduced from the Far East.

Unfortunately, the Runner had no claim to being a table bird – its upright running gait being at odds with the development of a plump carcass.

The original Runners occurred in a variety of colours, including fawn, fawn and white and white, but many other colour varieties have been developed over the years.

It was from the blending of the fawn and white Indian Runner and the Rouen, with a dash

of the wild Mallard, that a Mrs Campbell of Uley in Gloucestershire in England developed the Campbell breed of duck, with the intention of it being a good layer and providing a useful carcass for a family meal.

She introduced her breed to the public in about 1898 but, wishing to breed a more attractive buff-coloured duck, continued with her breeding program until she achieved her goal, and introduced what came to be known as the Khaki Campbell in 1901.

The extraordinary laying ability of the Khaki Campbell, together with its ability to produce a usable carcass, quickly saw it become one of the most popular breeds.

Individual ducks laying over 300 eggs in a year were quite common in the early years of this breed's development and, in laying tests, birds run as a flock consistently averaged over 200 eggs per year.

As the breed grew in popularity, a club was formed to promote it – the breed being accepted into the poultry standards in 1924.

For many years, the Khaki Campbell enjoyed popularity in Australia and was readily available as day-old ducklings from various hatcheries.

However, the latter years of the twentieth century saw its popularity dwindle and today it is more likely to be encountered as an exhibition bird rather than as a commercial supplier of duck eggs.

An offshoot of the Campbell breed known as the Welsh Harlequin possesses the excellent egg-laying ability of the Campbell, yet it too is more likely to be encountered on the show bench than as a purely utility bird.

Around the same time that Mrs Campbell was developing her ducks, the poultry industry in the United Kingdom was experiencing a period of rapid growth.

One of the great entrepreneurs of that time was William Cook, who had his poultry farm at Orpington in Kent in England, where he bred both fowls and ducks.

He is probably best known for introducing the Orpington breed of fowl to the world, which he championed along purely utilitarian lines.

Introduced into Australia, the Orpington fowl was further developed into the Australorp breed, which was one of the dominant laying breeds of chicken here until the 1990s.

However, not to be outdone by Mrs Campbell's Khaki Campbell ducks, Cook set about developing his own version of a buff duck, which he introduced to the world as the Buff Orpington.

The Orpington duck didn't prove to be as good a layer as the Campbell, however as a dual-purpose breed it is not to be despised.

Nevertheless, as for the Campbell duck nowadays, it is more likely to be kept as an exhibition breed, where it is admired for its very attractive buff plumage.

Another great entrepreneur of the early twentieth century was Reginald Appleyard, who ran the Priory Waterfowl Farm near Ixworth in Suffolk, England.

As well as specialising in breeding many kinds of duck and goose, Appleyard was responsible for developing what could be considered among the first of the specialist broiler style fowls, when he devel-

oped the Ixworth chicken.

Like Mrs Campbell and William Cook, Appleyard set out to develop a white-skinned duck with plenty of breast meat that could lay a large quantity of white eggs.

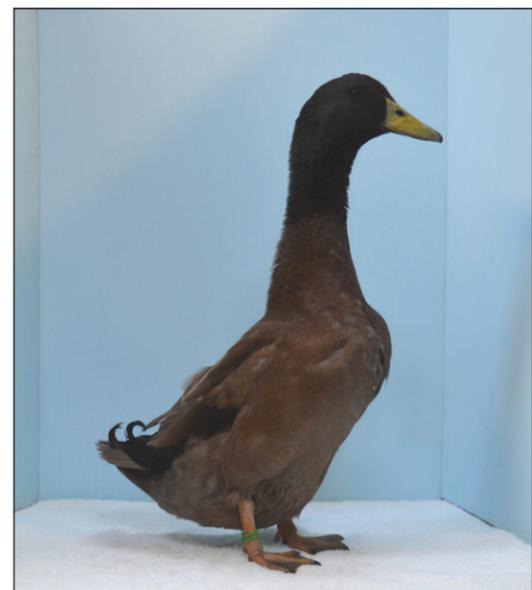
One of Appleyard's stated aims was that his breed of duck should be beautiful as well as having good utility qualities.

Starting in the 1930s, he continued with the development of the Appleyard ducks until his death in 1964.

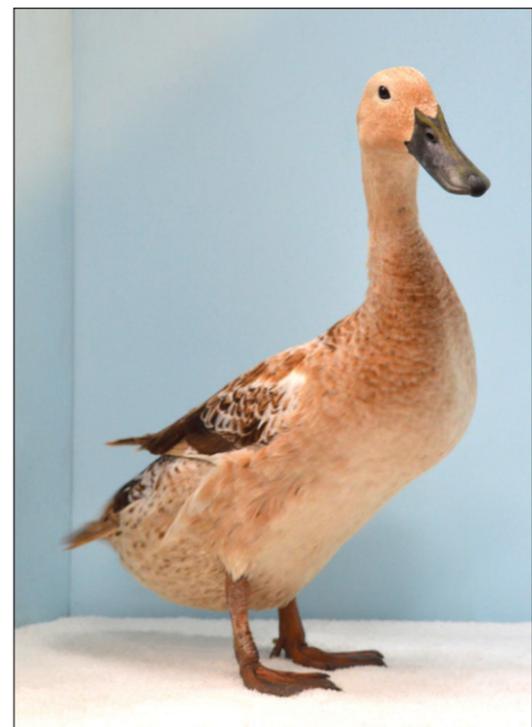
In his lifetime, he never produced a standard for his new duck breed, and it wasn't until 1984 that the Silver Appleyard breed was accepted into the British standards.

Silver Appleyards, as developed in Australia, have become one of the more popular exhibition breeds and are exhibited in both a standard and bantam version.

Many waterfowl fanciers enjoy the challenge of perfecting their markings, and ducks that don't make the grade for exhibition purposes usually find backyarders who are willing to take them on for their beauty and the steady supply of eggs that they produce.



Mrs Campbell from Uley, Gloucestershire in England introduced what came to be known as the Khaki Campbell in 1901.



An offshoot of the Campbell breed, the Welsh Harlequin possesses the excellent egg-laying ability.



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# Greater investment in biosecurity for Queensland

QUEENSLAND United Egg Producers welcomes the \$817.2 million Primary Industries spend and strongly supports the Queensland Crisafulli Government's goal of creating a \$30 billion primary production output by 2030, as outlined recently in the government's first budget.

This investment and future investments will be guided by the government's 25-year 'Primary Industries Prosper 2050' blueprint process, which is now calling for regional representatives from all industries to help guide regional five-year plans.

Some of the key high-

lights for the egg industry include the below.

A sum of \$60.9 million directed at bolstering Queensland's biosecurity efforts, including the employment of 100 additional frontline staff.

Following a meeting with Minister Perrett recently, we understand the recruitment is well underway for these new positions.

This is a critical investment for our industry now as we continue to monitor and prepare for any possible HPAI H5N1 and H7N8 incursions in Queensland.

A sum of \$51.9 million over four years to support the Farm Business Resilience Program, Regional

Drought Resilience Planning Program and Drought Preparedness Grants.

A \$30 million 'Sowing the Seeds of Farming Innovation Fund', which aims to back Queensland-first projects, promoting new technologies and techniques to future-proof agriculture in Queensland.

The strong investment and collaborative approach by the government in primary industries is a reassuring signal for our industry and QUEP is looking forward to working with the Minister, his team and the government.

**Candice Stower**  
Executive Officer  
QUEP

## APSS 2026 second announcement

THE Australia Poultry Science Symposium organising committee is excited to announce that the Paper-Submission Portal and Pre-Registration sites for APSS 2026 are now both live.

The online paper submission portal will be open for three months, commencing July 1, 2025.

If you wish to be part of next year's symposium, don't delay – submit your paper as early as possible.

Note that once your paper is accepted, you are expected to attend and present it at the conference, which will be held from February 9-11, 2026.

Authors who do not register by the Author

Registration Deadline will not be included.

### Important key dates for authors

**Jul 1, 2025 – Paper Submission Opens**

Full paper submission can be submitted by visiting the website, creating an account and uploading your paper to the online platform.

**Sep 30, 2025 – Paper Submission Closes**

Full paper submission deadline, acceptance of submissions made after this date will be at the discretion of the organising committee.

**Oct 1, 2025 – Online Registration Opens**

Credit card payment will be required when registering online.

If you are unable to register online or need to register prior to Oc-

tober for visa purposes, contact Jo-Ann Geist for a manual registration form.

**Dec 15, 2025 – Author Registration Deadline**

Registration to be completed by authors with accepted papers for presentation otherwise they will be withdrawn from the program.

Alternatively, if you are simply planning to attend APSS 2026, we encourage you to pre-register for the event.

Pre-registered delegates will receive personalised reminders for all of our registration deadlines and will have access to our Early Bird rate, which will give you 5 percent off your registration.

Save the dates and start writing up your papers.

We look forward to seeing everyone again next February.

**APSS 2026 Organising Committee**



Scan to pre-register for APSS 2026.



Scan to submit a paper (by Sep 30).



The author with Egg Farmers of Australia chief executive officer Melinda Hashimoto.

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# Understanding how ducks resist AI through analysing genetic responses

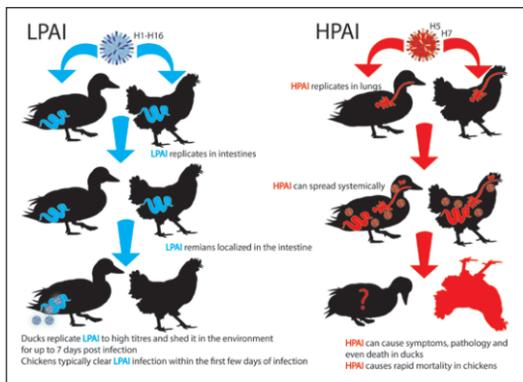


Figure 1. Tissue tropism and disease outcome of low pathogenic avian influenza (LPAI) versus highly pathogenic avian influenza (HPAI) in ducks and chickens. LPAI strains (H1-H16) replicate in the intestine and remain localised in both species, though ducks shed virus longer. In contrast, HPAI strains (H5, H7) replicate in the lungs and can spread systemically. While ducks can show variable outcomes, chickens experience rapid mortality.

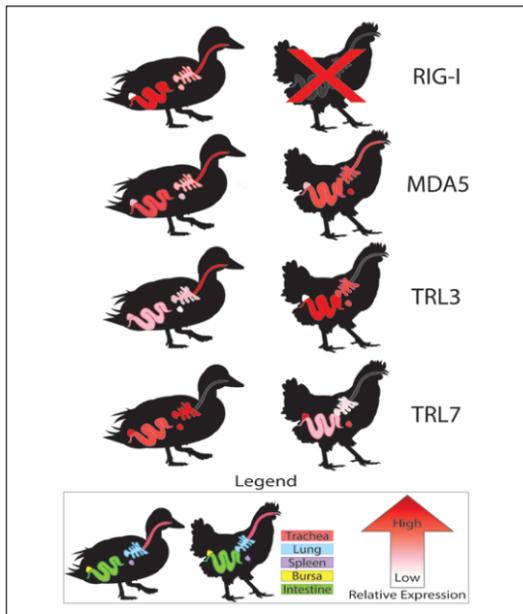


Figure 2: Baseline tissue expression of viral pattern recognition receptors in ducks and chickens. RIG-I is absent in chickens and is strongly expressed in duck tissues targeted by influenza virus. MDA5, TLR3 and TLR7 also show species- and tissue-specific expression differences. Relative expression is represented by colour intensity in five key tissues: trachea, lung, spleen, bursa and intestine. Modified from Figure 2 from Campbell & Magor, 2020 – scan the QR code for *Frontiers in Cellular and Infection Microbiology* article.

WITH highly pathogenic avian influenza continuing to spread globally, affecting both wild birds and devastating commercial poultry, there is increasing pressure to understand the mechanisms of resistance some species display.

Mallard ducks and other dabbling ducks are natural carriers of avian influenza virus and can shed large amounts of virus while showing few or no signs of illness.

In both ducks and chickens, low-pathogenic strains typically replicate in the intestines (see Figure 1).

Highly pathogenic avian influenza strains, in contrast, replicate primarily in the lungs and can spread systemically to other tissues in both species.

While HPAI infections in ducks can sometimes cause little to no clinical disease, they can also lead to severe illness or death, depending on the strain.

In chickens, HPAI infections are consistently severe, often fatal within days.

Recent outbreaks of H5 and H7 HPAI strains have devastated poultry industries in multiple countries, leading to the culling

of millions of birds and major disruptions to egg and meat production.

Dr Lee Campbell, now based at the University of Sydney, studied the complex genetic resistance mechanisms between ducks and AIV during her PhD in the lab of Dr Katharine Magor at the University of Alberta in Canada.

Lee's PhD research investigated how ducks respond to LPAI and HPAI at the genetic level, aiming to understand how reservoir hosts, such as ducks, avoid severe disease despite high levels of viral replication.

Understanding how ducks tolerate infection is more than academic.

It could help identify risk factors for outbreaks in poultry, improve surveillance and inform breeding or vaccine strategies to increase disease resistance in chickens.

Earlier work from the Magor lab looked at how ducks detect influenza virus through specific immune sensors, called pattern recognition receptors, and compared this to chickens.

Several PRRs, including RIG-I, MDA5, TLR3 and TLR7, recognise viral RNA and help trigger early immune responses.

Ducks and chickens differ in baseline expression levels of these receptors in tissues where LPAI and HPAI replicate (see Figure 2), likely contributing to species-specific differences in early responses and viral susceptibility.

RIG-I especially is an important detector of IAV replication in ducks and is notably absent in chickens. When activated, the RIG-I pathway turns on interferon responses that help limit viral spread early in infection.

Much of what was known about the duck response to AIV came from studies focusing on individual genes or single tissues.

To gain a broader picture, the team conducted transcriptomic analysis of Pekin ducks infected with two different influenza strains – a HPAI H5N1 strain (VN1203) and an LPAI H5N2 strain (BC500).

This analysis looked at how thousands of genes changed in expression across key tissues, lung, spleen and intestine, during the first three days of infection in Pekin ducks.

The highly pathogenic VN1203 virus, which replicates in the lungs and spreads systemically, triggered strong gene responses in both the lung and

spleen (see Figure 3).

Thousands of genes were activated each day, including many involved in antiviral defence and inflammation.

In contrast, the low pathogenic BC500 virus replicated in the intestine and induced fewer changes, with most gene responses peaking only at two days post-infection.

Despite the large differences in severity between LPAI and HPAI strains, ducks activated a shared set of core immune genes in response to both strains.

These included well-known viral sensors such as RIG-I, MDA5, and TLR3, which initiate early antiviral defences.

This consistent localised response may be key to how ducks control initial infection without becoming ill.

Interestingly, the virus replicated – lungs for HPAI VN1203 and intestines for LPAI BC500 – showed not only strong activation of antiviral genes but also selective suppression of inflammatory genes.

For example, ducks infected with VN1203 showed reduced expression of some pro-inflammatory cytokines in the lung, while ducks infected with BC500 down-regulated genes involved in immune cell

continued P11



Dr Lee Campbell studied the complex genetic resistance mechanisms between ducks and AIV during her PhD. In the Sydney School of Veterinary Sciences, she is also a member of both the Poultry Research Foundation and the Sydney Infectious Disease Institute.

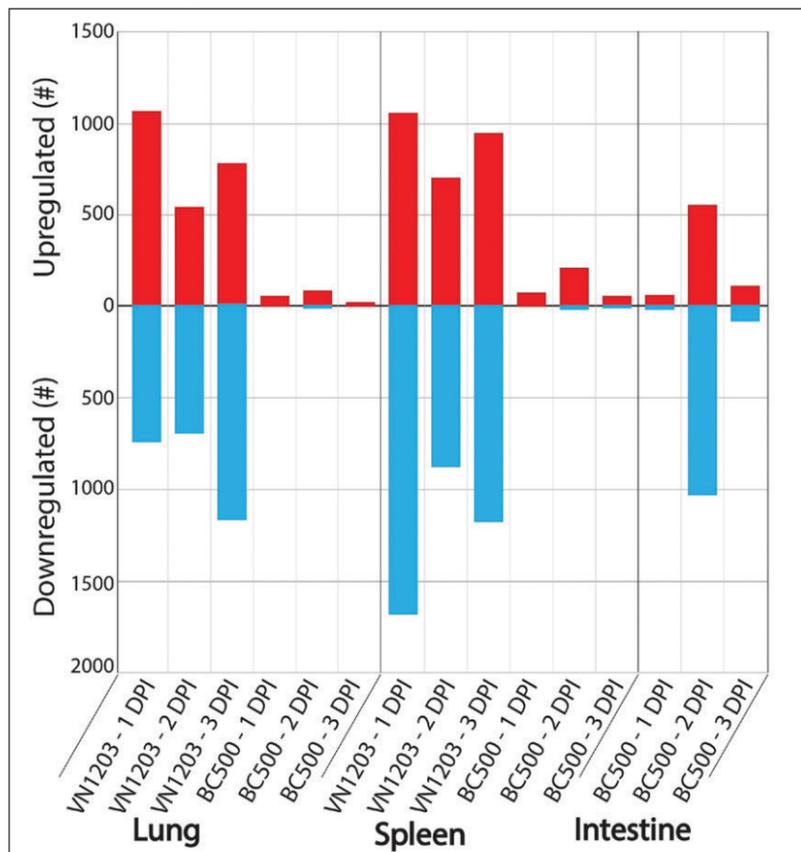


Figure 3: Number of genes upregulated (red) or downregulated (blue) over the first three days of infection with either HPAI H5N1 (VN1203) or LPAI H5N2 (BC500) in lung, spleen and intestine of Pekin ducks. VN1203 induced strong responses in lung and spleen, while BC500 responses were more restricted and peaked at 2 DPI in the intestine. Modified from Campbell et al., 2021, using data from Table 1. – scan the QR code for *Frontiers in Immunology* article.

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## Aussie Pumps

# Understanding how ducks resist AI through analysing genetic responses

from P10 recruitment and complement activation in the intestine.

This suggests that ducks not only mount a strong antiviral response but also actively limit damage in the tissues most affected by infection.

Together, these results suggest that ducks use both global and tissue-specific strategies to control influenza virus.

Their response appears early and localised – they activate antiviral defences quickly and shut these responses down quickly, limiting inflammation (see Figure 4).

This response likely helps ducks inhibit

out-of-control viral replication without becoming ill.

In contrast, chickens tend to have a delayed response to infection, likely due in part to the absence of the viral sensing pattern recognition receptor RIG-I.

This delay allows the virus to replicate to higher titres before an antiviral response is activated.

This can cause a stronger inflammatory response, leading to greater tissue damage.

These insights may help identify genetic or immune pathways that could be leveraged to improve disease resistance in more susceptible species such as chickens

Dr Campbell's work at the University of Sydney will focus on characterising intracellular immune responses to AIV in native Australian wildlife.

She aims to explore how wild bird species respond to AIV compared to domestic ducks and chickens.

Understanding these differences in immune responses between different species could aid in surveillance and management strategies, especially as H5 strains continue to circulate in wild birds and poultry globally.

This article summarises findings from published studies in *Frontiers in Immunology* and *Frontiers in*

*Cellular Infection and Microbiology* – scan the QR codes below.

The University of Alberta, St. Jude Children's Research Hospital and funding from the Natural Sciences and Engineering Research Council of Canada and Canadian Institutes of Health Research made these studies possible.

For more information, contact Dr Lee Campbell at the University of Sydney at [lee.campbell@sydney.edu.au](mailto:lee.campbell@sydney.edu.au)



Scan for the full article published in *Frontiers in Immunology*.



Scan for the full article published in *Frontiers in Cellular and Infection Microbiology*.

# Australia's food celebrity couple is bacon and eggs

WHEN you think of celebrity couples that work well together you might think of Prince William and Princess Kate.

But what is the food world's equivalent?

The answer is simply bacon and eggs, of course.

At least that's according to Egg Farmers of Australia chief executive officer Melinda Hashimoto, who recently congratulated the nation's pork and bacon industry on providing a top-tier product.

Her message was issued in the lead-up to the country's annual BaconFest in Kingaroy Queensland on August 15-16.

"Nothing can beat the culinary coupling

of bacon and eggs for a hearty breakfast, and both our egg farmers and pig farmers work tirelessly to provide Aussie families with world-class ingredients," Ms Hashimoto said.

"Bacon and eggs really are the food world's celebrity couple, the pairing even spending time in the fridge together."

Food historians suggest that eggs have been eaten for more than 6000 years, while bacon dates back 3000 years – making it one of the oldest specific cuts of cured meats in history.

Individually, the combination of bacon and eggs as a breakfast coupling was boosted in the US in the 1920s by Edward Bernays,

the father of modern-day public relations.

He surveyed doctors about the best type of breakfast to eat and used the data – suggesting heavy proteins – to push bacon and eggs to the top of the breakfast menu.

"While it was essentially an agricultural food promotion, today the combination of bacon and eggs continues to remain the king of the breakfast table," Ms Hashimoto said.

"That's why Kingaroy BaconFest is a good time to acknowledge pork and eggs together, as two important industries in Australian agriculture."

For more information and tickets to Kingaroy BaconFest, visit [www.kingaroybaconfest.com.au](http://www.kingaroybaconfest.com.au)



Bacon and eggs – the celebrity match of Australia's food world.

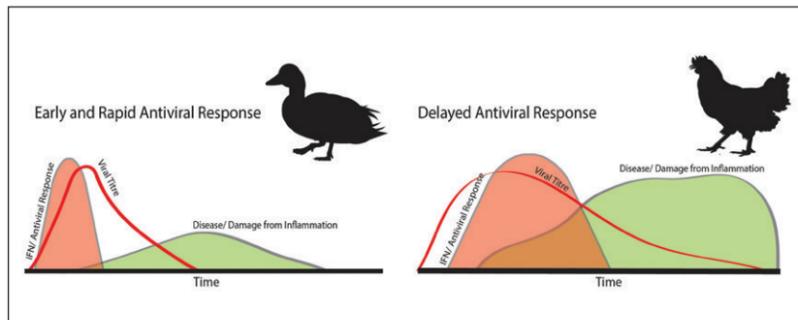


Figure 4. Comparison of early and rapid antiviral response in ducks versus delayed antiviral response in chickens. Ducks mount an early interferon (IFN) response that limits viral replication and reduces inflammation. In contrast, chickens have delayed IFN activation, allowing virus to reach higher titres and triggering greater inflammatory damage.



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# Global market update

THE global poultry industry has seen a relatively strong start to the year, sustained by rising animal protein prices and lower feed costs compared to last year.

However, recent developments – including the announced (and postponed) US import tariffs, bird flu outbreaks in key regions and the Israel-Iran conflict – are introducing significant uncertainty.

According to RaboResearch's latest animal protein report, these factors are poised to impact global trade and market dynamics substantially.

Despite strong fundamentals for the global poultry market, supported by high beef and egg prices and stable feed costs, geopolitical tensions are weighing on the global economy.

The International Monetary Fund has downgraded its global gross domestic product growth forecast by 0.5 percent.

This uncertain economic environment, coupled with avian flu outbreaks, is affecting poultry market stability.

RaboResearch senior analyst animal protein

Nan-Dirk Mulder said: "While global markets are expected to remain resilient, regional variations are likely, influenced by geopolitical events, their economic repercussions and the evolving bird flu situation."

The US imposition and subsequent postponement of significant import tariffs in April have left the possibility of a trade war looming.

Should trade agreements be reached, the US poultry sector could expand its market access, potentially disadvantaging local producers or competing exporters.

Conversely, a prolonged trade war could restrict US access, benefiting other exporters such as Brazil, Thailand, Russia and the European Union.

Both scenarios carry economic implications, with a trade war potentially leading to price inflation, particularly affecting economies with the highest tariffs – notably in Asia and Africa – and indirectly influencing poultry markets.

Additionally, the global feed ingredient market's reliance on a few countries could

lead to short-term volatility and a heightened focus on resource security in the long term.

The development of the Israel-Iran war could affect global economic growth and the chicken industry.

The Middle East is a significant import market for poultry, and an escalation of the conflict may affect global trade.

Brazil, and to a lesser extent the US, Turkey and Ukraine, are major exporters to the Middle East.

Increasing conflict could heavily affect their exports, in addition to any impacts on local industries.

Bird flu outbreaks, along with potential tariff impacts and geopolitical developments, including the Israel-Iran conflict, are likely to disrupt trade dynamics.

"The Brazilian bird flu outbreak in May has significantly affected global trade, with 40 percent of Brazilian exports blocked by major importers," Mr Mulder said.

"The hatching egg trade is also severely impacted by outbreaks in Europe, Brazil, the US and previously in New Zealand."

# Aussie Pumps backs poultry industry

IT'S exciting to read this publication and see the opportunities for growth in this very important Australian industry.

The only downside is the potential for outbreaks of high pathogenicity avian influenza, which occurred in several areas across eastern Australia in 2024.

We know strains have been spreading globally, causing widespread outbreaks and significant deaths of poultry.

At Aussie Pumps, we are working on developing high-pressure steam cleaners to sterilise by using super reliable Australian-designed portable trolley-mounted steam cleaners.

The machines, Aussie's Admiral series, can produce 3000psi pressure with 19LPM flow.

Steam is infinitely adjusted by the operator, with maximum temperatures up to 130C.

It is those high temperatures from these machines that can have a very positive effect on killing germs and sanitising sheds, virtually at every step in the chicken growth cycle.

The machines are built to last, with stainless-steel covers, steel chassis – not polyester or plastic material – and four wheels for ease of

movement around the shed.

The high-pressure triplex pumps are heavy-duty slow speed, running at 1450rpm, from heavy-duty three-phase electric motors, four-pole slow-speed IP56 rating.

Aussie Pumps chief engineer John Hales said, "We learnt during the COVID crisis that temperatures above 60C were capable of completely sanitising surfaces."

"The machines also have an inbuilt high-pressure detergent injection system that enables the operator to pre-wash applications and then steam clean after the detergent has done its job."

The pump-motor combo is not close coupled but has a flexible coupling between the motor and pump for a smoother and much cooler drive.

This is important when cleaning during Australia's hot summers.

Machines come with a low water cut out warning light that prevents damage to the machine in the event of running out of water.

A low fuel sensor and warning light is also part of the control system.

For the operator, using the machine is easy with minimised maintenance

due to the 'Timed Total Stop'.

This is an auto shut-down when the gun has been closed off for a set amount of time.

The machines also feature micro-leak detection, so if there is a leak anywhere in the system, the operator becomes aware of it and can carry out rectification work immediately.

The Aussie Admiral also features a safety thermostat to protect the pump.

"We've tried to think of everything the poultry industry would need in designing the features on this machine," Mr Hales said.

**Upgrade to 4000psi**  
The Aussie Admiral is also available using a pressure pump that delivers 4000psi with a maximum steam capability of 130C.

Powered by a 6.6kW three-phase 415V motor, this machine is capable of completing tasks faster and more thoroughly because of

the high pressure and temperature combination.

"These machines are perfect for operation in a shed," Mr Hales said.

"It should be noted that even the steel chassis we designed for this machine has a built-in bumper at the front and a large 18-litre fuel tank to enable operation for long periods.

"The standard machines come with a mild steel heavy-duty coil.

"For areas where water may have corrosive elements, a stainless-steel coil is also available."

These machines match perfectly with a combination of our heavy-duty cast iron and 316 stainless-steel self-priming pumps.

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# Costs of transitioning livestock sector to net zero under future climates

WHILE practices for reducing or removing greenhouse gas emissions abound, little information exists on the combination of practices required to reach net-zero emissions, the cost of transitioning to net-zero or how carbon removals may change under hotter and more variable conditions expected with climate change.

In a recent paper, 'Costs of transitioning the livestock sector to net-zero emissions under future climates', researchers – including co-author Professor Matthew Harrison from the Tasmanian Institute of Agriculture at the University of Tasmania – assessed pathways for transitioning livestock farms to net-zero GHG emissions.

Using a co-design approach with industry stakeholders, they modelled the impacts of several combinations of practices for reducing and removing GHG emissions:

- Improving soil carbon storage by grazing management and pasture renovation
- Improving carbon storage in vegetation by planting native tree species on farm
- Improving livestock feed conversion efficiencies (essentially allowing animals to put on more weight with the same amount of feed intake)
- Adopting anti-methanogenic feed additives such as asparagopsis or biochar to inhibit enteric methane emissions
- Revenue diversification with renewable energy (wind turbines) or irrigated grapevines to reduce dependence on rainfall for income.

This research shows that few interventions enhanced productivity and profitability while reducing GHG emissions.

Antimethanogenic feed supplements and planting trees afforded the greatest mitigation, while revenue diversification with wind turbines and adoption of livestock genotypes with enhanced feed-conversion efficiency were most conducive to improving profit.

Serendipitously, the intervention with the lowest social license – continuing the status quo and purchasing carbon credits to offset emissions – was also the most costly pathway to transition to net-zero.

In contrast, stacking several interventions to mitigate enteric methane, improve FCE and sequester carbon entirely negated enterprise emissions in a profitable way.

The researchers concluded that costs of transitioning to net-zero were lower when interventions

were bundled and/or evoked productivity co-benefits.

The research was aimed at small and large producers, assessing small and large-scale investments, noting that all of these adaptations were suggested in the first place by farmers.

It is demand driven.

As an example, improving soil fertility and renovating pastures with legumes were done on a routine basis by most livestock producers, other than those in the rangelands.

Stacking – or combining practice changes – is highly topical within industry at the moment.

The key conclusion from this work was that there was a trade-offs between benefits derived and complexity.

Prof Harrison further noted that doing nothing – the simplest option – and purchasing carbon credits to offset all farm emissions was the most costly option.

In contrast, stacking interventions that reduce enteric methane, sequester carbon and improve livestock productivity would not only get the farm to net zero, but would also improve profit.

So the cost would be zero but the challenge with stacking is complexity.

Reducing enteric methane is difficult to enact for grazing systems – this research only looked at the potential outcome, rather than the mechanics of doing so.

It accounted for variable livestock and carbon prices, as well as costs – the supplementary information contains a sensitivity analysis.

The conclusion relates to current prices.

Reducing the cost of feed additives would make this option more attractive, but how low do you go?

And to what level should livestock and carbon prices increase?

Extrapolating the economics too far would create too many uncertainties.

At the moment, feed additives result in the greatest reduction in enteric methane, which is a livestock farm's biggest GHG, but they also cost the most of available options.

Seaweed reduces enteric methane by 80 percent, depending on how often and how much is eaten.

Biochar has very little effect and deserves further research.

The biochar examined in the field increased cattle liveweight gains by 5 percent, but there was no compelling evidence that seaweed improved productivity.

If it did, it would be more cost-effective.

Assumptions were that biochar cost \$2/kg dry matter and asparagopsis similar – assuming the asparagopsis was 0.5 percent of daily intake.

We need to be cognisant that this is a modelling study.

Researchers modelled those adaptations that the regional reference group were most interested in.

But a model is a simplification of reality.

No model can account for everything.

If it did, it would not be a model but would be reality.

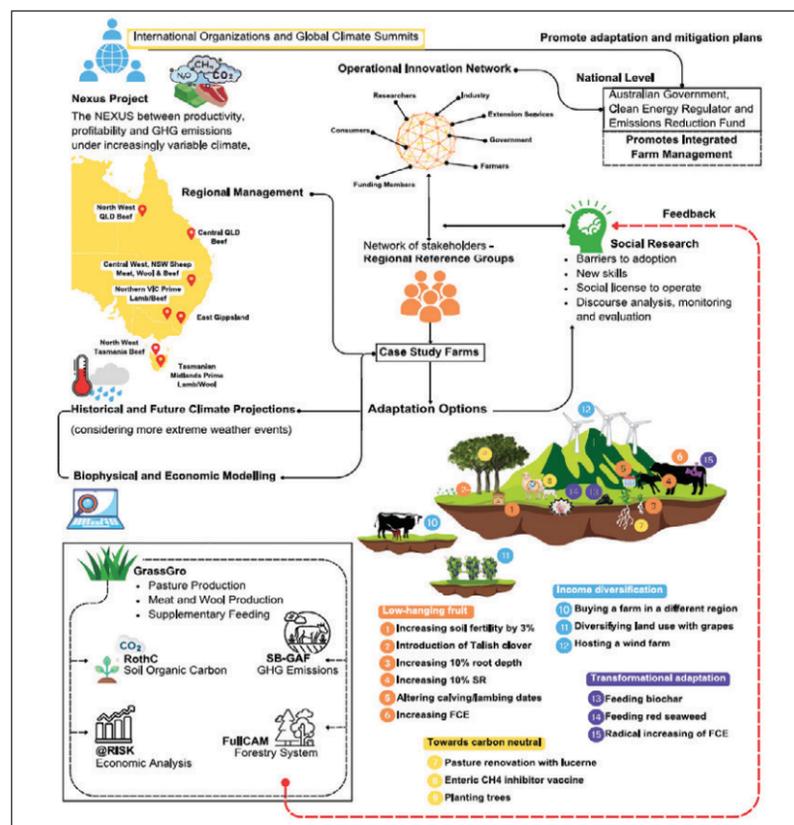
This is why models are created – so they can address the central ques-

tion and simplify other aspects of reality.

It is worth noting that only a select few regions could be used for renewable energy – either wind or solar.

This is because they need to be close to three-phase powerlines and have ideal conditions, such as high winds near the coast or north facing aspect for solar.

"I don't see this conclusion as being misconstrued by politicians, as the practical realities of site requirements associated with renewable energy will prohibit renewables ever becoming something adopted en masse," Prof Harrison said.



Co-design framework for economic, environmental and social factors.

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I and D Birchall were awarded Grand Champion Bird of Show with a standard gold pencilled pullet.



The Hinton family won Reserve Bird of Show with a bantam black cockerel.



Champion Junior Bird of Show was won by Colby Pout.



Jackson Cleve took out Reserve Champion Junior Bird of Show.

# Hamburgh Club of NSW 2025 Annual Show Report

THE weekend started with many exhibitors penning their birds on the Friday evening, then meeting to have dinner at a local hotel bistro.

It was a great evening with 40 enthusiastic breeders and the judge attending the social gathering, plus some friends from the Langshan Club too.

Show morning in Mudgee was frosty but turned into a beautiful winter day, which set the scene for a splendid day with 240 Hamburgs – consistently the largest display of Hamburgs in Australia – exhibited by 24 super keen owners.

The open standard

classes had 157 exhibits in all seven standard colours, 37 bantams in five of the standard colours, four novices exhibiting 15 birds and an amazing five juniors exhibiting 31 birds.

There were also 13 developmental birds on display.

The major award winners were I and D Birchall for Grand Champion Bird of Show with a standard gold pencilled pullet, the Hinton family for Reserve Bird of Show with a bantam black cockerel, P and L Williams for Reserve Champion Standard with a silver spangled cockerel, the Hinton Family for

Reserve Champion Bantam with a blue pullet, Alison Heap Champion Novice with a bantam silver spangled cockerel, Colby Pout Champion Junior with a bantam cockerel and P and L Williams for Champion Breeding Pair of Show with a pair of standard silver spangles.

Judge Kelvin Smith from Shepparton Victoria was very impressed with the huge number of Hamburgs and the overall quality and presentation of the birds, especially the Gold Pencilled standards and the very rare standard whites.

The club has an em-

phasis on learning, particularly for the novices and juniors, with a competition called the 'Hamburgh Proficiency Award'.

In this year's competition, competitors judged four silver spangled males to the Australian Standards point score, with the winner being the closest to the competition judge.

Jasmyne Clarke, a novice entrant, won the award.

Also, during the day, an open discussion was held, led by the more experienced breeders, on the difficult task of deciding what birds to cull, what to show and, im-

portantly, what to keep for breeding from.

This segment of the show was very well patronised and hopefully helped all the breeder participating.

This year was a memorial event in tribute to Peter Williams, who passed away soon after last year's show.

Peter was a great club member who continually promoted Hamburgs and encouraged new breeders and juniors of this majestic breed of poultry.

A perpetual trophy was purchased in honour of Peter for Champion Standard Silver Spangled and this year's win-

ners were Peter's sons Pat and Luke Williams.

In addition, there was a Peter Williams encouragement award selected from the junior classes,

which was won by Jackson Cleve.

**Ian Birchall**  
President  
Hamburgh Club of NSW



The Peter Williams perpetual trophy for Champion Standard Silver Spangled was won by Pat and Luke Williams.

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