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THE AUSTRALIAN VETERINARIAN MAGAZINE

'ANCIENT SPAGHETTI' IN DOG HEARTS REVEALS ORIGINS OF HEARTWORM

EASTERN QUOLLS RETURN TO MAINLAND AUSTRALIA IN MILESTONE CONSERVATION RELEASE

AUSTRALIA NEEDS A CANINE BRAIN BANK TO REDUCE THE RISK OF DOG ATTACKS

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Misinformation stops here. Zenrelia™ is the NEW JAK Inhibitor for dogs with allergic and atopic dermatitis, recently launched in Australia and is APVMA approved with no restrictions in relation to dogs receiving vaccinations.^

FACT #1

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FACT #3

The vaccine booster study proved dogs on Zenrelia, even at 3X the label dose, achieved adequate vaccine titres.[1]

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^When administered according to label directions. Read product leaflet for full instructions For dogs from 12 months of age and 3 kg body weight.

Reference: 1. Fent GM, Jacela J, Plazola-Ortiz R, *et. al. Immunologic response to first booster vaccination in dogs treated with Zenrelia™ (ilunocitinib tablets) at up to three times the recommended therapeutic dose compared to untreated controls.* BMC Veterinary Research. 2025;21:481

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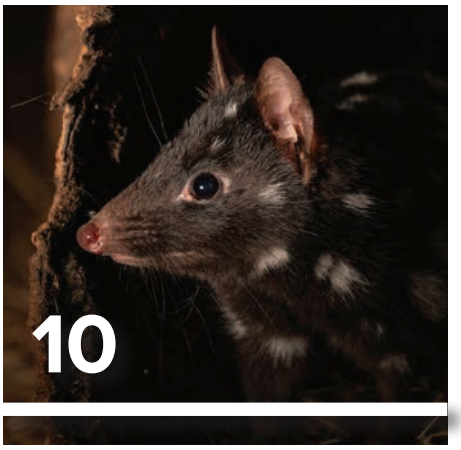

EASTERN QUOLLS RETURN TO MAINLAND AUSTRALIA IN MILESTONE CONSERVATION RELEASE

RISING RATES OF RARE DISEASES IN CATS AND DOGS POSE NEW CHALLENGES FOR VETS

Cover image: *iStock Wirestock*

THE AUSTRALIAN VETERINARIAN

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DOGS WITH CANCER COULD LEAVE LASTING LEGACY

A UNIVERSITY OF QUEENSLAND PROJECT COULD BE A GLIMMER OF HOPE FOR DOGS SUFFERING FROM INOPERABLE OR INCURABLE CANCERS.

The project will test the effectiveness of immunomodulatory drug Enzistat in treating solid tumours caused by naturally occurring cancers, including soft tissue sarcoma, mast cell tumour and melanoma.

Professor Rachel Allavena from UQ's School of Veterinary Science said owners who had been told their dog's cancer was terminal or their pet's tumours were inoperable should apply for the trial.

"The 6-week treatment consists of oral tablet Enzistat being administered twice daily, regular consultations, blood samples and biopsies," Professor Allavena said.

"Enzistat is designed to target advanced cancers by activating the patient's immune system.

"Previous compassionate use trials showed Enzistat achieved tumour regression and increased survival time for palliative patients with advanced, late-stage cancers, supporting further evaluation in a formal trial.

"The research consists of 2 trials with the first focusing on terminal patients where the aim is to prolong their lives.

"The second aims to see if the drug can shrink large tumours to allow for surgical removal."

To be eligible for participation, dogs must have received a cancer diagnosis from their vet and be able to provide medical records.

Researchers will work with the dogs' regular vet throughout the duration of the trial.

The dogs must also have a predicted survival time of more than 3 months and be able to travel to UQ Gatton at least 3 times over a 6-week period.

Solid tumours are a common problem in canine health with approximately 1 in 3 dogs developing cancer in their lifetime.

Dr Jose Granados Soler said canine cancers could be treated with surgery, chemotherapy and radiotherapy but expense and availability often prevented dogs receiving treatment.

"Immunotherapeutics is in its infancy in veterinary medicine and is a newly established approach in human oncology," Dr Granados Soler said.

"Our goal is to develop safe, easily applied immunotherapies, amenable to delivery in general practice at an affordable cost.

"We will optimise these therapies as sole or combination with standard of care treatments, giving each pet dog the best chance to fight its cancer."

UQ is undertaking this trial in partnership with drug discovery company Avammune Therapeutics Inc that developed Enzistat.

Avammune Therapeutics chief executive Arun Papaiah said beginning the first formal veterinary clinical trial with The University of Queensland was a monumental step.

"This trial is not just about advancing science, it's about providing families more time with their beloved companions," Mr Papaiah said.

"Enzistat is designed to be an oral, off-the-shelf drug that provides high-end immunotherapy results without the complexity of hospital-based infusions."

The trial will provide Enzistat and research associated assessments, with participants required to cover other veterinary costs.

MORE INFORMATION

Owners of eligible dogs should apply for the trial by contacting uqvets.sa@uq.edu.au.

Professor Rachel Allavena and Dr José Granados Soler urge owners of eligible dogs to apply for the trial. (Photo credit: The University of Queensland)

Reference: 1. *Nederveld S, Krautmann MJ, Mitchell J. Safety of the Selective JAK1 Inhibitor Oclacitinib in Dogs. Journal of Veterinary Pharmacology and Therapeutics. 2025;0:1-11* ***2.*** *Marsella R, Doerr K, Gonzales A, Rosenkrantz W, Schissler J, White A. Oclacitinib 10 years later: lessons learned and directions for the future. J Am Vet Med Assoc. 2023 Mar 25;261(S1):S36-S47.*

zoetis

UNREGISTERED AND IMPROPERLY COMPOUNDED VETERINARY MEDICINES RISK ANIMAL HEALTH, WELFARE AND VETERINARY INNOVATION

BY **BEN STAPLEY, CEO ANIMAL MEDICINES AUSTRALIA**

Australia's regulatory framework for veterinary medicines is facing increasing pressure from unregistered and illegally compounded products risking animal health and welfare, regulatory integrity and veterinary innovation.

The Australian Pesticides and Veterinary Medicines Authority (APVMA) oversees the pre-market approval and regulation of veterinary medicines, ensuring products meet strict standards for safety, quality and efficacy. Veterinary medicine compounding is controlled via a hodge-podge of state and territory controls designed to allow reasonable access to products when registered alternatives are unavailable, but that have been exploited to undermine appropriate regulatory oversight, creating unacceptable risks to animal health and welfare. Gaps in current regulatory systems for compounded and unregistered veterinary products need to be closed to minimize risks and restore the integrity and robustness of regulatory oversight.

Within tightly controlled limits, veterinary compounding plays an established and essential role in veterinary practice. Veterinary compounding can facilitate tailored treatments, and better administration when no suitable registered product exists.

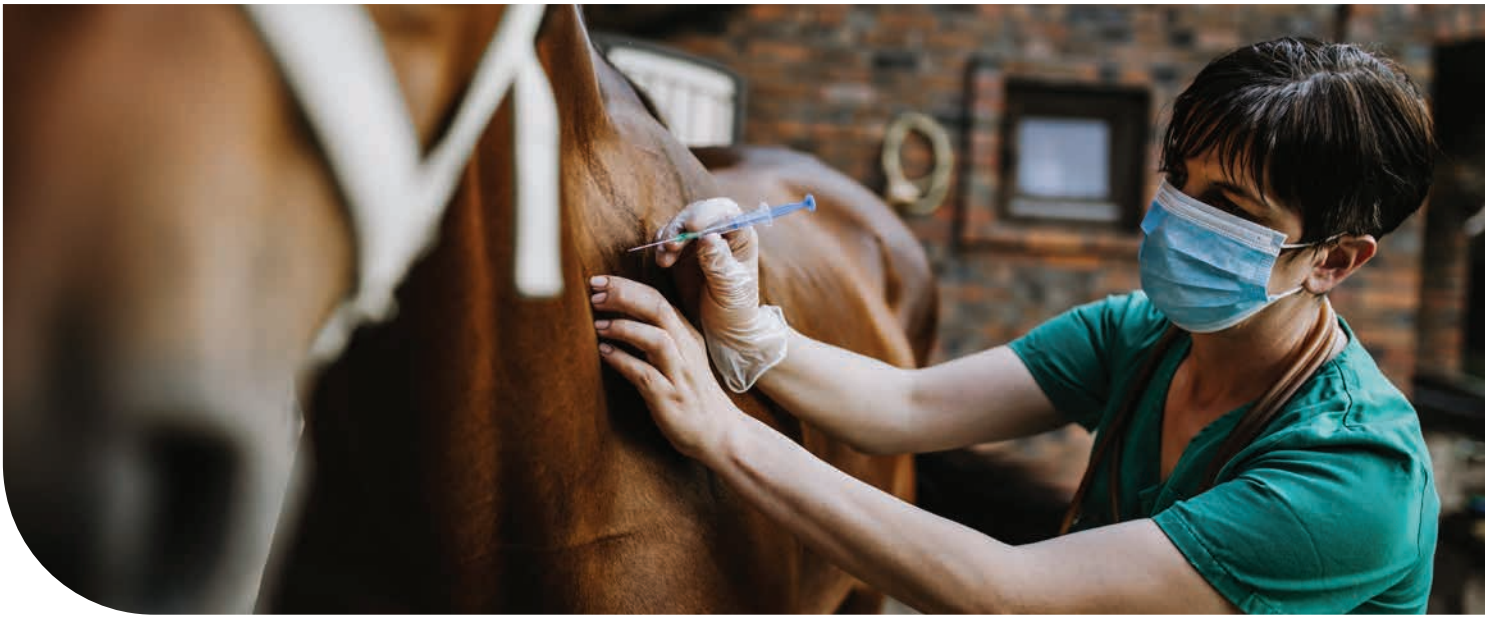
Instances of compounded products being manufactured in commercial quantities, supplied between practitioners, and promoted as alternatives to registered veterinary medicines are increasing. This trend undermines safeguards imposed on APVMA-registered products and blurs the line between bespoke compounding and unregistered manufacturing.

IDENTIFIED RISKS

Unlike registered veterinary medicines, compounded products are exempt from APVMA registration and are not required to undergo an independent pre-market assessment, comply with Good Manufacturing Practice (GMP) standards, and are not required to be manufactured in an audited and licensed manufacturing facility. As a result, compounded risks can present elevated risks, including:

- **Quality and contamination:** Inconsistent formulation, lack of homogeneity, and ad-hoc quality control systems may increase risks of contamination or variable potency.
- **Safety and stability:** Without rigorous stability testing, compounded medicines risk degradation or becoming unsafe during storage – even after relatively short periods. Negative animal welfare outcomes could result from a lack of safety and efficacy assessments, especially from novel combinations of active ingredients.
- **Batch production risks:** Large-scale 'batch' manufacturing without GMP oversight can amplify risks from formulation errors across multiple animals.
- **Residue uncertainties:** Altering the formulation, composition and route of administration may affect residue depletion and excretion in treated animals, with potential risks to food safety and/or trade access, non-compliance with industry standards and auditing requirements, or non-compliance with racing or other sport or competition rules and regulations.
- **Legal risk for veterinarians:** Compounded veterinary medicines lack registered label instructions for insurers to assess legal and best-practice use, potentially exposing veterinarians to liability if adverse reactions occur or residues are detected.
- **Animal welfare risks:** Ineffective or unstable compounded products may result in treatment delays, prolonged illness, or disease progression beyond effective intervention.

The risks are not merely hypothetical. While comprehensive data is limited, several incidents internationally have highlighted the potential consequences. In 2009, 21 ponies died after being administered an incorrectly compounded



health supplement, receiving fatal doses of selenium[1], three other horse deaths followed administration of a compounded parasite treatment with 18-21 times the labeled active concentration[2]. In 2015, a compounded feline pain relief cream containing high concentrations of flurbiprofen (used for treating osteoarthritis or rheumatoid arthritis), was found to have caused kidney and intestinal damage in treated animals[3].

Beyond the elevated animal health and welfare risks unregistered compounded products discourage innovation and investment in veterinary medicines. Veterinary compounding systems that bypass key regulatory controls and costs diminish the available market for legitimate, registered veterinary medicines. This reduces the pipeline of innovative, new treatments and increases reliance on unregulated products, compromising safety and efficacy. Perversely, the increased availability of compounded products increases their need.

Ultimately this results in illegal and unregistered compounded medicines undermining key components of the regulatory system for veterinary medicines and creates an uneven playing field. Reform is now essential to ensure that when veterinarians and animal carers use veterinary medicines, they can be assured that the highest quality, safety and efficacy standards have been applied – and independently assessed by a rigorous and diligent regulator.

To protect animal health and uphold regulatory integrity, Animal Medicines Australia is calling for veterinary compounding rules to be tightened in three key areas:

1. **National consistency:** The Agvet Chemicals Subcommittee of AgSOC should be tasked - as a matter of priority – to develop nationally harmonised rules for veterinary compounding.
2. **Mandatory reporting:** APVMA should be provided with public funds to implement and administer a structured adverse event reporting system for compounded veterinary medicines, in partnership with relevant state and territory authorities.
3. **Stronger compliance:** Extend and enforce restrictions on batch production of compounded veterinary medicines and increase enforcement activity targeting unregistered large-scale compounding.

These measures should be accompanied by enhanced education for veterinarians and pharmacists about their legal requirements and ethical boundaries of veterinary compounding. Primarily, wherever possible, veterinarians should reach for the registered product in preference to any compounded veterinary medicine.

OUTLOOK

Compounded veterinary medicines remain an important clinical tool for veterinarians when used sparingly, appropriately and legally. However, unregulated manufacturing, inconsistent quality, and potential animal welfare impacts, undermine Australia's veterinary medicine regulatory system. In the long term, uncontrolled veterinary compounding risks discouraging the investment and innovation necessary to minimize the need for compounded veterinary medicines.

Regulatory authorities, state and federal governments and industry groups must act decisively to close these loopholes, enforce compliance, and preserve the integrity of a rigorous and effective veterinary medicines regulatory system.

REFERENCES:

[1] Desta B, Maldonado G, Reid H, et al. Acute selenium toxicosis in polo ponies. *Journal of Veterinary Diagnostic Investigation.* 2011;23(3):623-628. doi:10.1177/1040638711404142

[2] United States Food and Drug Administration, 2019. Compounded Unapproved Animal Drugs from Rapid Equine Solutions Linked to Three Horse Deaths. Available at: https://www.fda.gov/animal-veterinary/cvm-updates/compounded-unapproved-animal-drugs-rapid-equine-solutions-linked-three-horse-deaths

[3] Forbes, 2015. Pet Owner Alert: Compounded Flurbiprofen Pain Creams Can Kill, Sicken Cats. Available at https://www.forbes.com/sites/davidkroll/2015/04/17/pet-owner-alert-compounded-flurbiprofen-pain-creams-can-kill-sicken-cats/

'ANCIENT SPAGHETTI' IN DOG HEARTS REVEALS ORIGINS OF HEARTWORM

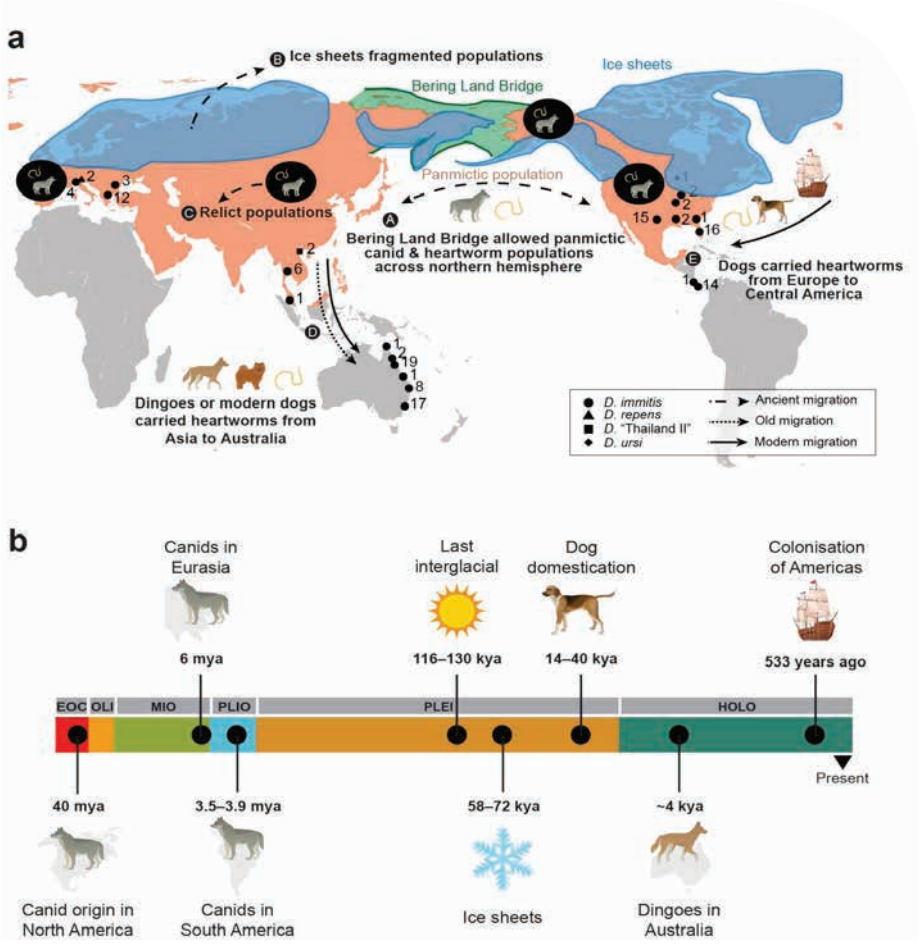
GLOBAL DNA STUDY REWRITES THE EVOLUTIONARY HISTORY OF CANINE DISEASE.

Research led by the University of Sydney is reshaping scientific understanding of one of the world's most widespread canine parasites, suggesting heartworm disease has a far deeper and more complex evolutionary history than previously believed – including a possible ancient origin of Australian heartworms linked to dingoes.

The findings have significance for developing treatments given the rise in drug resistance to the disease.

In a global genome-wide study of canine heartworm parasites, researchers analysed more than 100 heartworm genomes collected from dogs and wild canids across multiple continents. The findings challenge the long-held assumption that heartworm spread largely through recent, human-mediated movement of domestic dogs.

Instead, the study points to a new evolutionary paradigm, where ancient canid hosts such as wolves and dingoes played a pivotal role in shaping the global distribution of heartworms over tens of thousands of years.



A new evolutionary paradigm of heartworms throughout history. (Photo credit: The University of Sydney)

The paper is published in ***Communications Biology.***

Heartworm disease, caused by the parasite Dirofilaria immitis, is transmitted by mosquitoes and can be fatal for dogs if left untreated. Adult worms – often described as looking like strands of spaghetti – can grow up to 30 centimetres long and live in the blood vessels of the heart and lungs.

One of the most intriguing findings relates to Australia. Genetic signatures in Australian heartworms suggest they may share ancestry with parasites from Asia. This raises the possibility that heartworm could have arrived in Australia with the continent's first dingoes, which are believed to have migrated from Asia thousands of years ago.

However, the researchers caution that the evidence is not conclusive. An alternative explanation – that heartworm was introduced to Australia more recently, following European colonisation – cannot yet be ruled out.

"While our data suggest an ancient link between Australian and Asian heartworms, the sample size means we need to be careful about drawing firm conclusions," said senior author Professor Jan Slapeta from the University of Sydney School of Veterinary Science.

"What we can say with confidence is that heartworm evolution is far older and more complex than a simple story of parasites hitchhiking with modern dogs."

> *"Heartworm evolution is far older and more complex than a simple story of parasites hitchhiking with modern dogs."*
> *Professor Jan Slapeta*

The international team used whole-genome sequencing to compare heartworms from different regions,

allowing them to reconstruct population histories and track how parasites diverged over time. By examining patterns across continents, the researchers identified distinct regional heartworm populations, shaped by the movements and isolation of ancient canids during ice ages and interglacial periods.

Lead author Dr Rosemonde Power, who completed her PhD at the University of Sydney and is now based at Stockholm University, said the findings overturn long-standing assumptions in parasitology.

"For decades, we assumed heartworms were spread mainly through recent human activity," Dr Power said. "What we're seeing instead is evidence of deep co-evolution between heartworms and their canine hosts, even before humans were part of the picture."

"We're seeing ... deep co-evolution between heartworms and their canine hosts, even before humans were part of the picture."
Dr Rosemonde Power

The research also has important implications for animal health today, particularly as drug resistance to heartworm treatments emerges in parts of the world.

"Understanding where heartworms come from and how different populations are related helps us respond more effectively to disease and drug resistance," Professor Slapeta said. "Heartworms are not the same everywhere, and local history matters."

The authors emphasise that while the study analysed over 100 genomes, further sampling – particularly from under-represented regions – will be needed to refine timelines and test competing hypotheses, including the origins of heartworm in Australia.

Still, the study marks a significant step forward in understanding the ancient, global journey of one of dogs' most dangerous parasites – and the long evolutionary history hidden within that unsettling spaghetti in a dog's heart.

RESEARCH

Power, R. et al 'Population genomics reveals an ancient origin of heartworms in canids' *(Communications Biology 2026).* DOI: 10.1038/s42003-025-09250-x

DECLARATION

The authors declare no competing interests. Funding was received from the Canine Research Foundation, Dogs Victoria and the Australian Companion Animal Health Foundation Research Fund. Researchers received support from the Australian Government, the Jean Walker Trust Fellowship, the Australian Society for Parasitology's Researcher Exchange, UKRI Future Leaders Fellowship, the Pathogen Informatics group at the Wellcome Sanger Institute and the Sydney Informatics Hub.

MORE INFORMATION:

Visit: www.sydney.edu.au

EASTERN QUOLLS RETURN TO MAINLAND AUSTRALIA IN MILESTONE CONSERVATION RELEASE

SYDNEY ZOO HAS ONCE AGAIN RELEASED EASTERN QUOLLS INTO THE WILD, MARKING A MAJOR MILESTONE IN ITS EFFORTS TO RESTORE A SPECIES ONCE EXTINCT ON MAINLAND AUSTRALIA.

On Tuesday 27 January, Sydney Zoo released four Eastern quoll joeys at Bannockburn Rewilding Sanctuary in New South Wales, building on last year's successful reintroduction and continuing a landmark conservation project delivered in partnership with the Invasive Species Council's Rewilding Australia program.

Once widespread across South-Eastern Australia, Eastern quolls rapidly declined around a century ago, as introduced foxes and feral cats spread out across their habitats. Today, wild populations naturally occur only in Tasmania, making rewilding efforts on the mainland both ambitious and critical.

The four joeys will join five Eastern quolls released by Sydney Zoo at Bannockburn in 2025, strengthening genetic diversity and supporting the development of a thriving, self-sustaining population. Encouragingly, three of the first quolls released have since gone on to have joeys of their own.

Located on the NSW South Coast, Bannockburn Rewilding Sanctuary is a 68-hectare fenced safe haven, free from foxes and feral cats, providing a secure environment for vulnerable native species to re-establish in semi-wild conditions.

The project forms part of the Eastern Quoll Conservation Coalition, led by the Invasive Species Council, which aims to establish 50,000 hectares of fox-free habitat for Eastern quolls on mainland Australia by 2030. Rob Brewster, Invasive Species Council's Rewilding Manager said "rewilding gives us the opportunity to step back in time, but also look forward, and imagine a future Australia without the devastating impacts from foxes and feral cats".

Researchers from the University of Sydney are monitoring the newly released quolls using tracking technology to assess their movements, survival and ecological impact. The findings will help guide future rewilding efforts, including exploring how Eastern quolls could one day

persist beyond predator-free fenced environments.

Eastern quolls play a vital ecological role by controlling insects and small animals and improving soil health through digging and foraging.

Liz Gerber, Community and Conservation Manager at Sydney Zoo, said the release represents a significant step forward for native species recovery. “Eastern quolls play an important role in healthy ecosystems and bringing them back helps restore balance that has been missing for decades,” Ms Gerber said. “Building on last year’s successful release shows what can be achieved when conservation is guided by science and strong partnerships.”

Kelly Davis, Natives Animal Care Manager at Sydney Zoo, said seeing the joeys transition into the wild was a powerful moment for the team. “To be part of bringing back a species from extinction in this area is incredibly special,” Ms Davis said. “These quolls were raised with the goal of release and seeing them settle into their natural environment is exactly what we hoped for.”

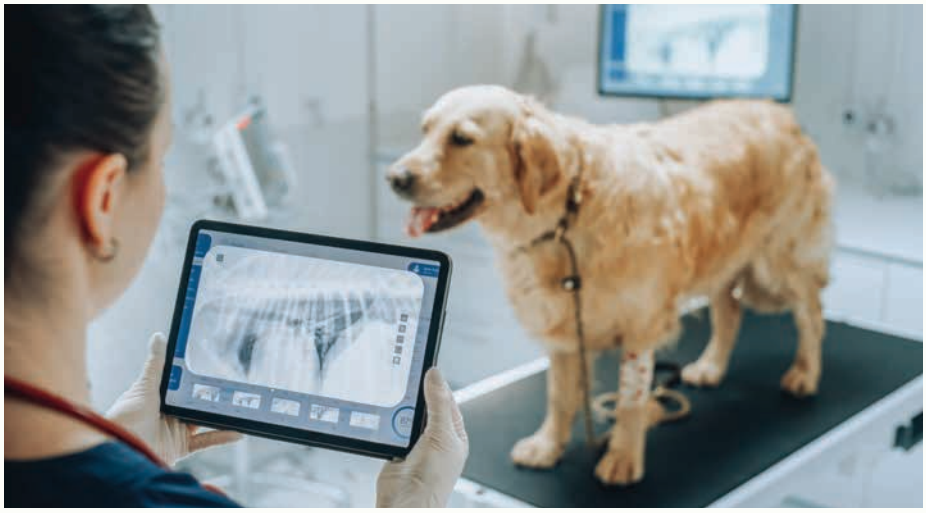
With Eastern quolls now beginning to re-establish in protected mainland environments, projects like this offer renewed hope that the species can once again thrive across Australia.

Images Credit: All Images were provided by Sydney Zoo.

ABOUT SYDNEY ZOO

Sydney Zoo opened on December 6th, 2019, and is a world class zoo in the heart of Western Sydney. Home to over 150 species across five iconic precincts, Sydney Zoo has fast become one of Sydney’s most popular attractions. Sydney Zoo offers an immersive guest experience that connects people with wildlife from around the world, while promoting conservation and Aboriginal culture through its Bungarribee Dreaming experience. Sydney Zoo is located off the Great Western Highway in Bungarribee, only 40 minutes from the CBD. For more information visit: **SydneyZoo.com.**

Dr Lisa Frilling, VET.CT radiologist



FREE WEBINAR ON IMPROVING IMAGING TECHNIQUES AND RADIATION SAFETY

GLOBAL TELERADIOLOGY COMPANY, VET.CT IS HOSTING A FREE WEBINAR TO SUPPORT VETERINARY TEAMS WITH IMPROVING IMAGING TECHNIQUES AND RADIATION SAFETY IN SMALL ANIMAL PRACTICE.

This practical session - designed for anyone undertaking radiography - is the latest addition to VET.CT's comprehensive suite of X-Pert Radiation Safety resources, which champions the health and safety of people and patients with the use of ionising radiation in diagnostic imaging.

THE WEBINAR WILL TAKE PLACE ON:

Tuesday 17th March,
7:00-8:00pm AEST.

The webinar's primary goal is to empower veterinary teams to transition safer and more efficient workflows. The session will demonstrate practical techniques for achieving stable patient positioning and consistent, repeatable images without relying on manual restraint or complicated setups.

LEARNING OUTCOMES INCLUDE:

- **Improving confidence with hands-free techniques:** The session will directly address how to safely image animals without the use of manual restraint. It will also challenge the belief that hands-free radiography takes longer, proving that both thoracic and abdominal studies can often be performed efficiently and safely on conscious animals with the correct technique.
- **Improving image quality:** Clarifying what defines a good radiographic image, the session will include real-life examples such as 'what a lateral elbow should look like' to build foundational confidence.
- **Understanding legal obligations:** Recognising that radiation legislation varies between regions, the talk is intended to act as a bridge to champion best practice globally.

The presenter, VET.CT radiologist Dr Lisa Friling, has extensive experience in this subject, having guided a clinic to become the first animal hospital in Sweden to go fully hands-free. She says, "Improving radiation safety in practice does require change, which can be challenging. However, this change is important - to improve health and welfare of patients and the safety of staff, and it is absolutely possible with the right support and guidance. My hope is not only to teach, but to inspire. If I can learn how to work hands-free, then anyone who works with animals and ionising radiation can do it too. The key is just to give it a try."

The session is available to watch live and a recording will be added to VET.CT's X-Pert Radiation Safety Centre, which offers free downloadable toolkits for both small animal and equine practice, including positioning guides, top tips, chemical restraint protocols, and a series of case studies.

To register for the webinar to watch live and receive the recording visit: ***https://events.zoom.us/ev/AoUvrzk-_2uzZnp4qAmFOGXmRcK1aTTw-6qvuXG9dcE1R9P6nekq~Anw9-XhUxtsFzbNTgw72jB-z7T3VYWaNeeenRj7ewgvpDl2-SZXIsQQCoA***

The X-Pert radiation safety resources for small animal practice can be accessed here: ***uk.vet-ct.com/welcome-to-x-pert*** and the equine resources here: ***uk.vet-ct.com/welcome-to-x-pert-equine***

For more information, please visit ***www.vet-ct.com***

TESTING CONFIRMS CHEMICAL-FREE FUTURE FOR FIGHTING FLYSTRIKE

RESEARCHERS HAVE SUCCESSFULLY SHOWN A UNIVERSITY OF QUEENSLAND DEVELOPED TECHNOLOGY CAN IMPROVE THE EFFICACY OF A CHEMICAL-FREE FLYSTRIKE TREATMENT FOR SHEEP

Researchers have successfully shown a University of Queensland developed technology can improve the efficacy of a chemical-free flystrike treatment for sheep.

The technology, BenPol, addresses the limitations of double-stranded RNA (dsRNA) treatment to mitigate flystrike, which is the painful and sometimes fatal infestation of maggots on live sheep.

Queensland Alliance for Agriculture and Food Innovation Research Fellow Dr Karishma Mody said flystrike was a major problem in Australia, controlled by chemical pesticides at a cost of nearly $320 million a year.

"A chemical-free alternative to treating flystrike is as critical to the future of Australia's wool industry," Dr Mody said.

"Previous research showed double-stranded RNA (dsRNA) delivered to maggots slowed their development and even led to larval death.

"The challenge is that the dsRNA breaks down very quickly in biological fluids, preventing it from reaching the target gene.

"Our laboratory tests have confirmed that BenPol acts as a tiny protective capsule for dsRNA, keeping it intact long enough for the larvae to ingest it so it can reach the gut and switch off the target gene."

QAAFI PhD candidate Yakun Yan said BenPol provided an effective platform to protect and enhance the uptake of RNA technology.

"The findings represent a major step forward for RNA-based livestock protection," Ms Yan said.

"Australia grows about a quarter of the world's greasy wool, so it makes sense to develop smarter, environmentally friendly solutions to protect our sheep and our industry."

Dr Mody said QAAFI researchers successfully tested the BenPol platform through a crucial collaboration with the Department of Primary Industries (DPI).

She said the work was done in collaboration with Professor Tim Mahony and supported by The University of Queensland, with the DPI supplying blowfly eggs and larvae and providing testing facilities.

With laboratory testing complete, the team is preparing for the next critical stage.

"We now want to take BenPol into field testing through sheep trials and refine the formulation for real-world conditions," Dr Mody said.

"Partnering with industry will be essential to ensure BenPol can protect the dsRNA under farm conditions to help secure the future of our wool industry.

"There's also potential for this method to be used on other pest problems in livestock, including cattle ticks and buffalo fly in cattle."

The research was published in Pest Management Science.

COLLABORATION AND ACKNOWLEDGMENTS

The research was supported by The University of Queensland, an Advance Queensland Industry Research Fellowship and the Department of Primary Industries. The Queensland Alliance for Agriculture and Food Innovation is a research institute at The University of Queensland, established with and supported by the Department of Primary Industries.

MORE INFORMATION

Visit: www.uq.edu.au

Yakun Yan and Dr Karishma Mody with wool samples at UQ. (Photo credit: University of Queensland/Megan Pope)

CVS AUSTRALIA INTRODUCES LOWER ISOFLURANE GUIDANCE ACROSS ITS 53 CLINICS

CVS AUSTRALIA HAS INTRODUCED NEW CLINICAL GUIDANCE AIMED AT SIGNIFICANTLY REDUCING THE AMOUNT OF ISOFLURANE USED, A COMMONLY USED INHALATIONAL ANAESTHETIC.

The guidance has been developed by CVS Australia's Clinical Advisory Committee, chaired by Dr Paul Davey, supported by expertise across CVS including the UK. The move reflects CVS Australia's commitment to safer, more sustainable veterinary care.

Wattle Grove operating theatre. (Photo credit: CVS Australia)

WHY REDUCE ISOFLURANE?

Isoflurane is a potent greenhouse gas, estimated to be 539 times more potent than carbon dioxide. Reducing the amount of isoflurane used to achieve the same, or even improved patient safety, can significantly reduce the amount of isoflurane released into the atmosphere.

Its use in veterinary anaesthesia also carries clinical and occupational risks. Long-term exposure to volatile anaesthetics has been linked to health concerns for veterinary professionals, including headaches, cognitive impairment, infertility, and even certain cancers.

By reducing reliance on isoflurane, CVS Australia aims to enhance anaesthetic safety, reduce its impact on the environment, and safeguard colleague wellbeing.

A MULTI-MODAL APPROACH TO ANAESTHESIA

The new guidance promotes a multi-modal anaesthesia strategy, looking to consistently consider the lowest possible inhaled isoflurane concentration to achieve safe and stable anaesthesia for patients. This is achieved through a combination of techniques including:

- Pre-clinic anxiolytics to reduce stress and sedative requirements
- Improved premedication using medetomidine and opioids like methadone or buprenorphine
- Locoregional anaesthesia, such as epidurals and nerve blocks, to provide targeted pain relief
- Continuous Rate Infusions (CRIs) using combinations like fentanyl, lidocaine, and ketamine (FLK) to provide analgesia and reduce anaesthetic requirements
- Low-flow anaesthesia to minimise oxygen and isoflurane consumption

These methods not only reduce the need for inhalational agents but also improve patient stability during procedures and shorten recovery times. Many cases may even benefit from TIVA (Total Intravenous Anaesthesia) techniques which have no reliance on the use of inhalational agents.

Dr Davey, Chair of CVS Australia's Clinical Advisory committee, said: "This guidance reflects how we should balance the best outcomes for our patients, our people, and the planet. These steps will not only improve clinical outcomes but also reduce our environmental footprint and safeguard the wellbeing of our teams."

MORE INFORMATION:

CVS Group is a leading provider of veterinary services, operating 53 practices across six states in Australia. For more information, visit www.cvsvets.com.au.

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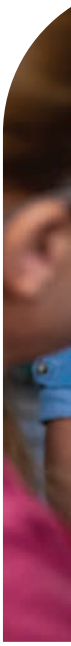
See product label for full claim details and directions for use. Boehringer Ingelheim Animal Health Australia Pty. Ltd. Level 1, 78 Waterloo Road, North Ryde NSW 2113. ABN 53 071 187 285. ®NexGard SPECTRA is a registered trademark of the Boehringer Ingelheim Group. PET-0132-2025B

NexGard SPECTRA®
Spot-On for Cats

NEW COMMENTARY EXAMINES EVIDENCE OF THE SAFETY OF BEDINVETMAB (BERANSA®) FOR MANAGING OSTEOARTHRITIS PAIN IN DOGS



ZOETIS HAS PUBLISHED NEW COMMENTARY IN FRONTIERS IN VETERINARY SCIENCE DISCUSSING DATA ON BEDINVETMAB (BERANSA, ALSO CALLED LIBRELA™ IN OTHER MARKETS) FOR THE TREATMENT OF OSTEOARTHRITIS (OA) PAIN IN DOGS.

The commentary[1] offers a carefully considered perspective on findings from a previous study by Farrell et al[2] titled "Musculoskeletal adverse events in dogs receiving bedinvetmab (Librela)".

Zoetis is committed to ongoing scientific rigour and transparency to support the veterinary community's understanding of OA pain, the role of Nerve Growth Factor (NGF) in driving OA pain, and the safe and effective use of Beransa.

Following a detailed review of the Farrell et al[2] study, the commentary[1] offers an expert perspective on the methodology and findings presented, which include:

- A recommendation to veterinarians to consider key elements of the case-control series described in the Farrell
- et al study[2] to ensure the data is adequately contextualised – including the study's non-blinded design, potential selection bias of the 19 cases, an absence of controls for baseline OA severity or comorbidities, significant variability in pathology
- types, and incomplete NSAID histories.
- An explanation that a disproportionality analysis is a robust methodology used in studies for signal detection in large databases to identify adverse events with higher-than-expected reporting frequency. The "descriptive disproportionality analysis" approach
- described in the Farrell et al study[2] does not align with these established methods. Moreover, these authors experienced significant dataset limitations, with full and complete adverse event reporting information unavailable to them due to data protection
- laws and regulatory agencies' limited access policies. This, combined with a change in reporting requirements within the period studied, meant that the extracted data alone was unable to provide a truly representative comparison or analysis between products,
- or to draw conclusions of any causal relationships.
- An acknowledgement from Zoetis of the possibility of adverse events related to Beransa and a welcoming of ongoing research into this area, while recognising that further investigation beyond that presented in the Farrell
- et al[2] study is needed in order to establish a causal association in dogs between any OA treatment and accelerated joint destruction, or other adverse events.

The commentary was authored by Anthony Simon (Director of Scientific Affairs and Pharmacovigilance, Zoetis Veterinary Medicines Research and Development), Beatriz Monteiro (Director of Veterinary Operations at Zoetis International Centre of Excellence), Oliver Knesl (Medical Director & Lead, Zoetis Global Commercial Development) and Adam Werts (Zoetis Senior Principal Scientist).

Zoetis encourages veterinary teams to read the commentary to support their own evidence-based decision making when considering OA pain treatment options.

Dr Mark Kelman, Companion Animal Veterinary Operations Manager at Zoetis Australia, emphasised the importance of reviewing scientific data with appropriate rigour and context.

"At Zoetis, we welcome open scientific dialogue and believe that evidence should always be interpreted within a robust scientific framework. Careful evaluation of the quality of data, statistical methods, and claims in any publication is essential to advancing animal health and wellbeing. The recent commentary by Simon et al highlights how comprehensive, large-scale pharmacovigilance helps ensure an accurate understanding of a product's safety profile," said Dr Kelman.

According to Dr Leon Warne*, a Specialist in Veterinary Analgesia and Pain Management, collaboration with the veterinary industry should be the focus to support appropriately addressing OA pain management in dogs.

"As an industry, we should continue to support balanced knowledge sharing. It is critically important though, that our clinical approach to the diagnosis and management of OA pain is derived from a strong foundation of evidence-based medicine. This will ensure greater clinical outcomes and improvement in the quality of life of the

patients we all care so much about. I would encourage veterinarians to read this commentary so they can draw their own conclusions." said Dr Warne.

Zoetis remains focused on partnering with veterinarians to help pets live a better, pain-free life, and feel that the publication of the commentary should address questions that have circulated around Beransa safety. Veterinary teams who still have questions or concerns are encouraged to contact Zoetis for additional support on **1800 814 883**.

Dr Leon Warne is currently contracted by Zoetis Australia as an Anaesthesia & Pain Management Specialist and consultant.

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1. Simon A., et al. Commentary: Musculoskeletal adverse events in dogs receiving bedinvetman (Librela). Front. Vet. Sci. Sec, Anesthesiology and Animal Pain Management DOI: 10.3389/fvets.2025.1663398

2.Farrell M., et al. Musculoskeletal adverse events in dogs receiving bedinvetmab (Librela). Front. Vet. Sci. Sec. Anesthesiology and Animal Pain Management DOI:

3. https://doi.org/10.3389/fvets.2025.1581490

FIRST NT DETECTION OF HENDRA VIRUS IN A BAT - **HORSE OWNERS ENCOURAGED TO VACCINATE**

THE DEPARTMENT OF AGRICULTURE AND FISHERIES (DAF) HAS CONFIRMED THE NORTHERN TERRITORY'S FIRST DETECTION OF HENDRA VIRUS IN A BAT, FOLLOWING A POSITIVE TEST RESULT ON 11 DECEMBER 2025.

Horse owners are encouraged to vaccinate their horses, particularly in areas where large bat populations are present.

Early signs of Hendra Virus in horses can include:

- fever
- increased heart rate
- discomfort or shifting weight between legs
- rapid or difficult breathing.

Steps horse owners can take to reduce risk include

- preventing horse feed and water from becoming contaminated by flying fox droppings or fluids
- isolating sick horses early while awaiting veterinary assessment
- maintaining good hygiene, cleaning and biosecurity routines.

MORE INFORMATION

For more information visit the departments website by clicking this link ***https://daf.nt.gov.au/news/2025/first-nt-detection-of-hendra-virus-in-a-bat***

More information about Hendra virus can be found on our resources page. Click this link to find more information about Hendra ***https://www.horsecouncil.org.au/resourceshormones***

RISING RATES OF RARE DISEASES IN CATS AND DOGS POSE NEW CHALLENGES FOR VETS

WA'S LEADING VETERINARY HOSPITAL AT MURDOCH UNIVERSITY IS REMINDING PET OWNERS THAT IF THEY NOTICE CHANGES WITH THEIR PETS TO GO AND SEE A VETERINARIAN.

Diseases such as cancer, diabetes, and thyroid conditions in dogs and cats are on the rise, and the signs can be really subtle.

Like in humans, environmental and lifestyle factors are contributors to increasing rates of disease and early detection is key to better outcomes.

Dr Robert Shiel, Professor of Small Animal Internal Medicine at Murdoch University's School of Veterinary Medicine, said treating these complex diseases requires a multi-disciplinary approach to ensure accurate diagnosis and effective treatments.

"Many endocrine diseases are increasing in frequency. This trend raises questions about environmental factors and parallels in human medicine," Professor Shiel said.

"Endocrine diseases such as diabetes, hypo and hyperthyroidism and Cushing's disease can present in various ways, including changes in appetite and coat condition.

"One example of an increasing trend is Hyperaldosteronism (Conn's syndrome) in older cats. This is a condition that can lead to high blood pressure, muscle weakness, lethargy and eye problems. It was rare 40 years ago but is becoming more common."

Dr Albert Thomas, a lecturer in Veterinary Oncology, said cancer rates in companion animals also remain persistently high: one in four dogs and one in five cats will develop cancer during their lifetime.

The Animal Hospital at Murdoch University. (Photo credit: Murdoch University)

"Unfortunately, the statistics are high, and those rates are going to continue to grow as better diagnostics and treatment options become available," he said. "We're now exploring targeted therapies, particularly adapting human drugs for common animal diseases."

The demand for new and improved approaches to animal care is only increasing as pet ownership grows.

The 2025 Pets in Australia study by Animal Medicines Australia estimates pet ownership rates are 12% higher over pre-pandemic levels. There are 31.6 million pets living in 7.7 million households – representing 73% of all Australian households - almost 50% of which are dogs, and 34% cats. The report found that despite cost-of-living pressures, Australians spend $21 billion annually on their pets.

Murdoch's School of Veterinary Medicine is responding to this increasing demand for care with constant advances in veterinary clinical research.

Dean of Veterinary Medicine Dr Henry Annandale said these included:

A significant focus on cancer treatments for dogs and cats to improve quality and length of life.

Advances in treatment of diseases like diabetes, blood disorders, cardiovascular disease, thyroid and adrenal disorders, and injury management.

The increasing role of veterinary research in disease economics and prevention, for example food safety

and public health policy, disease response, and mitigation of the impact of climate change and natural disasters on animal health and productivity.

"The integration of technologies like telemedicine and digital imaging, and the aligning of veterinary training with real-world practice needs, have ensured the veterinary profession today is vastly different from that of decades gone by," Dr Annandale said.

A recent gift of $100 million by Perth businessman and philanthropist Ted Powell will fund construction of a new School of Veterinary Medicine at Murdoch, featuring the latest technology and increased capacity to train 50% more veterinarians to meet national workforce shortages.

"The history of the Murdoch School of Veterinary Medicine over the past 50 years reflects the transformations we have seen in attitudes to animal health, safety, welfare and rights," Dr Annandale said.

"Today, we are playing a leading role in shaping the future of veterinary medicine through our research, teaching and engagement - both in our local community and on the world stage."

The Murdoch University School of Veterinary Medicine is the only veterinary teaching school in Western Australia. The School was recently ranked 39 in the world in the 2025 QS World University Rankings by Subject.

MORE INFORMATION

School of Veterinary Medicine
Murdoch Veterinary School is responsible for oversight and delivery of all veterinary-associated education, including the training of professionally registrable veterinarians and the next generation of specialists.
The School is also responsible for the operation of an emergency, critical care, primary care and referral teaching facility, and conducting of research into animal health, welfare and disease.
Visit: www.murdoch.edu.au

PATCH OFFERS HOPE TO SAVE FROG POPULATIONS

LA TROBE UNIVERSITY ACADEMICS HAVE DEVELOPED A NON-INVASIVE WAY TO MONITOR HORMONES IN FROGS IN AN IMPORTANT STEP TOWARDS PROTECTING THE VULNERABLE ANIMALS FROM EXTINCTION.

Global frog populations are disappearing at an alarming rate due to issues such as habitat loss, climate change, pollution, invasive species and disease, with 41 per cent of species listed as threatened.

Hormones play a crucial role in animal reproduction and coping with stressors, both of which are vital for survival, however, studying frog hormones has been difficult because traditional methods, like blood sampling, are invasive and stressful for the animal.

The solution? Tiny patches that collect hormone-rich secretions from frog skin, offering a simple, stress-free way to monitor health and reproduction.

Developed by researchers from La Trobe's Wildlife Conservation and Reproductive Endocrinology Lab (WiCRE), in collaboration with the University of Wollongong, this non-invasive method marks a major step forward in amphibian monitoring.

Their study, published in Frontiers in Conservation Science, shows that skin patches can reliably measure hormone levels, providing valuable insights into frog wellbeing without the need for invasive procedures.

Led by Dr Alicia Dimovski and Dr Kerry Fanson from La Trobe, the team optimised the method and showed that the patches can detect meaningful changes in testosterone levels, in tests on Blue Mountains tree frogs.

"The study shows that dermal patches can effectively measure hormone levels in frogs with minimal disruption to the animal," Dr Dimovski said.

(Photo credit: La Trobe University)

"This is a big step forward in helping us understand frog biology and improve conservation efforts."

Frogs play an important role in ecosystems and hold cultural and intrinsic value. With many species at risk of extinction, there is an urgent need for better tools to monitor their health.

"We hope this research helps support conservation breeding programs and contributes to the long-term survival of these incredible animals," Dr Dimovski said.

The technique will be broadly applicable to other frog species, such as the spotted marsh frog (pictured below).

The research was conducted in collaboration with Dr Aimee Silla from the Evolution and Assisted Reproduction Laboratory (EARL) Lab at the University of Wollongong.

The full report can be found here: Frontiers | Validation of dermal patches as a non-invasive tool for monitoring amphibian steroid hormones

MORE INFORMATION

Visit: www.latrobe.edu.au

SYDNEY ZOO ANNOUNCES NEW EXECUTIVE LEADERSHIP TO DRIVE ITS NEXT CHAPTER OF GROWTH

SYDNEY ZOO TODAY ANNOUNCED THE APPOINTMENT OF CEO MICHAEL KELLY AND HEAD OF MARKETING MICHELLE ROWLING, MARKING THE BEGINNING OF A MAJOR GROWTH PHASE FOR THE MAJOR SYDNEY ATTRACTION. THE NEW LEADERSHIP TEAM BRINGS DECADES OF EXPERIENCE ACROSS AUSTRALIA'S MOST ICONIC WILDLIFE, TOURISM AND ENTERTAINMENT DESTINATIONS.

Michael Kelly joins Sydney Zoo with a proven record in conservation-aligned tourism, having led Currumbin Wildlife Sanctuary through significant visitation and revenue growth, expanded environmental programs, and award-winning guest experiences. He later oversaw major transformation projects for the National Trust of Queensland, including the launch of the acclaimed Astra Lumina Gold Coast, and has served on the board of the Zoo & Aquarium Association of Australasia.

Michelle Rowling, formerly Head of Sales and Marketing at Luna Park Sydney, brings more than 15 years' experience delivering high-impact campaigns, major cultural events and brand growth across the tourism and entertainment sector. Her leadership has seen the successful rollout of large-scale destination marketing initiatives, including the sold-out 90 Years of Fun celebration and a portfolio of seasonal programs such as Lunar New Year, Eid and New Year's Eve.

The appointments follow the recent acquisition of Sydney Zoo by Hammons Holdings, bringing the much loved attraction into its national portfolio that includes iconic attractions BridgeClimb Sydney, and Scenic World in the Blue Mountains.

David Hammon, Group CEO of Hammons Holdings, said the appointments reinforce the organisation's long-term investment in tourism and its commitment to delivering world-class experiences at Sydney Zoo. "We are delighted to welcome Sydney Zoo into the Hammons Holdings family of attractions and have Michael and Michelle join our leadership team. They bring proven tourism expertise and their leadership will help shape our long-term vision for conservation, immersive experiences, community connection and unforgettable wildlife moments."

As one of Australia's major zoos, Sydney Zoo continues to strengthen its contribution to the NSW visitor economy, welcoming families, schools, community groups and international visitors year-round. Guided by its new leadership team, Sydney Zoo's next growth phase will assess future expansion opportunities, including the Western Sydney Parklands Bunagrarribee Tourism Hub EOI, while strengthening alignment across Hammons Holdings' attractions to enhance visitor experiences from Sydney to the Blue Mountains ahead of the opening of Western Sydney International Airport next year

Both Michael and Michelle officially commenced their roles in Dec 2025.

ABOUT SYDNEY ZOO

Sydney Zoo opened on December 6th, 2019, and is a world class zoo in the heart of Western Sydney. Home to over 4,000 animals, five iconic precincts, and Australia's largest Reptile and Nocturnal house, Sydney Zoo has fast become one of Sydney's most popular attractions. Sydney Zoo offers an immersive guest experience that connects people with wildlife from around the world, while promoting conservation and Aboriginal culture through its Bungarribee Dreaming experience. Sydney Zoo is located off the Great Western Highway in Bungarribee, only 40 minutes from the CBD. For more information visit: SydneyZoo.com.

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REHABILITATION AND RECOVERY

THE ROLE OF CHIROPRACTIC IN FUNCTIONAL RESTORATION POST-SURGERY AND INJURY

A SYSTEMS-BASED PERSPECTIVE ON SPINAL HEALTH.

BY: **DR. BILL ORMSTON, *DVM, CAC, DVETHOM***

As veterinary medicine advances, our ability to surgically repair damaged joints, ligaments, and vertebral structures continues to improve. Yet for many canine patients, the success of surgery hinges not only on the precision of the procedure but on the functionality of recovery. A structurally sound stifle after a TPLO, or a decompressed spinal cord after a hemilaminectomy, is only the starting point. What happens in the weeks and months following surgery—the patterns of movement, compensation, and neurological reorganization—determines long-term outcomes.

This is where chiropractic care offers distinct value. As a neurobiomechanical intervention, chiropractic adjustments can help reset dysfunctional movement patterns, reduce compensatory loading, and support proprioceptive re-integration during recovery. When integrated within a multimodal rehabilitation plan, chiropractic care improves not only how dogs heal—but how they move after healing.

POST-INJURY COMPENSATION: THE HIDDEN RISK IN RECOVERY

After injury or surgery, dogs naturally adapt to pain, weakness, and mechanical limitations. These adaptations are protective in the short term but often become maladaptive over time.

Consider a dog recovering from a cruciate ligament rupture:

- Postoperatively, the dog favors the surgical limb.
- Load shifts to the contralateral hind limb and diagonally to the opposite forelimb.
- The pelvis rotates subtly to accommodate weight shift.
- The thoracolumbar spine tightens, especially ipsilaterally.
- Muscle atrophy sets in on the surgical side; compensatory tension builds elsewhere.

These patterns don't resolve on their own. Without targeted intervention, compensation becomes the new default, predisposing the dog to overuse injuries, degenerative joint changes, or persistent lameness.

NEUROLOGICAL PLASTICITY AND MOTOR PATTERN REWIRING

Chiropractic adjustments, when applied correctly and judiciously during recovery, stimulate joint mechanoreceptors and influence central pattern generators (CPGs) in the spinal cord—neural networks responsible for coordinating rhythmic movement such as walking and trotting.

Post-injury, these CPGs often become disorganized due to altered sensory input and disuse of the affected limb. By restoring normal joint mobility—especially in the spine and proximal limb girdles—chiropractic care re-establishes accurate afferent input, allowing the brain and spinal cord to recalibrate motor output.

This process is particularly beneficial for:

- Dogs with incomplete recovery from disc disease (e.g., "spinal walking" pattern)
- Delayed proprioception in one or more limbs post-injury
- Dogs returning to sport or performance post-rehabilitation

Restoring spinal joint motion may not be sufficient alone, but it enhances the responsiveness to physical therapy and neurologic retraining, improving the overall trajectory of recovery.

WHEN AND HOW TO INTEGRATE CHIROPRACTIC POST-SURGERY

Timing and technique are critical. Chiropractic should not be performed over inflamed, unstable, or recently surgically altered joints. However, it can be used:

- **Early in recovery**, to address compensatory restrictions away from the surgical site (e.g., thoracic spine stiffness after hindlimb surgery)
- **Mid-phase**, when the dog is cleared for active rehabilitation, to restore segmental mobility and enhance neuromuscular control
- **Late-phase,** to correct persistent asymmetries that limit full return to function

Key areas to assess include:

- Cervical spine (especially after forelimb procedures or prolonged post-operative confinement)
- Thoracolumbar junction (common site of compensatory tension)
- Lumbosacral region and pelvic symmetry (often disrupted by altered gait)
- Scapulothoracic function (especially in weight-shifting compensations)

The veterinary chiropractor works closely with the rehabilitation team, often adjusting between physical therapy sessions to allow for optimal integration of retraining exercises.

CLINICAL EXAMPLES

TPLO Recovery

A 6-year-old Labrador retriever underwent TPLO for left CCL rupture. At 5 weeks post-op, radiographs showed good healing, but the dog was reluctant to bear full weight and

had developed ipsilateral lumbar spasm and pelvic tilt. Chiropractic adjustments targeted L4–S1 and the left ilium, resulting in visible stride improvement and more symmetrical weight bearing within two sessions. Integration with hydrotherapy and strengthening exercises followed.

Hemilaminectomy Follow-Up
A 9-year-old Dachshund with thoracolumbar IVDD had successful surgical decompression but exhibited "floating" hindlimb placement and exaggerated spinal curvature. Chiropractic care was initiated at 4 weeks post-op, focused on mobilizing non-surgical segments and reactivating paraspinal proprioceptive input. Combined with tactile stimulation and assisted walking, the dog regained more controlled hindlimb placement and began partial unassisted ambulation at 6 weeks.

SPORT AND WORKING DOGS: RECOVERY AND RETURN-TO-PLAY

In athletic dogs, chiropractic care supports faster recovery by maintaining spinal alignment during rest periods and helping to re-establish symmetrical movement before return to sport.

Key benefits include:

- Reducing risk of re-injury by correcting compensatory patterns
- Improving kinetic chain function through spinal-pelvic-limb coordination
- Supporting mental focus and drive by reducing chronic low-grade discomfort

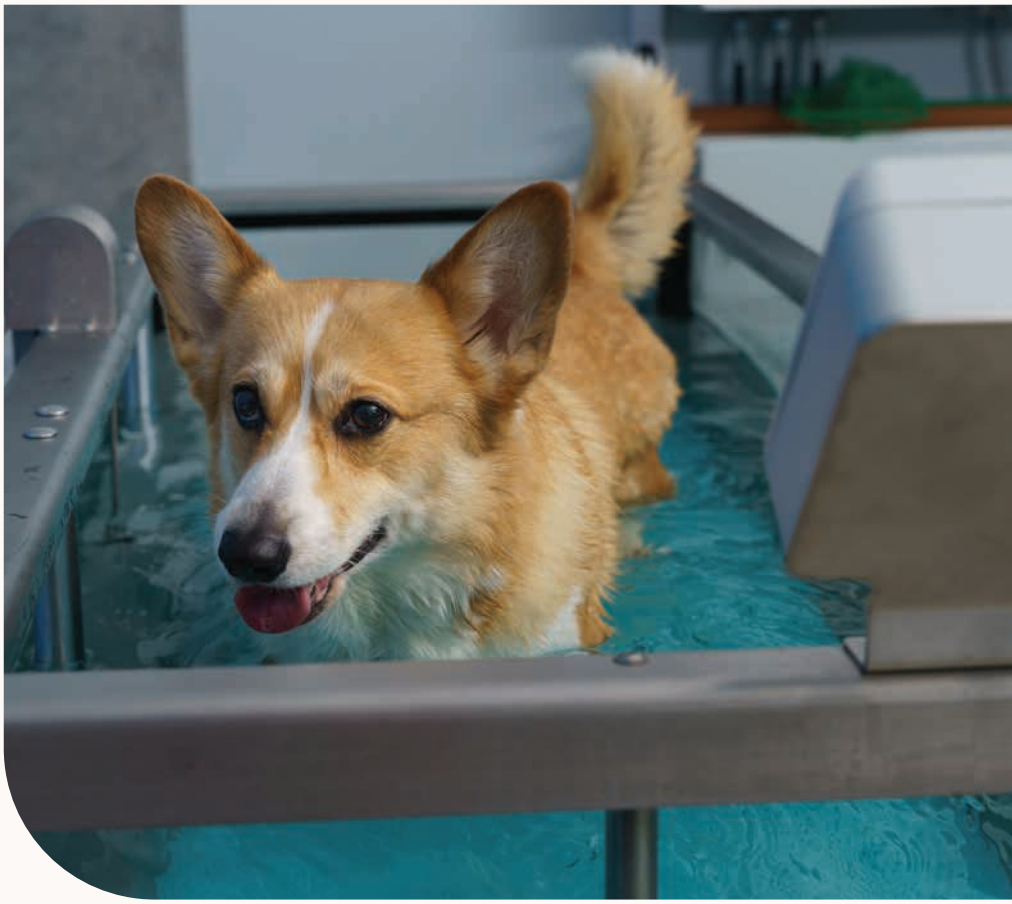
Handlers of agility, flyball, and detection dogs often report that dogs receiving regular chiropractic care post-injury return to sport with better movement quality and confidence.

MULTIMODAL SYNERGY: CHIROPRACTIC IS A TEAM PLAYER

Chiropractic is most effective when integrated with other rehabilitative modalities. For example:

- **Laser therapy** for local inflammation and pain control
- **Therapeutic exercise** for strength and endurance
- **Acupuncture** for neurologic stimulation and systemic regulation
- **Hydrotherapy** for low-impact muscle activation

The chiropractor's role is to normalize joint function, especially in the axial skeleton, allowing other therapies to build strength and coordination on a functional framework.



CONSIDERATIONS AND CONTRAINDICATIONS

Not all cases are appropriate for chiropractic care. Contraindications include:

- Acute, unstable orthopedic injuries (e.g., unhealed fractures)

Active disc extrusion or neurologic • decline without stabilization

- Infection or neoplasia involving the spine or joints

All patients should be cleared by the attending veterinarian, and chiropractic adjustments should only be performed by veterinarians or certified animal chiropractors operating under veterinary referral, depending on local regulation.

CONCLUSION: REBUILDING THE WAY DOGS MOVE

Surgical success is only part of the equation. The ultimate goal is functional recovery—restoring a dog's ability to move, play, work, and age well. Chiropractic care offers a powerful tool for reconnecting the brain to the body, eliminating lingering compensations, and supporting full-body integration during healing.

For the veterinary team seeking to optimize outcomes post-injury or post-op, chiropractic provides a bridge between structural repair and true functional restoration. It helps dogs not only recover—but **recover well**.

ABOUT DR BILL ORMSTOM

Dr. O started his veterinary career as a mixed animal mobile practitioner. That is when he discovered animal chiropractic. Through animal chiropractic, Dr. O found a sense of belonging, as well as an opportunity to help animal patients resolve their ailments. Animal chiropractic helped him to build a foundation for understanding health in animals that he was eager to share with other doctors like himself. Because of this he has been the backbone of more than one animal chiropractic program. He continues to find innovative ways to help animal chiropractors grow their practice, educate their clients and help more animals. He is the author of the books "Yes! It is Really A Thing", and "Yes It's A Better Thing." He currently teaches at Animal Chiropractic Education Source.
Visit: **www.yeschiro.com.**

SUPPORTING ANIMAL HEALTH, PROTECTING AUSTRALIA: AMA MARKS INTERNATIONAL DAY OF VETERINARY MEDICINE

ANIMAL MEDICINES AUSTRALIA (AMA) ON DECEMBER 9TH 2025, JOINS THE GLOBAL COMMUNITY IN CELEBRATING INTERNATIONAL DAY OF VETERINARY MEDICINE, RECOGNISING THE VITAL ROLE VETERINARY MEDICINES PLAY IN SUPPORTING THE HEALTH AND WELLBEING OF ANIMALS - BENEFITING PEOPLE, COMMUNITIES AND THE ENVIRONMENT.

(Photo credit: Animal Medicines Australia)

Veterinary medicines are essential tools used by veterinary professionals to keep the nation's 31.6 million pets and livestock healthy, maintain biosecurity, and protect wildlife. These products underpin good animal health and welfare, forming a critical part of a One Health approach for human and animal health within a shared healthy environment.

AMA Executive Director Mr Ben Stapley said the animal health industry supplying essential veterinary medicines is fundamental to protecting animals from, and treating animals with, illnesses and injuries.

"AMA members supply approximately 80 per cent of the veterinary medicines used in Australia, improving animal health and welfare and supporting Australia's $31.4 billion livestock industry with the tools needed for preparedness and rapid response.

"In any biosecurity emergency, veterinary medicines are essential to managing risks and limiting the spread of disease."

AMA is advocating for a regulatory environment that creates incentives for animal health companies to introduce new animal health technologies. Providing incentives for the animal health sector to invest in innovation - such as improving data protection for veterinary medicines - will further enhance animal health and welfare and support sustainable livestock production.

AMA members remain committed to supporting Australia's veterinary professionals through ongoing innovation and by ensuring access to safe, effective and science-based animal health products. These products provide veterinarians with the tools needed to diagnose, treat and prevent disease, contributing to a healthier future for all animals.

"Our members are at the forefront of veterinary medicine innovation, continually working to stay ahead of emerging threats. This International Day of Veterinary Medicine, we acknowledge all those working to improve the lives and welfare of our pets and livestock."
concluded Mr Stapley.

MORE INFORMATION

Visit: animalmedicinesaustralia.org.au

WESTERN RINGTAIL POSSUMS ARE FEELING THE HEAT

EXTREME HEAT IS FORCING WESTERN AUSTRALIA'S CRITICALLY ENDANGERED WESTERN RINGTAIL POSSUM (NGWAYIR) TO CUT BACK ON VITAL ACTIVITY AND FEEDING, NEW RESEARCH SHOWS.

The study, a collaboration between the Western Australia Department of Biodiversity, Conservation and Attractions (DBCA), Murdoch University, The University of Western Australia and Biota Environmental Sciences, examined how extreme but non-lethal heat affects ringtail possum behaviour — an area poorly understood by scientists.

During the summer of 2024–25, which included several heatwaves, the research team monitored ten western ringtail possums living south of Perth. Each animal wore a lightweight collar fitted with GPS and accelerometer devices to record activity levels.

The study found that on very hot days (above 40°C), nocturnal activity declined by up to 43% in males and 31% in females, compared with cooler days (around 27°C).

"What really stood out was that the biggest drop in activity happened early in the evening, when western ringtail possums usually do most of their feeding," said DBCA research scientist Harry Moore, who was the lead author on the study.

"That's concerning, because it suggests they're missing critical foraging opportunities on the hottest days, which can lead to weight loss and lower energy levels," he said.

Dr Moore said those changes could potentially translate to lower rates of reproduction and survivability.

"During one of the heatwaves, we lost a collared possum that likely died from heat stress, and another was found showing clear signs of overheating such as panting, shaking and licking its paws."

"It highlights just how vulnerable this species is when temperatures climb."

The Western Ringtail Possum is listed as critically endangered under the Environment Protection and Biodiversity Conservation Act, and it was recently believed that the species had declined by more than 80% in ten years to an estimated population size of around 3,400 mature individuals.

However, last year, Murdoch University School of Environmental and Conservation Sciences PhD candidate and zoologist Roy Teale led the largest and most rigorous wildlife survey ever done for the species, surveying 41 sites over 1,200km of transects across the range of the species.

Researchers estimated the population size at around 21,800 possums in just the surveyed footprint, nearly seven times higher than previous estimates with a lot of habitat still unsurveyed.

"One encouraging finding from my earlier research was that western ringtail possum numbers are far higher than we previously believed," Mr Teale said.

But Mr Teale, who was a co-author on this latest study, said climate change still poses a threat to western ringtail possums.

"Higher numbers don't mean the species is safe. With climate change driving more frequent and intense heatwaves, our latest findings show new risks emerging that could still threaten the species' long-term survival."

Dr Moore recommended that future climate vulnerability assessments needed to move beyond counting deaths.

"Our results show that it's not enough to look at whether animals survive heatwaves — we also need to understand what heat is costing them," he said.

"Protecting cooling habitat like large trees, canopy cover and natural hollows, and factoring behavioural stress into climate-risk planning, will be critical as extreme heat becomes more frequent."

The paper, ***Sublethal effects of extreme heat on a critically endangered marsupial***, is available in the journal Pacific Conservation Biology.

MORE INFORMATION

Visit: www.murdoch.edu.au

AUSTRALIA NEEDS A CANINE BRAIN BANK TO REDUCE THE RISK OF DOG ATTACKS

A STEP TOWARDS DEVELOPING GENETIC TESTS THAT COULD IDENTIFY HIGH-RISK ANIMALS BEFORE THEY EVER BITE.

BY: PROFESSOR PAUL MCGREEVY AND RIMINI QUINN | THE CONVERSATION

Dog attacks are on the rise in Australia. The most recent data from the Australian Institute of Health and Welfare show dog-related hospital admissions more than doubled in the eight years to 2021.

Over 2021–22 in Australia, there were more than 9500 cases of attacks where a person was bitten or struck by a dog.

In response, some governments are introducing tougher penalties for dog attacks. In November 2025, for example, the South Australian government introduced fines of up to $25,000 for people whose pet attacks and seriously injures or kills a person or animal.

But reactive enforcement like this can't prevent tragedies. Something that might be able to help is an Australian canine brain bank. This would be a key step in developing genetic tests that could identify high-risk animals before they ever bite.

BREEDS ARE COMPLEX

In March 2020, 90-year-old Ada Holland was killed by three unregistered dogs on Collingwood Beach in Vincentia, New South Wales. Her death prompted a coronial inquiry which heard that just a week before the fatal attack, the same dogs had attacked another person. However, inadequate council procedures failed to prevent the subsequent tragedy.

During the inquest, one of us (Paul) provided expert evidence.

Asked to identify the breed of dogs involved in the attack, he could only conclude they appeared to be a mixture of multiple dog breeds which included Staffordshire bull terrier; the specific breed composition could not be determined.

Deputy State Coroner Carmel Forbes acknowledged breed-related issues remain "complex".

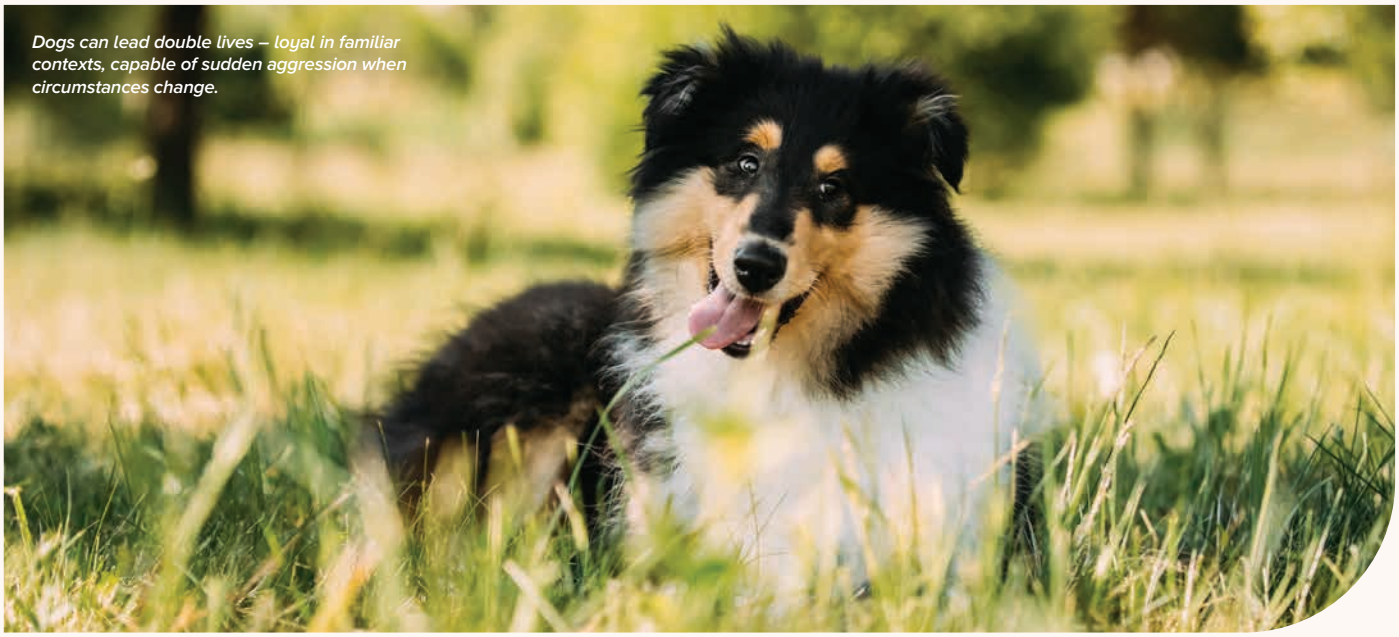
This uncertainty is a fundamental limitation of our current approach when it comes to identifying aggression in dogs, which relies on appearance, not neurobiology.

THE GENETICS OF DOG BEHAVIOUR

In the past few decades scientists have made slow but steady progress in understanding the genetics of dog behaviour.

A 2016 study found genetic variants linked to behaviours such as stranger-orientated and dog-orientated fear and aggression.

Another study three years later identified genomic regions associated with aggression and fear across more than 100 breeds.



Dogs can lead double lives – loyal in familiar contexts, capable of sudden aggression when circumstances change.

Most significantly, a 2022 study demonstrated that breed alone explains less than 10% of behavioural variation.

Our team's pilot work has also shown increased serotonin 1A receptors in dogs euthanised for aggression. Genetic studies have linked serotonin and dopamine-related genes with canine aggression.

These represent genuine advances in understanding aggression in dogs. A canine brain bank would go even further.

WHAT IS A CANINE BRAIN BANK?

Our research team first proposed establishing an Australian canine brain bank to understand the biological basis of impulsive aggression in 2013. But more than a decade later, it still doesn't exist.

The concept involves systematically collecting brain tissue from the thousands of dogs euthanised for aggression in Australia each year alongside normal controls and identifying receptor densities that characterise high-risk dogs.

These patterns will then be linked to genetic markers predicting which dogs pose the highest risk – before they ever bite.

Unlike probing a living dog's brain, testing for the genetic markers predictive of impulsive aggression may eventually require only a simple blood sample.

The brain bank essentially provides the key to translate neurobiological risk into testable genetic markers for living dogs.

BUILDING BETTER SCIENCE

Shelters already use behavioural assessments to evaluate how dogs respond to handling, food, and unfamiliar people.

These assessments are useful, but they have limitations. For example, dogs can lead "double lives" – loyal in familiar contexts, capable of sudden aggression when circumstances change. A dog may pass shelter assessments, yet later respond dangerously to triggers not encountered during evaluation.

A shelter could combine observed behaviour with genetic risk assessment. A dog showing good temperament but carrying high-risk genetic markers might need extra socialisation or placement only with experienced handlers.

Conversely, a dog breed perceived to be dangerous but with low genetic risk markers might be safely rehomed.

This combined approach could target resources where most needed. It could also help breeders select away from high-risk traits and give shelter staff objective assessment tools.

But it's important to say that genetic markers should only inform management strategies, such as placement with experienced handlers or enhanced training, and not mandate euthanasia decisions.

NATURE VERSUS NURTURE

Of course, genetics and behavioural assessment don't tell the whole story.

Each dog's learning history and gene expression – including their socialisation experiences, training methods, living conditions and how the owner handles the dog – profoundly shape behavioural outcomes.

Even dogs with genetic predispositions toward impulsivity may never display dangerous aggression if properly managed, while dogs with low genetic risk can become dangerous through neglect or deliberate conditioning.

This doesn't diminish the value of genetic markers but underscores why we need multiple layers of assessment. Genetic information would help identify which dogs need particularly careful environmental management and which owners need additional support to provide it.

No single approach will prevent all attacks. But better science – including the establishment of a canine brain bank – gives us much better odds.

This article first appeared in The Conversation.

MORE INFORMATION

Visit: www.sydney.edu.au

RESEARCHERS GIVE UPDATE ON NEUROLOGICAL CONDITION IMPACTING MAGPIES IN WA

MURDOCH UNIVERSITY RESEARCHERS HAVE GIVEN AN UPDATE ON THEIR INVESTIGATION INTO THE MYSTERIOUS NEUROLOGICAL SYNDROME AFFECTING MAGPIES IN WESTERN AUSTRALIA.

In April 2025, Murdoch University partnered with WA Wildlife to conduct an intensive investigation into the mysterious neurological syndrome affecting magpies in WA.

Using the last known cases, researchers carried out a comprehensive study to uncover possible causes of this unusual condition.

While the research team is yet to find a definitive cause of neurological syndrome, ongoing molecular testing and pathology have provided some leads.

Dr Flaminia Coiacetto, Senior Lecturer at Murdoch University's School of Veterinary Medicine, said the investigation so far had allowed the team to rule out several possible causes.

"This is an important step forward," Dr Coiacetto said.

"While we don't yet have a definitive answer, the progress we've made is guiding our next steps.

"This work is complex, but every piece of information brings us closer to understanding what's happening and how best to respond."

WHAT THE RESEARCH INVOLVED

The investigation involved three major steps:

1. Molecular testing for known and unknown pathogens, including viruses, bacteria, and parasites, as well as screening for important notifiable diseases through DPIRD.
2. Environmental contaminant screening, testing liver samples for approximately 250 substances such as heavy metals, pesticides, herbicides, and rodenticides.
3. Post-mortem and pathology, examining organs and tissues under the microscope for signs of disease or infectious agents.

WHAT WE KNOW SO FAR

Dr Bethany Jackson, from Murdoch University's Centre for Biosecurity and One Health and School of Veterinary Medicine, said testing has ruled out notifiable diseases such as bird flu and Newcastle disease.

Botulism was not detected, although this remains difficult to exclude completely.

Glyphosate was absent from all samples, and while low levels of legacy pesticides (such as dieldrin and DDT byproducts), rodenticides, and some heavy metals were found, these were similar in both affected and unaffected birds.

"As with other contaminants that persist, we are not surprised that second-generation rodenticides are present," Dr Jackson said.

"This reinforces the importance of using all pesticides, herbicides, and rodenticides sparingly and with thought for secondary toxicity and environmental impacts."

WHAT'S NEXT

The team will continue investigations into potential infectious agents, including blood parasites and insect-borne viruses, and will focus on comparing 'normal' cases to those showing neurological signs.

Further testing and possible treatment trials are planned for the next season.

"Complex wildlife diseases like this often take multiple seasons to investigate, and sometimes no definitive cause is found," Dr Coiacetto said.

"Our team is committed to continuing this work into the next season and building on what we've learned so far.

"We thank the public and our wildlife sector colleagues for their continued support as we respond to this challenging and unusual condition."

PUBLIC GUIDANCE

- Do not collect or report deceased birds to wildlife centres or Murdoch University for research use. We require very specific and time-sensitive samples for our work.
- If a live bird shows signs of paralysis, call the Wildcare Helpline on **(08) 9474 9055** or take it to a wildlife carer or hospital.
- If five or more sick or dead birds are found in one area, report this to the Emergency Animal Disease Hotline: **1800 675 888.**

The project was made possible thanks to the support of NMI laboratories, DPIRD, wildlife centres and volunteers — including Darling Range Wildlife Shelter, Kanyana Wildlife, Perth Wildlife Hospital, and WA Wildlife — as well as private donors and Murdoch University research staff.

MORE INFORMATION

Visit: www.murdoch.edu.au

Animal Referral & Emergency Network

Our specialist and emergency hospitals are part of the communities they serve, with trusted teams who understand local vets, pets and families.

Each hospital offers the reassurance of a familiar, dedicated service - while having the support of a wider network to provide advanced facilities and expertise when you need it most.

For referring vets, that means seamless collaboration and world-class care delivered locally, without the complexity of managing multiple providers.

AEC animal emergency centre

Mount Waverley, VIC
(03) 9803 8122

Frankston, VIC
(03) 9770 5555

Highett, VIC
(03) 9532 5261

Varsity Lakes, QLD
(07) 5593 4544

Stones Corner, QLD
(07) 3456 0500

Noosaville, QLD
(07) 5353 7005

Kedron, QLD
(07) 3350 1333

Midland, WA
(08) 6500 3010

ARH Animal Referral Hospital

Homebush West, NSW
(08) 6500 3010

Minchinbury, NSW
(08) 6500 3010

Baulkham Hills, NSW
(02) 9639 7744

West Gosford, NSW
(02) 4323 3886

Fairy Meadow, NSW
(02) 4283 8432

Essendon Fields, VIC
(03) 9379 0700

ARH Animal Referral Hospital Brisbane

Sinnamon Park, QLD
(07) 3172 0593

Greencross Vet Centre GP & Emergency / Adelaide Veterinary Services & Referral Centre

Norwood, SA
(08) 8132 0533

mvsc Melbourne Veterinary Specialist Centre

Glen Waverley, VIC
(03) 9887 8844

CARE Centre for Animal Referral & Emergency

Collingwood, VIC
(03) 9417 6417

VRH veterinary referral hospital

Dandenong, VIC
1300 385 874

Greencross Vet HOSPITAL

Werribee, VIC, 3030
(03) 8721 1414

For further information and to connect with your local hospital team, visit: emergencyvet.com.au

2026 AUSTRALIAN DOG OF THE YEAR WINNERS ANNOUNCED!

THE GOOD NEWS AUSTRALIA NEEDS RIGHT NOW: A REMINDER OF HOPE, KINDNESS AND HUMANITY, LED BY DOGS

From conservation, therapy and assistance dogs to military, search and rescue, athlete and advocacy heroes, the Puppy Tales Australian Dog of the Year Awards celebrate everyday dogs who have brought comfort and joy through good and challenging times, and helped to restore independence, confidence and safety for people across Australia.

"The Australian Dog of the Year Awards began six years ago, and since then it can feel as though the world has moved from one moment of heaviness to the next. In that time, dogs have become emotional anchors for so many of us, offering comfort, connection and quiet strength," says Awards founder Kerry Martin, international award-winning pet photographer, author and creator of Puppy Tales

"These Awards intentionally shine a light on what is good and hopeful. They celebrate dogs, particularly our winning dogs, who remind us that kindness and care still matter, and that there is still hope, heart and humanity in the world. This year they honour remarkable canine companions whose impact reaches far beyond their own homes, and whose presence continues to lift Australian lives."

This year's stories were deeply moving for the new judging panel, which include:

- Awards Founder Kerry Martin
- The Saltiest Dog's Founder Kate Opitz
- ABC's Muster Dogs TV star Frank Finger
- 2025 Winner Elle's human, Robyn Adair
- Australian Dog Lover publisher Agnes Beugnon
- Georgia Gardner - human to Valerie the Dachshund, known for one of Australia's most remarkable dog reunion stories

Winners, nominees and voters received prizes worth $20K, including $1,000 donation by Puppy Tales to the Australian Dog of the Year Award winner's preferred charity, and $250 to the nominated charities of the recipients of the People's Choice Award and ARAS (All Rescues Are Special) Medal. celebrate everyday dogs who have .

You can read about the WINNERS here and the incredible canine Finalist panel by visiting: https://puppytales.com.au/winners/

2026 DOG OF THE YEAR

WINNER

LOUIE!

BORDER COLLIE
GOLD COAST QLD

NOMINATED CHARITY RECIPIENT
Gold Coast Centre Against Sexual Violence

Helping people feel safe and regulated during highly vulnerable moments

Louie is a therapy dog who supports survivors of sexual violence through calm, grounding companionship. Certified with Therapy Dogs Australia, he regularly visits the Gold Coast Centre Against Sexual Violence, helping people feel safe and regulated during highly vulnerable moments.

Working alongside his handler, trauma survivor and breathwork facilitator Caroline Brunne, Louie's quiet presence highlights the powerful role dogs can play in trauma recovery and healing. Louie's human, Caroline Brunne:

"Louie has an instinctive ability to meet people exactly where they are, without judgement or expectation. He brings gentleness to difficult conversations and reminds people they are not alone. Louie doesn't seek attention; he simply shows up, offering comfort and healing one soft moment at a time."

PEOPLE'S CHOICE AWARD

ISLA

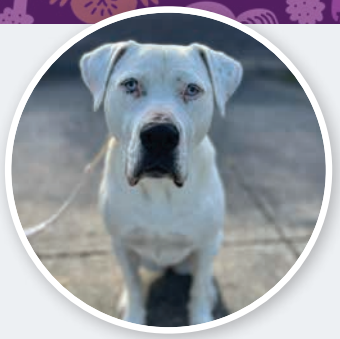
Transformed her handler's world!

LABRADOR RETRIEVER
SYDNEY NSW

NOMINATED CHARITY RECIPIENT
Guide Dogs NSW/ACT

Isla is a guide dog whose partnership has transformed her human Karlee Symond's life, restoring independence, confidence and freedom. Before Isla, everyday tasks such as leaving the house alone felt overwhelming and isolating. Since being matched, Isla has supported Karlee to pursue university study, gain employment and relocate independently to a major city for the first time. Through her calm guidance and unwavering reliability, Isla has removed barriers, opened doors and helped her human build a life once thought out of reach.

ARAS (ALL RESCUES ARE SPECIAL) MEDAL



WILLOW

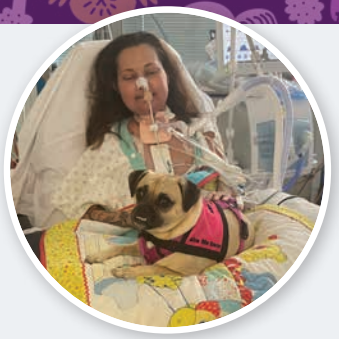
Calm, gentle presence.

BULL ARAB CROSS
BITTEN, VIC

NOMINATED CHARITY RECIPIENT
Hear No Evil – Australian Deaf Dog Resc

Willow is a deaf rescue dog who has changed perceptions and outcomes for deaf dogs across Australia. Adopted in 2015, she was taught to communicate using Auslan signs and became an ambassador for Hear No Evil – Australian Deaf Dog Rescue. Through school visits, Deaf festivals, expos and media appearances, Willow's calm, gentle presence has helped thousands understand that deaf dogs are intelligent, capable and deeply bonded companions — proving that deafness is not a limitation, but a different way to connect.

CANINE HOME HERO MEDAL



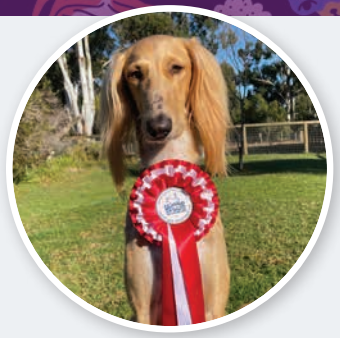
HONEY

Essential emotional support.

PUG
REDBANK
PLAINS QLD

Honey is an assistance dog whose quiet devotion brought comfort during the final months of her human Vanessa's life. Visiting ICU every day for three months, Honey offered calm, loyalty and grounding companionship in a place of uncertainty and fear. Once a timid rescue, she became a steady presence for Vanessa, her husband Joel and hospital staff, offering grace and strength even when she was never asked or expected. Honey now continues supporting Joel, carrying forward a legacy of love in Vanessa's memory.

DOG OF TALENT MEDAL



PUCK

Extraordinary focus and drive.

SALUKI
PERTH, WA

Puck is the definition of versatility in motion. A Saluki with extraordinary focus and drive, he is one of the first dogs of any breed in Australia to achieve champion titles across four disciplines – conformation, lure coursing, tracking, and track and search – proving that true talent comes in many forms. Beyond competition, he also serves as a wellbeing dog, offering calm, grounding support to students at school.

PAWS-ITIVE CHANGE AWARD

GUS

Comforting thousands of families.

LABRADOR RETRIEVER
PERTH, WA

For almost a decade Gus has brought comfort to thousands of families at Ronald McDonald House WA, helping them navigate the tough times and celebrate the good times. Known as the "Director of Hugs and Pats," he offers calm companionship to parents and children facing long hospital stays and life-altering uncertainty. Gus brings comfort, warmth and a sense of normality during life's hardest moments.

SPECIAL MENTIONS

DAISY

"Animal Companion therapy dog"

WILL

"Veteran assistance dog"

TEST. DON'T GUESS.
5 HOUNDS LAUNCHES AUSTRALIA'S FIRST TITRE TEST ROADSHOW

A SIMPLE WAY TO CHECK YOUR DOG'S IMMUNITY BEFORE THEIR NEXT VACCINATION

5 HOUNDS BY DR WILL.

Australian dog wellness brand 5 Hounds is launching Australia's first Titre Test Roadshow, giving pet owners across five major cities the opportunity to check their dog's immunity to core diseases before deciding whether a booster vaccination is needed.

With more than 500 appointments already booked, the clinics reflect growing interest among Australian dog owners in more personalised approaches to preventive healthcare. Modern veterinary tools now make it possible to assess each dog's individual immune status and align vaccination timing accordingly.

Founded by veterinarian Dr Will Maginness, 5 Hounds combines veterinary diagnostics with species-appropriate nutrition to support long-term canine health.

"At 5 Hounds, our approach to preventive healthcare is centred on the individual dog," says Dr Will. "Titre testing isn't about abandoning vaccines. Vaccination is essential to protect dogs against serious diseases. By measuring antibody levels, we can determine whether a booster is needed for each dog."

Titre testing involves a small blood sample to measure protective antibody levels against Canine Parvovirus, Distemper and Adenovirus (Hepatitis). The results indicate whether a dog remains protected or whether a booster may be recommended.

XX. (Photo credit: 5 Hounds)

Vaccination guidelines from the World Small Animal Veterinary Association (WSAVA) advise that following the initial puppy course and first annual booster, core vaccines should not be administered more frequently than every three years in adult dogs. In some parts of Australia, additional vaccinations for local diseases, such as leptospirosis, may also be recommended where risk is present*.

During a pilot pop-up clinic last year, 5 Hounds conducted 510 titre tests. Of those dogs, only three showed antibody levels low enough to recommend a booster at that time.

"The results don't mean vaccination isn't important," Dr Will says. "It shows that immunity can persist in many dogs for years after their primary course and initial booster. Titre testing is one tool in preventive care. It helps us make informed decisions based on the individual dog and does not replace routine veterinary health checks, which remain essential for assessing a dog's overall health."

The initiative forms part of 5 Hounds' broader veterinary-led preventive health model, combining diagnostic monitoring with species-appropriate, lightly cooked nutrition. A significant proportion of immune function is associated with the gut, highlighting the role nutrition plays in supporting long-term immune health.

In addition to providing clarity around vaccination timing, titre testing may help some owners avoid unnecessary repeat vaccination where immunity persists.

"Our goal is simple," Dr Will says. "Vaccinate when needed, guided by the individual dog's immune status."

XX. (Photo credit: 5 Hounds)

UPCOMING CLINIC DATES:

- Brisbane: 14 Mar (Dogs Queensland, 247 King Ave, Durack QLD) | 9am–3pm
- Sydney: 15 Mar (Dogs NSW, 44 Luddenham Rd, Orchard Hills NSW) | 9am–3pm
- Melbourne: 21 Mar (27A Cameron St, Brunswick VIC) | 9am–4pm

BOOKINGS

Dog owners can secure a booking via https://**5hounds.com.au/pages/titre-test-for-dogs-australia**

Cost: Free for 5 Hounds subscribers* | $150 for non-subscribers.

*Subscriber eligibility: Minimum of two fresh food boxes purchased within the six months prior to the titre testing date.

Pet owners unsure whether titre testing is suitable for their dog are encouraged to contact the 5 Hounds team at **info@5hounds.com.au**

ABOUT 5 HOUNDS

5 Hounds is an Australian veterinary-led dog wellness company focused on preventive healthcare through diagnostic monitoring and species-appropriate nutrition to support long-term canine health. Through healthy, convenient dog food subscriptions, 5 Hounds provides personalised meal plans crafted by vets to support every dog's unique health needs. Discover more at **https://5hounds.com.au**

CASE STUDY: **ODIE**

NAME: Lisa Cutajar

SUBURB: Mulgrave VIC

DOG: Odie, 5-year-old Black Labrador

2025 TITRE TEST OUTCOME:

Strong immunity to all three core diseases (Canine Parvovirus, Distemper and Adenovirus (Hepatitis)

TELL US ABOUT ODIE.

"Odie is not just my best friend but my soul dog. He is full of personality and is a gentle little teddy bear who loves his cuddles. He is my little shadow. Never far away when food is involved has even mastered opening his treat cupboard. No food is off limits in his mind. Odie also enjoys rolling around in any body of water whether that be a swim at the beach or a roll in the mud. His obsession with squeaky toys and chew toys brings him joy along with walks in nature. Odie never fails to make us laugh and smile each and every day he is truly one of a kind."

Odie at a 5 Hounds Titre Test Clinic in 2025 . (Photo credit: 5 Hounds)

WHY DID YOU CHOOSE TITRE TESTING FOR ODIE?

"I work in the pet industry every day, so I'm constantly talking about proactive health and long-term wellbeing. My dog is the love of my life, and everything I do for him is with longevity in mind. Titre testing just made sense. It's about making informed decisions, not automatic ones."

CASE STUDY: **RUBY**

NAME: Sophia Sellick

SUBURB: Brighton, VIC

DOG: Ruby – 14-year-old Staffordshire Bull Terrier

2025 TITRE TEST OUTCOME:

Strong immunity to all three core diseases (Canine Parvovirus, Distemper and Adenovirus/Hepatitis)

TELL US ABOUT RUBY:

"I adopted Ruby when she was 5 years and 3 months old, and she's been a huge part of our family ever since. She has the sweetest nature and still loves being involved in everything we do. I'm a Pilates instructor, and she even joins me for a few gentle 'paw-lates' moves at home. She might be 14, but she still enjoys her walks, going out on the boat and being right by my side."

Ruby at a 5 Hounds Titre Test Clinic in 2025. (Photo credit: 5 Hounds)

WHY DID YOU CHOOSE TITRE TESTING FOR RUBY?

"Ruby is getting older now and she has a few health issues, so I'm very conscious about anything that could place unnecessary stress on her immune system. Titre testing gave me clarity. Instead of assuming she needed another vaccine, we were able to make a decision based on her actual immunity."

STATE OF THE AUSTRALIAN DOG FOOD INDUSTRY

PEDIGREE LEADS PACKAGED DOG FOOD, FOLLOWED BY A COMPETITIVE SECOND TIER. CONJOINTLY HAS LAUNCHED BRAND TRACKER BY CONJOINTLY, A BRAND TRACKING SOLUTION THAT SHEDS LIGHT ON BRAND PERFORMANCE IN THE AUSTRALIAN PACKAGED DOG FOOD MARKET.

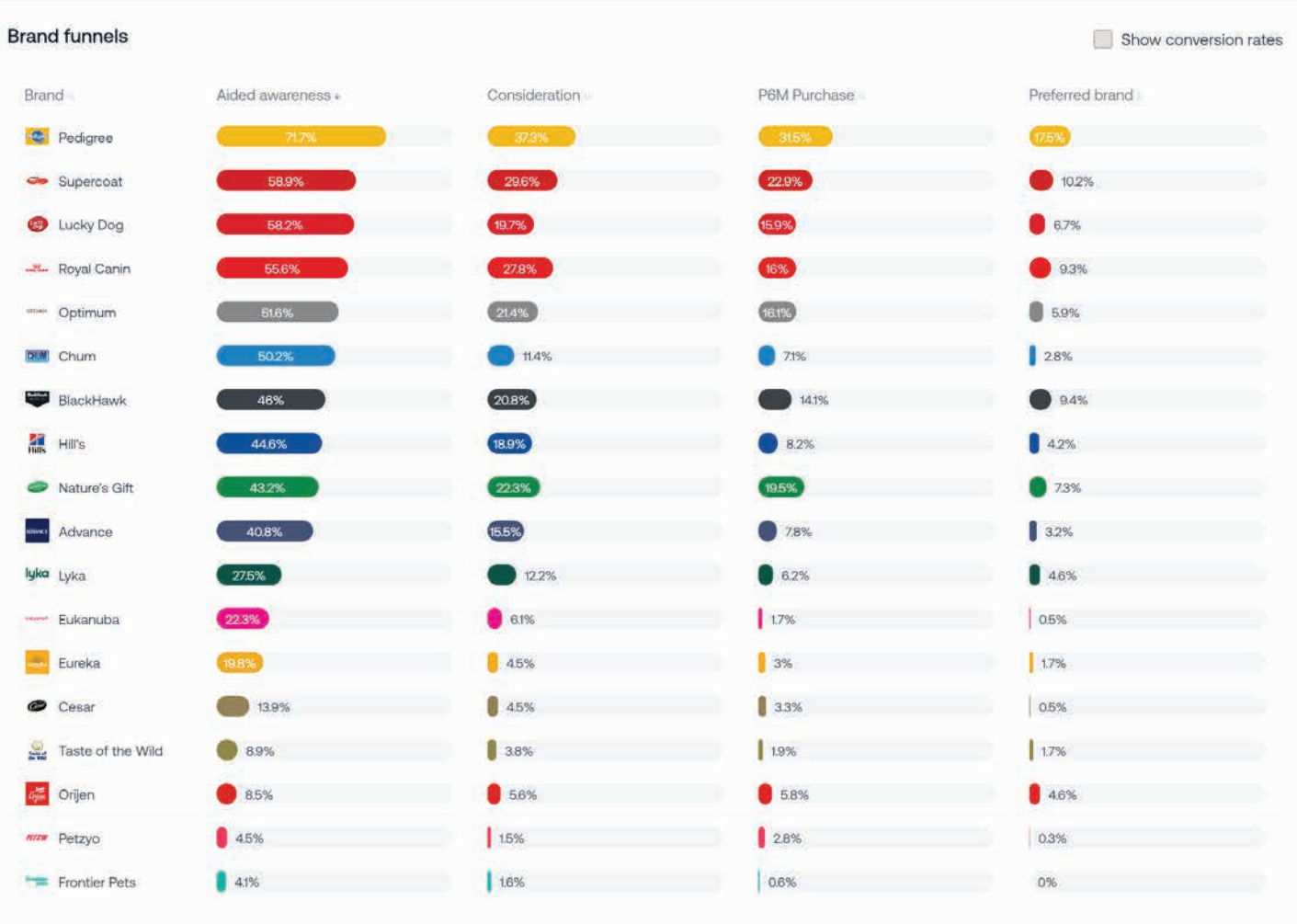
INITIAL FINDINGS FROM AUSTRALIAN PACKAGED DOG FOOD MARKET

Pedigree has a towering presence in the Australian packaged dog food market. The brand achieves 72% awareness, 37% consideration, and 18% preference – substantially ahead of all competitors. No other brand captures more than 10% preference, making the gap between Pedigree and the second tier decisive.

A competitive second tier includes Supercoat (59% awareness, 30% consideration, 10% preference), Lucky Dog (58% awareness, 20% consideration, 7% preference), and Royal Canin (56% awareness, 28% consideration, 9% preference). These brands achieve substantial awareness but lag considerably behind Pedigree at both consideration and preference.

Optimum (52% awareness, 21% consideration, 6% preference) and Chum (50% awareness, 11% consideration, 3% preference) show moderate awareness but significantly underperform at consideration. Hill's presents a different problem: while its awareness of 45% is within reach of the mid-tier, it captures only 4% preference compared to Supercoat's 10%, indicating a steeper drop-off in the funnel.

Nature's Gift (43% awareness, 22% consideration, 7% preference) demonstrates solid conversion efficiency, capturing relatively strong consideration despite mid-tier awareness. Eukanuba presents a striking anomaly: 22% awareness but only 0.5% preference, indicating a pronounced awareness-to-preference gap suggesting failure to win choice among those aware of the brand. BlackHawk (46% awareness, 21%



consideration, 9% preference) shows much stronger conversion efficiency, nearly matching Royal Canin's preference levels despite lower initial awareness.

People in the industry are also watching closely the gap between mainstream supermarket brands and emerging premium players. Brands like Lyka (28% awareness), Eureka (20%), and Frontier Pets (4%) represent the growing fresh/freeze-dried segment challenging traditional kibble.

Explore the Australian packaged dog food data at ***https://brandtracker.conjointly.com/australia/packaged-dog-food/.***

ABOUT BRAND TRACKER BY CONJOINTLY

Brand Tracker delivers automated brand performance reporting with rigorous, market-representative insights. Australian businesses across industries can now access statistically weighted brand funnel data, including awareness, consideration, purchase intent and preference.

"We built Brand Tracker because traditional brand tracking locked businesses into expensive, inflexible contracts and delivered snapshots long after market conditions shifted," said Nik Samoylov, Founder of Conjointly. "Brand Tracker gives Australian businesses the easy-to-use and easy-to-digest analytics they need to know their brand positioning, brand awareness and more, without requiring a six-figure commitment."

Brand Tracker currently offers Australian businesses free access to detailed public brand data across four industries. For monitoring of your own brand with advanced analytics and real-time dashboards, Priority Access starts from the industry-breaking price of $6,000 per year – a fraction of traditional agency costs. Custom tracking solutions are also available for businesses with specific needs.

ABOUT CONJOINTLY

Conjointly started as a simple online tool for conjoint analysis in 2016 and has since evolved into an industry-leading market research platform.

MORE INFORMATION

Visit: conjointly.com/blog/dog-food-aus

WA - CHANGES TO THE LIVER FLUKE IMPORT CONDITIONS FOR HORSES WILL APPLY FROM 1 DECEMBER 2025

THIS IS PROVIDED, FURTHER TO THE NOTIFICATION OF 25 SEPTEMBER 2025, TO ADVISE OF WA'S NEW LIVER FLUKE IMPORT CONDITIONS FOR HORSES. THE IMPORT CONDITIONS ARE DESIGNED TO REDUCE THE RISK OF LIVER FLUKE ENTERING WA AND WILL COME INTO EFFECT FROM 1 DECEMBER 2025.

TREATMENT REQUIREMENTS FROM 1 DECEMBER 2025

- Horses of WA origin, which have been absent from WA for 2 weeks or less and resided only in the liver fluke test exempt area of Australia, require no treatment (or testing).
- Horses of WA origin, which have been absent from WA for 12 weeks or less and which spent any time in the liver fluke test area of Australia require a treatment (but are not required to be tested).
- All other horses entering WA, regardless of the location of their property of origin or destination, must be treated for liver fluke at the Entry Inspection Point or within 48 hours before presenting to the WA border checkpoint.
- Treatment of liver fluke must be with triclabendazole at a dose rate of 12mg/kg body weight (APVMA permit 13882) and be administered, or directly supervised, by a registered veterinarian or an authorised government inspector.
- **From 1 December 2025, horses entering WA will no longer be required to undergo post-entry liver fluke treatment**.

MORE INFORMATION

Read more on the Department website by clicking this link https://www.dpird.wa.gov.au/businesses/livestock-farming/importing-livestock-into-wa

PPGA WELCOMES NSW BAN ON PRONG COLLARS, REINFORCING HUMANE DOG TRAINING STANDARDS

THE PET PROFESSIONAL GUILD AUSTRALIA (PPGA) STRONGLY WELCOMES THE NSW GOVERNMENT'S ANNOUNCEMENT DELIVERING LONG-AWAITED ANIMAL WELFARE REFORMS, WITH THE PROHIBITION OF PRONG COLLARS REPRESENTING A DECISIVE STEP FORWARD FOR DOG WELFARE ACROSS THE STATE.

The reforms announced by the NSW Government respond to sustained community concern and reflect contemporary animal welfare science, which recognises prong collars as unnecessary, painful, and harmful. PPGA has long advocated for their removal from lawful use nationwide.

"Prong collars work through pain, fear, and discomfort. They compromise both physical welfare and emotional safety, and they have no place in modern dog training," said Sarah Campbell, President of the Pet Professional Guild Australia. "This ban clearly acknowledges what the evidence has shown for years and what many in the community already understand."

PPGA's formal Position Statement on Choke and Prong Collars sets out the organisation's evidence-based position that aversive training equipment increases fear, anxiety, and aggression in dogs, creating not only serious welfare concerns but also a broader public safety risk. By suppressing behaviour through pain rather than addressing its underlying causes, these tools can increase the likelihood of reactive or aggressive responses. The statement reinforces PPGA's commitment to force-free, humane training methods that prioritise learning, safety, and the human–animal relationship.

"As Australia's only professional association dedicated to force-free training and behaviour, this reform aligns directly with our Code of Conduct and position statements," Campbell said. "Effective training is built on skill, education, and trust, not pain and intimidation."

PPGA also supports the introduction of tougher penalties for leaving animals in hot cars. Vehicles can reach lethal temperatures within minutes, and measures such as shade or cracked windows are not sufficient. "These incidents are entirely preventable, and stronger laws help reinforce that responsibility always lies with the human," said Sarah Campbell.

PPGA acknowledges the leadership shown by the Minns Government in responding to community expectations and advancing animal welfare laws that reflect best practice and current science. The Guild looks forward to continued engagement to support humane, ethical standards for companion animals across New South Wales.

MORE INFORMATION

Visit: www.ppgaustralia.net.au

N IS FOR "NO TO ANAESTHESIA-FREE DENTISTRY"

BY: **TRACEY SMALL BA (SOC SC), VN, DIP VN (DENTISTRY)**
HALLAM VETERINARY CLINIC, HALLAM, VICTORIA

Anaesthesia-free dentistry (AFD) has become increasingly popular within the companion animal industry over the past decade, largely driven by targeted marketing campaigns and heightened public concern regarding anaesthetic safety. Although promoted as a safer, cheaper, and more "natural" alternative to veterinary dental procedures performed under general anaesthesia, AFD is strongly opposed by veterinary dental specialists and professional veterinary bodies worldwide. This opposition is grounded in a substantial body of evidence demonstrating that AFD cannot diagnose or treat subgingival disease, may cause pain and distress, and misleads owners into believing their pets have received legitimate dental care when no therapeutic benefit has been delivered.[1-9]

One of the primary drivers of AFD's popularity is fear—specifically, fear of anaesthesia. Many owners rely on anecdotal stories, historical experiences, or online misinformation that exaggerates anaesthetic risk. These anxieties are further amplified by AFD marketing that portrays professional veterinary dentistry as dangerous, unnecessary, or excessively costly. Grooming businesses, mobile operators, and boutique pet services frequently advertise AFD as a "gentle" or "holistic" option, emphasising visible cosmetic improvement while ignoring the deeper pathology that defines periodontal disease.[1-4] This messaging appeals to owners who lack formal knowledge of dental pathology and may mistakenly equate clean tooth crowns with genuine oral health.

However, periodontal disease, the condition AFD claims to treat, is fundamentally a subgingival disease process. It is the most common disease affecting dogs and cats, with up to 80% of animals over three years of age affected.[1,3,9] The disease begins with the accumulation of plaque biofilm and progresses beneath the gingival margin, where bacteria colonise the gingival sulcus. This triggers inflammatory responses that lead to epithelial detachment, deepening periodontal pockets, and eventual destruction of the periodontal ligament and alveolar bone. Over time, these processes result in gingival recession, root exposure, tooth mobility, pain, and ultimately tooth loss. Crucially, the earliest and most clinically significant stages of periodontal disease occur beneath the gingiva—areas that AFD cannot access.[1,2,5,6]

Owners often judge dental health based solely on visible indicators such as calculus accumulation, plaque staining, or crown discolouration. AFD capitalises on this perception by removing superficial calculus to produce visibly "cleaner" teeth. However, this cosmetic improvement provides no therapeutic benefit. Subgingival plaque remains undisturbed, inflammatory processes continue unabated, and disease progression occurs silently.[1-5] In this respect, AFD may do more harm than good, as it masks pathology, reinforces misconceptions, and delays appropriate veterinary intervention.[1-9]

Veterinary organisations worldwide have taken clear and consistent positions against AFD. In Australia, the Australian Veterinary Association (AVA) states unequivocally that AFD fails to meet acceptable standards of care and exposes animals to unnecessary pain and risk.[3] International bodies including the American Veterinary Dental College (AVDC), American Animal Hospital Association (AAHA), World Small Animal Veterinary Association (WSAVA), and the Royal College of Veterinary Surgeons (RCVS) echo the same conclusion: dental procedures requiring diagnosis, probing, imaging, or treatment must be performed under general anaesthesia.[1-9] These organisations agree that anaesthesia is not optional but essential to ensure accurate diagnosis, safe handling, and humane treatment.

A comprehensive veterinary dental examination involves multiple steps that cannot be replicated in a conscious patient. These include an orofacial examination, detailed intraoral inspection, periodontal probing, charting of abnormalities, and full-mouth diagnostic imaging[1-9] Periodontal probing alone requires precise measurement of pocket depths, evaluation of attachment loss, assessment of furcation involvement, and identification of subtle gingival defects—procedures that animals will not tolerate while awake.[1-9] Even minor discomfort can result in sudden head movements, placing both the patient and clinician at risk.[2,4,6]

Diagnostic imaging is indispensable for identifying pathology hidden beneath the gingiva and alveolar bone. Dental radiography and cone-beam computed tomography (CBCT) can detect conditions that are not externally visible, including endodontic disease, root fractures, retained roots, tooth resorption, periapical lucencies, cysts, and early bone loss[1,2,4-7,9] One study demonstrated that 28% of dogs and 42–43% of cats had clinically significant lesions detectable only via radiographs, despite appearing normal on visual examination.[5] Without imaging, these conditions remain undiagnosed and untreated. AFD providers, who lack both the legal authority and the necessary equipment to obtain diagnostic images, are therefore incapable of adequately evaluating oral disease.[1-9]

Evidence further demonstrates the diagnostic failures inherent in AFD. In another study, animals that initially underwent AFD were subsequently examined under general anaesthesia, revealing numerous significant conditions that had been missed, including advanced periodontal disease, oral masses, resorptive lesions, and oronasal fistulae.[1] These findings highlight that AFD not only fails to diagnose disease but may actively delay appropriate care, allowing pathology to progress and increasing the complexity of future treatment.

The welfare implications associated with AFD are profound and multifaceted. Performing dental procedures on conscious animals necessitates physical restraint to prevent movement while sharp instruments are used. This restraint, combined with discomfort or pain, creates a highly stressful and distressing experience for the animal.[1,2,5,7] Inflamed gingival tissues are extremely sensitive, and even light contact with dental instruments can cause significant pain. Attempts to perform subgingival scaling without anaesthesia are not only ineffective but unethical, as they cause pain without delivering therapeutic benefit.[1-9]

Physical restraint also increases the risk of fear-based or defensive reactions. Animals may struggle, vocalise, jerk their heads, or attempt to bite; not out of aggression, but as a normal response to perceived threat or pain.[1-3,5,7-9] When these behaviours are forcibly suppressed, psychological harm may occur. Animals may subsequently develop aversion to oral handling, grooming, or veterinary visits, leading to long-term behavioural consequences that complicate future care.[8]

The risk of physical injury during AFD is substantial. Dental scalers and curettes are sharp, precision instruments designed to incise both soft and hard tissues.[2,6,7] Sudden patient movement can result in accidental lacerations to the gingiva, tongue, lips, or oral mucosa.[2,4,6,7] Even superficial injuries can cause pain, bleeding, and increased infection risk.[2] In addition, inappropriate instrumentation may cause micro-abrasions to enamel surfaces, accelerating plaque re-accumulation and worsening periodontal disease.[2] Thus, AFD may directly contribute to disease progression.

Operator safety is also compromised during AFD. Conscious animals experiencing discomfort are more likely to bite or scratch.[6,8] Many AFD practitioners lack formal training in animal behaviour, safe restraint, or infection-control protocols comparable to those used in veterinary clinics. Their inability to administer analgesia or sedation further exacerbates these risks, placing both patient and operator in jeopardy.[6,7]

Perhaps the most ethically concerning aspect of AFD is client deception. Owners frequently equate visible cleanliness with oral health. Following AFD, the cosmetic appearance of the teeth may provide a false sense of reassurance, despite ongoing periodontal inflammation, infection, and bone loss beneath the gingiva.[1,2,5-9] This misconception may lead to delayed veterinary intervention, resulting in preventable pain, disease progression, and the need for more extensive treatment later. Some animals subjected to repeated AFD sessions ultimately require multiple or full-mouth extractions due to severe, untreated periodontal disease.[1,7]

Fear of anaesthesia remains central to AFD's appeal; however, modern veterinary anaesthesia is very safe. The Confidential Enquiry into Perioperative Small Animal Fatalities (CEPSAF) reported mortality rates of 0.05% in healthy dogs and 0.11% in

healthy cats—figures far lower than commonly perceived.[1,10] Advances in anaesthetic agents, monitoring technologies, staff training, and standardised protocols have dramatically improved safety outcomes. Under general anaesthesia, animals benefit from airway protection via endotracheal intubation, precise control of anaesthetic depth, intravenous fluid therapy, and continuous monitoring of oxygenation, ventilation, cardiovascular function, and body temperature.[1-10] None of these safeguards exist during AFD.

The risks associated with AFD, including unmanaged pain, aspiration of debris, incomplete treatment, psychological distress, and progression of undiagnosed disease, are consistently underestimated.[1-3,5,6] AFD is not merely an ineffective dental service; it is a practice with significant potential to cause harm.

Regulatory and ethical frameworks clearly establish that dental procedures involving diagnosis, probing, imaging, or treatment constitute acts of veterinary practice.[1-8] Allowing unqualified individuals to perform these procedures undermines animal welfare and misleads the public. Veterinary organisations, including the AVA and AVDC, emphasise that dental treatment performed under general anaesthesia is the only approach that meets acceptable standards of care.[3,5-7]

To address ongoing misconceptions, veterinarians have a responsibility to educate clients using clear, compassionate, and evidence-based communication.[2,3,7-9] Explaining the pathophysiology of periodontal disease, demonstrating radiographic findings, and outlining modern anaesthetic safety protocols can help owners understand why AFD is inappropriate and why general anaesthesia is essential for proper diagnosis and treatment.[7]

AFD is incompatible with modern companion animal healthcare. It fails to diagnose disease, fails to treat pathology, misleads owners, and exposes animals to unnecessary pain, stress, and risk. In contrast, dental treatment performed under general anaesthesia enables comprehensive assessment, accurate diagnosis, effective therapy, and a humane, pain-free experience. For these reasons, the veterinary profession has an ethical obligation to discourage AFD and advocate for evidence-based, welfare-centred dental care.

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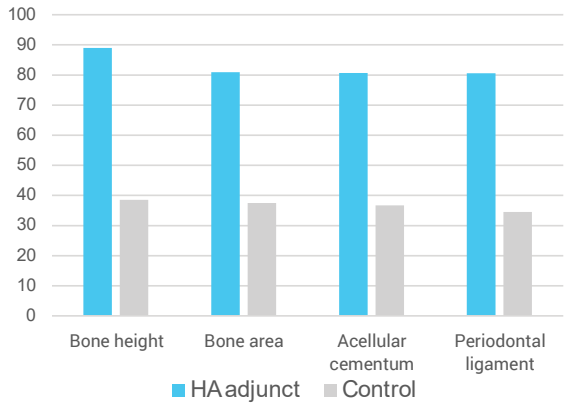
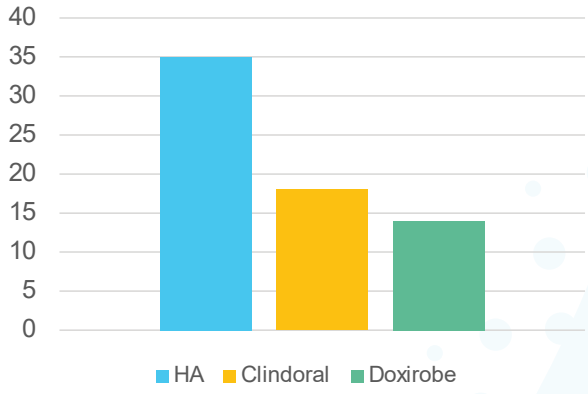


Probing Pocket Depth Across Therapies

% improvement over control



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Open Flap Debridement / Guided Tissue Regeneration	Fill subgingival pocket
Extraction	*Fill extraction pocket*

**Pockets < 3mm and < 1mm are considered normal in dogs and cats, respectively*

Questions? Reach out to:

Bryan Song, MD
Founder & CEO
bryan@periovive.com
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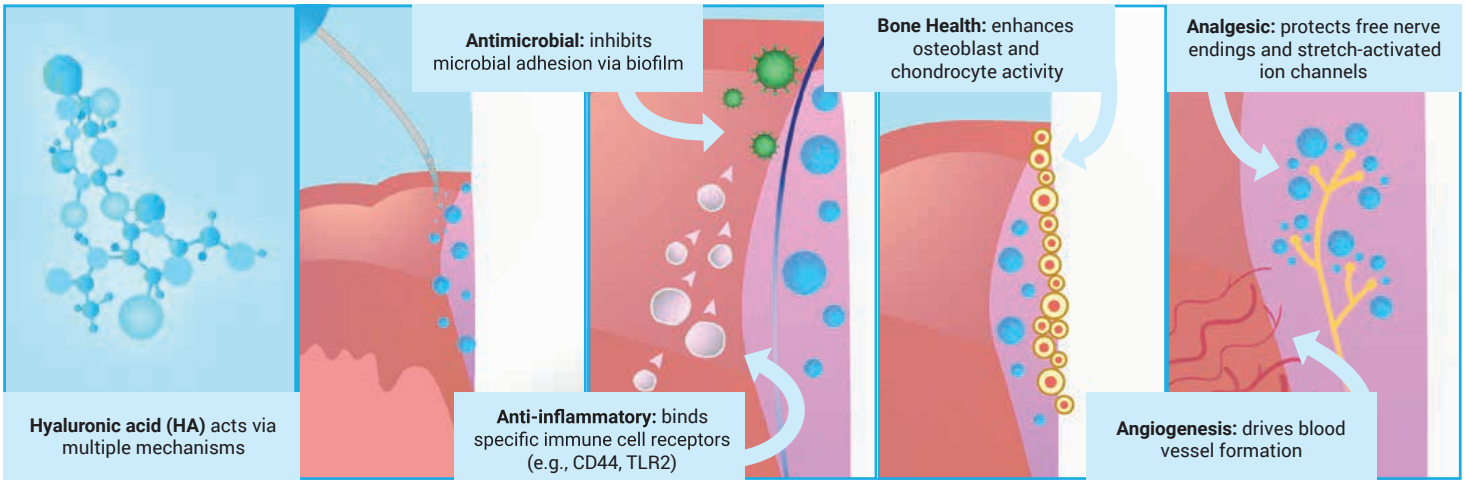
How it works



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Jennifer Redmon, DVM
Pet Dental USA

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Jan Bellows, DVM, DAVDC
Hometown Animal Hospital & All Pets Dental

"PerioVive is backed by more studies than the next two products combined and it's so easy to use -- and even easier to sell to my clients!"

Erin Ribka, DVM, DAVDC
Veterinary Dental Specialties New Orleans

PROJECT 'AIRBEAR' TECH COULD HELP PREDICT BEST KOALA HABITATS FROM THE SKY

POWERFUL TECHNOLOGY THAT EFFICIENTLY DETECTS AND ACCURATELY PREDICTS EUCALYPTUS TREE SPECIES FAVOURED BY KOALAS COULD HELP ECOLOGISTS FIND THE BEST HABITATS FOR CONSERVATION.

BY: PROFESSOR MATHEW CROWTHER, PROFESSOR OF QUANTITATIVE CONSERVATION BIOLOGY, THE UNIVERSITY OF SYDNEY.

Powerful technology that efficiently detects and accurately predicts eucalyptus tree species favoured by koalas could help ecologists find the best habitats for conservation.

Researchers, in a study coined 'Project Airbear', used hyperspectral airborne imagery technology taking high resolution images of the environment.

Spectral images record how light reflects from objects at different wavelengths, including invisible light beyond what the human eye can see. Hyperspectral images go further by capturing this information in many very narrow wavelength bands for every pixel in the image, allowing subtle differences in materials or vegetation to be detected.

From a great distance, the project's aerial technology records visible and infra-red lightwaves reflecting off surfaces making it possible to detect the spectral signatures produced by leaf pigments, water content and chemical composition, including nitrogen content vital for koala nutrition.

Using these hyperspectral airborne images, the researchers trained complex machine learning models to leverage information in individual tree canopy pixels and identify tree species containing the nitrogen preferred by koalas.

By combining tree species identification with nutritional data, the method can highlight areas where koalas are most likely to thrive.

Koala populations are declining significantly due to habitat loss, making large scale identification of quality koala habitats essential for conservation.

However, koalas are famously picky eaters, choosing to eat only Eucalyptus leaves with certain nutritional levels from certain tree species. They also prefer to live in very specific Eucalyptus trees.

> "It's a real 'Goldilocks' situation when looking for the best locations for koala habitats. It's not just finding the right tree species, it also needs to have the right nutritional quality that can help a population to thrive long term. That can even differ within the same tree species," said research lead Professor Mathew Crowther from the School of Life and Environmental Sciences, University of Sydney.

"To our knowledge, no koala focused study has attempted to classify individual Eucalyptus species using this method and include tree species as a candidate to improve nitrogen content predictions."

"We can sample trees directly and measure the chemical contents, but it is labour intensive, and can only cover small areas, and show the actual nutritional content.

HyVista taking hyperspectral airborne imagery of remanent vegetation (potential koala habitat) in agricultural land. Credit: Glen Huber

"That's why this technology is so important. It promises to speed up identification and protection of invaluable habitats."

The study used airborne imagery collected over Gunnedah, in the Liverpool Plains region of north-western New South Wales, Australia, an area with a declining koala population. Gunnedah's agricultural landscape is a patchwork of Eucalyptus woodland containing species such as river red gum.

The initial stages of the study saw the researchers on the ground, painstakingly identifying the tree species and its geolocations and collecting leaf samples for laboratory nitrogen analysis. These samples were then used to train and test machine learning models based on hyperspectral airborne imagery.

Hyperspectral airborne imagery technology being operated. Source: Glen Huber

Cartoon depiction of 'Project Airbear', a research surveying potential Koala habitats. Credit: Ivy Shih @ivyhish

The study's lead author, Dr Cristian Gabriel Orlando from the University of Sydney said:

"By exploiting the variability contained at the pixel-level of each canopy, we can train accurate models to predict suitable koala habitat at scale with limited on-ground data. This will support conservationists and land managers in habitat restoration and planning possible future koala translocations, which rely on knowledge of the trees within the landscape. This research will improve future management actions."

The study was published in Science of the Total Environment, as part of a collaboration between University of Sydney, the Sydney Institute of Agriculture, the University of New England and HyVista Corporation.

The researchers hope to expand the study to other areas of NSW and, eventually, across Eastern Australia.

Professor Bradley Evans from the University of New England said:

"Robust remote sensing techniques that identify the species composition down to individual plants across landscapes are a big step forward for Australian Ecology and Earth Observation.

"With the spectral and spatial power of the HyVista HyMap sensor, we can cover an order of magnitude more ground per day flying faster than with our drones.

"Moving forward, we can expect to see detailed assessments of our biodiversity and koala habitat condition, powered by more routine flights covering our most critical and threatened landscapes."

Professor Evans said the next phase of the research would involve NASA JPL bringing out their latest Hyperspectral Imager out in 2027.

"We will be working with various environmental and agricultural agencies to have NASA and HyVista fly our most critical sites. The University of New England, partnering with University of Sydney and others, are also planning a new 'National Collaborative Facility' for this technology so we can put the technology to good use for Australia and future collaborations with NASA."

DECLARATION:

The authors declare that they have no known competing financial interests or personal relationships that could appear to influence the work reported in this paper. The project was supported by the University of Sydney School of Life and Environmental Sciences Strategic Partnership Seeding grant 'Airbears: Predicting koala habitat by combining leaf chemistry with hyperspectral imagery' to MS Crowther, F F. van Ogtrop and T.F.A Bishop.

MORE INFORMATION

Visit: www.sydney.edu.au

NEW RESEARCH: **RISING HOUSEHOLD COSTS DRIVING RISKY PET CARE DECISIONS**

NEW DATA FROM GAPONLY® REVEALS A FINANCIAL PREPAREDNESS GAP

KEY POINTS

- Approximately 8% of cats and dogs are insured in Australia (PetSure estimates)
- 21% have experienced an unexpected pet-related cost in the last 12 months of $2,000+; 6% have faced $5,000+
- 41% felt overwhelmed/ panicked or cried because of pet healthcare costs.
- 46% would consider euthanasia at $3,000+; 18% at $1,000+
- 36% have tried home remedies; 17% have used telehealth
- 83% of 50+ have no insurance

Sydney, January 21, 2026 – New research suggests cost-of-living pressures are increasingly shaping how Australian households manage pet healthcare costs.

The research, conducted by pet insurance payment service GapOnly® suggests many Australian pet owners are navigating serious financial risk when pet emergencies arise. GapOnly®, developed by PetSure, estimates that only eight per cent of cats and dogs in Australia are insured, yet one in five have already experienced unexpected pet-related costs of $2,000 or more in the past year.

This comes at a time when one in three Australian pet owners say they would be unable to access $1,000 or more at short notice for pet care, costs without borrowing the funds or relying on credit in the event of any emergency.

“Welcoming a new pet to the family is a time of joy, bonding, and excitement. But people are often unaware of potential health concerns and risks, and the costs involved with treating these,” said Chief Veterinary Officer at PetSure, Dr Simone Maher.

The research found 36 per cent of Australian pet owners turn to home remedies or online sources before contacting a vet. Additionally, 34 per cent have asked their vet about less expensive treatment options

The research also shows clear generational patterns:

- Gen Z (ages 18–28) are among the most likely to explore cost saving approaches to pet care, with 45 per cent relying on home remedies or online information, 25 per cent delaying treatment due to cost, 21 per cent using vet telehealth services, and 44 per cent asking their vet for less expensive treatment options.
- Millennials (ages 29–44) were significantly more likely than older generations to use telehealth for pet care, with 24 per cent reporting they had accessed this service. Millennials also had 39 per cent trying home remedies and 38 per cent asking for cheaper alternatives.
- Baby Boomers (ages 61-79) were also likely to have used home remedies (26%) or asked for a cheaper treatment (21%)
- Older Australians were the most likely to reluctantly proceed with euthanasia when faced with a large, unexpected vet bill

“When pet owners delay care or turn to home remedies, it may be due to cost or other barriers to care – such as living remotely or mobility challenges, not because they don’t care. Unfortunately, these delays can allow small issues to escalate into more serious and costly problems,” said Dr Maher.

When treatment becomes unavoidable, households are forced into difficult financial trade-offs. The research shows 44 per cent would put a large pet care bill on a credit card, 39 per cent would ask friends or family for help, 35 per cent would cut back on essentials like groceries or utilities, and 27 per cent would cancel or delay a planned holiday.

Sadly, 46 per cent said that if costs reached $3,000, they would have to reluctantly consider euthanasia.

“While pet insurance doesn’t prevent emergencies, it can help provide families with financial assistance and the ability to respond with confidence in the face

of issues. Products like GapOnly® further support this by reducing upfront out-of-pocket payments at the point of care, helping ease pressure when decisions need to be made quickly," said Dr Maher.

TOP 10 HEALTH CONDITIONS FOR DOGS AND CATS
(SOURCE: PETSURE AUSTRALIAN PET HEALTH MONITOR 2025)

Top 10 health conditions in dogs (all ages)

Rank	Condition	Average cost for treatment*	Highest cost for treatment*^
1	Skin infections/allergies	$667	$21,209
2	Gastro conditions	$874	$37,599
3	Ear infections	$439	$22,665
4	Wounds from traumatic injuries and fights/bites	$836	$46,525
5	Mass lesions (lumps and bumps)	$961	$31,195
6	Eye conditions	$468	$19,419
7	Osteoarthritis	$823	$39,289
8	Musculoskeletal conditions	$607	$15,591
9	Anal sac disorders	$316	$30,697
10	Dental conditions	$816	$13,158

Top 10 health conditions in cats (all ages)

Rank	Condition	Average cost for treatment*	Highest cost for treatment*^
1	Gastro conditions	$903	$26,987
2	Urinary tract disorder	$1,459	$38,769
3	Skin infections/allergies	$470	$21,343
4	Fight or bite wounds	$620	$24,529
5	Eye conditions	$424	$20,106
6	Behavioural problems	$141	$10,679
7	Ear infections	$422	$10,979
8	Osteoarthritis	$779	$8,032
9	Heart murmurs	$1,569	$22,800
10	Mass lesions (lumps and bumps)	$1,486	$34,688

**Based on 2024 PetSure claims data as at Feb 2025. Amount claimed per policy over a 12-month period. Reimbursement for these claims under a pet insurance policy would be subject to limits such as annual benefit limits or sub-limits, benefit percentage, applicable waiting periods and any applicable excess. Cover is subject to the policy terms and conditions.*

^Pet insurance policies can have an annual limit between $5,000 - $30,000 to assist with eligible treatment costs.

ABOUT THE RESEARCH

All figures reported, unless otherwise stated, are from YouGov. Fieldwork was conducted online between 24 November and 3 December 2025 among 2,029 Australian pet owners aged 18 and over. The figures have been weighted and are representative of this sample. For comparison purposes only, a probability sample of this size would have an estimated margin of error of ±2.2 percentage points at the 95% confidence level.

METHODOLOGY:

This survey has been conducted using an online interview administered to members of the YouGov Australian panel of 71,000+ individuals who have agreed to take part in surveys. Emails are sent to panellists selected at random from the base sample. The e-mail invites them to take part in a survey and provides a generic survey link. Once a panel member clicks on the link they are sent to the survey that they are most required for, according to the sample definition and quotas. (The sample definition could be "adult population" or a subset such as "adult females"). Invitations to surveys don't expire and respondents can be sent to any available survey. The responding sample is weighted to the profile of the sample definition to provide a representative reporting sample. The profile is normally derived from census data or, if not available from the census, from industry accepted data.

ABOUT GAPONLY®

Helping make veterinary care more accessible, GapOnly® is an innovative pet insurance claims payment solution which allows customers to claim on the spot, and just pay the gap (the difference between the vet's invoice and the eligible insurance claim benefit) on eligible claims at participating vet clinics. GapOnly® is powered by PetSure and is available with all PetSure administered policies. For more information, visit gaponly.com.au.

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IT'S YOUR CASE - DOMESTIC SHORTHAIR LETHARGIC AND INTERMITTENT VOMITING FOR THE LAST 2 WEEKS

VETCT
Teleradiology | Teleconsulting | Education

Species: Feline
Sex: Male Neutered
Breed: Domestic Shorthair (DSH)
Age: 10 years

Clinical History:

He has seemed lethargic and had intermittent vomiting for the last 2 weeks. He seems to be more distant than normal. He has no major medical history of note per owner.

Anatomic regions:

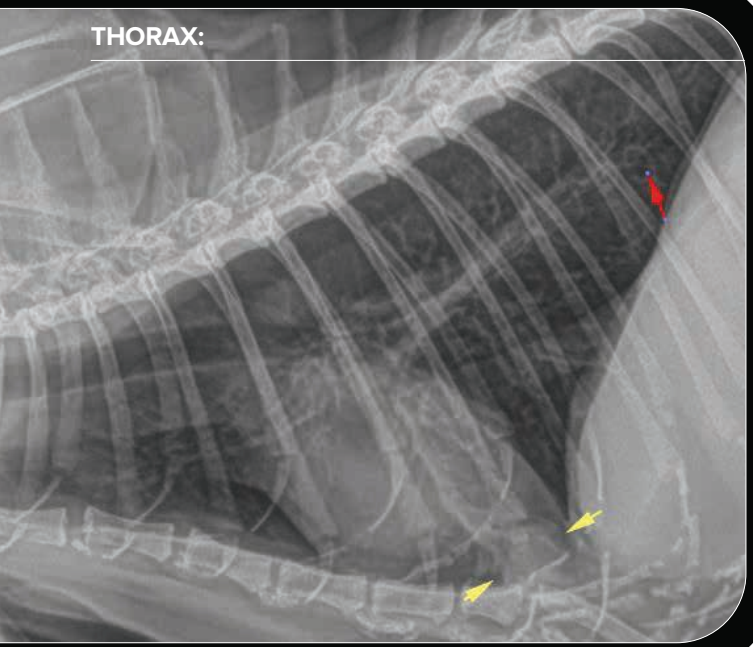
Thorax, Abdomen

Diagnostic interpretation:

THORAX:
The patient has a thin body habitus. The cardiac silhouette is normal in size and position; there is no specific chamber enlargement. The pulmonary vasculature is normal in diameter and tapers as it extends to the periphery. Mild bronchial pattern is diffusely distributed (red arrows). In the ventral periphery of the right middle lung lobe, irregular soft tissue is bronchocentric (yellow arrows). No nodules are seen. The trachea and mainstem bronchi are patent. The pleural space and mediastinum are unremarkable.

The thoracic vertebral column is unremarkable without evidence of fracture, luxation or osteolysis.

THORAX:



ABDOMEN:
There is reduced central abdominal serosal contrast where soft tissue opacity is closely associated with the gas filled intestinal segment. There is increased soft tissue opacity that is ill-defined medial to the spleen (orange arrows) and along the right lateral body wall (pink arrows). In the left caudal peritoneal space, a smoothly marginated thinly mineral walled structure (light blue arrow) is consistent with the Bates body.

The liver is enlarged, extending beyond the costal arch, and has smooth margins (red arrow).

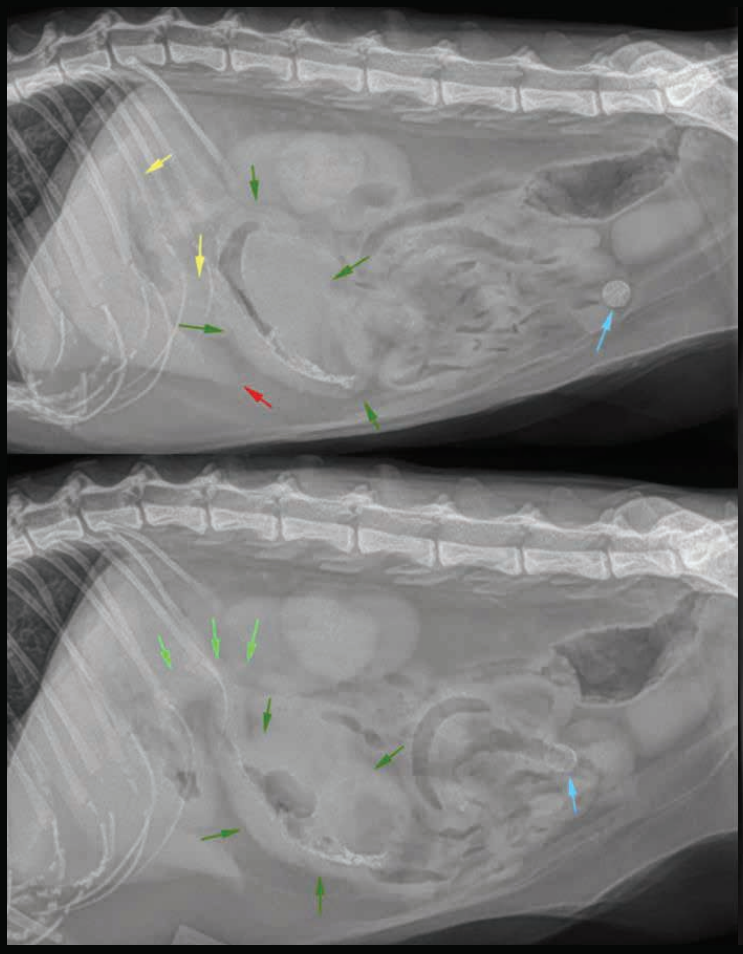
The visible margins of the liver and spleen are radiographically within normal limits.

The gastric silhouette contains gas and minimal heterogenous soft tissue (yellow arrows); it is normal in position. The duodenum is partially delineated in the left lateral view (bright green arrows). This is dorsally to the previously described central abdominal soft tissue. Eccentrically surrounding a gas and mineral filled lumen, lobulated soft tissue caudally displaces regional small intestinal segments. This structure spans three vertebral segments and occupies 1/3 of the height of the abdomen on the lateral views.

The renal and urinary bladder silhouettes are smoothly marginated and within normal limits. There is mild asymmetry between the shape of the renal silhouettes. There are no radiopaque calculi.

The lumbar vertebral column is unremarkable without evidence of fracture, luxation or osteolysis.

ABDOMEN:



Conclusions:

- Diffuse bronchial changes may represent chronic lower airway inflammation (i.e. feline asthma +/- fibrosis).
- Focal soft tissue in the periphery of the right middle Lung Lobe. Differentials include focal atelectasis, bronchopneumonia, or combination therein. Neoplastic infiltration is considered Less likely.
- Small intestinal mass with gravel sign. Consider the potential for partial obstruction of the lumen. Primary consideration is given to neoplasia (i.e. lymphoma or gastrointestinal adenocarcinoma).
- Infectious aetiologies (i.e. pythium) are uncommon in this geographic region and should be correlated to historical exposure.
- Peritoneal effusion+/- steatitis. Likely secondary inflammation however the potential for perforation should be considered.
  - Consider potential for concurrent pancreatitis.
- Hepatomegaly. This is nonspecific and differential include fat infiltration, hepatic lipidosis, neoplasia, cholangiohepatopathy versus Less likely, vacuolar hepatopathy (i.e. metabolic or endocrine hepatopathy) versus nodular regeneration.

Additional comments:

There are substantive changes evident in these radiographic could contribute to the patient's apathy and recent vomiting. The presence of a soft tissue mass in association with the small intestine is concerning for neoplastic infiltration. Further evaluation can be made with sonography and tissue sampling. Given the accumulation of mineral at the Level of the mass, a gravel sign associated with partial obstruction should also be considered. This may be relevant if the patient has experienced recent weight loss.

The regional Loss of contrast can represent inflammation associated with the mass. Gastrointestinal masses are at risk of perforation and the potential for septic effusion should be evaluated with fluid sampling and cytology.

The change in the region of the right middle lung lobe could be benign atelectasis associated with chronic lower airway inflammation however decreased clearance can potentiate bronchopneumonia. Quick screening can be made with sternal recumbency and repeated dorsiventral view of the thorax to assess for resolution of atelectasis. Further evaluation for bronchopneumonia can be made with bronchoalveolar lavage or response to empiric therapy.

VETERINARY DIAGNOSTICS MARKET SIZE WORTH $25.24 BILLION BY 2034

THE GLOBAL VETERINARY DIAGNOSTICS MARKET IS ON A STRONG GROWTH TRAJECTORY WITH THE MARKET SIZE VALUED AT USD 10.21 BILLION IN 2024 AND PROJECTED TO REACH USD 25.24 BILLION BY 2034, EXHIBITING A ROBUST COMPOUND ANNUAL GROWTH RATE (CAGR) OF 9.5% DURING 2025–2034, ACCORDING TO THE LATEST MARKET RESEARCH REPORT BY POLARIS MARKET RESEARCH.

This landmark growth is being propelled by multiple sustainable demand drivers, shifting industry dynamics, and revolutionary technological advancements across animal health sectors worldwide. The veterinary diagnostics segment is rapidly evolving to address the escalating need for accurate, rapid, and cost-effective diagnostic tools that cater to companion animals, livestock, and poultry.

MARKET GROWTH FUELED BY RISING ANIMAL HEALTH PRIORITIES

A major contributor to market expansion is the increasing expenditure on animal healthcare, particularly for companion pets like dogs and cats, as pet owners prioritize proactive and preventive diagnostics. Factors such as pet humanization trends, higher disposable incomes in emerging economies, and widespread adoption of pet insurance plans are driving diagnostic service utilization.

In livestock, the demand is linked closely to food safety, biosecurity, and productivity optimization, with governments and agricultural stakeholders emphasizing early disease detection to prevent outbreaks and ensure safer consumption of animal-source foods globally.

TECHNOLOGICAL ADVANCEMENTS ACCELERATE DIAGNOSTIC CAPABILITIES

Rapid advancements in diagnostic technologies are redefining the veterinary diagnostics landscape. Innovations such as point-of-care (POC) testing devices, molecular diagnostics, and pathology-based techniques are delivering faster results, greater accuracy, and efficient disease monitoring—especially for infectious and non-infectious conditions.

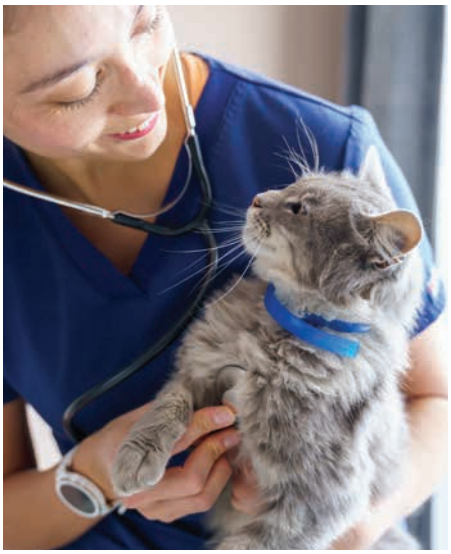
Artificial Intelligence (AI), machine learning, and advanced imaging integration are being leveraged to interpret complex data, including X-rays, CT scans, and laboratory results, enabling veterinarians to make diagnostic decisions with improved confidence and precision.

KEY MARKET SEGMENTS & INSIGHTS

By Product:
Consumables, reagents & kits held the largest market share in 2024 due to their frequent usage across a wide range of diagnostic procedures and repeat purchase requirements.

By Species:
The canine species segment dominated in 2024, driven by high pet ownership, increased spending on advanced care, and the prevalence of chronic conditions such as cancer, obesity, and diabetes among dogs.

By Testing Type:
Pathology testing emerged as the leading segment due to its extensive application in detecting complex diseases and tissue-level analysis across animal types.



By Disease Type:
Non-infectious diseases held the most significant market share, reflecting the rising need for comprehensive diagnostics to manage chronic and lifestyle-related conditions in animals.

By End-Use:
Laboratories accounted for the largest share by revenue, being centers of advanced diagnostic capabilities handling high volumes of animal samples.

View More Information @ https://www.polarismarketresearch.com/industry-analysis/veterinary-diagnostic-market/request-for-sample

REGIONAL DYNAMICS: NORTH AMERICA LEADS THE PACK

North America remained the largest market in 2024, supported by sophisticated veterinary healthcare infrastructure, a high rate of pet adoption, strong regulatory frameworks, and a robust ecosystem of veterinary diagnostic service providers.

Rapid adoption of cutting-edge diagnostics in clinical and laboratory settings, coupled with consumer willingness to invest in preventive care for pets, has reinforced the region's dominance. Meanwhile, other regions such as Asia-Pacific and Europe are anticipated to register impressive growth rates driven by expanding veterinary services, rising livestock industries, and government health initiatives.

COMPETITIVE LANDSCAPE & STRATEGIC POSITIONING

The veterinary diagnostics market is highly competitive and fragmented, with key global and regional players innovating relentlessly to meet evolving demand. Major industry participants include Idexx Laboratories Inc., Zoetis, Thermo Fisher Scientific Inc., Neogen Corp., Heska Corporation, BioMérieux, Randox Laboratories Ltd., and others that are expanding their portfolios across consumables, imaging, and molecular diagnostics.

Strategic initiatives such as investing in R&D, establishing global partnerships, and launching advanced diagnostic platforms are expected to drive competitive advantage and market share gains. Integrated solutions that facilitate faster turnaround times, mobile diagnostics, and AI-driven analytics are anticipated to be the cornerstone of future growth.

FUTURE OUTLOOK & MARKET OPPORTUNITIES

Looking ahead, the Veterinary Diagnostics Market is positioned for sustained expansion over the next decade. Increased animal health awareness, rising companion animal populations worldwide, and heightened emphasis on zoonotic disease surveillance post-pandemic will continue to shape market demand.

In addition, expanding point-of-care diagnostics, telehealth integration, and AI-assisted remote diagnostic platforms are likely to emerge as future growth engines, especially in underserved regions where access to traditional veterinary services remains limited.

CONCLUSION: STRATEGIC GROWTH IN VETERINARY DIAGNOSTICS

As the global veterinary diagnostics landscape evolves, stakeholders—including healthcare providers, diagnostics manufacturers, investors, and policy makers—stand to benefit from the rapid market growth, technological transformation, and expanding end-user demand. With the projected USD 25.24 billion market value by 2034, this sector represents a compelling opportunity for innovation, investment, and enhanced animal health outcomes worldwide.

MORE INFORMATION

Visit: www.polarismarketresearch.com

IMPACTS OF COLONISATION ON DINGOES ARE 'WRITTEN IN THEIR BONES', NEW RESEARCH FINDS

HOW HAS EUROPEAN COLONISATION SHAPED DINGOES OVER THE LAST TWO CENTURIES? PROFESSOR MATHEW CROWTHER AND CO-AUTHORS UNRAVEL THE DETAILS.

BY: KYLIE CAIRNS, MATHEW CROWTHER, MELANIE FILLIOS, MIKE LETNIC FOR THE CONVERSATION

Dingoes are no ordinary dogs. They trace their roots back to an ancient Asian lineage and made their way to Australia more than 3500 years ago.

Since then, they've become integrated into Australian ecosystems. They hold deep cultural meaning for many Indigenous Australians — woven into songlines, ceremonies, and family life, and often regarded as kin.

In research published today in PNAS, our team sought to unravel how European colonisation has shaped dingoes over the last two centuries. Like everyone and everything else in Australia when the First Fleet arrived in 1788, dingoes had to adapt to a new reality – and that adaptation is written in their bones.

COLONIAL CONFLICT WITH DINGOES

The arrival of Europeans in Australia irrevocably changed Indigenous communities, ecosystems and the continent's apex predator, the dingo. With the First Fleet came livestock and many European dogs including greyhounds, terriers and spaniels.

During the past 237 years, public attitudes to dingoes have been shaped by the creatures' conflict with livestock. Trapping, shooting, bounties and poison baiting have become commonplace.

Some have been concerned that interbreeding between dingoes and European dogs may lead to dingoes losing their unique identity.

However, recent DNA studies have suggested such interbreeding is uncommon, at least in the modern era.

But the extent of the historic genetic influence of dogs on dingoes has still been unclear.

ANALYSING ANCIENT TISSUE

For our new research, we used a combination of stable isotope and ancient DNA analysis of pre-1788 and post-1788 dingoes from the Nullarbor Plain in Western Australia. Stable isotope analysis looks at the chemicals found in once-living tissues to determine diet and environmental conditions.

We also compared the genomes of modern dingoes to these historic baselines to uncover the timing and extent of gene flow from modern dogs into dingoes.

Our analysis showed changes in the chemical signatures (carbon and nitrogen) of Nullarbor dingo bones post-1788. This suggests dingo diets changed after European arrival.

Europeans managed the landscape in completely new ways. They introduced sheep, cattle and rabbits. By killing dingoes Europeans

A portion of the dingo fence near Coober Pedy, South Australia. Schutz/Wikimedia

facilitated the eruption of kangaroo numbers. This altered the native vegetation and changed which prey animals were available for dingoes to hunt.

MAINTAINING A DISTINCTIVE IDENTITY

With pre-1788 dingoes as a baseline we can detect the presence of historic European dog DNA in many modern dingo populations, particularly in southeastern Australia.

However, little European dog DNA is detected in dingoes from central and western Australia. Despite historic hybridisation, dingoes have maintained their distinctive identity.

We found that gene flow from European dogs into dingoes peaked during the mid 20th century (1960s to 1980s). We can tell this from the length of the DNA fragments inherited, with modern dingoes carrying many small chunks of historic European dog DNA rather than long stretches.

Many dingoes have had no dog ancestors in the last 10 generations (roughly five years per generation). The timing of gene flow into dingoes coincided with the intensification of large-scale dingo culling programs.

These programs may have increased opportunities for breeding between dingoes and dogs by breaking down dingo social structures and reducing the availability of dingo mates.

OVERCOMING INBREEDING

We found that pre-1788 dingoes had high levels of inbreeding, which reflects long-term isolation and a small founding population.

After 1788, the fragments of European dog DNA present in many dingoes were important sources of genetic diversity. This extra DNA variation may be helping dingoes to overcome inbreeding.

We also found evidence that positive selection is acting to retain these fragments of European dog DNA in dingo populations. This could explain why European dog DNA is persisting through so many generations.

While gene flow between species is typically considered detrimental, we now understand that gene flow can help species adapt to challenges and changing environments.

For example, in areas with low winter snow the local snowshoe hares have gained a brown winter coat as a result of gene flow from jackrabbits.

DINGO MANAGEMENT IS DIVISIVE

Dingoes are a serious threat to livestock such as sheep. But they play an important role in maintaining healthy ecosystems and are deeply valued by many Aboriginal peoples.

Lethal control of wildlife often comes with unintended consequences. For example, reducing dingo numbers could increase the risk of hybridisation with domestic dogs, as it does with wolves and coyotes in North America.

Studies have also shown ecosystems without dingoes are less resilient. These ecosystems are also characterised by shifts in vegetation due to an increase in plant consumption and a loss of small prey species.

Our findings challenge the idea that hybridisation is negative. Historical gene flow may provide the genetic variability for dingoes to overcome inbreeding and meet the challenge of changing Australian environments.

“Australian policy makers should prioritise maintaining large and connected dingo populations.”

There is a complex interplay between historic inbreeding, gene flow from dogs and the consequences of culling. Establishing historic baselines is crucial to disentangling complex evolutionary histories and informing conservation policy in a world where hybridisation is an increasingly common occurrence.

Australian policy makers should prioritise maintaining large and connected dingo populations. This will allow evolutionary forces to get rid of unhelpful European dog DNA variants while retaining beneficial diversity.

More broadly, conservation must move beyond simplistic notions of “purity”. Worldwide, hybridisation is a growing conservation threat. But it can also be a critical tool for threatened species recovery.

Many wild canids – wolves, coyotes and jackals – have experienced gene flow from dogs. Importantly for dingoes, despite some historic gene flow, they remain ecologically and genetically distinct from dogs – as they have been since before European colonisation.

MORE INFORMATION

Visit: www.sydney.edu.au

PERTH'S DOLPHINS EAT WHAT'S IN SEASON AND ARE LOYAL TO THEIR GROUPS

THEY EAT SEASONAL FOOD, REST HALF OF THEIR BRAIN AT A TIME, ARE LOYAL TO THEIR COMMUNITIES BUT OCCASIONALLY MIGRATE ACROSS TOWN AND ARE KNOWN TO BE ABLE TO SURVIVE SHARK BITES.

Perth's two dolphin groups in the Swan-Canning Rivers and further south in Cockburn Sound have been studied for more than a decade by Murdoch University researcher Dr Delphine Chabanne, who is a passionate champion of the marine mammals' welfare.

Dr Chabanne, from Murdoch University's Harry Butler Institute, was born and raised in France and owes her name to the animal she's been fascinated by since childhood (Delphinus is the Latin word for 'dolphin'). She has spent her career studying dolphins and is often joined on the water by citizen scientist volunteers.

She gave a presentation to students on Perth's coastal dolphins in late 2025 as part of Western Australian Marine Science Institution's (WAMSI) education outreach program Thinking Blue. The program connects school students with leading researchers from WAMSI's partnership through online talks.

"There are three species of coastal dolphins in Western Australia and here in Perth the only species present is the Indo-Pacific bottlenose dolphins," Dr Chabanne said.

"There are about 120 dolphins who live primarily in Cockburn Sound and Owen Anchorage and about 25 who use the Swan Canning estuary."

"Sometimes dolphins from the Swan Canning estuary will be seen with Cockburn Sound dolphins, potentially mating," Dr Chabanne said.

"While rare, movement between communities has also been observed. One example is 'Hugs' who was born from a resident mum in Owen Anchorage but has been spending most of her time in the lower reaches of the Swan Canning estuary since having her first calf in 2021."

HOW ARE DOLPHINS STUDIED?

Dr Chabanne said dolphin surveys involved travelling by boat in either parallel lines or zig-zag to look for groups of dolphins. When they are spotted, researchers take photos, record the group composition and monitor the animals' behaviour. Environmental conditions are also collected, when possible, such as water temperature and depth in the area.

"We photograph the dorsal fins because each one is distinctive. Dolphins are born with smooth fins, but over time individuals get nicks, scars and notches that allow us to track them."

"Since 2011, we have been issuing a 'Finbook' on the River Guardians website which helps identify local dolphins residing in the Swan Canning estuary."

She said sometimes dolphins had bigger injuries such as shark bites.

Dolphins are generally resilient to shark bites, unless they were bitten on their softer bellies where their vital internal organs are located.

SEASONAL DIETS

Perth's dolphins are opportunistic with food. Dr Chabanne said their preferences changed with the seasons: In summer they tended to eat more benthic detritivore fish, such as mullet, while in winter they prefer cuttlefish and octopus. Although dolphins have teeth, they often toss octopus into the air to break it into smaller pieces before swallowing it.

THREATS TO DOLPHINS

"One of the biggest dangers is fishing lines and nets in the water that can tangle dolphins," Dr Chabanne said.

"Removing the gear can be very difficult, and because of their size, thinner blubber, and their limited awareness of their environment, dolphin calves are particularly vulnerable to fishing gear entanglement."

She said boat strikes were another threat to the mammals and because they relied on sound, loud noises underwater can disturb their behaviour.

Keeping the waterways clean and free of pollution was also important for their overall health.

"Cetacean Morbillivirus, which weakens the animals' immune system, has killed dolphins around Perth. Some of six dolphins found dead in 2009 were infected with the virus, and another five died in 2019."

INTERESTING DOLPHIN FACTS

Females can live for about 40 years, while males live around 35 years.

They emit clicking sounds and listen to the returning echoes as sound waves bounce off surfaces to understand their surroundings and search for food.

Dolphin pregnancy lasts 12 months, with calves staying with their mothers for 3 to 5 years as they learn essential skills.

Dolphins rest one half of their brain at a time, allowing them to stay alert for predators or danger and to surface for air.

HOW TO PROTECT DOLPHINS?

- Keep the oceans/estuaries/coast clean and tidy.
- Have a beach clean up to stop rubbish going into the water.
- Carefully dispose of fishing line and other gear
- Slow down in boats
- Don't feed dolphins
- Join a citizen science program

MORE INFORMATION

Find out more about the Harry Butler Institutes' Centre for Sustainable Aquatic Ecosystems at Murdoch University.
Visit: www.murdoch.edu.au

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COVERMY PET LAUNCHES IN AUSTRALIA TO MAKE ESSENTIAL PET INSURANCE FINALLY AFFORDABLE

COVERMY PET HAS OFFICIALLY LAUNCHED IN AUSTRALIA, OFFERING A SIMPLER AND MORE AFFORDABLE PET INSURANCE ALTERNATIVE BUILT AROUND WHAT AUSTRALIAN PET OWNERS ACTUALLY CLAIM FOR - NOT COSTLY EXTRAS THAT DRIVE UP PREMIUMS

With more than 70% of Australian households owning a pet, unexpected vet bills remain a major financial pressure for many families. Industry claims data from 2025 show that insured pets claim on average, under $2,000 per year for injury and illness, while more complex treatments can cost significantly more.

However, many traditional pet insurance policies leave owners with no choice but to pay for high annual limits and add-on services baked into the pricing - even if they're never used, driving up premiums and putting pet insurance out of reach for many everyday households. "We've heard loud and clear what pet owners are frustrated by - pet insurance can become overcomplicated and overpriced," said Grant Pugh, General Manager, at CoverMy Pet. "We looked at real claims data and built our offerings around the treatments Australians actually need help paying for, while ensuring pets remain protected for life."

CoverMy Pet offers just three straightforward tiers of insurance to suit different budgets, with up to $8,000 in annual cover and lifetime protection, so pets aren't left vulnerable as they age. By stripping out non-essential inclusions, CoverMy Pet keeps premiums low, with policies starting from around the cost of two coffees a week, while still covering the treatments that matter most to everyday Australian pet owners.

CoverMy's three simple tiers focus on essential veterinary care, including:

- Vet bills for accidents, injuries and illness
- Cruciate ligament treatment
- Vet consultations
- Tick paralysis treatment
- Cancer treatment
- Hip dysplasia care
- Skin conditions
- Lifetime cover for ongoing protection

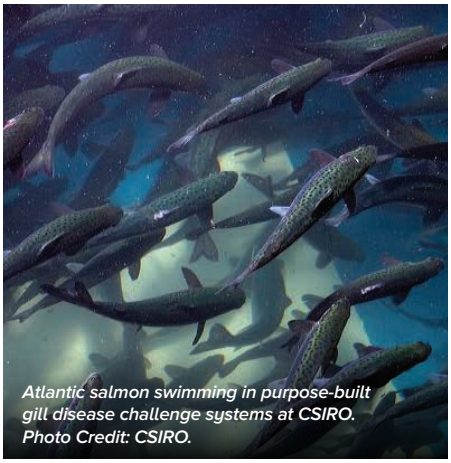
By focusing on essential care and long-term protection, CoverMy Pet aims to close a long-standing gap in the Australian pet insurance market, making reliable, impactful insurance cover accessible to more pet owners, without the confusion or inflated costs.

MORE INFORMATION

Visit: www.covermy.au/pet-insurance/

RESEARCHERS TO TRIAL NEW ANTI-INFLAMMATORY TREATMENTS FOR GILL DISEASE IN FARMED SALMON

AN INTERNATIONAL TEAM OF RESEARCHERS IS TESTING WHETHER COMMON ANTI-INFLAMMATORY DRUGS COULD OFFER A BETTER WAY TO TREAT GILL DISEASE IN FARMED ATLANTIC SALMON, WHICH COSTS THE GLOBAL AQUACULTURE INDUSTRY MILLIONS EACH YEAR.



Atlantic salmon swimming in purpose-built gill disease challenge systems at CSIRO. Photo Credit: CSIRO.

Atlantic salmon being checked for gill disease. Photo Credit: CSIRO.

Jelly fish (such as Aurelia coerulea pictured here) can contribute to complex gill disease in Atlantic salmon and will be examined in this study. Photo Credit: CSIRO.

The project, GILLMED, brings together researchers from CSIRO, Australia's national science agency, alongside Patogen, Moredun Scientific, Nautilus Collaboration and Mowi. It is funded by the Norwegian Seafood Research Fund (FHF).

Complex gill disease (CGD) is a leading cause of fish death on salmon farms. It is caused by a mix of biological, husbandry and environmental factors, including parasite, bacteria, jellyfish and algae.

Current treatments for marine gill disorders include hydrogen peroxide and freshwater baths. These require handling of fish and are not always effective. New, less invasive and more reliable approaches are urgently needed.

Dr James Wynne, principal research scientist at CSIRO, said GILLMED would take a new approach by exploring well-known anti-inflammatory drugs already used in veterinary medicine to provide symptomatic relief for complex gill disease in farmed salmonids.

"We're committed to ensuring these treatments are safe – protecting fish health, supporting farmers, and protecting consumers," said Dr Wynne.

"Norwegian salmon farmers are deeply committed to maintaining good gill health in their fish. They allocate 0.3 per cent of all export income to research, and in close dialogue with the industry, FHF have prioritised novel research into anti-inflammatory drugs to control complex gill disease in Atlantic salmon," said Morten Lund, director R&D fish health and welfare at FHF.

"We hope the results will be useful for the aquaculture industry," he added.

The project will assess the safety and effectiveness of four non-steroidal anti-inflammatory drugs (NSAIDs) – including meloxicam, ketoprofen and carprofen – for use as oral treatment.

These drugs are already approved in food-producing animals in Norway and the UK but have not yet been tested in fish.

Researchers will test safe doses of the drugs, trial their effectiveness in treating gill disease in Atlantic salmon, study how the fish respond at a biological level, and explore whether the treatments could be used on commercial farms.

The final results will be presented at the bi-annual Gill Health Initiative conference in 2027.

Going forward, GILLMED aims to support veterinarians and salmon producers with new treatment options by providing scientific evidence to inform regulatory approvals.

MORE INFORMATION

Visit: www.csiro.au

NSW WILDLIFE COUNCIL WELCOMES FUNDING FROM THE NSW GOVERNMENT'S WILDLIFE REHABILITATION REVIEW

THE NSW WILDLIFE COUNCIL (NWC), THE PEAK BODY FOR WILDLIFE RESCUE AND REHABILITATION IN NEW SOUTH WALES, WARMLY WELCOMES THE NSW GOVERNMENT'S ANNOUNCEMENT OF $9 MILLION IN FUNDING FOR THE NSW WILDLIFE SECTOR AS PART OF THE WILDLIFE REHABILITATION REVIEW.

This significant investment in wildlife care will offer support to many groups in the state's largest and longest-standing wildlife rescue and care network, which comprises nearly 6,000 members—representing 68% of all wildlife rescuers and rehabilitators in NSW.

NWC's 30 member groups operate across both urban and rural areas of NSW, often travelling long distances to rescue animals or seek veterinary support. The newly announced funding will help offset travel expenses and the high costs of essential items such as food and medications for the wildlife which are frequently paid for by dedicated volunteers.

Sonja Elwood, Chair of the NWC, said, "The cost of wildlife care is significant. Hearing that some of the funding will be put towards supporting small operational expenses and collaborative initiatives is most encouraging as the majority of our members fund these expenses out of their own pockets.

"On average over 23,000 kilometres is traveled, close to a million dollars is spent on feed, fuel and medical supplies and the average annual feed bill per volunteer member group is $25,000, sometimes much more."

NWC members play a vital role in supporting wildlife during national disasters such as bushfires, floods, and heatwaves. The current heatwave has led to significant flying fox deaths in NSW. The Council's strong network enables collaborative rescues and rehabilitation efforts, especially for vulnerable species.

"Australia's unique wildlife is facing a significant decline due to habitat loss and other threats such as natural disasters, collisions with motor vehicles, and domestic animal attacks. In 2023–2024, NWC members coordinated rescues for over 454 land and marine species, including 72 threatened species. Nearly 35,000 animals were rehabilitated and released by NWC members over the past year, contributing meaningfully to the survival of Australia's unique wildlife.

And this year, a new NWC Website together with a Learning Hub will be introduced to improve basic and advanced training, access to updates, reports, and for members and to connect volunteers with local groups and licencing and government departments," added Ms Elwood.

ABOUT THE NSW WILDLIFE COUNCIL

The NSW Wildlife Council, (NWC) is the peak body for wildlife rescue and rehabilitation in NSW. NWC represents 30 groups, comprising statewide and regional wildlife rehabilitators supporting close to 6,000 members. The NWC adopts collaborative approaches to achieve desired outcomes in wildlife care. This collaboration is shown through its strong relationship with other wildlife rescue groups, the veterinary community, the Veterinary Practitioners Board and government departments. Visit: www.nwc.org.au

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For further information, please contact an Elanco Animal Health Consultant on 1800 995 709 from anywhere in Australia Monday to Friday.

^Not in conjunction with any other offer. One free sample per veterinarian will be available during the sample promotional period from 1st January 2026 until 30th September 2026. To qualify for a free sample a veterinarian must complete the registration at https://my.elanco.com/au/galliprant-sample-request. This is a vet clinic promotion and as such wholesale and online pharmacy accounts are not eligible. A valid Australian veterinary registration number must be provided. Deliveries will only be made to the street address of a registered veterinary premises. No PO boxes accepted. Please allow 28 business days for Galliprant sample to arrive.

INDICATION Galliprant is a NSAID that controls pain and inflammation associated with osteoarthritis in dogs. * **1.** Kirkby Shaw, K, et al. Vet Med Sci. 2016;2:3-9.

Read product leaflet for full instructions. The safety of Galliprant has not been established in dogs less than 3.6 kg or less than 9 months of age.

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