

WOAH Collaborating  
Centre for  
Animal Welfare Science  
and Bioethical Analysis:

The David Bayvel  
Consortium



**Ministry for Primary Industries**  
Manatū Ahu Matua

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**Australian Government**

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**Department of Agriculture,  
Fisheries and Forestry**



# Plan for Progress



## Working together:

What we have done:

- Re-established **active working relationships** at WOAH forum (Paris, November 2023)
- Set up **communication channels** between partners

What we plan to do:

- At least quarterly meetings to **re-establish regular communication** and enhance working relationships, commencing in **December 2023**
- Recommence **engagement with the WOAH Network of Animal Welfare Collaborating Centres**



## Short term actions:

Strategic planning:

- Identify **common interests, shared priorities**, key areas of activity and opportunities through workshopping activities
- Develop a **6-month reactivation workplan** which embeds a review of progress against key milestones

Key areas of activity:

- **Case studies**, commencing with **transport challenges** as a shared priority
- Provide **expert input** to the Animal Welfare section of the Terrestrial Animal Health Code

## Long term actions:

Develop a **5-year workplan** for 2025-2030 which includes short-, mid- and long-term goals and actions that **support the vision and four pillars of the WOAH Global Animal Welfare Strategy**



## Reporting:

- Progress on key actions will be captured at quarterly meetings and tracked as **action items**
- Commitment to inform WOAH of key activities via the **Annual Report**

An innovative, multi-centre partnership between the New Zealand and Australian Governments and internationally recognised research institutions

## WOAH Collaborating Centre for Animal Welfare Science and Bioethical Analysis: The David Bayvel Consortium

Associates:



Ministry for Primary Industries  
Manatū Ahu Matua



Australian Government  
Department of Agriculture,  
Fisheries and Forestry

# Ministry for Primary Industries

Manatū Ahu Matua



## Dr Carolyn Guy Director Animal Health and Welfare

Carolyn joined the Ministry in 1998 after practicing as a veterinarian in a mixed small and large animal clinic, during which time she also completed a post-graduate Diploma of Business Administration.

Over the years she has held a variety of roles across the Ministry including managing a team which coordinated New Zealand's activities in the international standard setting bodies, OIE, IPPC and Codex; New Zealand's relationship with Australia in the areas of food regulation and primary industries; negotiating SPS chapters of free trade agreements; representing New Zealand at the WTO SPS Committee; and a posting to Tokyo as Counsellor Primary Industries for Japan and South Korea.

She is currently Chair of the Regional Animal Welfare Strategy Advisory Group for the Asia-Pacific region, chairs the Collaborating Centre, and is on the Council for the Australia New Zealand College of Veterinary Scientists





## Dr Emily Orchard-Mills

### Australia's Management Group Representative

Emily graduated from a Bachelor of Veterinary Science with First Class Honours from the University of Sydney in 2005.

After working in private practice in Australia and the United Kingdom, she completed a PhD through the University of Sydney in 2016.

Emily joined the Department of Agriculture, Fisheries and Forestry (DAFF) in 2015 and has primarily worked in animal welfare areas across the department.

Her current role in DAFF involves working with Australia's Animal Welfare Task Group (AWTG) which comprises representatives from each of the Australian state and territory government departments responsible for animal welfare and from the Australian Federal Department of Agriculture, Fisheries and Forestry. AWTG oversees the development and review of animal welfare standards and guidelines for farm animals in Australia.

Emily is currently the WOAHA National Focal Point for Animal Welfare for Australia and a member of the Regional Animal Welfare Strategy.

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Dr Caroline Lee

CSIRO

Australia's National Science Agency

Dr Caroline Lee is a Senior Principal Research Scientist at CSIRO in Armidale. She has over 25 years of experience in animal welfare research and has published over 130 peer review publications. She has an interest in developing novel methods of animal welfare assessment including measures of emotions in animals and assessment of new technologies such as virtual fencing. Dr Lee is an Adjunct Professor at The University of New England and The University of Tasmania. She contributes to animal welfare policy development through her roles on National Animal Welfare Standard Committees and the NSW Animal Welfare Council.



# Focus and expertise



## **Top five focus areas / priority animal welfare topics**

- Welfare benchmarking and assurance
- Machine vision and AI to automate animal behaviour and welfare assessment
- Animal welfare impacts of virtual fencing
- Humane slaughter and pain management
- Assessment of cognitive measures of affective states

## **Speciality topics / areas of expertise within animal welfare**

- Development of novel measures of affective states
- Development and application of digital technologies for animal welfare assessment
- Applied research: improved management and housing systems, pain relief, humane slaughter practices
- Prawn behaviour and welfare (emerging)

## Dr Cheryl O'Connor

Dr Cheryl O'Connor is the Animal Behaviour and Welfare Science Team Leader, at AgResearch, Ruakura. She has been an animal behaviour and welfare scientist for 30 years, applying that knowledge to improve the welfare of animals and ensure a social license to operate for farmers and the wider primary industries. Prior to this role she was a programme leader at the Ministry for Primary Industries. She assisted and advised the National Animal Welfare Advisory Committee in the development of animal welfare standards, working collaboratively with individuals and groups across the extreme spectrum of views on New Zealand's animal welfare system.



# Focus and expertise

## **Top five focus areas / priority animal welfare topics**

- Indicators of positive welfare and comfort in pastoral dairy cows.
- Heat stress – effects and mitigation.
- Welfare of cows in wintering systems when animals are managed outdoors
- Sheep behaviour and welfare
- Wearable technology and machine learning to automate health and welfare indicators and assessment

## **Speciality topics / areas of expertise within animal welfare**

- Pastoral farming systems
- Animal behaviour research
- Heat stress
- Cold stress
- Wearable technologies
- Applied research: to improve animal welfare from management practices and farmer decision making on-farm



## **Associate Professor Ngaio Beausoleil**

**Co-director. Associate Professor  
Applied Ethology and Animal Welfare Science  
School of Veterinary Science**



Ngaio's research employs behavioural and physiological methods to investigate various aspects of animal welfare. Major research themes include:

- Systematic scientific evaluation of animal welfare
- Conservation Welfare: Welfare impacts associated with wildlife conservation activities
- Breathlessness in animals
- Humane methods of 'euthanasia'
- Gaseous methods of 'euthanasia'
- Humane vertebrate pest control
- Developmental processes, modulation and alleviation of pain in farm animals
- Novel methods for evaluating pain in farm animals

# Focus and expertise

## Top five focus areas / priority animal welfare topics

- Humane killing
- Affective states in animals and how to recognize them
- Pest welfare
- Pain mitigation
- Live export by sea

## Speciality topics / areas of expertise within animal welfare

- Fundamental research: What is animal welfare and how can it be assessed?; What affective states can animals experience and how can they be recognized (e.g. avian pain, avian and mammal breathlessness, boredom, nausea)?
- Applied research: Novel and improved methods of pain mitigation, welfare impacts of stunning and killing (various domestic and wild species, including pests and fish), zoo animal management, production animal management (e.g. live export by sea, winter grazing, bobby calf transport)
- Technical skills: veterinary anaesthesia and analgesia, neurophysiology (EEG), animal behaviour, pharmacology, anatomical preparations



# Dr Lauren Hemsworth

Senior Lecturer (Animal Welfare)

Animal Welfare Science Centre, The University of Melbourne



Lauren's role involves a substantive research program and undergraduate and graduate teaching, centered on the behaviour and welfare of domestic and captive animals.

Lauren's research focuses on (1) animal welfare assessment and the development of welfare assessment tools (animal welfare methodology), (2) the effects of human-animal interactions and the human-animal relationship on animal welfare (the human-animal relationship), and studying human factors relevant to animal welfare, (3) the effects of the social and physical environment on the behaviour and welfare of animals (housing and husbandry practices), and (4) community attitudes towards animal welfare and the impact of public perceptions on the sustainability of animal industries (community attitudes), across a range of animal uses (farm, companion and zoo settings).



# Focus and expertise



THE UNIVERSITY OF  
MELBOURNE

## Top five focus areas / priority animal welfare topics

- Animal welfare methodology: animal welfare assessment and the development of welfare assessment tools (benchmarking and assurance).
- Human-animal interactions and the human-animal relationship: farm, companion and zoo animals.
- Housing, husbandry and handling effects on animal welfare: farm, companion and zoo animals.
- Humane slaughter.
- Tertiary, post-graduate and industry education and training.

## Speciality topics / areas of expertise within animal welfare

- Fundamental research and applied research across a range of animal use settings: development of animal welfare assessment methodology; impact of early life experiences; improved housing systems, management and handling practices; human-animal interactions and human-animal relationship; humane slaughter practices.
- Attitudinal effects: human factors relevant to the welfare of livestock, zoo and companion animals, and community attitudes towards animal welfare and the impact of public perceptions on the sustainability of animal industries.
- Human behaviour change to improve animal welfare.
- Development and delivery of tertiary, post-graduate and industry education and training.



## Professor Alan Tilbrook

Professorial Research Fellow

Centre for Animal Science

University of Queensland



Professor Alan Tilbrook is nationally and internationally recognised for leading scientific research in animal science and biomedical science (endocrinology, neuroendocrinology, behaviour, stress, and reproduction).

He leads Animal Welfare within the Queensland Alliance for Agriculture and Food Innovation and the School of Veterinary Science at The University of Queensland. Professor Tilbrook has established and is the Managing Director of The Animal Welfare Collaborative (TAWC), which is a university-facilitated network of individuals, companies, and organisations working together to make evidence-based improvements in animal welfare.

Professor Tilbrook's research is conceptually driven with a multidisciplinary and integrative approach.

# Focus and expertise



## **Top five focus areas / priority animal welfare topics**

- Biological markers of animal experience to assess animal welfare
- Assessment of pain and pain mitigation
- Effect of early life experiences on stress resilience later in life
- Animal welfare research engagement and education in China
- Live export by sea (including heat stress)

## **Speciality topics / areas of expertise within animal welfare**

- Neuroendocrinology and endocrinology
- Stress physiology
- Assessment of animal welfare (multiple species)
- Animal behaviour
- Use of near and mid-infrared spectroscopy in the assessment of animal welfare

# Aiming to achieve the following impacts

