



1 August 2014

Senate Environment and Communications References Committee
PO Box 6100
Parliament House
Canberra ACT 2600

Dear Committee members,

WILDLIFE HEALTH AUSTRALIA (WHA) SUBMISSION: INQUIRY INTO ENVIRONMENTAL BIOSECURITY

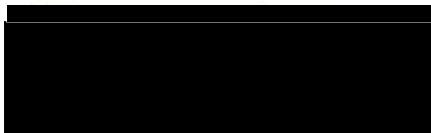
Please find attached a submission to the Committee regarding feral animals, native wildlife and disease and Australia's environmental biosecurity.

Incursions by diseases and disease agents of feral animals and wildlife pose a risk to Australia's environment and biosecurity. Failure to rapidly identify and respond to an incursion can also have flow-on effects upon Australia's trade, market access and human health. Australia's current wildlife health system is almost entirely driven by agricultural and human health needs.

Changing contact between people and animals is only likely to exacerbate and increase the concerns. There is a framework in place strongly developed over the last 15 years, but the current funding risks that it will not be able to effectively address concerns. **Surveillance, contingency planning and integration of wildlife diseases that may impact on environment into national arrangements is the solution.** Failure to do so leaves Australia exposed.

We are happy to discuss this submission with you face to face should you feel it would assist the working group. We hope that our submission helps you with this important work.

Best Wishes,



Rupert Woods PhD
CEO, WHA

WILDLIFE HEALTH AUSTRALIA (WHA) SUBMISSION: INQUIRY INTO ENVIRONMENTAL BIOSECURITY

THE IMPORTANCE OF WILDLIFE HEALTH TO AUSTRALIA'S FUTURE BIOSECURITY

Diseases and disease agents of feral animals and wildlife pose a threat to Australia's environment and future biosecurity:

- Wildlife are hosts and/or reservoirs for important diseases and disease agents that can affect the environment and biodiversity. Some of these diseases can lead to extinction (e.g. the introduction of chytridiomycosis in frogs in Australia) or severely impact upon populations (e.g. white-nose syndrome in bats in America which has not yet reached Australia).
- Other wildlife diseases, which have already been introduced into Australia still have unknown impacts e.g. psittacine herpesvirus 1 introduced with legally traded green-winged macaws and pigeon paramyxovirus, which was believed to have been introduced through smuggling.
- Wildlife are also hosts and/or reservoirs for important exotic diseases and disease agents that can affect trade and market access (e.g. another exotic disease, tuberculosis which is present in possums in New Zealand) and detection of disease and disease agents in wildlife, and the lack of evidence of absence to satisfy trading partners, can impact upon trade and market access.
- Furthermore, Australian wildlife are susceptible to many of the important exotic emergency diseases of production animals and, if introduced and established, spillover to humans and food animals can occur (e.g. most other exotic diseases of concern to us including foot and mouth disease, classical swine fever, Nipah virus, Surra etc).
- Wildlife are also the most common source of emerging novel diseases and these diseases can impact upon environment, people and food animals (Jones et al 2008, McFarlane et al 2012).
- While incursions and exotics are recognised as risks (for example chytridiomycosis, which has caused the extinction of six Australian frog species), it is also important for the Committee to remember that another risk on a national scale...supported by the outbreaks of emergency animal diseases in the last 30 years, is the emergence of diseases from within Australia (for example Tasmanian Devil facial tumour disease, avian influenza, Hendra virus, Australian bat Lyssavirus, Tularaemia, Leishmania etc.). However, the necessary frameworks for management of these two disease pathways **support one another**: a focus on detection and preparedness for incursion by exotics helps our detection and response to outbreaks in endemics and vice-versa.

In assessing and developing strategies to manage incursions of diseases with wildlife as part of their ecology that may impact on Australia's environment, these facts, including hosting of exotic diseases, spillovers and flow-on effects need to be considered.

The risks will become greater with changing land use, climate change, animal movements and as societal attitudes bring wildlife, livestock and people into closer contact.

AUSTRALIA'S STATE OF PREPAREDNESS FOR NEW ENVIRONMENTAL INCURSIONS

Australia's current wildlife health system is embedded in our biosecurity/agriculture framework.

The system focuses on surveillance and preparedness for diseases with wildlife as part of their ecology that may impact upon Australia's agricultural trade and market access. Diseases of wildlife that impact upon Australia's biodiversity and environment are a low priority. Wildlife Health Australia assists Australian governments in maintaining this system.

Though much good work has been done, there is an immediate need:

- to bring environment into Australia's wildlife health system;
- to improve education and knowledge of diseases with wildlife as part of their ecology that may impact upon Australia's environment and biosecurity and to prepare for and respond to these risks;
- to further develop Australia's national wildlife health system to support Australia's animal health specifically in the area of wildlife diseases and biodiversity impacts, and;
- for information gathering and contingency planning for potential high risk diseases with wildlife as a part of their ecology that may impact upon Australia's environmental biosecurity.

It is also vital in future that Australia be able to show that it is free of exotic diseases and disease agents that can affect or be carried by wildlife and feral animals that can jeopardise our trade and market access.

These activities are complementary, however, wildlife biosecurity information and response sources differ from production sources and need separate support. Australia's wildlife health system is almost entirely focussed on agricultural drivers. Current frameworks exist that can help, however, **the gap area is in support for surveillance and preparedness for exotic wildlife diseases that could impact upon environment** rather than trade and market access.

THE SOLUTION: SURVEILLANCE, CONTINGENCY PLANNING AND THE INTEGRATION OF WILDLIFE DISEASES THAT MAY IMPACT UPON ENVIRONMENT INTO NATIONAL ARRANGEMENTS

Having surveillance and contingency plans in place for wildlife disease agents that are outside Australia (e.g. tuberculosis in possums, white-nose syndrome in bats) and the collection of data and risk assessment for agents introduced and within into Australia (e.g. psittacine herpes virus I and pigeon paramyxovirus) is important to better assist in identifying, assessing and mitigate biosecurity risks.

The better our preparedness and knowledge of the risk and distribution of such agents the better Australia can be placed to manage environmental impacts and also the flow-on effects into other areas such as agriculture and human health.

Support for framework building and the inclusion of diseases that may impact upon environment into Australia's general wildlife health surveillance system is required.

PRIORITY ACTIONS: INCLUSION OF WILDLIFE DISEASES THAT MAY IMPACT UPON ENVIRONMENT IN AUSTRALIA'S WILDLIFE HEALTH SYSTEM

Strategies for identification and management of exotic wildlife diseases that could impact upon Australia's environment must be developed and integrated into Australia's current wildlife health biosecurity framework.

There are opportunities to quickly and easily build upon existing structures. **Expanding the activities of Wildlife Health Australia, whose current focus is trade and agriculture, to include a focus on diseases of wildlife that may impact upon the environment, biosecurity and biodiversity is the obvious solution.**

Utilising existing structures, complementarity rather than redundancy or competition, and the need to engage the states and territories in meaningful ways need to be considered. Failure to do so leaves Australia exposed.

RELEVANT TECHNICAL INFORMATION SUPPORTING OUR COMMENTS OR PRIORITY ACTIONS

Jones KE, NG Patel, MA Levy, A Storeygard, D Balk, JL Gittleman, P Daszak (2008) Global trends in emerging infectious diseases. *Nature* 451:990-995.

McFarlane R, A Sleigh and T McMichael (2012) Synanthropy of wild mammals as a determinant of emerging infectious diseases in the Asian–Australasian region. *EcoHealth* 9(1):24-35.

ABOUT WILDLIFE HEALTH AUSTRALIA

Wildlife Health Australia (WHA) is the peak body for wildlife health in Australia and operates nationally. The head office is located in Sydney, NSW.

WHA activities focus on the increasing risk of emergency and emerging diseases that can spill over from wild animals and impact on Australia's trade, human health, biodiversity and tourism. We provide a framework that allows Australia to better identify, assess, articulate and manage these risks. We provide the framework for Australia's general wildlife health surveillance system.

WHA's vision is for "One Biosecurity", a concept that means different things to different people. For us, it is the recognition that human, domestic animal and wildlife biosecurity are strongly interlinked with each other and the environment. It also recognises that the best biosecurity outcomes will result from strong collaboration and communication between workers in these fields. WHA activities are underpinned by this principle and we actively foster interdisciplinary work on wild animal health.

Our mission is to develop strong partnerships in order to better manage the adverse effects of wildlife diseases on Australia's animal health industries, human health, biodiversity, trade and tourism.

WHA directly supports the Animal Health Committee (AHC), Animal Health Australia (AHA), the Animal Health Policy Branch and the Office of the Chief Veterinary Officer (OCVO) within the Australian Government Department of Agriculture (DoA) and Australian governments in their efforts to better prepare and protect Australia against the adverse effects of wildlife diseases. It provides priorities in wildlife disease work, administers Australia's general wildlife disease surveillance system as well as facilitating and coordinating targeted projects. Wildlife health intelligence collected through the National Wildlife Health Information System (eWHIS: <http://www.wildlifehealth.com.au>) administered by WHA is provided to members of AHC and the Australian Government DoA, and Departments of Health (DoH) and Environment (DoE), on issues of potential national interest, potential emerging issues and significant disease outbreaks in wildlife. The information is provided in line with the agreed policy for data security.

WHA is administered under corporate governance principles. A management group, chaired by an appointment from DoA provides strategic direction and advice to a small team, which oversees the running of WHA. It is important to note that WHA involves almost every agency or organisation (both government and NGO) that has a stake or interest in animal and wildlife health issues in Australia. In addition WHA also comprises more than 600 wildlife health professionals and others from around Australia and the rest of the world who have an interest in diseases with feral animals or wildlife as part of their ecology that may impact on Australia's trade, human health and biodiversity.

More information on WHA is available at: <http://www.wildlifehealth.com.au>.