

Senate Environment and Communications References Committee

Inquiry into the impacts of feral deer, pigs and goats in Australia

Response by the Centre for Invasive Species Solutions to written questions on notice

Authorised by Andreas Glanznig, CEO

1. At the time of your submission, the new generation pig bait Hoggone was yet to be approved by the APVMA. What is the current status of Hoggone?

The APVMA gazetted Hoggone on 24 September 2019 as an unrestricted S6 chemical with mandatory use of a hopper for deployment. This was accompanied by a 28 day public consultation phase, which is now closed.

Additionally, some States require the product to be listed through a Pesticide Control Order (PCO) or equivalent under respective pesticide legislation before it can be made commercially available in those jurisdictions.

The new product will be manufactured by Animal Control Technologies Australia (ACTA), and is expected to be available through them from 2020.

Gazettal background information is at:

https://apvma.gov.au/sites/default/files/gazette_24092019_0.pdf

More information on Hoggone features and considerations at:

<https://animalcontrol.com.au/products/hoggone>

2. Is a deer bait currently under development? Has the immunocontraceptive for deer been approved?

No deer bait is currently under development by the Centre for Invasive Species Solutions and in Australia to our knowledge.

An APVMA application for GonaCon has yet to be lodged, pending clarification of several matters with the APVMA.

It should be emphasised that as this product needs to be administered by injection, it is **not** a cost nor effort effective tool that can be used for broadscale deer management.

3. As some time has passed since your submission, please update the committee on your work in relation to control methods for deer pigs and goats.

Please refer to the CISS 2018-19 Annual Report, available on-line at: <https://invasives.com.au/wp-content/uploads/2019/11/CISS-Annual-Report18-19-web.pdf>

For deer, pls refer to pages 18-24, 37.

For feral pigs, pg.57, as well as FeralScan community mapping and management system on pg. 48, which includes Feral PigScan. FeralPigScan at <https://www.feralscan.org.au/feralpigscan/> is currently

not being promoted as unlike wild dogs, rabbits and carp, there is no nationally coordinated program to promote and drive utilisation of community led cooperative feral pig management.

4. The committee heard about the particular challenges of dealing with deer in peri-urban areas during its hearing in Melbourne. What control methods are currently available in peri-urban and urban environments? Is there anything you are working on that would be of assistance in that environment?

Management of vertebrate pests in urban and peri-urban areas is complex given social and tenure challenges. Peri-urban governments have identified the need for better tools and strategies for control of wild dogs (and foxes) and deer. The Centre project portfolio includes a relevant project entitled, *Management of wild dogs and deer in peri-urban landscapes: strategies for safe communities*. The project aim is to provide pest managers, through collaborations and community-led actions, with alternative strategies for managing wild dogs and deer in peri-urban areas of Australia. Partners include Queensland Department of Agriculture and Fisheries (Project Leader), NSW Department of Primary Industries, ACT Parks and Conservation, NSW Local Land Services, Griffith University, Sunshine Coast Council, and Brisbane City Council.

The project is at an early stage and currently collecting baseline population information at NSW and Brisbane sites (see Annual Report pg. 22)

More information on specific project objectives is at:

<https://invasives.com.au/research/management-wild-dog-deer-peri-urban-landscapes-strategies-safe-communities/>

A potential new tool that has very limited application for targeted peri-urban deer management in certain instances is the GonaCon fertility control agent that is being progressed by the Centre. If approved by the APVMA, national registration will be more than two years. See caveat in response to question 2.

5. Would you please provide the committee with an update on the collaborative research effort into deer management and the progress of relevant projects?

As set out in our submission, the Centre is coordinating Australia's largest collaborative deer management RD&E program.

Please refer to the CISS 2018-19 Annual Report for project updates, available on-line at:

<https://invasives.com.au/wp-content/uploads/2019/11/CISS-Annual-Report18-19-web.pdf>

Management of wild dogs and deer in peri-urban landscapes: strategies for safe communities – pg.22

Cost effective management of wild deer – pg.23

The role of wild deer in the transmission of diseases of livestock – pg.23

Feral deer aggregator update – pg. 37

Additional information is on the CISS web site at: <https://invasives.com.au/research#pest-animals-landscape-management>

6. Please provide the committee with an update on CISS's current and future funding arrangements.

CISS is the trading name for Invasive Animals Ltd, a not-for-profit company limited by guarantee. Its Members include the Australian Government, all States, the ACT, Meat and Livestock and CSIRO. It is currently funded through two head agreements for the five year period 1 July 2017 to 30 June 2022. These head agreements are a Commonwealth Grant Agreement that provided \$20 million for the following purposes:

1. Fund research, development and extension activities regarding the management of invasive pest animals and weeds that span the invasion curve (prevention, eradication, containment and asset protection), which threaten native ecosystems, native habitats and endemic species and that may reduce Australian agricultural productivity and profitability;
2. Produce new or next generation invasive pest animal and weed management tools, extension materials and strategies designed to:
 - a. Improve surveillance and monitoring;
 - b. Improve treatment and control options
 - c. Improve behaviours of invasive species management; and
 - d. Improve collective action and community acceptance.
3. Facilitate large scale collaboration between governments, industry and universities, providing continuity for, and building on, the work of the Invasive Animals Cooperative Research Centre (IA CRC) in invasive species management, following conclusion of Cooperative Research Centre Programme funding in June 2017; and
4. Support the Grantee to operate the Centre for Invasive Species Solutions (CISS).

The Commonwealth Grant Agreement has enabled a large scale 17 partner collaborative RD&E portfolio to be scoped, brokered and implemented through the CISS Portfolio No. 1 Agreement. This has enabled the core Commonwealth investment of \$20 million over 5 years to currently be leveraged to an over \$48m cash and in-kind portfolio in two years. A summary of this RD&E portfolio is at:

https://invasives.com.au/wp-content/uploads/2018/10/180511_doc_PortfolioOneprojectlist_distribution.pdf

Additional innovation projects are now being added to this portfolio, such as the recent announcement of funding to enable land managers and communities to more easily detect and manage priority weeds through development a national computer vision weed identification App and community mapping and management system – WeedScan – that leverages off our award winning FeralScan platform. This nationally coordinated approach results in major efficiencies rather than the fragmented alternative of each jurisdiction developing its own computer vision weed identification app. More information is at: <https://minister.agriculture.gov.au/mckenzie/media-releases/ai-to-help-weed-out-pests>

While the company – Invasive Animals Ltd – is an on-going concern, portfolio level funding to deliver transformational large-scale impacts beyond the expiry of the current two head agreements on 30 June 2022 is uncertain.

CISS is seeking to identify and access new funding streams to diversify its income base to complement core government and industry investments. However to continue providing national value by pursuing transformational innovation and knowledge through large-scale RD&E collaborations beyond 2022 will again require 5-10 year head agreement arrangements that bring all

governments, industry and research providers into a strategic collaboration that provides the ability to leverage funding and achieve scale and impact.

7. Some evidence has spoke about the need for a landscape scale approach and others call for a targeted approach to control. Can these approaches work together?

These approaches can indeed be complementary and even synergistic. Landscape scale approaches enable better management of discrete populations and sustain benefits by reducing the rate of vertebrate pests from surrounding areas moving into recently controlled areas. This can be complemented by intensive site based vertebrate pest management for asset protection, such as threatened species critical habitat, a vulnerable threatened ecological community, or a livestock or cropping asset, that exist within a landscape management area.

8. Please provide more information on the national facilitator approach for wild dogs and how this could be applied to feral deer. How did the position for wild dogs come into being?

The Centre strongly supports the improved the national facilitator approach, and based on the success of the National Wild Dog Coordinator / National Wild Dog Action Plan. This approach also enables national scale RD&E to be integrated within this national framework, and has accelerated the path to adoption of best practice management practices and tools.

Initial success of applying a nil-tenure approach enable larger-scale cooperative wild dog management in Brindabella and Wee Jasper and several other areas, convinced the IA CRC that this approach had potential national application. A case study of this early success is at:

<https://www.pestsmart.org.au/national-wild-dog-action-plan/case-studies/brindabella/>

The National Wild Dog Facilitator – as this position was known from 2006 to 2017 – was established by the former Invasive Animals Cooperative Research Centre to promote cooperative cross- or nil-tenure wild dog management.

It was initially funded from 2007 to 2009 through the IA CRC core program augmented with National Feral Animal Control Program funds from 2007-2012 with in-kind primarily provided by the Queensland Government. This was augmented with industry funding in 2009-2011 from Australian Wool Innovation.

The on-going industry support is a testimony to the success of this approach.

An economic impact assessment of the project for the years 2007-2012, which includes background, affirmed the economic benefit for agriculture and is at:

<https://www.pestsmart.org.au/economic-analysis-national-wild-dog-facilitator/>

From 2012, the National Wild Dog Facilitator has been 100% industry funded initially fully funded by AWI to 2017, then co-funded with Meat and Livestock Australia, Wool Producers, Sheep Producers, Cattle Council and Animal Health Australia from 2017.

A summary, objectives and early 2019 outputs of the National Wild Dog Coordinator project is at:

<https://invasives.com.au/research/national-wild-dog-management-coordinator/>

The recent independent 2019 review of the industry led National Wild Dog Action Plan found that it added significant value to agriculture and communities through increasing confidence, leadership, capability and investment in wild dog control.

The history of the National Wild Dog Coordinator / National Wild Dog Action Plan approach is outlined by the current NWDMCC Chair, Geoff Power at:

<https://www.pestsmart.org.au/national-wild-dog-action-plan-proves-worth-review/>

The NWDAP review is on the PestSmart web portal at:

https://www.pestsmart.org.au/wp-content/uploads/2015/02/NWDAP-Stage-3-Review-Impact-Assessment-2019-REPORT.pdf?utm_source=CISS+external+e-news+subscriber+list&utm_campaign=57574fc00f-EMAIL_CAMPAIGN_2019_09_04_04_25_COPY_01&utm_medium=email&utm_term=0_dca65e59c7-57574fc00f-85300405

The Australian Government has recognised the strategic value of National coordinator – National plan approach when it recently provided three year funding for a National Feral Pig Coordinator. The Minister’s media release of 8 November stated that:

“We’ve seen the success of the National Wild Dog Action Plan – and we can mirror that with this feral pig role, for the benefit of not just of the pig industry but agriculture more broadly and our beautiful environment.” More information at:

<https://minister.agriculture.gov.au/mckenzie/media-releases/feral-pig-coordinator>

The CISS national collaborative feral deer R&D management program provides a solid and logical platform to promote and accelerate adoption of larger-scale best practice deer management catalysed through a national feral deer coordinator – national feral deer action plan approach.

9. Would you see a national plan for the management of deer as being helpful, and if so under what process should that plan be developed?

CISS supports a national action plan in principle, on the proviso that it is developed through a collaborative governance and institution building approach with the aim of fostering cooperation, coordination and networking across sectors and industries analogous to the development and implementation of the National wild Dog Action Plan.

10. the RSPCA has raised concerns in its submission (p.7) that listing feral deer as a pest species would effectively remove any protection under animal welfare legislation. Do you have a view on that?

Deer are a major expanding vertebrate pest. As such the legislative and regulatory response should enable appropriate, effective and efficient action to manage feral deer in line with other already well established listed vertebrate pests such as feral pigs and rabbits. CISS recognises that such management should be humane and accord with best practice management Standard Operating Procedures. In this regard, a number of new SOPs are being developed through the CISS project, Cost effective management of deer, being led by NSW DPI. More information is at:

<https://invasives.com.au/research/cost-effective-management-wild-deer/>

11. Is the translocation/relocation of deer illegal in every state and territory?

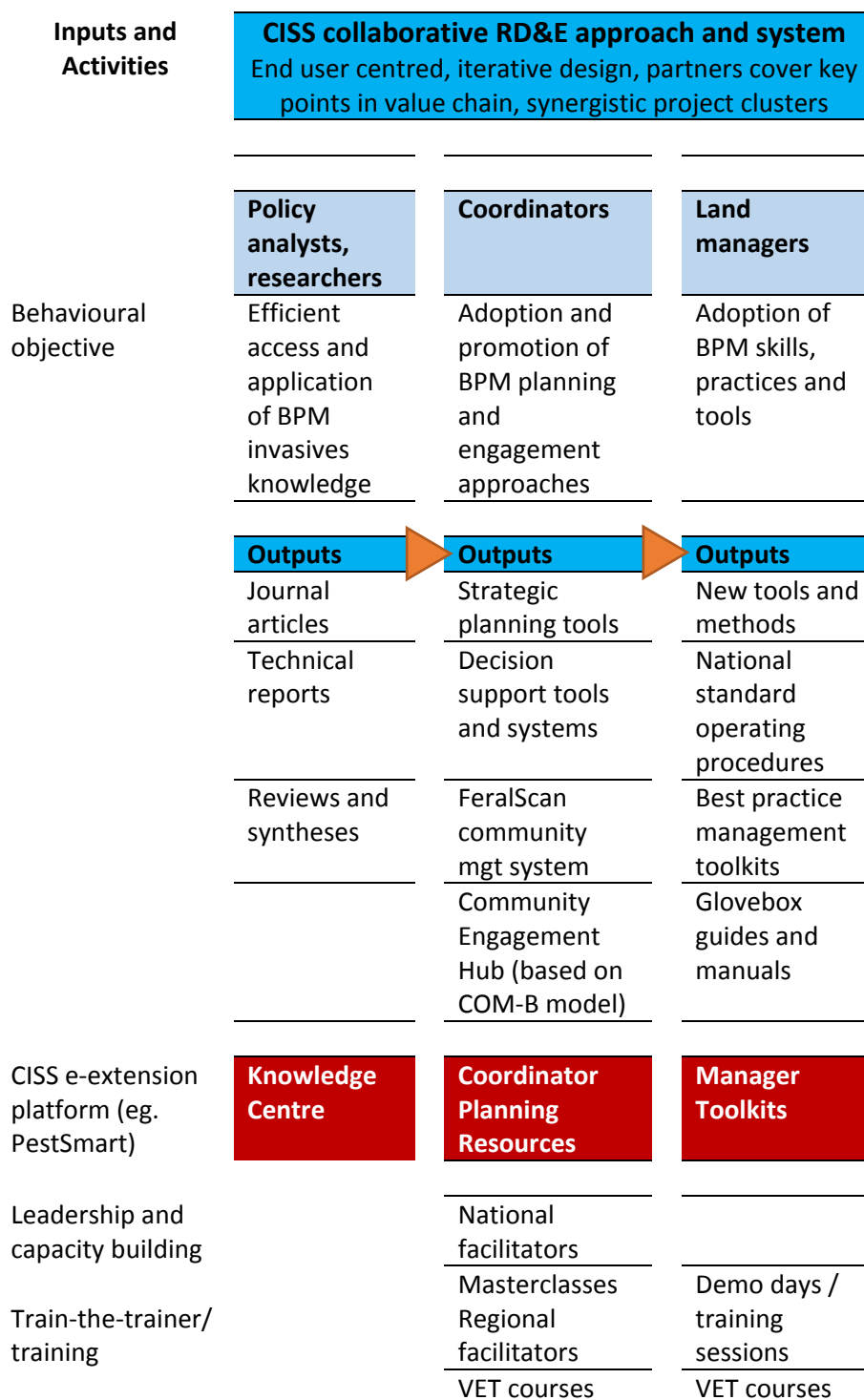
This question should be referred to the States and Territories.

12. How can the learnings from successful control programs best be shared?

The knowledge brokering and adoption model of CISS is instructive in this regard.

CISS Research, Innovation and Engagement Model and System

The CISS research, innovation and engagement model has been developed and refined over the 12 year Invasive Animals CRC, and has been instrumental in the design of CISS programs. It aims to cover all key points in the value chain from need identification through to engagement and adoption via a managed distributed network of Member, partner and other organisations. A schematic representation of the generic CISS research, innovation and engagement model is below.



This model has been applied to design both the CRC and CISS wild dog and rabbit programs, and could be readily applied to accelerate adoption of best practice feral pigs and deer management.

I would particularly like to bring to the Committee's attention the PestSmart best practice management digital platform, which was viewed 529,537 times by more than 220,000 users in FY 18/19. This includes the practical outputs designed for coordinators and land managers as per the above schema. More information in the CISS 2019 Annual Report, pg.63.

13. Do you support the NFF's recent call for an increased federal-state focus on the eradication of feral pigs?

CISS strongly supports increased coordinated federal-state action on strategic feral pig management, and commends the Australian Government for investing in a National Feral Pig Coordinator to promote cooperative, nil-tenure management. CISS also supports intensive management action in the drought given that feral pigs are water constrained and will aggregate around water points and other moist areas. This vulnerability should be taken advantage of proactively before the drought breaks and pigs disperse and breed up. As a rapid knockdown of feral pig populations by 70% or more is needed to suppress population growth, and because feral pig populations have the reproductive ability to double in size annually, now is the time to implement a strategic management program. The biosecurity risk of African Swine Fever doubles the timeliness of strategic action. A caveat to our response is that feral pig eradication – that is the total removal of all pigs from a given area – is not economically nor technically feasible at large-scales. Population suppression is a more technically correct goal for larger-scale feral pig management.

14. On 8 November 2019 the Minister for Agriculture announced the establishment of a National Feral Pig Coordinator, with Commonwealth funding of \$1.4 million over the next three and a half years to support this role. Do you have any views on this announcement, and the Coordinator should undertake their activities?

CISS strongly supports this announcement and the National Coordinator – National Action Plan model. As recognised in the Minister's press release, the National Wild Dog Coordinator and National Wild Dog Action is a proven and successful model and its approach and processes should be learnt from and adapted by the new National Feral Pig Coordinator project. This should include ensuring close coordination with the National Wild Dog Coordinator and National Wild Dog Action Plan.