

**Submission
No 1**

**INQUIRY INTO VETERINARY WORKFORCE SHORTAGE
IN NEW SOUTH WALES**

Name: Dr Campbell Costello

Date Received: 14 June 2023

**Submission
No 1**

**INQUIRY INTO VETERINARY WORKFORCE SHORTAGE
IN NEW SOUTH WALES**

Name: Dr Campbell Costello

Date Received: 14 June 2023

I am flying veterinarian from Northern QLD that travels across the top end and into regional NSW to offer basic veterinary services. Without funding of my business, the veterinary sector, and drastic changes the veterinary algorithm, the industry isn't sustainable. I am happy to elaborate on more if needed but the basic stats of the industry are contained within my PDF pitch document. I have been practicing for 13 years and I don't have many mates left in the industry. I'd like to see this change.



Outback & Airborne

Veterinary Services



TOC

3 Overview

4 Problems to solve

5 Project objective

7 More Pets, Less Vets

8 Disease Threats

10 Disease Surveillance

12 Solutions

13 Going Bush

14 Mentoring the Next Generation

17 The Top-End EAD

22 Target

24 Process

26 Annual Deliverables

28 The Journey

29 Team

35 The Passion



Overview

The veterinary industry is currently facing some complex challenges. The ever increasing threat of an Emergency Animal Disease (EAD) outbreaks, the increase of animal ownership during the COVID pandemic, and the frighteningly high rate of suicide, burnout, and attrition all congeal together to create a myriad of unique obstacles for the Veterinary industry. It is these unique predicaments that Outback & Airborne Veterinary Services is taking head on all whilst developing innovative solutions





Problems to solve

1

In Australia a Veterinarian is four times more likely to die by suicide vs the average Australian. 1 in 3 vets are considering leaving the profession in the next 12 months, 1 in 10 are considering leaving immediately

2

During the COVID pandemic, pet ownership in Australia increased by 10% with 70% of Australians now owning an animal

3

The probability of an Emergency Animal Disease (EAD) outbreak has increased from 42% in August 2021, to 56% in December 2022

4

A workplace review by the Australian Veterinary Association (AVA) in 2021 revealed that 77.47% of clinics are advertising a veterinary position with 30.64% taking longer than a year to fill, or did not fill the position at all



Project objective

The objective of Outback & Airborne Veterinary Services is to deliver affordable and regular Veterinary services, disease detection and responses to regional Australians and animals amidst a Veterinary shortage

Why Bother With a Flying Vet?

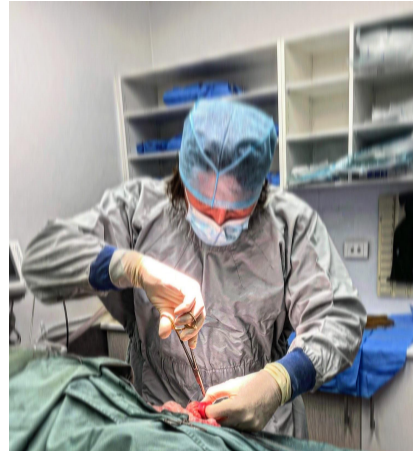


More Pets, Less Vets

During the COVID Pandemic animal ownership increased by 10%. The Veterinary crisis is exacerbated annually with 1 in 3 vets considering to leave the profession in the next 12 months, and 1 in 10 considering an immediate departure

Implications:

This has led to an increased demand on the Veterinary industry, especially in the bush. Coupled with no financial support of the industry it is becoming increasingly difficult to meet financial expectations of animal owners whilst trying to digest the ever growing workload



Long hours

Veterinarians are globally some of the lowest paid professionals





Disease Threats

Over the last 12 months the probability of an EAD outbreak on Australian sovereignty has increased by 14% to 56%. There are also extensive areas of outback Australia that do not have a regular Veterinary Service and are therefore left “unguarded” when it comes to disease surveillance

Implications:

In a recent simulated Foot-and-Mouth (FMD) disease outbreak in California, it was estimated the impact of delaying the detection of FMD by **1 hour** increased animal slaughter by 2,000 head, led to 6 additional infected premises, and cost the economy an extra US\$500 million





50% less

Had a nationwide movement ban had been implemented on Day 1 vs Day 3 during the 2001 United Kingdom FMD outbreak, it was estimated that the amount of Infected Premises could have been reduced by more than half

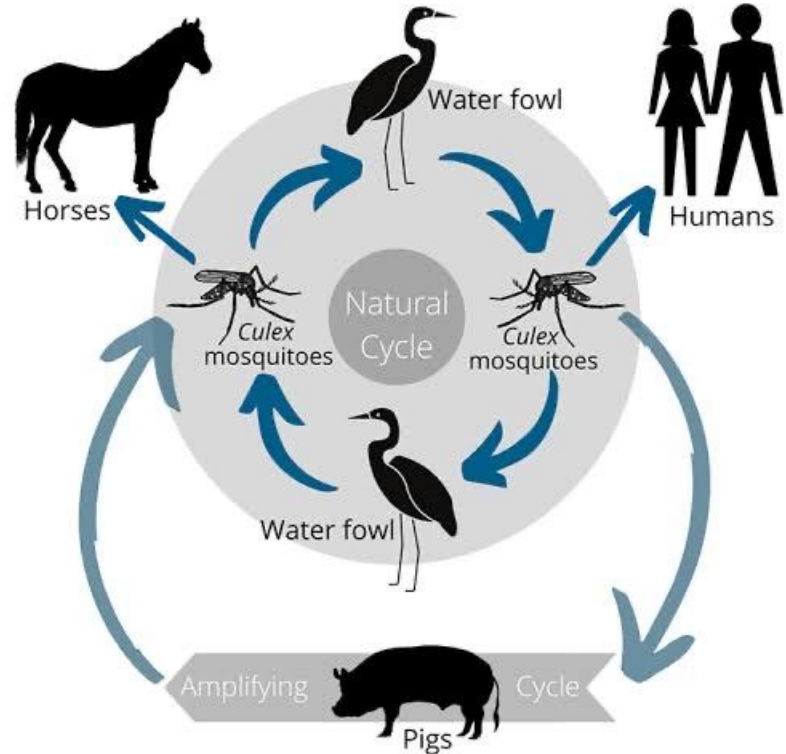
Having Veterinarians “out and about” is crucial to early disease detection

Disease Surveillance

Veterinarians are instrumental for disease detection and surveillance. This data is vital for epidemiologists to establish risk and prevalence statistics. These statistics have even more added value to Public Health bodies if these diseases are zoonotic - they can be passed onto humans.

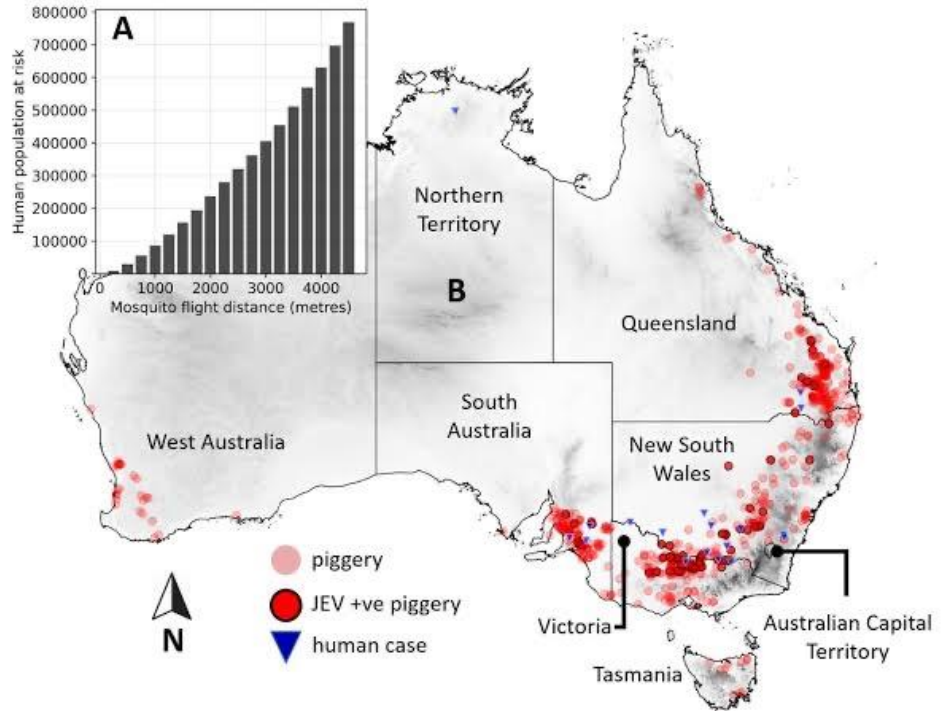
Implications:

In February 2022, Japanese Encephalitis (JE) was detected and confirmed in QLD, VIC, SA, and NSW piggeries. By March 2022, there was a rare case of JE in an Alpaca in the Adelaide Plains LGA and the NT recorded several positives in feral pigs.



Several human fatalities from JE in Australia

It is not known how JE made it to Australian sovereignty, and this is **the first time** JE has been detected and confirmed in **Southern Australia**





Solutions

Outback & Airborne Veterinary Science (O&A) was started in the bush, for the bush. Outback & Airborne's ability to cover large distances by air makes it unique to other Veterinary providers. Combined with established connections in regional Australia and "*in-the-field*" capabilities, O&A is the perfect veterinary algorithm for delivering much needed Veterinary Services to regional Australia, detecting disease, all whilst mentoring the next generation of Veterinarians.



“Going Bush”

O&A can move a veterinary team and equipment extensively throughout the regional postcodes of Australia efficiently and quickly. It takes O&A less than 5 hours to travel from Townsville to Alice Springs and less than 7 hours from Canberra to Townsville!



Mentoring the Next Generation

Offering Veterinary Students succour as they approach graduation in order to be “match-fit” for practice



“Dr Costello knows all too well the hardships encountered in a Veterinary career and goes above and beyond to provide support to anyone needing it whilst creating awareness within the industry”

- **Dr Erin Allanson BVSc, recent graduate and mentee** -



2,172 pets

To every registered Veterinarian in Australia... This does not include unknown numbers of pets in Indigenous communities.

"We need to prepare, train, and retain every Final Year Student and New Graduate coming through university" -

Dr Costello BVSc



Dr Costello BVSc - Head Veterinarian and Pilot

“Our unique ability to take on EADs from the skies and insert into extremely isolated postcodes allows us to respond quickly and efficiently unlike any other Veterinary Service”



The Top-End EAD

Ehrlichia Canis, a tick-borne Rickettsial bacteria, was first detected in Australia in the Kimberley region of WA May 2020 and quickly spread across the Top-End. Dr Costello mediated with dozens of Indigenous Communities across the North and whilst delivering their Indigenous Community Animal Health Programs, O&A was able to blood sample hundreds of extremely isolated dogs. This enabled the NT government to track the spread of this deadly disease.

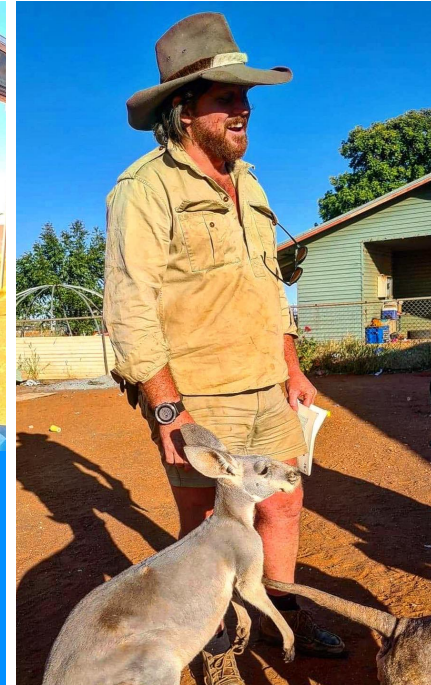
Implications:

Dr Costello has first hand experience with an EAD outbreak within Australia, and has trained with the UN & FAO in Nepal responding to real FMD outbreaks. O&A is skilled and “match-fit” when it comes to going bush, seeking out and detecting disease, as well as responding to other EADs.



On the front line

Dr Costello has been taking the recent E Canis outbreak head-on in the Top-End





Dr Costello BVSc - Head Veterinarian and Pilot

“We have dealt with EADs before, we already have rapport with bush communities throughout Australia, and we are collaborating with innovative laboratories that enable us to test quickly in the field”



US\$500 Million

It was modelled during a Californian study if an FMD outbreak response was delayed by **1 hour**





Mobile molecular diagnostics, traditionally confined to bricks-and-mortar laboratories, are now mobile and have “airborne capabilities” for rapid insertion into the field

Mobile molecular biology lab set to fight bovine disease

theinland.com.au/story/7149516/no-ordinary-horse-float-set-to-fight-bovine-diseases

2 March 2021



They usually cart precious livestock but this is no ordinary horse float.

This horse float has been converted into a mobile molecular biology laboratory - the only one of its kind in Australia - to provide a quick turn-around for livestock disease diagnoses that will help with prevention and treatment options at feedlots and on farm.

The lab was planned at the start of a joint project on bovine respiratory disease (BRD) between the NSW Department of Primary Industries (DPI) and Charles Sturt University (CSU) in 2018.

But the mobile lab was fast-tracked due to COVID-19 restrictions as feedlots did not want people from Sydney on site.

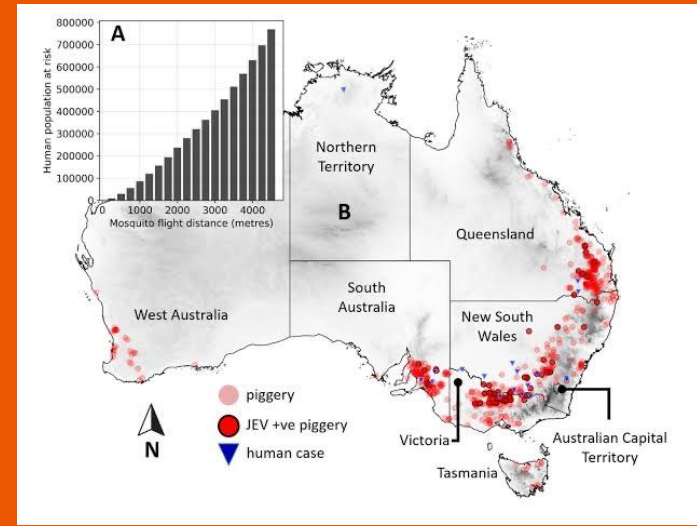
DPI animal health research officer Ian Marsh said the mobile lab was set up at a truck stop where CSU researchers would collect samples from feedlot cattle to be tested for BRD.

For many diseases, Dr Marsh said it was almost impossible to get to a lab before it breaks down, which could affect the results.

"Feedlots needs decisions within an hour of taking the sample ... instead of collecting samples remotely and taking it to a lab, which can take days. It makes remote labs capable of doing it themselves to get answers quickly," Dr Marsh said.

Evaluation of dogs (*Canis familiaris*) as an indicator of Japanese encephalitis (JE) outbreaks: A retrospective serological study in the Seoul metropolitan area around the 2010 resurgence of JE in the Republic of Korea

Jung-Yong Yeh ^{a, b, c, d}  



Blood testing dogs can be the harbingers for Japanese Encephalitis prevalence in communities, especially as JE is zoonotic and a potentially fatal disease in humans.



Target

The solutions provided by Outback & Airborne Veterinary Services are numerous

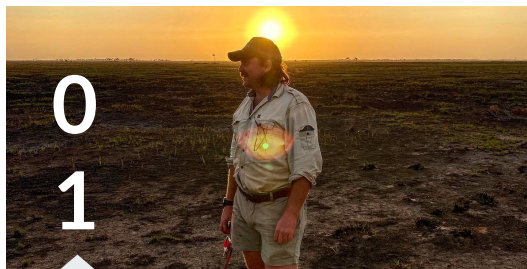
- 01 | Much needed Veterinary Services into the bush
- 02 | Rapid and affordable disease detection
- 03 | Diagnostic Support of Veterinary Clinics
- 04 | Liaison between industry, public, and government
- 05 | Mentoring and advocacy for the Veterinary Industry







Process



0
1

Investment

Funds received from government, public, and philanthropic avenues

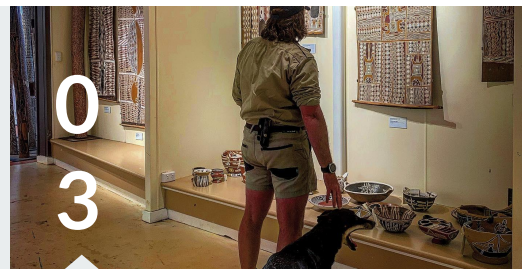


Veterinary Deployment

Veterinary deployment by air into the regional areas that require veterinary services and disease surveillance



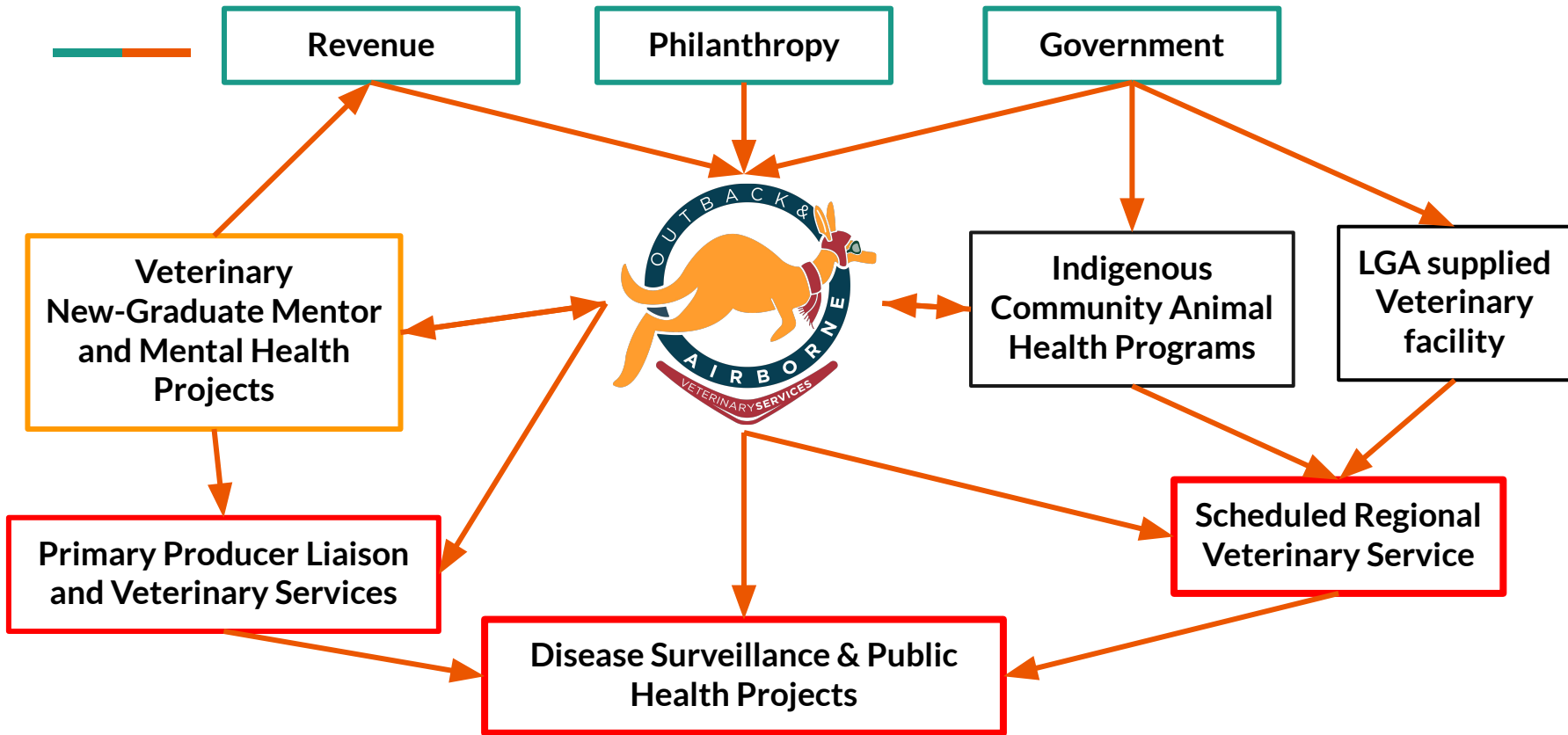
0
2



0
3

Mission accomplished

Affordable de-sexings, vaccinations, consultations, disease surveillance, and referral services delivered





O&A Annual Deliverables

The cost benefits of proactive Veterinary and “One Health” projects are substantial. Mental health is estimated to cost the Australian economy **\$60 Billion** annually. Literature clearly illustrates that the “*Pet Effect*”, ie the companionship of an animal, benefits human mental, physical, and social health. Unfortunately, when a owner and their animal can not access Veterinary Care, the “*Pet Effect*” is *severely* impacted. It was also recently modelled that if a FMD outbreak response was delayed by 1 hour, it would cost an extra **US\$500 Million**.

Logistics

\$150K

300 hours of flying

\$1.75 per km

Skills

\$350K

To continually mentor and train our Vets and Nurses

Consumables

\$80K

To subsidise laboratory overheads and invest in medical and surgical inventories

Whilst at Port Hedland, VH-LWO typically flies across the Pilbara, landing in a variety of rugged and remote locations throughout the region.

An average retrieval from the Pilbara to Perth takes 3.5 hours in a PC-12 aircraft like VH-LWO and costs around \$30,000. In its first year of service, our new aircraft is expected to carry more than 500 patients to definitive care.



Financial statistics

FINANCIAL STATISTICS

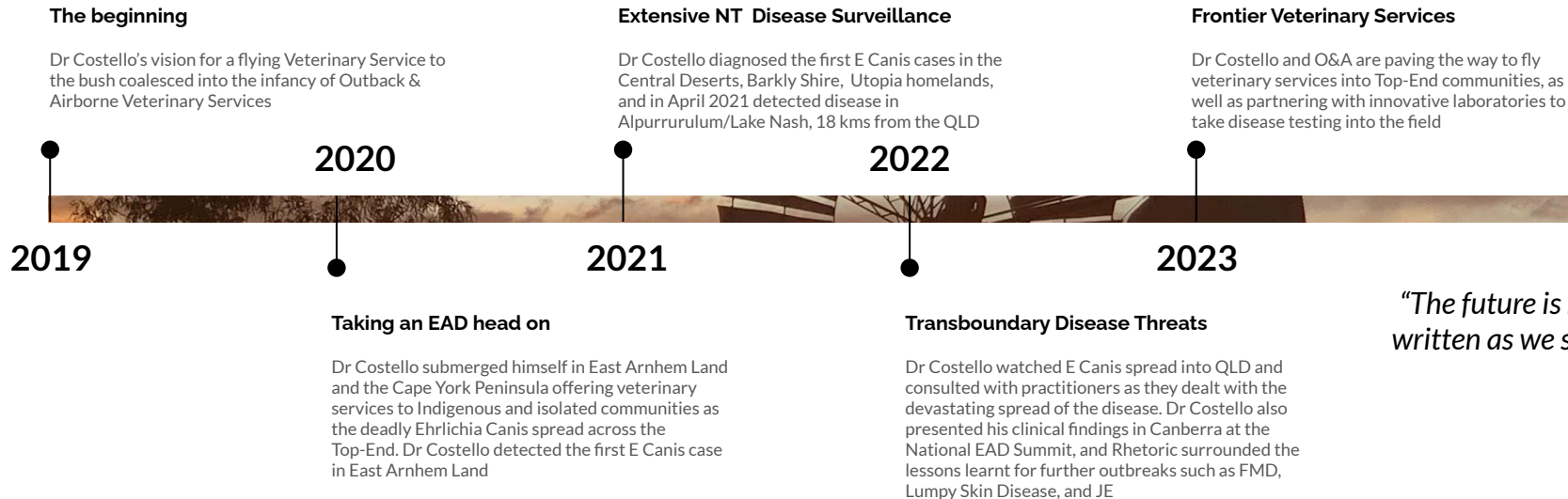
	2019/20	2018/19	2017/18	2016/17
Operational costs				
Aeromedical services	91,471,781	89,186,267	81,568,196	80,045,480
Specific projects	12,732,548	8,786,479	7,697,896	12,733,767
TOTAL OPERATIONAL COSTS	104,204,329	97,972,746	89,266,092	92,779,247
Funded by:				
Commonwealth Government operating grants				
- Aeromedical activities	26,384,743	26,748,555	21,087,347	23,533,119
- Specific projects	7,866,314	7,118,593	4,801,967	9,372,298
- Medicare receipts	786,341	588,439	626,985	658,363
Queensland State Government operating grants				
- Aeromedical activities	52,901,682	51,100,504	46,771,992	44,593,350
- Specific projects	2,578,269	2,384,190	2,758,595	2,738,911
Other specific projects	953,848	713,221	667,850	809,811
TOTAL GRANTS	91,471,197	88,653,502	76,714,736	81,705,852
RFDS contribution	12,733,132	9,319,244	12,551,356	11,073,395
TOTAL OPERATIONAL FUNDING	104,204,329	97,972,746	89,266,092	92,779,247
Donations, legacies and other fundraising activities				
Donations and fundraising				
- General purpose	13,772,496	11,255,848	9,870,294	9,360,689
- Specific purpose	-	-	-	-
- Membership fees	1,000	1,080	1,280	1,016
- Legacies – general purpose	14,113,189	4,822,152	5,695,603	5,682,490
TOTAL FUNDRAISING	27,886,685	16,079,080	15,567,177	15,044,195

Right: The donations and funding of the QLD Royal Flying Doctor Services that allows them to deliver their much needed services to the bush

Australia prides itself on providing health services by air in the bush, it's time for the Veterinary edition



The Journey

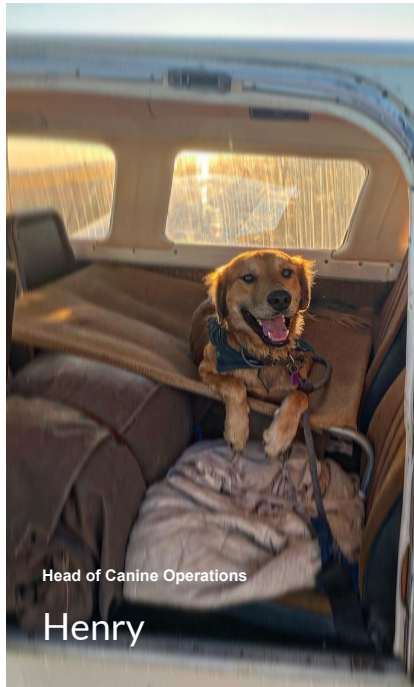



“The future is being written as we speak”



Team

The frontline Veterinary Team is made of a diverse workforce that is as unique as the areas that O&A service





Head Veterinarian & Senior Pilot

Dr Campbell Costello

Born and raised on his family's cattle properties in Northern-Queensland Dr Costello is well aware of the need of specialised skills and services in the bush. Dr Costello completed his Veterinary Degree at James Cook University in Townsville 2010 and has practiced throughout Australia and Internationally. Dr "Cozy" Costello has combined his passion for Veterinary Science with his love of aviation to create Outback & Airborne Veterinary Services





dr_cozy ▾



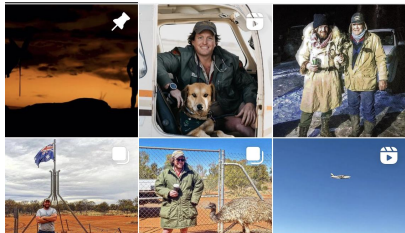
380 Posts 4,648 Followers 6,085 Following

Campbell Costello
Veterinarian & Pilot 🇺🇸 🇺🇸 🇺🇸 "Pip" the Piper Lance
✈️ '89 Landrover Perentie 🐪 Not sure which
column of the Dunning-Kruger effect to occupy
@outbackvets
outbackvets.com

Edit Profile



HotBoiSum... Desert tour... Mongol Der... More Bland... TV Fe



NEWS

SHARE

Rural vets want more engagement from government over disease of foot-and-mouth disease

ABC Rural / By [Hugo Rikard-Bell](#)

Posted Mon 11 Jul 2022 at 8:58pm



Campbell Costello offers his services to labour-

ABC



Conversations

Home Episodes Contact

FULL EPISODE

The flying vet from outback Queensland

Broadcast Tue 26 Jul 2022 at 11:00am



LISTEN
52 m

The flying vet from outback Queensland (
Supplied: Campbell Costello, Outback and Airborne
Veterinary Services
)



Head of Canine Operations

“Henry”

Henry is Golden Retriever cross god knows what and hails from the Central Desert region of Finke, NT. Henry may even enjoy flying more than Dr Costello and is a great liaison companion with Indigenous communities and regional clients alike.





Support Team

Nurses & Vet Students

In the 2021 AVA Veterinary Workforce Survey the top three reasons given by respondents for leaving a role or the industry entirely were:

- Better remuneration 64.05%
- Suitable hours of work 40.51%
- Opportunity to develop new skills 43.01%

O&A believes that by offering roles to veterinary students they are given surgical and medical literacy as they prepare for entry into the workplace. O&A believe that by offering flexible and well paid positions to other veterinary professionals we can provide the work-life balance that the industry seeks to galvanise it against burn-out





Other Collaborations

O&A is excited to announce that we are working with INEOS Grenadier to develop an in-the-field Veterinary Support vehicle for delivering Veterinary Services to the bush



The Passion

Dr Costello lost his father after a tragic mustering accident on horseback on the family cattle station; it ripped his family apart. Dr Costello's believes that the accident was unfortunately "unavoidable" albeit heartbreaking. However, Dr Costello can not live with the fact that every 12 weeks, another family like his is devastated when a Veterinarian dies by suicide. Dr Costello endeavours to improve the Veterinary working conditions, increase public awareness, increase remuneration, and to reduce the sobering statistics of the veterinary industry.

"Veterinary Science should be a career choice, not a death sentence", Dr Campbell Costello BVSc

Grazier Peter Costello, Fanning Downs, drowned in the Burdekin River at Ravenswood

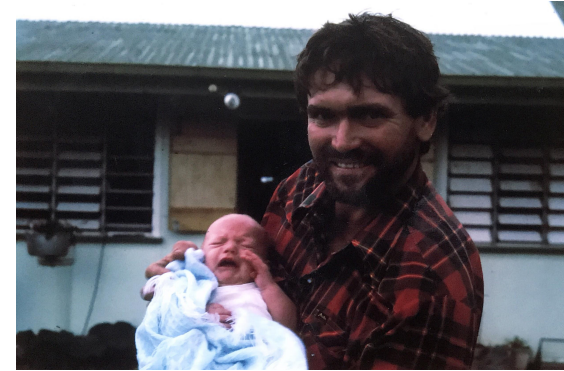
By Jessica Johnston

Updated September 12 2019 - 4:23pm, first published September 10 2019 - 5:30pm



Peter Costello, Fanning Downs, will be sorely missed by the Charters Towers community.

A WELL-KNOWN Charters Towers





How can you help?

Providing Veterinary Care and Services plus disease surveillance, across isolated Australia is a challenge. Outback & Airborne Veterinary Services can not operate without the generosity of the public, corporate sector, community organisations, or funding from Local, State, Territory, and Federal Governments.

Contact us today to help the cause:

- Operating and running aircraft
- Purchase medical and surgical equipment
- Develop “One Health” and Veterinary projects in the bush





**Dr
Campbell Costello**
Head Vet &
Director

+61 418 198 263
www.outbackvets.com



Outbackvets



@dr_cozy
@outbackvets



Campbell Costello



Outback & Airborne Veterinary Services acknowledges the Traditional Custodians of the land and skies which we work and fly within. We pay our respect to their Elders past, present, and emerging, and endeavour to eliminate barriers to Veterinary Services

