



TWWHA Deer Control Project – End of Project Update

Tasmanian Wilderness World Heritage Area - Deer Control End of Project Update 2024

The Tasmania Parks and Wildlife Service (PWS) has undertaken two eradication and control efforts for wild fallow deer in the Walls of Jerusalem National Park (WoJNP) and adjacent bordering areas of the Central Plateau Conservation Area (CPCA). This summary report provides a final update for the project.

Background

PWS applied for and was successful in acquiring a \$400,000 Australian Heritage Grant from the Australian Government to survey for and eradicate wild fallow deer from the WoJNP and surrounding reserves using thermal technology. The project is known as the TWWHA (Tasmanian Wilderness World heritage Area) Deer Control Project.

The project goal was to trial thermal technology in the eradication of wild fallow deer within the WoJNP and reduce numbers of wild fallow deer within the CPCA to alleviate migration pressures into the WoJNP.

The project has been undertaken over the last two years with all preparation and planning completed in April 2023. Operational deployments occurred in May 2023 and May 2024. May has been selected as the best month for undertaking the operation due to the following factors:

- May is the end of the rut with deer still in groups and/or trying to fatten prior to winter.
- the recreational fishing season closes on April 28 (most waters).
- recreational use is reduced after Easter.
- autumn weather is generally more stable for aerial operations.
- the weather is cool particularly at altitude which assists in thermal detection of deer.
- there is a need to undertake the deployment prior to the onset of wetter winter weather; and
- the Wedgetail Eagle breeding starts in June.

THERMAL ASSISTED AERIAL CULLING

This project was predominantly an aerial shooting program from a helicopter using thermal assisted technology (cameras). This method is currently being used in several

mainland jurisdictions with great success. Thermal Assisted Aerial Culling (TAAC) differs from conventional aerial shooting methods in that operations are guided by a high-quality thermal imager and a manual operator. Shooting only occurs in times of low solar warming (such as first light / last light), usually 3 to 4 hours per day although it can operate all day on heavily clouded days. The benefits of TAAC are:

- animals are identified and targeted more easily including from a distance.
- animals can be tracked through cover reducing the risk of injured animals escaping.
- scattered herds can easily be reacquired.
- non target species can easily be identified; and
- all relevant data is captured allowing for review of animal welfare outcomes.

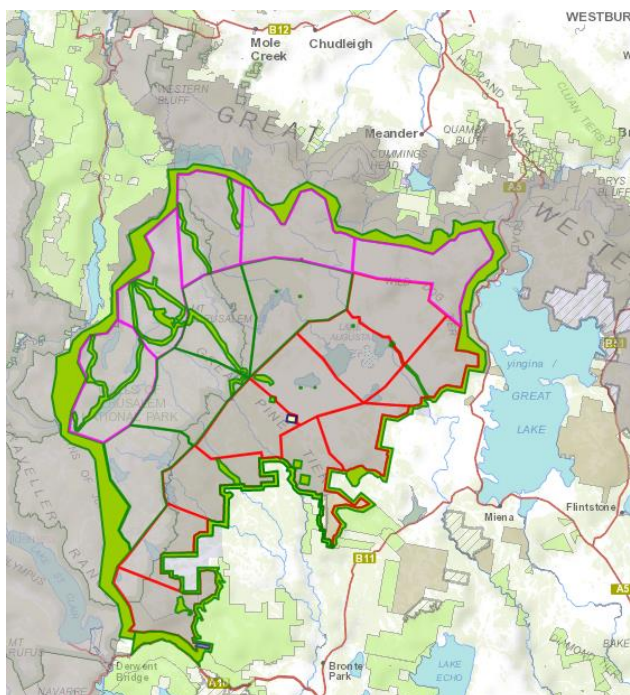


Deer Thermal Visibility

Project Area

The project area was divided into daily task units to ensure that the entire project area could be thoroughly and systematically examined for deer. The helicopter flew each unit in a search grid pattern scanning for deer. The grid transects were moved closer together or further apart depending on the thoroughness required and purpose of the day's objectives. Each daily task unit provided a discreet area that considered reserve and private

boundaries, infrastructure, buffer zones, special features and no shoot areas. No shooting zones were established 1000 metres from shack communities, 500 metres from agricultural and forestry boundaries and 250 metres from reserve huts, shacks, roads, tracks and other infrastructure within park boundaries. Live mapping in the aircraft ensured that buffer areas and no shoot zones were visible and can be adhered to at all times.



Shooting area and no shooting zones (green areas)

Personnel and Aircraft

Nine NRE Tas officers with considerable shooting experience were selected from a pool of approximately eighty NRE Tas authorised firearm officers to participate in the aerial shooting training. Seven NRE Tas officers successfully completed their training as aerial marksmen. All seven officers were rostered over the deployment period to ensure a shared workload in a challenging operating environment.

Operations were conducted out of a Eurocopter AS350 B3 helicopter.



Project aircraft

Shooting was limited to short periods after first light and before last light and on days with heavy cloud cover.

Shooters and the thermal camera operators sat on the edge of the aircraft in temperatures as low as minus six scanning below for signs of deer body heat as they scanned the project area.

This year 8 volunteer ground shooters participated in the cull. The ground shooters were selected from the Tasmanian branches of the Sporting Shooters Association of Australia and the Australian Deer Association. The ground shooters operated in the eastern section of the Central Plateau Conservation Area while the aircraft and aerial markspersons operated inside the Walls of Jerusalem National Park. The volunteers operated in small groups for up to 4 days in a row and were active for the first two weeks of the operation.

Animal Welfare

A primary objective is to uphold the highest of animal welfare standards when undertaking any culling operations. NRE Tas Deer Culling Operational Procedures have been designed to ensure all culling activities are consistent with National Guidelines and place animal welfare as the highest priority. During the operational phase of the aerial shooting, the project was overseen by an independent veterinarian and a veterinary officer was present for every day of shooting to ensure there was appropriate oversight.

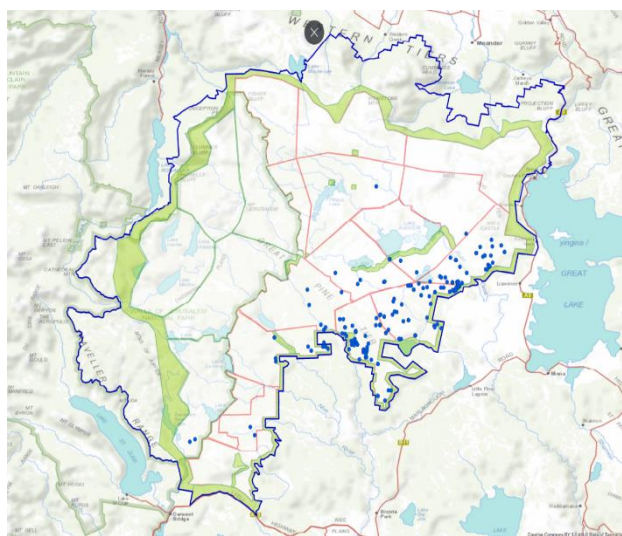
The independent veterinarian in charge of animal welfare oversight said:

“In my opinion animal welfare of the highest standard possible was maintained throughout the operation. My observations showed that the team was very focussed on minimising the time from engagement to insensibility and to ensuring that no deer were injured and allowed to escape.”

2024 Operational Deployment Facts

- From the period April 28 to May 18, a further 306 deer were humanely destroyed within the project area.
- The 306 deer consisted of 68 stags, 228 antlerless deer and 10 immature deer.
- The volunteer ground shooting program was highly successful. 8 volunteers operated for a combined total of 42 days (between April 30 and May 11) and removed 10 deer.
- The volunteer program involved members from ADA and SSAA. They operated in conjunction with aerial program and the two programs (aerial and ground shooting) were able to work together concurrently in a safe and methodical way.
- A total of 31 flights were conducted.
- The aircraft operated for 65 hours.
- The aircraft traversed 103,608 hectares in a search grid pattern travelling 4,604 kilometres.
- Only one and a half days were lost to bad weather.
- A total of 2,065 rounds were fired during the operational phase.
- Each deer was compulsorily shot at least 3 times in rapid succession as required by standard operating procedures.

- There were zero wounded animal escapes.
- The entire project period was monitored to assess animal welfare outcomes by both independent contracted and Government veterinary officers.
- Veterinary officers were satisfied that all animal welfare outcomes were achieved.
- Over the two years of the program, 1,017 deer have been removed over a total of 40 days.
- Most of the deer shot were located within the high-density zone of the CPCA, thus reducing migration pressures in the WoJNP.
- Pre aerial cull monitoring was completed in April 2023 and March 2024. Post cull monitoring was undertaken in July 2023 and will be completed in July 2024.
- A small number of deer that were shot close to Lake Augusta Rd were relocated to an area away from the public infrastructure.



Deer locations 2024

The Project – Where to from here?

Post cull monitoring, camera retrieval and surveys will occur in August 2024. This will assist in determining how successful the cull has been. It will also help in determining the movement of deer in the control area. Once all the information from the previous 2 years of monitoring has been analysed PWS will deploy a number of sentinel cameras in appropriate locations to enable deer detection and provide early warning of deer movement towards the Walls of Jerusalem National Park. This monitoring will inform planning and operations for deer control programs for future years.

PWS also trialed the use of lead-free ammunition this year. The ammunition was successful and operated effectively. The assessments completed by independent vets, showed that results from the lead-free ammunition were accurate and had the appropriate animal welfare outcomes.

Furthermore, the assessments by these vets also indicated that many of the deer had been feeding on the Miena Cider Gum

Gum, with remnants of this vegetation found in their stomachs. This is quite concerning given the endangered status of Miena Cider Gum, that grazing by deer is listed as a threatening process and that the deer in the CPCA were deliberately targeting the plant. PWS are undertaking vegetation monitoring as part of the project to provide more information on the impact of deer on the Miena Cider Gum.



Browsed Miena Cider Gum

This year's cull focused on the WoJNP itself with closer transects and increased thermal imaging capability in the aircraft through the use of two cameras and slower aircraft speeds. Once this was completed, efforts were concentrated on population reduction in what is known as the high-density area to reduce migration pressures on the WoJNP. Future deer control activities will be focused on this high-density area – mid to high zones, whilst ensuring that wild fallow deer continue to be fully eradicated from the WoJNP.

The PWS is planning to expand the NRE Tas volunteer shooting program to include up to 20 volunteers in total. These volunteers, in combination with other control methods will be able to assist the PWS in keeping deer out of the WoJNP in the future.

PWS would like to thank the community for adhering to the closures of the WoJNP and CPCA during May 2024.

For further information on the TWWHA Deer Control project please go to [TWWHA - Deer Control Project 2023-2024 | Parks & Wildlife Service Tasmania](#) or contact the TWWHA Deer Control Project Officer, Yasmin Aly on 0448 238 750 or email deer.project@parks.tas.gov.au.

