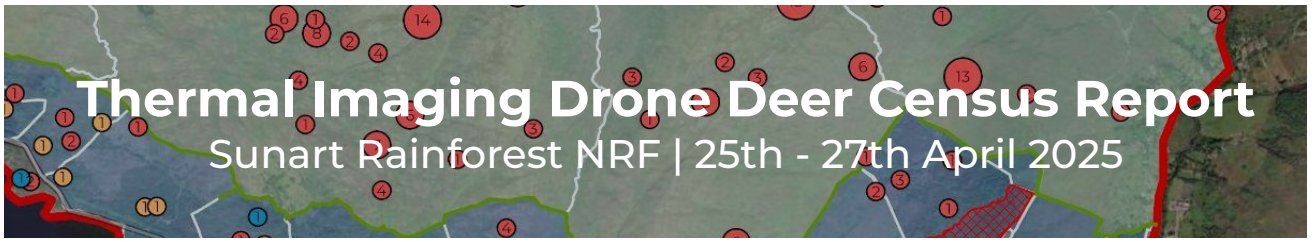
BODDY

ENVIRONMENTAL LTD.



Thermal Imaging Drone Deer Census Report

Sunart Rainforest NRF | 25th - 27th April 2025

Report By: Kestrel Selby Boddy
Director, Boddy Environmental Ltd.

Date: 29th April 2025

Table of Contents

Executive Summary

In February 2025, Boddy Environmental Ltd. conducted a comprehensive thermal imaging drone deer census across the Sunart Rainforest Project area, utilising the latest thermal imaging drone technology and our advanced data collection software. Key findings include:

- **48 flight points** and **48 sub-compartments** were used between two operators to cover the 82.67 km² census area over three days from the 25th to 27th April 2025.
- Exclusion zones have been established, where a too dense canopy cover prevented thermal imaging penetration, covering an area of **6.68 km²**, leaving a net census area of **75.99 km²**.
- In total, **778 Red deer** and **31 Roe deer** were observed inside the census boundary, with **12 Red deer** observed outside of the boundary to the east and west.
- Thermal imaging conditions were excellent for the majority of the census. Planning around the weather allowed the census to be completed without any exclusion zones being applied due to the low cloud base on the 26th and 27th.
- It is known that both Red deer and Roe deer were undercounted due to the dense canopy cover of mature woodland in Achnanallen and Resipole Plantations.
- A deer density of **10.6 deer / km²** represents a reliable minimum population baseline of deer present on the Sunart Rainforest project area at the time of the census.
- Sheep and Cattle were also observed on the open range during the census, along with Red Fox.

Picture 1. *Red Stag, FLS An Cnap, Nr. Salen - 27.04.2025**

Images have been taken of as many deer as possible; however, in some cases, it is not possible to capture an image of each deer due to woodland canopy or unfavourable weather conditions.

Methodology

At Boddy Environmental Ltd., our approach to deer census integrates cutting-edge thermal imaging technology with years of experience in the wildlife sector. Our drone-based methodology provides a robust solution for accurately estimating deer populations across various habitats. The combination of thermal imagery and drones provides efficient, non-invasive surveys that deliver precise, spatially mapped data—ideal for conservation planning, management, and ecological assessments.

We use state-of-the-art thermal imaging technology mounted on modern drone platforms to detect and monitor wildlife populations across diverse landscapes, including dense woodlands, open fields, and mixed habitats. Thermal imaging detects animal heat signatures from an oblique angle, allowing a 200x zoom RGB camera to effectively identify and count wildlife, even in low-light or obscured conditions. This method enhances accuracy by capturing "live" data that reflects a minimum population count within a designated survey area.

Our drones can cover extensive areas in a systematic, grid-based manner, ensuring complete coverage with maximised efficiency. Under optimal conditions, our high-resolution thermal cameras can detect animals up to 2 kilometres away. However, actual survey coverage is carefully planned within the constraints of each habitat.

Each survey begins with comprehensive planning to ensure optimal survey conditions and to account for habitat characteristics that may impact visibility. The survey area is divided into subcompartmented plots, each with designated take-off and landing points to maintain a clear visual line of sight (VLOS) as required by CAA (Civil Aviation Authority) guidelines. These plots provide an efficient framework for dense woodland areas, allowing our drones to survey methodically and accurately. In more open environments, such as agricultural or upland regions, our team can scale up the area covered by adapting flight patterns to each landscape's unique features.

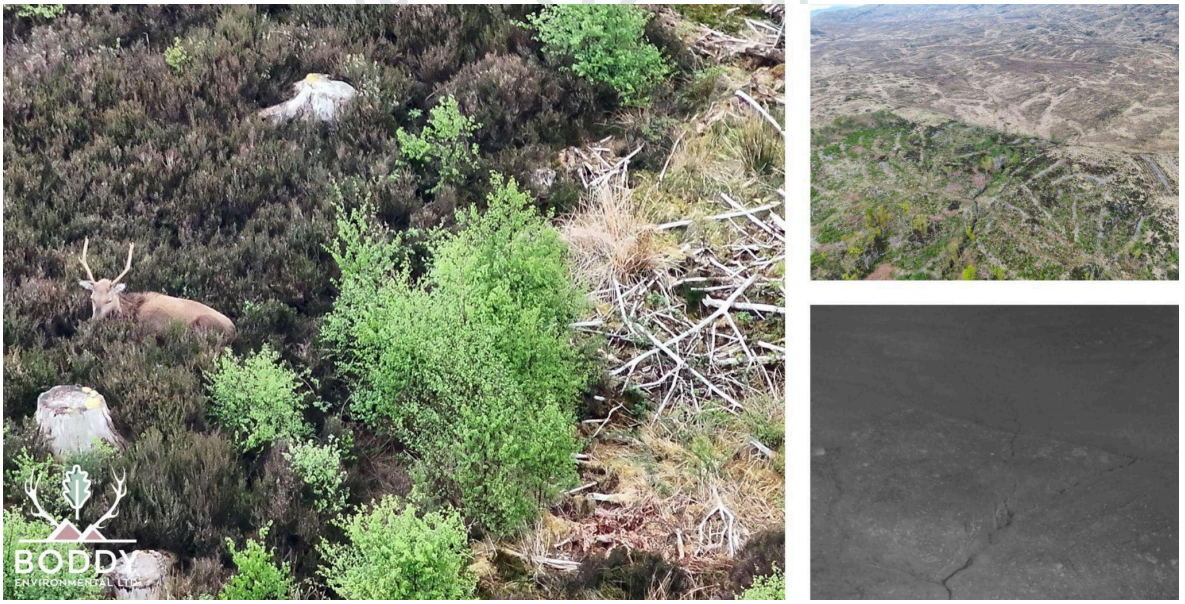
Boddy Environmental Ltd. deploys advanced planning and logistical strategies in densely vegetated habitats or complex environments that require multi-day surveys. We coordinate multiple drone operators to maximise data integrity across larger regions, ensuring that all significant habitat zones are surveyed thoroughly.

This methodology ensures accurate population baselines and provides invaluable insights for wildlife management, conservation planning, and land use decision-making. By leveraging our experience in thermal drone technology, Boddy Environmental Ltd. delivers reliable data that supports sustainable environmental stewardship.

Special thanks are due to Bruce Taylor of Brambletree Management Ltd. for assisting with the Sunart Rainforest Drone Deer Census project logistics.

Census Details

Conducted by:	Boddy Environmental Ltd.
Lead Operator:	Kestrel Selby Boddy
Additional Operators:	Samuel Wright
Client:	Brambletree Management Ltd.
Date of Census:	25th - 27th April 2025
Location:	Sunart Rainforest, Acharacle
Target Species:	Red Deer (*Cervus elaphus*) Roe Deer (*Capreolus capreolus*)
Other Species:	Sheep (*Ovis aries*) Cattle (*Bos taurus*) Red Fox (*Vulpes vulpes*)



Picture 2. *Red Stag, 2 Ardery, Sunart Rainforest - 26.04.2025*

Site Location and Extent

The census was conducted over the Sunart Rainforest Nature Restoration Fund project area, covering a total area of 82.67 km². Exclusion zones were used in areas where a too dense canopy cover prevented the thermal imaging sensor from penetrating, allowing deer observations to be made. A total of 6.68 km² has been excluded from the census, leaving a net census area of 75.99 km².

The census aimed to accurately assess wild deer populations, specifically Red deer, using advanced thermal imaging techniques to support the potential conservation and management plans of the estate. The Sunart Rainforest project area was split into 48 sub-compartments, each with a designated flight point to be completed over the 25th to 27th April 2025.

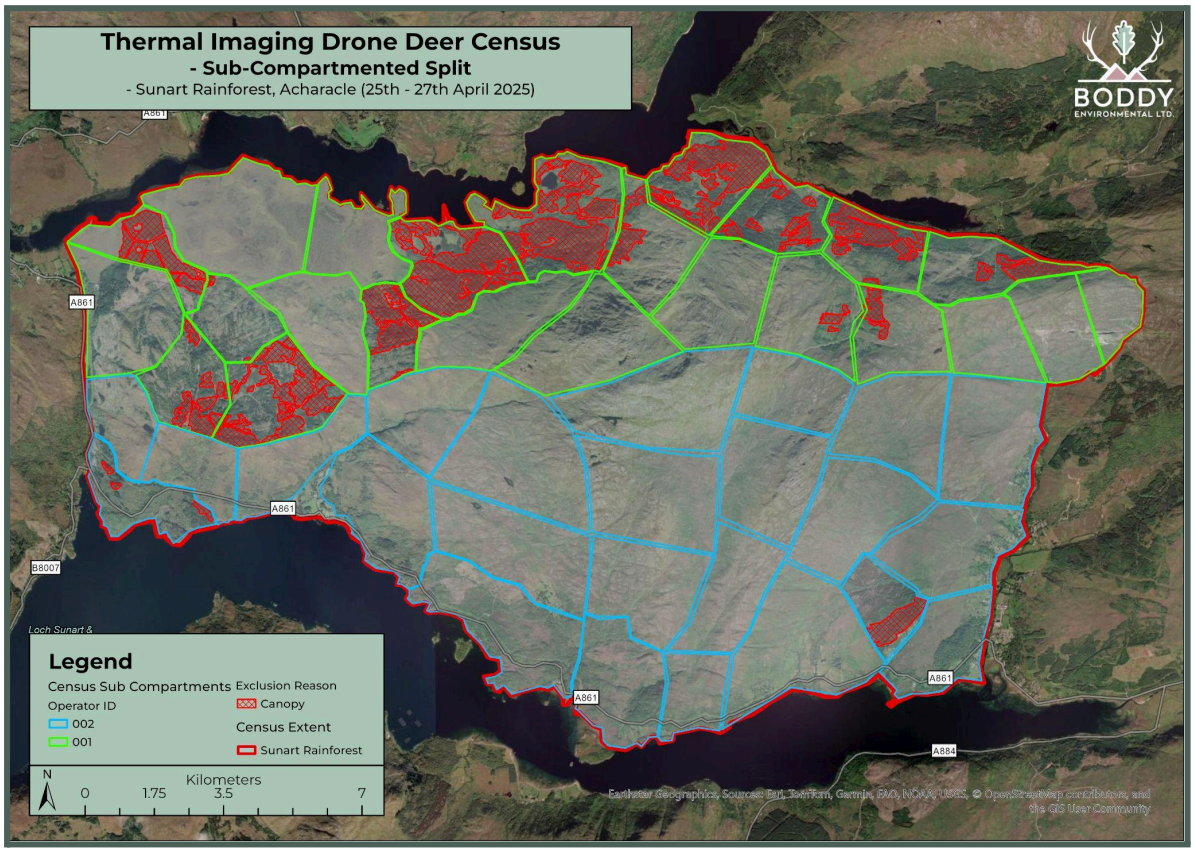


Figure 1. *Census Sub-Compartments, Sunart Rainforest - 27.04.2025*

Equipment and Methods

Two drone/operator teams were deployed for this census, with a DJI Matrice 30T equipped with a 640x512px thermal imaging camera and a DJI Matrice 350 RTK equipped with a 1280x1024px DJI H30T thermal imaging camera. The thermal capabilities of the drones enabled the detection of deer in open hill habitats from over 2 km away, allowing for flexibility in flight points in these habitats. Each of the 48 subcompartments contained a unique flight point to ensure the census area was fully covered methodically. The operation began just after first light on 25th April, with one operator surveying the high ground to the southeast of Achnanallen Plantation, before moving west into the woodland later that morning. The other operator began at the south-eastern sub-compartments, moving north-west through the day. Due to a low cloud base forecast on the 26th, a decision was made to survey the higher-altitude areas, such as Beinn Resipol, on April 25th. The operators continued until they hit a suitable break in the landscape and woodland at the Allt Camas Bhlathain burn on the northern side and the ridge running south-west from Beinn Resipol on the southern side. The following day, a low cloud base at 650 metres above sea level allowed operators to revisit their westmost flight points and confirm that the observed deer were still in position, minimising double-counting doubts. Both operators continued to work westward, using the East Loch Shiel strategic deer fence, which ran from the northeast of Claish Moss to where it met Loch Sunart at Resipol Farm. This acted as a suitable break to prevent deer movement between the survey days. The operators continued westward on the final day of the census until the whole area had been completely covered with no gaps remaining in the areas scanned with the thermal imaging.

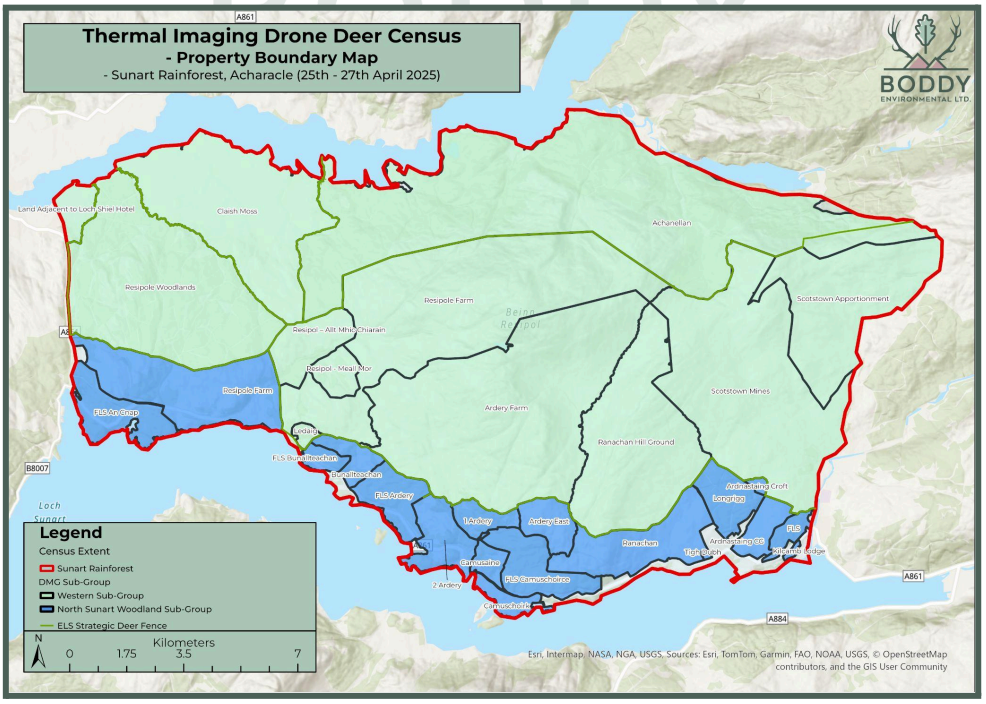


Figure 2. *Property Boundary Map, Sunart Rainforest - 27.04.2025*

Census Comments

Friday 25th April **0600 - 1600** **10 hrs**

- Initial thermal imaging detection rates were excellent on the open hill, but deteriorated through the morning as the sun heated rock surfaces. Cloud cover returned around 1200 hours and improved thermal imaging conditions for the rest of the day.
- Wind speeds remained around 15 mph from the southeast throughout the majority of the day, with speeds picking up to 27 mph in areas of no shelter.
- A decision was made to move through the higher-altitude areas of the census on that day because the forecast showed a low cloud base the following day.
- Good road and track access allowed operators to move into each of the flight points with ease using 6x6 and 4x4 quadbikes; however the woodland block to the west of Meall Iain had to be surveyed by the southern operator from the ridgeline, rather than the planned northern operator in Achnanallen due to visual line of sight (VLOS) concerns.
- Thermal imaging detection rates were deteriorated in Achnanallen due to the densely packed canopy of the mature conifers, and it should therefore be noted that the population of Red deer and Roe deer counted in this woodland was undercounted. Exclusion zones have been applied.
- Red deer were observed moving through a porous fence on the Achnanallen Plantation.
- It was expected that the areas surveyed on the higher altitude areas of the south-eastern faces would be less populated due to the direction of the wind.
- Considerations were made when flying in closer proximity to populated areas, such as Strontian, to minimise disturbance to the general public and private properties. A 150-metre geofence was applied to any such properties.
- No safety or access issues were present during the census, allowing the woodland and open-range areas to be surveyed efficiently and methodically.
- There is complete confidence that the area was sufficiently covered and no gaps were left in the census, excluding the regions of Achnanallen Plantation.

< 27 mph SE Wind **Mixed dry conditions** **Good thermal detection**

Saturday 26th April **0700 - 1430** **7.5 hrs**

- As forecast, a low cloud base was present at around 650 metres above sea level; however, this did not prove to be a problem, as the operator had already surveyed the area above 500 metres.
- The consistent cloud base meant thermal imaging detection rates were excellent on the open range for the whole day.
- Thermal imaging detection rates were deteriorated in Achnanallen once again due to the densely packed canopy of the mature conifers, and it should therefore be noted that the population of Red deer and Roe deer counted in this woodland was undercounted. Exclusion zones have
- been applied.
- Red deer were observed moving through a porous fence on the Achnanallen Plantation.
- Light rain began at 1100 hours, but didn't become problematic until 1230, when it was decided that the operators would halt the operation for 1 hour until it cleared at 1330 hours.
- Wind speeds remained consistently below 22 mph from the east for the whole day, and a high density of Red deer was observed on the western face of Beinn Resipol sheltering from the wind.
- The operators were able to observe and record the locations of Red deer from the previous day to remove any doubts about double-counting.
- Good road and track access allowed operators to move into each of the flight points with ease, using 6x6 and 4x4 quad bikes.
- No safety or access issues were present during the census, allowing the woodland and open-range areas to be surveyed efficiently and methodically.
- There is complete confidence that the area was sufficiently covered and no gaps were left in the census, excluding the regions of Achnanallen Plantation.

< 22 mph E Wind **Cloud cover** **Excellent thermal detection**

Sunday 27th April **0700 - 1300** **6 hrs**

- Initial thermal imaging detection rates were excellent, thanks to a consistent cloud cover that kept the ground temperature cool. However, later in the morning, some heavier rain did begin, forcing the operators to work during periods of lighter rain and slow down the operations.
- Some exclusion zones were applied in Resipol Plantation and FLS An Cnap, where dense conifers prevented thermal imaging penetration of the canopy.
- The operators were able to observe and record the locations of Red deer from the previous day to remove any doubts about double-counting.
- Wind speeds remained consistently below 19 mph from the east for the whole day.
- Operators were able to use clearings in the Resipol Plantation and on the A861 to maintain a good visual line of sight throughout the day.
- Considerations were made when flying in closer proximity to populated areas, such as Salen, to minimise disturbance to the general public and private properties. A 150-metre geofence was applied to any such properties.
- Red deer were observed moving through a porous fence on the Resipol Plantation.
- No safety or access issues were present during the census, allowing the woodland and open-range areas to be surveyed efficiently and methodically.
- There is complete confidence that the area was sufficiently covered and no gaps were left in the census, excluding the regions of Resipol Plantation and FLS An Cnap.

< 19 mph E Wind **Cloud cover** **Excellent thermal detection**

Picture 3. *Four Red Stags, Resipol Plantation, Nr. Acharacle - 27.04.2025*

Confidence Levels

There is complete confidence that the census area was surveyed entirely and methodically to minimise any doubts of double-counting. Operators were able to identify and observe Red deer, which had been identified in the previously completed sub-compartments, minimising double-counting doubts. There is full confidence in the species and sex classification, with multiple misidentifications being picked up by our quality control checks. There is less confidence in the Red and Roe deer age classifications due to the time of year the census took place.

Other Comments

- Binoculars were also used to scan from vantage points where possible.
- The Sunart Rainforest NRF project area is bounded by Loch Shiel to the north, FLS and Ariundle to the east, Loch Sunart to the south, and FLS and Shiel Bridge to the west.
- Strategic deer fences are in place around Achnanallen Plantation, Resipol Plantation and from Strontian to the southeast corner of Resipol Plantation.
- It is known that these fences are porous in specific locations, and Red and Roe deer can freely move between the open range and fenced areas.
- Deer that were located within 100 metres of each other were identified as a single group.
- Overall, thermal imaging conditions were excellent throughout the census, meaning operators could detect, identify, and classify deer-sized objects over 2 kilometres in open range habitats.
- The dataset was reviewed, and several quality control adjustments were made.
- In some cases, the operators were not able to get a positive identification of the sex and age of Red and Roe deer, and these were recorded as “unknowns”
- 12 Red deer were observed outside the census boundary on FLS Ariundle Common Grazing, FLS Shielbridge, and Shielbridge properties and have been included in the dataset to show how the density could appear if the census were conducted at a different time.

Deer Species Identified (Total Observed)

Species	Total
Red deer	790
Roe deer	31
Total	**821**

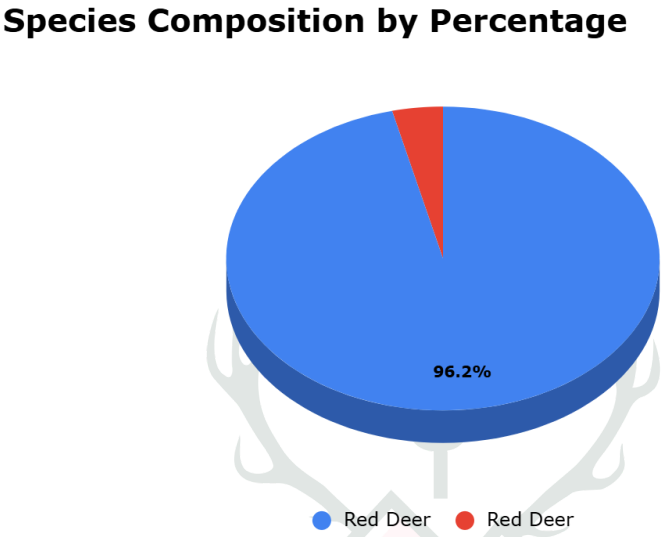
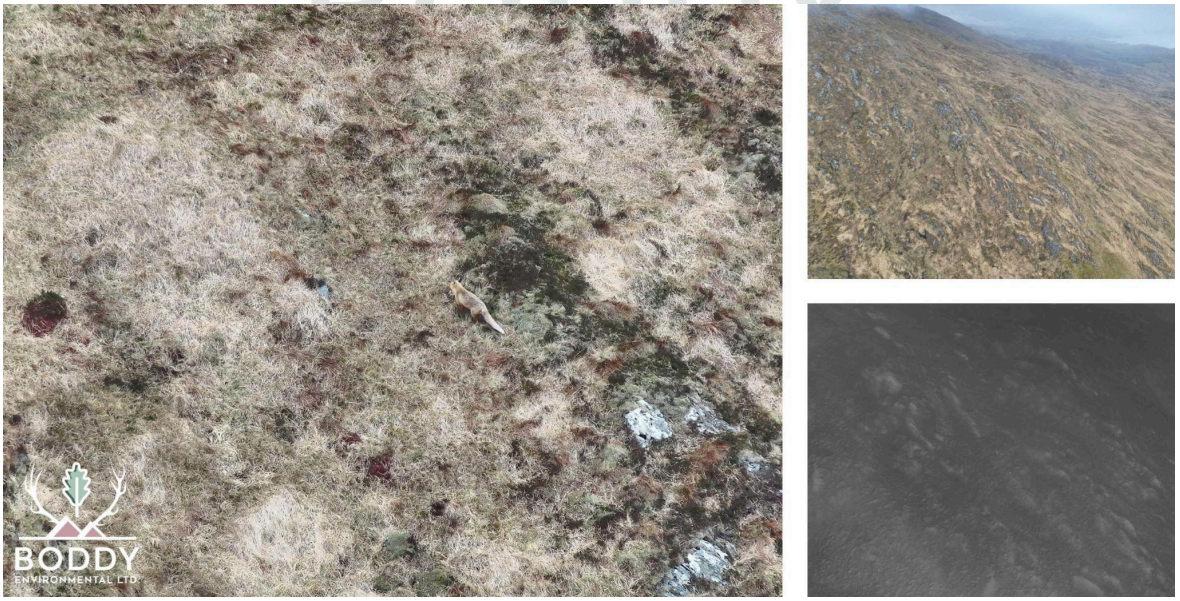


Figure 3. *Species composition by percentage, Sunart Rainforest - 27.04.2025*

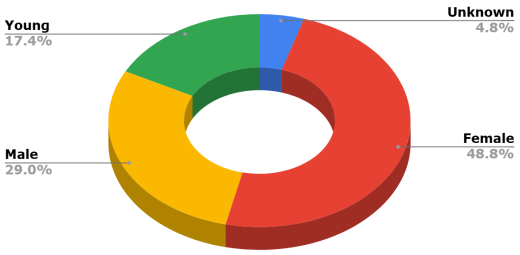


Picture 4. *Red Fox, Glac an Fharaidh, Sunart Rainforest - 26.04.2025*

Red Deer Observations

Males:	226
Females:	380
Young:	135
Unknown Sex / Age Class:	37
Total:	778
Total (Outside Boundary):	12
Range of Groups:	1 - 36
Recruitment Rate:	35.5%

Sex and Age Class Distribution:



Density Calculations

Red Deer Inside Boundary

Total Red Deer	Net Census Area (km²)	Density (deer / km²)
778	75.99	10.2

All Red Deer

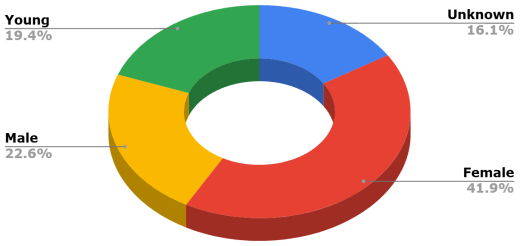
Total Red Deer	Net Census Area (km²)	Density (deer / km²)
790	75.99	10.4

Picture 5. *Red Hind and Calf, Ranachan, Nr. Strontian - 25.04.2025*

Roe Deer Observations

Males:	7
Females:	13
Young:	6
Unknown Sex / Age Class:	5
Total:	31
Total (Outside Boundary):	0
Range of Groups:	1 - 3
Recruitment Rate:	46.2%

Sex and Age Class Distribution:



Density Calculations

Roe Deer Inside Boundary

Total Roe Deer	Net Census Area (km²)	Density (deer / km²)
31	75.99	0.4

Picture 6. *Roe Doe and Twins, Resipol Farm, Sunart Rainforest - 26.04.2025*

Density Analysis and Spatial Distribution

Red deer were observed throughout the landscape on the open range and in woodland habitats. Some areas showed a lower presence of Red deer than others. For example, only four Red stags were observed on the Claish Moss landholding, with no observations made on the wetland habitats on Claish Moss, indicating a less preferential habitat for Red deer. The east and south-east winds that were present during the census, meant that Red deer on the open range were positioned in areas of shelter from the wind, which can appear to show a more concentrated density in certain areas and the observations made during the census represent the position of groups of Red deer at the time census. Groups of Red deer ranged in size from **one** to **thirty-six** individuals, with some groups showing a mix of all three sexes and age classifications. Red stags, hinds and calves were all well distributed through the region, with certain higher density areas of Red stags around Scotstown Apportionment and a higher density area of Red hinds and calves around the southern boundary of Achnanallen Plantation.

Roe deer were widespread throughout most of the broadleaved native woodland to the west of the landscape, except for a small number to the east of Achnanallen Plantation. It is known that due to their smaller size, Roe deer were undercounted because the progression of tree leaves made them a more challenging target to identify on thermal imaging cameras compared to Red deer. No Roe deer were observed in the south-east corner of the project area, indicating a less preferential habitat for Roe deer. Roe deer were observed in groups ranging in size from **one** to **three** individuals.

The density of deer between the North Sunart Woodland Sub-Group (NSWG) and the census area in the Western Sub-Group (WSG) differed, and a density calculation has been done on both to show this difference:

Area of Interest:	North Sunart Woodland Sub-Group (NSWG)	Census Area in Western Sub-Group (WSG)
Net Census Area:	15.02 km²	60.97 km²
Red Deer:	101	677
Roe Deer:	25	6
Total Deer:	126	683
Deer Density:	8.4 deer / km²	11.2 deer / km²

This table has been created to show the difference in deer densities between the NSWG and census area in the Western Sub-Group of the East Loch Shiel deer management group, showing a 28% increase when comparing the two.

Helicopter Count Comparison (Red Deer Only)

Count Name:	**Heli - 09.01.19**	**Heli - 25.02.22**	**Drone - 17.04.25**
Male:	124	69	226
Female:	321	210	380
Young:	114	69	135
Unknown	0	0	37
Total:	559	348	778
Density:	*6.7 deer / km²*	*4.2 deer / km²*	*10.2 deer / km²*

Deer Species Density Calculation

Species:	**Total:**	**Density:**
Red Deer	778	10.2
Roe Deer	31	0.4
Total:	**809**	**10.6 *deer / km²***

Picture 7. *Three Red stags, Resipol Farm, Sunart Rainforest - 27.04.2025*

Special Observations and Anomalies

Outlier Observations

Notably, 12 Red deer were observed outside the official census boundary. These outlier observations have been incorporated into a separate total count and density calculation to show a density which might have been observed at other times of day compared to when the census was conducted. **Five** Red foxes were also observed during the census.

Special Observations

While Boddy Environmental Ltd. plans to conduct a Rhododendron drone survey during leaf-off conditions in November 2025, observations have been made that Rhododendron is much more widespread on the south side of the project area, with higher densities in the native woodland in the southwest corner.

Behavioural Note

Throughout the census, deer were observed feeding from a distance. Occasionally, a strong gust of wind in the right direction caused the deer to notice and look up at the drone. In some cases, the noise caused the deer to move; however, this was noted to prevent double-counting. If there were any doubt that deer were being double-counted, they would be removed from the dataset.

Picture 8. *Red hind in close proximity to Rhododendrons, Nr. Bunallteachan, Sunart Rainforest - 26.04.2025*

Recommendations

Baseline for Deer Management

This census offers a reliable minimum baseline for deer population levels on the Sunart Rainforest project area. The findings can be used to establish or refine a Deer Management Plan, helping to balance the deer population with the estate's ecological and land management goals by identifying areas that require increased deer management.

Repeat Census

If the census is to be repeated in the future, we suggest that it be completed when the populations of Red deer are close to their highest (late summer to early autumn) to obtain a more accurate estimate of recruitment rates and establish a trend of population movements over the warmer summer months.

Conclusion

The Sunart Rainforest thermal drone deer census provided a reliable baseline for Red deer and Roe deer populations, representing the **absolute minimum population** of deer present on the project area at the time of the census, when the population is close to its minimum, with a typical low occurring around the end of winter and the beginning of spring before summer recruitment and immigration.

Picture 8. *Red hinds and calves, Ranachan Hill Ground, Sunart Rainforest - 25.04.2025*

Report by: *Kestrel Selby Boddy, Director, Boddy Environmental Ltd.*

Appendix 1. Maps

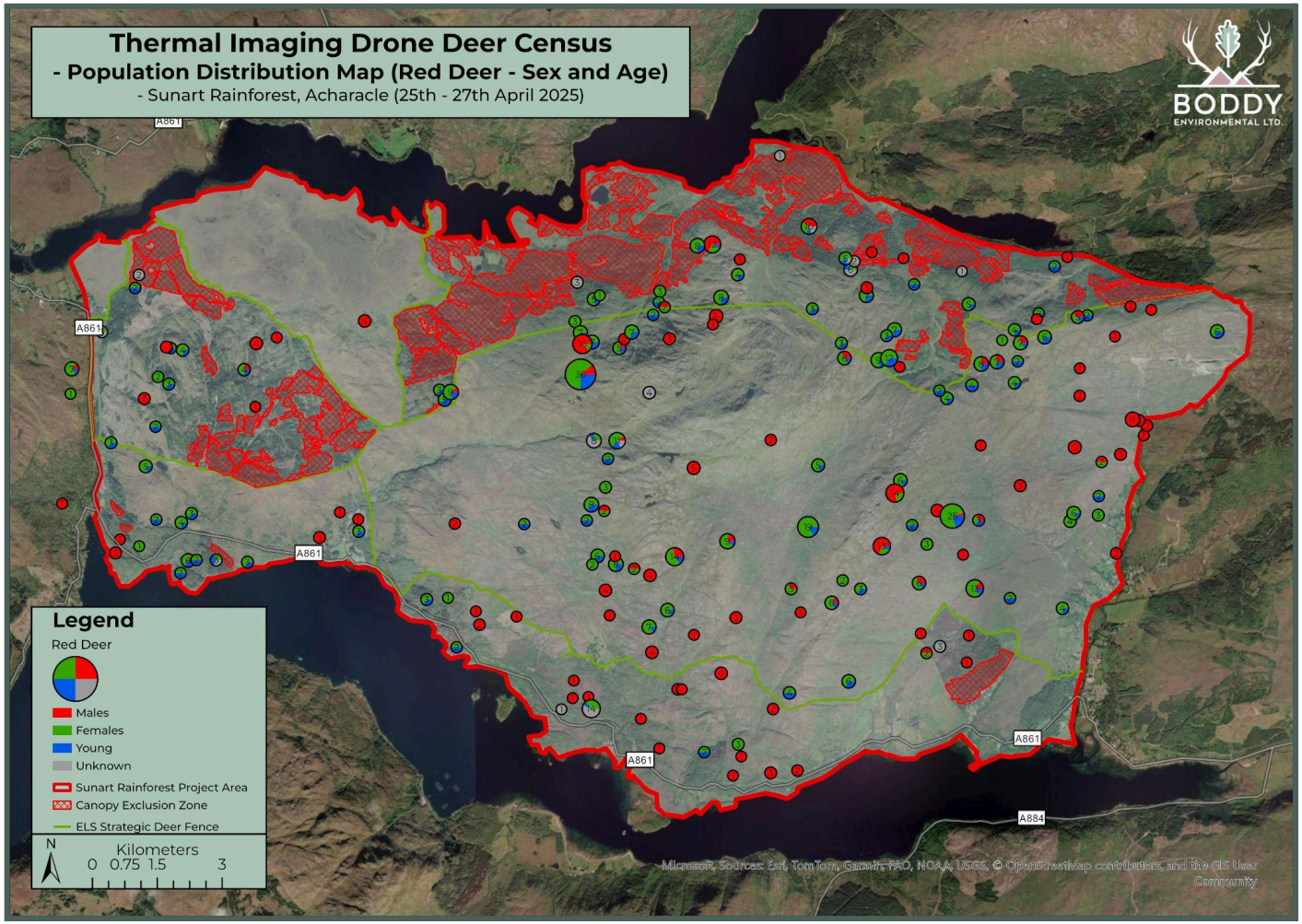


Figure 4. *Population Distribution Map (Red deer - Sex and Age), Sunart Rainforest - 27.04.2025*

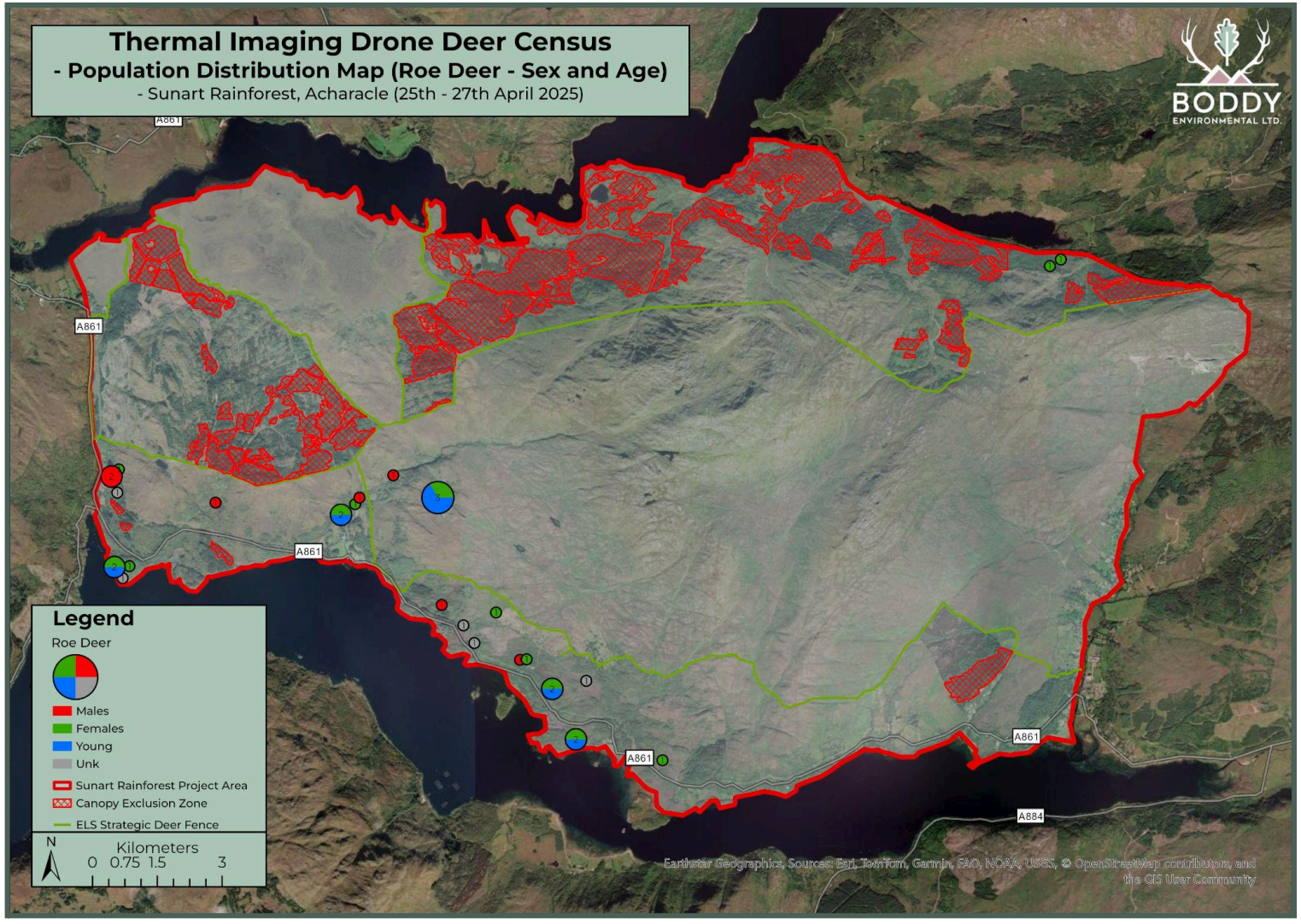


Figure 5. *Population Distribution Map (Roe deer - Sex and Age), Sunart Rainforest - 27.04.2025*

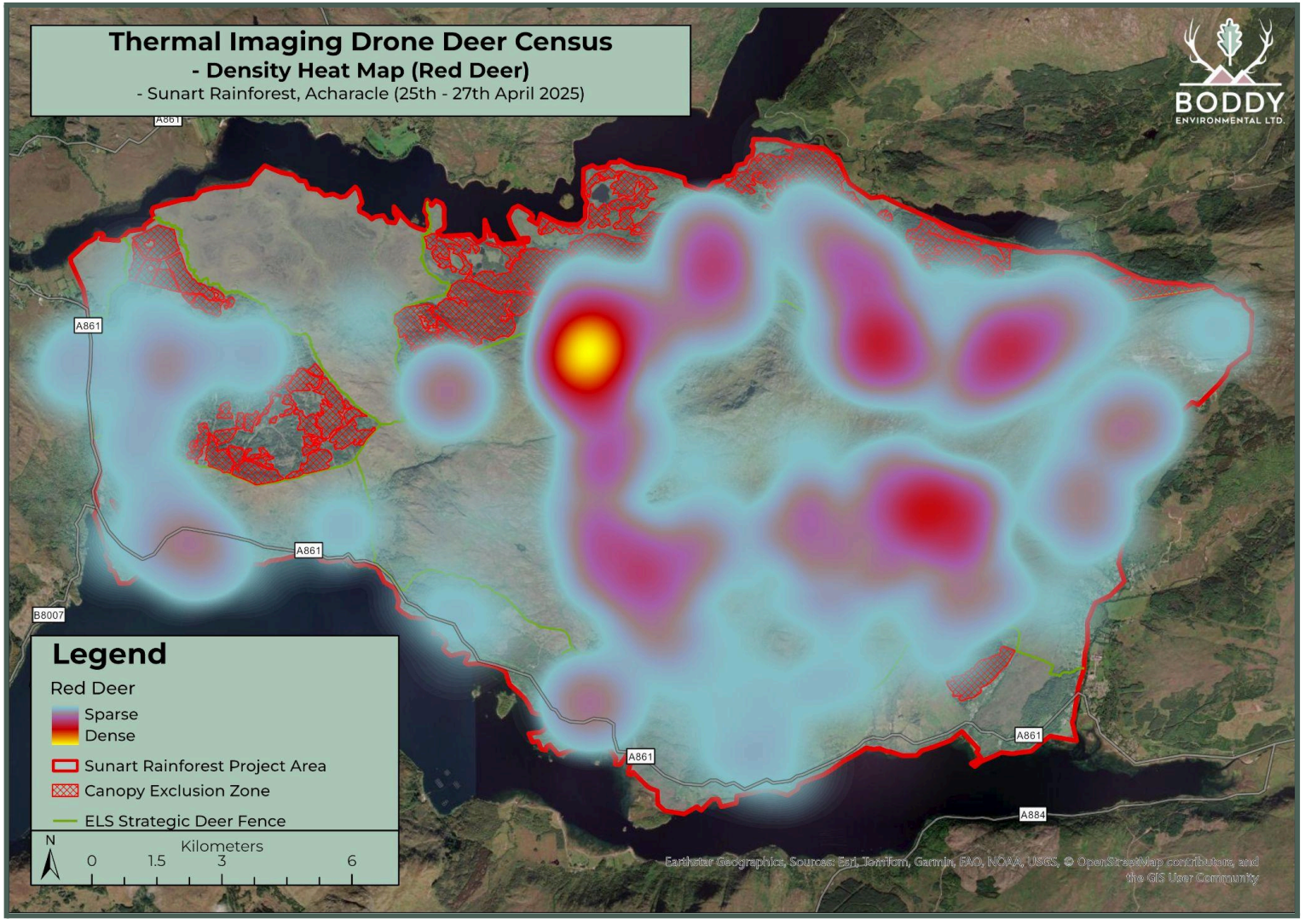


Figure 6. *Density Heat Map (Red deer), Sunart Rainforest - 27.04.2025*

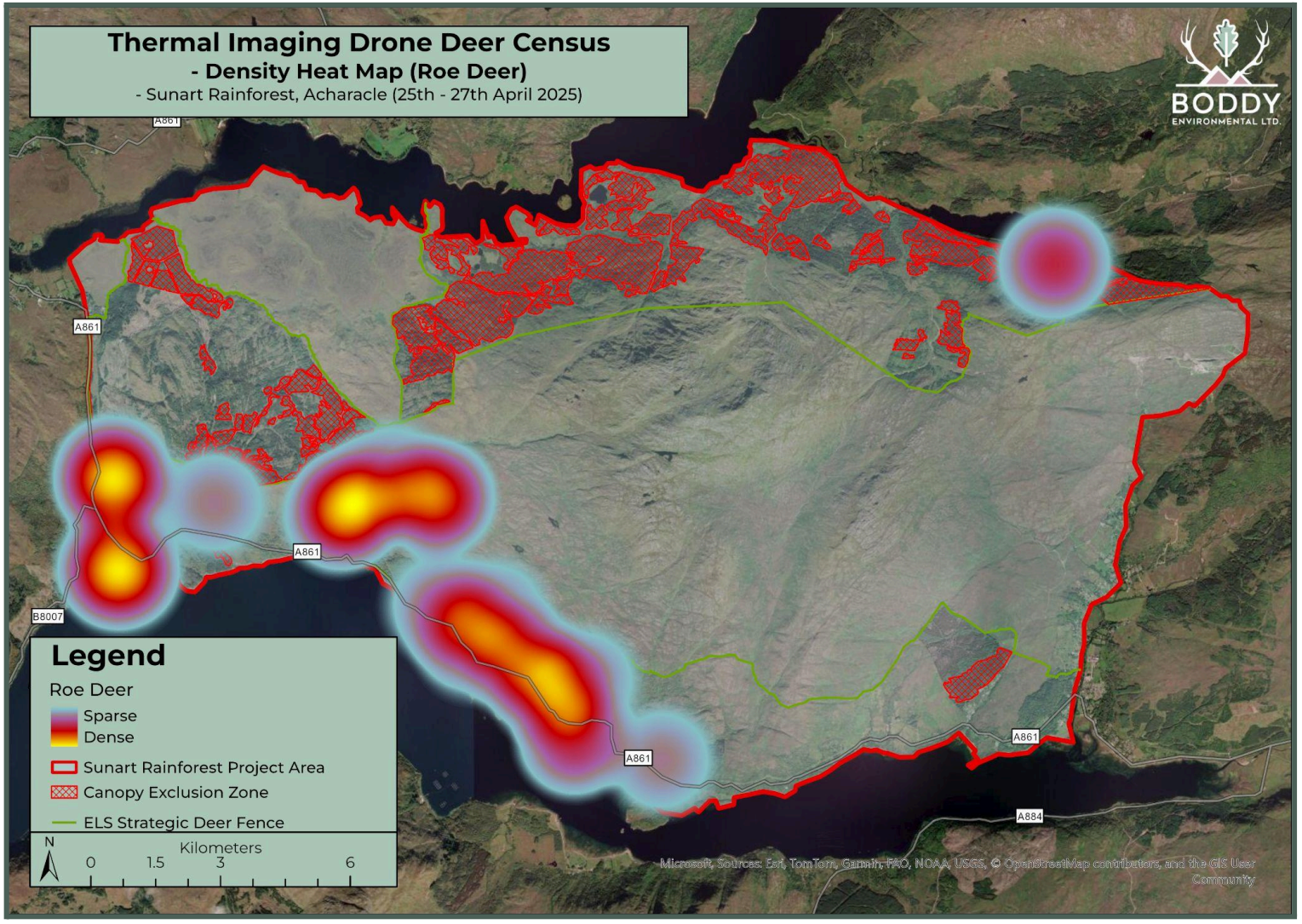


Figure 7. *Density Heat Map (Roe deer), Sunart Rainforest - 27.04.2025*

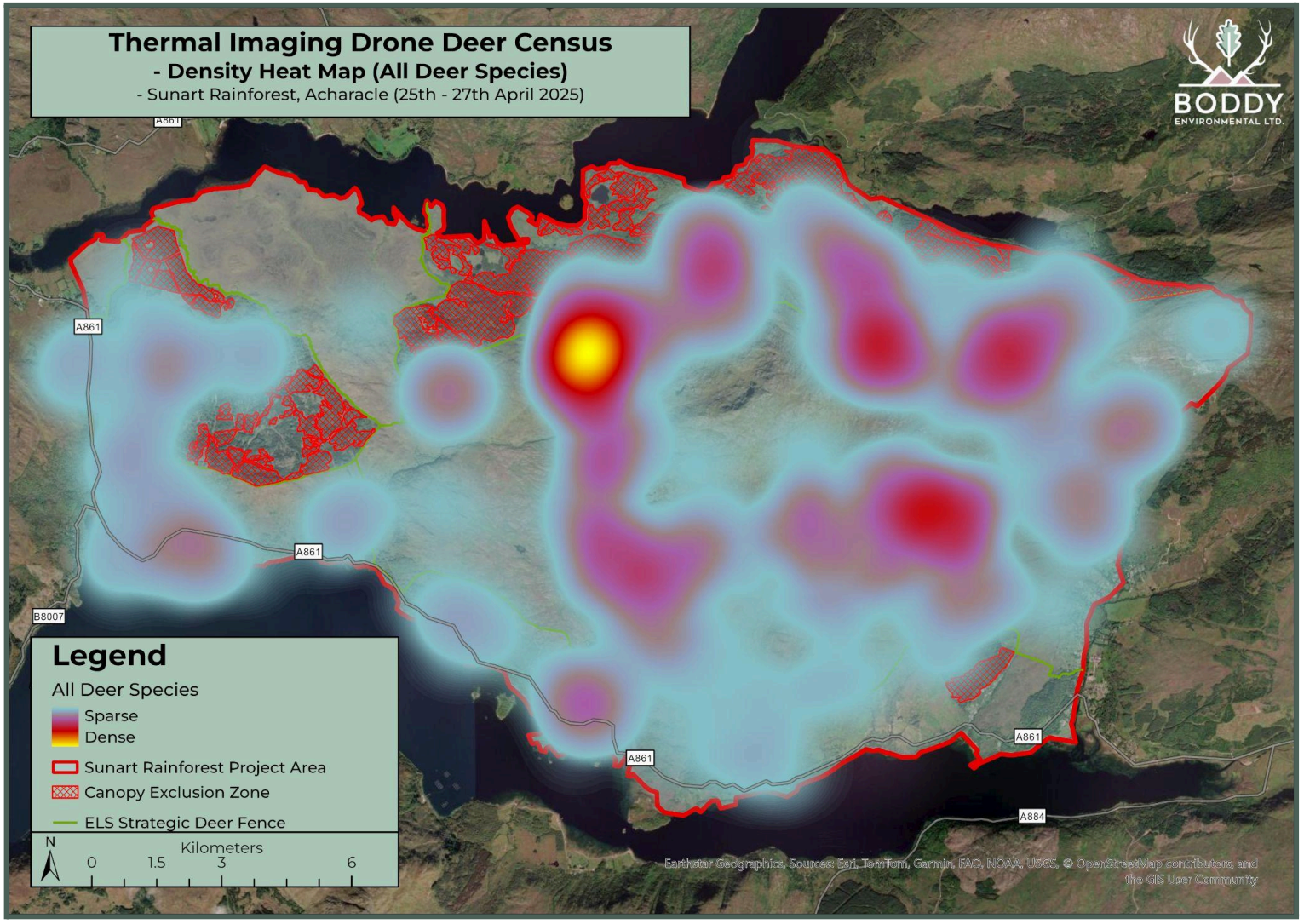


Figure 8. *Density Heat Map (All Deer Species), Sunart Rainforest - 27.04.2025*

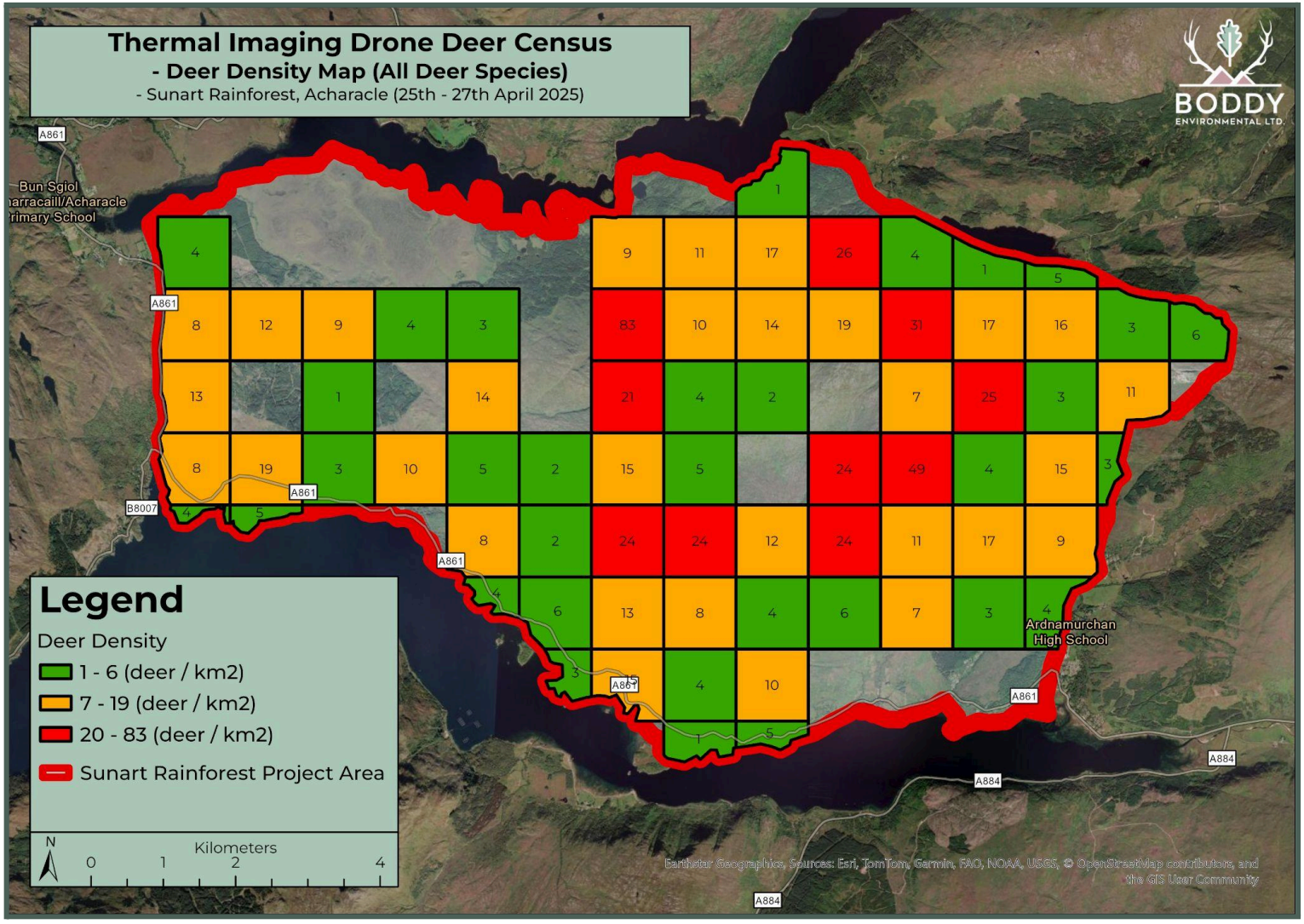


Figure 9. *Density Heat Map (All Deer Species), Sunart Rainforest - 27.04.2025*

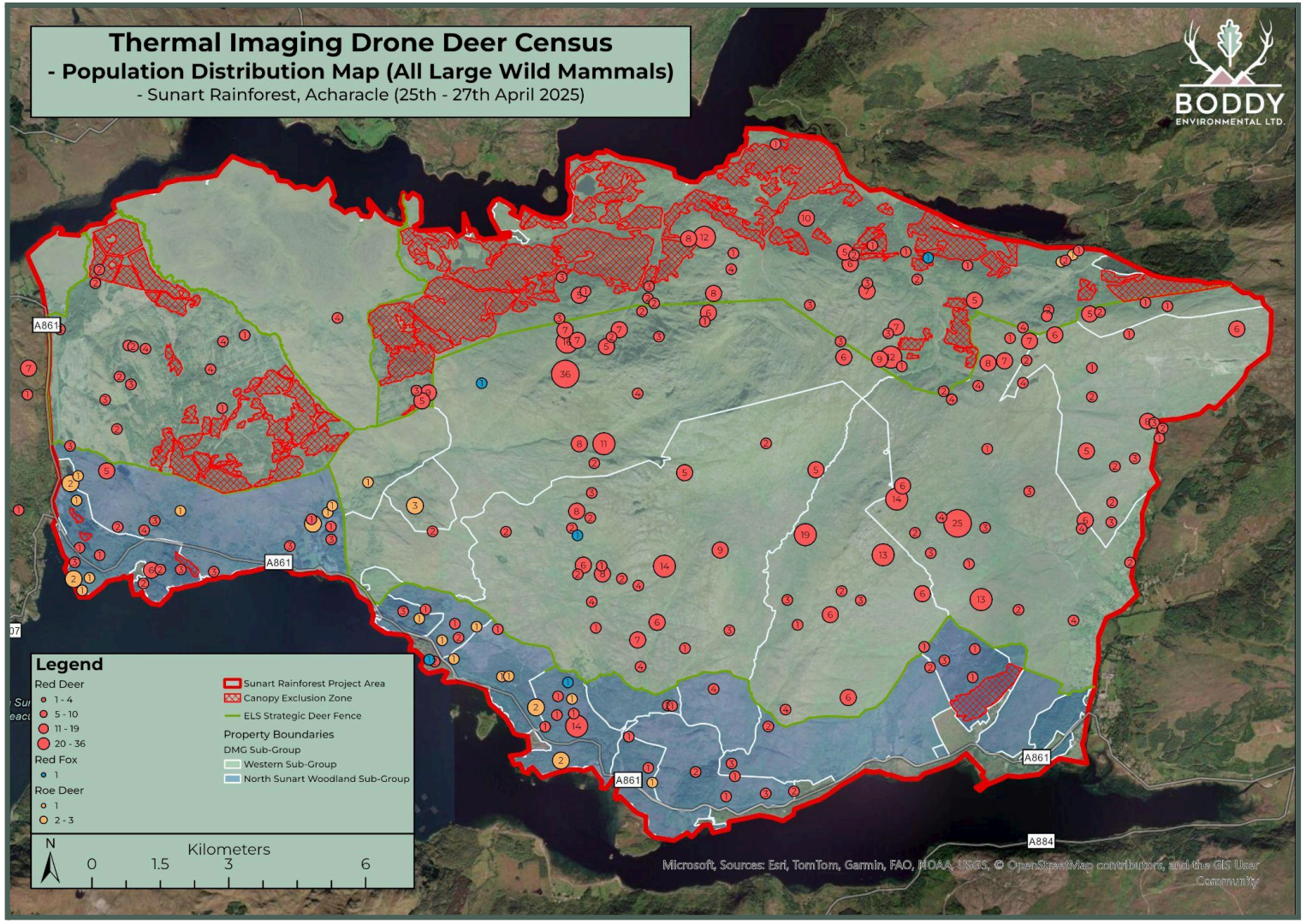


Figure 10. *Population Distribution Map (All Large Wild Mammals), Sunart Rainforest - 27.04.2025*

Appendix 2. Density Table

				Red						Roe							
Landholding	**Census Area (km²)**	**Exclusion Zone (km²)**	**Net Census Area (km²)**	**Male**	**Female**	**Young**	**Unknown**	**Total**	**Density (deer / km²)**	**Male**	**Female**	**Young**	**Unknown**	**Total**	**Density (deer / km²)**	**Total Deer**	**Total Density (deer / km²)**
NSWG																	
1 Ardery	0.45	0	0.45	3	0	0	0	3	6.67	0	0	0	0	0	0.00	**3**	**6.67**
2 Ardery	1.00	0	1.00	3	5	1	9	18	18.00	0	2	2	1	5	5.00	**23**	**23.00**
Ardery East	0.66	0	0.66	4	0	0	0	4	6.06	0	0	0	0	0	0.00	**4**	**6.06**
Ardnastaing CG	0.54	0	0.54	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Ardnastaing Croft	0.07	0	0.07	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Bunallteachan	0.45	0	0.45	3	1	0	0	4	8.89	0	1	0	1	2	4.44	**6**	**13.33**
Camusaine	0.31	0	0.31	2	0	0	0	2	6.45	0	1	0	0	1	3.23	**3**	**9.68**
Camuschoirk	0.35	0	0.35	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
FLS An Cnap	1.18	0.03	1.15	5	7	5	1	18	15.65	0	2	1	2	5	4.35	**23**	**20.00**
FLS Ardery	0.90	0	0.90	1	0	0	0	1	1.11	1	1	0	1	3	3.33	**4**	**4.44**
FLS Bunallteachan	0.26	0	0.26	0	2	1	0	3	11.54	1	0	0	0	1	3.85	**4**	**15.39**
FLS Camuschoirce	1.21	0	1.21	7	1	1	0	9	7.44	0	0	0	0	0	0.00	**9**	**7.44**
FLS Strontian	0.29	0	0.29	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Kilcamb Lodge	0.04	0	0.04	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Longrigg	0.84	0.23	0.61	2	0	0	3	5	8.20	0	0	0	0	0	0.00	**5**	**8.20**
Ranachan	1.97	0	1.97	3	4	0	0	7	3.55	0	0	0	0	0	0.00	**7**	**3.55**
Resipole Farm - NSWG	3.14	0	3.14	5	14	6	0	25	7.96	2	3	1	0	6	1.91	**31**	**9.87**
Tigh Dubh	0.02	0	0.02	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Unknown NSWG	1.60	0	1.60	0	1	1	0	2	1.25	2	0	0	0	2	1.25	**4**	**2.50**
Total NSWG:	**15.28**	**0.26**	**15.02**	**38**	**35**	**15**	**13**	**101**	**6.72**	**6**	**10**	**4**	**5**	**25**	**1.66**	**126**	**8.38**

				Red						Roe							
Landholding	**Census Area (km²)**	**Exclusion Zone (km²)**	**Net Census Area (km²)**	**Male**	**Female**	**Young**	**Unknown**	**Total**	**Density (deer / km²)**	**Male**	**Female**	**Young**	**Unknown**	**Total**	**Density (deer / km²)**	**Total Deer**	**Total Density (deer / km²)**
WSG																	
Achnanellan	15.34	4.91	10.43	27	93	36	13	169	16.20	0	2	0	0	2	0.19	**171**	**16.39**
Ardery Farm	10.13	0	10.13	33	53	15	0	101	9.97	0	0	0	0	0	0.00	**101**	**9.97**
Claish Moss	5.68	0	5.68	4	0	0	0	4	0.70	0	0	0	0	0	0.00	**4**	**0.70**
Land Adjacent to Loch Shiel Hotel	0.48	0	0.48	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Ledaig	0.13	0	0.13	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Ranachan Hill Ground	5.13	0	5.13	15	38	11	0	64	12.48	0	0	0	0	0	0.00	**64**	**12.48**
Resipole - Allt Mhic Chiarain	1.08	0	1.08	0	0	0	0	0	0.00	1	0	0	0	1	0.93	**1**	**0.93**
Resipole - Meall Mor	0.51	0	0.51	0	0	0	0	0	0.00	0	1	2	0	3	5.88	**3**	**5.88**
Resipole Farm - Hill Ground	9.18	0	9.18	40	58	23	7	128	13.94	0	0	0	0	0	0.00	**128**	**13.94**
Resipole Woodlands	7.21	1.51	5.7	13	15	7	4	39	6.84	0	0	0	0	0	0.00	**39**	**6.84**
Scotstown Apportionment	4.24	0	4.24	24	14	6	0	44	10.38	0	0	0	0	0	0.00	**44**	**10.38**
Scotstown Mines	8.04	0	8.04	32	74	22	0	128	15.92	0	0	0	0	0	0.00	**128**	**15.92**
Unknown WSG	0.24	0	0.24	0	0	0	0	0	0.00	0	0	0	0	0	0.00	**0**	**0.00**
Total WSG:	**67.39**	**6.42**	**60.97**	**188**	**345**	**120**	**24**	**677**	**11.10**	**1**	**3**	**2**	**0**	**6**	**0.10**	**683**	**11.20**
Total:	**82.67**	**6.68**	**75.99**	**226**	**380**	**135**	**37**	**778**	**10.24**	**7**	**13**	**6**	**5**	**31**	**0.41**	**809**	**10.65**
*Outside Boundary**	*N/a*	*N/a*	*N/a*	*5*	*6*	*1*	*0*	*12*	*N/a*	*0*	*0*	*0*	*0*	*0*	*N/a*	***12***	***N/a***

*Excluded from density calculations as outside of the census boundary at the time of the census.