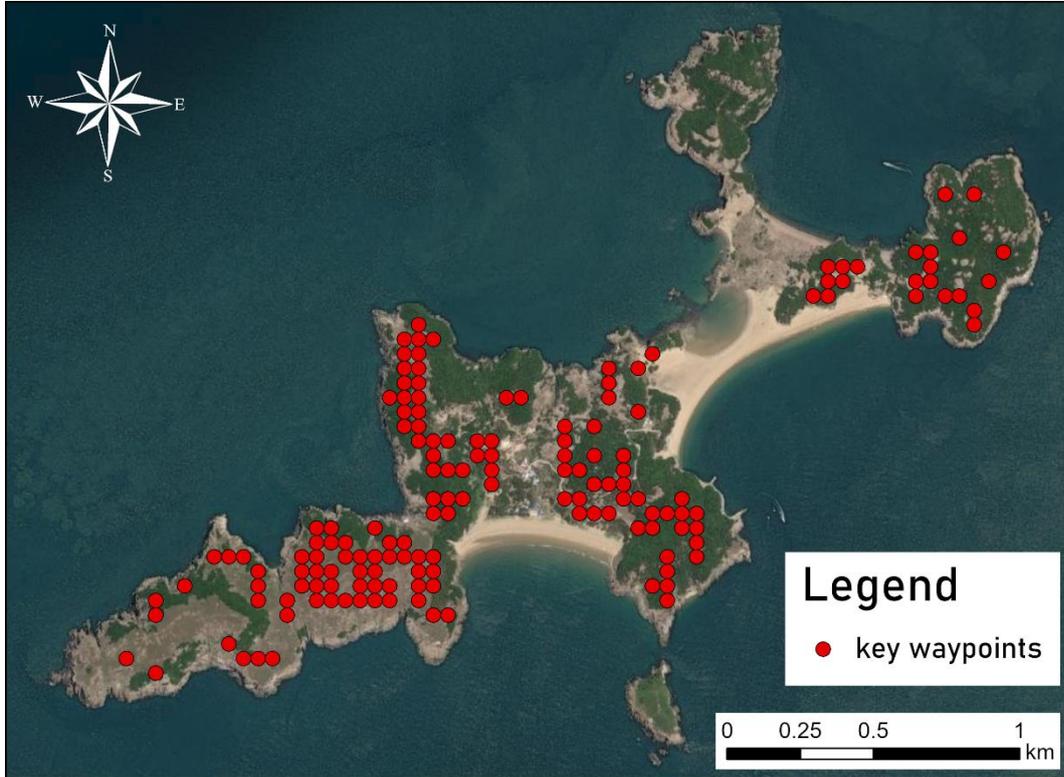
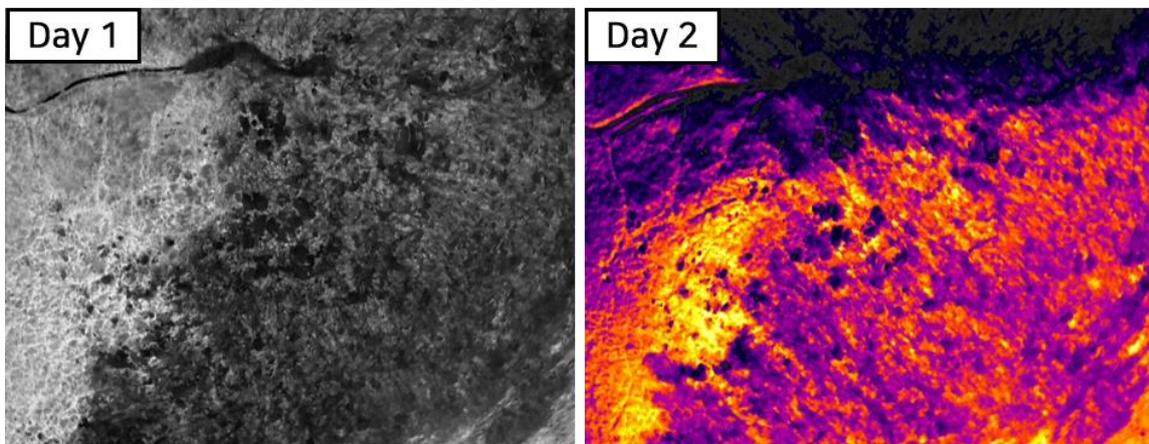


## Supplementary Materials

**Figure S1:** Distribution of key waypoints derived from sampling strata results on Guleopdo Island. Each waypoint is spaced at 50-meter intervals, optimizing coverage for efficient wildlife detection.



**Figure S2:** Comparison of thermal images from the same location on Day 1 and Day 2 of the survey. On Day 1, the presence of cloud cover resulted in a slower increase in ground heat, as the clouds limited direct sunlight and prevented rapid thermal accumulation. In contrast, on Day 2, the clear weather allowed for an unobstructed influx of the sun, causing the ground heat to rise significantly faster.



**Figure S3:** Presence distribution map based on detection results. This map indicates the areas within the survey area where the target species primarily remained, with higher presence values (in green) denoting concentrated activity.

