

Beaufort County Camera Trap Project

Project Goal

This project documents reptiles, amphibians and small mammals across Beaufort County using drift-fence camera arrays paired with cover boards. Standardizing the array design and the camera settings lets us match survey effort between sites, so records from every array are directly comparable and can be pooled into a single county-wide dataset.

Design Standards and Camera Settings

The numbers below are the requirements. Camera housing, fence materials, camera brand, etc. are up to the discretion of the property or organization installing the array, so long as the below parameters are met. Instructions for standard array and trap design, with a materials list, can be provided upon request.

DESIGN REQUIREMENTS

ITEM	REQUIREMENT
Drift fence	50 ft long , set at least 35 cm above the soil line and 7 cm below it. Straight and taut, no gap where it meets the soil.
Fence-to-trap gap	Under 5 cm between the fence end and the trap entrance, so nothing slips past.
Housing height	The camera lens and the PIR sensor both sit 25–30 cm above the trap floor. Measure to the lens and the sensor, not to the housing.
Entrance	At least 18 cm width × 10 cm height , facing the fence.
Exit	At least 15 cm width × 10 cm , facing away from the fence.
Entrance guides	At least 14 cm tall and 25 cm long , angled out from the entrance. A nominal 2×6 measures 14 cm, which meets the minimum exactly.
Camera	Close-focus game camera with a measured trigger speed under 0.5 s , or a camera modified for close focus that hits the same trigger speed. Bench test for sharpness at 25–30 cm.
Cover boards	Optional: Six sets , each two 3 ft × 4 ft sheets of roofing tin stacked two high . Every set is at least 5 m from the fence and no more than 20 m from it , and at least 10 m from any other set.
Check interval	The array and all six coverboard board sets at least every 14 days . Every check documented, including checks where you find nothing.
Reporting	Every reptile, amphibian and mammal under about 1 kg recorded on the cameras, documented and shared in the standard workbook format.

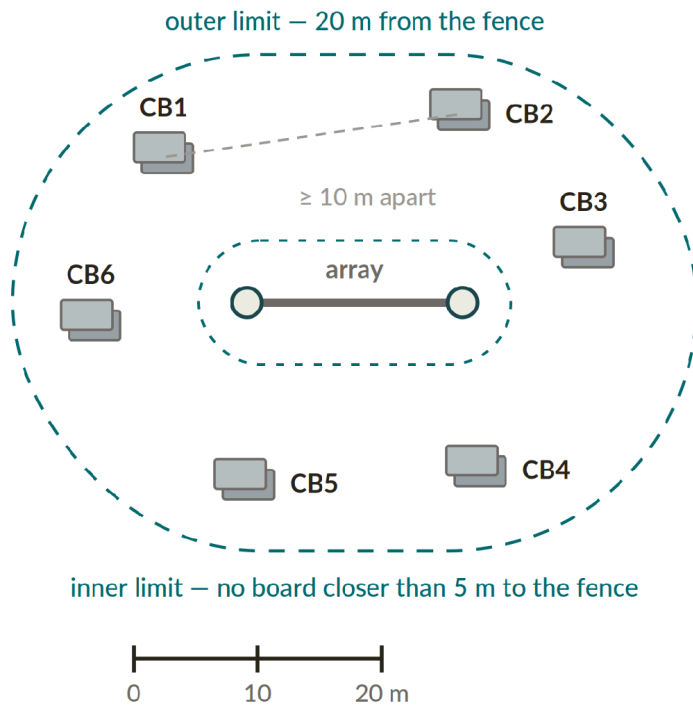
CAMERA SETTINGS

SETTING	REQUIRED VALUE
Trigger speed	Under 0.5 s , based on an independent measurement rather than the manufacturer's claim.
Mode and Settings	Photo (not video), 3-photo burst , 5 s trigger interval , high PIR sensitivity , 3 MP or better .
Night	Lowest flash power and the fastest night shutter the camera offers. At 25–30 cm the animal is close enough that full power will overexpose it.
Schedule	24 hours continuous . No time-lapse, no daily window, no motion-freeze.
Info strip	On , at the bottom of the frame. 24-hour clock , mm/dd/yyyy , and EDT all season — do not adjust for the fall time change.
Camera name	Site code plus the directional fence-end letter, N, S, E or W. Example: BIT1E is the east end of Brays Island Trap 1.
Memory card	32 GB or larger , formatted in the camera at every install.
Batteries	Lithium or high-capacity NiMH recommended, always replaced as a full set. Alkaline cells sag in the cold and cost you trigger speed.

Data Logging and Sharing

An Excel workbook is provided for logging the array setup, every camera check, field observations made during a check, and the animals identified from the camera images. Fill out a field check sheet on site and enter it into the workbook within seven days of the visit. Name each image folder with the site code and the date range it covers, then share it with the project coordinator or place it in the shared repository. The project requires all records of reptiles, amphibians and mammals under about 1 kg; the property or organization hosting the array is welcome to record anything else it finds useful, provided the camera settings above stay unchanged.

Cover board sets on the site



6 sets per site — each one is two 3 × 4 ft sheets of roofing tin, stacked two high.

Spread them across different microhabitats: field edge, damp swale, closed canopy, sunny opening.

Record a GPS point, the install date, and the distance from the nearest point of the fence for every set.

Let them weather as long as you can before the first check.

Then check all six every time you check the array — at least every 14 days.

