

Table A5. Steps to deploy a remote camera.

Task	Instructions
Select camera locations	<ol style="list-style-type: none"> 1) Locate the predetermined camera locations (e.g. based on study design and determined before camera set up; Appendix A - Table A2). 2) Select a FOV Target Feature (if applicable) to maximize detection probability (e.g., wildlife trail). 3) Identify a suitable attachment point in the vicinity of the target area (e.g., tree, fence post) that supports: <ul style="list-style-type: none"> • a detection zone ~3–5 m from the camera (~3–5 m from the FOV Target Feature), • a Field of View (FOV) at least 5 m wide and 10 m long (unobstructed by objects, shrubs or trees), and • the camera aimed perpendicular to the expected movement path of the Target Species. 4) Trim vegetation as needed. <p>Note: It may be necessary to bring a man-made attachment point (e.g., stake). The most suitable attachment point will depend on the camera height, angle, and direction because these choices will impact the Field of View (FOV).</p>
Set camera	<ol style="list-style-type: none"> 5) Before setting up the camera, record the Camera Make and Camera Model, Camera Serial Number, and optionally the Camera ID, SD Card ID, key ID (for python or cable lock), attachment and the equipment that will be used to secure the camera. 6) Ensure the SD card is inserted, the batteries are fresh and turn the camera on. 7) Check (and record) the camera settings (e.g., Trigger Mode(s), Video Length (seconds), Trigger Sensitivity, # of Photos Per Trigger, Motion Image Interval (seconds), Quiet Period (seconds), etc.) to ensure they match the predetermined choices and that the date time is correct. Record the Deployment Start Date Time (in the format: "DD-MMM-YY HH:MM:SS")
Walktest	<p>Perform a walktest to confirm that the Field of View (FOV) is satisfactory (see section 7.4.5). See the camera's user manual for instructions on how to perform the walktest for your particular Camera Make and Camera Model.</p> <ol style="list-style-type: none"> 8) Ensure the camera detects motion 5 m in front of the camera, at both 0 m and 0.5–1 m height. Trim vegetation as needed. 9) Activate the walktest mode. 10) Attach the camera at the desired camera height, angle, and direction. 11) Walk in front of the camera to a specified distance (i.e., the "Walktest Distance," e.g., 5 m). 12) Wave your hand in front of the camera (usually at ground level and at a chosen height [i.e., the "Walktest Height," e.g., 0.8 m]) to determine if the camera is activating. 13) If the camera is set correctly (based on the user's criteria), an indicator light will flash to signal that the sensor is detecting heat and motion (thus indicating the camera's detection zone). 14) Arm the camera or wait for the camera to arm itself (~2 minutes of inactivity).

Task	Instructions
	<p>15) Note whether a walktest was performed on the field datasheets and if so, optionally record the Walktest Distance (m) and Walktest Height (m).</p>
Attach and secure the camera	<p>16) Attach and secure the camera to the tree/post (e.g., security box or bracket, cable lock and lock box, as needed). Security / lock boxes are recommended to avoid theft.</p> <ul style="list-style-type: none"> Cameras should be angled slightly downward. <p>17) Record the camera height (m).</p> <ul style="list-style-type: none"> In general, cameras should be ~0.5–1 m from the base of the tree to the bottom of the camera lens. <p>18) Record the Camera Direction (degrees).</p> <ul style="list-style-type: none"> Cameras should ideally face north (if not, south).
Test images	<p>19) Write the deployment metadata (specifically, Sample Station ID, Camera Location ID, Deployment ID, Deployment Crew, and Deployment Start Date Time (in the format “DD-MMM-YYYY HH:MM:SS”) on either a Test Image Sheet or a dry-erase board with a marker. This is important in case of the situation that the camera does not properly record the user label.</p> <p>20) Walk ~5 m in front of the camera.</p> <p>21) Face the Test Image Sheet/dry-erase board towards the camera, and slowly walk towards the camera. If the Test Image Sheet is laminated, tilt it slightly downward to avoid sun glare on the shiny surface.</p> <p>22) Allow the camera to take a series of images.</p>
Document deployment metadata	<p>Relevant deployment metadata should be documented each time a camera is deployed (see full list below). Each event should have its own Camera Deployment Field Datasheet.</p> <p>Note: If a camera is deployed for more than one survey, the field crews will need to revisit the camera location to “service” the camera and/or equipment (e.g., to refresh batteries or swap out SD cards. If the field crew visits the camera location to collect the camera and other equipment (“Service/Retrieval Crew”; i.e., the camera location will no longer be used and cameras, SD cards, and batteries are not replaced), this is referred to as a “retrieval.” Whether the Service/Retrieval Crew services or retrieves a camera, additional metadata should be collected that is not included in the deployment metadata (see “service/retrieval metadata” below).</p> <p>Pertinent deployment metadata collection fields include [Camera Deployment Field Datasheet]:</p> <ul style="list-style-type: none"> Project ID Sample Station ID Camera Location ID Latitude Camera Location OR Northing Camera Location Longitude Camera Location OR Easting Camera Location UTM Zone Camera Location (if applicable) GPS Unit Accuracy (m) *Access Method Deployment Crew

Task	Instructions
	<ul style="list-style-type: none"> • Deployment Start Date Time (DD-MMM-YYYY HH:MM:SS) • Camera ID • Camera Make • Camera Model • Camera Serial Number • *SD Card ID • *Key ID • *Security • Trigger Mode(s) • *Video Length (seconds) • Trigger Sensitivity • Photos Per Trigger • Motion Image Interval (seconds) • Quiet Period (seconds) • Camera Height (m) • *Camera Direction (degrees) • *Camera Attachment • *Stake Distance (m) • FOV Target Feature • FOV Target Feature Distance (m) • Bait/lure Type • *Camera Location Characteristics • *Deployment Area Photos Taken • *Deployment Area Photos Numbers • *Test Image Taken • *Walktest Complete • *Walktest Distance (m) • *Walktest Height (m) • *Camera Active On Departure • *Camera Location Comments • *Deployment Comments
Camera service or retrieval	<p>23) Approach the camera from the front so that the camera will collect images of the field crew, thus serving as backup documentation of the Deployment End Date Time (in the format “DD-MMM-YYYY HH:MM:SS”) in case that field sheets are lost, destroyed, etc.</p>
Document service/retrieval metadata	<p>Relevant Service/Retrieval metadata should be collected each time a camera is serviced (e.g., revisited to refresh batteries or swap out SD cards) or retrieved (e.g., revisited to collect the camera and other equipment, i.e., the camera location will no longer be used and the camera, SD card, and batteries are not being replaced) if there have been any changes to camera location, sampling period, and/or setting type (e.g., not baited and then baited later) (see below for a full list). Whether the crew services or retrieves a camera, additional metadata fields should be collected that are not included in the deployment metadata. Each event should have its own Camera Service/Retrieval Field Datasheet.</p>

Task	Instructions
	<ul style="list-style-type: none"> • Be sure to record the “purpose of visit” (i.e., to service or retrieve the camera) as well as whether the camera was active or incurred damage, as this can provide context if there are no photos taken after a certain date. • If the camera was damaged/is not functioning - before setting up the camera, record the new Camera Make and Camera Model, new Camera Serial Number, and optionally the New Camera ID, Key ID, and/or SD Card ID (if applicable; if python or cable lock damaged). • Be sure to record whether the batteries were replaced (under “batteries replaced”). If using lithium batteries, the camera’s battery level indicator may not decline evenly (but rather indicate full battery until a sudden drop-off). If you expect to leave your camera for a long period of time before checking it again, it is best to refresh the batteries. • Record other relevant metadata below. • Ensure you collect whatever material you used to attach the camera to the tree, post, etc. and any other equipment you brought with you. <p>Pertinent service/retrieval metadata collection fields include [Camera Service/Retrieval Field Datasheet]:</p> <ul style="list-style-type: none"> • Project ID • Sample Station ID • Camera Location ID • Purpose Of Visit (Service or Retrieve) • Service/Retrieval Crew or Deployment Crew • Deployment Start Date Time (DD-MMM-YYYY HH:MM:SS) (may also be the Deployment End Date Time (DD-MMM-YYYY HH:MM:SS) for a previous deployment) • *Camera Active On Arrival • *Camera Damaged • *Card Status (% full) • *# Of Images • *SD Card Replaced • *Remaining Battery (%) • *Batteries Replaced • New Camera ID • New Camera Make • New Camera Model • New Camera Serial Number • New SD Card ID • Bait/lure Type • *Deployment Area Photos Taken • *Deployment Area Photos Numbers • *Test Image Taken • *Walktest Complete

Task	Instructions
	<ul style="list-style-type: none"> • *Walktest Distance (m) • *Walktest Height (m) • *Camera Active On Departure • *Camera Location Comments • *Service/Retrieval Comments • Additional information may be collected as needed <p>Data can be input into a tablet interface or recorded on a paper Camera Service/Retrieval Field Datasheet.</p>

Notes: An asterisk (*) indicates the field is optional and not required by the AB Metadata Standards (RCSC, 2023) and [B.C. Metadata Standards \(RISC, 2019\)](#).