UPLAND WILDLIFE HABITAT MANAGEMENT

Implementation Requirements 645

Natural Resources Conservation Service (NRCS) **December 2023**

Landowner _____

WHAT IS UPLAND WIDLIFE HABITAT MANAGEMENT

Upland wildlife habitat management is to provide and manage upland habitats and connectivity within the landscape for wildlife.

PURPOSE

This practice may be applied to treat upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, and food in proper amounts, locations and times to sustain wild animals that inhabit uplands during a portion of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on land where the decision maker has identified an objective for conserving a wild animal species, guild, suite or ecosystem.

Land within the range of targeted wildlife species and capable of supporting the desired habitat.

CONSIDERATIONS

This practice may affect the target species as well as non-target species though mechanisms such as hunting, predation, disease transmission, nest parasitism, etc. Consider effects of this practice on species with declining populations.

Wildlife population control may be necessary to protect and maintain certain habitats. This is a responsibility of the landowner. State and federal regulations may apply to population control methods.

Undisturbed areas conserved at a sufficient extent during management activities, may sustain disturbance-intolerant animals and plants.

Other conservation practices that may be utilized in conjunction with this practice to create a wildlife management plan include:

- Pasture & Hay Planting (512)
- Wildlife Watering Facility (648)

NRCS, AR
December 2023

- Early Successional Habitat Development/Management (647)
- Restoration and Management of Rare or Declining Habitats (643)
- Tree/Shrub Establishment (612)
- Range Planting (550)
- Prescribed Grazing (528)
- Prescribed Burning (338)
- Forage Harvest Management (511)
- Use Exclusion (472)
- Riparian Forest Buffer (391)
- Riparian Herbaceous Cover (390)
- Forest Stand Improvement (666)

PRACTICE SPECIFICATIONS

NRCS shall ensure that plans and specifications for this practice are prepared by persons with adequate training in the fields of wildlife management, biology or ecology.

Written specifications, schedules and maps shall be prepared for each planning area and each habitat type.

Specifications shall:

- Identify the amounts and kinds habitat elements, locations and management actions necessary to achieve the client's management objectives.
- Describe the appropriate method, timing and intensity of management needed to produce the desired habitat conditions and sustain them over time.

Specifications shall be transmitted to clients using NRCS approved specifications sheets, implementation requirements, or customized narrative statements included in the conservation plan.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended throughout its expected life:

- Evaluate habitat conditions on a regular basis in order to adapt the conservation plan and schedule of implementation.
- Annually inspect and repair structural or vegetative components of this practice.

UPLAND WILDLIFE HABITAT MGMT – SPECIFICATIONS SHEET

Landowner/Cooperator _____

Field Office _____

Plan Number _____ **Location** _____

Purpose/Objective of the Practice (Check all that apply)		
	To treat upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, and food in proper amounts, locations, and times to sustain wild animals that inhabit uplands during a portion of their life cycle.	
✔	Other	monitor bird response in conjunction with other practices

Species of Concern	Upland birds

Site Conditions	
Document how habitat elements are being addressed:	
Food	Insect and Forb (seed producing) species improved with strategically timed prescribed fire.
Cover	Strategically times prescribed fire, grazing management, and 649 structures for wildlife
Water	N/A
Interspersion and Distance	Recorded via monitoring. See attached pages.
Migration (if applicable)	N/A

Requirements for 645 practice certification require completion of all three surveys: Spring Breeding Bird, Fall Covey Count, and Photo Point. Check all boxes below to indicate completion:

☐ **Spring Breeding Bird (Documentation includes maps and finalized data sheets for 3 repeat surveys)**

☐ **Fall Covey Count (Documentation includes maps and finalized data sheets for 3 repeat surveys)**

☐ **Photo Point**

If applicable, provide a site view of the practice design and application in area below or as an attached diagram. Location of other relevant information and complimentary practices may be included.

Scale 1"=_____ ft. (NA indicates sketch not to scale: grid size=1/2" by 1/2")

See attached 500m buffer map

Additional Specifications and Notes

See attached pages for survey details. Spring breeding bird counts should occur at a rate of one point per 50 acres.

Fall covey counts should occur at a rate of one per 200 acres.

Practice Design Certification (to be completed after implementation requirements are complete and before practice installation)

By signing below, I certify that:

- the site specific requirements for the installation, operation, and maintenance of the practice on the client's treatment unit, as recorded in these implementation requirements, have been prepared in accordance with the 645 Upland Wildlife Habitat Management Standard and the guidance in the 645 Upland Wildlife Habitat Management Practice Specification.

Signature _____ **Date** _____

Practice Installation Certification (To be completed after practice installation and check out)

By signing below, I certify that:

- The practice has been installed according to the site specific installation requirements

Signature _____ **Date** _____

Open Pine RCPP 645 Spring Breeding Bird Survey

Instructions

1. For each survey point, record OBERSEVER NAME, DATE, START TIME, POINT ID, COUNT NAME (if applicable), and record whether the point is in a FOCAL or REFERENCE area.
2. Surveys can be completed from ½ hour prior to sunrise and 3 hours after sunrise.
3. Estimate CLOUD COVER, TEMPERATURE, WIND SPEED (Beaufort Scale) and NOISE LEVEL prior to starting each survey point. See box to right for Beaufort Scale and Noise Levels definitions.
4. Do not complete surveys when it is raining (fog is fine) or if wind speeds are >4 on the Beaufort Wind Scale.
5. The surveys last for 5 minutes.
6. Record the location of each target bird you detect on the map with a dot and a number. The number will serve as the BIRD ID.
7. In the table next to the map, record the BIRD ID, four letter AOU SPECIES CODE, the TIME INTERVAL it was first detected (1-5), and if you first detected the bird visually, check the box in the BIRD SEEN? column.
8. Surveys should occur at a density of one survey point per 50 acres.
9. Three replications should occur per survey point between May 15 and June 30.

Beaufort Wind Scale:
0 = 0 mph/still
1 = 1-3 mph/wind shown by smoke drift
2 = 4-7 mph/wind felt on face, leaves rustle
3 = 8-12 mph/leaves in constant motion
4 = 13-18 mph/Small tree branches move
5 = >18 mph

Noise Levels:
0 = silent
1 = distant noise not interfering
2 = at times difficult to hear
3 = constant noise, hard to hear

Bird Name	4 Letter AOU Species Code
Indigo Bunting	**INBU**
Northern Bobwhite	**NOBO**
Prairie Warbler	**PRAW**
Yellow-breasted Chat	**YBCH**
Eastern Wild Turkey	**WITU**
Brown Headed Nuthatch	**BHNU**

OPEN PINE SPRING BREEDING BIRD SURVEY DATA SHEET

Location Name:

Circle: Focal Area or Reference

Point ID	Observer Name	Date	Start Time	% Cloud Cover	Wind Code	Noise Code	1st, 2nd, or 3rd Sampling Event

Bird ID	Species Name/Code	Time Interval 1,2,3,4, or 5	Bird Seen? Check box if seen before heard

Instructions:

- Collect data from May 15th – June 30th
- Collect data from a half hour before sunrise until 3 hours after sunrise; record start time for each point.
- Do not collect data if it is raining or snowing.
- Favorable wind speed is <4 mph, but wind speed up to 12 mph is acceptable; favorable cloud cover is <75%.
- Record location of each calling bird using 4-letter species code along with the 1 minute interval that bird was heard within. Transfer information to datasheet table above.
- Cloud Cover, wind code, and noise code should be estimated after completing each point.
- Reverse order in which points are surveyed for 2nd sampling event
- Surveys should occur at a density of one survey point per 50 acres.
- Three replications should occur per survey point.

Wind Codes:

0 = 0mph/still
1 = 1-3 mph/wind shown by smoke drift
2 = 4-7 mph/wind felt on face, leaves rustle
3 = 8-12 mph/leaves in constant motion

Noise Codes:

0 = silent
1 = distant noise not interfering
2 = at times difficult to hear
3 = constant noise, hard to hear

Species:

Indigo Bunting - INBU
Northern Bobwhite – NOBO
Prairie Warbler – PRAW
Yellow-breasted Chat - YBCH
Eastern Wild Turkey- WITU
Brown-headed Nuthatch- BHNU

Spring Breeding Bird Survey - Forest

1. For each survey point, record OBERSEVER NAME, DATE, START TIME, POINT ID, COUNT NAME (if applicable), and record whether the point is in a FOCAL or REFERENCE area.
2. Surveys can be completed from ½ hour prior to sunrise and 3 hours after sunrise.
3. Estimate CLOUD COVER, TEMPERATURE, WIND SPEED (Beaufort Scale) and NOISE LEVEL prior to starting each survey point. See box to right for Beaufort Scale and Noise Levels definitions.
4. Do not complete surveys when it is raining (fog is fine) or if wind speeds are >4 on the Beaufort Wind Scale.
5. The surveys last for 5 minutes.
6. Record the location of each target bird you detect on the map with a dot and a number. The number will serve as the BIRD ID.
7. In the table next to the map, record the BIRD ID, four letter AOU SPECIES CODE, the TIME INTERVAL it was first detected (1-5), and if you first detected the bird visually, check the box in the BIRD SEEN? column.

Beaufort Wind Scale:
0 = 0 mph/still
1 = 1-3 mph/wind shown by smoke drift
2 = 4-7 mph/wind felt on face, leaves rustle
3 = 8-12 mph/leaves in constant motion
4 = 13-18 mph/Small tree branches move
5 = >18 mph

Noise Levels:
0 = silent
1 = distant noise not interfering
2 = at times difficult to hear
3 = constant noise, hard to hear

Bird Name	4 Letter AOU Species Code
Bachman's Sparrow	**BACS**
Indigo Bunting	**INBU**
Northern Bobwhite	**NOBO**
Eastern Wood-Pewee	**EAWP**
Wood Thrush	**WOTH**
Yellow-Billed Cuckoo	**YBCU**

NBCI National Bobwhite Conservation Initiative

Spring Breeding Bird Survey

Observer Data Sheet

v1.6.2.16

Observer Name	☐ Focal ☐ Reference	Point ID	Date	Start Time

Count Name	Temperature ˚F	Cloud Cover %	Wind Speed 0-5	Noise Level 0-3

Bird Name (Landowner Forest Survey)	4 Letter AOU Species Code
Bachman's Sparrow	BACS
Indigo Bunting	INBU
Northern Bobwhite	NOBO
Eastern Wood-Pewee	EAWP
Wood Thrush	WOTH
Yellow-Billed Cuckoo	YBCU

NOTES:

BIRD ID (List 1, 2, 3, 4, etc.)	**AOU Species Code** 4-letter code	**Time Interval** Minute 1,2,3,4 or 5	**Bird Seen?** Check box if seen before heard
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BIRD ID (List 1, 2, 3, 4, etc.)	**AOU Species Code** 4-letter code	**Time Interval** Minute 1,2,3,4 or 5	**Bird Seen?** Check box if seen before heard
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BIRD ID (List 1, 2, 3, 4, etc.)	**AOU Species Code** 4-letter code	**Time Interval** Minute 1,2,3,4 or 5	**Bird Seen?** Check box if seen before heard
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NOTES:

Spring Breeding Bird Survey - Grassland, Savanna

1. For each survey point, record OBERSEVER NAME, DATE, START TIME, POINT ID, COUNT NAME (if applicable), and record whether the point is in a FOCAL or REFERENCE area.
2. Surveys can be completed from ½ hour prior to sunrise and 3 hours after sunrise.
3. Estimate CLOUD COVER, TEMPERATURE, WIND SPEED (Beaufort Scale) and NOISE LEVEL prior to starting each survey point. See box to right for Beaufort Scale and Noise Levels definitions.
4. Do not complete surveys when it is raining (fog is fine) or if wind speeds are >4 on the Beaufort Wind Scale.
5. The surveys last for 5 minutes.
6. Record the location of each target bird you detect on the map with a dot and a number. The number will serve as the BIRD ID.
7. In the table next to the map, record the BIRD ID, four letter AOU SPECIES CODE, the TIME INTERVAL it was first detected (1-5), and if you first detected the bird visually, check the box in the BIRD SEEN? column.

Beaufort Wind Scale:
0 = 0 mph/still
1 = 1-3 mph/wind shown by smoke drift
2 = 4-7 mph/wind felt on face, leaves rustle
3 = 8-12 mph/leaves in constant motion
4 = 13-18 mph/Small tree branches move
5 = >18 mph

Noise Levels:
0 = silent
1 = distant noise not interfering
2 = at times difficult to hear
3 = constant noise, hard to hear

Bird Name	4 Letter AOU Species Code
Dickcissel	DICK
Eastern Kingbird	EAKI
Eastern Meadowlark	EAME
Field Sparrow	FISP
Indigo Bunting	INBU
Northern Bobwhite	NOBO
Painted Bunting	PABU
Prairie Warbler	PRAW
Yellow Breasted Chat	YBCH

NBCI National Bobwhite Conservation Initiative

Spring Breeding Bird Survey

Observer Data Sheet

v1.6.2.16

Observer Name	☐ Focal ☐ Reference	Point ID	Date	Start Time

Count Name	Temperature ˚F	Cloud Cover %	Wind Speed 0-5	Noise Level 0-3

Landowner Grassland/Savanna Survey

Bird Name	4 Letter AOU Species Code
Dickcissel	DICK
Eastern Kingbird	EAKI
Eastern Meadowlark	EAME
Field Sparrow	FISP
Indigo Bunting	INBU
Northern Bobwhite	NOBO
Painted Bunting	PABU
Prairie Warbler	PRAW
Yellow Breasted Chat	YBCH

NOTES:

BIRD ID (List 1, 2, 3, 4, etc.)	AOU Species Code 4-letter code	Time Interval Minute 1,2,3,4 or 5	Bird Seen? Check box if seen before heard
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BIRD ID (List 1, 2, 3, 4, etc.)	**AOU Species Code** 4-letter code	**Time Interval** Minute 1,2,3,4 or 5	**Bird Seen?** Check box if seen before heard
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BIRD ID (List 1, 2, 3, 4, etc.)	**AOU Species Code** 4-letter code	**Time Interval** Minute 1,2,3,4 or 5	**Bird Seen?** Check box if seen before heard
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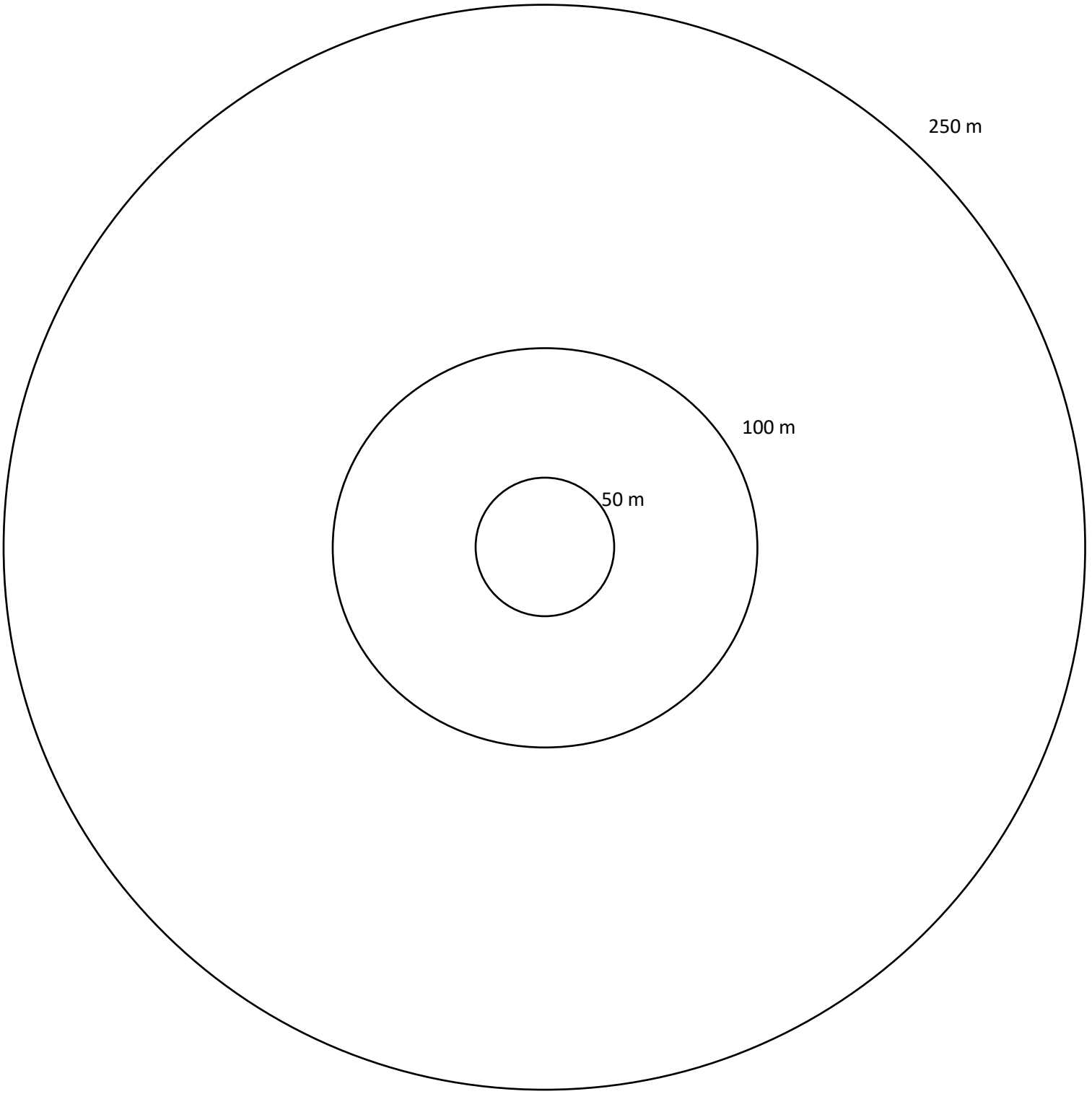
NOTES:

Spring bird monitoring map



NBCI
National Bobwhite Conservation Initiative

Fall Covey Call

Observer Data Sheet

v1.10.1.15

Observer Name	Date	Start Time	Sunrise Time	Barometric Pressure mm Hg
				~ 1:00 am: ~ 7:00 am: Change (+/-) =

Point ID	Latitude	Longitude

Cloud Cover %	Wind Code 0-3	Noise Code 0-3	Stimulation ☐Yes ☐ No	Replication 1-3

NBCI Fall Covey Call Observer Instructions

1. Make sure you know how to find listening point (i.e., post marked with reflective tape) in the dark. Prior to the field, record OBSERVER NAME, DATE, SUNRISE TIME & POINT ID.
2. Collect data 45 minutes before sunrise to sunrise. Record actual START TIME.
3. Weather: do not collect data if it is raining or snowing (fog is fine, but increases sound). Favorable wind speed is <4 mph, cloud cover <75% and <0.05 in./Hg change in barometric pressure [0100–0700 hr]. Bobwhite calling is positively related to high barometric pressure.
4. On covey location field map record location of each calling covey with an X, along with TIME DETECTED and COVEY ID. A calling covey is defined as a single or grouped series of ‘‘koi-lee’’ vocalizations coming from a fixed location.
5. Data fields:
   - CLOUD COVER, WIND CODE & NOISE CODE: Estimate immediately after calling tails off. If birds are not heard calling by 15 minutes before sunrise, measure immediately (don’t wait until sunrise).

Wind Codes:
0=0 mph/still
1=1-3mph/wind shown by smoke drift
2=4-7mph/wind felt on face, leaves rustle
3=8-12mph/leaves in constant motion

Noise Codes:
0=silent
1=distant noise not interfering
2=at times difficult to hear
3=constant noise, hard to hear

   - For each mapped X (covey location) transfer TIME DETECTED and COVEY ID, indicate your CONFIDENCE IN COVEY LOCATION ESTIMATION, and if a covey was flushed, record the number of QUAIL IN COVEY. Estimated calling covey locations (Xs) ≤30 meters apart are classified as 1 covey. Be conservative.
   - Do not stimulate calling, except as specified in CIP, Table 3. Use of any stimulation (e.g., electronic call) significantly reduces capacity for estimating abundance. Check the box, YES or NO for STIMULATION.
   - Complete remainder of data as instructed by coordinator.

Covey ID	Confidence in Covey Location Estimation High, Medium, or Low	Time Detected	Quail in Covey #	Confidence in Quail Counted High, Medium, or Low

Fall covey count monitoring map

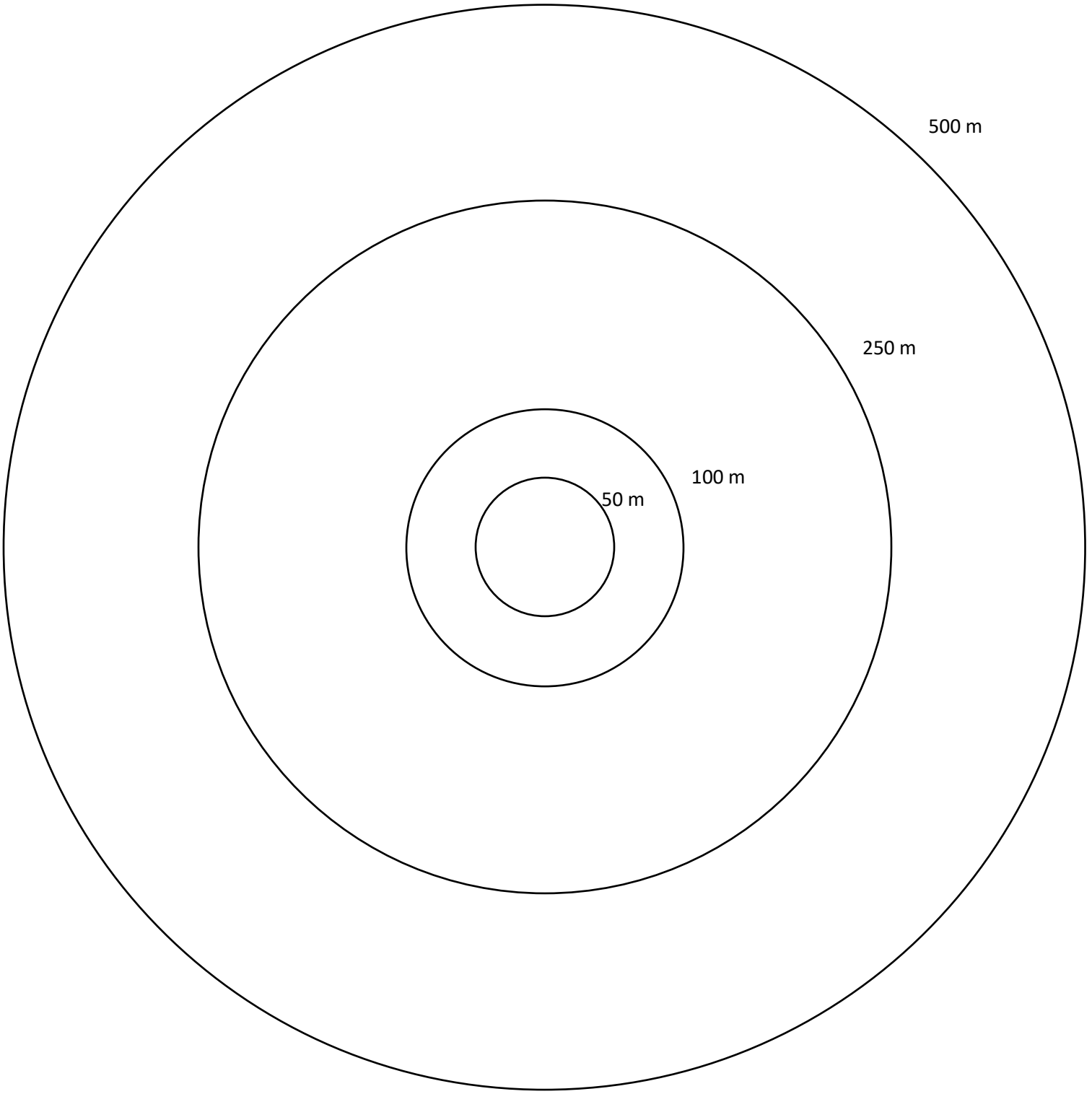


Photo Point Protocol – Fixed Monitoring Procedures for EQIP, CSP, RCPP Projects

Photo point monitoring is an effective, method of monitoring watershed, riparian systems, vegetation and ecosystem change. It consists of repeat photography of an area of interest over a period of time, with photographs taken from the same location and with the same field of view as the original photo. With appropriate site marking and documentation, photos can be precisely replicated by different people for many years.

Photo points should be established to evaluate the efficacy of management activities and determining whether management objectives are being met (e.g. woodland restoration or prescribed burning).

Steps will include:

1. Defining the monitoring area according to planned acreage for practice 645.
2. Selecting and establish camera points and photo direction(s).
3. Photograph the scene or subject.
4. Organize and file the data.

These steps outline consideration and procedures for establishing photo points in areas selected for monitoring within the Open Pine RCPP Practice 645.

1. Establish camera points. Based on the open pine RCPP project objective, establish camera points for each photo point at each bird monitoring location. Spring bird monitoring locations should occur at a minimum density of 1 point per 50 acres. Fall covey count monitoring locations should occur at a minimum density of 1 point per 200 acres. Pay particular attention to the distance between the photo subject and camera points to ensure that the photographs will adequately document the scene or subject and the expected changes.

2. **Identify a witness site.** A witness site is (preferably) an immovable object in the monitoring area that can be easily identified when returning to the area. It serves as a reference to quickly locate the monitoring area and as a reference point from which the camera point and photo directions can be located. Examples of witness sites could be signs, intersection of road, etc. Measure the distance and direction from the camera point to the witness site (note -attach identification tag to the witness site with distance and direction to camera points if possible).

3. **Identify project photo direction(s) from camera point in coordination with the project biologist.** Within selected practice 645 monitoring areas, one camera point should be established at each bird monitoring location to adequately document change. At least one photo should be taken per camera point in a consistent direction for every bird monitoring event. Up to 4 photos (one photo per cardinal direction) may be necessary to document changes over time at each camera point.

4. **Mark camera points.** Camera **points should be permanently marked** to relocate in the future (metal fence posts work well for most purposes); **measure the distance and direction from camera points to the** subject or target scene; obtain coordinates of the camera point.

5. **Assign identification numbers.** Assign identification numbers to all camera points and photo direction (e.g. CP01N, CP01W, CP01S, CP01E, CP02N…).

6. **Record pertinent site information**. Record pertinent information about the monitoring site on a map, aerial photograph, and/or site description form (date, observer, location, site description, objectives, identification numbers, and locations of camera points, include directions of photo).

7. **Repeat photos**. Take a new photo at each camera point, in the same photo direction(s), during each spring/fall bird monitoring event.

8. **Create a site locator field book**.

Equipment Checklist
□ **Camera** □ **Memory cards** □ **Extra batteries** □ **Tripod/pole** □ **GPS**
□ **Forms**□ **Site description and location**
□ **Camera location and photo points**
□ **Photo ID cards** □ **Clipboard** □ **Compass** □ **measuring device**
□ **Copies of original photos (site locator field book)**
□ **Fenceposts OR** □ **Steel stakes** □ **Hammer** □ **Meter board**

Photo identification cards: for each photo, an identification card should be be placed within the camera's field of view each time a photo point is photographed to embed pertinent information about the site into the picture (11x8.5 laminated and use dry erase). The card should contain the site name, camera point identification #, and date. Other information such as the photograph number, time of day, and photographer's initials may also be included.

Summary Photo-Point Monitoring
• Select project & monitoring areas
• Set objectives & method
• Establish, mark, & assign ID numbers to camera points
• Identify a witness site, record site information & create site locator field book
• Take photographs at each camera point with each photo direction during each bird sampling event