

## **Appendix A. Crocker Wind Farm Acoustic Survey Station Photographs and Datasheets**

## **Acoustic Detector Station Cro-1a**



**Station Cro-1a Location**



**Station Cro-1a Orientation**



**Station Cro-1a Detection Cone**



# Acoustic Presence/Probable Absence 2016 Form

Project: Crocker

Station ID: 1a

Start Date/Time (military): 20160722 1925

End Date/Time: 20160725 1734

Observer(s): ETG BLK

## Station Information:

County: Clark State: SD

Datum: NAD27 Zone: 14T Easting: (6 digits) 589247 Northing: (7 digits) 4995068

Detector Type: SM2+ Detector Serial #: 65531 Tablet Location\*: 1

Detector Housing: Ammo Box Toolbox Plastic Tote Other: N/A

Battery source: Internal External If External: volts amp/hrs

## Microphone

Mic Serial#\* 2699 Mic Ht (m): (from ground) 3.048 Mic Channel\* R Audio Div\* 1 Data Div\* 1

Mic Horizontal Orientation: 263 Mic Vertical Orientation: 22 Sound Reception: None Horn Bat Hat PVC Elbow

## All Detector Checklist

Date/Time	Battery Voltage	Mic Check Good? Y/N	Cables, detector housing, mic holder Good?	Data Card(s) Replaced?	Battery Changed?	Sensitivity Setting (normally 6)	Test Indicators (checkmark)	Volume (lowest setting) Yes/No	LED Lights (circle) (should be Standby unless between 1800 and 1830hrs)	Comments (e.g., detector set, detector picked up, moved, knocked over, vandalized, etc.)
20160722 1927	6.52	✓	✓	✓	✓		"Data" lit Static Heard		Record Status Data	Standby Error
20160725 0539	5.46						"Data" lit Static Heard		Record Status Data	Standby Error
							"Data" lit Static Heard		Record Status Data	Standby Error
							"Data" lit Static Heard		Record Status Data	Standby Error

## Habitat Description (within 100m)

% Forested: 10 % Open/Ag: 90 % Water: 0 Dominant Tree Spp: E. Cotton Wood + Siberian Elm

Stand Age: Young Mature Old

## Detector Sampling (circle 1 or more):

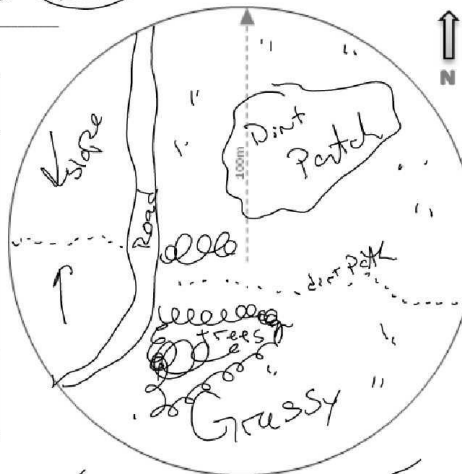
Creek Riparian Pond Bottomland Forest Upland Forest Field Edge Open Field

Cave Entrance Mine Portal Bridge Structure Other:

Topography: Flat Slope High Point Low Point Other:

Habitat Description: Map out habitat features within 100 m radius of Song Meter (x). Indicate direction of microphone using an arrow, include any features of interest (water, buildings, rocky outcrops, etc.). Provide a written description in the space below, including details on width of the road/trail/cutline, size of pond/lake, distance to nearest water, etc.).

Detector is on the north side of a dirt road leading to open grassy fields. Directly to the North is a dried dirt patch, perhaps an old pond. To the west is a corridor created by trees lining the dirt road. The trees extend a bit to the south. Mostly open field. To the far west is an access road which leads to farm houses.



## Photos (check)

Detector Location ✓  
(detector + main habitat surveyed)

Detector Orientation ✓  
(detector + surrounding habitat)

Detection Cone ✓  
(air space sampled)



## **Acoustic Detector Station Cro-1b**



**Station Cro-1b Location**



**Station Cro-1b Orientation**



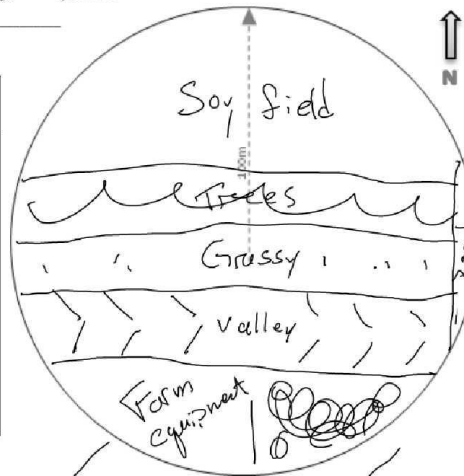
**Station Cro-1b Detection Cone**

**Acoustic Presence/Probable Absence 2016 Form****Project:** Crocker**Station ID:** 1b**Start Date/Time (military):** 20160722 1503**End Date/Time:** 20160726 1726**Observer(s):** ETG BLK**Station Information:****County:** Clark **State:** SD**Datum:** NAD83 **Zone:** 14T **Easting: (6 digits)** 589010 **Northing: (7 digits)** 4995109**Detector Type:** SM2+ **Detector Serial #:** 1584 **Tablet Location\*:** 1**Detector Housing:** Ammo Box Toolbox Plastic Tote Other: N/A**Battery source:** Internal External **If External:** \_\_\_\_\_ volts \_\_\_\_\_ amp/hrs**Microphone****Mic Serial#:** 2736 **Mic Ht (m): (from ground)** 3.048 **Mic Channel#:** R **Audio Div#:** 1 **Data Div#:** 1**Mic Horizontal Orientation:** 270 **Mic Vertical Orientation:** 24 **Sound Reception:** None Horn Bat Hat PVC Elbow

All Detector Checklist						Anabat Only			
Date/Time	Battery Voltage	Mic Check Good? Y/N	Cables, detector housing, mic holder Good?	Data Card(s) Replaced?	Battery Changed?	Sensitivity Setting (normally 6)	Test Indicators (checkmark)	Volume (lowest setting) Yes/No	LED Lights (circle) (should be Standby unless between 1800 and 2800Hz)
20160722 1504	6.46	✓	✓	✓	✓		"Data" lit Static Heard		Record Status Data Standby Error
20160725 1733	5.44						"Data" lit Static Heard		Record Status Data Standby Error
							"Data" lit Static Heard		Record Status Data Standby Error
							"Data" lit Static Heard		Record Status Data Standby Error

**Habitat Description (within 100m)**% Forested: 25 % Open/Ag: 75 % Water: 0 **Dominant Tree Spp:** Ponderosa Pine (Best guess w/ 1 tree app)**Stand Age:** Young Mature Old**Detector Sampling (circle 1 or more):**Creek Riparian Pond Bottomland Forest Upland Forest Field Edge Open FieldCave Entrance Mine Portal Bridge Structure Other: \_\_\_\_\_**Topography:** Flat Slope High Point Low Point Other: \_\_\_\_\_**Habitat Description:** Map out habitat features within 100 m radius of Song Meter (x). Indicate direction of microphone using an arrow. Include any features of interest (water, buildings, rocky outcrops, etc.). Provide a written description in the space below, including details on width of the road/trail/cutline, size of pond/lake, distance to nearest water, etc.).

Detector is between a line of pine trees to the north and a man-made valley to the south (~20m deep). To the north is a soy bean field. To the south is a farm. To the far east is an access road. Detector is facing west along the tree line.

**Photos (check)****Detector Location** ✓  
(detector + main habitat surveyed)**Detector Orientation** ✓  
(detector + surrounding habitat)**Detection Cone** ✓  
(air space sampled)

## **Acoustic Detector Station Cro-2a**



**Station Cro-2a Location**



**Station Cro-2a Orientation**



# Acoustic Presence/Probable Absence 2016 Form



Project: Crocker  
 Start Date/Time (military): 20160725 1611  
 Observer(s): ETG BLK

Station ID: 2a  
 End Date/Time: 20160727 0931

## Station Information:

County: Clark State: SD  
 Datum: NAD27 Zone: 14T Easting: (6 digits) 597763 Northing: (7 digits) 4985260  
 Detector Type: SM3 Detector Serial #: 302518 Tablet Location\*: 1  
 Detector Housing: Internal Ammo Box Toolbox Plastic Box Other:             
 Battery source: Internal External If External:            volts            amp/hrs

## Microphone

Mic Serial#\* 0532 Mic Ht (m): (from ground) 3.048 Mic Channel\* R Audio Div\* 1 Data Div\* 1  
 Mic Horizontal Orientation: 255 Mic Vertical Orientation: 23 Sound Reception: None Horn Bat Hat PVC Elbow

All Detector Checklist						Anabat Only			
Date/Time	Battery Voltage	Mic Check Good? Y/N	Cables, detector housing, mic holder Good?	Data Card(s) Replaced?	Battery Changed?	Sensitivity Setting (normally 6)	Test Indicators (checkmark)	Volume (lowest setting) Yes/No	LED Lights (circle) (should be Standby unless between 1800 and 0800hrs)
20160725 1616	6.5	✓	✓	✓	✓		"Data" lit Static Heard		Record Status Data Standby Error
20160727 0931	5.6						"Data" lit Static Heard		Record Status Data Standby Error
							"Data" lit Static Heard		Record Status Data Standby Error
							"Data" lit Static Heard		Record Status Data Standby Error

## Habitat Description (within 100m)

% Forested: 15 % Open/Ag: 85 % Water: 0 Dominant Tree Spp: Elm

Stand Age: Young Mature Old

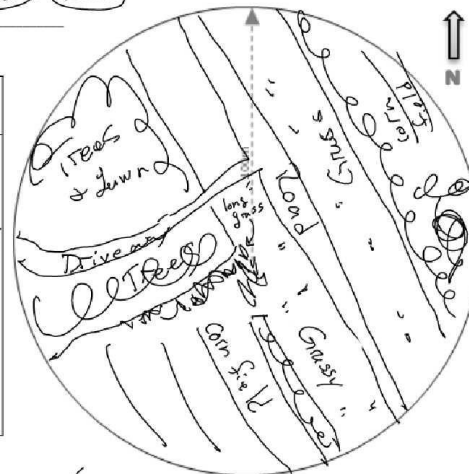
## Detector Sampling (circle 1 or more):

Creek Riparian Pond Bottomland Forest Upland Forest Field Edge Open Field  
 Cave Entrance Mine Portal Bridge Structure Other:           

Topography: Flat Slope High Point Low Point Other:           

Habitat Description: Map out habitat features within 100 m radius of Song Meter (x). Indicate direction of microphone using an arrow, include any features of interest (water, buildings, rocky outcrops, etc.). Provide a written description in the space below, including details on width of the road/trail/cutline, size of pond/lake, distance to nearest water, etc.).

Detector is at the edge of a corn field, to the west & southwest. Directly east is a road, trees and another corn field. The road travels N-S. To the NW is a driveway leading to a home.



## Photos (check)

Detector Location ✓  
 (detector + main habitat surveyed)

Detector Orientation ✓  
 (detector + surrounding habitat)

Detection Cone ✓  
 (air space sampled)

## **Acoustic Detector Station Cro-2b**



**Station Cro-2b Location**



**Station Cro-2b Orientation**



**Station Cro-2b Detection Cone**



**Acoustic Presence/Probable Absence 2016 Form**

**Project:** Crocker  
**Start Date/Time (military):** 20160725 1636  
**Observer(s):** ETG BLK

**Station ID:** 2b  
**End Date/Time:** 20160727 0918

**Station Information:**

**County:** Clark **State:** SD  
**Datum:** NAD27 **Zone:** 14T **Easting: (6 digits)** 597419 **Northing: (7 digits)** 4995326  
**Detector Type:** SM2+ **Detector Serial #:** 16823 **Tablet Location\*:** 1  
**Detector Housing:** Ammo Box Toolbox Plastic Tote Other: N/A  
**Battery source:** Internal External **If External:** \_\_\_\_\_ volts \_\_\_\_\_ amp/hrs

**Microphone**

**Mic Serial#\*** 2744 **Mic Ht (m): (from ground)** 3.048 **Mic Channel\*** R **Audio Div\*** 1 **Data Div\*** 1  
**Mic Horizontal Orientation:** 162 **Mic Vertical Orientation:** 22 **Sound Reception:** Noise Horn Bat Hat PVC Elbow

**All Detector Checklist**

Date/Time	Battery Voltage	Mic Check Good? Y/N	Cables, detector housing, mic holder Good?	Data Card(s) Replaced?	Battery Changed?	Sensitivity Setting (normally 6)	Test Indicators (checkmark)	Volume (lowest setting) Yes/No	LED Lights (circle) (should be Standby unless between 1800 and 2800Hz)	Comments (e.g., detector set, detector picked up, moved, knocked over, vandalized, etc.)
20160725 1639	6.44	✓	✓	✓	✓		"Data" lit Static Heard		Record Status Data	Standby Error
20160727 0928	5.51						"Data" lit Static Heard		Record Status Data	Standby Error
							"Data" lit Static Heard		Record Status Data	Standby Error
							"Data" lit Static Heard		Record Status Data	Standby Error

**Anabat Only****Habitat Description (within 100m)**

**% Forested:** 20 **% Open/Ag:** 50 **% Water:** \_\_\_\_\_ **Dominant Tree Spp:** Elm

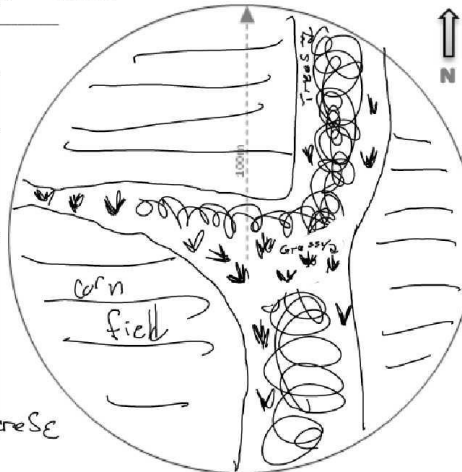
**Stand Age:** Young Mature Old**Detector Sampling (circle 1 or more):**

Creek Riparian Pond Bottomland Forest Upland Forest Field Edge Open Field  
Cave Entrance Mine Portal Bridge Structure Other: \_\_\_\_\_

**Topography:** Flat Slope High Point Low Point Other: \_\_\_\_\_

**Habitat Description:** Map out habitat features within 100 m radius of Song Meter (x). Indicate direction of microphone using an arrow, include any features of interest (water, buildings, rocky outcrops, etc.). Provide a written description in the space below, including details on width of the road/trail/cutline, size of pond/lake, distance to nearest water, etc.).

Detector is sandwiched between 3 corn fields lined by Elm trees. At the intersection the grass is waist height, and it borders all of the fields. One field is SW, one is N + NW, and the other is to the east. Trees also line these borders, but they are the most dense to the SE. Also dead trees are SE

**Photos (check)**

**Detector Location** ✓  
 (detector + main habitat surveyed)

**Detector Orientation** ✓  
 (detector + surrounding habitat)

**Detection Cone** ✓  
 (air space sampled)