

Appendix 1 – USGS Patuxent Wildlife Research Center Bird Point Count Database

The **Bird Point Count Database** <http://www.pwrc.usgs.gov/point/> is an open submission archive of bird point counts that currently has data from 18 US states, Puerto Rico, and Alberta. The current site (Version 2) was established in 2006. Most data are from the eastern-half of the continental US; according to the site statistics. The site statistics appear to exaggerate the number of distinct sites and points accessible in the database, but it is evident that there are several thousand points scattered over greater than 100 sites. The surveys include breeding bird surveys, marsh bird surveys, and migratory bird surveys

The data are searchable by several geographic criteria, including state, physiogeographic region, or a biome-based bird conservation area. It is also searchable by bird species or year. On the Home Page, there is a brief description of point count methodology, and links to technical information on the methodology.

To access data, search or explore to find a geographic unit of interest (e.g. *New York* or *Lower Great Lakes Plain*). Selecting a desired geographic unit will list *Land Units* (e.g. *Montezuma NWR*). Note that the listing can be sorted by *Land Unit*, *State*, type of site, and number of points or surveys.

Once a *Land Unit* has been selected, you will details about the land unit, including the years surveyed, the number of points surveyed, and the methodological details of the point counts (highlighted in brown box). Click ***Inventories*** to access a list of all species detected among the point counts for the *Land Unit*.

Click ***List of Points and Coordinates*** to see a list of all points surveyed within the *Land Unit* by a code name, along with a listing of other information including geocoordinates. Click on a selected point to access the summary table of species detected at that point, a description of the point, and its georeference. The georeference may be in decimal degrees or UTM. UTM georeferences be easily converted to decimal degrees (see Appendix 2).

There are several things to be aware of in using these data:

1. The summary table for a point count location is usually the cumulative presence-absence for all surveys that year. Sites have variable numbers of surveys, and species detected will increase with survey effort. Under ***Study Name*** in the ***Land Unit Description*** there is a list of the number of surveys per year. This information can also be accessed by clicking ***Learn More*** in the ***Point Count Point*** window.
2. The point count survey methodology, although generally standardized, varies across studies in important details including period during the year of the study (e.g. breeding season, migration), duration of a point count sample, and radial distance of samples. The methodological details can be found under ***Study Name*** in the ***Land Unit Description*** or accessed by clicking ***Learn More*** in the ***Point Count Point*** window.

The accuracy of the data is very sensitive to the skill and experience of the surveyor. I have detected some obvious errors likely due to misidentifications in some point count records.

An example of how to locate a point count data set (e.g. a point count location in Montezuma National Wildlife Refuge, New York State):

1. From the Bird Count Database **Home page**, under the option **Explore** select **Search by state**.



2. Select **New York**. Note that there are currently 9 land units and 1325 points in the Point Count Database for New York State.
3. Select **Montezuma NWR**. Note that there are currently 91 points and 246 surveys in the Point Count Database for the Montezuma National Wildlife Refuge.

4. Selecting **NWR** brings you to a page **Land Unit Description**. You will see listed information such as the number of points (91), the number of different studies (6), the date-span of the point counts (2007-2011).

Land Unit Description

You are here: [Home](#) / [Explore](#) / [Land Unit Description](#)

Name: Montezuma NWR
Type: National Wildlife Refuge
State: NY
Survey sites: 91
BCR: Lower Great Lakes/ St. Lawrence Plain
PIF Physiogr. Reg.: Lower Great Lakes Plain
Survey Years: 2007-2011
Contact: [Linda Ziembra](#)
Studies: 6
More: [Inventory](#) | [List of Points with Coordinates](#)

Studies

Study name: **10 min Forested Wetland Monitoring**
Start year:2008 End year:2012
Purpose:
Field Method:0,1,2,...,9min w/ 25,50,100,>100m (Knutson 2008)
Surveys:

Survey year	Points surveyed	Surveys
2008	33	2.00 per point
2009	33	2.00 per point
2010	33	1.00 per point

Study name: **10 min Grassland Monitoring**
Start year:2008 End year:2012
Purpose:
Field Method:0,1,2,...,9min w/ 25,50,100,>100m (Knutson 2008)
Surveys:

Survey year	Points surveyed	Surveys
2008	13	3.00 per point
2009	15	3.00 per point
2010	15	3.00 per point

Summary of Surveys

Key Links


Metadata for Surveys

- From the **Land Unit Description** page, select **Inventory** to access a list of all species detected on any survey.

Species Inventory

You are here: [Home](#) / [Explore](#) / [Species Inventory](#)

Species seen on surveys at Montezuma NWR

Filtered on: **Years: all years** [Change Filter](#)
114 species found. 

Species	Total Individuals	Total Flyovers	Distinct Points
uninterpretable	14	0	11
Canada Goose	69	0	10
Trumpeter Swan	2	0	1
Wood Duck	70	0	16
Gadwall	4	0	2
Mallard	29	0	10
Northern Shoveler	4	0	1
Redhead	4	0	2
Hooded Merganser	20	0	3
Wild Turkey	8	0	6
Pied-billed Grebe	80	0	16
Double-crested Cormorant	28	0	2
American Bittern	23	0	8
Least Bittern	2	0	2
Great Blue Heron	107	0	33
Great Egret	6	0	3
Green Heron	3	0	3
Turkey Vulture	5	0	4
Osprey	24	0	15
Bald Eagle	7	0	6
Northern Harrier	3	0	3
unid. Accipiter Hawk	1	0	1
Red-tailed Hawk	1	0	1
Virginia Rail	9	0	4
Sora	3	0	2
Common Moorhen	75	0	14
American Coot	10	0	8
Killdeer	12	0	9
American Woodcock	1	0	1
unid. Gull	5	0	4

- From the **Land Unit Description** page, select **List of Points with Coordinates** to access a list of all 91 points surveyed at Montezuma NWR.

Points

You are here: [Home](#) / [Explore](#) / [Land Unit Description](#) / [Points \(explore\)](#)

Selected: Points from TOTAL POINTS: 91				
Point	Description	Yr Est.	Slope/aspect/Elev.	Coords: Lat/lon Or UtmX/Y
AV1	Avery	2007	4/93/121	43.0065071/-76.7580471
AV2	Avery	2007	1/161/118	43.0023815/-76.7598924
CR1		2010	8/73/	42.9992087/-76.7914290
CR2		2010	0/40/	42.9964677/-76.7951032
CR3		2010	1/103/	42.9958672/-76.7903260
CR4		2010	2/292/	42.9938157/-76.7931001
CR5		2010	2/250/	42.9925919/-76.7895930
EB1		2010	4/87/	42.9782003/-76.7804803
EB2		2010	7/69/	42.9745198/-76.7814778
EB3		2010	2/78/	42.9699315/-76.7783166
SU1	Subheadquarters	2008	2/82/119	42.9769932/-76.7694818
SU2	Subheadquarters	2008	4/103/120	42.9727138/-76.7696165
WA1	Waugh	2008	4/268/122	42.9900483/-76.7915922
WA2	Waugh	2007	3/84/119	42.9888637/-76.7878779
WA3	Waugh	2008	3/286/123	42.9868004/-76.7902590
WA4	Waugh	2007	2/71/119	42.9849794/-76.7863548
WA5		2010	1/317/	42.9913256/-76.7974191
WA6		2010	2/38/	42.9911316/-76.8011670
WI1	Wilgoose	2007	5/65/124	42.9623493/-76.7696136
WI2	Wilgoose	2007	4/76/124	42.9580671/-76.7670144

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- Select the first listed point in the **List of Points with Coordinates** (AV1). You will see metadata on the point, including its location and time span, and a list of species detected during the point count.

Survey Point

You are here: [Home](#) / [Explore](#) / [Survey Point](#)

Point Count Surveys from: Montezuma NWR
Point (actual survey site): AV1
Coordinates: Lat / Lon: 43.0065071 / -76.7580471 UTM zone/x/y: 18 / 356718.0 / 4763037.0
Elev: 121m **Slope:** 4° **Aspect:** 93°
Description: Avery

Survey Summary			
Season	First Yr	Latest Yr	~ # Of Surveys
Breeding	2007	2010	10

Point Species List				
Species	Freq. Occurrence On Surveys			
	2007	2008	2009	2010
Gadwall	-	-	-	X
Mallard	-	-	X	-
Great Blue Heron	-	X	-	-
Osprey	-	-	X	-
Bald Eagle	-	-	-	X
Willow Flycatcher	X	X	-	X
Eastern Kingbird	-	-	X	-
Tree Swallow	X	X	X	X
Barn Swallow	X	X	X	-
Marsh Wren	-	X	-	-
American Robin	X	X	-	X
Yellow Warbler	-	X	-	-
Common Yellowthroat	X	X	-	X
Savannah Sparrow	-	X	X	X
Song Sparrow	-	X	X	X
Swamp Sparrow	-	-	X	-
Red-winged Blackbird	X	X	X	X
Common Grackle	X	X	X	X
American Goldfinch	-	-	X	X

KEY:
 "X" = Found during at least one survey during this year
 "- " = Not found during this year's counts

Note: these data should not be interpreted other than as simple occurrence data, and over/under counted species may simply be a factor of sampling time, purpose of survey, seasonality, and frequency of surveys.

} Metadata for Point

} Occurrence Data per Survey-Year