

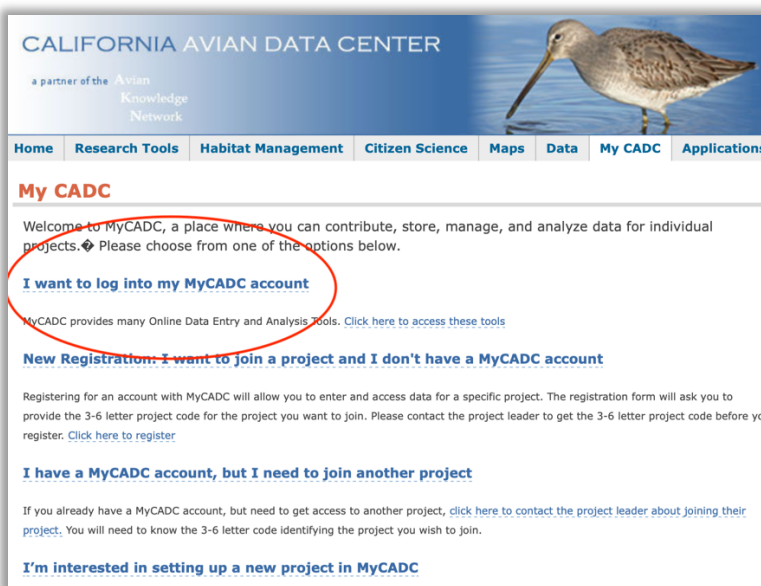
Using CADC2 to record your block observations for MCBBA2

This document will teach you how to log into CADC2 and use it to record your breeding bird observations. The last section will teach you how use the [MCBBA Data Explorer](#) to determine the latitude and longitude coordinates for a location within your block and to determine the distance you travelled.

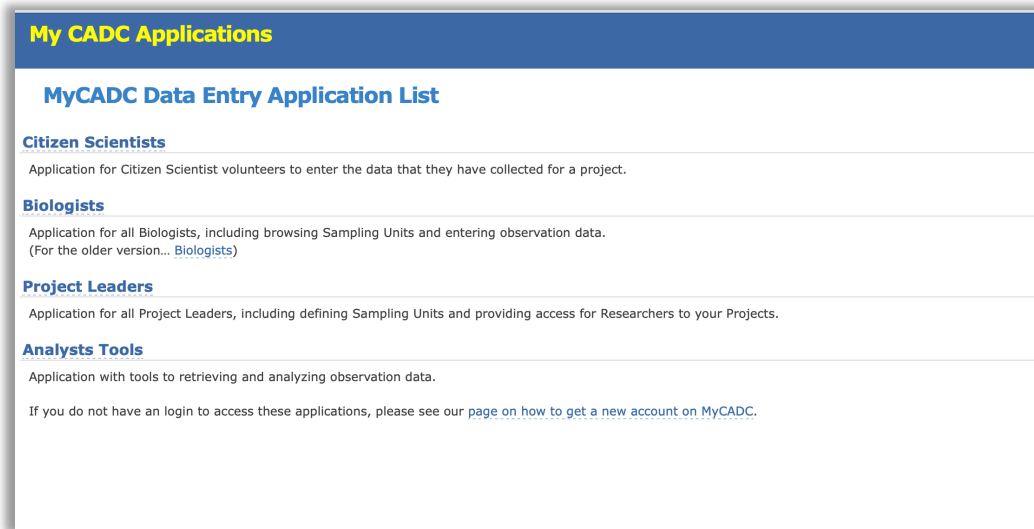
1. Click <https://data.pointblue.org/cadc2/> to open the screen shown below and then click the “Go” button in the orange/red box on the right.



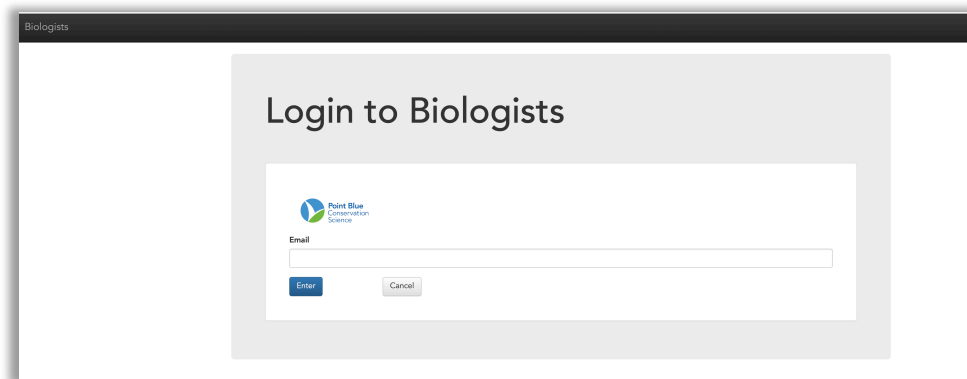
2. Click the blue link labelled **I want to log into MyCADC account.**



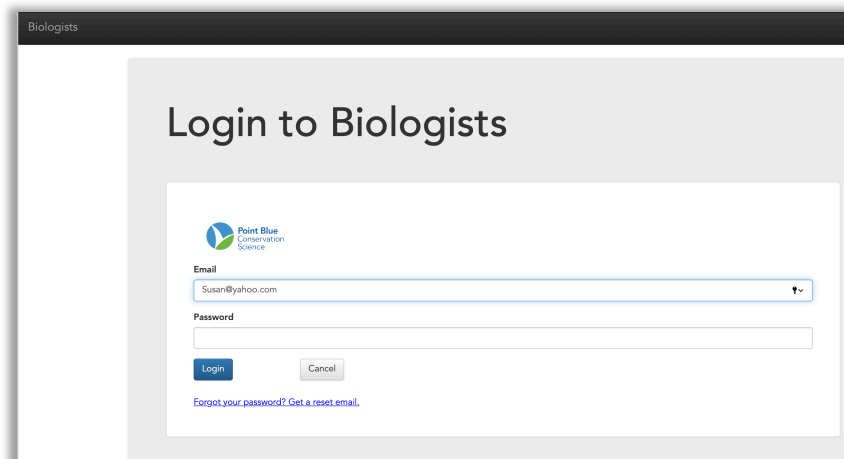
3. Click the blue link labelled **Biologists**.




4. Enter your email address and press the blue **Enter** button.



5. Enter your password and then click the blue **Login** button.




- Make sure that MCBBA2- Marin County Breeding Bird Atlas 2 is the highlighted project and then select **Area Search Surveys** from the list on the right, under the large heading labelled “Project Observation Types”.

Biologists 

Project: MCBBA2 (Biologist)

Welcome to AKN Biologists

AKN Biologists is an application for entering and reviewing field observations in support of the Avian Knowledge Network, hosted by [Point Blue Data Solutions](#)




Projects

What project do you want to work in?

[Quick Tips >>](#)

MCBBA2 - Marin County Breeding Bird Atlas 2

SFSS - San Francisco Shorebird Surveys



Project Observation Types

For project: MCBBA2

What type of observations would you like to work on?


[Quick Tips >>](#)

- [Area Search Surveys](#)
- [Site Conditions](#)

Locations and Sampling Units

- [Get GPS files or maps for Project](#) ▶

- Locate and then select your block from the long list of all survey blocks.

Biologists 

Project: MCBBA2 (Biologist)

Type: Area Search

Area Survey Locations

Where are the observations located?

[Quick Tips >>](#)

- [A > 1-10 \(1-10\)](#)
- [A > 1-12 \(1-12\)](#)
- [A > 1-19 \(1-19\)](#)
- [A > 1-20 \(1-20\)](#)
- [A > 1-21 \(1-21\)](#)
- [A > 1-22 \(1-22\)](#)
- [A > 1-23 \(1-23\)](#)
- [A > 1-24 \(1-24\)](#)
- [A > 1-7 \(1-7\)](#)
- [A > 1-8 \(1-8\)](#)
- [A > 1-9 \(1-9\)](#)
- [A > 2-13 \(2-13\)](#)
- [A > 2-14 \(2-14\)](#)
- [A > 2-15 \(2-15\)](#)
- [A > 2-16 \(2-16\)](#)
- [A > 2-17 \(2-17\)](#)
- [A > 2-18 \(2-18\)](#)
- [A > 2-2 \(2-2\)](#)
- [A > 2-20 \(2-20\)](#)
- [A > 2-22 \(2-22\)](#)
- [A > 4-11 \(4-11\)](#)
- [A > 4-12 \(4-12\)](#)
- [A > 4-9 \(4-9\)](#)
- [A > 5-1 \(5-1\)](#)
- [A > 5-10 \(5-10\)](#)
- [A > 5-11 \(5-11\)](#)
- [A > 5-12 \(5-12\)](#)
- [A > 5-13 \(5-13\)](#)
- [A > 5-15 \(5-15\)](#)
- [A > 5-16 \(5-16\)](#)
- [A > 5-17 \(5-17\)](#)
- [A > 5-18 \(5-18\)](#)
- [A > 5-19 \(5-19\)](#)
- [A > 5-2 \(5-2\)](#)
- [A > 5-20 \(5-20\)](#)

8. Click the blue **Start** button to begin your new survey.

The screenshot shows the 'Create a new visit' form in the Biologists application. At the top, there is a header with 'Biologists' and a home icon, followed by 'Project: MCBBA2 (Biologist)', 'Type: Area Search', and 'Location: 5-12 (5-12)'. Below this is a green notification bar stating: 'You have observations that have not been saved. [Go to the observations page and save to database](#) or [discard it](#).' The main section is titled '+ Create a new visit' with the instruction 'Choose from the protocols below and select the Start button.' There are two dropdown menus: 'Observation protocol' with the selected value 'MARIN_BBA - BBA for Marin county CA' and 'Site condition protocol' with the selected value 'MARIN_BBA_EVENT - Event data for Marin BBA surveys'. A blue 'Start' button is located below these menus. At the bottom, there is a section for 'Review / edit an existing visit' with the instruction 'Review and edit an existing visit below by selecting the date.' and a 'Quick Tips >>' link. A yellow box at the bottom states 'No events at this location.' and '0 rows'.

9. In the **General information** section, enter the Date, Start Time, and End Time of your visit. You'll need to type "pm" if your start and end times were in the afternoon, or just enter the times using military time. For example, you could type either 1:30 pm or 13:30.

The screenshot shows the 'General' section of the Biologists application. At the top, there is a header with 'Biologists' and a home icon, followed by 'Project: MCBBA2 (Biologist)', 'Type: Area Search', 'Location: 12-22 (12-22)', and 'Visit: New'. Below this is a section for 'Protocols: MARIN_BBA' and 'MARIN_BBA_EVENT'. The 'General' section is titled with a list icon and the word 'General'. It contains the instruction 'Enter the following overall information about your visit.' and a 'Quick Tips >>' link. There are three input fields: 'Date' with the value '2021-04-2', 'Start Time' with the value '09:00', and 'End Time' with the value '13:00'. Below these are two more input fields: 'Visit' with the value 'None' and 'Data Sharing' with an information icon.

10. Select your name from the drop-down list, then enter the number of observers and type in the other observer names (if any).

The screenshot shows a web form with a dropdown menu on the left containing a list of names. 'Kelly, Susan' is selected and highlighted in blue. To the right of the dropdown, the form includes a section for 'Area Search' with 'Location: 12-22 (12-22)' and 'Visit: New'. Below this, there is a section for 'End Time' with a value of '13:00'. Further down, there is a section for '# of other observers' with a value of '1', and a text input field for 'Other observer names' with the placeholder text 'Enter names'.

11. In the **Site Conditions** section, enter your party hours and distance traveled (in kilometers). To convert miles to kilometers, multiply your miles * 1.609344.

The screenshot shows the 'Site Conditions' section of a web form. At the top, there is a header with 'Biologists' and a home icon. Below this, there is a section for 'Project: MCBBA2 (Biologist)', 'Type: Area Search', 'Location: 12-22 (12-22)', and 'Visit: New'. Underneath, there is a section for 'Protocols: MARIN_BBA' and 'MARIN_BBA_EVENT'. The main section is titled 'Site Conditions' with a tree icon and the text 'Enter the following data about your visit for this date.' Below this, there is a 'Quick Tips >>' link. The 'TRANSECT' section contains two fields: '* Party Hours' and '* Distance Traveled' (km).

12. In the **Observations** section enter your data from this visit, including species, count, breeding code, and (only for the breeding codes detailed on the next page) the latitude and longitude where you observed them. Once you start typing the species code, a drop-down list will appear so you can select the correct code, as shown below.

H Observations

Enter the species you observed at this location.

[Quick Tips >>](#)

[Search the species database for what species are allowed for this Protocol](#)

Enter a Count for each Species entered. Click **Save All** below when finished.

If you did not see any species, leave this area blank and click **Save - No Species Detected** below.

Protocol: [MARIN_BBA](#)

#	Species ⓘ	Count ⓘ	Breeding ⓘ	Latitude ⓘ	Longitude ⓘ	Notes ⓘ	
1	can						✕
2	CANG - Canada Goose						✕
3	CAGO - Canada Goose						✕
4	AMWI - American Wigeon						✕
5	ABDU - American Black Duck						✕
6	MEDU - Mexican Duck						✕
7	CANV - Canvasback						✕
8	AMFL - American Flamingo						✕
9	GFLA - American Flamingo						✕
10	AWPE - American White Pelican						✕
11	BRPE - Brown Pelican						✕
12	AMBI - American Bittern						✕
13	AMKE - American Kestrel						✕
14	AMCO - American Coot						✕
15	AMGP - American Golden-Plover						✕
16	LGPL - Unid. Lesser or American Golden-Plover						✕
17	AMOY - American Oystercatcher						✕
18	AMAV - American Avocet						✕
19	AMWO - American Woodcock						✕
20	AFCD - African Collared-Dove						✕
21	MWPP - Mexican Whip-poor-will						✕
22	MEVI - Mexican Violetear						✕
23	KBTO - Keel-billed Toucan						✕
24	CAJA - Canada Jay						✕
+ 20 rows	AMCR - American Crow						
	CANW - Canyon Wren						
	AMDI - American Dipper						
	AMRO - American Robin						
	AMPI - American Pipit						

[Save All](#)
[Save - No Species Detected](#)

If you've observed more than one breeding code for the same species, create additional rows for that species and use the relevant breeding code for each row. As shown below, I recorded 3 CANG (Canada Goose) in the first row and 40 in the second because we observed 3 goslings with their parents. I entered the goslings as FY (Fledged Young) in the first row and recorded the other CANGs with the code H.

Biologists

Project: MCBBA2 (Biologist)

Type: Area Search

Location: 12-22 (12-22)

Visit: 2021-04-21

Observations

Species observations with details, layout and titles dependent on protocol.

Quick Tips >>

☐ Scroll observations (Beta)

Observation Protocol:

MARIN_BBA

Total Birds Counted:

409

Download CSV

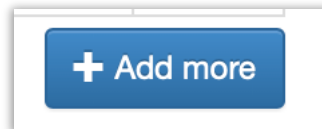
Species	Count	Breeding	Latitude	Longitude	Notes	
CANG	3	FY	38.02846	-122.51719		X
CANG	40	H				X
MUSW	2	H				X
GADW	6	P				X
BRBL	8	M				X
RWBL	20	M				X
WEBL	1	AE	38.02291	-122.52015	Observed an adult sitting on top of a nest box, flying off, an...	X
AMCO	12	H				X
AMCR	4	H				X
MODO	2	H				X
GREG	3	O				X
HOFI	10	H				X
COGA	1	H				X
LEGO	1	H				X
NOHA	2	P				X
NOHA	2	V	38.02257	-122.50679		X
GRHE	1	H				X
ANHU	3	M			All males, all displaying	X
KILL	1	O				X
WTKI	1	A	38.02605	-122.51867	Observed an adult WTKI repeatedly mobbing an AMCR in th...	X
MALL	50	H				X
MALL	2	FY	38.02740	-122.51741	Swimming with an adult female in the first pond at Las Galli...	X
NOMO	3	M				X
BCNH	5	H				X
BLPH	1	H				X
ROPI	15	H				X
CORA	1	H				X

Always enter the latitude and longitude for the Probable and Confirmed codes listed in the table below. **Be sure to enter them in decimal format, as shown in the previous illustration.**

You can use the MCBBA Data Explorer to help you determine the coordinates, as explained in the section that follows these instructions, under the heading **How to use the MCBBA Data Explorer's Print Map feature.**

Probable	
T	Territorial behavior, singing 7+ days
D	Displays, bonding, copulation
V	Visiting potential nest site
N	Nest building by wren, woodpecker, corvid, plover
Confirmed	
NB	Nest building/ all other spp.
DD	Distraction display
NU	Nest recently used
FY	Fledged young
AE	Adult entering nest site
FS	Fecal sac
CF	Carrying food
NE	Nest with eggs
NY	Nest with young

13. If you have more than 20 observations, use the blue [Add more](#) button to add more rows.



14. When you've entered all your observations, click the blue Save All button at the bottom of the list of observations.



Now your observations are saved in the database. The data status is Raw" so you can still review your entries and edit as necessary. Notice the message shown below that explains how to edit: **Double click to edit** any data with the blue vertical bar (|) next to it.

Review or Edit Area Search / Area Survey Visit

Detailed information about a specific set of observations for a survey. **Double click to edit** any data with the blue vertical bar (|) next to it.

 [Quick Tips >>](#)


15. Once you're certain you've entered all your observations correctly, click the blue button labeled "[Proofing completed.](#)"

Data status is currently RAW. When you have finished proofing and reviewing this visit, click:


✓ Proofing completed

How to Look up a Species Code

If you're unsure of a species code click the blue link near the top of the screen, [Search the species database for what species are allowed for this Protocol](#).

 **Observations**

Enter the species you observed at this location.

 [Quick Tips >>](#)

[Search the species database for what species are allowed for this Protocol](#)

Enter a Count for each Species entered. Click **Save All** below when finished.

If you did not see any species, leave this area blank and click **Save - No Species Detected** below.

Protocol: [MARIN_BBA](#)

Species Lookup For Protocol MARIN_BBA

Type (at least 2 letters) to lookup either a species scientific name, common name and/or a 4 letter species code.

Search for:

swallow

23 found

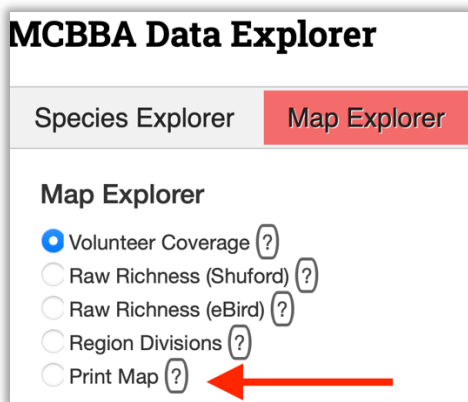
STKI: Swallow -tailed Kite Elanoides forficatus	STGU: Swallow -tailed Gull Creagrus furcatus	LSTS: Lesser Swallow -tailed Swift Panyptila cayennensis
GSTS: Great Swallow -tailed Swift Panyptila sanctihieronymi	TRES: Tree Swallow Tachycineta bicolor	MANS: Mangrove Swallow Tachycineta albilinea
GOSW: Golden Swallow Tachycineta euchrysea	VGSW: Violet-green Swallow Tachycineta thalassina	BAHS: Bahama Swallow Tachycineta cyaneoviridis
BAWS: Blue-and-white Swallow Pygochelidon cyanoleuca	BCSW: Black-capped Swallow Notiochelidon pileata	WTGS: White-thighed Swallow Neocheilidon tibialis
NRWS: Northern Rough-winged Swallow Stelgidopteryx serripennis	SRWS: Southern Rough-winged Swallow Stelgidopteryx ruficollis	BANS: Bank Swallow Riparia riparia
CLSW: Cliff Swallow Petrochelidon pyrrhonota	CASW: Cave Swallow Petrochelidon fulva	PERU: Chestnut-collared Swallow Petrochelidon rufocollaris
BARS: Barn Swallow Hirundo rustica	UNSW: Unid. Swallow Hirundinidae sp.	XXSW: Unid. Swallow /Swift Aves sp.
XSWA: Unid. Swallow Hirundinidae sp.	SWTA: Swallow Tanager Tersina viridis	

In the example shown above I searched for *swallow* and found 23 codes for the different species of swallows permitted in this database. Notice that it includes the code **XSWA** for swallows that can't be identified to a specific species.

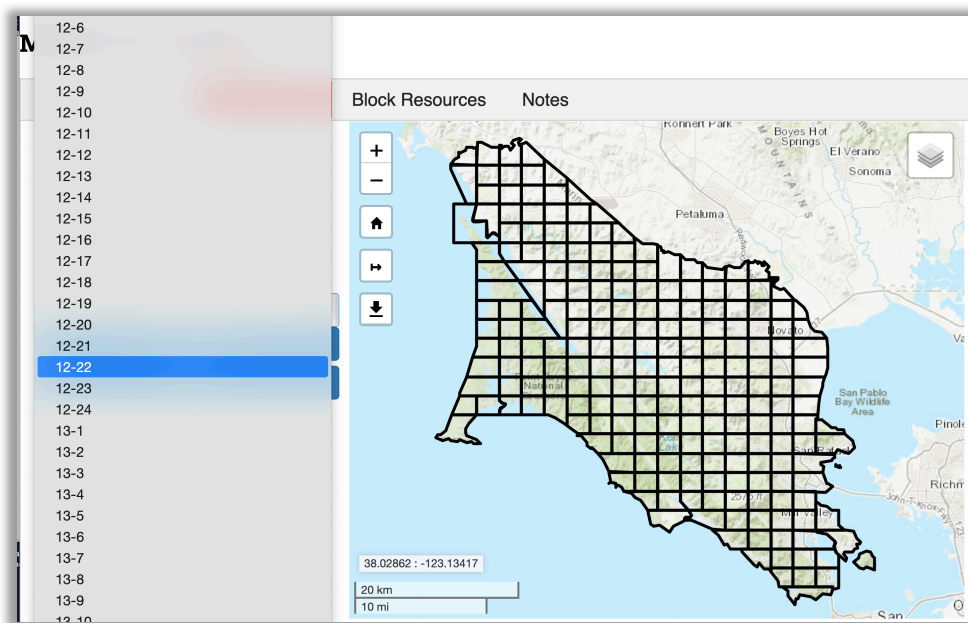
How to use the MCBBA Data Explorer's Print Map feature

This section will teach you how to open the map file for your block from the [MCBBA Data Explorer](#) and then use it to determine the latitude and longitude coordinates for a location within the block where you observed breeding bird evidence. It will also demonstrate how to use the Polyline Measure tool determine how far you travelled while birding.

1. Open the MCBBA Data Explorer, at <https://mcbba.github.io/webmap/mcbba>. select the **Map Explorer** tab and then click **Print Map**.



2. Open the gray drop-down list of block numbers, scroll down the list until you've highlighted your block and then select it.



3. Click the blue **Zoom to Block** button.

MCBBA Data Explorer

Species Explorer
Map Explorer

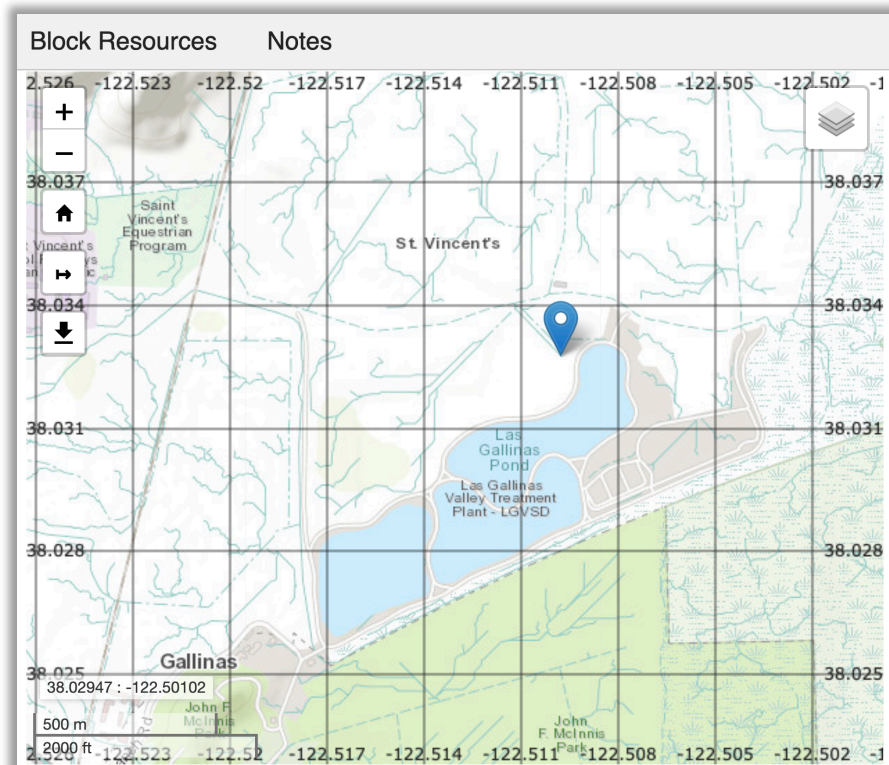
Map Explorer

☐ Volunteer Coverage (?)
☐ Raw Richness (Shuford) (?)
☐ Raw Richness (eBird) (?)
☐ Region Divisions (?)
☒ Print Map (?)

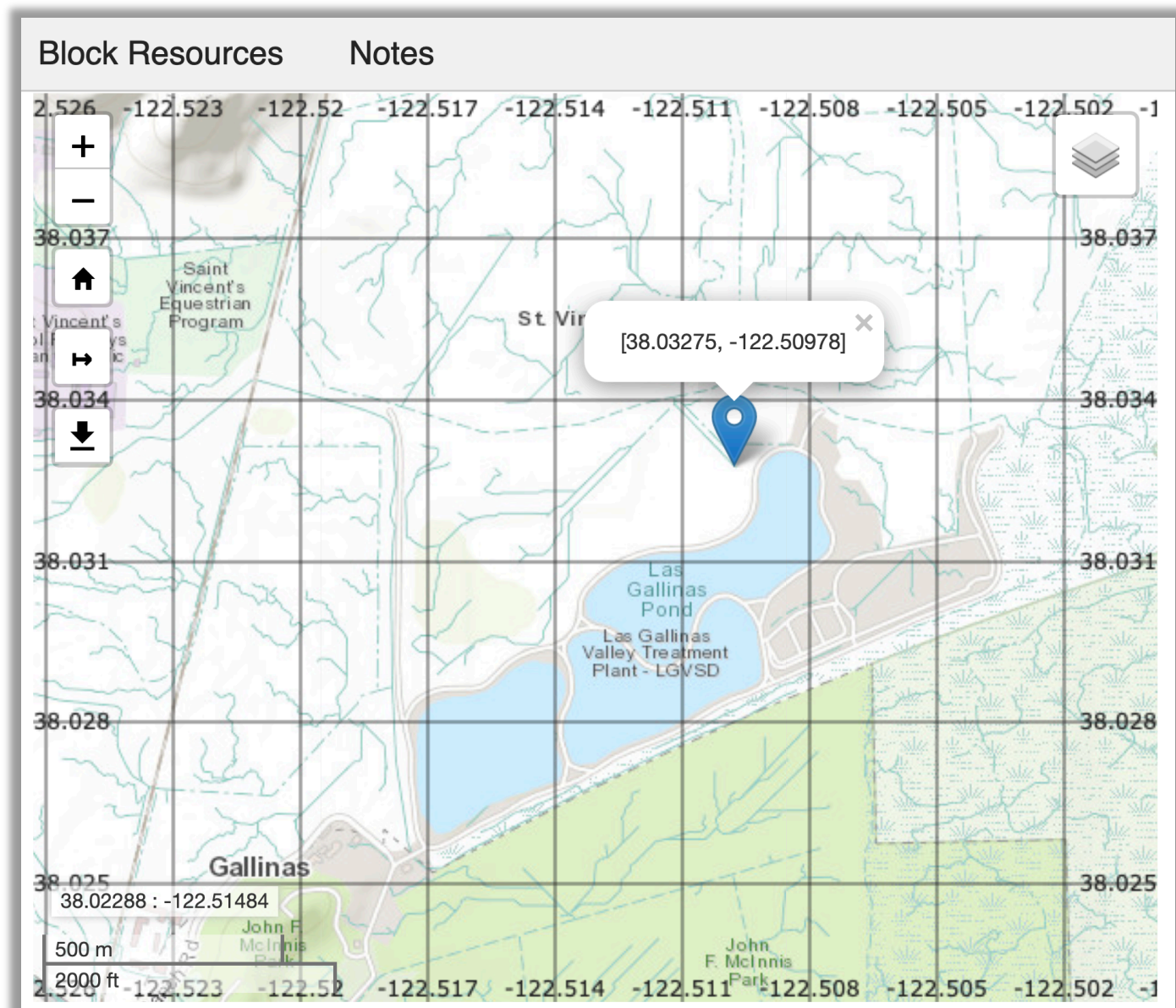
12-22

Zoom to Block

- Right-click on the map where you want to mark a specific location where you observed breeding activity. This will place a pin marker on your map, as shown below.

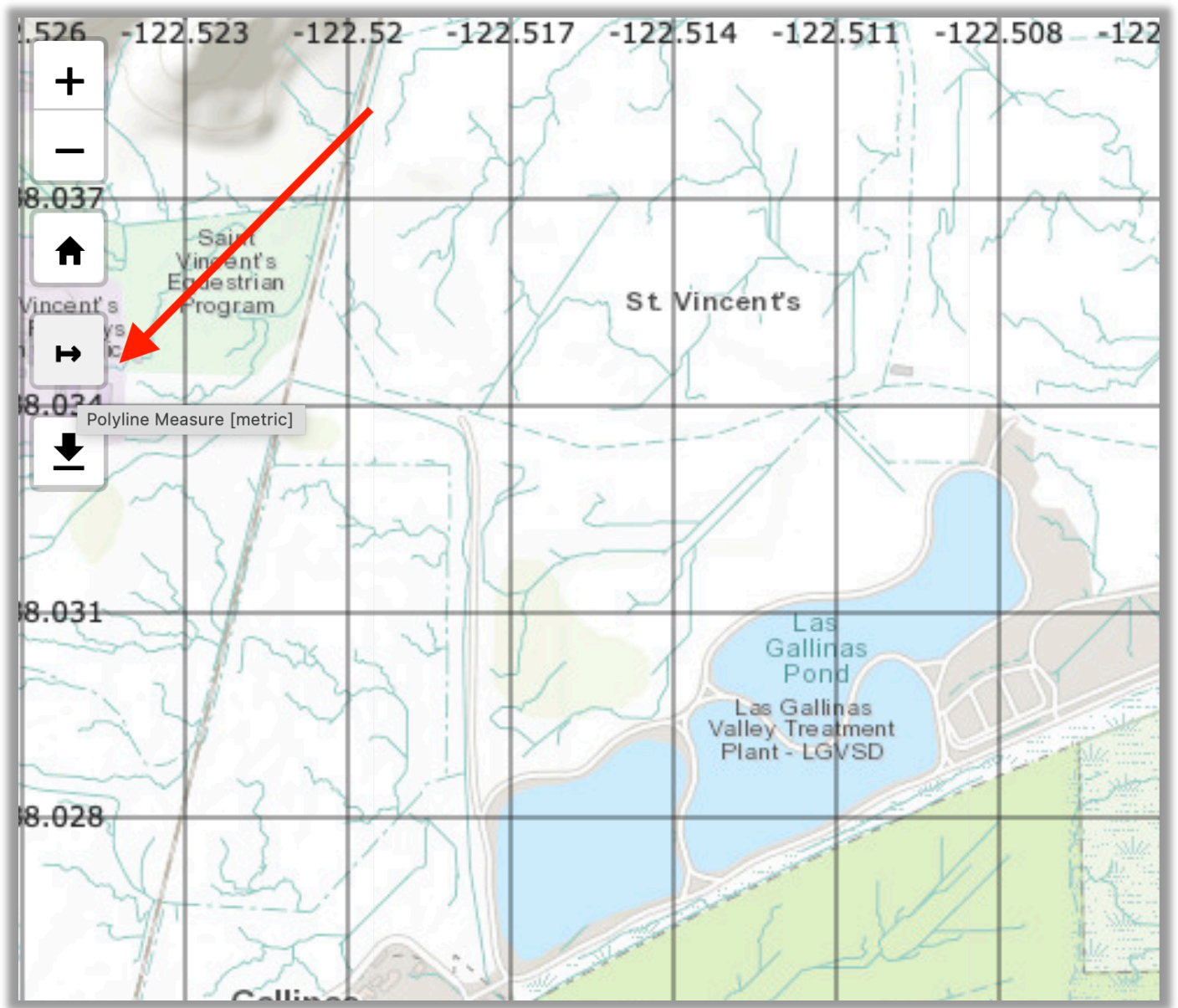


5. Click on the pin to display the exact latitude and longitude coordinates, as shown below. You can then highlight the coordinates with your mouse, right-click and copy them into your clipboard.



Determining distance

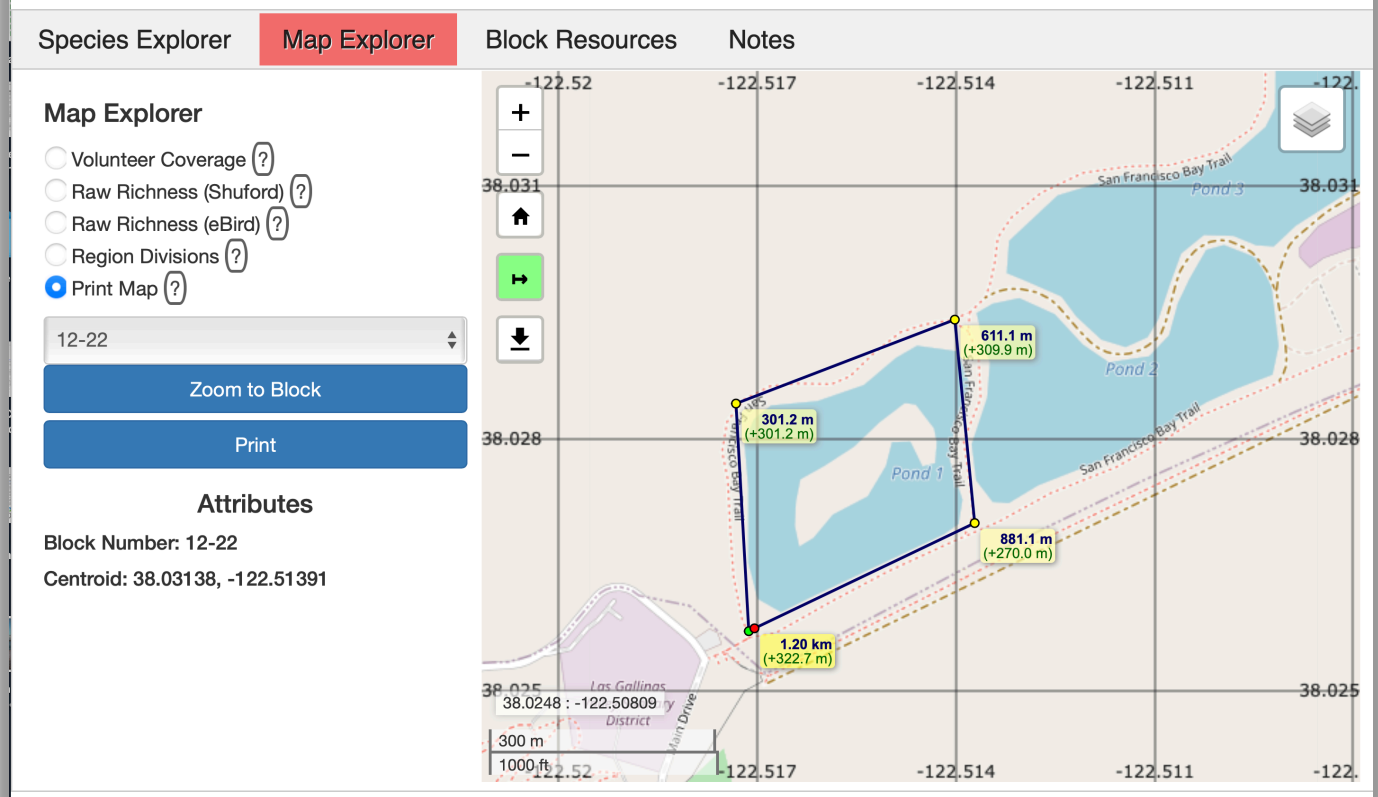
1. To use the Polyline Measure tool to determine how far you travelled on a site visit, open your map (steps 1-3 above) and then click the Polyline Measure tool, as shown below (with a red arrow pointing to it).



2. Next, click on the map where you started your walk. This places a small red circle there.
3. Click on the second point you travelled to, and keep repeating as needed.
4. To finish, press the Esc key.

In the example shown below, I wanted to determine the distance that I travelled while birding around the first pond at Las Gallinas. I clicked my starting point and a red circle appeared. Then I clicked on the other three corners in succession. To determine my total distance, in kilometers, I just add up all the numbers shown in the yellow boxes.

MCBBA Data Explorer



MCBBA2 Contacts

MCBBA2's grid system is organized into four regions, listed below. Block leaders, additional observers, and prospective volunteers should first reach out to the Regional Coordinator who oversees the region where their block is located. Questions about maps should be directed to our GIS Analyst.

Volunteer Staff

- GIS Analyst – William Wiskes data.mcbba@gmail.com

Volunteer Regional Coordinators

- Region A, Tomales and northwest Marin - David Wimpfheimer calnatureguide@gmail.com
- Region B, Point Reyes and southwest Marin – Joan Lampier egret4@gmail.com
- Region C, Novato and northeast Marin – Susan Kelly mbbanovato@icloud.com
- Region D, Tamalpais and southeast Marin – Alex Merritt merritt.alexander@gmail.com

Resources

- MCBBA2 Website - <https://marinaudubon.org/birds/marin-county-breeding-bird-atlas/>
- The MCBBA Data Explorer - <https://mcbba.github.io/webmap/mcbba>
- Dave Shuford's original Marin Breeding Bird Atlas - <https://archive.org/details/marincountybreed00shuf>
- Map Plus User Guide - https://duweis.com/en/mapplus_guide.html
- Schechter Natural History's Bird Codes, a smartphone tool to look up bird four-letter bird species codes. <https://schechterguides.com/bird-codes/>