

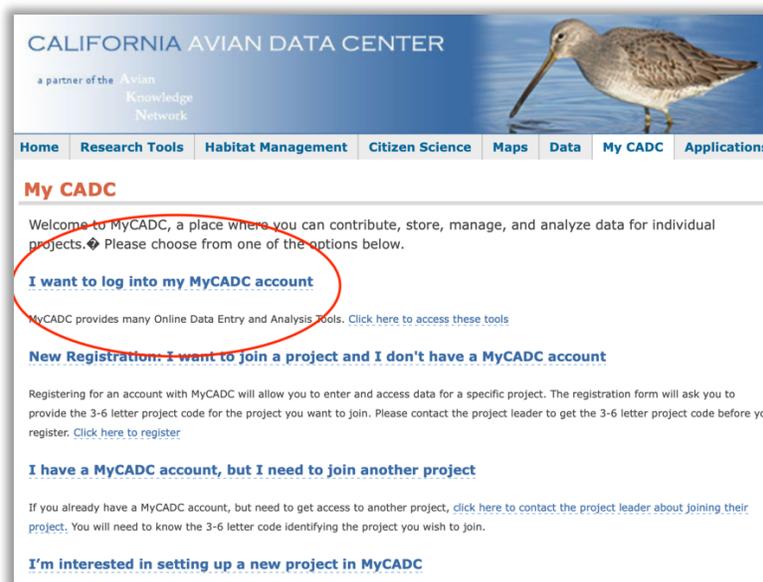
# Using CADC2 to record your block observations for MCBBA2

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.

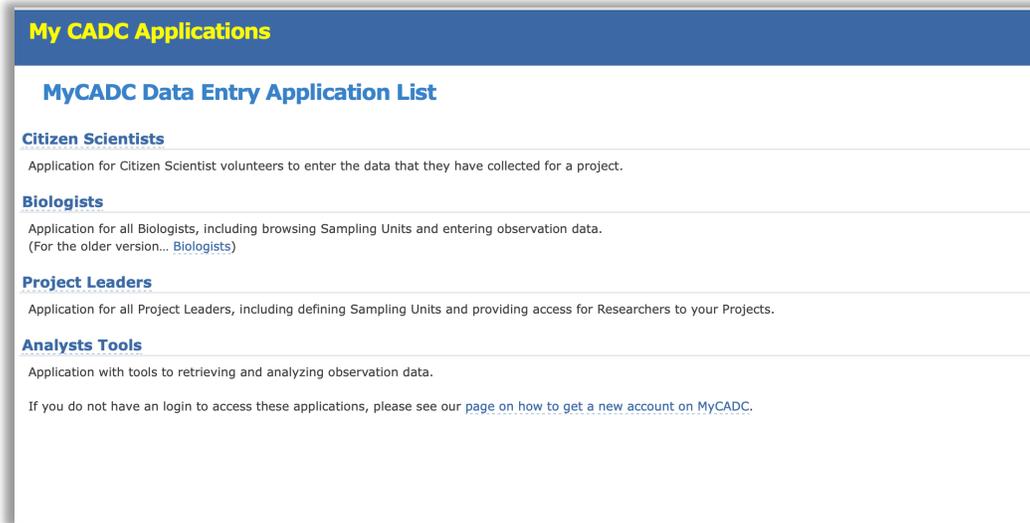
1. Click <https://data.pointblue.org/cadc2/> to open the screen shown below and then click the “Go” button in the orange/red box on the right.



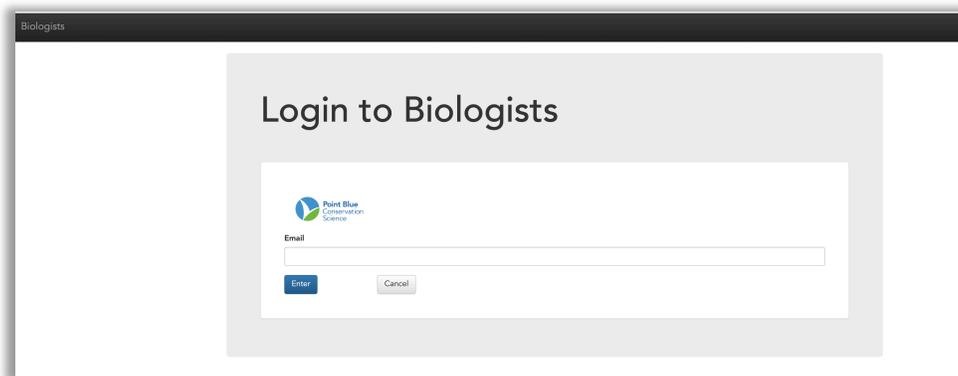
2. Click the blue link labelled **I want to log into MyCADC account.**



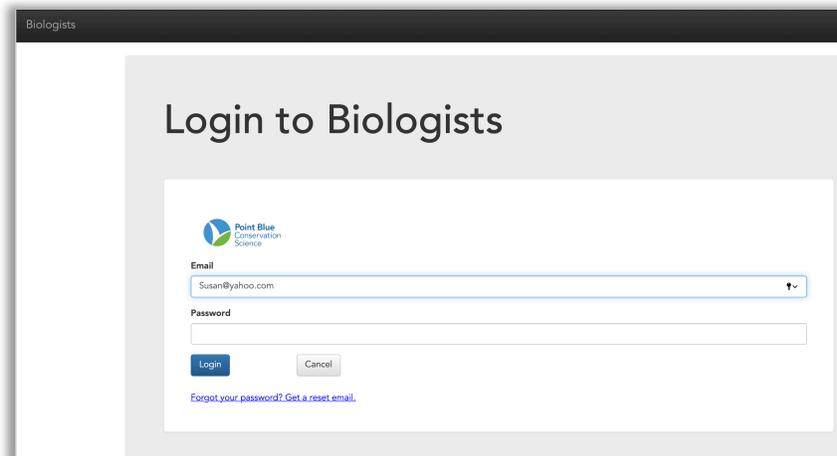
3. Click the blue link labelled **Biologists**.



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



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



6. 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**”.

The screenshot shows the AKN Biologists web application interface. At the top, it says "Biologists" with a home icon and "Project: MCBBA2 (Biologist)". Below this is a "Welcome to AKN Biologists" section with a sub-header "Projects" and the question "What project do you want to work in?". A "Quick Tips >>" link is present. A list of projects is shown, with "MCBBA2 - Marin County Breeding Bird Atlas 2" highlighted in blue. Below it is "SFSS - San Francisco Shorebird Surveys". To the right, under the heading "Project Observation Types" (with a gear icon), it says "For project: MCBBA2" and "What type of observations would you like to work on?". A "Quick Tips >>" link is also present. A list of observation types is shown: "Area Search Surveys" and "Site Conditions". At the bottom, under "Locations and Sampling Units", there is a link "Get GPS files or maps for Project" with a right-pointing arrow.

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

The screenshot shows the AKN Biologists web application interface. At the top, it says "Biologists" with a home icon, "Project: MCBBA2 (Biologist)", and "Type: Area Search". Below this is a heading "Area Survey Locations" with a location pin icon and the question "Where are the observations located?". A "Quick Tips >>" link is present. A long list of survey blocks is shown, each with a radio button and a label: "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' section of the Biologists application. At the top, it displays the user's location as '5-12 (5-12)'. A green notification bar states: 'You have observations that have not been saved. [Go to the observations page and save to database](#) or [discard it](#).' Below this, there is a 'Quick Tips >>' link. The main heading is '+ Create a new visit', followed by the instruction: 'Choose from the protocols below and select the *Start* button.' Another 'Quick Tips >>' link is provided. Two dropdown menus are visible: '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 positioned below the dropdowns. Underneath, there is a section for 'Review / edit an existing visit' with the instruction: 'Review and edit an existing visit below by selecting the date.' This section also includes a 'Quick Tips >>' link and a table with '0 rows' and a message: 'No events at this location.'

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' information section of the Biologists application. At the top, it displays the user's location as '12-22 (12-22)'. Below this, there are four tabs: 'Project: MCBBA2 (Biologist)', 'Type: Area Search', 'Location: 12-22 (12-22)', and 'Visit: New'. Underneath, there are two links for protocols: 'MARIN\_BBA' and 'MARIN\_BBA\_EVENT'. The main heading is 'General', followed by the instruction: 'Enter the following overall information about your visit.' A 'Quick Tips >>' link is provided. Below this, there are three input fields: 'Date' with the value '2021-04-21', 'Start Time' with the value '09:00', and 'End Time' with the value '13:00'. At the bottom, there are two dropdown menus: 'Visit' with the selected value 'None', and 'Data Sharing'.

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 interface with a dropdown menu on the left containing a list of names. The name 'Kelly, Susan' is selected and highlighted in blue. To the right of the dropdown, there is a form with the following elements:

- Area Search **Location:** 12-22 (12-22) **Visit:** New
- Information icon (i)
- Text: "on about your visit."
- End Time** (i) field with the value "13:00"
- Horizontal scrollbar
- # of other observers** (i) field with the value "1"
- Other observer names** (i) text input field with the placeholder "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, it displays the following information:

- Biologists
- Project:** MCBBA2 (Biologist) **Type:** Area Search **Location:** 12-22 (12-22) **Visit:** New
- Protocols:** [MARIN\\_BBA](#) [MARIN\\_BBA\\_EVENT](#)

The main section is titled **Site Conditions** and includes the instruction: "Enter the following data about your visit for this date." Below this is a link for [Quick Tips >>](#). The form contains two input fields:

- \* Party Hours** (i) input field
- \* Distance Traveled** (i) input field with a unit selector set to "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.

### 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	MWPW - 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](#)

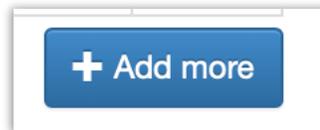
Species	Count	Breeding	Latitude	Longitude	Notes	
CANG	3	FY	38.02846	-122.51719		X
CANG	40	H				X
MUSW	2	H				X
GADW	6	P				X
BRBL	8	M				X
RWBL	20	M				X
WEBL	1	AE	38.02291	-122.52015	Observed an adult sitting on top of a nest box, flying off, an...	X
AMCO	12	H				X
AMCR	4	H				X
MODO	2	H				X
GREG	3	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.**

<b>Probable</b>	
T	Territorial behavior, singing 7+ days
D	Displays, bonding, copulation
V	Visiting potential nest site
N	Nest building by wren, woodpecker, corvid, plover
<b>Confirmed</b>	
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](#).

**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 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:

23 found

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

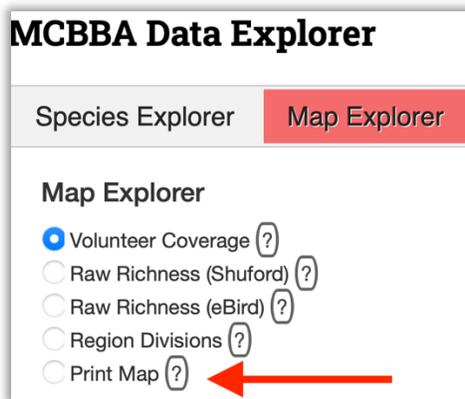
In the example shown above I searched for *swallow* and found 23 codes for the different species of swallows permitted in this database. Notice that it includes the code **XSWA** for swallows that can't be identified to a specific species.

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

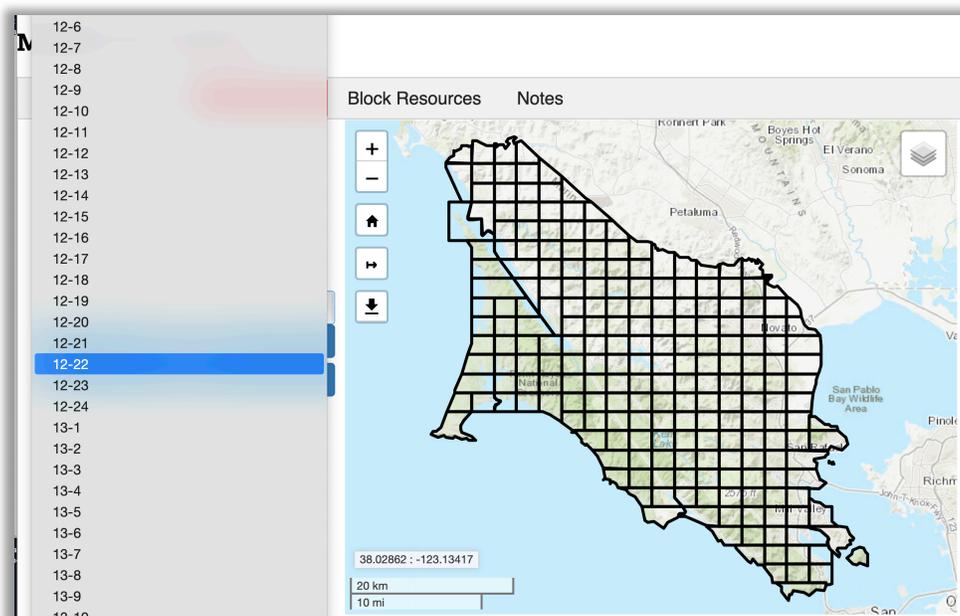
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This section will teach you how to open the map file for your block from the [MCBBA Data Explorer](#) and then use it to determine the latitude and longitude coordinates for a location within the block where you observed breeding bird evidence. It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

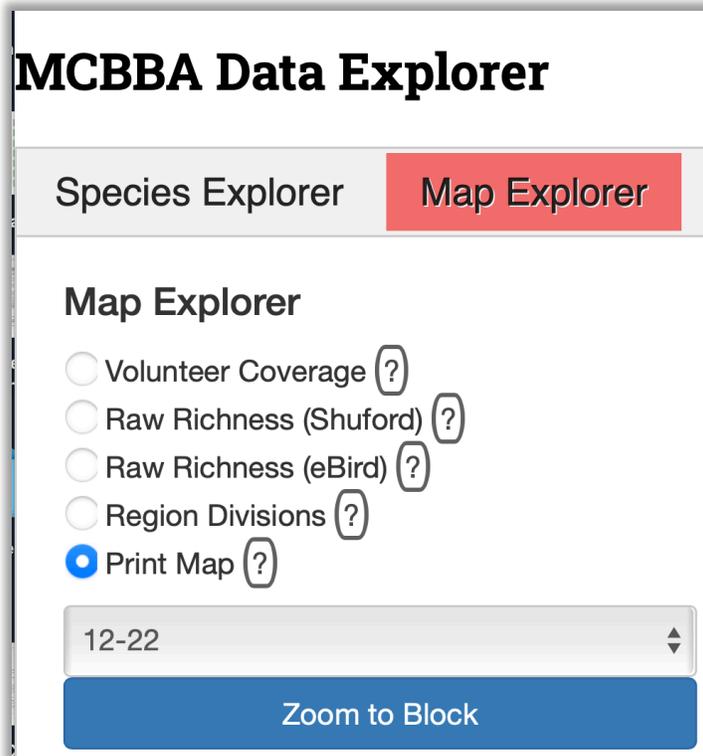
1. Open the MCBBA Data Explorer, at <https://mcbba.github.io/webmap/mcbba>. select the **Map Explorer** tab and then click **Print Map**.



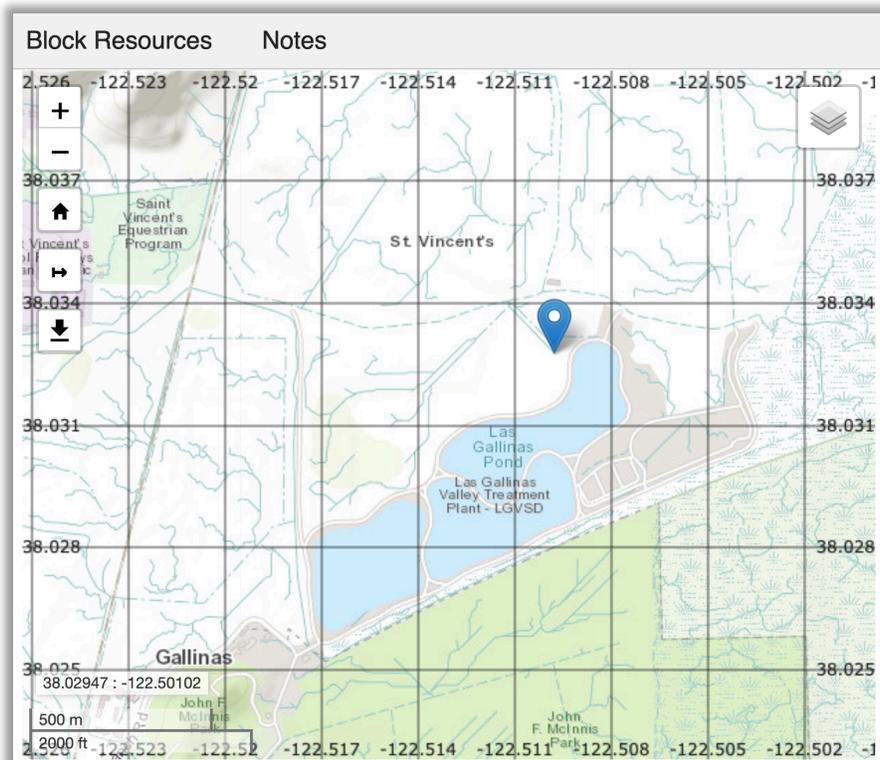
2. Open the gray drop-down list of block numbers, scroll down the list until you've highlighted your block and then select it.



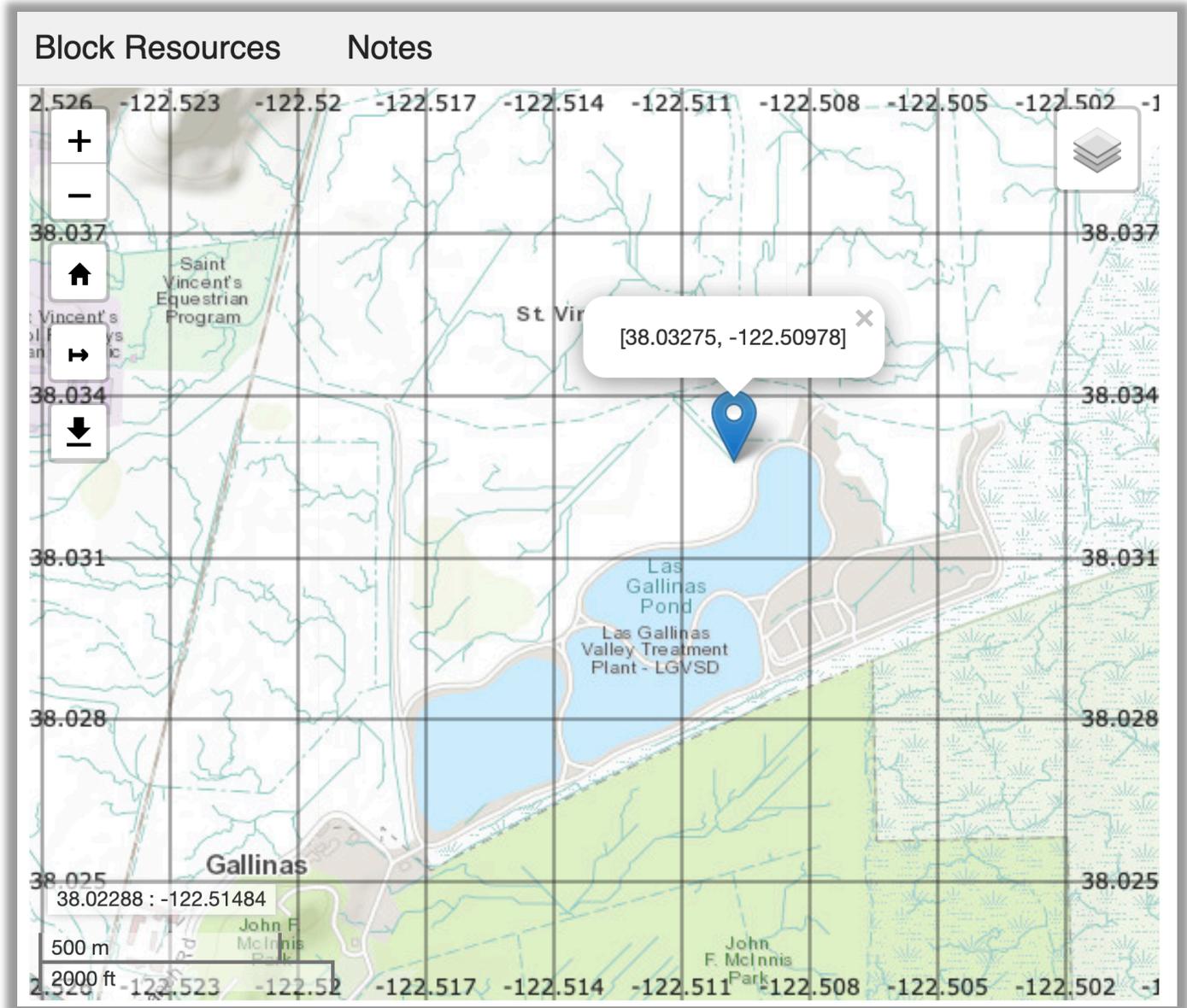
3. Click the blue **Zoom to Block** button.



4. 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.

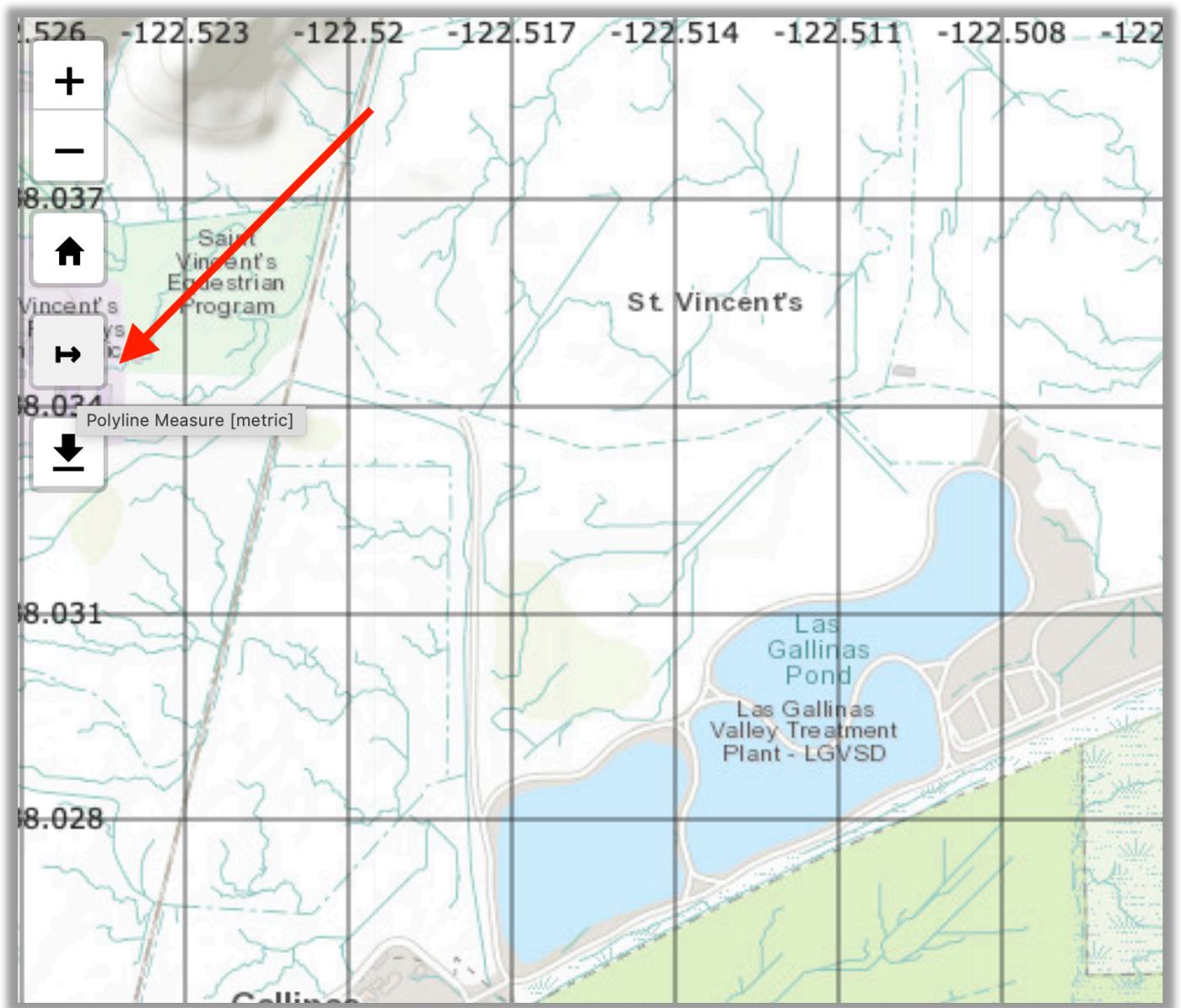


- Click on the pin to display the exact latitude and longitude coordinates, as shown below. You can then highlight the coordinates with your mouse, right-click and copy them into your clipboard.



### Determining distance

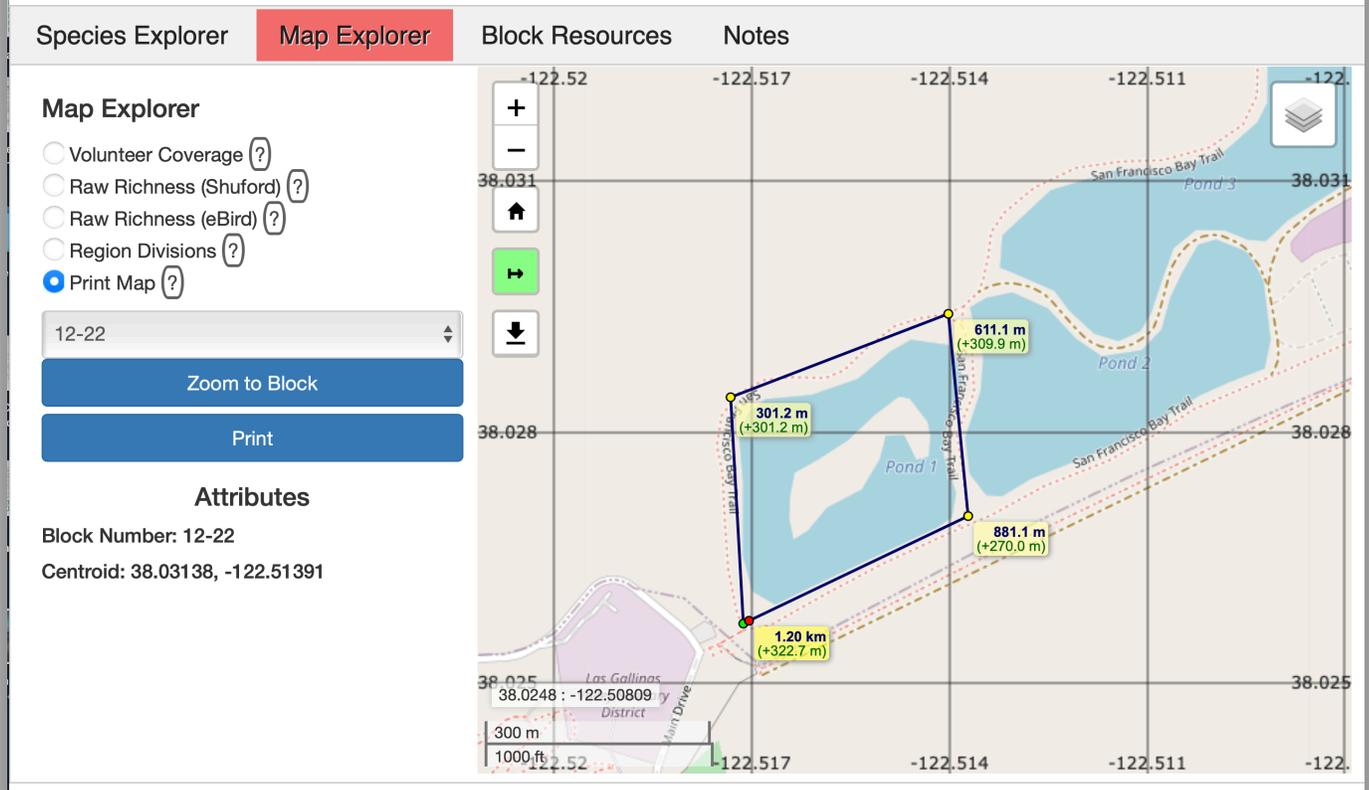
- To use the Polyline Measure tool to determine how far you travelled on a site visit, open your map (steps 1-3 above) and then click the Polyline Measure tool, as shown below (with a red arrow pointing to it).



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](mailto:data.mcbba@gmail.com)

## Volunteer Regional Coordinators

- Region A, Tomales and northwest Marin - David Wimpfheimer [calnatureguide@gmail.com](mailto:calnatureguide@gmail.com)
- Region B, Point Reyes and southwest Marin – Joan Lampier [egret4@gmail.com](mailto:egret4@gmail.com)
- Region C, Novato and northeast Marin – Susan Kelly [mbaranovato@icloud.com](mailto:mbaranovato@icloud.com)
- Region D, Tamalpais and southeast Marin – Alex Merritt [merritt.alexander@gmail.com](mailto: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](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/>