



# Using the Spotted Owl Reports Tool in BIOS 6



California Department of Fish and Wildlife  
California Natural Diversity Database Program

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The California Department of Fish and Wildlife stores northern spotted owl (*Strix occidentalis caurina*) and California spotted owl (*S. o. occidentalis*) data in the Spotted Owl Observations Database (SPOWDB). The data can be accessed by California Natural Diversity Database (CNDDDB) subscribers via [data download](#) or by viewing it in the [BIOS 6 Viewer](#). The benefits of using the BIOS Viewer include the ability to view spatial data without GIS software and the use of the Spotted Owl Reports tool.

## Spotted Owl Reports Tool

This tool runs a custom query and generates PDF reports that list spotted owl sites and observations near a selected area. Users must have a CNDDDB subscription to access the SPOWDB and the tool.

### Step 1: Open and log in to the BIOS Viewer

- Open **BIOS 6 Viewer** or the **CNDDDB/Spotted Owl Viewer** that corresponds to your subscription – Government or Commercial.

#### BIOS 6 Viewers

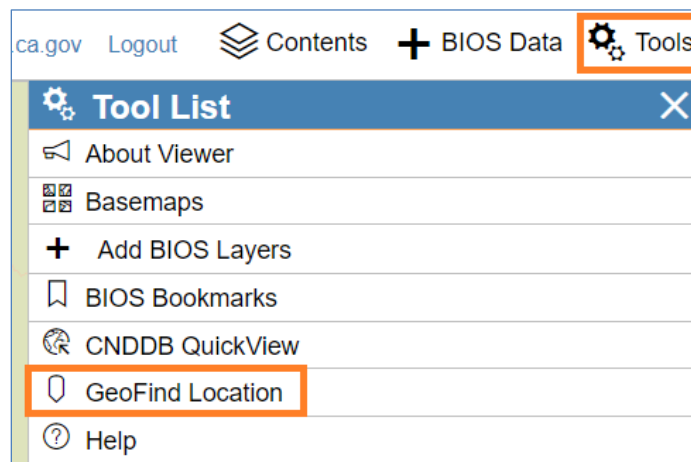
[Getting Started in BIOS 6 \(PDF\)](#)

<a href="#">BIOS 6 Viewer (Public &amp; Secure)</a>	<b>The primary BIOS 6 viewer</b>
<a href="#">CNDDB_GOV / Spotted Owl Viewer</a>	<b>Password required:</b> for CDFW Staff and Government CNDDDB Subscribers
<a href="#">CNDDB_COM / Spotted Owl Viewer</a>	<b>Password required:</b> for CDFW Staff and Non-Government CNDDDB Subscribers

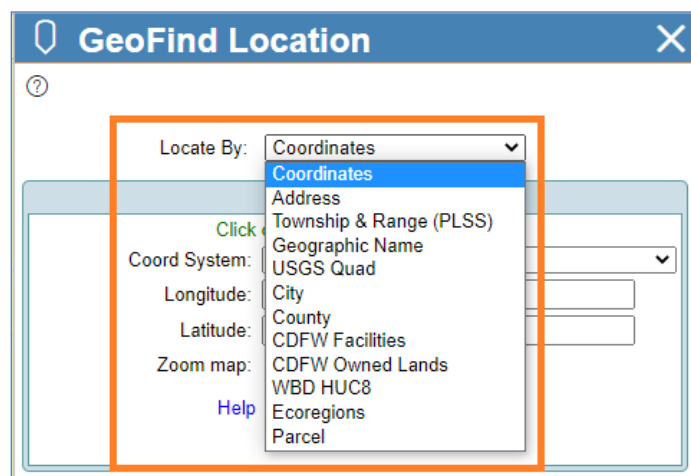
- *Note: the steps for using the Spotted Owl Reports tool are the same regardless of which link you open.*
- Review the contents of the welcome screen and click **Accept**
- Click on the **Login** button above the map and enter your CNDDDB subscriber credentials
  - If you opened one of the CNDDDB/Spotted Owl Viewers, then the **BIOS Layers** section of the **Contents** panel on the left will populate with multiple layers.

## Step 2: Navigate to your search area

- Pan, zoom, and/or use the **GeoFind Location** tool to navigate to your search area
  - Pan by left-clicking and dragging the cursor
  - Zoom by:
    - Using the scroll wheel on your mouse
    - Holding down the shift key while left-clicking and dragging your mouse to draw a box around your search area
  - Specify your area of interest using the **GeoFind Location** tool
    - Click on **Tools** in the upper right corner to access the **Tool List**
    - Click on **GeoFind Location**



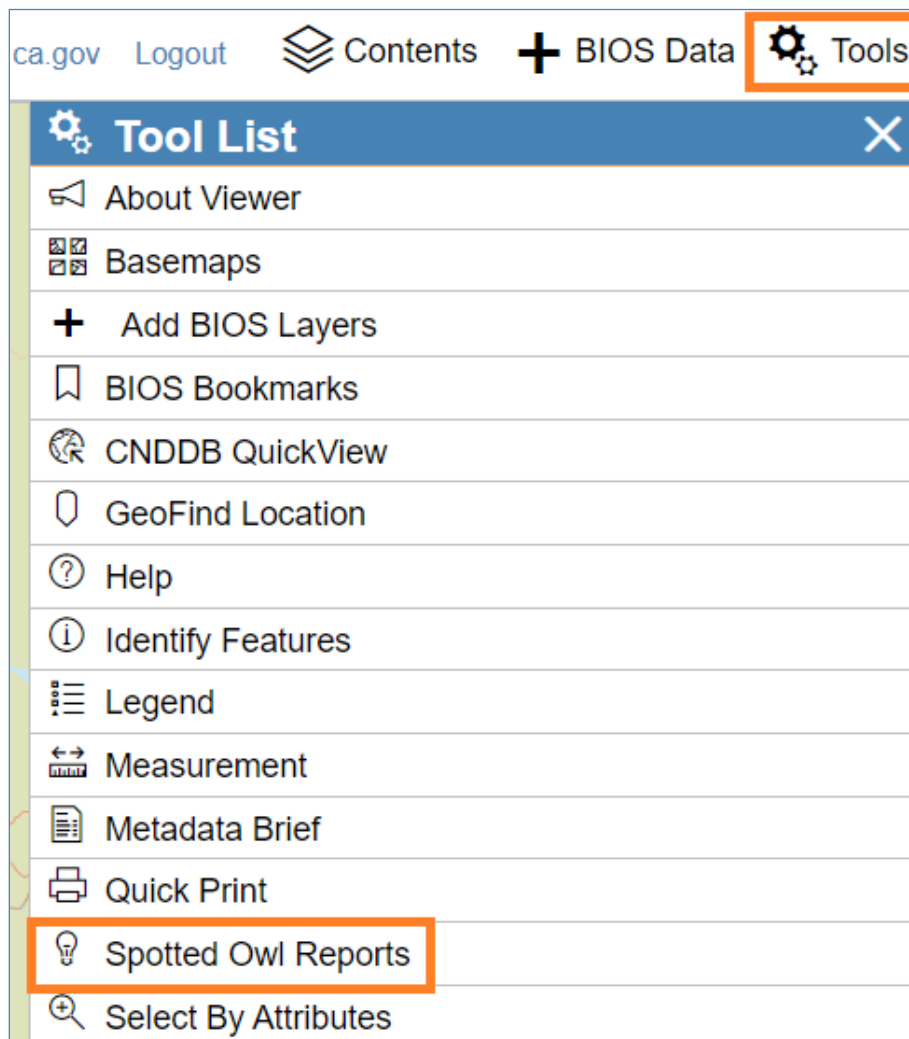
- You can search for a variety of location types as listed under the **Locate By** drop-down menu:



- Enter your search criteria then click **Find**
- Depending on how you search, you may also need to click the **Go** button next to the search result you want to zoom to.

### Step 3: Open and run the Spotted Owl Reports tool

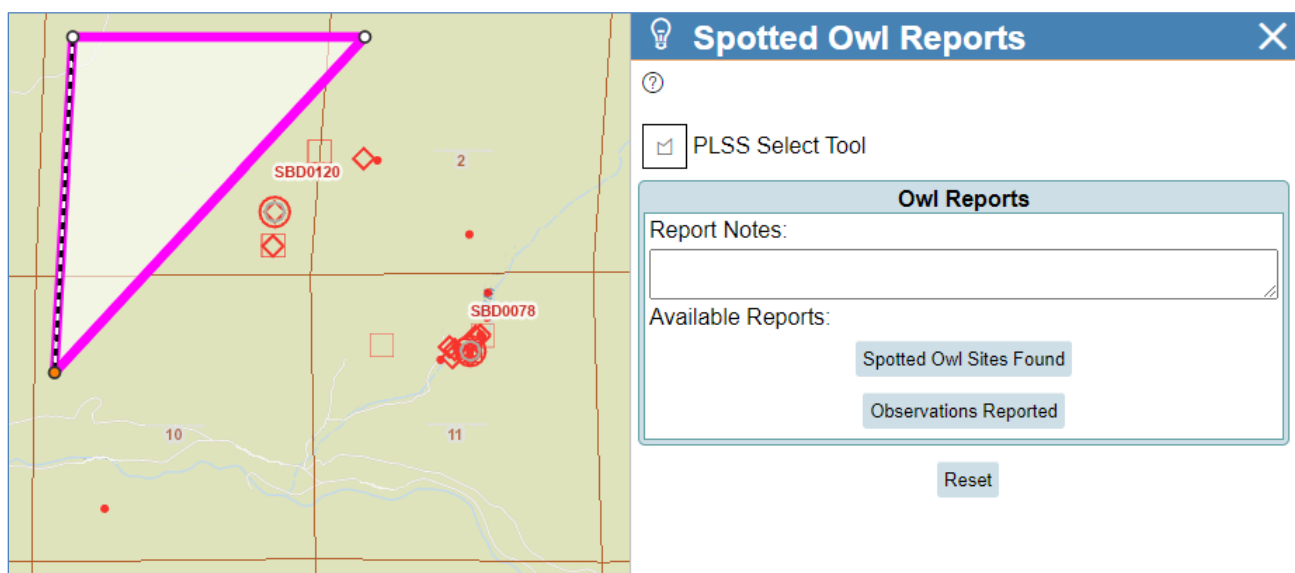
- Click on **Tools** in the upper right corner to access the **Tool List**
- Click on **Spotted Owl Reports**
  - *Note: Opening the tool automatically adds Spotted Owl Observations [ds704] and turns on PLSS Sections in the map. It may take a moment for the layers to appear.*



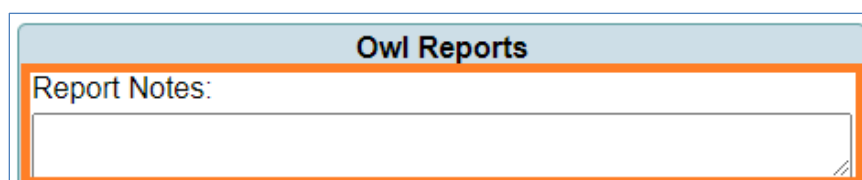
- Click on the **PLSS Select Tool** button



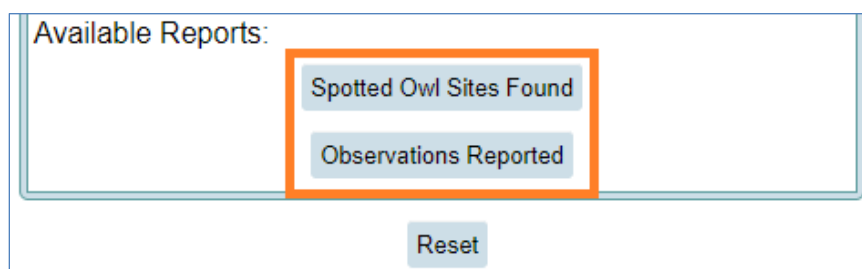
- Select PLSS sections within your search area
  - *Note: the tool queries for spotted owl records that fall within or are linked to the selected sections. Sections are approximately 1-mile square subdivisions of a Township and Range of the Public Land Survey System (PLSS). The PLSS location is often referred to as Meridian, Township, Range, Section (MTRS).*
  - To begin, left-click with your mouse to start drawing. Continue drawing vertices until you have drawn a polygon that intersects all the sections in your project area.
  - Double-click to finish your drawing.



- Create your reports
  - If you want to add additional notes to the report, such as the name of your project, you can type that information in the **Report Notes** text box



- Click on the buttons under **Available Reports** to generate PDF reports



- You will see a window pop up telling you that the report is being generated. Please be patient, as this process can take a moment.
- Depending on your browser settings, the report will open automatically or you will see another pop-up window offering you the choice to save the report to your computer or open it with your PDF reader software.
- If you would like to create a new report, click the **Reset** button at the bottom of the tool and repeat the process.


## Report Descriptions

Each report has a cover page that lists data version and report production dates, the sections that were searched, and notes if any were entered. The data pulled from the SPOWDB is listed starting on page 2 of each report.

*Note: records from outside the selected sections will be included in the reports if they share a Masterowl number with records inside the selected area. An example is provided in the sample reports below. The selected sections are 2, 3, and 10. SBD0078 is documented in the report even though it is listed in Section 11. One of SBD0078's observations is in Section 2 so the entire site is included in the reports.*


## Spotted Owl Sites Found

This report lists the Masterowl number for each site associated with the observations found in the selected area.

Data Version Date: 06/01/2022	<b>Report #1 - Spotted Owl Sites Found</b> Known Spotted Owl sites having observations within the search area.				
Report Generation Date: 6/21/2022					
Meridian, Township, Range, Section (MTRS) searched:					
S_###N_###E Sections(02,03,10);					
NOTES:					
SPOW Reports Tutorial					
<a href="#">Page 1</a>					
<i>Masterowl</i>	<i>Subspecies</i>	<i>LatDD NAD83</i>	<i>LonDD NAD83</i>	<i>MTRS</i>	<i>AC Coordinate Source</i>
SBD0078	CALIFORNIA	34. #####	-116. #####	S ##N ##E 11	Contributor
SBD0120	CALIFORNIA	34. #####	-116. #####	S ##N ##E 03	Contributor
<a href="#">Page 2</a>					

## Observations Reported

This report lists all the observations associated with the selected area. The observations are sorted by their Masterowl number and date.

Data Version Date: 06/01/2022		Report Generation Date: 6/21/2022		<b>Report #2 - Observations Reported</b> List of observations reported by site.							
Meridian, Township, Range, Section (MTRS) searched: S_###_##E Sections(02,03,10);											
NOTES: SPOW Reports Tutorial											
Page 1											
Type	Date	Time	#Adults	Age/Sex	Pair	Nest	#Young	Latitude DD NAD83	Longitude DD NAD83	MTRS	Coordinate Source
Masterowl: SBD0078 Subspecies: CALIFORNIA											
POS	1988	1200	2	UMUF	Y	Y	1	34. #####	-116. #####	S ### ##E 11	Contributor
POS	1995		2	UMUF	Y	Y	3	34. #####	-116. #####	S ### ##E 11	Quarter-section centroid
AC	1996		2	UMUF	Y	Y		34. #####	-116. #####	S ### ##E 11	Contributor
POS	2020-06-20	2235	1	AM				34.194875	-116.848963	S ### ##E 02	Contributor
Masterowl: SBD0120 Subspecies: CALIFORNIA											
POS	1990	1200	2	UMUF	Y			34. #####	-116. #####	S ### ##E 03	Contributor
POS	1991	1200	1	UF				34. #####	-116. #####	S ### ##E 02	Contributor
NEG	2010		0					34. #####	-116. #####	S ### ##E 03	Activity center
Positive Spotted Owl detections not associated with a known Activity Center Subspecies: CALIFORNIA											
POS	2020-03-27	0201	1	AM				34. #####	-116. #####	S ### ##E 10	Contributor
Page 4											

## Additional Information

### BIOS Viewer

For more information about the BIOS Viewer, please explore our [Tutorials and Training](#) resources. Help resources are also accessible through the BIOS Viewer by going to the **Tool List** and selecting **Help**.

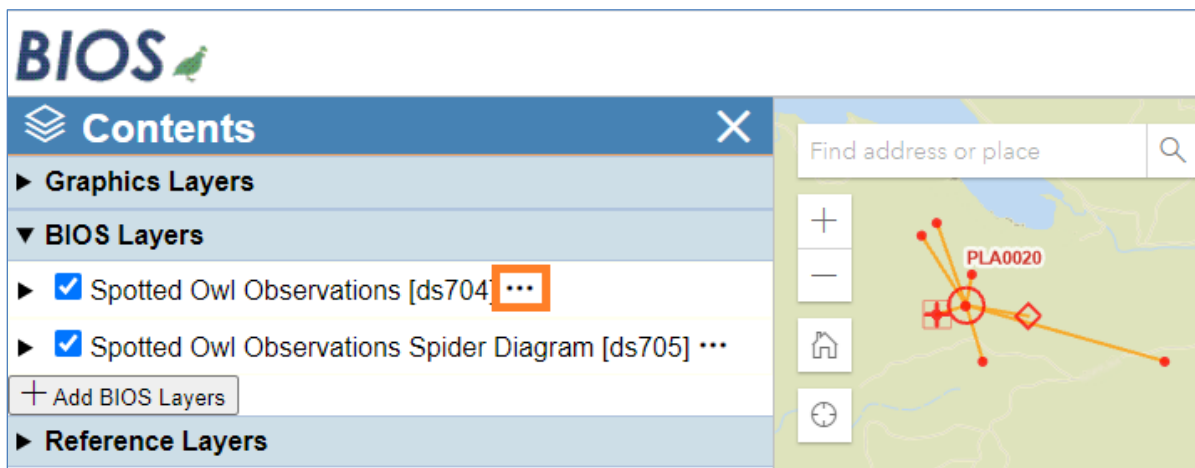
### SPOWDB

For more information about the SPOWDB, please refer to the CNDDDB's [Spotted Owl Observations Database Information](#) web page and the [Spotted Owl Observations Database Management Framework \(PDF\)](#).

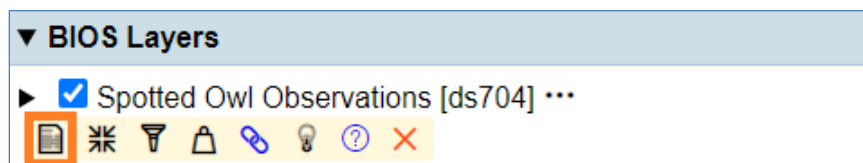
Additionally, every dataset available in the BIOS Viewer includes documentation called metadata. Metadata describes the dataset. This description includes the dataset's purpose, limitations, and field descriptions. Metadata is available online and is accessible through the BIOS Viewer.

## Accessing Metadata

- Click on the **Toggle Options** button next to the layer name in the **Contents** panel.
  - *Note: button labels appear when you hover your cursor over each button.*



- Click on the **Mini-metadata info** button and the **Metadata Brief** panel will open on the right side of your screen.



- *Note: the **Metadata Brief** is also accessible through the **Tool List** for any active layer.*
- Scroll to the bottom of the **Metadata Brief** and click **Complete metadata**. This will open a new tab in your browser with the complete metadata.