#### San Diego County Plant Atlas Project Parabotanist's Guide for data operations on the web site September 2008

There are four web pages in the Plant Atlas web site that allow Parabotanists to enter data and work with data that resides in the main Plant Atlas database. As a Parabotanist, you have permission, accessible by password, to enter new data, edit data that was entered earlier, list your data, and read and write to the Bulletin Board. You also have some tools to assist you, such as the Plant Name Finder, direct links to Google<sup>™</sup> mapping, and Search the Database. These tools are accessible from the home page.

When you are working with the forms on the web pages, you are interacting with the Plant Atlas database. You are adding new data or editing existing data. On occasion, you may encounter an error resulting from some internal problem among the computers that are handling the data. Generally, the best advice is simply to try again. If you encounter a consistent problem, please report the problem and any error messages you may get to the Plant Atlas staff.

If you are a novice computer user, be assured that you can't do any harm to the database by making errors on these web pages. You can close any page at any time and start over again. The database will assure that you don't enter duplicate specimen numbers, that your longitude and latitude is consistent with the reported square, and other details.

To reach the data pages, you will be asked to log in. The log in will then enable you to go to any of the pages and to navigate from page to page without further logins. You should log out when your work is complete for the session, but you don't have to. You will be automatically logged out after 30 minutes of inactivity.

When you click the

**Parabotanist LogIn** link from the Home Page, you will be directed to the page shown here. Enter your assigned initials and password into the text boxes and then click the button. You may then click on any of the links at the bottom of the page to go to that specific data page. Once on the



data page, you may use the links on those pages to navigate among the data pages. Your login information will be retained. If you are inactive for over 30 minutes, you will be logged out. You will get no message to that effect, but when you use the data page you will be redirected back to this login page to log in again.

When you have successfully logged in, you will find a set of drop-down menus to use to navigate to the page you want for the work you want to do.

| M  | eet the SDNHM Botany Staff  | Check our                             | progress                   |  |  |
|--|---|---------------------------------------|----------------------------|--|--|
| SAN DIEGO<br>NATURAL HISTO<br>MUSEUM   | RY  | San Diego Cou<br>PLANT ATI<br>PROJECT |                            |  |  |
|  | <del>e to see your Plant Atlas data</del><br>e Earth with the Atlas Grid ye |                                       |                            |  |  |
|  | Data Entry/Edit Guide   | Plant Atlas Home                      |                            |  |  |
|  | Current version: 9  | /8/2008                               |                            |  |  |
|  | Initials:   |                                       |                            |  |  |
|  | Password:   |                                       |                            |  |  |
| Successful login for John  | Sanborn. Please use the men   | us below to select the ta             | ask you intend to perform. |  |  |
| Looking for a collecting buddy? Want to ask a question another parabotanist may be interested in? Make a |   |                                       |                            |  |  |
| comment? Use the Parabotanist's Bulletin board. Find it here and on the Submissions menu.                |   |                                       |                            |  |  |
| Data Entry/Edit/R  | Lichens   | Reference                             | Submissions                |  |  |
|  |   |                                       |                            |  |  |
| Forms  | FAC   | 1                                     | Resources                  |  |  |
|  |   |                                       |                            |  |  |

The drop-down menus, with all their options are shown here. The top three menus link you to the "active" items, those that allow you to work with the database and other support systems. The primary functions regarding data entry, data editing, and data review are found



under the menu of that name. The tools on that menu provide the means of entering your collection data, after which you can edit it or review it. the **Bulk Edit** item allows you to edit certain items, such as collection locality, for a number of specimens at once. The **Reference** menu provides you with tools to assist you in locating your collection site, identifying other parabotanists, and detecting rare or endangered plants. The

Resources Collecting Equipment Make Your Own Field Press Linke to Resources Botany bookist - Museum Store How to Collect and Press Plants What Ilappens to My Specimens? Cheat Sheet for Data Collection How to Submit Specimens Why Were My Plants Rejected? How to Record Locality Understanding Maps and GPS Understanding Maps

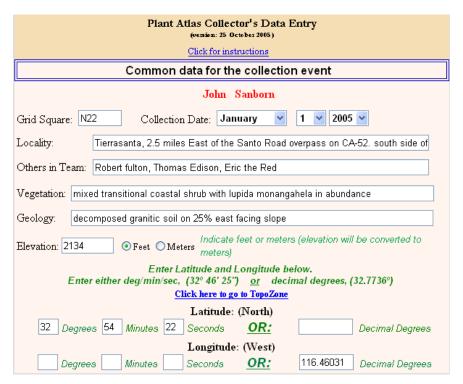
**Submissions** menu provides tools for communicating special items to the Plant Atlas staff and other parabotanists as well as reporting your time to the Volunteer department. The other menu items provide you with the information you need to successfully collect plants, keep accurate records, and make quality museum specimens.

## **Entering collection data:**

The New Data entry form is set up in two sections. The top section holds information that is likely to be common for a collection event. When you add each specimen's data, this top section will remain with the data you entered for the first specimen so you don't have to enter it for each specimen. However, you can change it at any time for an individual specimen or group of specimens.

There are a number of conditions that are checked by the program as you enter data. If your data violates one of these conditions, an error message will appear as in the example below. When an error message appears, simply click OK and correct the problem before attempting the entry again.

For example, if you enter a latitude or longitude that is not within the county, you'll see a message like this. You'll get messages like this if the square you entered does not match the latitude and longitude, and other entry errors. Your data stays on the screen when you get these messages, so all you have to do is correct the entry and try again.





#### Specific instructions for the Common Data for the Collection Event:

| Entry                 | Instructions   |
|-----------------------|--|
| Date                  | Enter the date you collected the specimen or specimens by selecting from                   |
|                       | the drop-down boxes  |
| Atlas Square          | Enter the Square. (example: A3, G14)   |
| Locality              | Describe the location with reference to roads, landmarks, natural features,                |
| -                     | etc. If on a slope, indicate which direction the slope faces. Describe the                 |
|                       | location well enough for another person to find it using these directions.                 |
| Others in Team        | Enter name(s) of people who were with you  |
| Vegetation            | Enter the type of vegetation in the vicinity of the collecting area. Name                  |
| -                     | specific plants if you like. Max size is 255 characters                                    |
| Geology               | Enter the soil type if you know it, and other details about the terrain in the             |
|                       | vicinity of the collecting area. Max size is 255 characters.                               |
| Elevation             | Enter the elevation if you know it. If you don't, leave the zero in the box.               |
|                       | Click on either the <b>feet</b> or <b>meters</b> button to indicate the units your data is |
|                       | in. All elevations will be converted to meters in the database.                            |
| Latitude              | Your latitude and longitude can be in either of two formats:                               |
| Longitude             | Degrees-Minutes-Seconds, for example 32° 46' 25"   |
|                       | Decimal degrees, for example 32.77361°   |
|                       | Set your GPS unit to one of these two formats. You cannot enter other formats,             |
|                       | such as degrees and decimal minutes, for example 32° 46.41′                                |
|                       | Do not put a minus sign in the longitude.  |
|                       | Enter your latitude and longitude in the three left boxes if it is in                      |
|                       | deg/min/sec format and in the single box on the right if it is in decimal                  |
|                       | degrees format.  |
|                       | Your latitude and longitude will be checked to make sure the format is OK,                 |
|                       | that it is within the county, and that it is within the Atlas Square you                   |
|                       | entered. Error messages will appear for any of these problems, and you can                 |
|                       | then correct your lat/long.  |
|                       |  |
|                       | Use the menu item, <b>Plant Species on Google Maps</b> , on the Plant Atlas home           |
|                       | page if you need help in determining the latitude and longitude, or to                     |
|                       | double-check what you read from your GPS unit.   |
| That completes data e | ntry for the collecting site. This data will remain as entered and will be entered with    |
| each specimen you en  | ter in the session. However, you can change these entries at any time.                     |

#### Specific instructions for the Specimen Details data:

Each time you enter a specimen, these data entry boxes will be cleared. If you open the Name Finder to help you find or spell plant names, the Name Finder will open in a separate window that you can keep open, perhaps minimized, during the session. You can copy and paste from the Name Finder into the data entry text boxes.

| Specimen #: 5001 Suffix: None 💌 Family: Asteraceae  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
| Genus: Artemisia Specific Epithet: tridentata   |  |  |  |  |  |  |
| Ovar ⊙ssp ON/A tridentata Infraname   |  |  |  |  |  |  |
| CommonName: Webman's Liverwort Enter a common name if you know it and don't have a scientific name.                                 |  |  |  |  |  |  |
| Phenology: Flowering  Number of Labels for mounting: 1  |  |  |  |  |  |  |
| Description Tree-like plant growing to about 65 feet. Blue paim fronds growing for the roots. And of Plant: furthermore, blah, blah |  |  |  |  |  |  |
| Preview Specimen Label  |  |  |  |  |  |  |
|   |  |  |  |  |  |  |
| Log Out Clear Event Data Add This Record to Database  |  |  |  |  |  |  |
| Return to Home Page <u>Edit Data</u> <u>Bulk Edit</u> <u>List Data</u>  |  |  |  |  |  |  |

| Entry                   | Instructions  |  |  |  |
|-------------------------|---|--|--|--|
| Specimen                | <b>Required.</b> Enter the integer number you have assigned to the particular           |  |  |  |
| Number                  | specimen in your collection. These must be integers. They must be unique (no            |  |  |  |
|                         | duplicates) except that a number may be used more than once if you include              |  |  |  |
|                         | a suffix in the following box. In this entry you may not include the suffix, that       |  |  |  |
|                         | is, you cannot enter "27A" here.  |  |  |  |
| Suffix                  | Enter a letter suffix chosen from the drop down box if you are using one. This          |  |  |  |
|                         | is not required, and it is not encouraged. You may not duplicate a                      |  |  |  |
|                         | number/suffix combination – the database will not accept the duplicate.                 |  |  |  |
|                         | Example of use: You may collect a specimen that is later determined to actually be      |  |  |  |
|                         | two different plants. If your original number was 325, we may (or you may) split it     |  |  |  |
|                         | into 325A and 325B.   |  |  |  |
| Family                  | If you know the plant family, enter it here.  |  |  |  |
| Genus                   | If you know the plant genus, enter it here.   |  |  |  |
| Species                 | If you know the species name, enter it here.  |  |  |  |
| var. or ssp.            | If you are going to enter an infraname, click on one of the buttons to indicate         |  |  |  |
|                         | if it is a variety or subspecies.   |  |  |  |
| Infraname               | If you know the variety or subspecies name, enter it here.                              |  |  |  |
| Common Name             | If you know the common name of the plant enter it here.                                 |  |  |  |
| A note about names:     | Your specimens will be examined and identified by Dr. Jon Rebman or another qualified   |  |  |  |
| botanist. After this ve | rification, the correct name for the plant will be written on the specimen label, and   |  |  |  |
| entered into the datab  | ase. You will be able to review your collection by number and see the correct botanical |  |  |  |
| name as well as an ac   | cepted common name if one is listed.  |  |  |  |
| Phenology               | Select the proper status from the drop-down list. Phenology means                       |  |  |  |
|                         | reproductive status. You must make a selection.   |  |  |  |
| Number of Labels        | Enter your estimate of the number of sheets that will be required to mount              |  |  |  |
|                         | the specimen. A label will be printed for each sheet, and your entry helps              |  |  |  |
|                         | automate that process. Generally this is left as 1.                                     |  |  |  |
| Description             | Describe the plant, particularly characteristics that will be lost when                 |  |  |  |
|                         | mounted, such as height and breadth. Include colors of flowers or fruit that            |  |  |  |
|                         | often fade when dried. 255 characters maximum.  |  |  |  |

To enter the specimen data into the database: Click the button: Add This Record to Database

#### To help keep track of your entries, click the button: Show My Last Five Entries

| Show My Last 5 Entries |     |      |           |     |        |                       |                |            |
|------------------------|-----|------|-----------|-----|--------|-----------------------|----------------|------------|
| Number                 | Sfx | Year | Month     | Day | Square | CommonName            | Family         | Genus      |
| 573                    |     | 2003 | September | 21  | Q23    | Cup-Leaf Lilac        | Rhamnaceae     | Ceanothus  |
| 572                    |     | 2003 | September | 21  | Q23    | Holly-Leaf Redberry   | Rhamnaceae     | Rhamnus    |
| 571                    |     | 2003 | September | 21  | Q23    | Morning-Glo <b>ry</b> | Convolvulaceae | Calystegia |
| 570                    |     | 2003 | September | 21  | Q23    | Silk Tassel           | Garryaceae     | Garrya     |
| 569                    |     | 2003 | September | 21  | Q23    | Pine Goldenbush       | Asteraceae     | Ericameria |

To see what the specimen label will look like, you may preview the label any number of times as you enter data before you click the **Add This Record to Database** button. Click the button:

Preview Specimen Label

A preview version of the specimen label will appear on the screen. This preview will be cleared from the screen on data entry.

Preview Specimen Label

| San J  | Diego Natural History Museum   |  |
|--|--|--|
| Vouche   | er for San Diego County Plant Atlas  |  |
|  |  | Asteraceae   |
| Pinus agrifolia var. withstandia                                       |  |  |
| the footbridge along the walking pa<br>W., Elev 257m . Vegetation: Hog | Mission Trails Park: On the east sid<br>ath westward from the Padre Dam. 3<br>weed and skunk cabbage mixed with<br>Granitic feldspar with sand and grave | 2.9658° N., 117.2345°<br>h cattails and other typical  |
| Each flower has a heart-shaped gree                                    | out 6" tall, with yellow flowers on :<br>in stamen and sixteen petals. This p<br>anical dummy who just does web p-                                       | lant was obviously   |
| John Sanbozn 567   | Square: A99  | 27 March 1997  |
| With: Popeye, Bhito, and Ms. Oy  | 1  |  |
|  | and Longitude are dummy values for   | and a state of the |

## **Editing collection data:**

To edit an existing record, use the **Edit Data** menu item; the form to the right will appear. When you enter a collection number, with suffix if the specimen has one, and click the Select This Specimen to Edit button. the screen will display the complete data set for that specimen. You can change any of the displayed items, and when you click the Enter Changes to Database button, those changes will be made.

| Enter a Specimen Number: 549 Enter the Suffix, if any:                                  |  |  |  |  |  |
|---|--|--|--|--|--|
| Select this Specimen to Edit  |  |  |  |  |  |
| Date: September v 21 v 2003 v Grid Square: P23  |  |  |  |  |  |
| Latitude: 32.85222  |  |  |  |  |  |
| Longitude: 116.45889 Deg Min Sec = Decimal Degrees                                      |  |  |  |  |  |
| Elevation: 1541 meters 0 feet = meters  |  |  |  |  |  |
| Locality: Kitchen Creek Truck Trail, south of Sunrise Highway, L Team: John Gregory     |  |  |  |  |  |
| Geology: granitic Vegetation: Pine and Oak woodland                                     |  |  |  |  |  |
| Family: Asteraceae Genus: Lessingia Specific Epithet: filaginifolia                     |  |  |  |  |  |
| Variety (var.) 🖌 InfraName: filaginifolia   |  |  |  |  |  |
| Common Name: California-Aster   |  |  |  |  |  |
| Description: Woody perennial to 0.5 meters; yellow disk wit Phenology: Fruit & Flower 💙 |  |  |  |  |  |
| Number of Labels Req'd: 2 Enter Changes to Database                                     |  |  |  |  |  |
| Log Out Home Page Enter New Data List Data  |  |  |  |  |  |

| Entry           | Instructions   |  |  |  |  |
|-----------------|--|--|--|--|--|
| Specimen Number | Enter the specimen number whose data you wish to edit. Then click on the         |  |  |  |  |
| And Suffix      | button: Select This Specimen To Edit The data for that specimen will             |  |  |  |  |
|                 | appear in the text boxes on the page.  |  |  |  |  |
|                 | Note: If your specimen has already been identified/verified                      |  |  |  |  |
| you will g      | et a message telling you that you cannot edit the data for that specimen.        |  |  |  |  |
| Edit the Data   | Change any of the data.  |  |  |  |  |
| Lat/Long and    | Note that Lat/Long is in decimal degrees. Any changes must be made in            |  |  |  |  |
| Elevation       | decimal degrees. If your data is in Deg/Min/Sec, use the calculator on the       |  |  |  |  |
|                 | page to convert it. Enter the Deg/Min/Sec into the three boxes and click the     |  |  |  |  |
|                 | = sign button. The decimal data will appear to the right and you can enter       |  |  |  |  |
|                 | that into Latitude or Longitude boxes.   |  |  |  |  |
|                 | Elevation is in meters. Take the same approach.                                  |  |  |  |  |
|                 | To make the changes, click the button:<br><mark>Enter Changes to Database</mark> |  |  |  |  |
|                 |  |  |  |  |  |

# **Bulk Editing collection data:**

The bulk data edit form allows you to change the data entries for a group of specimens at one time, without having to call them up individually as you do on the edit page. You can edit or delete data for those items in the Common Data area.

To use the form, enter the first and last specimen number in the text boxes at the top of the form for those specimens whose data you want to change. The changes will be made to the first, last, and all in between those numbers.

Data will be changed only for those items where the

| San Diego Natural History Museum<br>Plant Atlas Project<br>Collector's Common Data Edit Page  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
|   | John Sanborn   |  |  |  |  |  |  |
| This name is used to edit   | t the specimen data shown below for a group of records selected by specimen number. Data for |  |  |  |  |  |  |
|   | rered and labeled cannot be edited.  |  |  |  |  |  |  |
| Change selected items for the following specimen numbers:<br>Starting with Number: 501 and through Number: 522<br>Check the box to the left of all items to be changed<br>Items not checked will not be changed<br>Items checked but left empty will be changed to empty(deleted) |  |  |  |  |  |  |  |
| Grid Square To:   |  |  |  |  |  |  |  |
| <b>☑ Date To:</b> March   | <ul> <li>✓ 24 ✓ 2003 ✓</li> </ul>  |  |  |  |  |  |  |
| Latitude To: 33.420   | 083 33 25 15 33.42083  |  |  |  |  |  |  |
| □ Longitude To:   | Deg Min Sec = Decimal Degrees  |  |  |  |  |  |  |
| Elevation To:   | meters 0 feet = meters   |  |  |  |  |  |  |
| ✓ Locality To:  | Down by the old mill stream  |  |  |  |  |  |  |
| ✓ Team To:  |  |  |  |  |  |  |  |
| Geology To:   |  |  |  |  |  |  |  |
| ■Vegetation To:   |  |  |  |  |  |  |  |
| -   |  |  |  |  |  |  |  |
| IF the number reported as updated does not match the number of specimens you selected to change, some specimens may already have been labeled. If data for labeled<br>specimens has to be changed, contact the Plant Atlas staff.   |  |  |  |  |  |  |  |
| Click to Enter Changes to Database  |  |  |  |  |  |  |  |
| Log Out   | <u>Home Page Enter New Data Edit Data List Data</u>  |  |  |  |  |  |  |

check box to the left is checked. If you do not check the box, the data will not be changed even if you have entered something into the data text area. If a box is checked, and the data text field is left empty, the data for that item in the database will be deleted. In the example above, the entry for Team will be deleted from the database for specimens 1001 through 1005.

Use the latitude/longitude and elevation converters exactly as used on the Edit Data page.

When you are ready to make the change, click the green button at the bottom of the page.

If the operation is successful, a message will appear indicating the number of records that were updated. In the example above, only four records were updated even though it would appear that five records were selected. One of these records has already been labeled and therefore cannot be changed. A similar result may occur if

| ■Vegetation To:  |  |     |
|--|--|-----|
|  | Successful Update of 4 specimen records  |     |
| If the number reported as update<br>specimens has to be changed, cor | d does not match the number of specimens you selected to change, some specimens may already have been labeled. If data for labe<br>tact the Plant Atlas staff. | led |
|  | Click to Enter Changes to Database   |     |
|  |  |     |

there were missing numbers in the sequence. Your specimen numbers do not have to be sequential and complete. This process will affect whatever number of records exist between the numbers you specify in the boxes.

If the operation fails, an error message will appear on the form. The data you have entered will remain on the screen, and you can click the button again or correct the problem as indicated.

# List your collection data:

which you have

| You can see all of     | ParaBotanists Collection List Page   |  |  |  |
|------------------------|--|--|--|--|
| your collection on     | Version: 1 December 2005   |  |  |  |
| this page. The drop-   | Log Out  |  |  |  |
| down list of Atlas     | Jeannie Gregory  |  |  |  |
| Squares will list only | List My Collection Atlas Square: 299 🔽 Sort By: Family 🔽 🗌 Locality Display  |  |  |  |
| those Squares from     | Home Page Enter New Data Edit Data Bulk Edit   |  |  |  |
| which you have         | Ver? = Yes indicates that the specimen identification has been verified/corrected by Dr. Jon Rebman or another qualified botanist. |  |  |  |

collected plants. Select a Square and then click the button: List My Collection You may select {ALL} from the dropdown Atlas Square list to view your entire collection. Select a sort field you would like to sort your listing by. If sorting by date, the list will not be sorted exactly correctly.

Your list will appear as follows:

Each specimen listed as Verified will show the correct botanical name and accepted common name. If the specimen is listed as not yet verified, the names will be the ones you entered.

To assist parabotanists in good practice in entering

ParaBotanists Collection List Page Log Out Jeannie Gregory List My Collection Atlas Square: {ALL} Sort By: Date \* Locality Display Home Page Enter New Data <u>Edit Data</u> Bulk Edit Ver? = Yes --- indicates that the specimen identification has been verified/corrected by Dr. Jon Rehman or another qualified botanist Date Species Rank InfraName Common Name Num. SfxVer? Family Genus pinifolia 01 Aug 04 [D15] Asteraceae Ericameria Pine Goldenbush 1092 Yes 01 Aug 04 [D15] Lamiaceae Monardella lanceolata var. lanceolata Mustang Mint 1093 Yes 01 Aug 04 [E15] Bignoniaceae 1094 Catalpa speciosa Northern Catalpa Yes 01 Aug 04 [E15] Polygonaceae 1095 Eriogonum pauciflorum Pine Buckwheat Yes nudum ssp. 01 Aug 04 [E18] Asteraceae filaginifolia filaginifolia California-Aster 1090 Lessingia Yes var. 01 Aug 04 [E18] Asteraceae Lessingia glandulifera glandulifera Valley Lessingia 1088 Yes var. 01 Aug 04 [E18] Polemoniaceae Eriastrum 1087 No 01 Aug 04 [E18] Polygonaceae membranaceum Foothill Buckwheat Eriogonum wrightii 1089 Yes 01 Aug 04 (E19) Nyctaginaceae Red Ringstern, Scarlet Sniderlin in 1091 Boerbavia coccines Vac

Locality data, the **Locality Display** checkbox, if checked, will result in a different data set that includes the Locality field. The Locality display cannot be used with the {ALL} selection.

To provide a parabotanist with a view of the complete data record for each specimen, another more compact display is provided at the menu item **Review My Data**. This display does not permit editing.

## **Bulletin Board:**

The Bulletin board provides an opportunity for Parabotanists to post messages that may be of general value to the Plant Atlas community. If you have a question, and you think the answer should be shared with other Parabotanists, post it on the Bulletin Board. The Plant Atlas staff can enter responses directly to the question.

Your name will be recorded with any comment you enter but will not appear in the comment that other Parabotanists will see. If you want to "sign" the comment, add your name to the comment body. Staff comments will appear in red italics.





# Rare, Threatened, Endangered (Special Status) Plants:

On the login page, there are two links related to the subject of rare, threatened, endangered plants. The first link takes you to a page that facilitates the finding of special status plants by name and provides details of the status. You can, by selecting the appropriate button, display plants that are categorized by California or Federal law, or plants that are simply considered Special Status by the California Native Plant Society.

|   |   |   | 1   | ditte.   |
|---|---|---|---|--|
| SAN DIEGO<br>NATURAL HISTORY<br>MUSEUM  |   | /   | PLANT ATLAS   |  |
| 0   |   | tened, or<br>eturn to the previo  | Endangered Plant Lists  | 12 Oct 04  |
| Click the button for the list you want to<br>County plant species of special interes<br>Display the List button.  |   |   |   |  |
| The information provided here represe<br>to be, or likely to be, found in San Die<br>Use it as a guide, not an authoritative<br><u>Photo</u> to go to the <u>CalPhotos</u> web site.<br>Berkeley Digital Library Project, and <u>it</u><br>were contributed by native plant enthu<br>plants shown in the photos have been | go County. I<br>source. To se<br>Please note<br><u>may not inc</u><br>isiasts who v | ts accuracy,<br>ee photograp<br>that the CalP<br>clude photos<br>vere not train | completeness, and currency are in<br>hs of representative samples of the<br>hotos database was developed by<br>for all of the plants. Also, many of | not guaranteed.<br>he plants, click<br>y the UC<br>of the images |
| SD Plants I   | Protected by  | Law OSD   | Plants of Special Interest  |  |
| Sort the list by:   | Genus   | ~   | Display the List  |  |
|   | The ca<br>CT (Califorr  | itegory codes<br>nia Threaten<br>ned), FE (Fe                                   | s are:<br>ad), CE (California Endangered)<br>derally Endangered)  | ected by law.  |

| U.S. | CA | Family     | Genus          | Species    | Rank | InfraName   | Common Name          | CalPhotos |
|------|----|------------|----------------|------------|------|-------------|----------------------|-----------|
| FT   | CE | Lamiaceae  | Acanthomintha  | ilicifolia |      |             | San Diego thom-mint  | Photo     |
| PE   |    | Asteraceae | Ambrosia       | pumila     |      |             | San Diego ambrosia   | Photo     |
| FE   |    | Ericaceae  | Arctostaphylos | glandulosa | ssp. | crassifolia | Del Mar manzanita    | Photo     |
| FT   | CE | Fabaceae   | Astragalus     | magdalenae | var. | peirsonii   | Peirson's milk-vetch | Photo     |

|                          |                   | John                 | Sanborn        |              |                    |
|--------------------------|-------------------|----------------------|----------------|--------------|--------------------|
| Grid Square:             |                   |                      | Date:          | January 🏻 🛓  | 1 🗙 2004 🗙         |
|                          |                   | Latitude and l       |                |              |                    |
| Enter e                  | ither deg/min/see | and the second       | 10 <del></del> | cimal degree | s, (32.7736°)      |
| Degrees                  | Minutes           | Latitude:<br>Seconds | (North)<br>OR: |              | Decimal Degre      |
| Degrees                  | Miniates          | Longitude            | Catholica (    |              | Decimal Degre      |
| Degrees                  | Minutes           | Seconds              | OR:            |              | Decimal Degre      |
| Directions:              |                   | - 55                 |                | 25           |                    |
|                          |                   | -                    |                | 1            |                    |
| Genus:                   |                   | Specif               | ic Epithet:    | <u> </u>     |                    |
| Ovar O                   | ssp 💿 N/A         |                      |                | Infranam     | e                  |
| _                        |                   |                      |                | 7.<br>       |                    |
| Common Name:             |                   |                      | P              | henology:    | Select from List 🚩 |
| Description<br>of Plant: |                   |                      |                |              |                    |
|                          |                   |                      |                |              | Photo              |
| Abundance:               |                   |                      |                |              | available          |
|                          |                   |                      |                |              |                    |

If you encounter a plant that is protected by California and/or Federal law, you should report the observation, but not collect the plant. The link to the observation report form will take you to that page.

# **Topographic overview map/Aerial Images:**

The best aids to determining the latitude and longitude of your collecting site and ensuring you're in the square you believe you're in, are the two Google™ tools accessible from the home page. Both provide latitude/longitude display as well as Atlas Square references. See the Plant Species on Google Maps under the Plant Mapping menu, and Plant Atlas on Google Earth under the references menu.

For a quick aerial photo of any particular square, the web site provides a set of aerial images. After logging in, use the drop-down menu item **Reference** and then click on **Topo Maps/Photo Maps**. You will see the following page:



The left side of the page illustrates the overview map that will be made available. There are two links to access these maps. One leads to the maps produced in Adobe<sup>®</sup> pdf format, the other to maps produced in .jpg pictorial file format. The maps are the same either way, and the narrative on the page explains why you might pick one format over the other.

The right side of the page allows you to select an aerial image of any particular square. Use the drop-down boxes to select the square, and then click the Show Image button.