



Plant Atlas Web Site Overview

March 2017

San Diego County, with natural environments ranging from sea coast, up through foothills and mountains, and down to the desert, is a hotbed of botanical diversity. The Plant Atlas project is an intensive plant specimen collecting effort begun in 2003 employing dozens of volunteer plant enthusiasts and resulting in a very high density survey of the more than 2800 species found in the county. This web site presents the findings of that effort and provides users a variety of tools for researching those findings.

What can you do at this web site?

- ❖ Search the database of the San Diego Natural History Museum Herbarium
- ❖ Map the plant species of San Diego County by species or by locality or region
- ❖ Review the Checklist of species with links to other data sources
- ❖ Find plant names, common and scientific
- ❖ Find photographs of county plants
- ❖ View mounted specimen sheets
- ❖ Determine ownership of San Diego properties



Links to the commonly used tools are found on the left panel. All tools, including those used less often such as searching by user-drawn rectangle or polygon, can be found on the drop-down menus at the top of the page. You can also find the Types specimen images, Marine Algae specimen images, SD County place names search, and tools for creating and saving geographic entities for searching.

Search the Herbarium Database

The herbarium database holds the records for over 102,000 plants collected in San Diego county, many as

Search for: (select one or more criteria)

Family: Genus: Sp:

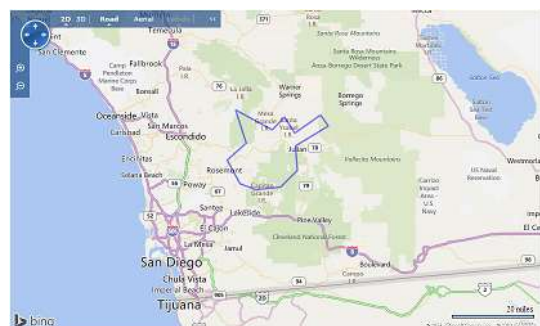
Collector last name: Locality includes:

After: Before: (Date format mm/dd/yyyy as in 10/23/1978)

Atlas Square = Ltr ▾ Nurr ▾ [Atlas Grid View](#) - Sort By: Family ▾

early as the 1870's. On the web site users can search by scientific name parts, collector's name, locality, dates, and Atlas Square. The search results can be downloaded as Excel or Word files. Users with requirements for special searches may contact the Botany Department with a request.

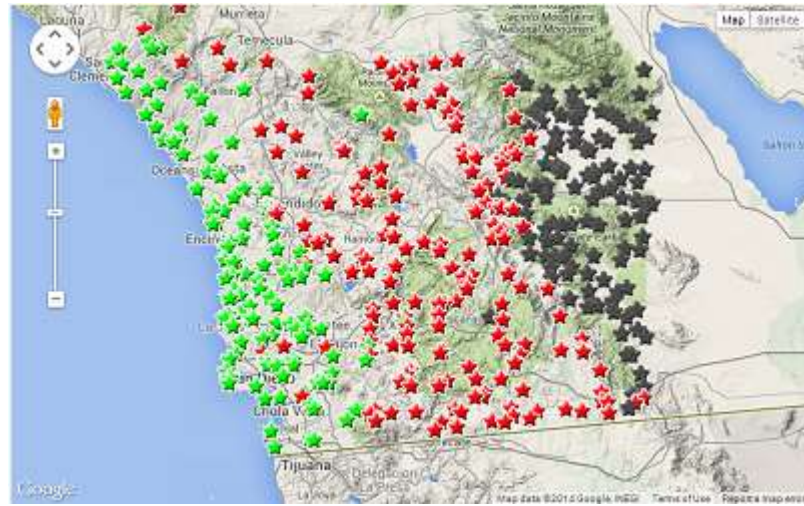
Under the Database Search menu website users can find two geographic searching tools, rectangle and polygon. With these tools users can get a list of all the specimens collected within the area drawn on the map. Because these searches have the potential to produce a very large result



set, they are limited to small areas. Users may request special geographic searches by providing the Botany Dept. with a defined area using a list of coordinates or an ESRI shapefile.

Map Collected Specimens

Web site users can map multiple collected species using a number of tools. The figure to the right shows Google map on which *Rhus integrifolia*, *Rhus ovata*, and *Larrea tridentata* have been sequentially mapped. The Berkeley Mapper is also provided as well as a Google map to map all the species of a single genus.



Checklist

The current list of species listed in the **Checklist of the Vascular Plants of San Diego County**, 5th Edition, 2014 by Jon P. Rebman, Curator of Botany, San Diego Natural History Museum and Michael G. Simpson,

Professor of Biology, San Diego State University, are presented with links to internal and external sources of information. Users can select a family from a drop-down list to generate a list of all the San Diego species of that family. That

Current Checklist of the Vascular Plants of San Diego County, California
 Current checklist of San Diego plant species maintained by the Plant Atlas project, updated periodically
 Based on the San Diego County Checklist, 5th edition, 2014, by Jon P. Rebman, SDNHM, and Michael G. Simpson, SDSU
[Click here for a list of checklists from the 4th Edition](#)

List the species of this selected family:

- + Some links to the SDNHM photo collection will yield no photos. The photo collection is a work in progress.
- + Some links to USDA or CalPhotos may fail due to name changes. [Click here](#) for the Jepson (University of California) list of current synonyms.
- + Don't know the family? Use the [Plant Atlas Name Finder](#) to find plant family names using common names or parts of common names or scientific genus names.

You have selected **Brassicaceae (Mustard)**

Voucher	Plant Name (SD Voucher)	Common Name	SD Photos	Cal Photos	Jepson	USDA	SD Collection	Map Genus
Spec Scan	Arabisopsis thalana (52997)	Mouse-Ear Cress	SD Photos	Cal Photos	Jepson eFlora	Plants Profile	Collection	Map
Spec Scan	Athyrium pusillum (126518)	Dwarf Athyrium	SD Photos	Cal Photos	Jepson eFlora	Plants Profile	Collection	Map
Spec Scan	Barbarea orthoceras (73714)	Erect-Pod Water-Cress	SD Photos	Cal Photos	Jepson eFlora	Plants Profile	Collection	Map
Spec Scan	Boechera arcuata (130565)	Elegant Rock-Cress	SD Photos	Cal Photos	Jepson eFlora	Plants Profile	Collection	Map

list includes links to other information items: (a) scan of the mounted specimen voucher, (b) common name of the species, (c) the SDNHM photo collection of the species, (d) the CalPhotos photo collection of the species, (e) the Jepson eFlora treatment of the species, (f) the USDA coverage of the species, (g) a list of DB records from the herbarium, (h) a map of all the specimens of the species.

Plant Names

Users who need help in plant names can find it on the *Find a Plant Name* page. Users can enter just part of a family, scientific name, or common name and get a list of all the names that match. So, for example, a user who entered "wood" as part of a common name would receive a list of 37 plant names whose common name contains the sequence "wood". A link to CalPhotos photographic collection helps the user to verify the sought after plant.

Group	Family	Scientific Name	Common Name	Native?	CalPhotos
Leptosporangiate Ferns	Thelypteridaceae	<i>Thelypteris acuminata</i>	Acuminate Wood Fern	Non-Native	Photo
Eudicots	Rosaceae	<i>Rosa gymnocarpa</i>	Baldip/Wood Rose	Native	Photo
Eudicots	Salicaceae	<i>Populus trichocarpa</i>	Black Cottonwood	Native	Photo
Eudicots	Fabaceae	<i>Acacia melanoxylon</i>	Blackwood Acacia	Non-Native	Photo
Eudicots	Saxifragaceae	<i>Lithochaetia bolanderi</i>	Bolander's Woodland Star	Native	Photo

Plants of the Ecological Regions

Eighteen distinct ecological regions have been identified in San Diego County. Website users can see and download (as Excel) a list of the species collected in each of these regions. Clicking in a region on the map produces the list of species by Family and provides a button to download the list.

List the Plant Species Collected to Date From the San Diego County EcoRegions
 Click on the Map to Select an Ecological Region [Click here for a larger, detailed map](#)
 Selected EcoRegion:
Northern Foothills

 Region selection is by squares, since region overlap will occur.
[What Grid Squares are in a Region?](#)




Plants that have been collected in the Northern Foothills ecological region:

Family	Plant Name	Common Name	Google Image
Aceraceae	Acer macrophyllum	Big-Leaf Maple	Click Here
Adoxaceae	Sambucus nigra ssp. caerulea	Blue Elderberry	Click Here
Agavaceae	Hesperoyucca whipplei	Chaparral Candle	Click Here
Agavaceae	Yucca schottiana	Mohave Yucca	Click Here

Plant Photographs

A web page provides a search of the SDNHM Botany Department's collection of photographs of county plants. On that page is also a link to the CalPhotos web site for a larger collection of photos (*although there is no guarantee that the CalPhotos plant photos are correctly or completely identified*).

A search by plant name produces a number of pages of thumbnails which include data on each photo. Each individual photo can then be selected to view a full-page size image.



Thumbnail 1: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 10 May 1999. Where: Silverwood Sanctuary (Audubon). Square. [View Photo](#)

Thumbnail 2: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Thumbnail 3: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Thumbnail 4: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Thumbnail 5: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Thumbnail 6: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Thumbnail 7: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Thumbnail 8: Hesperoyucca whipplei (Chaparral Candle). Photo by Ken Bowles. Date: 29 Mar 2005. Where: Loveland Reservoir Overlook. Square. [View Photo](#)

Display Size Actual size

Photo #: K054244 Photographer: Ken Bowles Orig File: Yucca2 Date: May 10, 1999
 Plant: Hesperoyucca whipplei Family: Agavaceae
 Alt: Squares, San Diego County, California
 Locality: Silverwood Sanctuary (Audubon)
 Copyright: © 2006



Photo by Ken Bowles

Mounted Specimen Sheets

Each species of the county checklist is represented by a mounted specimen voucher. These vouchers have all been scanned and are available to view on the website. Users search by family, genus, specific epithet, selecting either a list or small images of the specimen sheets. Clicking one of the thumbnails will bring up a full page display of the scanned voucher.

Search the San Diego County and MCB Camp Pendleton Synoptic Collections

To search the collections:
• Select one or more search criteria by entering a name or first part of a name to search for. Do not use wildcards.
• Check the **With Images** box to see specimen sheets.
• Check the box for either or both collections.
• Click the **List Specimens** button.

Family:
Genus:
Spec Ep:

MCB Camp Pendleton Synoptic San Diego County Synoptic

With Thumbnail Images
List Specimens

SDNHM Number: 106685
Tamaricaceae Tamarix ramosissima
Collector: Henk van der Werf
Number: 3950 Date: Jun 20, 1980
Phenology: Flower
Latitude: 32.7641° Longitude: -116.5723°
Elevation (meters): 1200
Location: Pine Valley, Corte Madera Ranch
Habitat:

Family: Tamaricaceae, Species: Tamarix ramosissima
SD Accession Number: 106685 (Voucher for San Diego County)
Collector: van der Werf, Coll Number: 3950, Collected: Jun 20, 1980, Collected at: 32.76409° Lat, -116.57253° Lng
Use Mouse Wheel or Buttons to Zoom Image — Click and Drag to Pan Image
[Return to the Search Page](#) [Download Image](#)

PLANTS OF CORTE MADERA RANCH
Pine Valley, San Diego County, California
Tamarix ramosissima Ledeb.
Small tree, 3 m, fls. white/yellow.

106685
SDNHM
SOCIETY OF NATURAL HISTORY

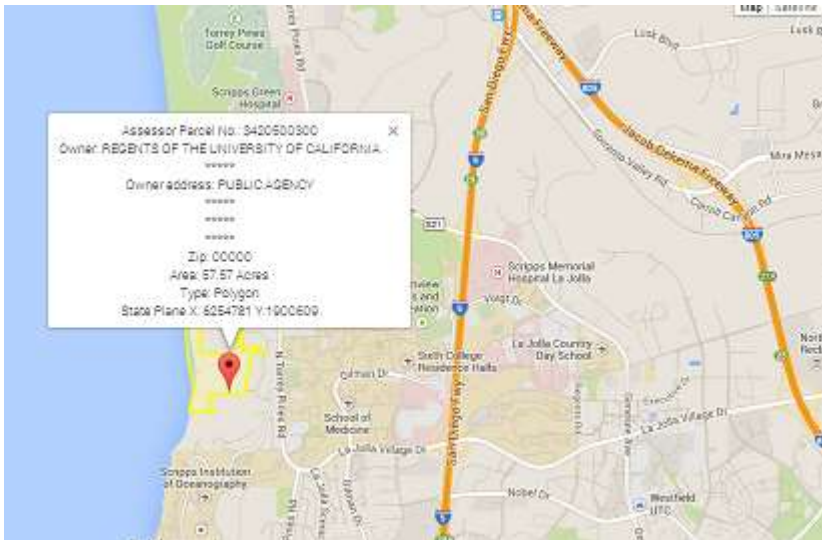
Photo: June 20, 1980
Coll. and det.: H. van der Werf
Elevation: CA, 1200 m

106685
SDNHM
SOCIETY OF NATURAL HISTORY

All the voucher sheets of the SDNHM synoptic collection are available as high resolution scans. Clicking on the link to the Hi-Res scan moves the user to another page that provides an image of the Hi-Res scan. The high resolution scans have been tiled to allow the presented scan to be zoomed and panned for a detail view of the specimen.

The page also provides a link to directly download the image so it can be handled on the client computer.

Property Ownership



When collecting plants it is important to know on whose property you may be needing access. To assist our collectors any anyone else wanting to examine an area shown by the mapping tools to be home to a particular species, the web site includes a property identification page. Users can simply click on any point on the map and a title box brings up the owner's name and address and draws the property lines of the parcel. Data is from San Diego County Assessor.

Plant List by Atlas Squares on Google Earth

For an easy way to get a list of the plants that have been found in any one of the Atlas Squares, a web user can download a Google Earth overlay that shows the squares and presents a link to a list of plants from the square.



San Diego Natural History Museum San Diego County Plant Atlas

List of plants collected in Square: F17
The list includes all specimens currently in the San Diego Natural History Museum herbarium

Family	Genus	Sp. Epithet	ssp./var.	Common Name	Google Images
Adoxaceae	Sambucus	nigra	ssp. caerulea	Blue Elderberry	Click
Agavaceae	Chitrogalum	parviflorum		Small-Flower Soap-Plant/Amole	Click
Agavaceae	Hesperoyucca	whipplei		Chaparral Candle	Click
Alliaceae	Allium	naismithianum		Red-Skin Onion	Click
Amaranthaceae	Amaranthus	albus		White Tumbleweed	Click
Amaranthaceae	Amaranthus	trifidus		Prostrate Amaranth	Click
Amaranthaceae	Amaranthus	californicus		California Amaranth	Click
Anacardiaceae	Maloma	aurina		Laurel Sumac	Click
Anacardiaceae	Rhus	integrifolia		Lemonadeberry	Click
Anacardiaceae	Rhus	ovata		Sugar Bush	Click
Anacardiaceae	Schinus	mole		Peruvian Pepper Tree	Click
Anacardiaceae	Schinus	molle		Brazilian Pepper Tree	Click
Apiaceae	Aethracus	caucalis		Bur Chervil	Click
Apiaceae	Apiastrium	angustifolium		Mock-Parsley	Click
Apiaceae	Conium	maculatum		Common Poison Hemlock	Click
Apiaceae	Daucus	pusillus		Rattlesnake Weed	Click
Apiaceae	Foeniculum	vulgare		Sweet Fennel	Click

There are two downloadable Google Earth files that when added to the user's Google Earth, provide the grid overlay and links to the lists.

Other Tools

- ❖ The Berkeley Mapper
- ❖ Geographic coordinate converter (UTM - Lat/Long - State Plane), Geographic distance calculator
- ❖ San Diego county Place names
- ❖ What Square am I in?
- ❖ Marine algae vouchers
- ❖ The Bird Atlas of San Diego