

Using CalFlora to Map and Monitor Weeds

Chris McDonald PhD

cjmcdonald@ucanr.edu

Natural Resources Advisor

University of California, Cooperative Extension

Why Monitor?

- We monitor weeds to know how much work we have before we tackle a project
- To track our progress managing infestations
- To know what weeds are coming our way
- To follow IPM (Integrated Pest Management) methods



Water, water everywhere...

- Up until the recent past (~10 years) we did not have enough data or accessibility to data to really monitor weeds at scale
- Before then the most reliable data was held by herbaria

**CCH1:**
Featuring California vascular plant data from the Consortium of California Herbaria and other sources

Participants News Search About Help Donate

CCH1 serves as a gateway to information from California vascular plant specimens that are house in herbaria, worldwide. Currently, the database includes **over 2.2 million specimen records** from **36 institutions**.

Please cite data retrieved from this page: *Data provided by the Consortium of California Herbaria (ucjeps.berkeley.edu/consortium/).*

Scientific Name

e.g.: **Platanaceae; Dudl; Dudleya bloch; blochmaniae; Dudleya blochmaniae Insul; Quercus X alvordiana.**

Geographic Locality

e.g.: **Round Meadow; Forester**

Elevation (metric): Lower Upper

County

All counties

Alameda

Alpine

Amador

Butte

Calaveras

Colusa

Contra Costa

Del Norte

El Dorado

Fresno

Glenn

Geographic Region

All regions

Anza Borrego

Big Sur

Channel Islands

Clear Lake

Death Valley

Donner Summit

Kings Canyon/Sequoia

Lake Shasta

Lake Tahoe

Lassen

Mendocino Coast

(1 or more; default is all counties) (Regions defined by bounding-box)

Source (1 or more; default is all sources)

(All sources)

BFRS (Blodgett Forest Research Station, UC Berkeley)

BLMAR (BLM Arcata Field Office)

CAS DS (California Academy of Sciences)

CATA (Catalina Island Conservancy)

CDA (California Department of Food and Agriculture)

CHSC (Chico State Herbarium, CSU Chico)

CLARK (Riverside Metropolitan Museum)

CSUSB (Herbarium, CSU San Bernardino)

GMDRC (Sweeney Granite Mountains Research Center)

HREC (Hopland Research & Extension Center, UC Berkeley)

HSC (Humboldt State University Herbarium)

JRVC (UC Irvine)

JOTR (Joshua Tree National Park Herbarium)

JROH (Jasper Ridge Biological Preserve)

LA (UCLA Herbarium)

MACF (CSU Fullerton)

OSI (California Polytechnic State University, SLO)

PASA (Pasadena City College)

PGM (Pacific Grove Museum of Natural History)

POM (Pomona Herbarium in RSA)

RSA (Rancho Santa Ana Botanic Garden Herbarium)

SACT (CSU Sacramento)

SBSG (Santa Barbara Botanic Garden)

SCFS (Sagehen Creek Field Station, UC Berkeley)

SD (San Diego Natural History Museum)

SDSU (San Diego State University)

Refine or Expand Search

☐ Enable yellow flags to display possible range discrepancies

☐ Include records from the California Floristic Province portion of Baja California

☐ CNPS Inventory (return only names in California Native Plant Society Inventory)

☐ Noxious weeds / invasives (return only records of CAL-IPC or CDFA covered weeds)

☐ Non-natives (return only records of naturalized species)

Collector (last name only; e.g.: **Muir; Moref**)

Collection Number (numerical part only)

Collection Date (Note: Before and After is by Year only)

California Consortium of Herbaria (CCH)

- Holds records for over 2.2 million specimens
- Began in 2003*
- Specimens must be vouchered by an herbarium
- Includes nearly all the old specimens collected by early botanists



CCH

- It functions as a scientific repository
- Used as a way to measure what this species is (type specimen)
- Specimens do not compare to pics



CCH

- Herbaria have significant limitations
- Herbaria can't take all the specimens they want
- They can't take numerous copies of every species on your preserve
- You don't want to spend the time making vouchers for every species or population on your preserve



- There's got to be a better way!



Tools To Monitor Organisms



- iNaturalist
- CalFlora
- ESRI Collector
- iMapInvasives
- Map of Life
- Project Noah
- eBird/Merlin
- Light Pollution Map



Merlin[®]



Project Noah

A global citizen science platform
to discover, share and identify wildlife

Several Tools To Monitor Weeds

- iNaturalist – Collect all organisms, helps to ID species,
- CalFlora – Collect plant data, input data for land management
- ESRI Collector – Collect all types of field data, not just for land managers
- iMapInvasives – I don't really know what it does, it might be good

CalFlora

- CalFlora is one of the most comprehensive and well used plant databases in the US, started in 2000.
- CalFlora is free to use
- No registration required to use the website
- Must set up a free account (email) to use CalFlora app - Observer Pro



CalFlora

- 501(c)3 non-profit with 6 team members
- Executive Director is Cynthia Powell
- Created/developed/maintained by California plant enthusiasts
- Independent from Cal-IPC, CNPS, CalPhotos, UC Jepson, herbaria, iNaturalist, ...



What Does CalFlora Do?

**Calflora**

information on **wild California plants**

Chris McDonald

EDIT - SIGN OUT

My Calflora

My Observations

Add Observations

Phone Applications

Donate

About Calflora

NEWS

Observation Hotline

What Grows Here?

Great Places

Planting Guide

NRCS eVegGuide

Weed Manager

Privacy

Search for Plants

SEARCHCLEARHELP

CommonABCDEFGHIJKLMNOPQRSTUVWXYZ
ScientificABCDEFGHIJKLMNOPQRSTUVWXYZ
FamilyABCDEFGHIJKLMNOPQRSTUVWXYZ

plant nameNAME WIZARD

county

anyAlamedaAlpineAmadorButteCalaverasColusaContra CostaDel NorteEl DoradoFresnoGlennHumboldtImperialInyoKernKingsLakeLassenLos AngelesMaderaMarinMariposaMendocinoMercedModoc

Enter part of a name: CommonScientificor Family
poppyPapaverPOACEAE

duration☐ Annual☐ Perennial☐ Biennial

lifeform☐ Grasslike☐ Tree☐ Herb☐ Fern☐ Shrub☐ Vine

status☐ Native to California☐ Not native to California☐ Cal-IPC invasive plants☐ CNPS rare plants☐ Affinity to serpentine soil

community

anyAlkali SinkAlpine Fell-fieldsBristle-cone Pine ForestChaparralClosed-cone Pine Forest

category☐ Monocot☐ Dicot☐ Gymnosperm☐ Pteridophyte☐ Bryophyte☐ Lichen☐ Algae☐ Whisk-fern

result formatPhotosmore ...Order byscientific name

Calflora • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • Contact Calflora

What Does CalFlora Do?



information on wild California plants

Chris McDonald

EDIT - SIGN OUT

My Calflora

My Observations

Add Observations

Phone Applications

Donate

About Calflora

NEWS

Observation Hotline

What Grows Here?

Great Places

Planting Guide

NRCS eVegGuide

Weed Manager

Privacy

Search for Plants

SEARCH CLEAR HELP

Common ABCDEFGHIJKLMNOPQRSTUVWXYZ
Scientific ABCDEFGHIJKLMNOPQRSTUVWXYZ
Family ABCDEFGHIJKLMNOPQRSTUVWXYZ

plant name NAME WIZARD

Enter part of a name: Common Scientific or Family
any Papaver POACEAE

duration ☐ Annual
☐ Perennial
☐ Biennial

status ☐ Native to California
☐ Not native to California
☐ Cal-IPC invasive plants

community
any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

result format Photos

county
any
Alameda
Alpine
Amador
Butte
Calaveras
Colusa
Contra Costa
Del Norte
El Dorado
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings
Lake
Lassen
Los Angeles
Madera
Marin
Mariposa
Mendocino
Merced
Modoc

Search for any
plant in
database using
common or
scientific name
or partial name

California • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • [Contact Calflora](#)

What Does CalFlora Do?



information on wild California plants

Chris McDonald

EDIT - SIGN OUT

My Calflora

My Observations

Add Observations

Phone Applications

Donate

About Calflora

NEWS

Observation Hotline

What Grows Here?

Great Places

Planting Guide

NRCS eVegGuide

Weed Manager

Privacy

Search for Plants

SEARCH CLEAR HELP

Common ABCDEFGHIJKLMNOPQRSTUVWXYZ

Scientific ABCDEFGHIJKLMNOPQRSTUVWXYZ

Family ABCDEFGHIJKLMNOPQRSTUVWXYZ

plant name NAME WIZARD

Enter part of a name: Common Scientific or Family

poppy Papaver POACEAE

duration ☐ Annual

lifeform ☐ Grasslike ☐ Tree ☐ Shrub ☐ Vine

monocot Dicot Gymnosperm Pteridophyte

Bryophyte Lichen Algae Whisk-fern

Order by scientific name

county any

Alameda

Alpine

Amador

Butte

Calaveras

Colusa

Contra Costa

Del Norte

El Dorado

Fresno

Glenn

Humboldt

Imperial

Inyo

Kern

Kings

Lake

Lassen

Los Angeles

Madera

Marin

Mariposa

Mendocino

Merced

Modoc

Show/List plants in your county or multiple counties, or species in your county(ies)

Calflora • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • Contact Calflora

What Does CalFlora Do?



information on wild California plants

Calflora

Chris McDonald
EDIT - SIGN OUT

[My Calflora](#)
[My Observations](#)
[Add Observations](#)
[Phone Applications](#)
[Donate](#)
[About Calflora](#)
[NEWS](#)
[Observation Hotline](#)
[What Grows Here?](#)
[Great Places](#)
[Planting Guide](#)
[NRCS eVegGuide](#)
[Weed Manager](#)
[Privacy](#)

Search for Plants

SEARCHCLEARHELP

Common ABCDEFGHIJKLMNOPQRSTUVWXYZ
Scientific ABCDEFGHIJKLMNOPQRSTUVWXYZ
Family ABCDEFGHIJKLMNOPQRSTUVWXYZ

plant name

NAME WIZARD

Enter part of a name: Common Scientific or Family
poppy Papaver POACEAE

duration☐ Annual
☐ Perennial
☐ Biennial

lifform☐ Grasslike
☐ Herb
☐ Shrub

☐ Tree
☐ Fern
☐ Vine

status☐ Native to California
☐ Not native to California
☐ Cal-IPC invasive plants

☐ CNPS rare plants
☐ Affinity to serpentine soil

community

any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

category☐ Monocot
☐ Dicot
☐ Gymnosperm
☐ Bryophyte

county

any
Alameda
Alpine
Amador
Butte
Calaveras
Colusa
Contra Costa
Del Norte
El Dorado
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings
Lake
Lassen
Los Angeles
Madera
Marin
Mariposa
Mendocino
Merced
Modoc

result format

Photos

more ...

California • 1700 Shattuck Av #198, Berkeley, CA 94709 •

Search by plant longevity
Annual,
Perennial,
Biennial

What Does CalFlora Do?

**Calflora**

information on wild California plants

Chris McDonald
EDIT - SIGN OUT

[My Calflora](#)
[My Observations](#)
[Add Observations](#)
[Phone Applications](#)
[Donate](#)
[About Calflora](#)
[NEWS](#)
[Observation Hotline](#)
[What Grows Here?](#)
[Great Places](#)
[Planting Guide](#)
[NRCS eVegGuide](#)
[Weed Manager](#)
[Privacy](#)

Search for Plants

SEARCHCLEARHELP

CommonABCDEFGHIJKLMNOPQRSTUVWXYZ
ScientificABCDEFGHIJKLMNOPQRSTUVWXYZ
FamilyABCDEFGHIJKLMNOPQRSTUVWXYZ

plant name

NAME WIZARD

Enter part of a name: Common Scientific or Family
poppyPapaverPOACEAE

duration☐ Annual
☐ Perennial
☐ Biennial

lifeform☐ Grasslike☐ Tree
☐ Herb☐ Fern
☐ Shrub☐ Vine

status☐ Native to California☐ CNPS rare plants
☐ Not native to California☐ Affinity to serpentine soil
☐ Cal-IPC invasive plants

community

any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

category☐ Monocot☐ Bryophyte

county

any
Alameda
Alpine
Amador
Butte
Calaveras
Colusa
Contra Costa
Del Norte
El Dorado
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings

result formatPhotos

more ...

Modoc

Search by plant type:
grass, vine, tree, ...

California • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • [Contact Calflora](#)

What Does CalFlora Do?



information on wild California plants

Calflora

Chris McDonald
EDIT - SIGN OUT

[My Calflora](#)
[My Observations](#)
[Add Observations](#)
[Phone Applications](#)
[Donate](#)
[About Calflora](#)
[NEWS](#)
[Observation Hotline](#)
[What Grows Here?](#)
[Great Places](#)
[Planting Guide](#)
[NRCS eVegGuide](#)
[Weed Manager](#)
[Privacy](#)

Search for Plants

SEARCHCLEARHELP

Common ABCDEFGHIJKLMNOPQRSTUVWXYZ
Scientific ABCDEFGHIJKLMNOPQRSTUVWXYZ
Family ABCDEFGHIJKLMNOPQRSTUVWXYZ

plant name

Enter part of a name: Common Scientific or Family
poppy Papaver POACEAE

duration☐ Annual
☐ Perennial
☐ Biennial

status☐ Native to California
☐ Not native to California
☐ Cal-IPC invasive plants

community

any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

liferShrubVine

category☐ Monocot
☐ Dicot
☐ Gymnosperm
☐ Pteridophyte☐ Bryophyte
☐ Lichen
☐ Algae
☐ Whisk-fern

result format Photos more ... Order by scientific name

Search by plant communities

Del Norte
El Dorado
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings
Lake
Lassen
Los Angeles
Madera
Marin
Mariposa
Mendocino
Merced
Modoc

Calflora • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • [Contact Calflora](#)

What Does CalFlora Do?



information on wild California plants

Chris McDonald

EDIT - SIGN OUT

My Calflora

My Observations

Add Observations

Phone Applications

Donate

About Calflora

NEWS

Observation Hotline

What Grows Here?

Great Places

Planting Guide

NRCS eVegGuide

Weed Manager

Privacy

Search for Plants

SEARCH CLEAR HELP

plant name

Enter part of a name: Common Scientific or Family

poppy Papaver POACEAE

duration

☐ Annual

☐ Perennial

☐ Biennial

status

☐ Native to California

☐ Not native to California

☐ Cal-IPC invasive plants

☐ CNPS rare plants

☐ Affinity to serpentine soil

community

any

Alkali Sink

Alpine Fell-fields

Bristle-cone Pine Forest

Chaparral

Closed-cone Pine Forest

category

☐ Monocot

☐ Dicot

☐ Gymnosperm

☐ Pteridophyte

☐ Bryophyte

☐ Lichen

☐ Algae

☐ Whisk-fern

result format Photos

more ...

Order by scientific name

Colusa

Contra Costa

Del Norte

El Dorado

Fresno

Glenn

Humboldt

Imperial

Inyo

Kern

Kings

Lake

Lassen

Los Angeles

Madera

Marin

Mariposa

Mendocino

Merced

Modoc

Search by plant classes

Monocot, dicot, bryophyte

California • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • [Contact Calflora](#)

What Does CalFlora Do?



information on wild California plants

Chris McDonald
EDIT - SIGN OUT

My Calflora
My Observations
Add Observations
Phone Applications
Donate
About Calflora
NEWS
Observation Hotline
What Grows Here?
Great Places
Planting Guide
NRCS eVegGuide

Search for Plants

SEARCH CLEAR HELP

plant name

Enter part of a name: Common Scientific Family
poppy Papaveraceae POACEAE

duration ☐ Annual ☐ Perennial ☐ Biennial

status ☐ Native to California ☐ Not native to California ☐ Cal-IPC invasive plants

community ☐ any ☐ Alkali Sink ☐ Alpine Fell-fields ☐ Bristle-cone Pine Forest ☐ Chaparral

category ☐ Monocot ☐ Dicot ☐ Gymnosperm ☐ Pteridophyte ☐ Bryophyte ☐ Lichen ☐ Algae ☐ Whisk-fern

county ☐ any ☐ Alameda ☐ Alpine ☐ Amador ☐ Butte ☐ Calaveras ☐ Colusa ☐ Contra Costa ☐ El Norte ☐ El Dorado ☐ Fresno ☐ Glenn ☐ Humboldt ☐ Imperial ☐ Inyo ☐ Kern ☐ Kings ☐ Lake ☐ Lassen ☐ Los Angeles ☐ Madera

Or a combination of these things

Cal-IPC listed Invasive perennial Poaceae in San Diego County

California • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • Contact Calflora

Cal-IPC listed Invasive perennial Poaceae in San Diego County Returns 28 species!



Calflora

Chris McDonald

[EDIT - SIGN OUT](#)

28 matching records.

Searching for: [name like poaceae](#) • [county: San Diego](#) • [duration: Perennial](#) • [Cal-IPC listed](#)

Click on the [Scientific Name](#) to see a Taxon Report.

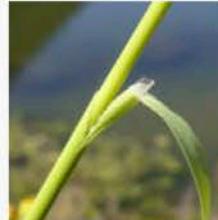
[Agrostis avenacea](#)

Pacific bentgrass

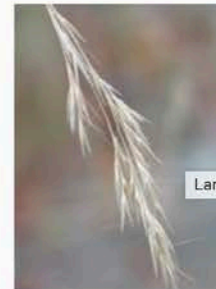
invasive non-native
Perennial grass



© 2001 Joe DiTomaso



© 2008 Zoya Akulova



[Large version of this photo](#)

© 2012 Robert Steers

[Agrostis stolonifera](#)

Redtop

invasive non-native
Perennial grass



© 2008 Keir Morse



© 2009 Barry Rice



© 2018 Zoya Akulova

[Alopecurus pratensis](#)

Meadow foxtail



What are some of the deeper semi-professional functions?



information on **wild California plants**

Calflora

Chris McDonald
EDIT - SIGN OUT

[My Calflora](#)
[My Observations](#)
[Add Observations](#)
[Phone Applications](#)
[Donate](#)
[About Calflora](#)
[NEWS](#)
[Observation Hotline](#)
[What Grows Here?](#)
[Great Places](#)
[Planting Guide](#)
[NRCS eVegGuide](#)
[Weed Manager](#)
[Privacy](#)

Search for Plants

SEARCH CLEAR HELP

Common poppy

plant name

duration

status

community

result format

NAME WIZARD

county

category

more ...

Order by

What plants grow in your area?
"What Grows Here"

California • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • [Contact Calflora](#)

What Grows Here?

What plants grow at
Torrey Pines?

 **Calflores** What Grows Here

MAP

TOOLS

Chris McDonald

EDIT - SIGN OUT

Criteria

☐ Low water tolerant

☐ Riparian

☐ Shade tolerant

☐ Commercially available

PLANT FILTER

RESULTS

PLANT NAMES

AREA

☒ in map area

☐ in polygon

DRAW A POLYGON

start drawing

SAVED SEARCH POLYGONS

POINTS

LOCATION

enter location name

SEARCH

Click on the map to choose a location.

Map

Satellite



LAYERS

Map data ©2019 1 km Terms of Use Report a map error

36.71250, -119.61250



Criteria

☐ Low water tolerant

☐ Riparian

☐ Shade tolerant

☐ Commercially available

▶ PLANT FILTER

▶ RESULTS

▶ PLANT NAMES

SEARCH

AREA

☐ in map area

☒ in polygon

DRAW A POLYGON

stop editing

EDITING: Click to add a new vertex.
Drag a vertex to move it. Click on a vertex to delete it.

☐ Select vertices by rectangle

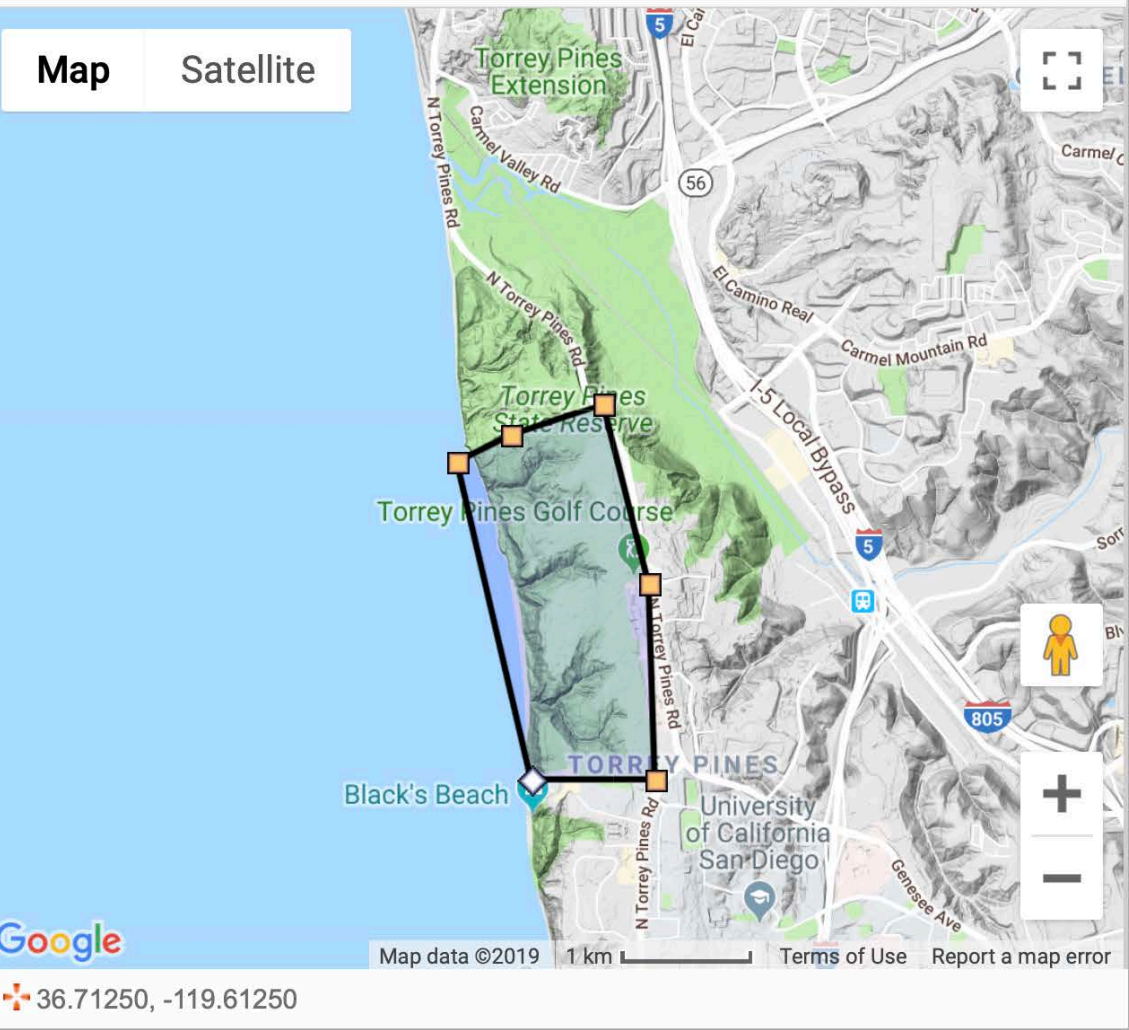
▶ SAVED SEARCH POLYGONS

▶ POINTS

LOCATION

Click on the map to choose a location.

LAYERS



What plants grow at
Torrey Pines?
Near the Golf
Course?



Criteria

- ☐ Low water tolerant
- ☐ Riparian
- ☐ Shade tolerant
- ☐ Commercially available

RESULTS

PLANT NAMES

PLANT FILTER

What plants grow at
Torrey Pines?
Near the Golf
Course?

SEARCH

AREA

☐ in map area

☒ in polygon

DRAW A POLYGON

edit
shape

clear
shape

SAVED SEARCH POLYGONS

POINTS

LOCATION

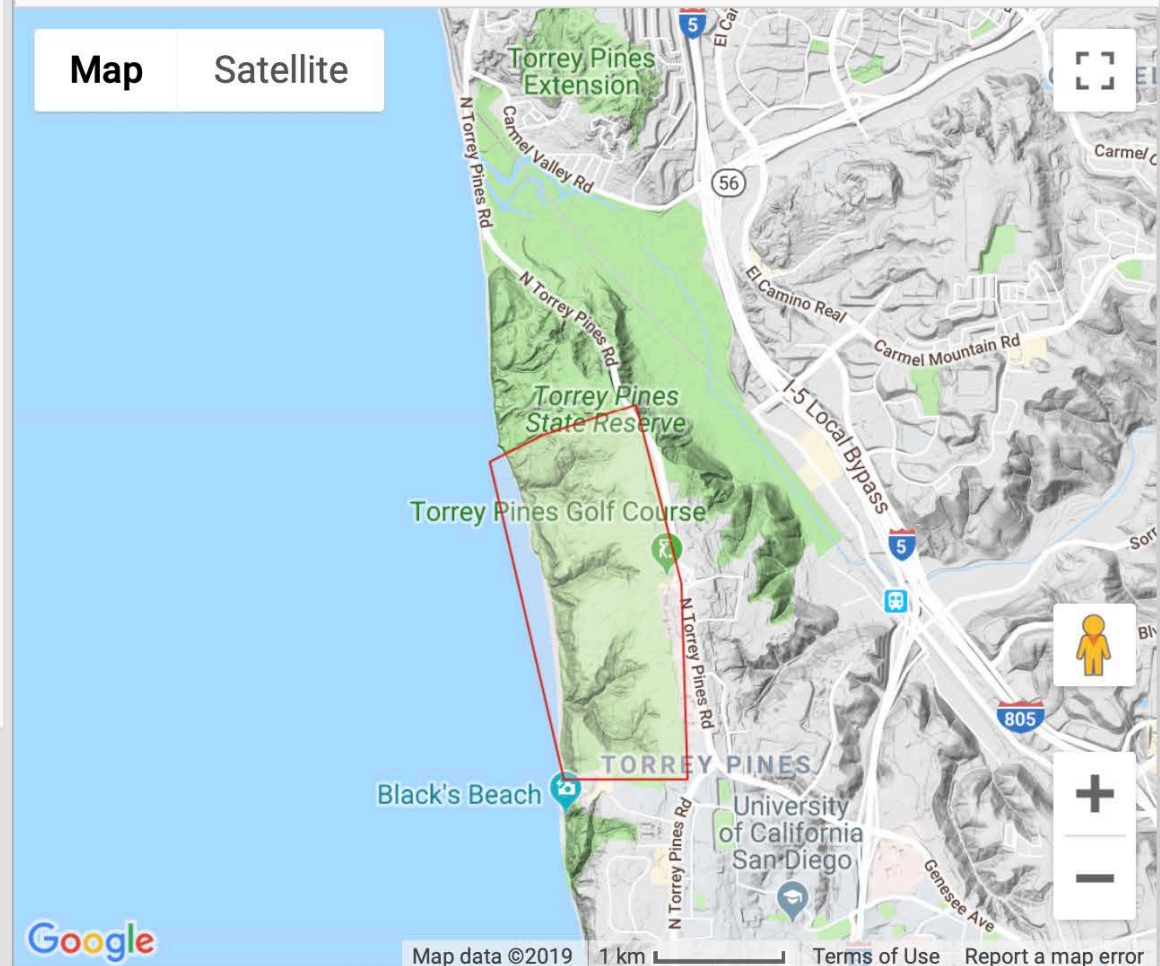
enter location name

Click on the map to choose a location.

LAYERS

Map

Satellite



Google

Map data ©2019

1 km

Terms of Use

Report a map error

36.71250, -119.61250

	Annual Herb	79
	Perennial Herb	72
	Grasslike	21
	Shrub	66
	Tree	14
	Vine	3
	Fern	3

Cortaderia selloana *Pampas grass*

1 record

invasive
non-native

Perennial grass

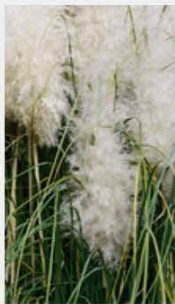
POACEAE



2008 Neal Kramer



2018 Jamie Flagg



Nick Kurzenko

Cynodon dactylon *Bermuda grass*

1 record (1 CCH)

invasive
non-native

Perennial grass

POACEAE



2008 Keir Morse



2008 Keir Morse



2008 Zoya Akulova

Ehrharta calycina *Perennial veldt grass*

1 record (1 CCH)

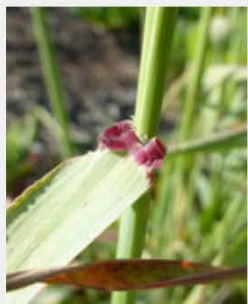
invasive
non-native

Perennial grass

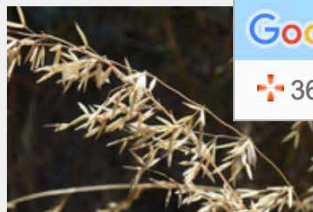
POACEAE



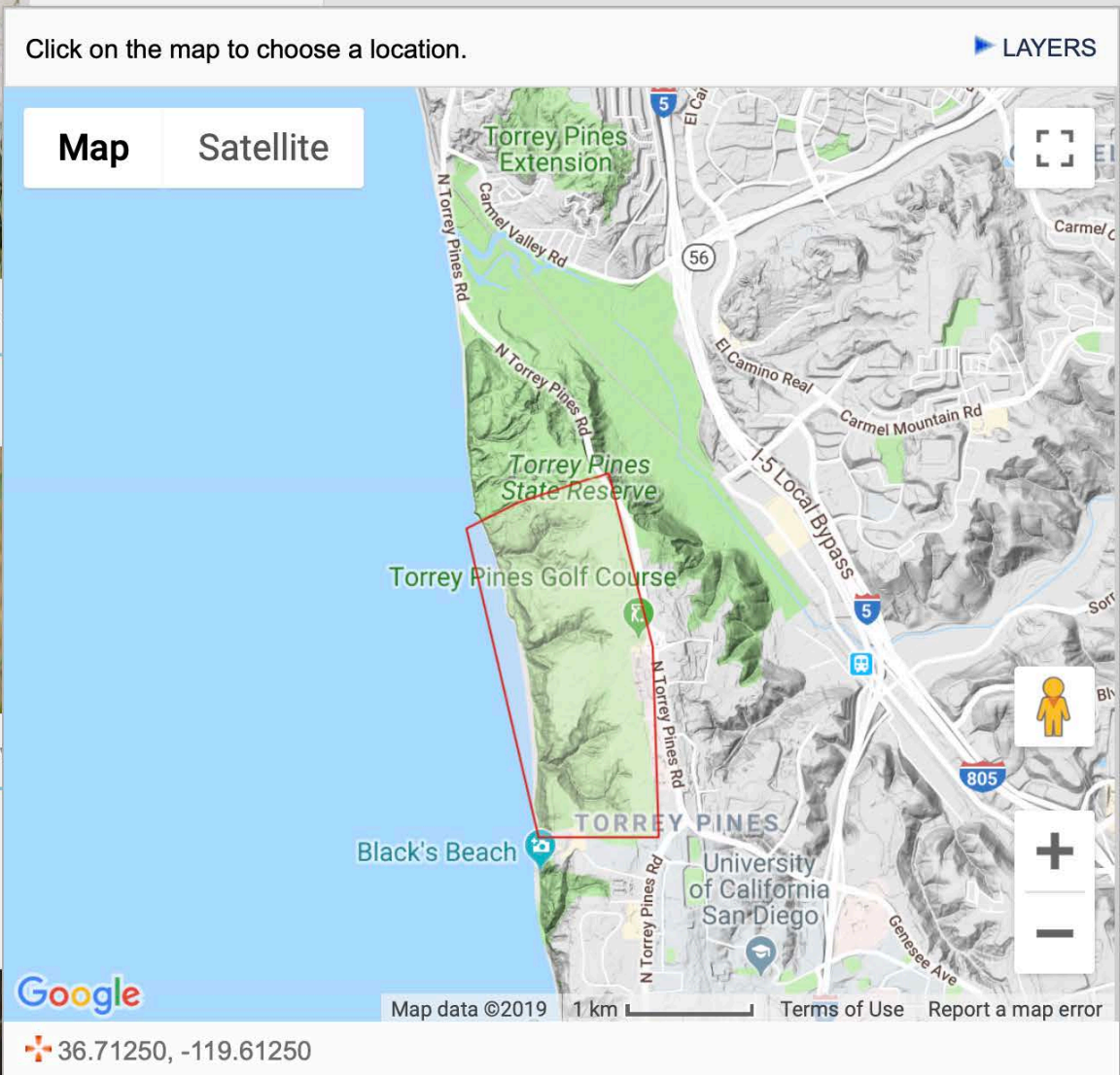
2013 Dale Ritenour



2015 Zoya Akulova



2014 Neal Kramer



Cortaderia selloana *Pampas grass*

1 record

invasive
non-native

Perennial

POACEAE

Cynodon

1 record (1)

invasive
non-native

Perennial grass

POACEAE

Ehrharta calycina *Perennial veldt grass*

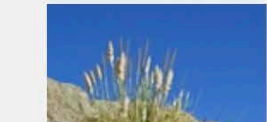
1 record (1 CCH)

invasive
non-native

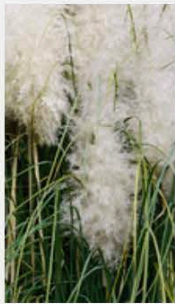
Perennial grass

POACEAE

What plants grow at
Torrey Pines?
Near the Golf
Course?
Ehrharta calycina



2018 Jamie Flagg



Nick Kurzenko



2008 Keir Morse

2008 Keir Morse

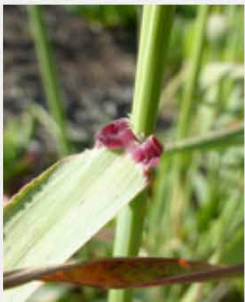


large version of this photo

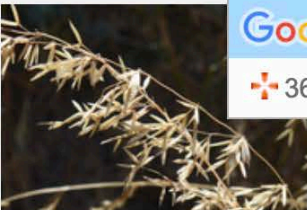
2008 Zoya Akulova



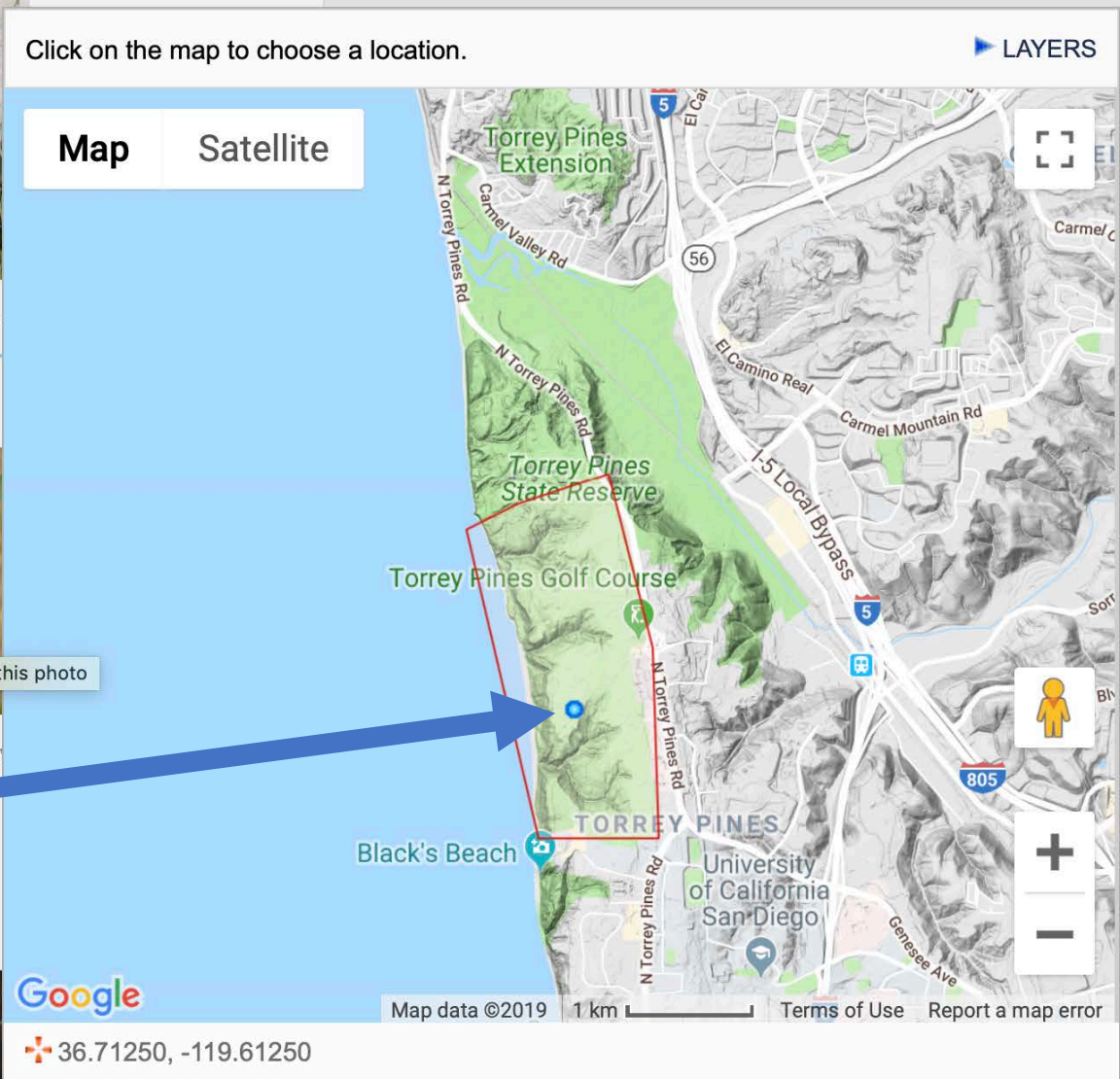
2013 Dale Ritenour



2015 Zoya Akulova



2014 Neal Kramer



One more cool semi-professional function



information on wild California plants

Chris McDonald

EDIT - SIGN OUT

My Calflora

My Observations

Add Observations

Phone Applications

Donate

About Calflora

NEWS

Observation Hotline

What Grows Here?

Great Places

Plant Communities

Naturalist VegGuide

Weed Manager

Privacy

Search for Plants

SEARCH CLEAR HELP

plant name

Enter part of a name: C

duration ☐ Annual ☐ Biennial

status ☐ Native to California ☐ Not native to California ☐ Cal-IPC invasive plants

community ☐ any ☐ Alkali Sink ☐ Alpine Fell-fields ☐ Bristle-cone Pine Forest ☐ Chaparral ☐ Closed-cone Pine Forest

category ☐ Monocot ☐ Bryophyte ☐ Dicot ☐ Lichen ☐ Gymnosperm ☐ Algae ☐ Pteridophyte ☐ Whisk-fern

result format more ... Order by

Common A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Scientific A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Family A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

any

Alameda

Alpine

Amador

Butte

Calaveras

Colusa

Contra Costa

Del Norte

El Dorado

Fresno

Glenn

Humboldt

Imperial

Inyo

Kern

Kings

Lake

Lassen

Los Angeles

Madera

Marin

Mariposa

Mendocino

Merced

Modoc

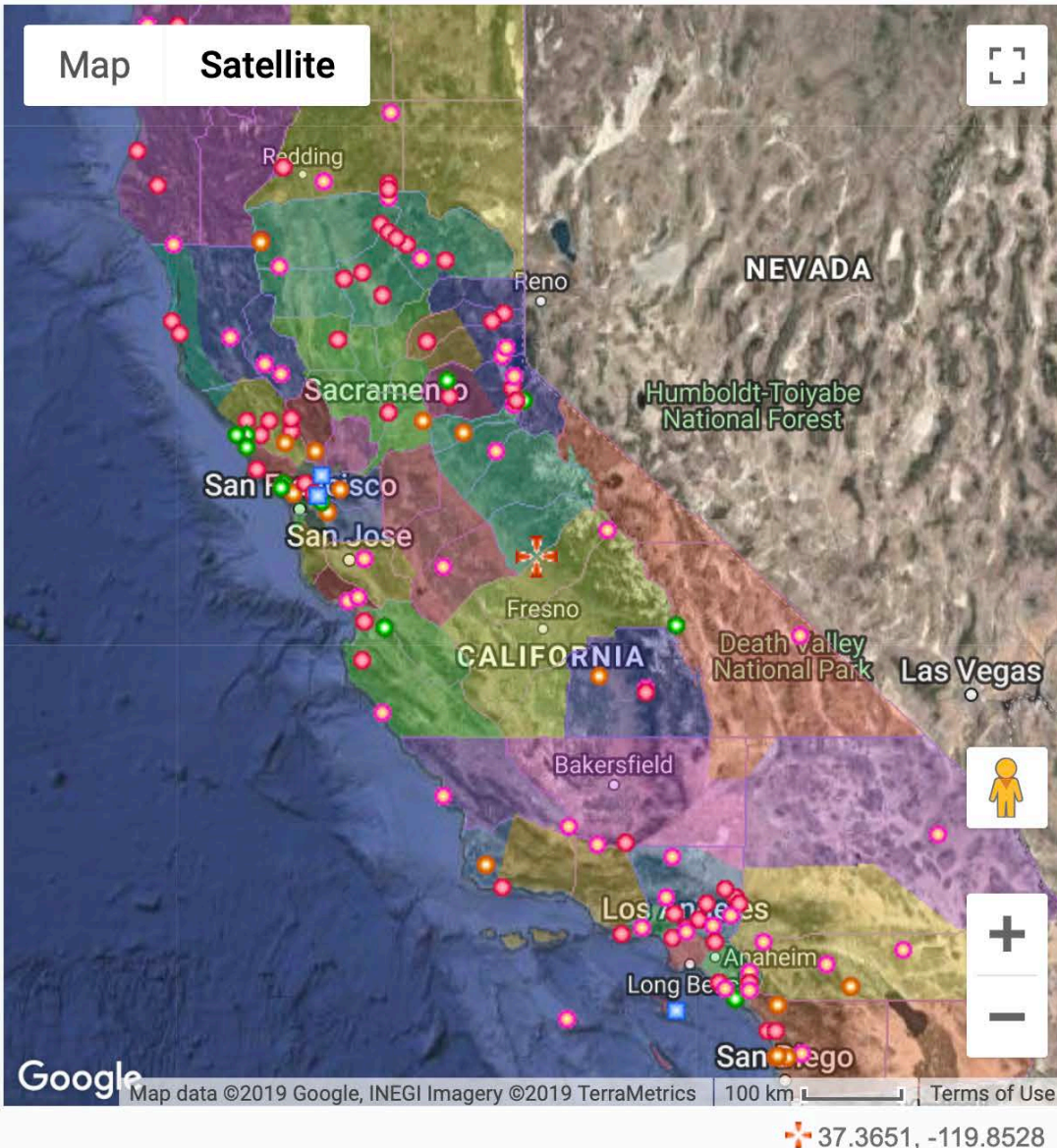
What plants will you see on your travels?

“Great Places”

Calflora • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • Contact Calflora

Map Layers

CNPS Chapter **Sierra Foothills**



Chapter Area

☐ in map area

any

SEARCH

Click on the photo to go to the page

NAME

AREA

DENSITY

Riverside-Corona Resource Conservation District
LandUse

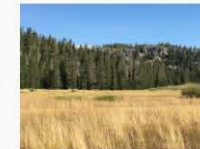


3 acres



native habitat demonstration garden

Blue Lake



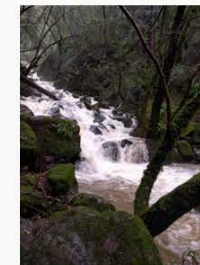
823 acres



0.015

Lassen National Forest, Rhodes Meadow, Chummy Meadows,
Spencer

Sugarloaf Ridge State Park (CDPR)



2,907 acres



0.150

Redwood forest, headwaters of Sonoma Creek

Kaweah Oaks Preserve

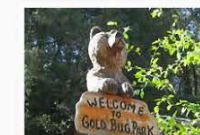


317 acres



0.647

Gold Bug Park - Placerville, CA



58 acres



0.296



ABOUT

A nice hike through chaparral with a good diversity of plants and some great views.

THE PLACE



View from Ellie Lane Trail 2016 Keir Morse



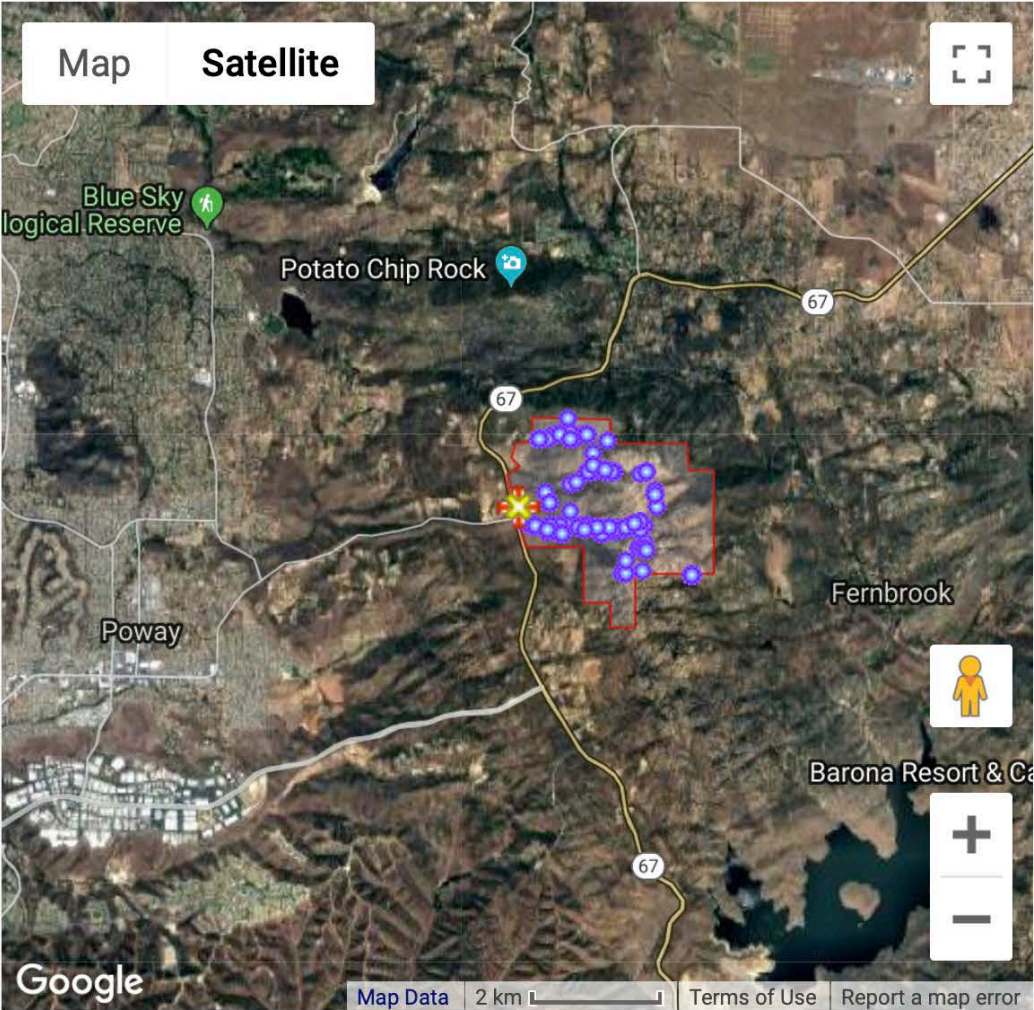
View from Ellie Lane Trail 2016 Keir Morse

THE PLANTS

+	Grasslike	4
+	Annual Herb	47
+	Perennial Herb	48
+	Shrub	39
+	Tree	7
+	Vine	5
+	Fern	8

† indicates a reference photo of the plant from CalPhotos, not taken at this location.

Map Layers



32.9802, -116.9732

What are some of the deeper 'professional' functions?

- When you register with CalFlora you can:
- Add your own observations (public or private observations)
- Form a group so your group can share observations
- Form a group so you can be alerted to new observations
- Receive email alerts about a species observation in a specific area or the entire state
- Show species observations on your smart phone so you can go walk to it in the field
- And many more...

Observations to help management priorities

- Looking up observations (made in the past)
 - I am concerned about a particular species
 - I am concerned about a place
- Adding observations - you would do this, most likely on your smart phone,
can be done online
 - I want to record a species that I am seeing

 Calflora **Observation Hotline**

TOOLSMapMAP LAYERSChris McDonaldEDIT - SIGN OUT

32.8664, -116.9516

Scientific Name

Status (native or not)
any

Start Date

End Date

OTHER SOURCES

Columns
Basic Data

Common Name

Observer

include surveys/checklists

Location Description

customize

☐ anywhere

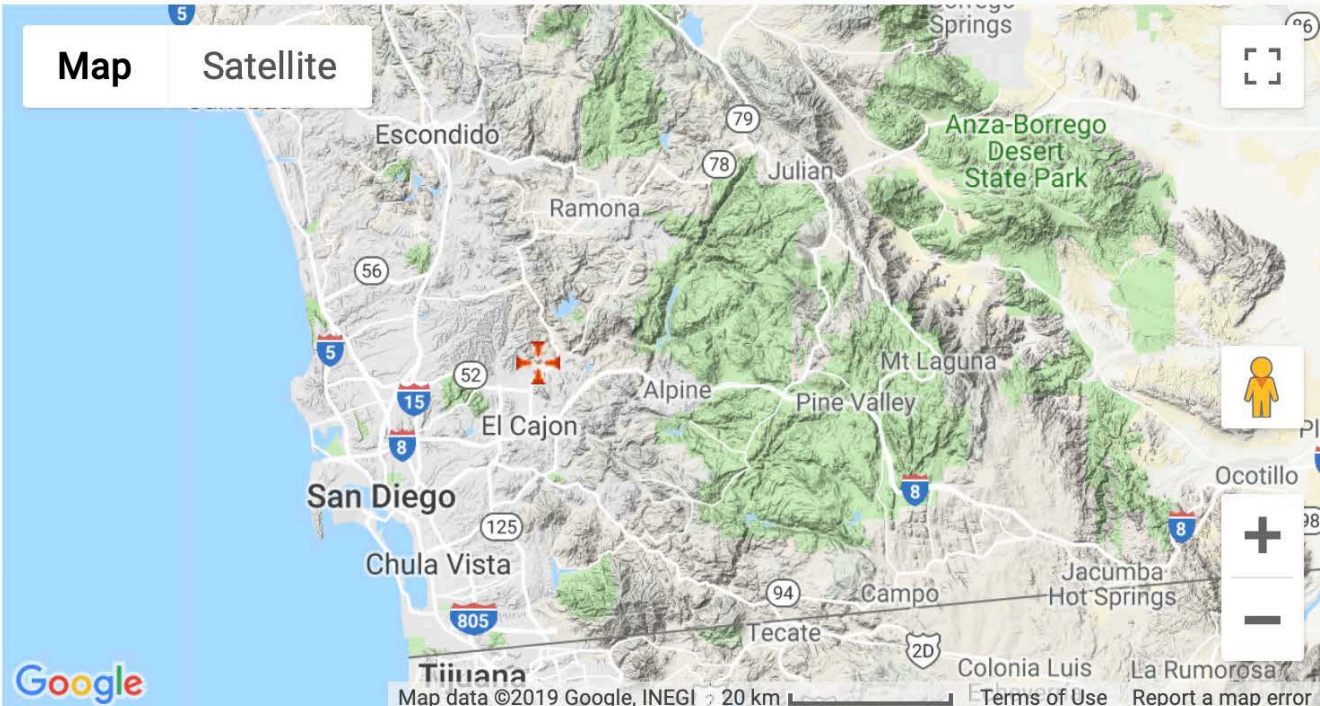
☒ in map area

POLYGON

Photos
any

SEARCH

MapSatellite



Google

ID	Plant	Photo	Observer	Source	Date	County	Location Description
----	-------	-------	----------	--------	------	--------	----------------------

The Observation Hotline is the main page for accessing observation data from CalFlora

Observation Hotline



information on wild California plants

Calflora

Chris McDonald
EDIT - SIGN OUT

[My Calflora](#)
[My Observations](#)
[Add Observations](#)
[Phone Applications](#)
[Donate](#)
[About Calflora](#)
[NEWS](#)
[Observation Hotline](#)
[What Grows Here?](#)
[Great Places](#)
[Planting Guide](#)
[NRCS eVegGuide](#)
[Weed Manager](#)
[Privacy](#)

Search for Plants

SEARCHCLEARHELP

plant name

Enter part of a name: Common Scientific or Family
poppy Papaver POACEAE

duration
☐ Annual
☐ Perennial
☐ Biennial

status
☐ Native to California
☐ Not native to California
☐ Cal-IPC invasive plants

community
any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

lifeform
☐ Grasslike
☐ Herb
☐ Shrub

☐ Tree
☐ Fern
☐ Vine

category
☐ Monocot
☐ Dicot
☐ Gymnosperm
☐ Pteridophyte

☐ Bryophyte
☐ Lichen
☐ Algae
☐ Whisk-fern

county
any
Alameda
Alpine
Amador
Butte
Calaveras
Colusa
Contra Costa
Del Norte
El Dorado
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings
Lake
Lassen
Los Angeles
Madera
Marin
Mariposa
Mendocino
Merced
Modoc

NAME WIZARD

result format
Photos

[more ...](#)

Order by
scientific name

California • 1700 Shattuck Av #198, Berkeley, CA 94709 • 510 883-3148 • [Contact Calflora](#)

 CalFlora **Observation Hotline**

TOOLSMapMAP LAYERSChris McDonaldEDIT - SIGN OUT

32.8664, -116.9516

Scientific Name

Status (native or not)
any

Start Date

End Date

Observer

OTHER SOURCES

Columns
Basic Data

Common Name

include surveys/checklists

Location Description

customize

☐ anywhere

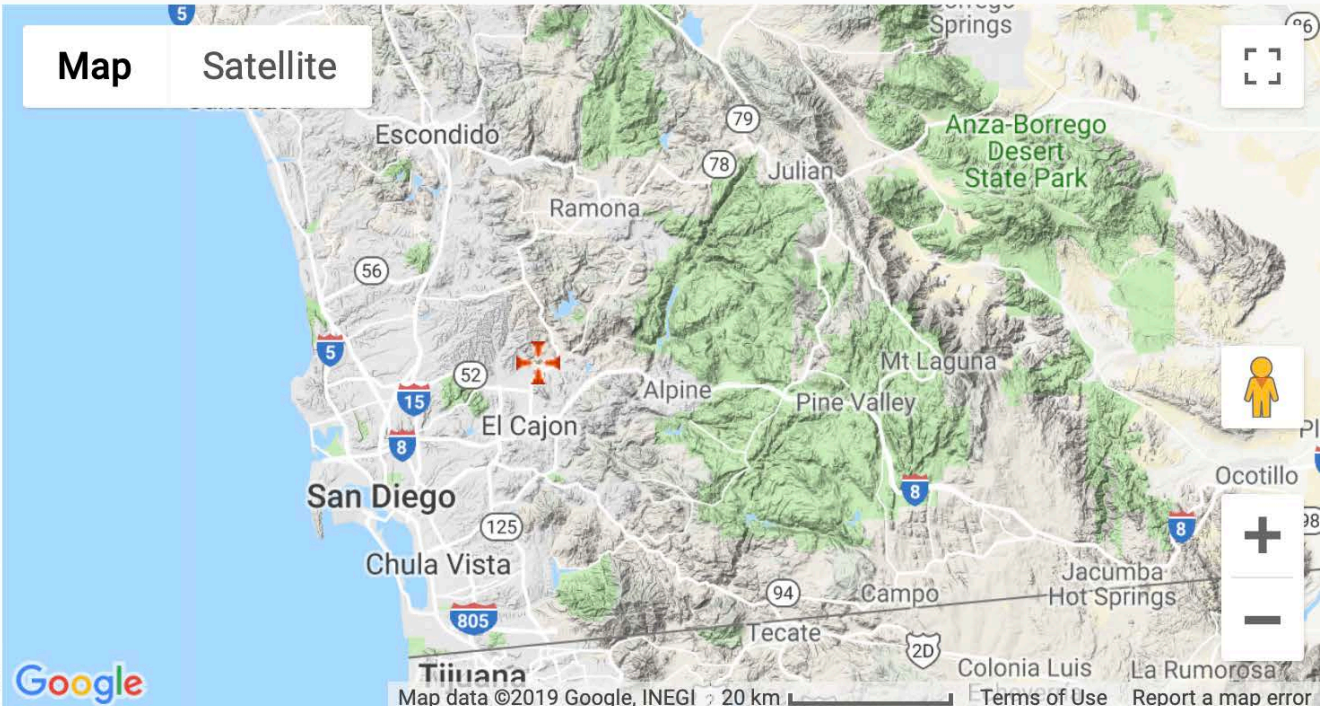
☒ in map area

POLYGON

Photos
any

SEARCH

MapSatellite



Google

ID	Plant	Photo	Observer	Source	Date	County	Location Description
----	-------	-------	----------	--------	------	--------	----------------------

The Observation Hotline is the main page for accessing observation data from CalFlora

Scientific Name

Oncosiphon piluliferum

Status (native or not)

any

Start Date

End Date

OTHER SOURCES

Columns

Basic Data

Common Name

Stinknet

Observer

include surveys/checklists

Location Description

anywhere

in map area

POLYGON

Photos

any

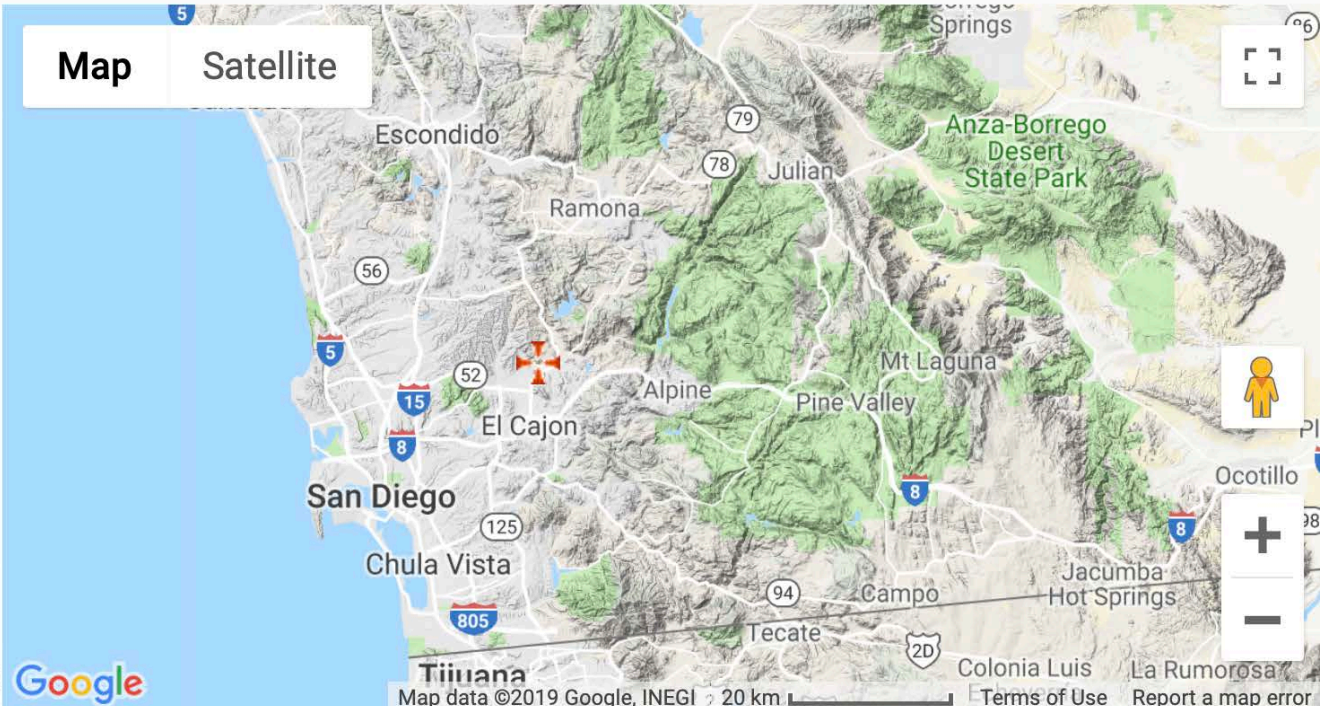
SEARCH

customize

32.8664, -116.9516

Map

Satellite



Google

Map data ©2019 Google, INEGI 20 km

[Terms of Use](#) [Report a map error](#)

ID	Plant	Photo	Observer	Source	Date	County	Location Description
----	-------	-------	----------	--------	------	--------	----------------------

Search for *Oncosiphon piluliferum* aka Stinknet in map area



1 matching record.

Searching for: **name like** stinknet

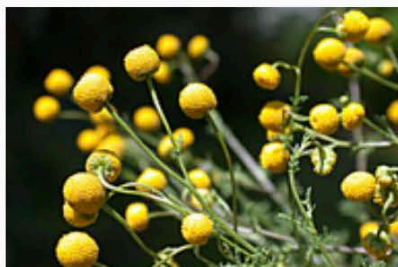
Click on the **Scientific Name** to see a Taxon Report.

Oncosiphon piluliferum

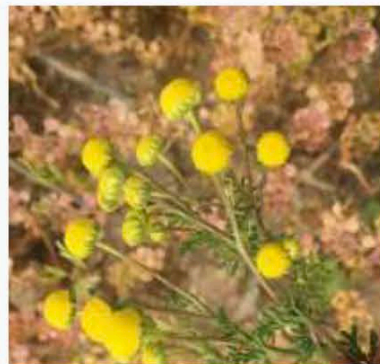
Stinknet

invasive non-native

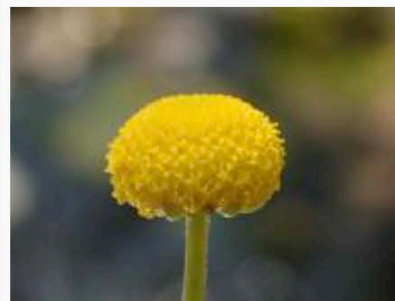
Annual herb



© 2003 Dean Wm. Taylor



© 2017 Brooke Stutz



© 2018 Ron Vanderhoff

Suggested Citation

Calflora: Information on California plants for education, research and conservation. [web application]. 2019. Berkeley, California: The Calflora Database [a non-profit organization]. Available: <https://www.calflora.org/> (Accessed: Jun 04, 2019).

The information on this page comes from diverse sources. None of the links are sponsored.

I entered stinknet in the plant name search box and this page comes up



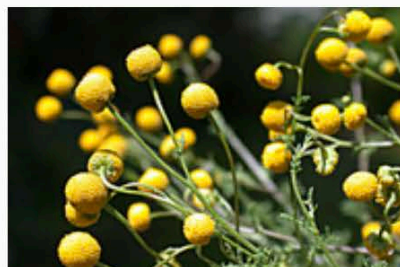
1 matching record.

Searching for: name like stinknet

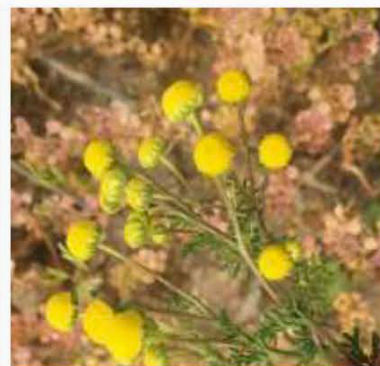
Click on the Scientific Name to see the Taxon Report.

Oncosiphon piluliferum

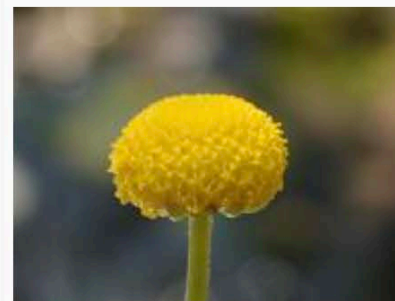
invasive non-native
Annual herb



© 2003 Dean Wm. Taylor



© 2017 Brooke Stutz



© 2018 Ron Vanderhoff

Suggested Citation

Calflora: Information on California plants for education, research and conservation. [web application]. 2019. Berkeley, California: The Calflora Database [a non-profit organization]. Available: <https://www.calflora.org/> (Accessed: Jun 04, 2019).

The information on this page comes from diverse sources. None of the links are sponsored.

[News](#) • [About Calflora](#) • [Home](#)

Calflora - 1700 Shattuck Avenue #198, Berkeley, CA 94709 - 510 883-3148 - [CONTACT](#)

I entered stinknet in the plant name search box and this page comes up



Oncosiphon piluliferum (L. f.) Källersjö
Stinknet

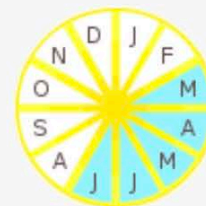
Oncosiphon piluliferum, a dicot, is an **annual herb** that is **not native** to California. There is a high risk of this plant becoming invasive in California according to [Cal-IPC](#).

Plant Distribution

Observation Hotline
(observation details)

Plant Characteristics

■ one or more occurrences
within a 7.5-minute quadrangle



Bloom Period

Photos from [CalPhotos](#) / [Calflora](#)

Family: **ASTERACEAE**

Genus: **Oncosiphon**



© 2003 Dean Wm. Taylor



© 2017 Lynne Small





Oncosiphon piluliferum (L. f.) Källersjö

Stinknet

Oncosiphon piluliferum, a dicot, is an **annual herb** that is **not native** to California. There is a high risk of this plant becoming invasive in California according to [Cal-IPC](#).

Plant Distribution

[Observation Hotline](#)
(observation details)

Plant Characteristics

■ one or more occurrences
within a 7.5-minute quadrangle



Bloom Period

Photos from [CalPhotos](#) / [Calflora](#)

Family: **ASTERACEAE**

Genus: **Oncosiphon**



© 2003 Dean Wm. Taylor



© 2017 Lynne Small





✦ 32.8664, -116.9516

Scientific Name

Oncosiphon piluliferum

Status (native or not)

any

Common Name

Stinknet

Start Date

End Date

Observer

▶ OTHER SOURCES

☐ include surveys/checklists

Location Description

Columns

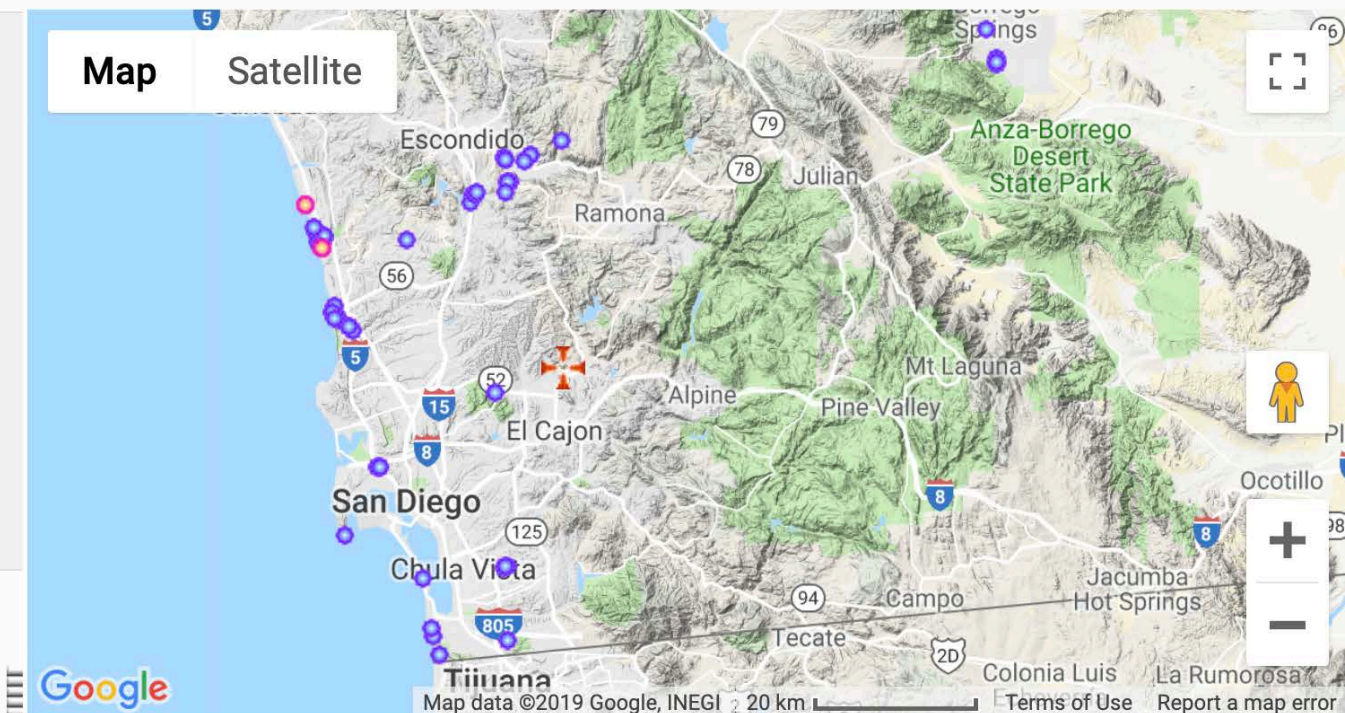
Basic Data

► customize

SEARCH

Click on ID to select a record. Click on column title to sort.

70 records:



ID	Plant	Photo	Observer	Source	Date	County	Location Description
io12951	<i>Oncosiphon piluliferum</i> Stinknet		Charles Adams		2019-05-23	San Diego	

32.8664, -116.9516

Scientific Name

Oncosiphon piluliferum

Status (native or not)

any

Common Name

Stinknet

Start Date

End Date

Observer

anywhere

in map area

POLYGON

Photos

any

include surveys/checklists

Location Description

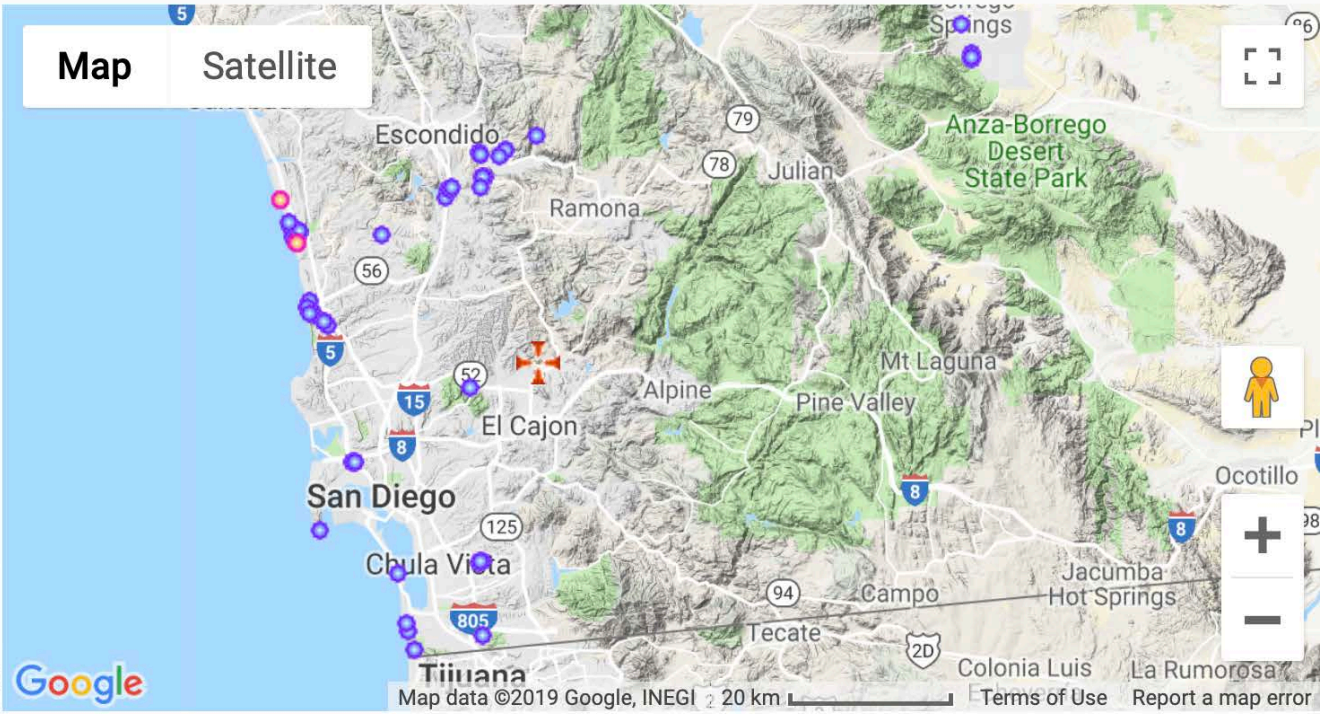
Columns

Basic Data

customize

SEARCH

70 records:



ID	Plant	Photo	Observer	Source	Date	County	Location Description
io12951	Oncosiphon piluliferum Stinknet		Charles Adams		2019-05-23	San Diego	

33.8204, -117.8796

Scientific Name

Status (native or not)

any

Common Name

Start Date

End Date

Observer

OTHER SOURCES

☐ include surveys/checklists

Photos

any

Location Description

☐ anywhere

☒ in map area

[POLYGON](#)

Columns

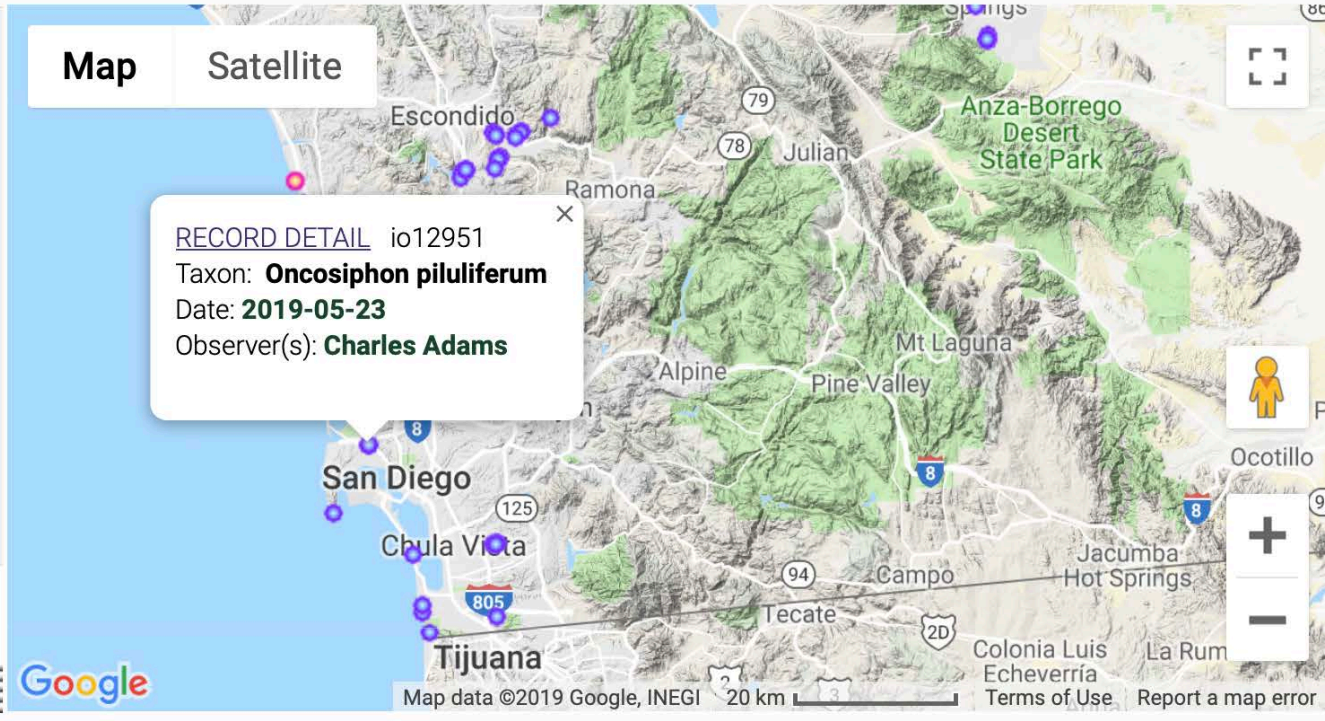
Basic Data

[customize](#)

SEARCH

Click on ID to select a record. Click on column title to sort.

70 records:



ID	Plant	Photo	Observer	Source	Date	County	Location Description
io12951 detail	Oncosiphon piluliferum		Charles Adams		2019-05-23	San Diego	



COMMENTS: 0

Plant Name ● [Oncosiphon piluliferum](#)
Stinknet

Observer Charles Adams [PROFILE](#)

Date 2019-05-23

County San Diego

Coordinates 32.75383, -117.19842

[LOCATION CLOSEUP](#)

[What Grows Here?](#)

Number of Plants 2 - 10

Phenology Flowering

Calflora ID io12951

Added 2019-05-23

[Plant Observation Entry](#)

Group [State Parks Weed Managers](#)

Location Quality HIGH (2)

Error Radius 10.0 meters

Context [Other Plant Observations](#) at this location



Like

© 2019 Charles Adams CC BY-NC 4.0

COMMENTS

Plant Name

Oncosiphon piluliferum

Stinknet

Observer

Charles Adams

[PROFILE](#)

Date

2019-05-23

County

San Diego

Coordinates

32.75383, -117.19842

[LOCATION CLOSEUP](#)

[What Grows Here?](#)

Number of Plants

2 - 10

Phenology

Flowering

Calflora ID

io12951

Added

2019-05-23

Group

State Parks Weed Managers

Location Quality

HIGH (2)

Error Radius

10.0 meters

Context

[Other Plant Observations](#) at this location



[Plant Observation Entry](#)

Let's learn more about this observation



Viewing **io12951**

entered on 2019-05-23 by **Charles Adams**

Group

State Parks Weed Managers

Project

Advanced data collection

Access by others

published

History ▶ none

NEW RECORD

Shape ▶ none

Point Location ▶

ADVANCED DATA COLLECTION

Scientific Name *

Oncosiphon piluliferum

Common Name

Stinknet

Observer *

Charles Adams

Observation Date *

2019-05-23 09:24:46

Notes

Radius / Buffer (meters)

Location Description

Habitat

Number of Plants

2 - 10

Distribution

Isolated Patch

Percent Cover

Management Status

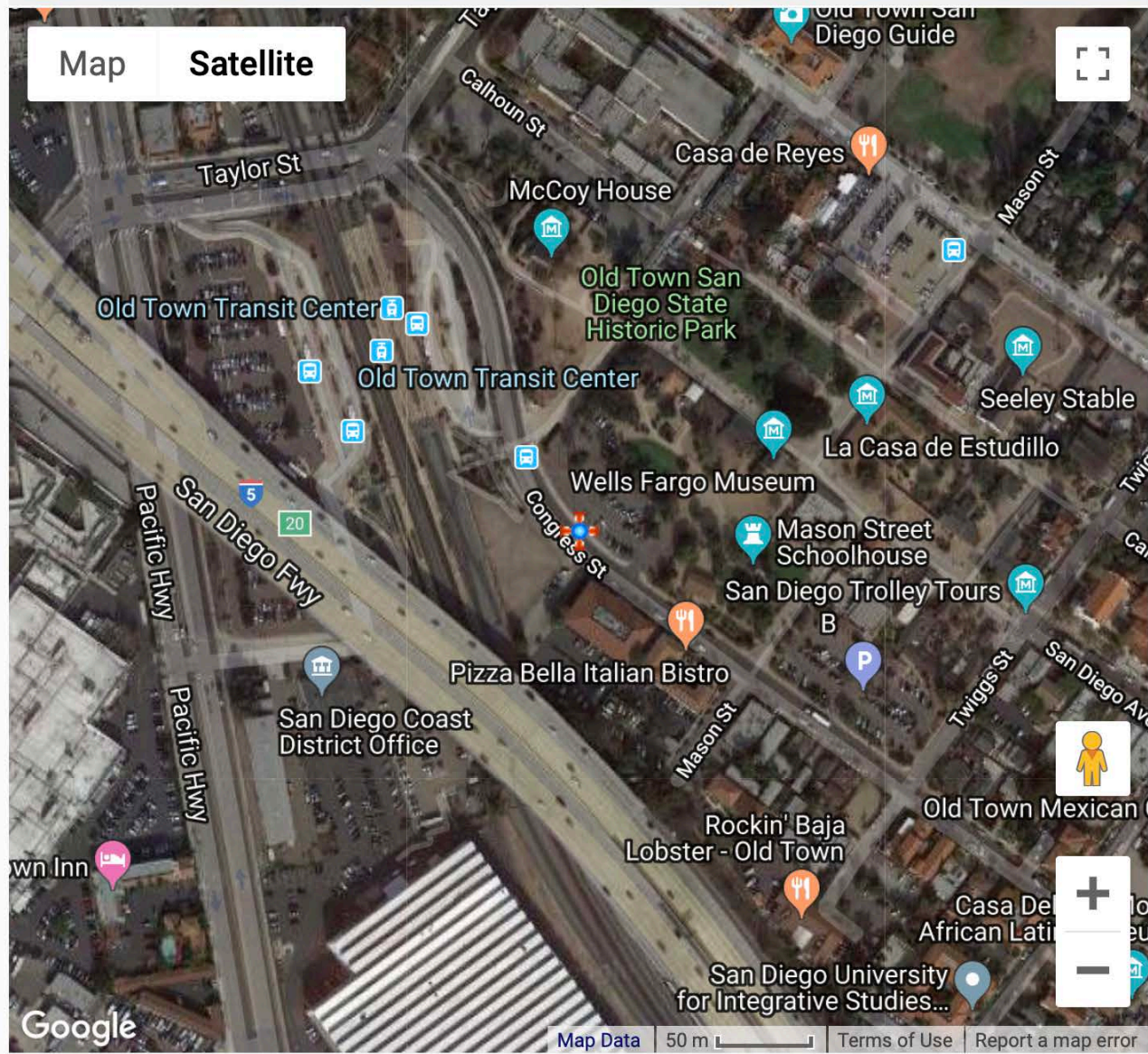
Phenology

Flowering

Map Layers ▶

Map

Satellite



32.75383, -117.19842



Viewing **io12951** entered on 2019-05-23 by **Charles Adams**

Group
State Parks Weed Managers

Project
Advanced data collection

Access by others
published

History ▶ none

NEW RECORD

Photos:



© 2019 Charles Adams

Click to see full size photo

Natural Status
WILD

Region

Collection / Survey #

Ownership

Plant Identification
recognized from prior determination

Elevation

Location Accuracy

Gross Area

Map Layers ▶

Map Satellite

Google

Map Data 50 m Terms of Use Report a map error

32.75383, -117.19842



Viewing **io12951**

Group

State Parks Weed Managers

Access by others

published

NEW RECORD

Photos:



© 2019 Charles Adams

Natural Status

WILD

Collection / Survey #

Plant Identification

recognized from prior determination

Location Accuracy

entered on 2019-05-23 by **Charles Adams**

Project

Advanced data collection

History ▶

If you are concerned
about a particular
species

This is the way to find out
the details of its current
spread and extent

Adding management
data to your observations
will help others just like
you

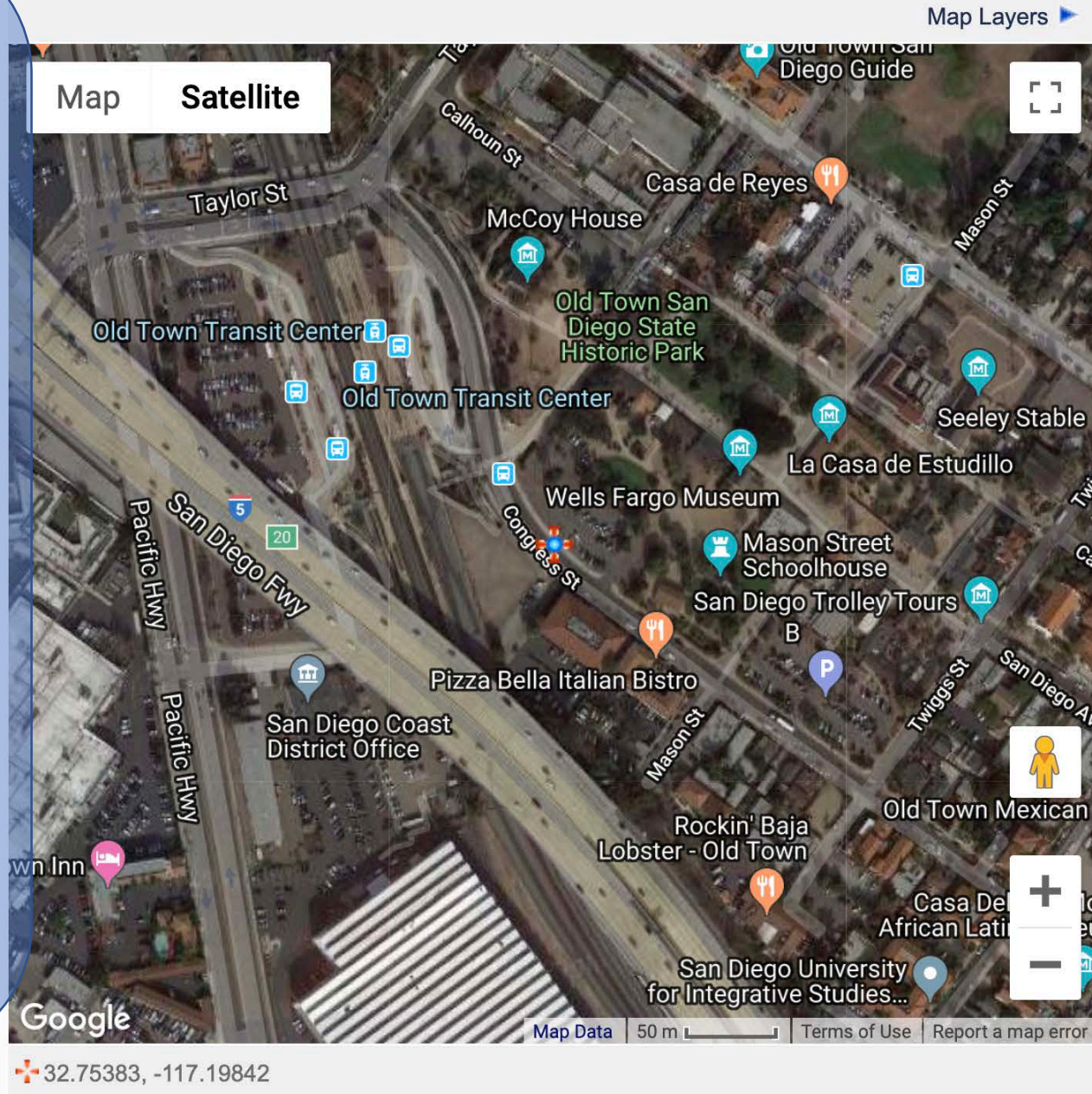
Click to see full size photo

Region

Ownership

Elevation

Gross Area



Observations to help management priorities

- Looking up observations (made in the past)
 - I am concerned about a particular species
 - I am concerned about a place
- Adding observations (you would do this, most likely on your smart phone)
 - I want to record a species that I am seeing



- My Calflora
- My Observations
- Add Observations
- Phone Applications

Donate

- About Calflora
- NEWS
- Observation Hotline
- What Grows Here?
- Great Places
- Planting Guide
- NRCS eVegGuide
- Weed Manager
- Privacy

Search for Plants

SEARCH CLEAR HELP

Common A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Scientific A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Family A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

plant name

NAME WIZARD

county
any
Alameda
Alpine
Butte
Calaveras
Colusa
Contra Costa
El Norte
Fresno
Glenn
Humboldt
Imperial
Inyo
Kern
Kings
Lake
Lassen
Los Angeles
Madera
Marin
Mariposa
Mendocino
Merced
Modoc

Enter part of a name: Common Scientific or Family

duration
☐ Annual
☐ Perennial
☐ Biennial

status
☐ Native to California
☐ Not native to California
☐ Cal-IPC invasive plants

☐ CNPS rare plants
☐ Affinity to serpentine soil

community
any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

category
☐ Monocot
☐ Dicot
☐ Gymnosperm
☐ Pteridophyte

☐ Bryophyte
☐ Lichen
☐ Algae
☐ Whisk-fern

result format Photos

more ...

Order by scientific name

What is on my preserve?



Criteria

- ☐ Low water tolerant
- ☐ Riparian
- ☐ Shade tolerant
- ☐ Commercially available

PLANT FILTER

RESULTS

PLANT NAMES

AREA

POINTS

LOCATION

enter location name

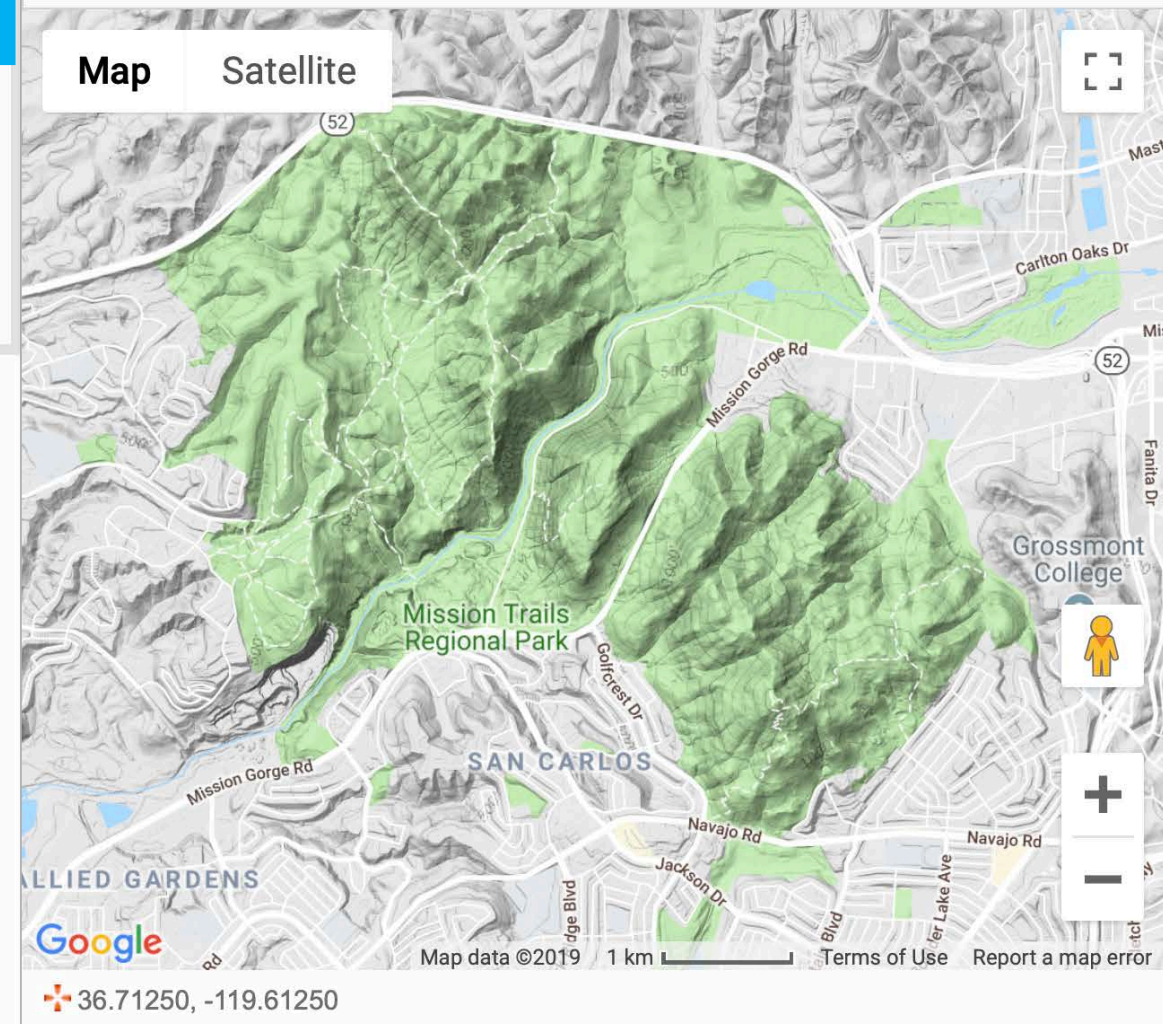
SEARCH

Click on the map to choose a location.

LAYERS

Map

Satellite



What is on my preserve?

I zoomed in the map to Mission Trails Regional Park



▼ Criteria

☐ Low water tolerant

☐ Riparian

☐ Shade tolerant

☐ Commercially available

▶ PLANT FILTER

▶ RESULTS

▶ PLANT NAMES

▶ AREA

▶ POINTS

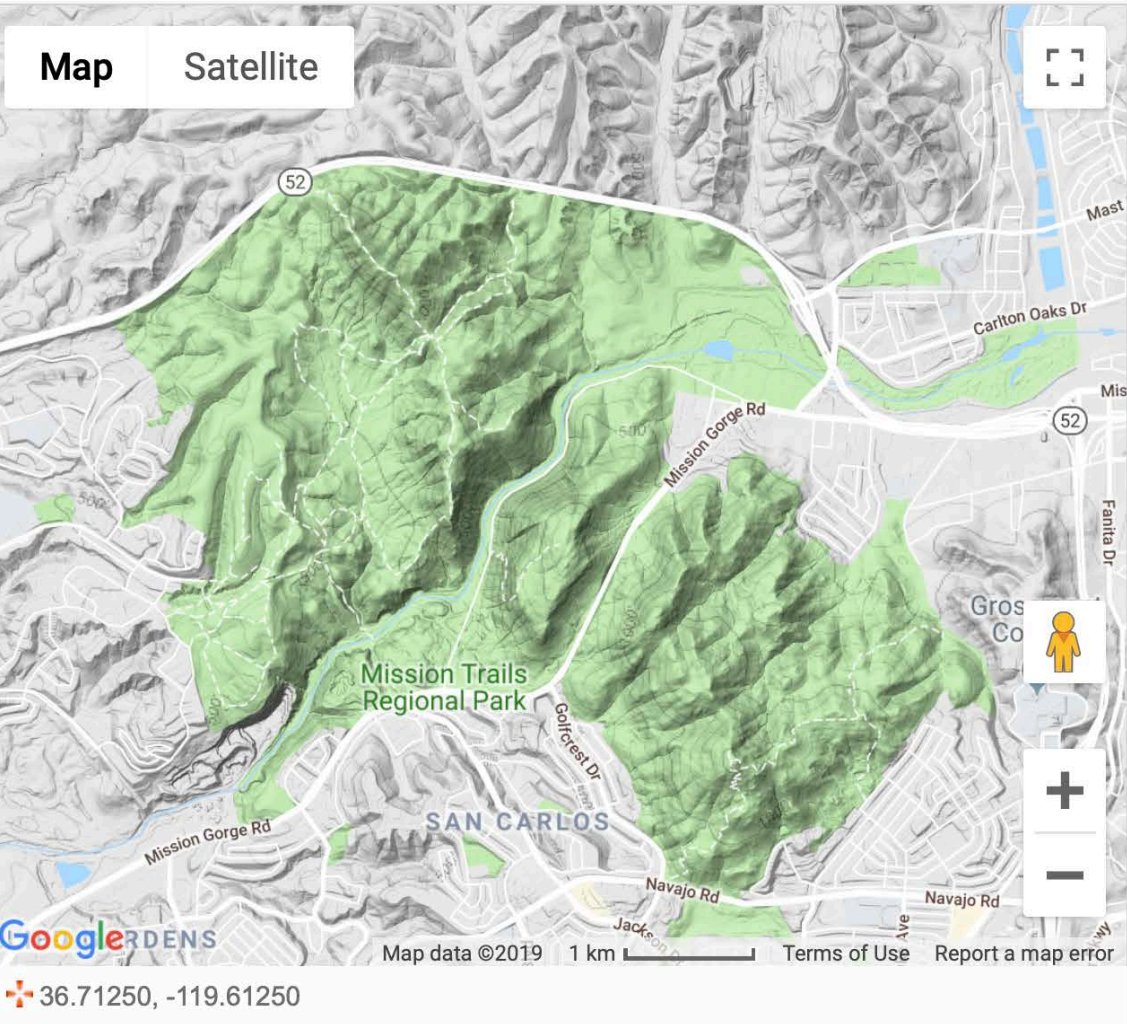
▼ LOCATION

enter location name

SEARCH

+	Annual Herb	269
+	Perennial Herb	223
+	Grasslike	101
+	Shrub	115
+	Tree	49
+	Vine	20
+	Fern	25

Click on the map to choose a location. LAYERS



Over 800 species observed on, or near Mission Trails



Criteria

☐ Low water tolerant
☐ Riparian
☐ Shade tolerant
☐ Commercially available

PLANT FILTER

SEARCH

RESULTS

PLANT NAMES

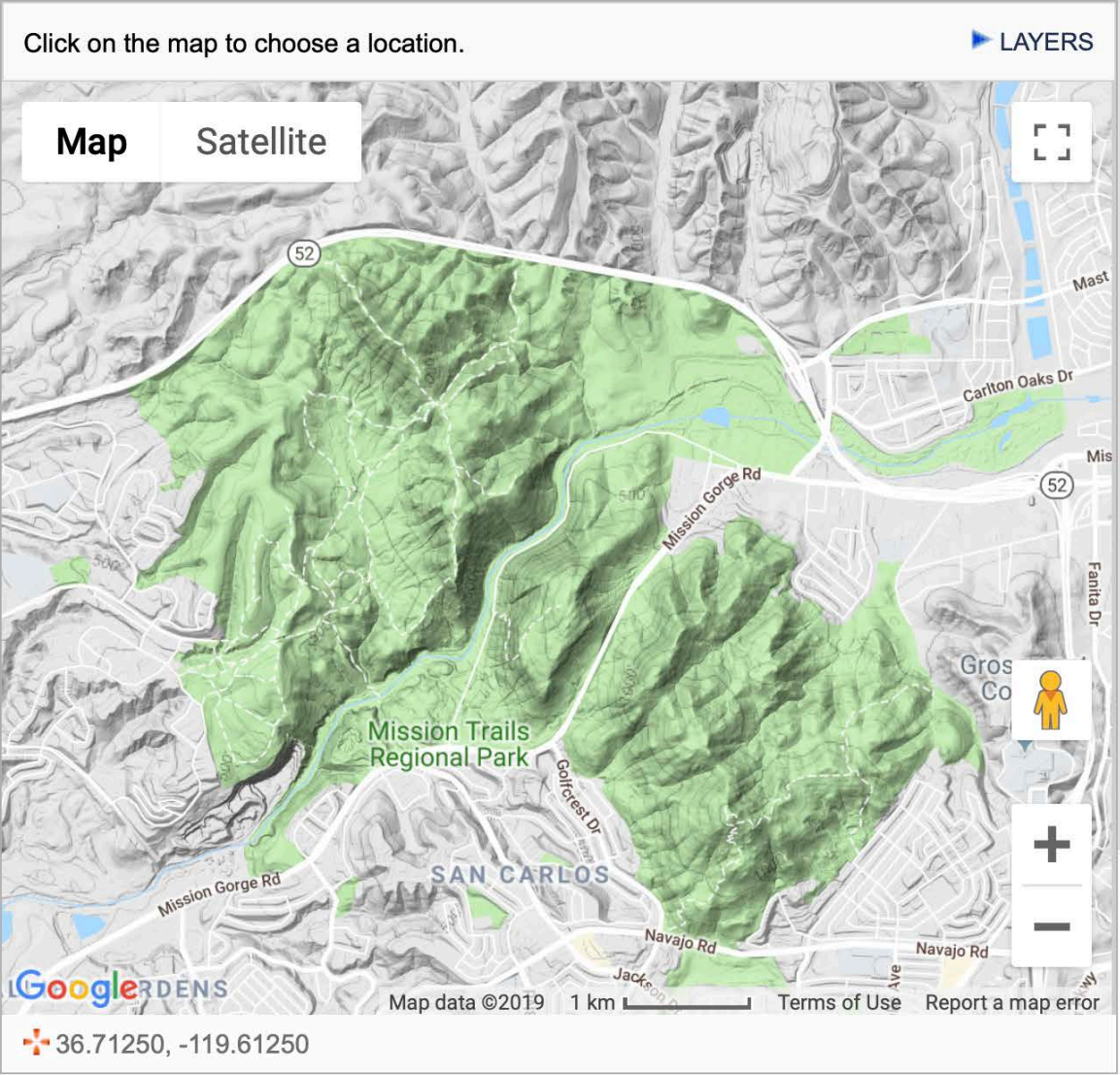
AREA

POINTS

LOCATION

enter location name

+	Annual Herb	269
+	Perennial Herb	223
+	Grasslike	101
+	Shrub	115
+	Tree	49
+	Vine	20
+	Fern	25



Where are the weed species?



Criteria

☐ Low water tolerant

☐ Riparian

☐ Shade tolerant

☐ Commercially available

PLANT FILTER

RESULTS

AREA

PLANT NAMES

POINTS

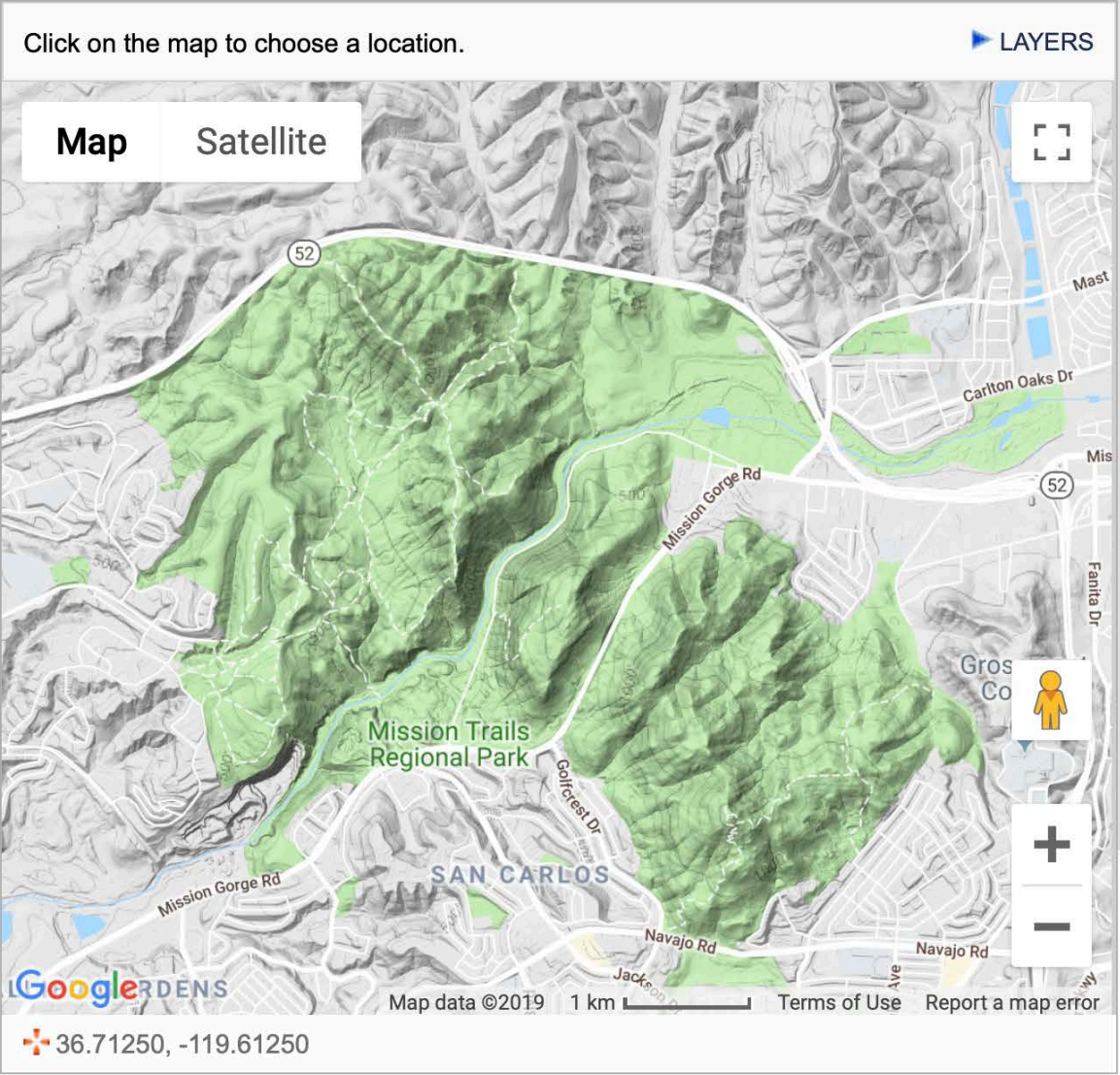
LOCATION

enter location name

SEARCH

+ Annual Herb	269
+ Perennial Herb	223
+ Grasslike	101
+ Shrub	115
+ Tree	49
+ Vine	20
+ Fern	25

Where are the weed species?





Criteria

- ☐ Low water tolerant
- ☐ Riparian
- ☐ Shade tolerant
- ☐ Commercially available

PLANT FILTER

RESULTS

Format

photo

Order by

Scientific Name

☒ Group by LIFEFORM

Location Quality

any

Minimum records / plant

1 record

PLANT NAMES

SEARCH

AREA

POINTS

0 points

CLEAR POINTS

ICON PALETTE

STATUS

Rare  [display](#)

Native  [display](#)

Non-native  [display](#)

Invasive  [display](#)

Plants with icons

APPLY

My Palettes

LOCATION

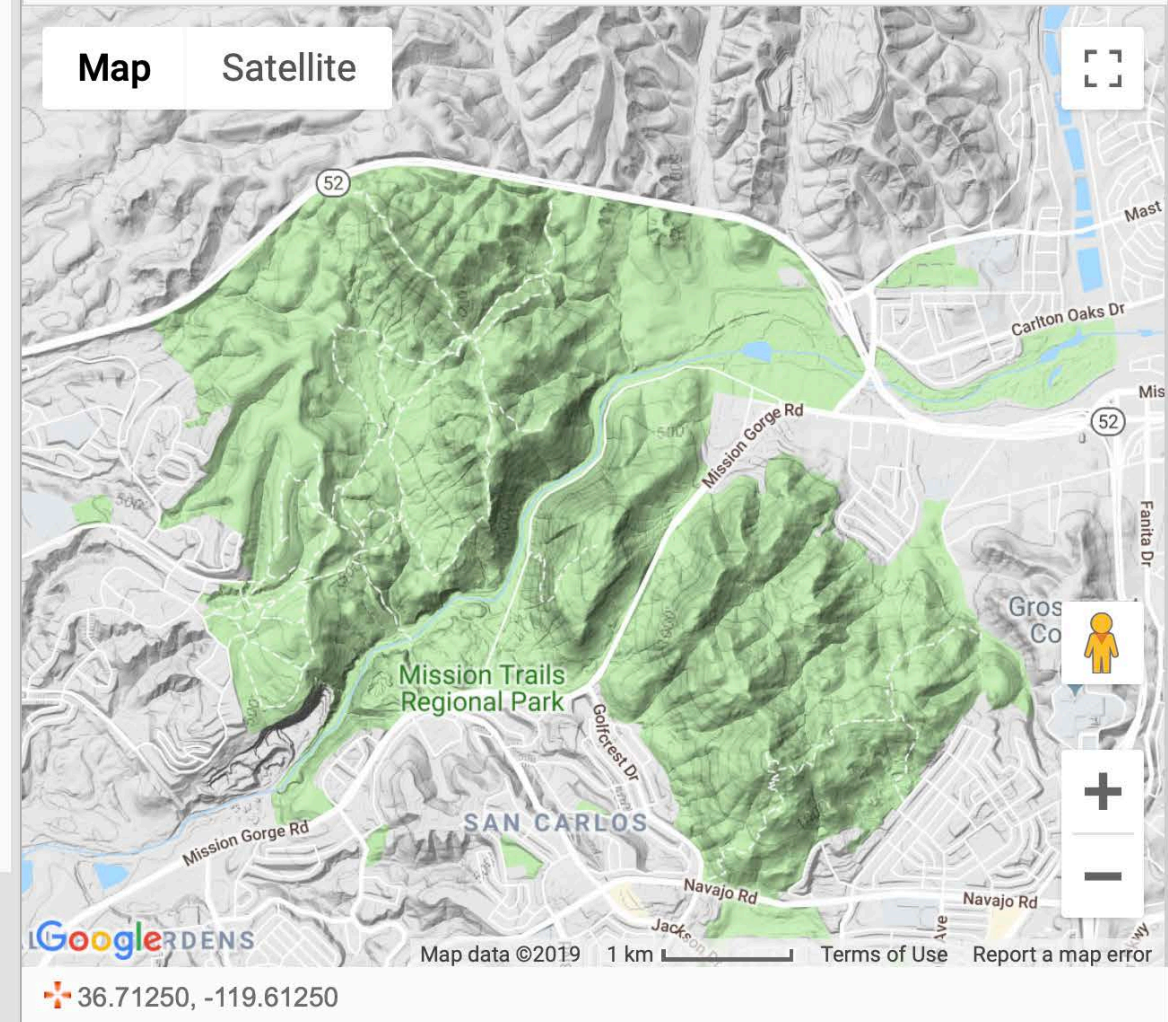
enter location name

Click on the map to choose a location.

LAYERS

Map

Satellite



Click icon palette, set to status,
Click display on invasive



Criteria

☐ Low water tolerant

☐ Riparian

☐ Shade tolerant

☐ Commercially available

PLANT FILTER

RESULTS

Format: photo

Order by: Scientific Name

☒ Group by LIFEFORM

Location Quality: any

Minimum records / plant: 1 record

PLANT NAMES

AREA

POINTS

532 points

CLEAR POINTS STOP

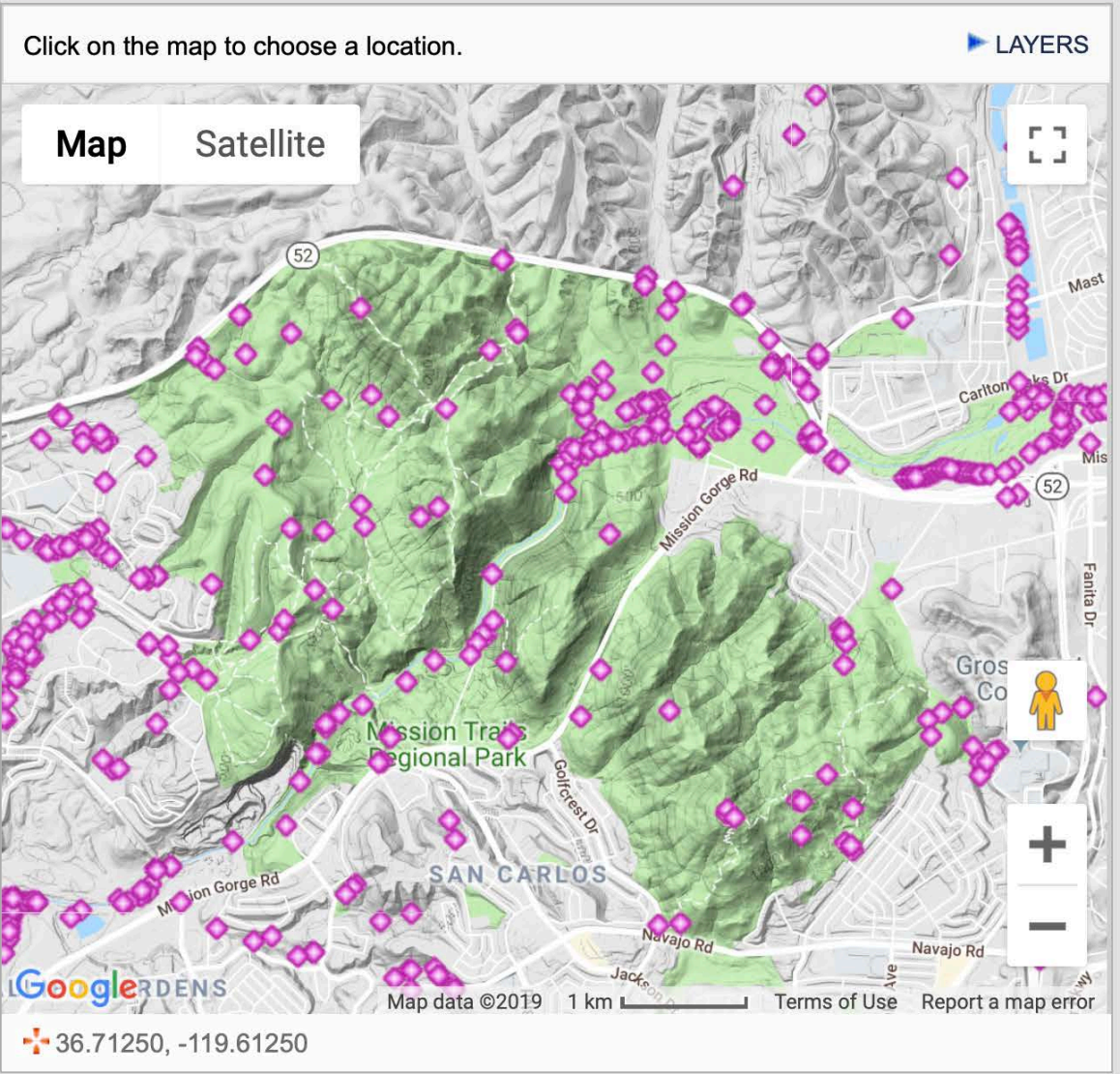
ICON PALETTE STATUS

Rare		display
Native		display
Non-native		display
Invasive		display

Plants with Icons APPLY

My Palettes

SEARCH



We now see the location of every
invasive species with an
observation



Criteria

☐ Low water tolerant
☐ Riparian
☐ Shade tolerant
☐ Commercially available

PLANT FILTER

RESULTS

Format
photo

Order by
Scientific Name

☒ Group by LIFEFORM

Location Quality
any

Minimum records / plant
1 record

PLANT NAMES

SEARCH

AREA

POINTS

532 points

CLEAR POINTS STOP

ICON PALETTE STATUS

Rare [display](#)
Native [display](#)
Non-native [display](#)
Invasive [display](#)

Plants with Icons APPLY

My Palettes

LOCATION

enter location name

Click on the map to choose a location.

LAYERS

Map Satellite

[RECORD DETAIL](#) wb1802-12
Taxon: **Centaurea solstitialis**
Date: **2017-01-01**
Source: **San Diego County Ag (SDMMP)**
Observer(s): **Giessow, Jason**
Location: **2: Mission Trails**

Dittrichia graveolens

Mission Trails Regional Park

Map data ©2019 1 km Terms of Use Report a map error

36.71250, -119.61250

	Annual Herb	269
	Perennial Herb	223
	Grasslike	101
	Shrub	115
	Tree	49

California

What Grows Here

MAP

TOOLS

Chris McDonald

EDIT - SIGN OUT

Criteria

☐ Low water tolerant

☐ Riparian

☐ Commercially available

PLANT FILTER

RESULTS

PLANT NAMES

AREA

POINTS

LOCATION

enter location name

SEARCH

+

Annual Herb269

+

Perennial Herb83

+

Grasslike101

+

Shrub115

+

Tree49

+

Vine20

+

Fern25

Another way to look at just the weeds

Over 800 species observed on Mission Trails

Click on the map to choose a location.

Map

Satellite

LAYERS

+

-

Report a map error



Criteria

☐ Low water tolerant
☐ Riparian
☐ Shade tolerant
☐ Commercially available

PLANT FILTER

Status (native or not)
non-native

Duration
any

Lifeform
any

Bloom month
any

Two or more photos
any

RESULTS

PLANT NAMES

AREA

POINTS
0 points CLEAR POINTS

ICON PALETTE NATIVE

Native display
Non-native display

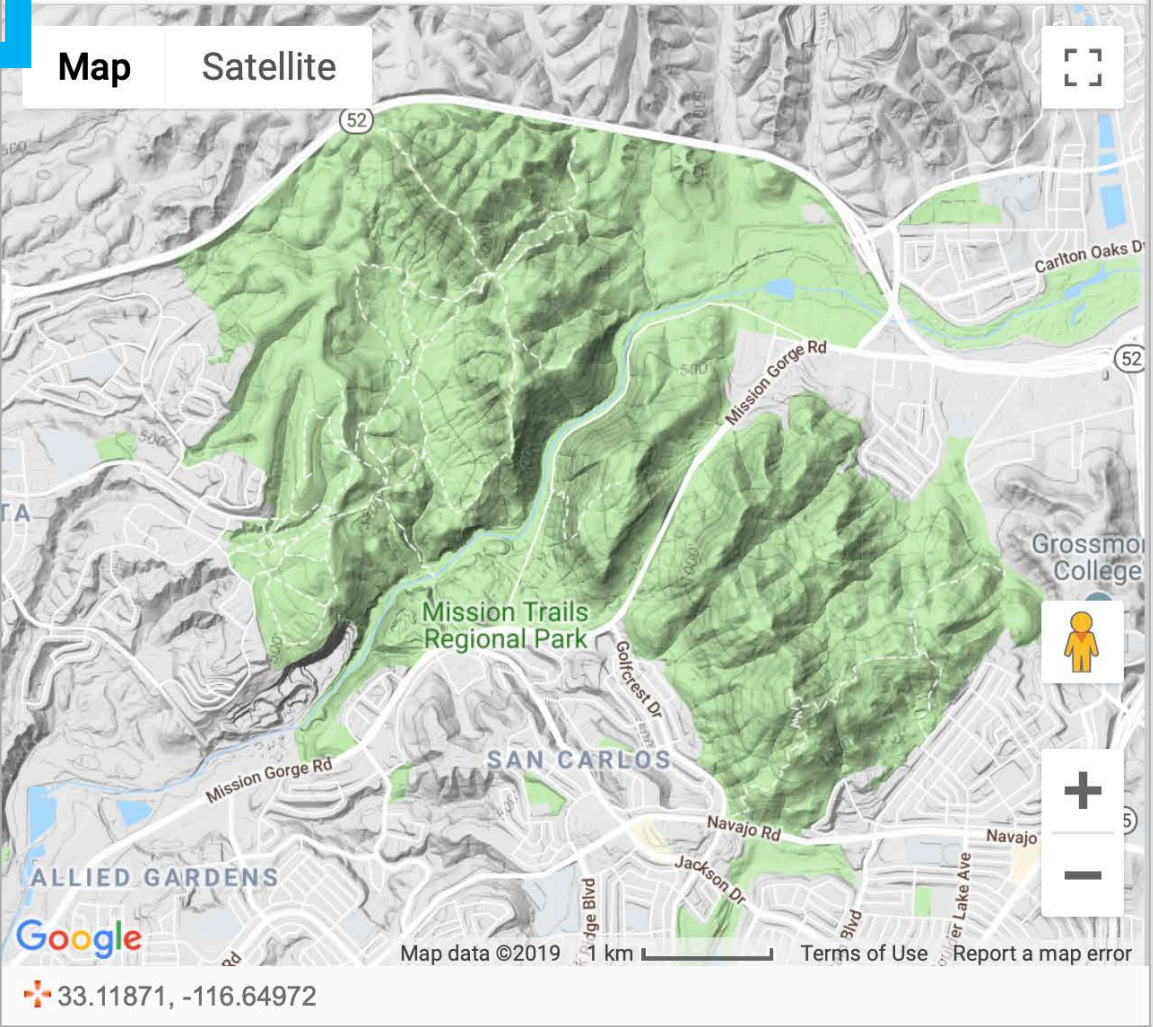
Plants with Icons APPLY

Santa Ysabel Preserve

SEARCH

Click on the map to choose a location.

LAYERS



Another way to look at just the weeds

+	Annual Herb	354
+	Perennial Herb	336
+	Grasslike	129
+	Shrub	158
+	Tree	55
+	Vine	24
+	Fern	22

Criteria

- ☐ Low water tolerant
- ☐ Riparian
- ☐ Shade tolerant
- ☐ Commercially available

PLANT FILTER

Status (native or not)

non-native

Duration

any

Lifeform

any

Bloom month

any

Two or more photos

any

SEARCH

RESULTS

AREA

PLANT NAMES

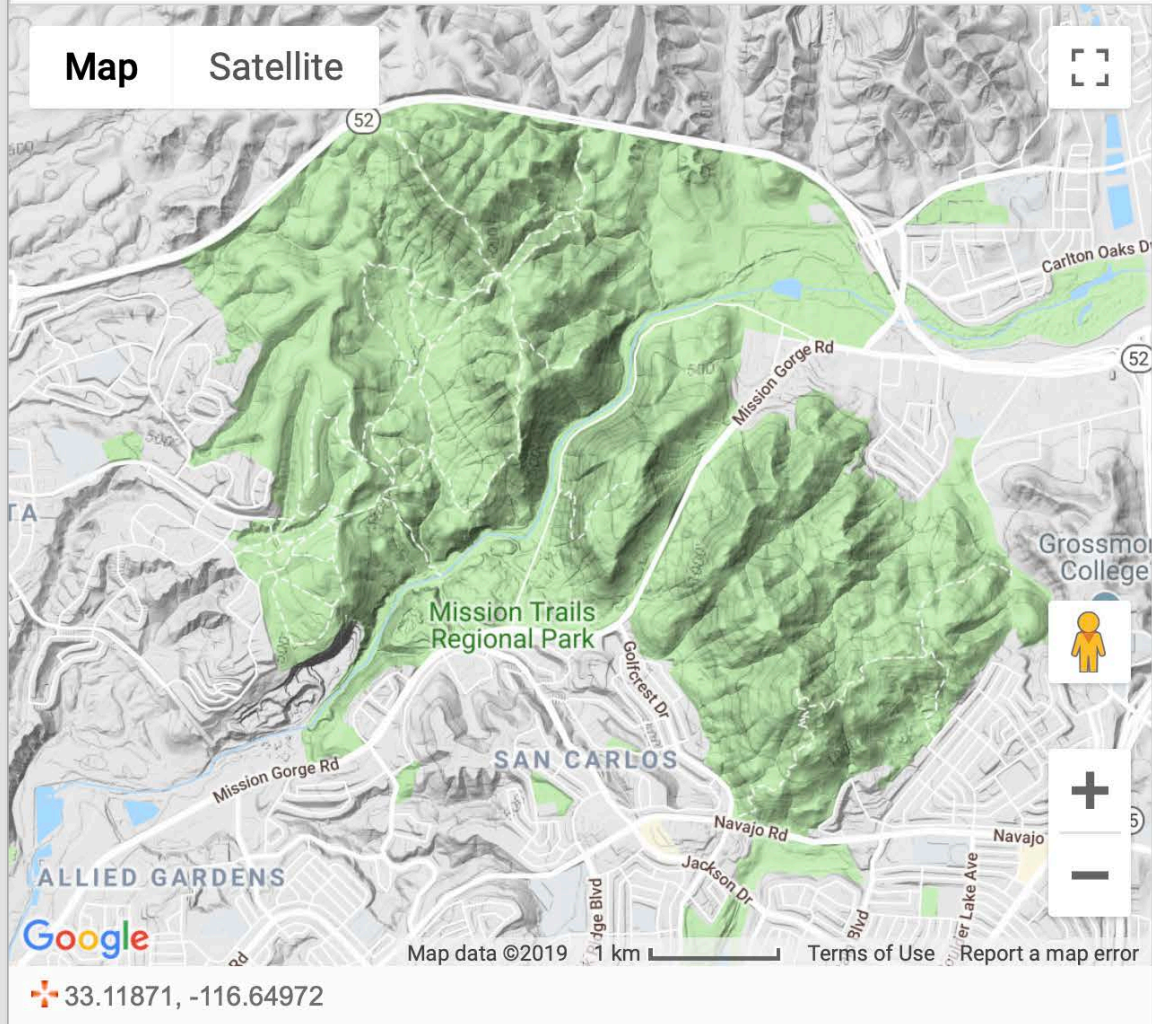
POINTS

LOCATION

Santa Ysabel Preserve

Click on the map to choose a location.

LAYERS



Another way to look at just the weeds

+	Annual Herb	80
+	Grasslike	43
+	Tree	29
+	Vine	5
+	Fern	0

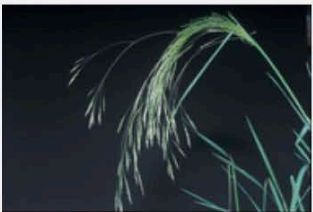
Agrostis avenacea *Pacific bentgrass*

1 record (1 CCH)

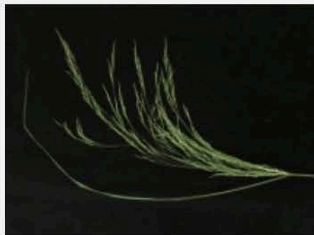
invasive
non-native

Perennial grass

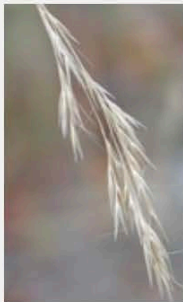
POACEAE



2001 Joe DiTomaso



2018 Doug Allshouse



2012 Robert Steele

Aira caryophyllea *Silvery hairgrass*

1 record

invasive
non-native

Annual grass

POACEAE



2004 Carol W. Witham



2009 Keir Morse



2010 Zoya Akulova

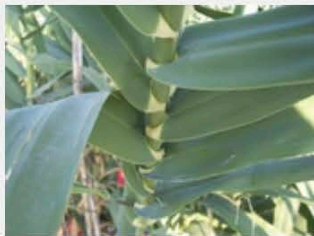
Arundo donax *Giant reed*

46 records

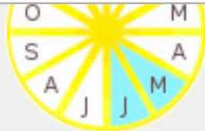
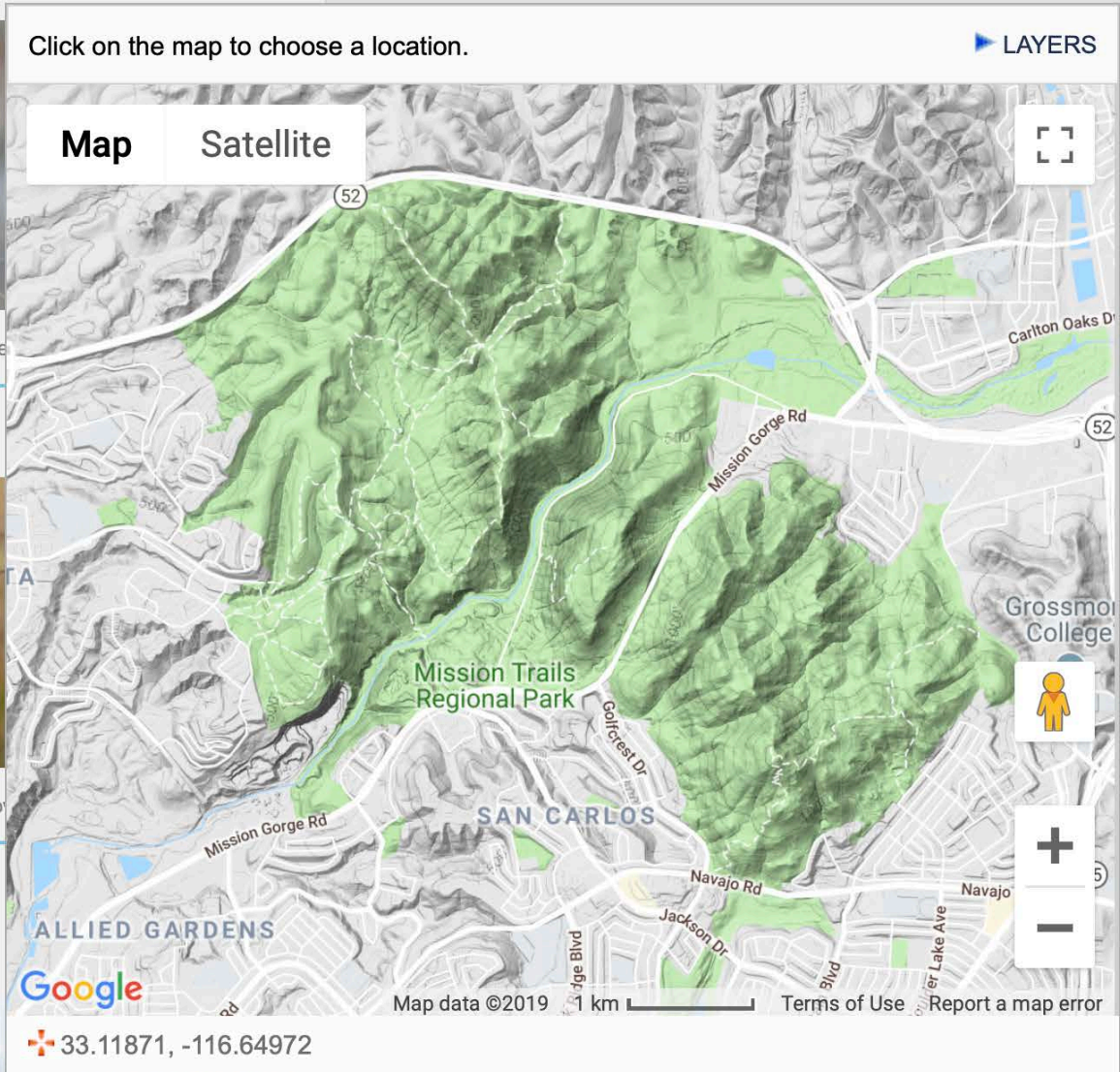
invasive
non-native

Perennial grass

POACEAE



2014 Ramona Robison



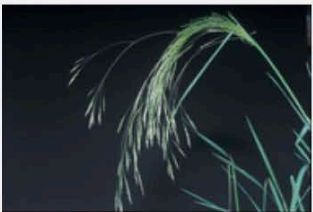
Agrostis avenacea *Pacific bentgrass*

1 record (1 CCH)

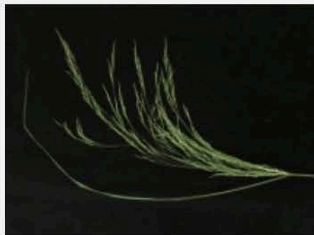
invasive
non-native

Perennial grass

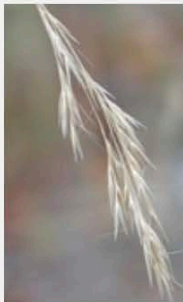
POACEAE



2001 Joe DiTomaso



2018 Doug Allshouse



2012 Robert Steele

Aira caryophyllea *Silvery hairgrass*

1 record

invasive
non-native

Annual grass

POACEAE



2004 Carol W. Witham



2009 Keir Morse



2010 Zoya Akulov

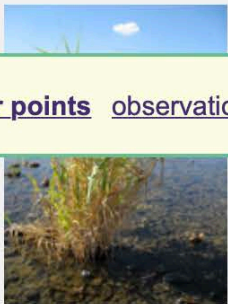
Arundo donax *Giant reed*

46 records

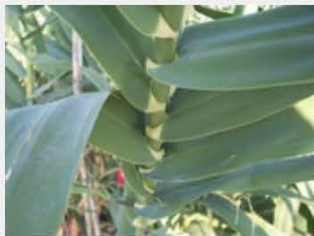
icon: ☒ display points [clear points](#) [observations](#)

Perennial grass

POACEAE



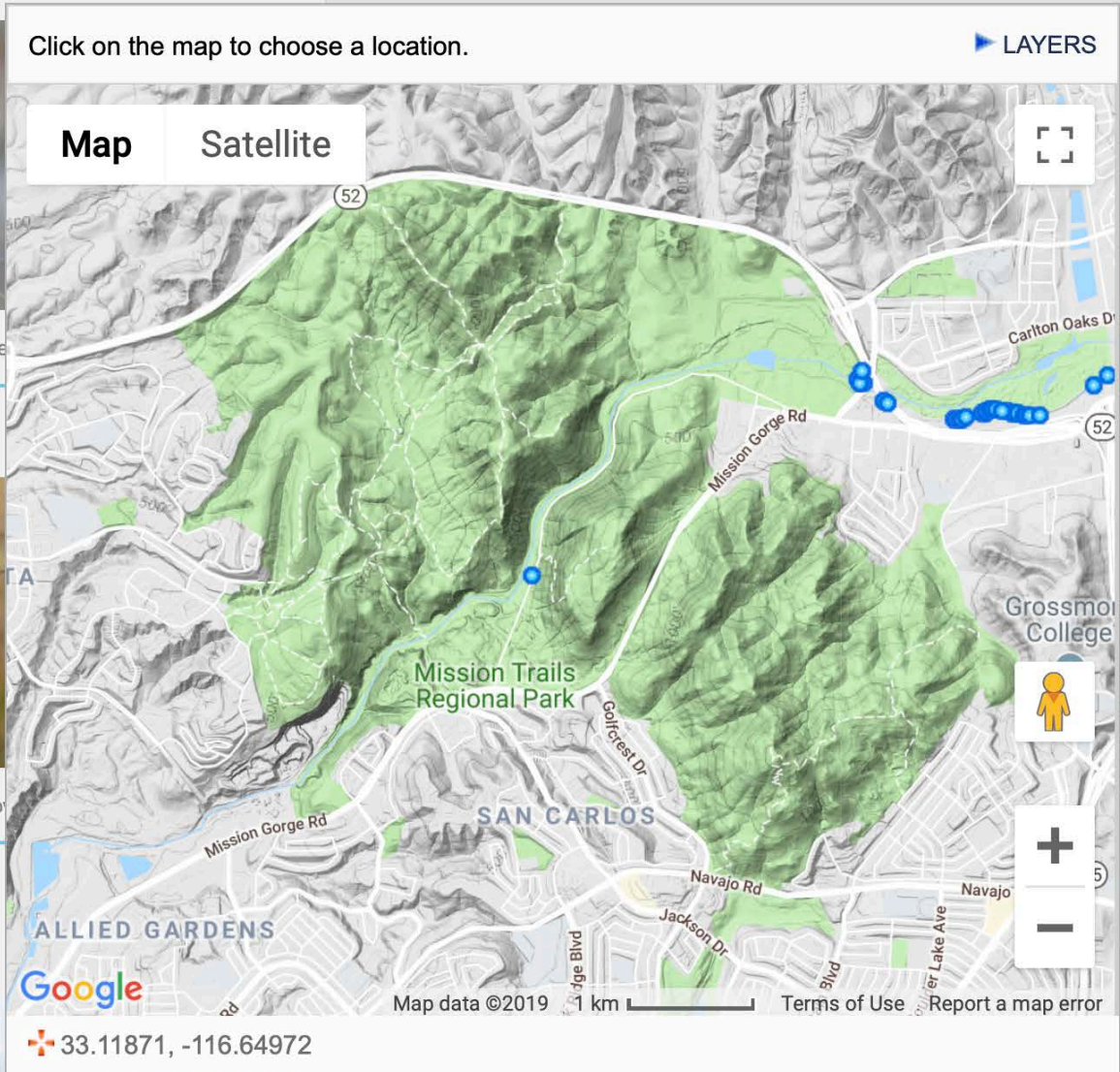
2008 John Dittus



2005 Luigi Biancamano



2014 Ramona Robison



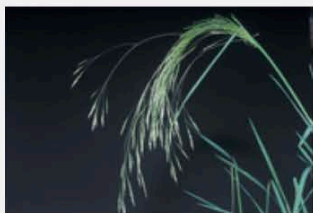
Agrostis avenacea *Pacific bentgrass*

1 record (1 CCH)

invasive
non-native

Perennial grass

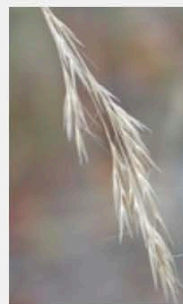
POACEAE



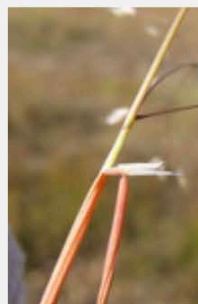
2001 Joe DiTomaso



2018 Doug Allshouse



2012 Robert Stee



2010 Zova Akulov

Click on the map to choose a location.

Map **Satellite**

RECORD DETAIL ce582

Taxon: **Arundo donax** (Checklist)

Date: **2012-01-09**

Source: **CNPS**

Observer(s): **Carolyn Martus, Mike Simpson**

Location: **Mission Trails Regional Park**

MISSION TRAILS REGIONAL PARK

SAN CARLOS

ALLIED GARDENS

Google

Map data ©2019 1 km Terms of Use Report a map error

+33.11871, -116.64972

Aira caryoph

1 record

invasive
non-native

Annual grass

POACEAE

Last recorded Arundo
location on lower portion
of MT is from 2012!
Is there more?

Arundo donax *Giant reed*

46 records



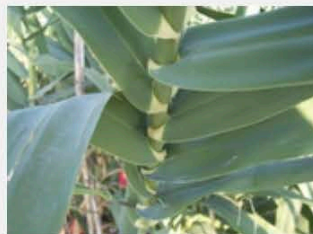
invasive
non-native

Perennial grass

POACEAE



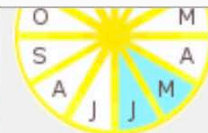
2008 John Dittus



2005 Luigi Biananeso



2014 Ramona Robison



Observations to help management priorities

- Looking up observations (made in the past)
 - I am concerned about a particular species
 - I am concerned about a place
- Adding observations (you would do this, most likely on your smart phone)

I want to record a species that I am seeing

Observations to help management priorities

- Adding observations
- Why do you want to add observations?
- Track progress of a management or restoration project
- Track spread of a species
- Record diversity at a site



Observations to help management priorities

- Adding observations
- Why do you want to add observations?
- Track progress of a management or restoration project
- Track spread of a species
- Record diversity at a site



Volutaria tubuliflora

- Documented in Borrego Springs in 2010
- Highly invasive, 4 locations in US
- Native to Mediterranean, North Africa, Middle East
- Grows in semi-arid and arid landscapes





- My Calflora
- My Observations
- Add Observations
- Phone Applications

Donate

About Calflora

NEWS

Observation Hotline

Wildlife & Plants

Great Places

Planting Guide

NRCS eVegGuide

Weed Manager

Privacy

Search for Plants

SEARCH

CLEAR

HELP

Common	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Scientific	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
Family	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

plant name

NAME WIZARD

county

- any
- Alameda
 - Alpine
 - Amador
 - Butte
 - Calaveras
 - Colusa
 - Contra Costa
 - Del Norte
 - El Dorado
 - Fresno
 - Glenn
 - Humboldt
 - Imperial
 - Inyo
 - Kern
 - Kings
 - Lake
 - Lassen
 - Los Angeles
 - Madera
 - Marin
 - Mariposa
 - Mendocino
 - Merced
 - Modoc

poppy Papaver POACEAE

duration

- ☐ Annual
- ☐ Perennial
- ☐ Biennial

lifeform

- ☐ Grasslike
- ☐ Tree
- ☐ Herb
- ☐ Fern
- ☐ Shrub
- ☐ Vine

status

- ☐ Native to California
- ☐ Not native to California
- ☐ Cal-IPC invasive plants
- ☐ CNPS rare plants
- ☐ Affinity to serpentine soil

community

- any
- Alkali Sink
 - Alpine Fell-fields
 - Bristle-cone Pine Forest
 - Chaparral
 - Closed-cone Pine Forest

category

- ☐ Monocot
- ☐ Dicot
- ☐ Gymnosperm
- ☐ Pteridophyte
- ☐ Bryophyte
- ☐ Lichen
- ☐ Algae
- ☐ Whisk-fern

result format

Photos

more ...

Order by

scientific name

California

Observation Hotline

TOOLS

Map

MAP LAYERS

Chris McDonald

EDIT - SIGN OUT

33.0187, -116.5858

MapSatellite

Scientific Name

Volutaria tubuliflora

Status (native or not)

any

Start Date

01/01/2000

End Date

2015-12-31

Observer

OTHER SOURCES

CCH, iNaturalist

anywhere

in map area

POLYGON

Photos

any

include surveys/checklists

Location Description

County

any

Searched all locations through 2015

22 records!

Basic Data

customize

SEARCH

Click on ID to select a record. Click on column title to sort.

22 records:

ID	Plant	Photo	Observer	Source	Date	County	Location Description
wb1441-8	Volutaria tubuliflora Egyptian knapweed	none	Frank Harris		2015-02-13	San Diego	Borrego Springs area
wb1441-7	Volutaria tubuliflora Egyptian knapweed	none	Frank Harris		2015-02-13	San Diego	Borrego Springs area
wb1441-6	Volutaria tubuliflora	none	Frank Harris		2015-02-13	San Diego	Borrego Springs area

Scientific Name

Volutaria tubuliflora

Status (native or not)

any

Common Name

Start Date

01/01/2000

End Date

2016-12-31

Observer

OTHER SOURCES

CCH, iNaturalist

Photos

any

include surveys/checklists

☒

2016

110 records!

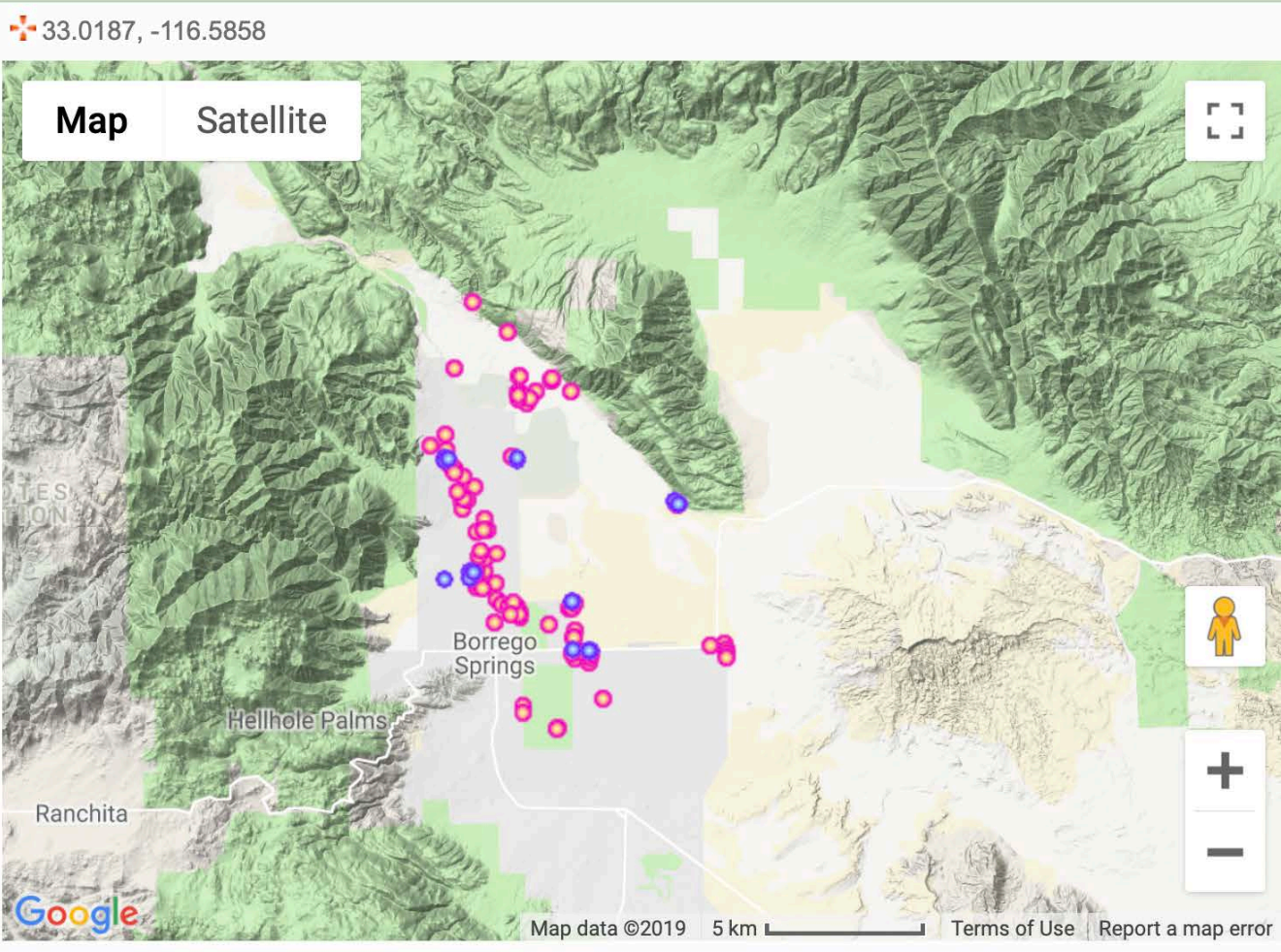
(pink dots are polygons)

Basic Data

SEARCH

Click on ID to select a record. Click on column title to sort.

110 records:



ID	Plant	Photo	Observer	Source	Date	County	Location Description
wb1729-20	Volutaria tubuliflora Egyptian knapweed	none	Frank Harris	Jason Giessow	2016-03-01	San Diego	17
wb1729-44	Volutaria tubuliflora Egyptian knapweed	none	Frank Harris	Jason Giessow	2016-03-01	San Diego	4
wb1729-82	Volutaria tubuliflora	none	Frank Harris	Jason Giessow	2016-03-01	San Diego	20

Scientific Name

Status (native or not)

Common Name

Start Date

End Date

Observer

[OTHER SOURCES](#)
CCH, iNaturalist

☒ include surveys/checklists

Photos

2017
1045 records!

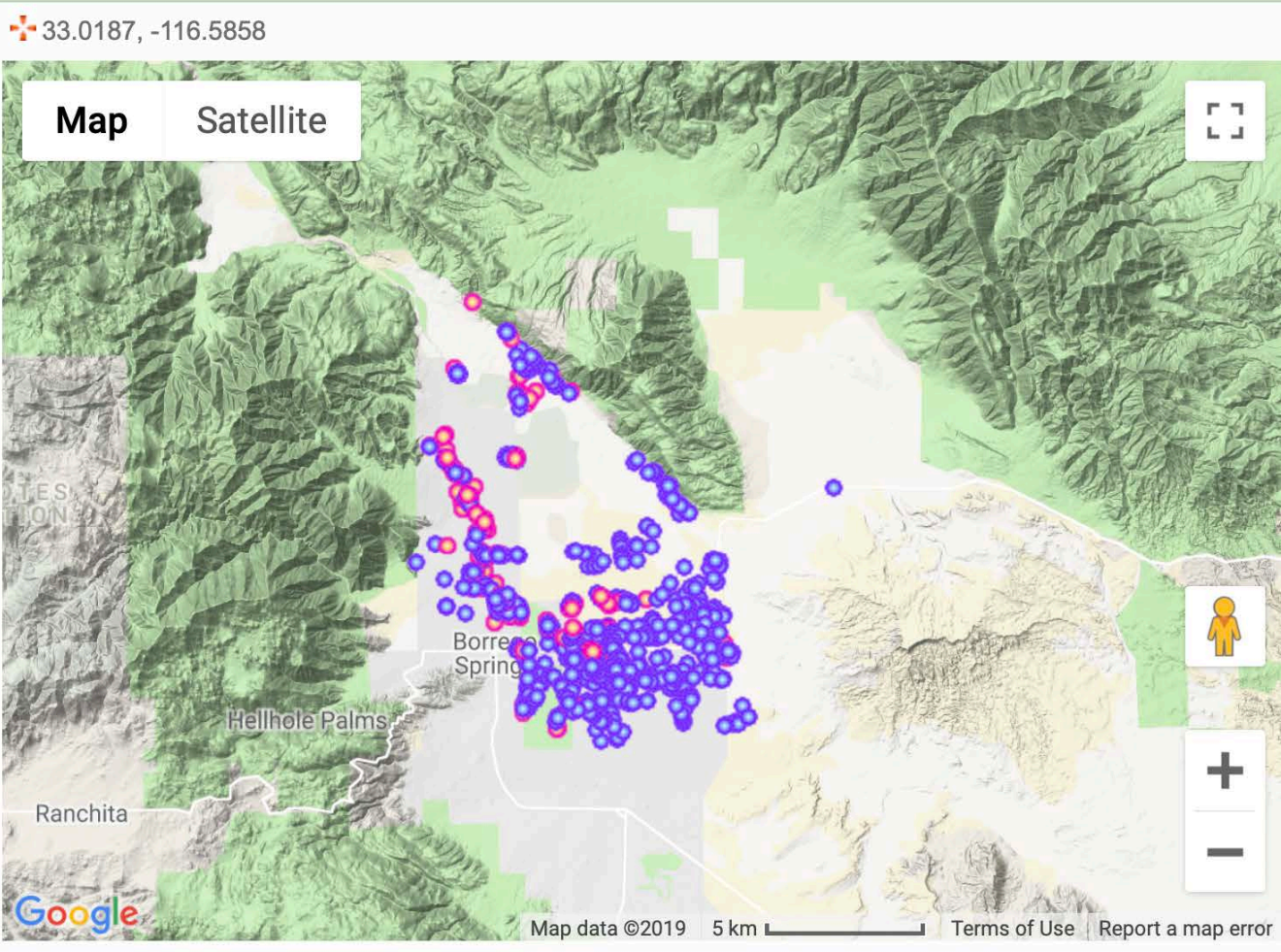
Basic Data

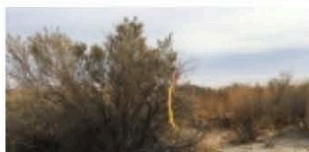
[customize](#)

SEARCH

Click on ID to select a record. Click on column title to sort.

1045 records:



ID	Plant	Photo	Observer	Source	Date	County	Location Description
io6874	Volutaria tubuliflora Egyptian knapweed	none	Joe Woods		2017-12-31	San Diego	East of DiGiorgio Road. Unbuilt subdivision.
							

Scientific Name

Volutaria tubuliflora

Status (native or not)

any

Common Name

Start Date

01-01-2000

End Date

2018-12-31

Observer

OTHER SOURCES

CCH, iNaturalist

include surveys/checklists

☒

Photos

any

anywhere

in map area

POLYGON

2018

1391 records

(2018 was a drought year)

Basic Data

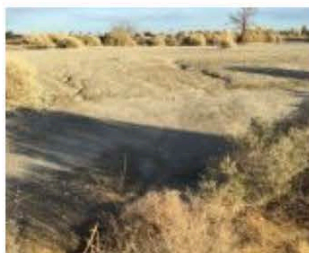
customize

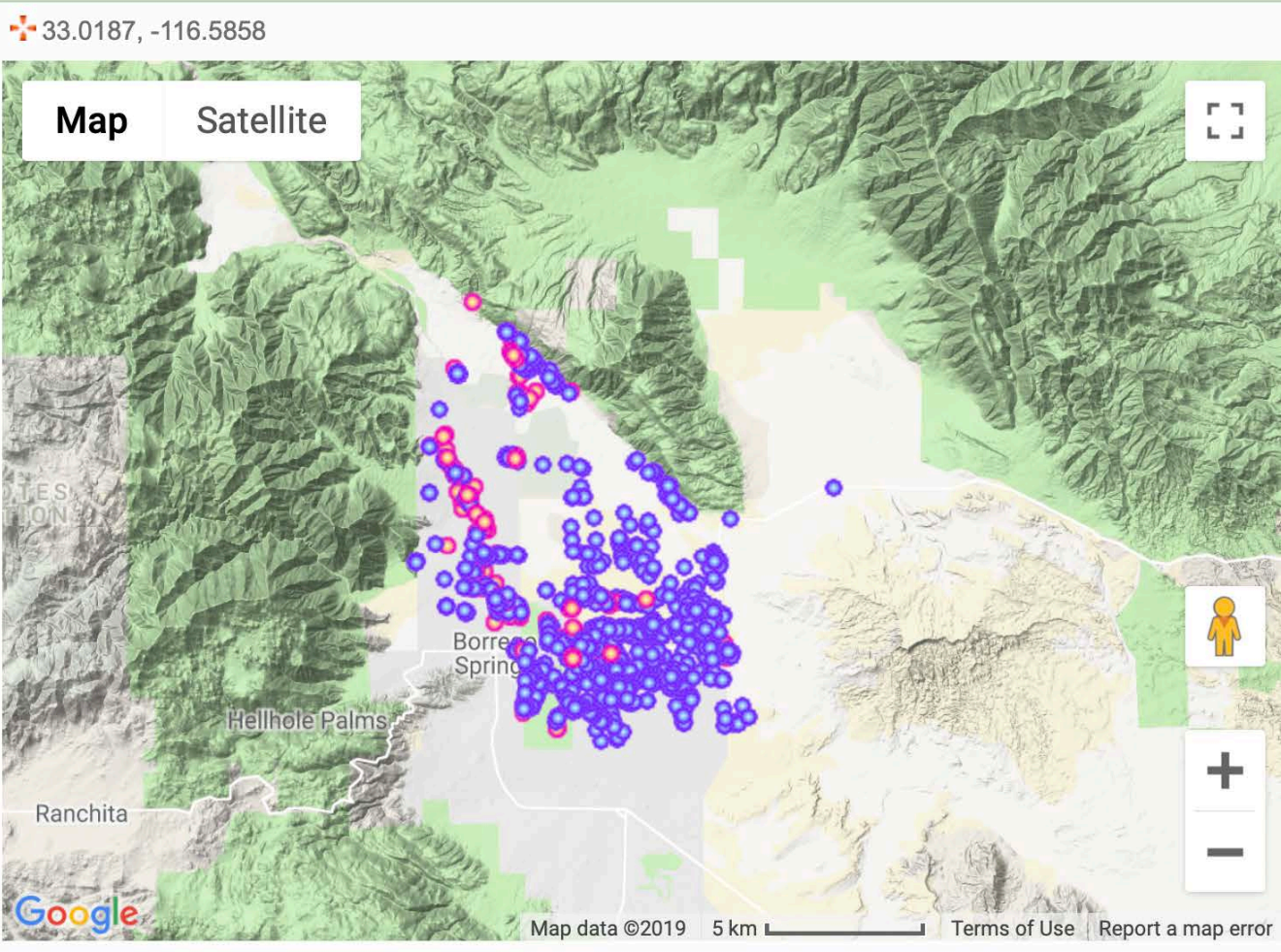
SEARCH

Click on ID to select a record.

Click on column title to sort.

1391 records:

ID	Plant	Photo	Observer	Source	Date	County	Location Description
io6805	Volutaria tubuliflora Egyptian knapweed		Joe Woods		2018-12-25	San Diego	Unbuilt subdivision in Borrego Springs Resort



Scientific Name

Status (native or not)

Common Name

Start Date

End Date

Observer

[OTHER SOURCES](#)
CCH, iNaturalist

☒ include surveys/checklists

Photos

anywhere

in map area

POLYGON

Current
2647 records

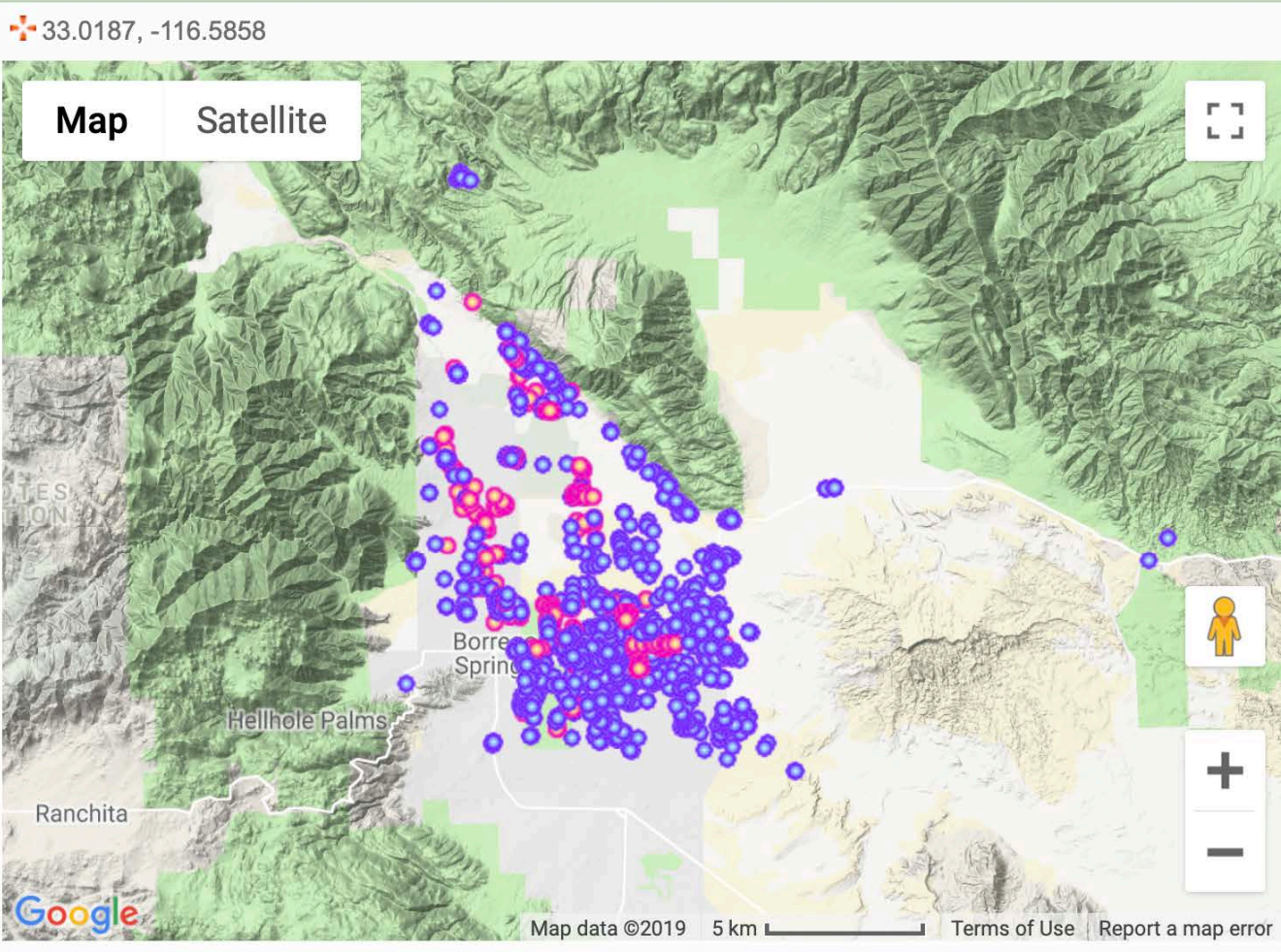
Basic Data

customize

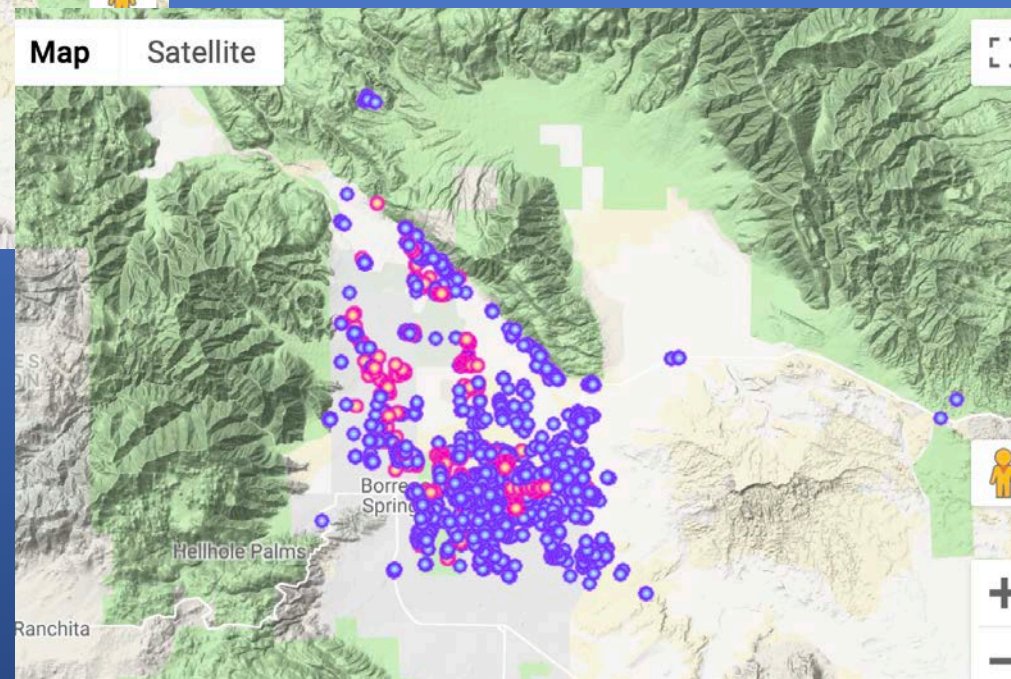
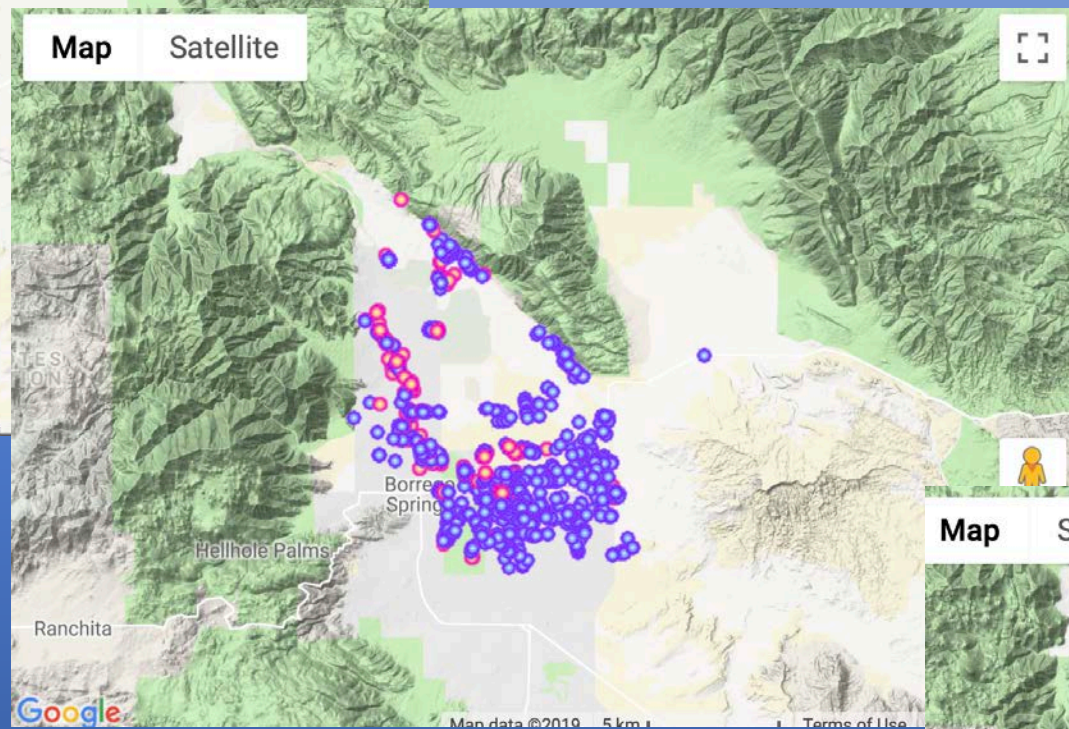
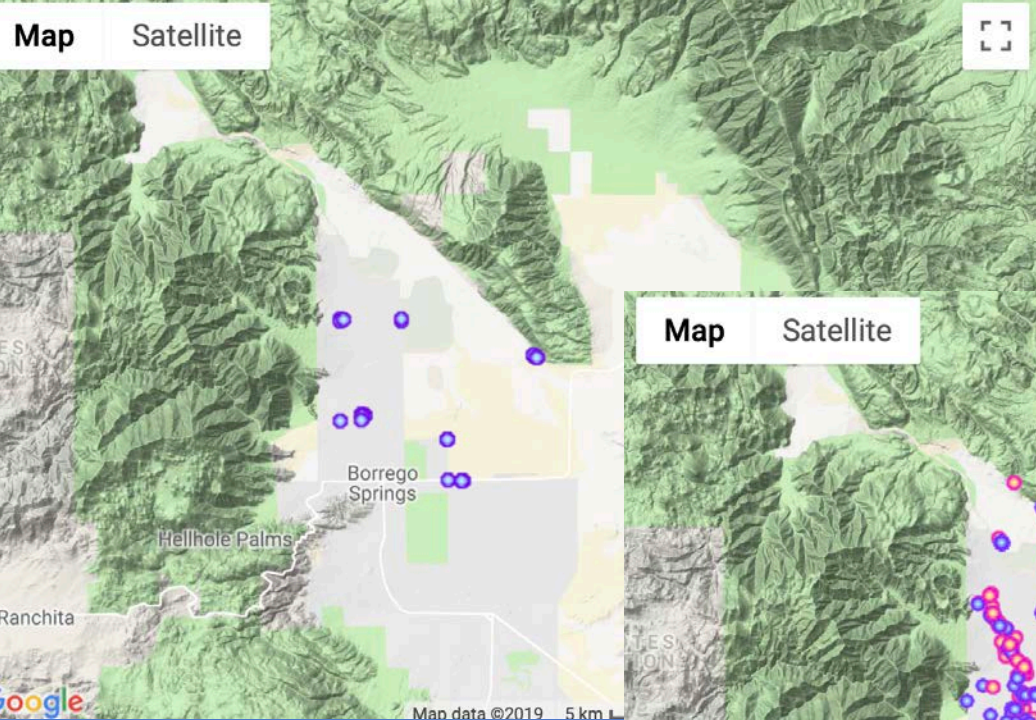
SEARCH

Click on ID to select a record. Click on column title to sort.

2647 records:



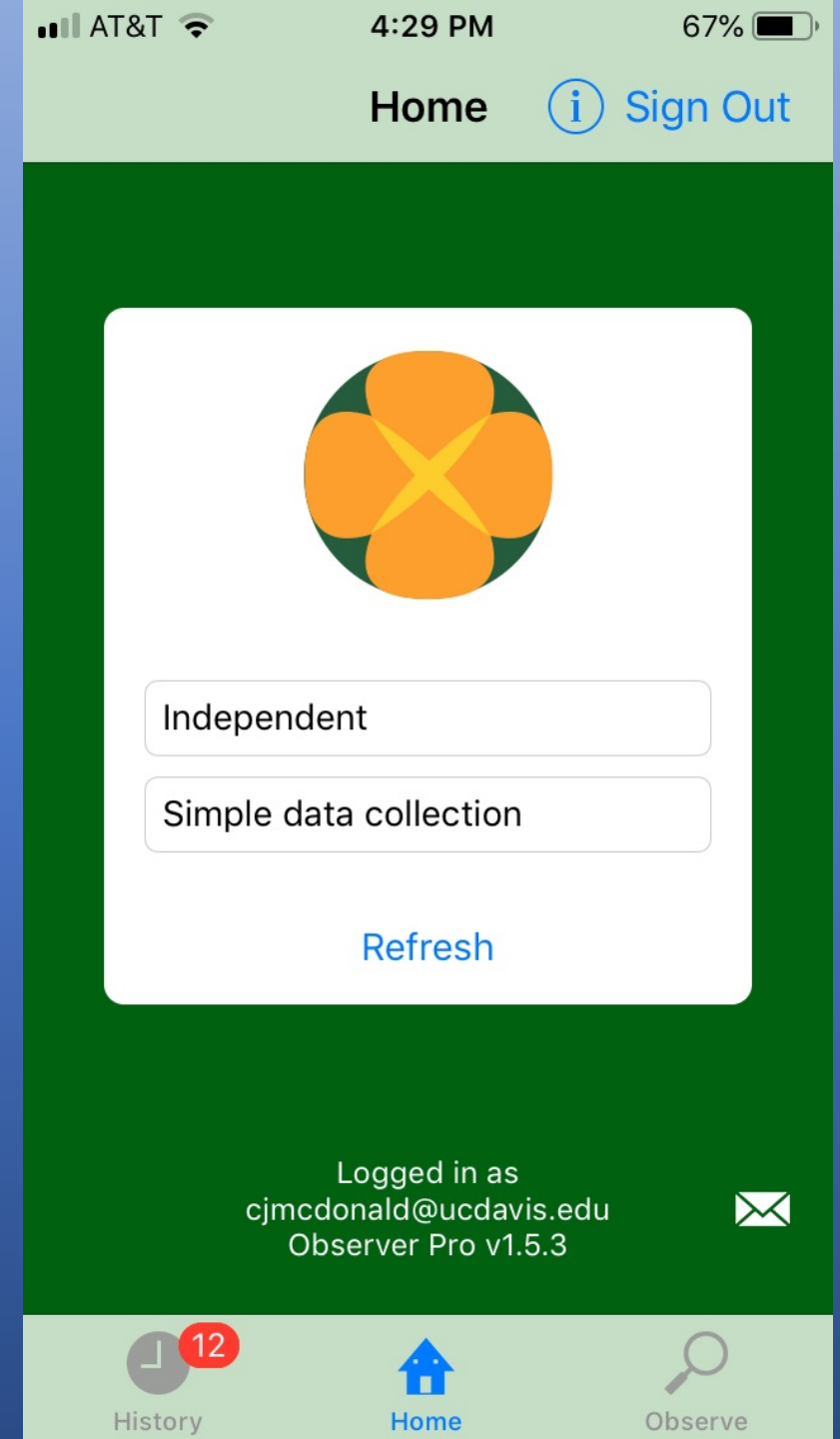
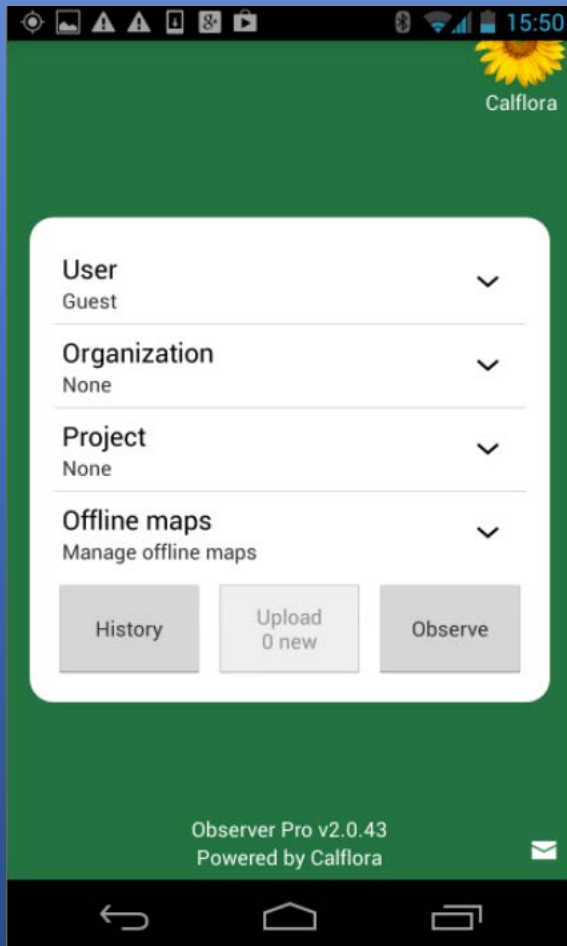
ID	Plant	Photo	Observer	Source	Date	County	Location Description
wb1968-2	Volutaria tubuliflora Egyptian knapweed	none	Giessow, Jason	San Diego County Ag (CDFA)	2019-05-02	San Diego	Borrego Springs, San Diego County
wb1968-34	Volutaria tubuliflora Egyptian knapweed	none	Giessow, Jason	San Diego County Ag (CDFA)	2019-05-02	San Diego	Borrego Springs, San Diego County
wb1968-35	Volutaria tubuliflora	none	Giessow, Jason	San Diego County Ag (CDFA)	2019-05-02	San Diego	Borrego Springs, San Diego County



2015 to 2017 to 2019

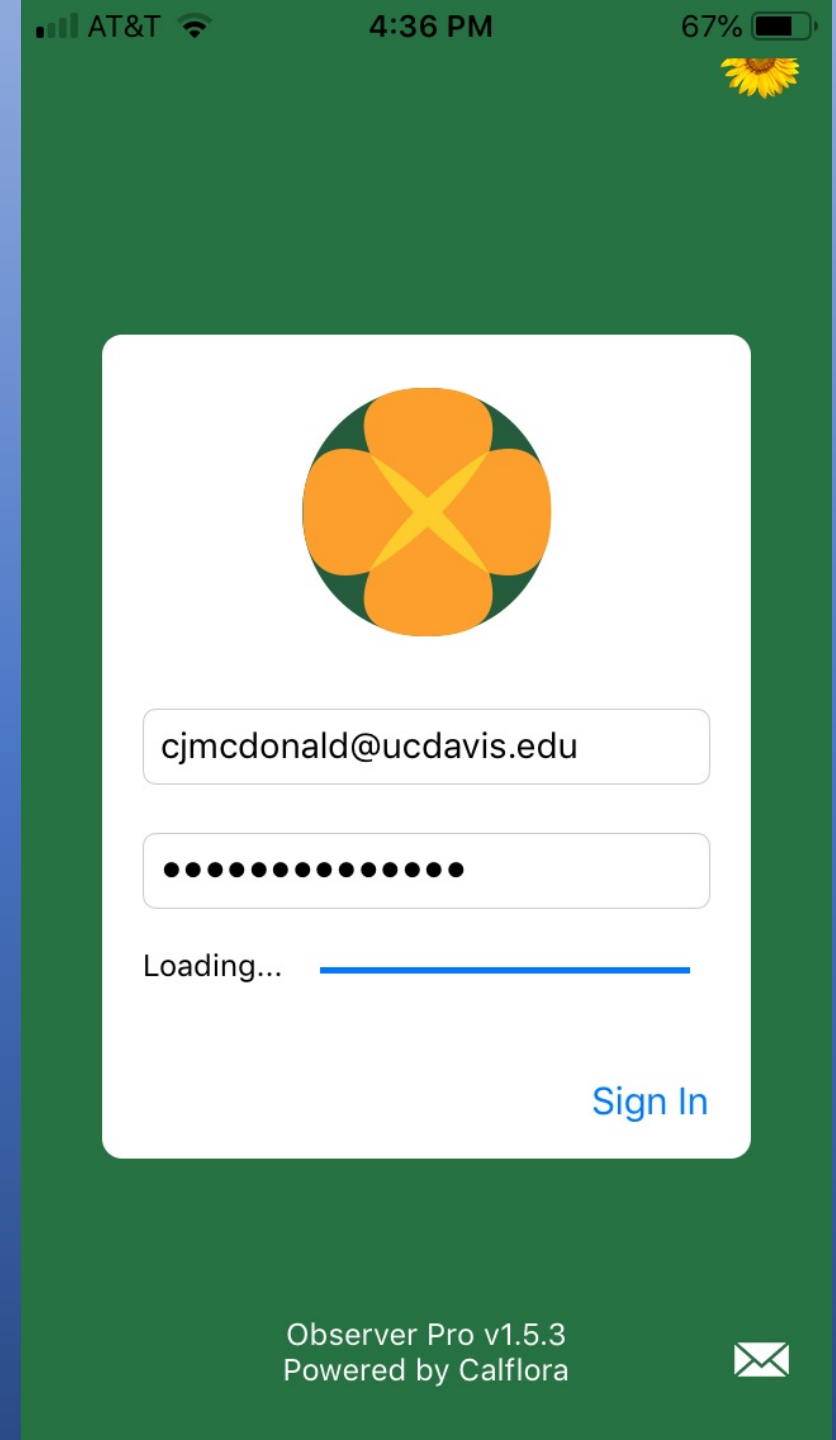
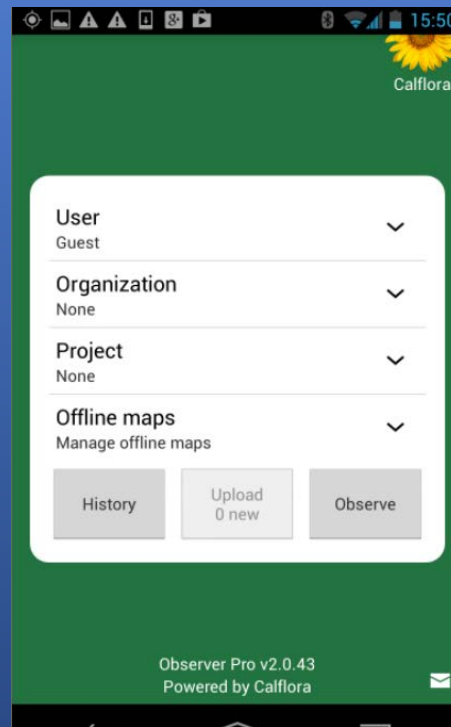
How to make an observation?

- Open the Observer App on your smartphone



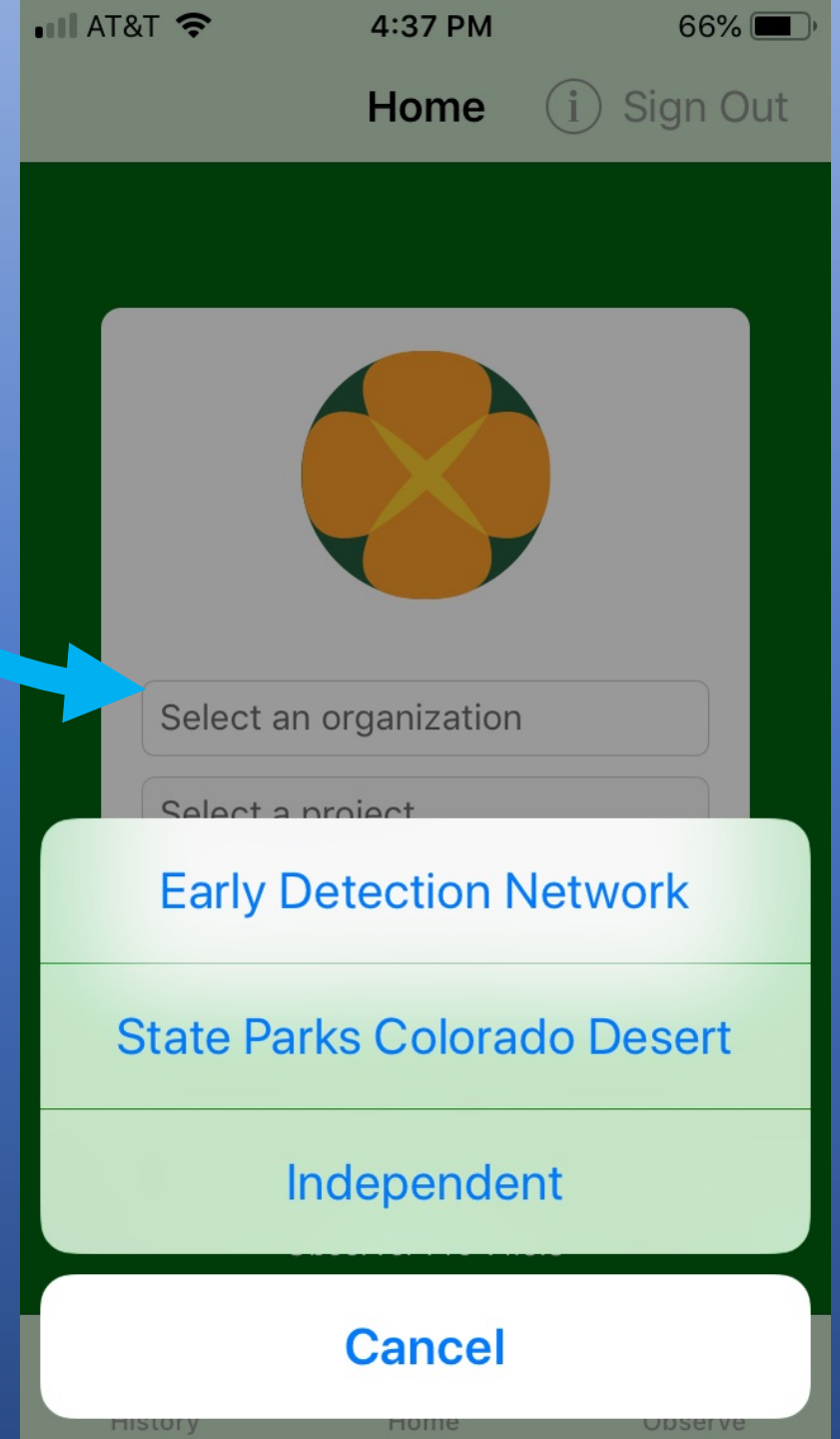
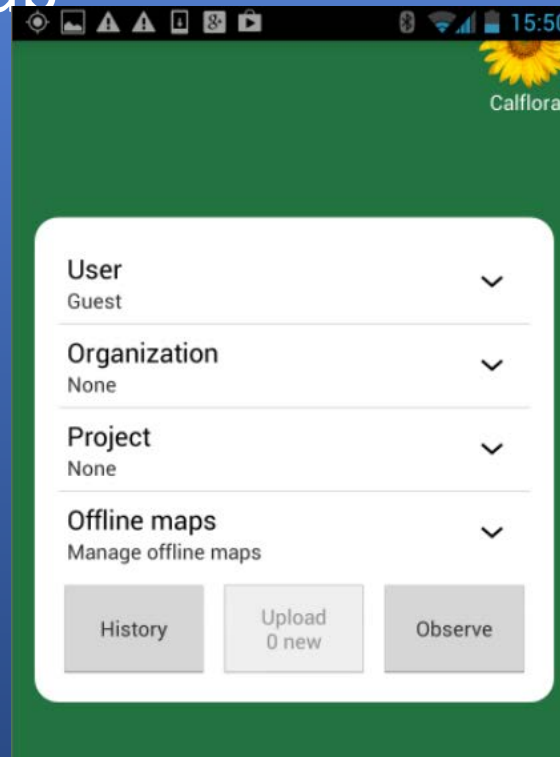
How to make an observation?

- Open the Observer App on your smartphone
- Log in with email and password
- SIGN IN BEFORE you lose cell service!



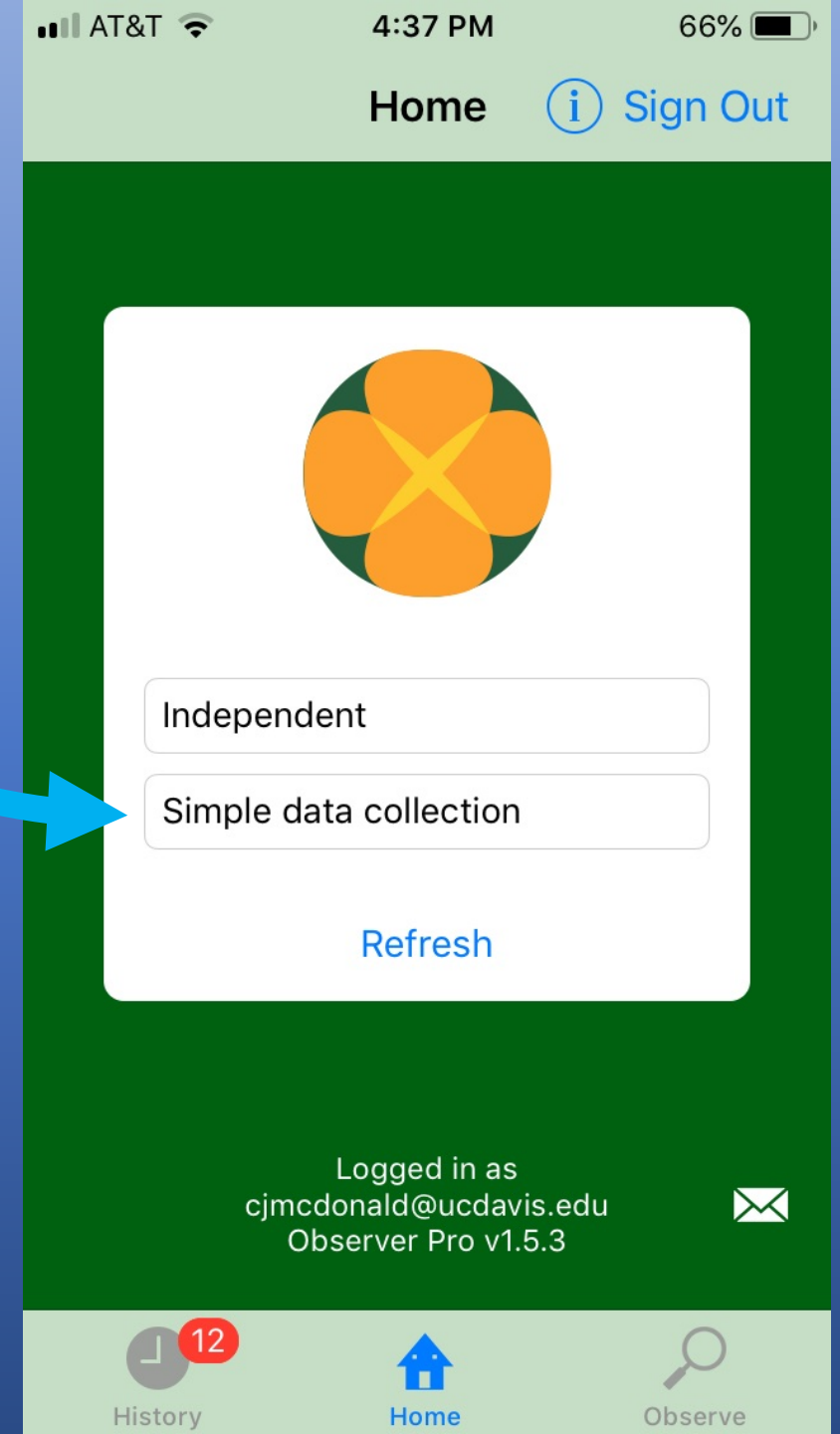
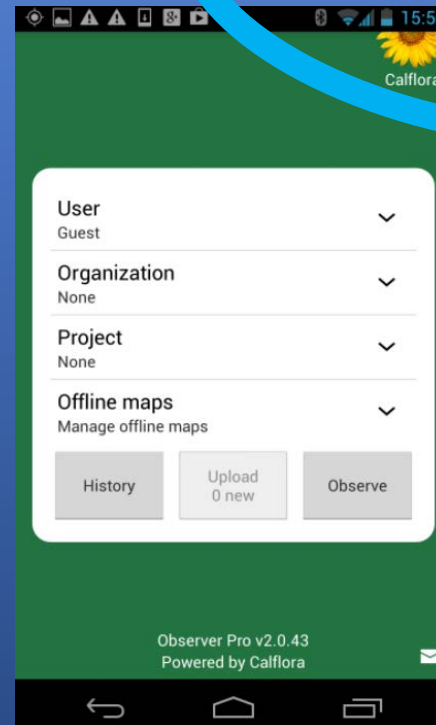
How to make an observation?

- Click select an organization – this is where groups are listed
- Most likely you are an independent
- (but if you are part of a group this is where you enter it)



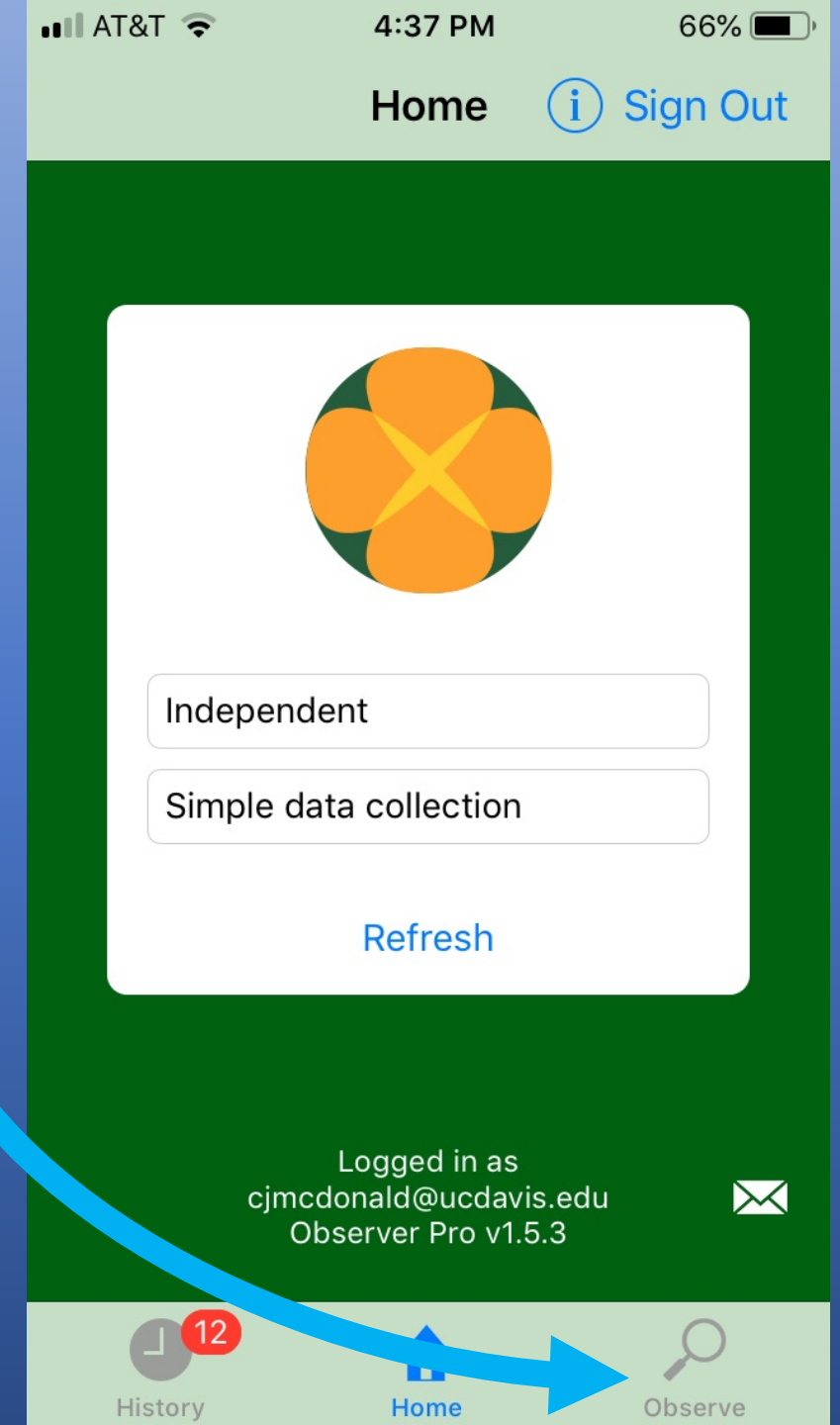
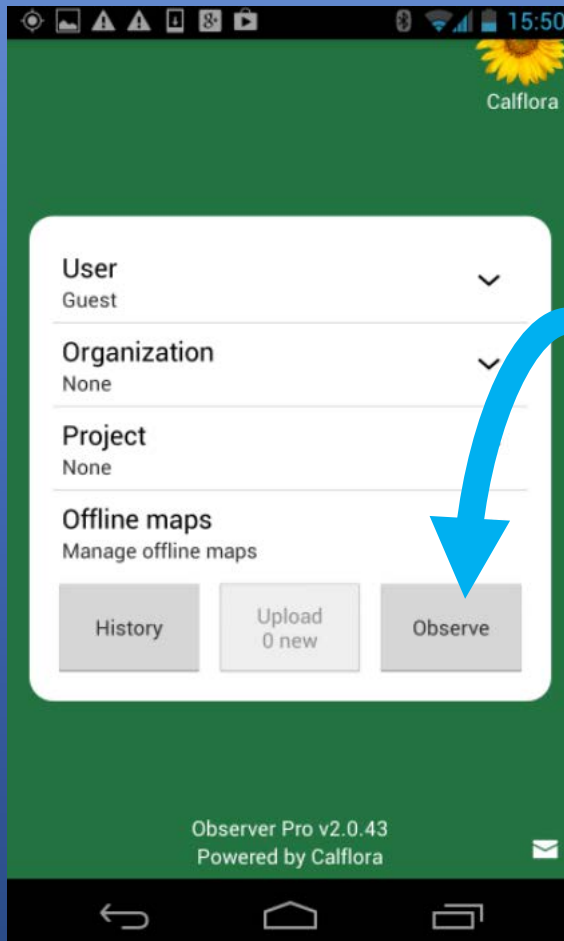
How to make an observation?

- Enter project
- Simple only has a few features
- Advanced allows to collect much more info on the plant you see
- Post-Fire (seems obvious)



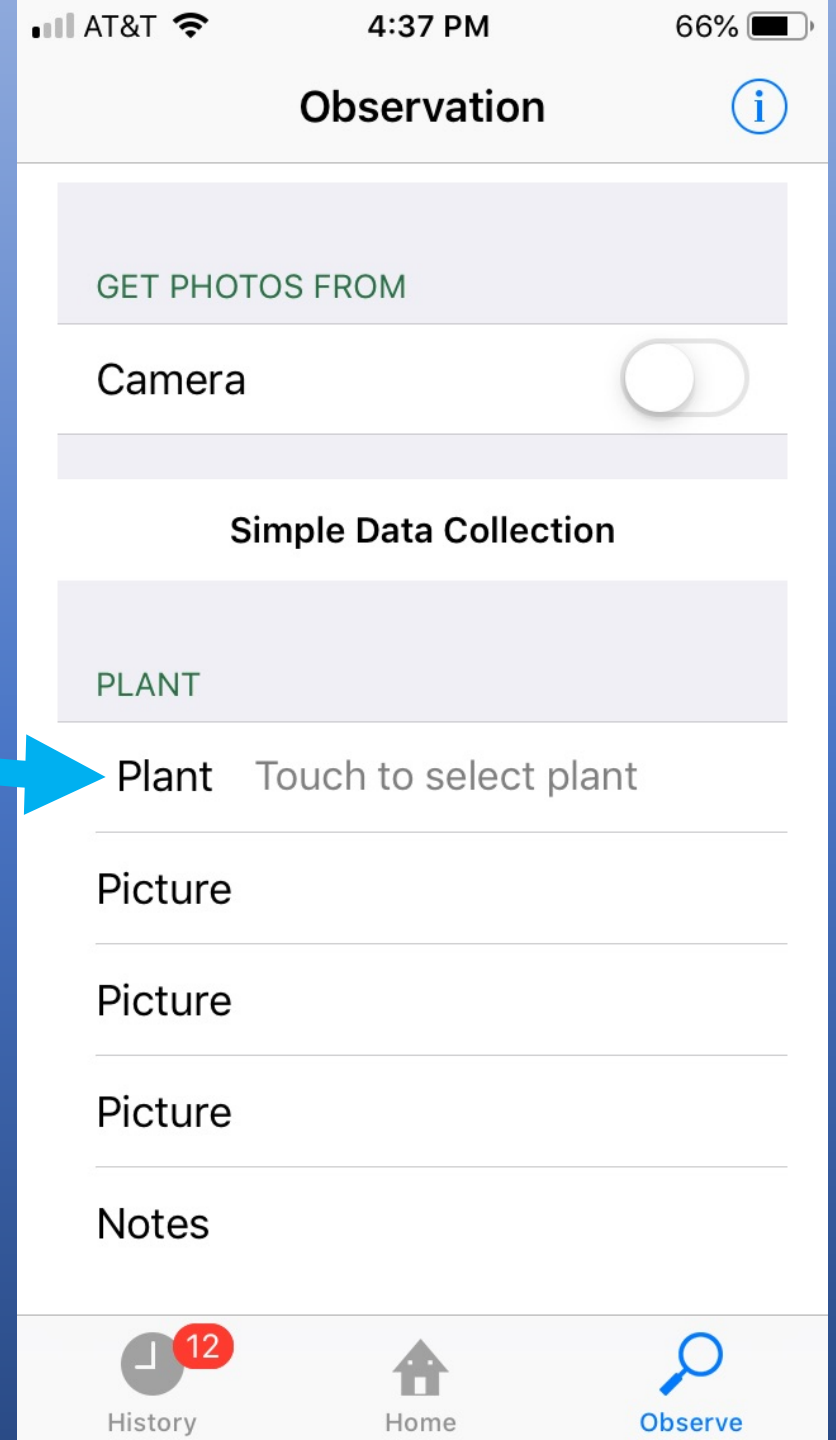
How to make an observation?

- Click “observe” on bottom



How to make an observation?

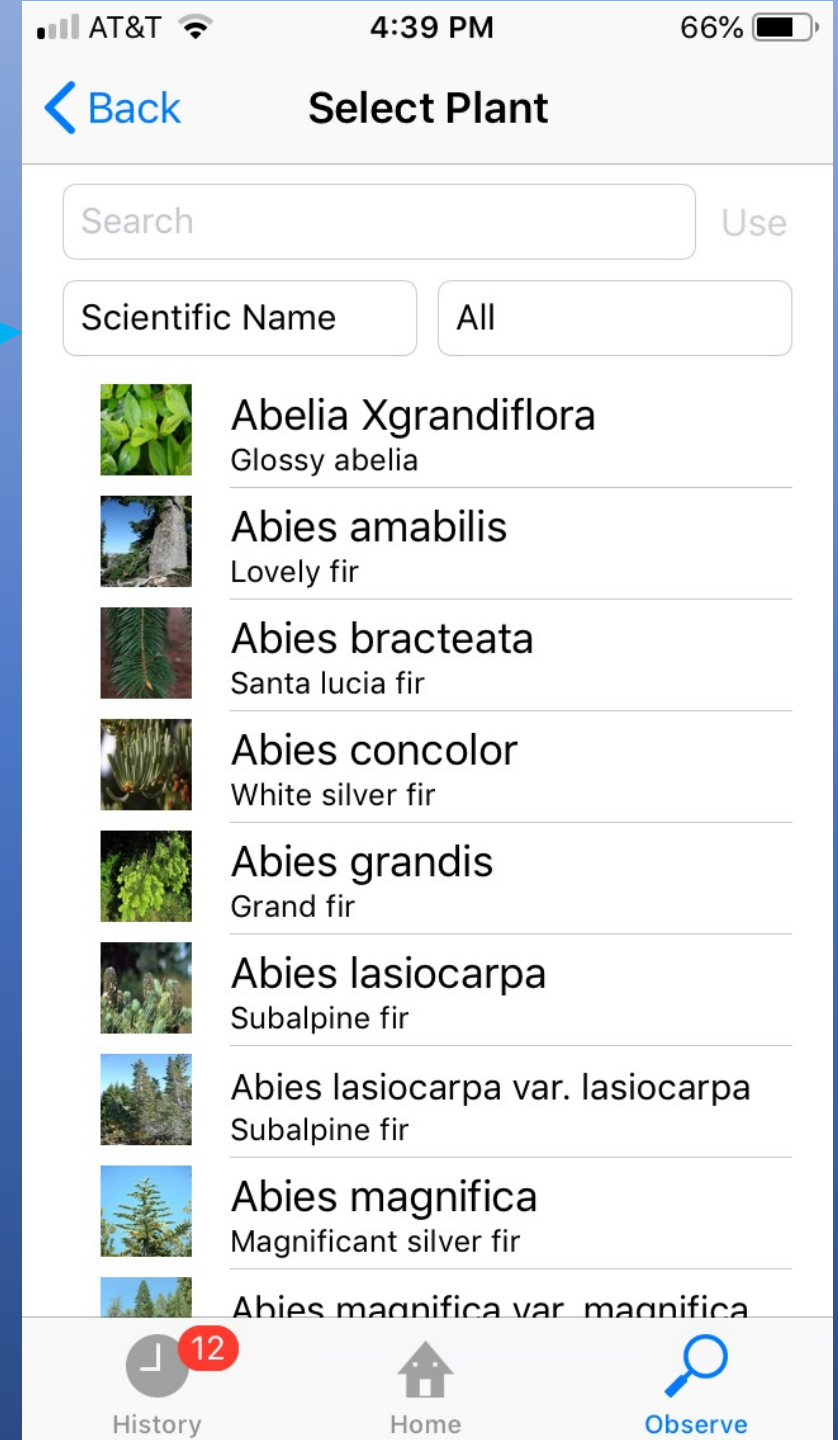
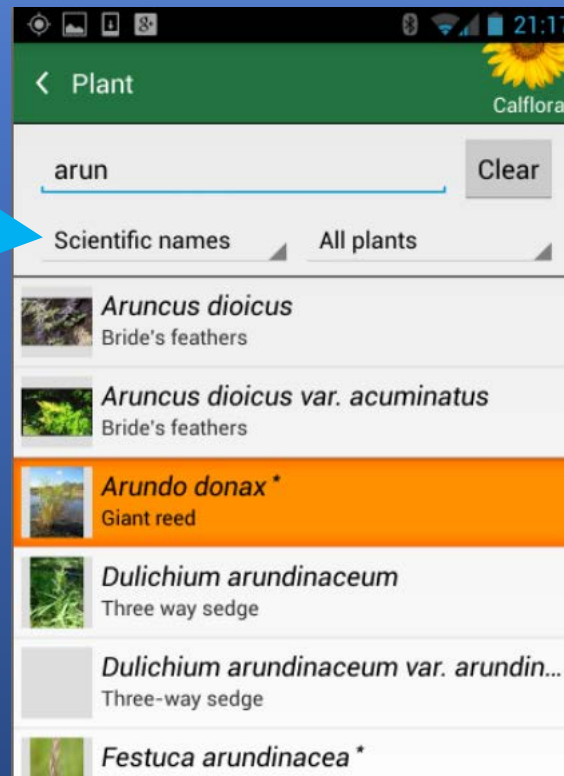
- I'm seeing Black mustard
- *Brassica nigra*
- Select "plant"



How to make an observation?

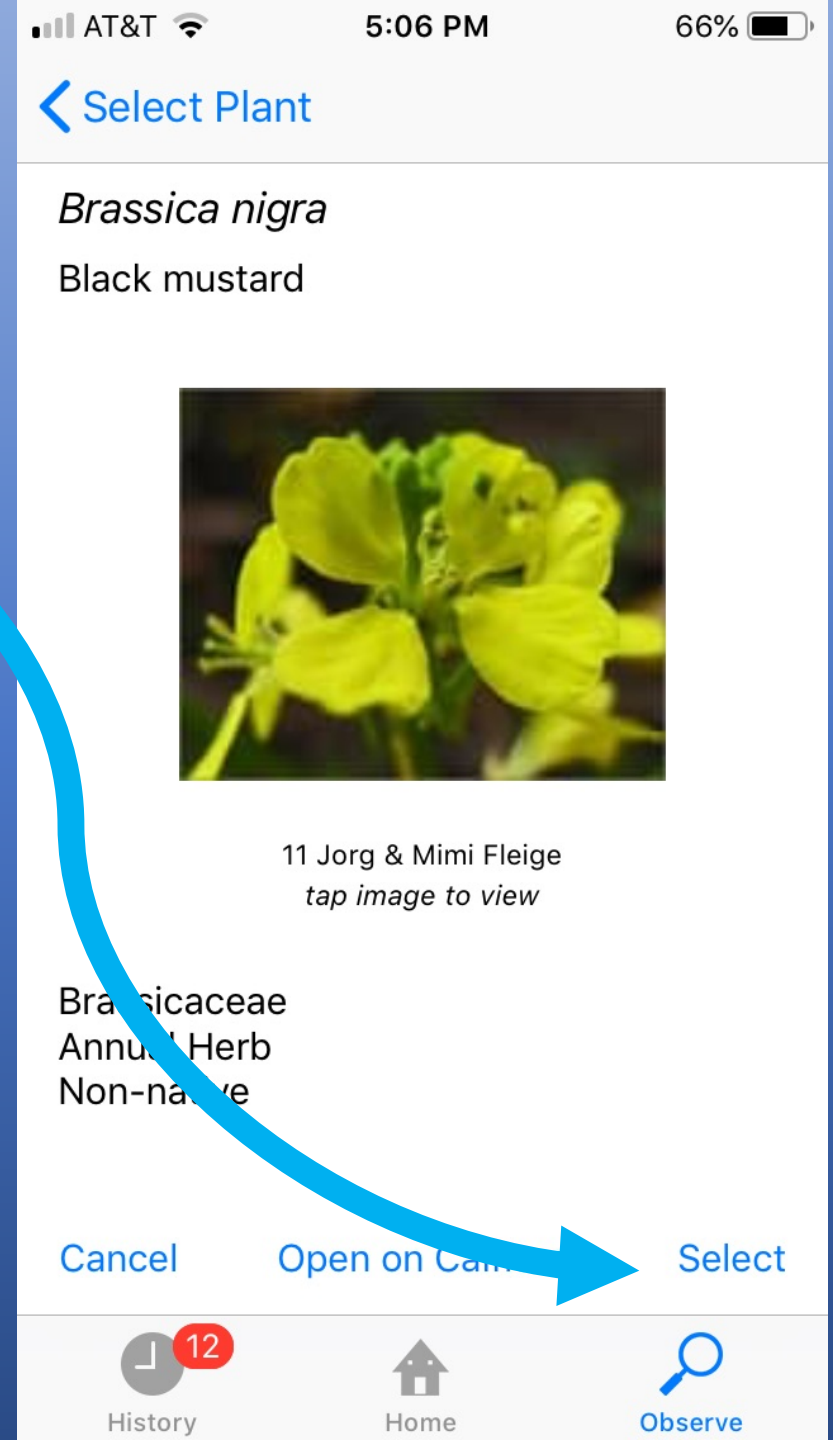
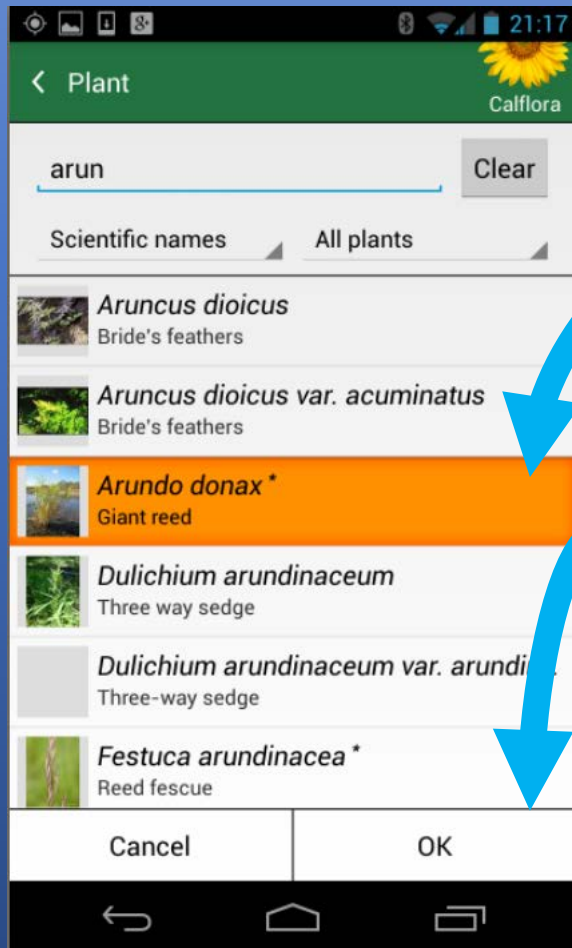
- Select plant
- On top box enter scientific or common name (use drop down to select between two options)

FYI, I don't have an android smartphone, and the screen shot I have is for arundo



How to make an observation?

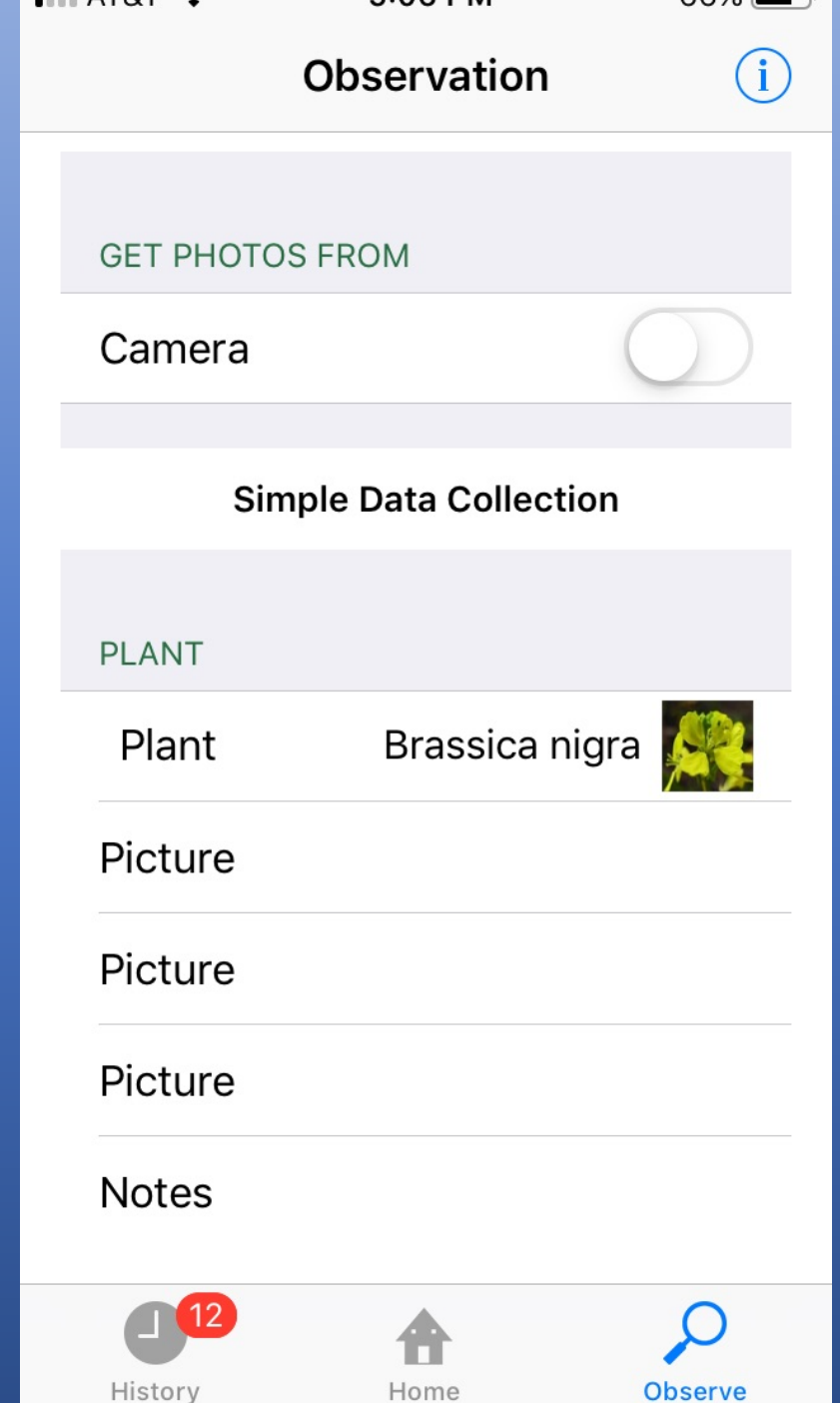
- Select your species (*Brassica nigra* in this case)



How to make an observation?

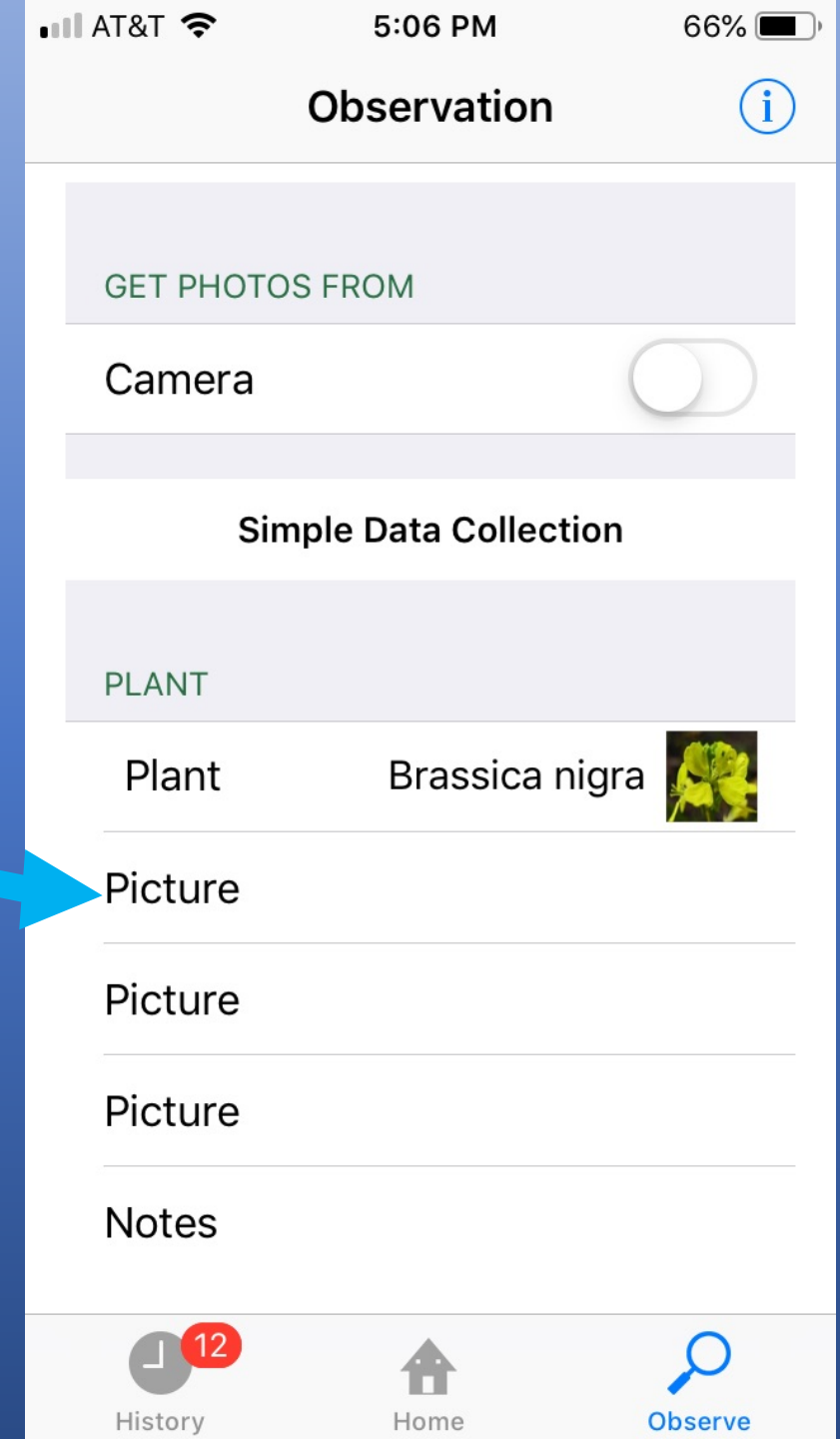
- The Observation page will appear

I don't have an android screen shot for this



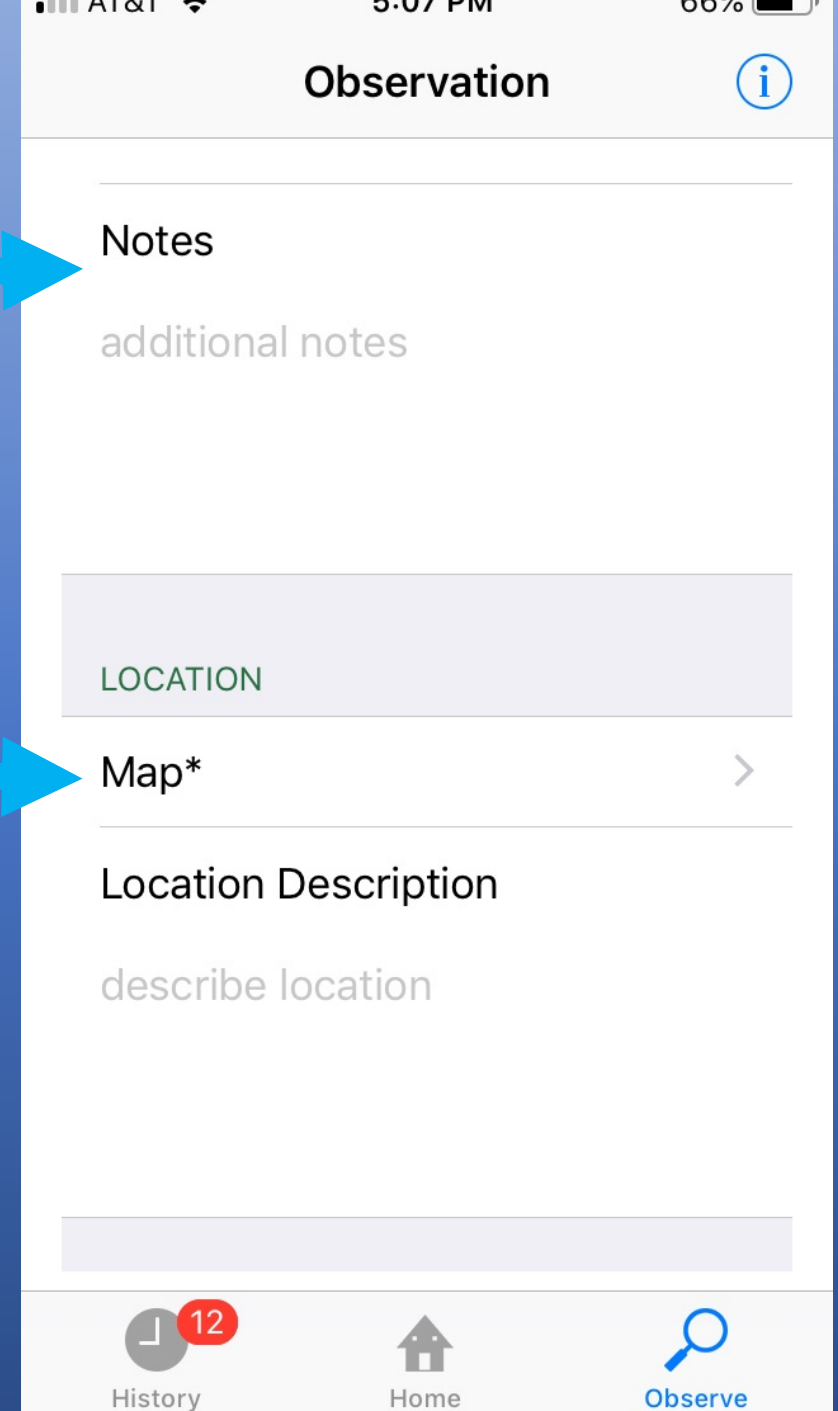
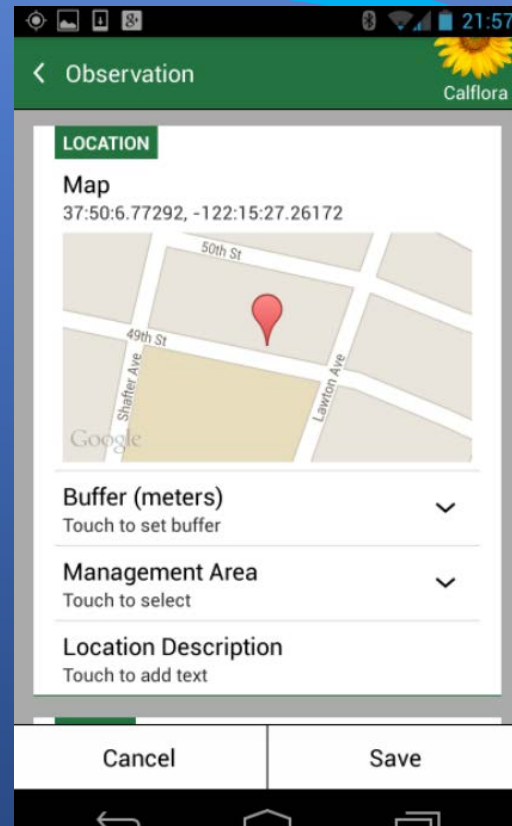
How to make an observation?

- Press “Picture” and take a GOOD picture of the plant
- Take several pictures, its ok
- If you are unsure of the species take
- 1 Whole plant
- 2 Flower and/or Fruit
- 3 Leaf



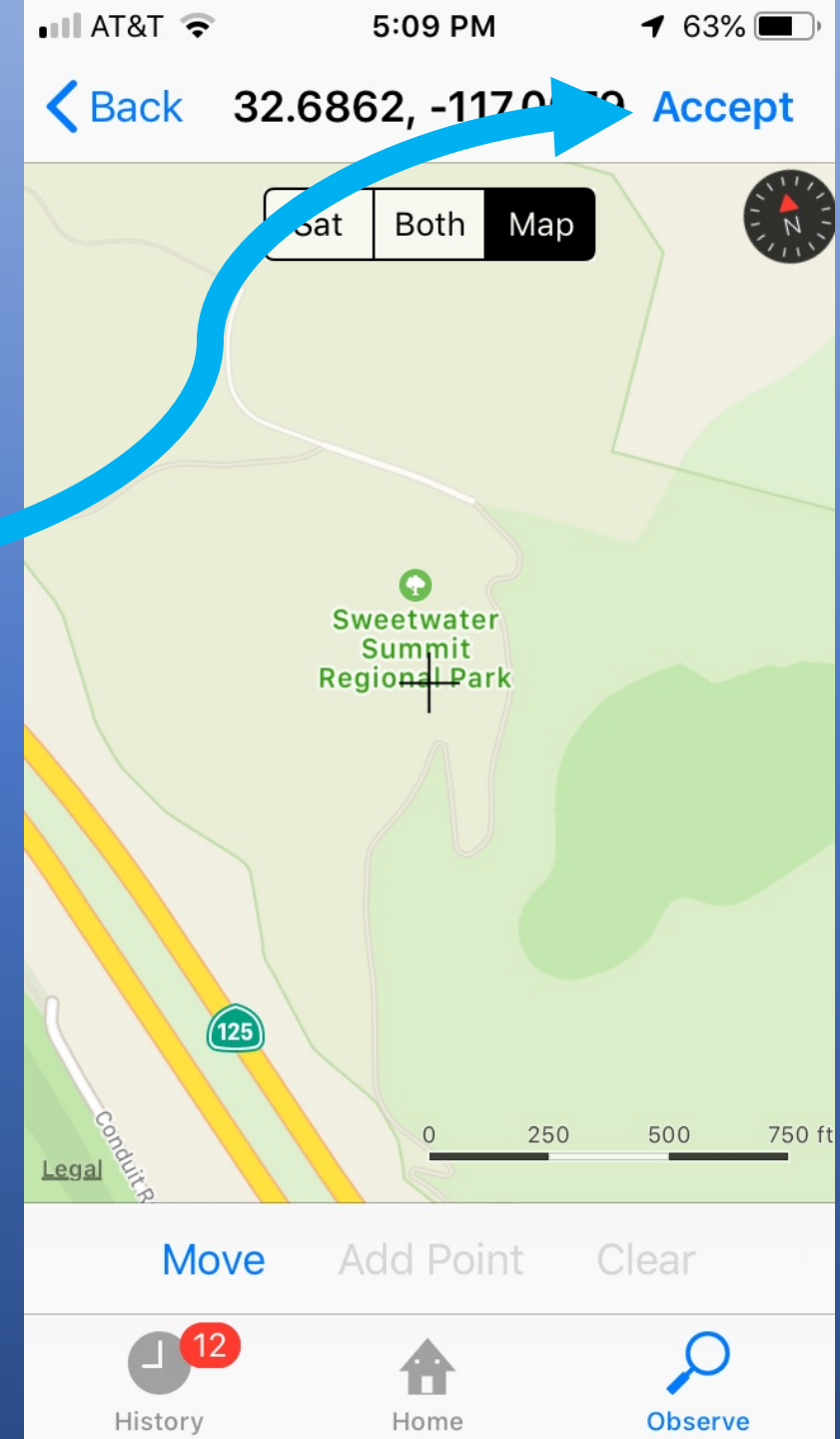
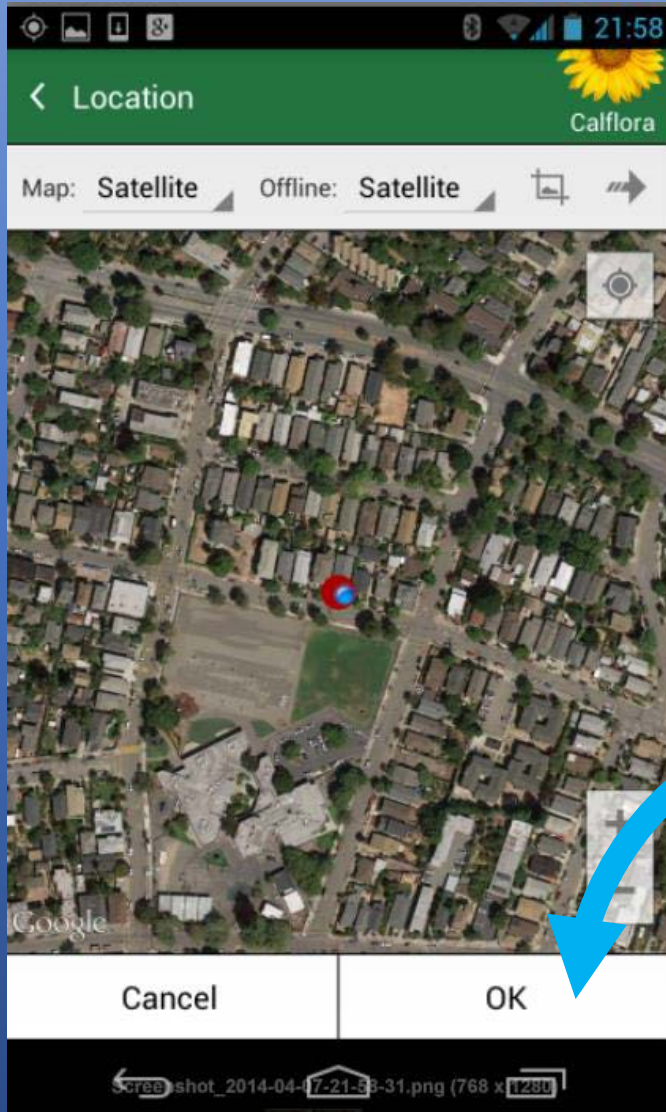
How to make an observation?

- Now scroll down page
- Add notes (optional)
- You MUST click on the “Map*”
under location



How to make an observation?

- You MUST click on the “Map*” under location
- Press accept or OK if the location looks good



How to make an observation?

- Black mustard *Brassica nigra*
- Add a location description (optional)



AT&T 5:07 PM 66%

Observation

Notes

additional notes

LOCATION

Map* 

Location Description

describe location

History  12 Home  Observe 

How to make an observation?

Observation Calflora

ASSESSMENT

- Status Touch to select
- Number of Plants Touch to select
- Percent Cover Touch to select
- Distribution Touch to select
- Phenology Touch to select

TREATMENT

- Treatment Method Touch to select
- Herbicide Touch to select

Cancel Save

- Select number of plants from drop down (default is 1)
- Select “Save”

Observation

ASSESSMENT

Number of Plants 1 >

WHEN

Date / Time 2019-06-05 11:23...

SAVE/CANCEL

Save

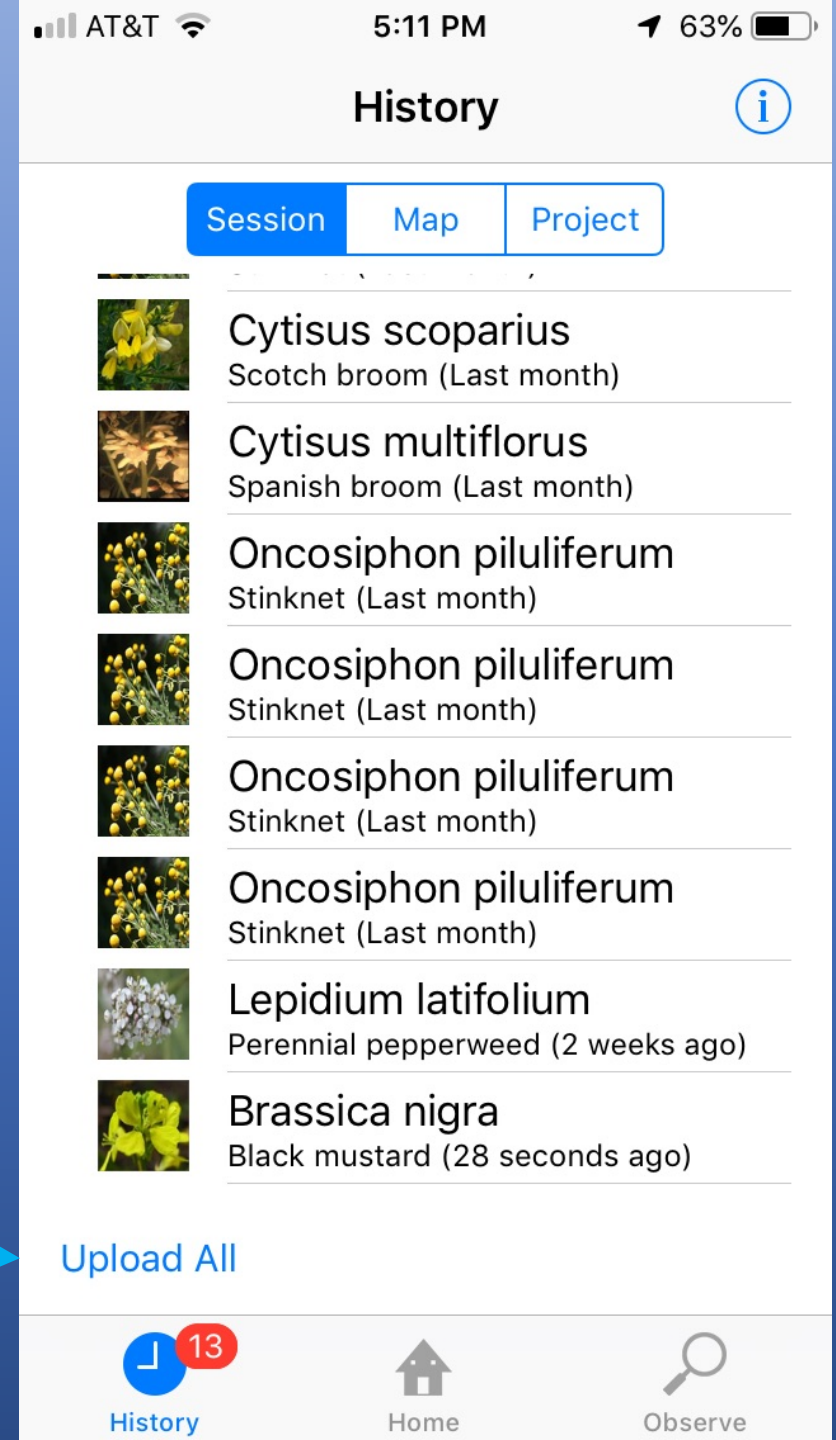
Clear

History Home Observe

How to make an observation?

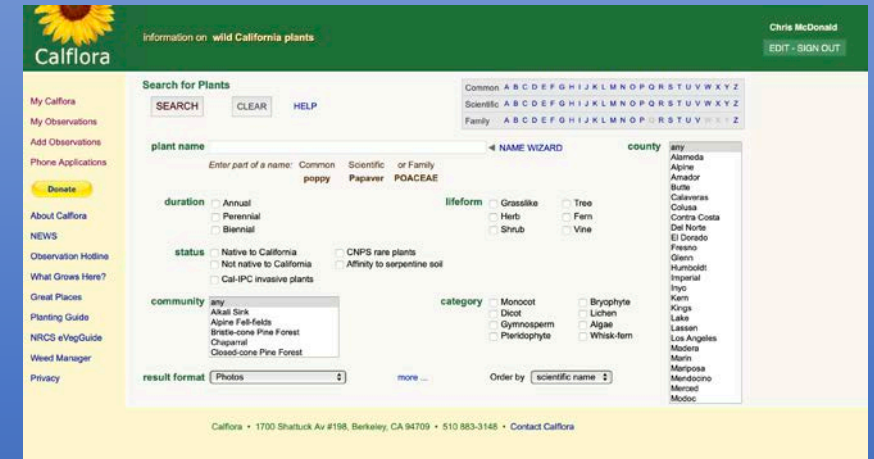
- Now the app takes me to History and shows me all the plants I have not uploaded
- Press “Upload All” When you have cell connection!!

Sorry no android screen shot



How to make an observation?

- When you upload an observation it uploads to your CalFlora account
- You MUST go to the website to then publish your observation to the web
- This process allows the observation to be stored in your phone without having cell connection





My Observations
Add Observations

- Phone Applications
- Donate
- About Calflora
- NEWS
- Observation Hotline
- What Grows Here?
- Great Places
- Planting Guide
- NRCS eVegGuide
- Weed Manager
- Privacy

Search for Plants

SEARCH CLEAR HELP

Common A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Scientific A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
Family A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

plant name
Enter part of a name: Common Scientific or Family
poppy Papaver POACEAE

duration ☐ Annual ☐ Perennial ☐ Biennial

status ☐ Native to California ☐ CNPS rare plants
☐ Not native to California ☐ Affinity to serpentine soil
☐ Cal-IPC invasive plants

community any
Alkali Sink
Alpine Fell-fields
Bristle-cone Pine Forest
Chaparral
Closed-cone Pine Forest

category ☐ Monocot ☐ Bryophyte
☐ Dicot ☐ Lichen
☐ Gymnosperm ☐ Algae
☐ Pteridophyte ☐ Whisk-fern

result format Photos more ... Order by scientific name

How to publish
your observation
once you've
uploaded it

- any
- Alameda
- Alpine
- Amador
- Butte
- Calaveras
- Colusa
- Contra Costa
- Del Norte
- El Dorado
- Fresno
- Glenn
- Humboldt
- Imperial
- Inyo
- Kern
- Kings
- Lake
- Lassen
- Los Angeles
- Madera
- Marin
- Mariposa
- Mendocino
- Merced
- Modoc

Scientific Name

Common Name

Status (native or not)
any

Observer

Group
any

Start Date

End Date

Source

Location Quality
any

Natural Status
any

Access by others
any

Location Description

☐ only surveys/checklists

Columns

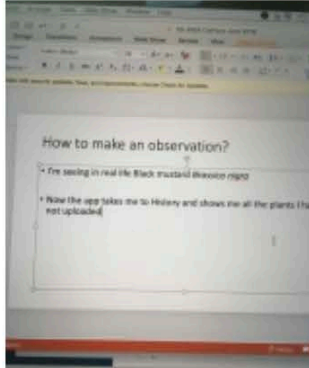
Basic Data

customiz

Click on ID to edit or publish a record.

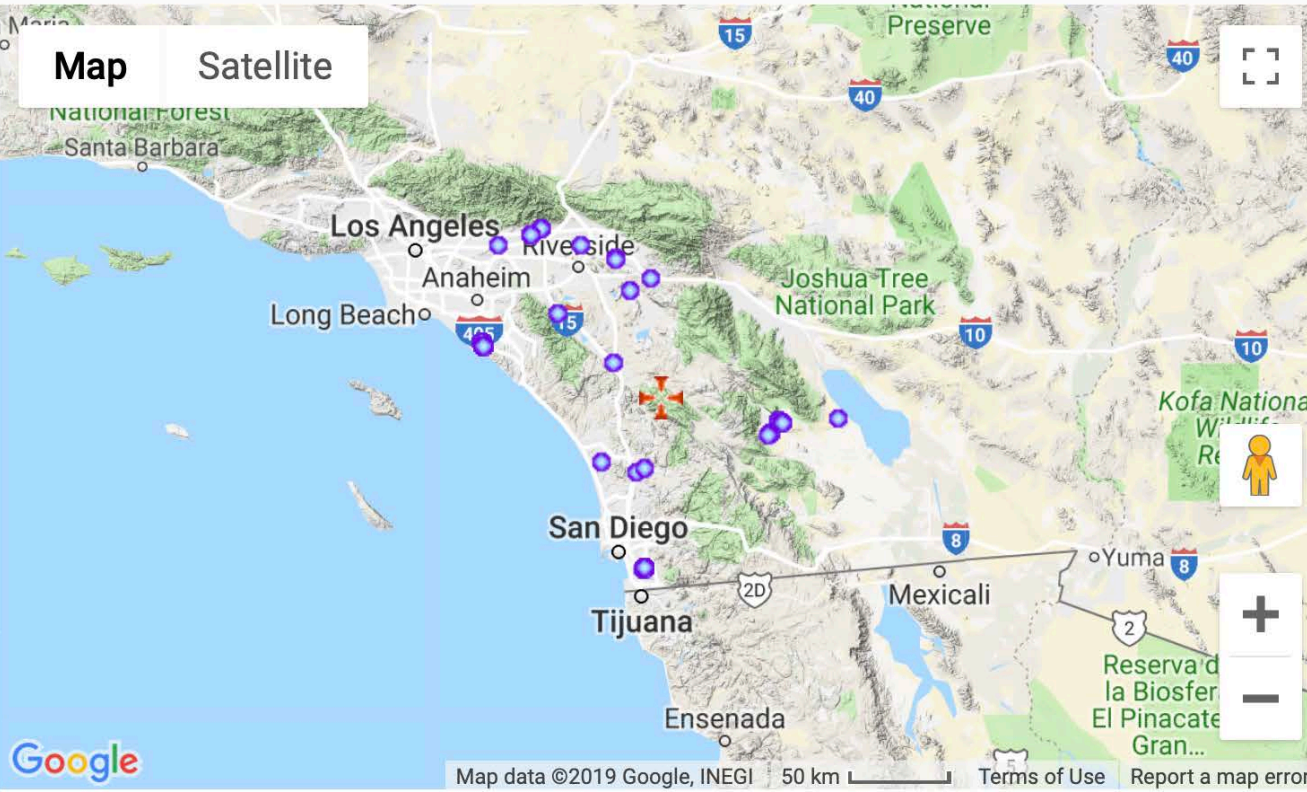
SEARCH

Click on plant record number

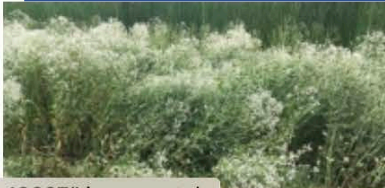
ID	Plant	Photo	Date	County	Location Description
io13628 unpublished	<i>Brassica nigra</i> Black mustard		2019-06-04	San Bernardino	

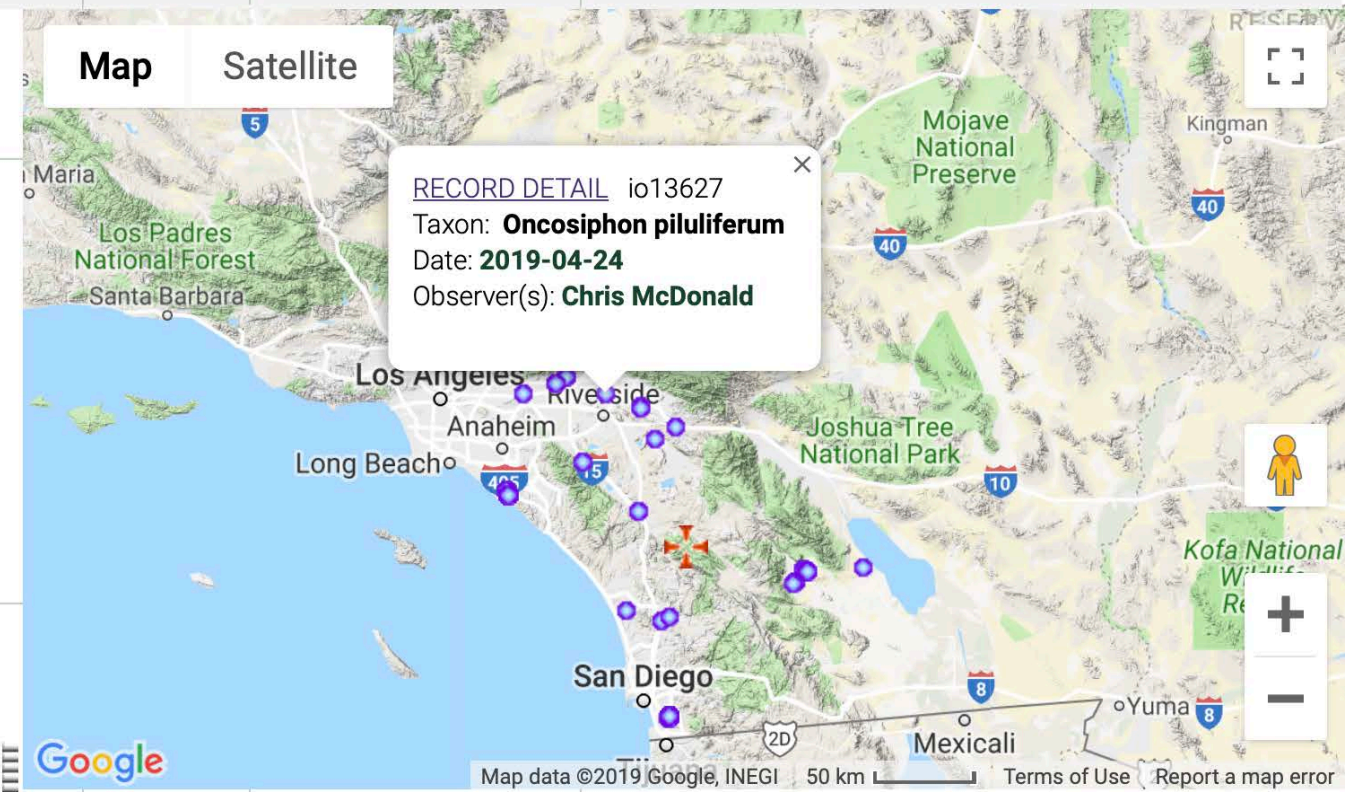
33.3995, -116.9405

MapSatellite

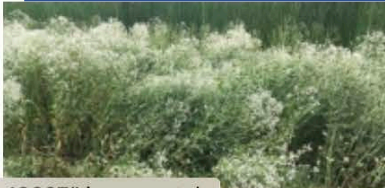


Map data ©2019 Google, INEGI 50 km Terms of Use Report a map error

ID	Plant	Photo	Observer	Date	County	Location Description
						
io13627	<i>Oncosiphon piluliferum</i>		Chris McDonald			
detail	editor	delete	publish			
io13627						
io13623 unpublished	<i>Cytisus multiflorus</i> Spanish broom					
io13626 unpublished	<i>Lepidium latifolium</i> Perennial pepperweed		Chris McDonald	2019-05-20	Riverside	Roadside



Click on publish,
this will make
your observation
public on CalFlora

ID	Plant	Photo	Observer	Date	County	Location Description
						
io13627	<i>Oncosiphon piluliferum</i>		Chris McDonald			
io13623	<i>Cytisus multiflorus</i> Spanish broom					
io13626	<i>Lepidium latifolium</i> Perennial pepperweed		Chris McDonald	2019-05-20	Riverside	Roadside

MapSatellite

RECORD DETAIL io13627
Taxon: **Oncosiphon piluliferum**
Date: **2019-04-24**
Observer(s): **Chris McDonald**

Los Angeles, San Diego, etc.

io13627

editordeletepublish

If you want to edit your observation, or keep it private, go to editor



Editing io13628

entered on 2019-06-04 by Chris McDonald

Group

Independent

Project

Simple data collection

Access by others

unpublished

History ▶ none

CANCEL

SAVE

Brassicaceae

Black mustard

Observer

Chris McDonald

Observation Date *

2019-06-04 17:12:46

Notes 1000

Location Description

Number of Plants

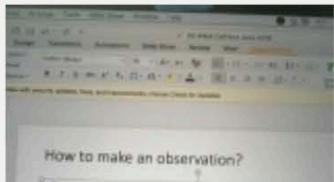
1+

Access by others gives you the option to keep your observation private

Photos:

Add a photo ▶

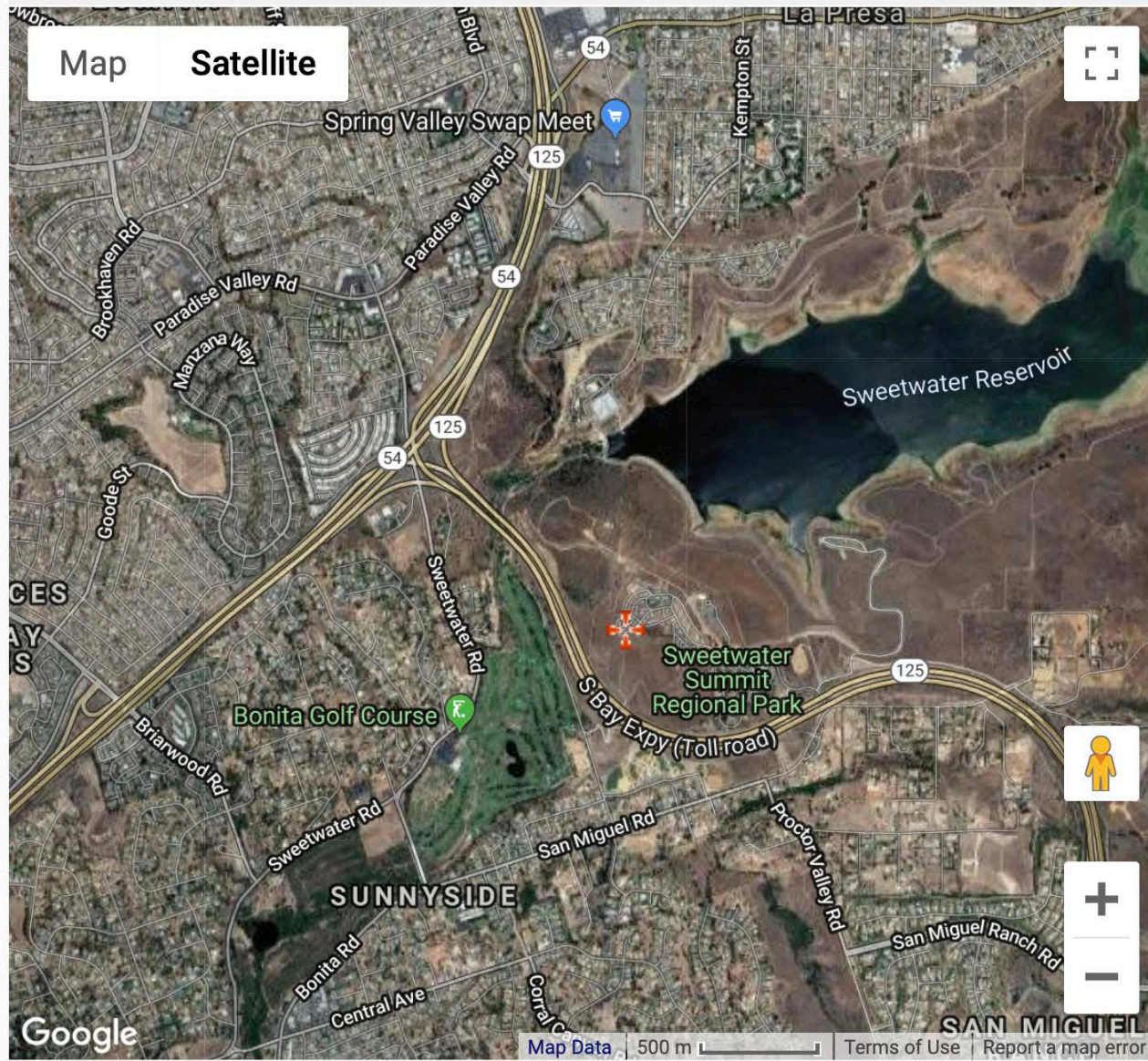
Click on a photo to edit



Map

Satellite

Map Layers ▶



32.68444, -117.00725

Map Data

500 m

Terms of Use

Report a map error

Weed Manager

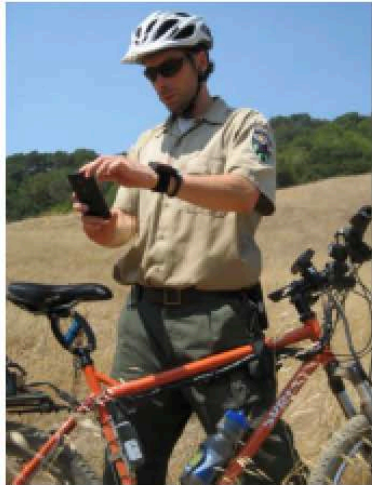
- CalFlora's program that allows users to track project management for a group of people or for large projects
- Very customizable input functions
- Enter herbicide usage (amount and name), time spent on project, stack treatment polygons, number of plants treated, bags removed, create PUR for Ag. Comm. (in development), enter volunteer hours, ...



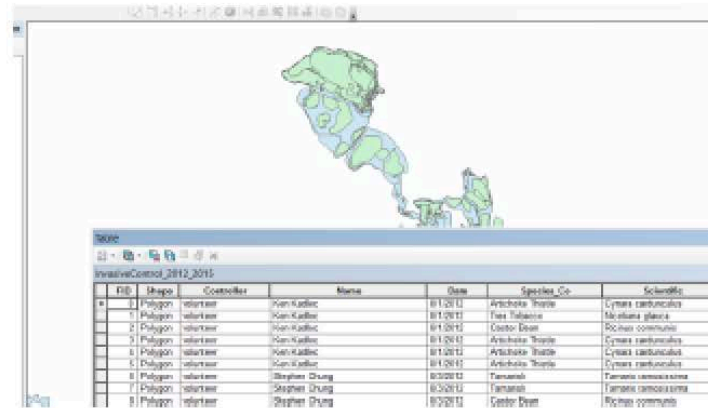
Calflora

information on wild California plants for conservation, education, and appreciation

Weed Manager: Acquiring data



Observer Pro
android phone app

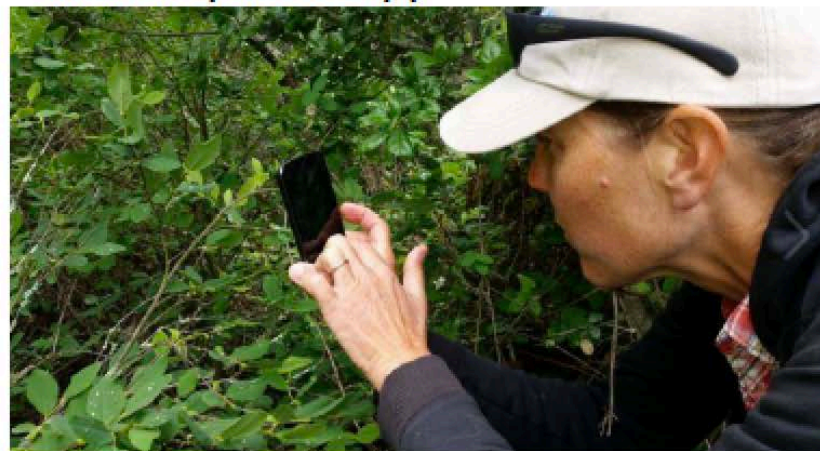


ID	Shape	Controller	Name	Date	Species Co	Scientist
1	Polygon	observer	Kan Kallac	8/1/2011	Artichoke Thistle	Cynara cardunculus
2	Polygon	observer	Kan Kallac	8/1/2011	Tara Taberna	Melilotus alba
3	Polygon	observer	Kan Kallac	8/1/2011	Croton	Croton
4	Polygon	observer	Kan Kallac	8/1/2011	Artichoke Thistle	Cynara cardunculus
5	Polygon	observer	Kan Kallac	8/1/2011	Artichoke Thistle	Cynara cardunculus
6	Polygon	observer	Stephen Chung	8/3/2012	Taraxacum	Taraxacum officinale
7	Polygon	observer	Stephen Chung	8/3/2012	Taraxacum	Taraxacum officinale
8	Polygon	observer	Stephen Chung	8/3/2012	Croton	Croton

Upload shapefiles / geodatabases



iOS phone app



Geotagged Photos

Calflora Plant Observation Entry

TOOLS

Organization: Project unavailable

Access by others: History none

Shape: none

Point Location: none

Photos: none

Management Status: Natural Status

Region: Collection / Survey

NEW RECORD

Map Satellite

San Francisco

San Jose

Sal

Monterey

Online

You Choose Treatment Fields

Org A

TREATMENT	
Treatment? Chemical	▼
Mechanical Method Touch to select	▼
Chemical Method Touch to select	▼
Herbicide Touch to select	▼
Ounces of Chemical Touch to set value	
Ounces of Water Touch to set value	
Concentration (%) Touch to set value	
Treated Surface Area, square feet Touch to set value	
Percent Treated 100	

Org B

TREATMENT	
Treatment Method Touch to select *	▼
Herbicide Touch to select	▼
Concentration (%) Touch to set value	
Percent Treated Touch to select	▼
Ounces of Chemical Touch to set value	
Ounces of Water Touch to set value	
Concentration (%) Touch to set value	
Treated Surface Area, square feet Touch to set value	
Percent Treated 100	
Number of Plants Treated Touch to set value	
Number of Bags Removed Touch to set value	
Labor Hours Touch to set value	

Viewing Record # **mg11858** entered on 2015-05-08 by **MCOSD Restoration Crew**

Organization Marin County Parks data pro	Project TELIAETR
--	----------------------------

Access by others
published

NEW RECORD

Shape ▶ none

MARIN CO. PARKS WEED / TREATMENT

Scientific Name *
Aegilops triuncialis

Observer *
Shawn - Go Native

Location Description
TERRA LINDA-SLEEPY HOLLOW DIVIDE NORTH

Habitat
Grassy slope

Number of Plants *
1+

Distribution
Scattered Plants

Percent Cover

Phenology

History ▼ This is the earliest record.

Select a record below to view:

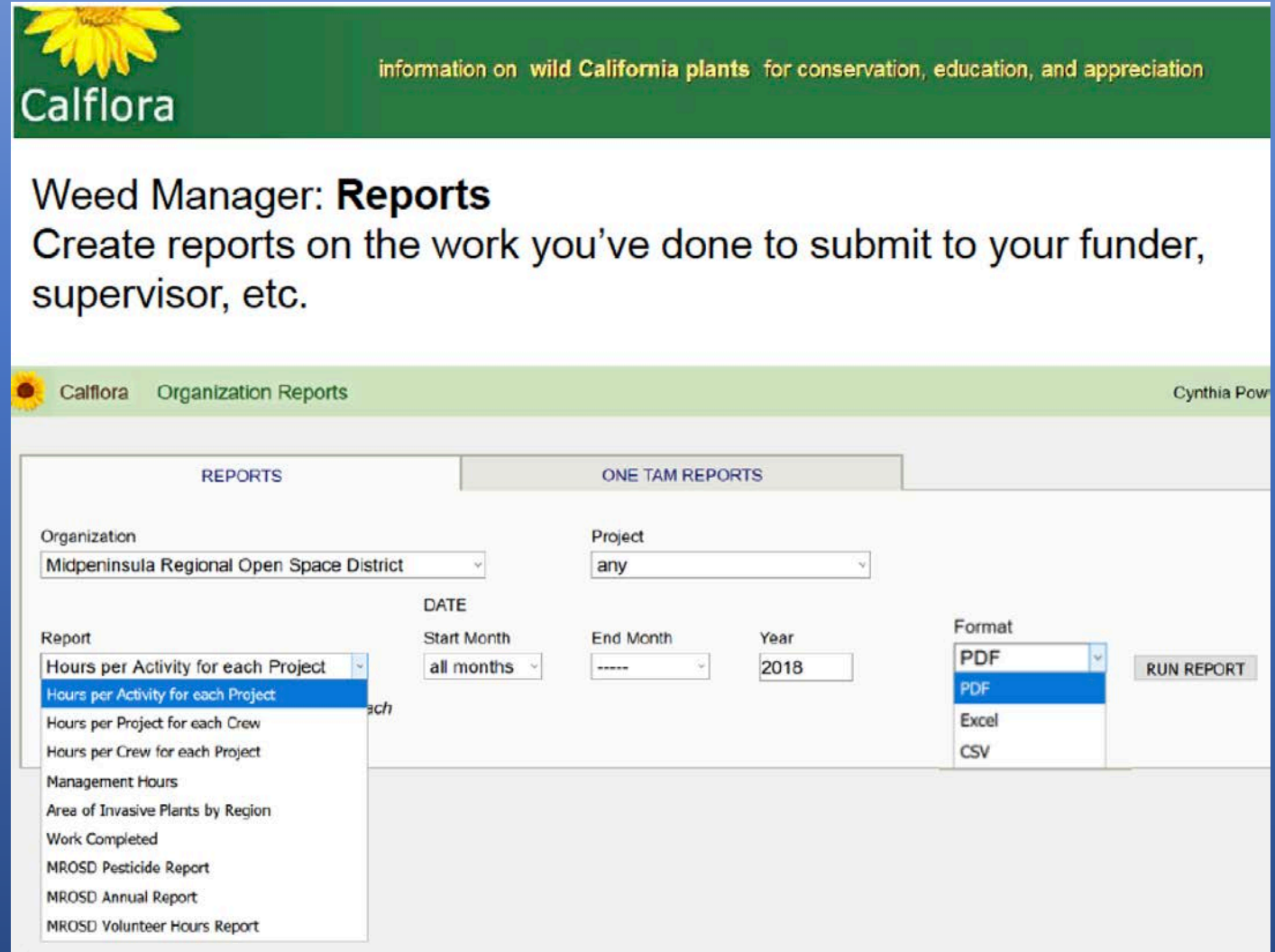
- mg11858 2015-05-08
- mg13614 2015-05-22
- mg23591 2016-04-25
- mg24910 2016-05-24
- mg27404 2016-06-28

Find nearby records of
Aegilops triuncialis

CLEAR SEARCH



Weed manager is not free, an annual subscription is required



The screenshot shows the Calflora website's Weed Manager Reports section. At the top, a green banner features a yellow flower icon and the text "information on wild California plants for conservation, education, and appreciation". Below this, the "Calflora" logo is on the left, and the title "Weed Manager: Reports" is centered, followed by the instruction "Create reports on the work you've done to submit to your funder, supervisor, etc.".

A light green navigation bar contains "Calflora", "Organization Reports", and the user name "Cynthia Powell". Below this, a tabbed interface shows "REPORTS" as the active tab, with "ONE TAM REPORTS" as an alternative. The form includes several dropdown menus: "Organization" (set to "Midpeninsula Regional Open Space District"), "Project" (set to "any"), "Report" (with a dropdown menu open showing options like "Hours per Activity for each Project", "Hours per Project for each Crew", "Management Hours", etc.), "Start Month" (set to "all months"), "End Month" (set to "-----"), and "Year" (set to "2018"). A "Format" dropdown menu is also present, with "PDF" selected. A "RUN REPORT" button is located to the right of the format menu.

Questions? cjmcdonald@ucanr.edu

