

# Utah Natural Heritage Program

## Field Data Collection

# Who We Are:

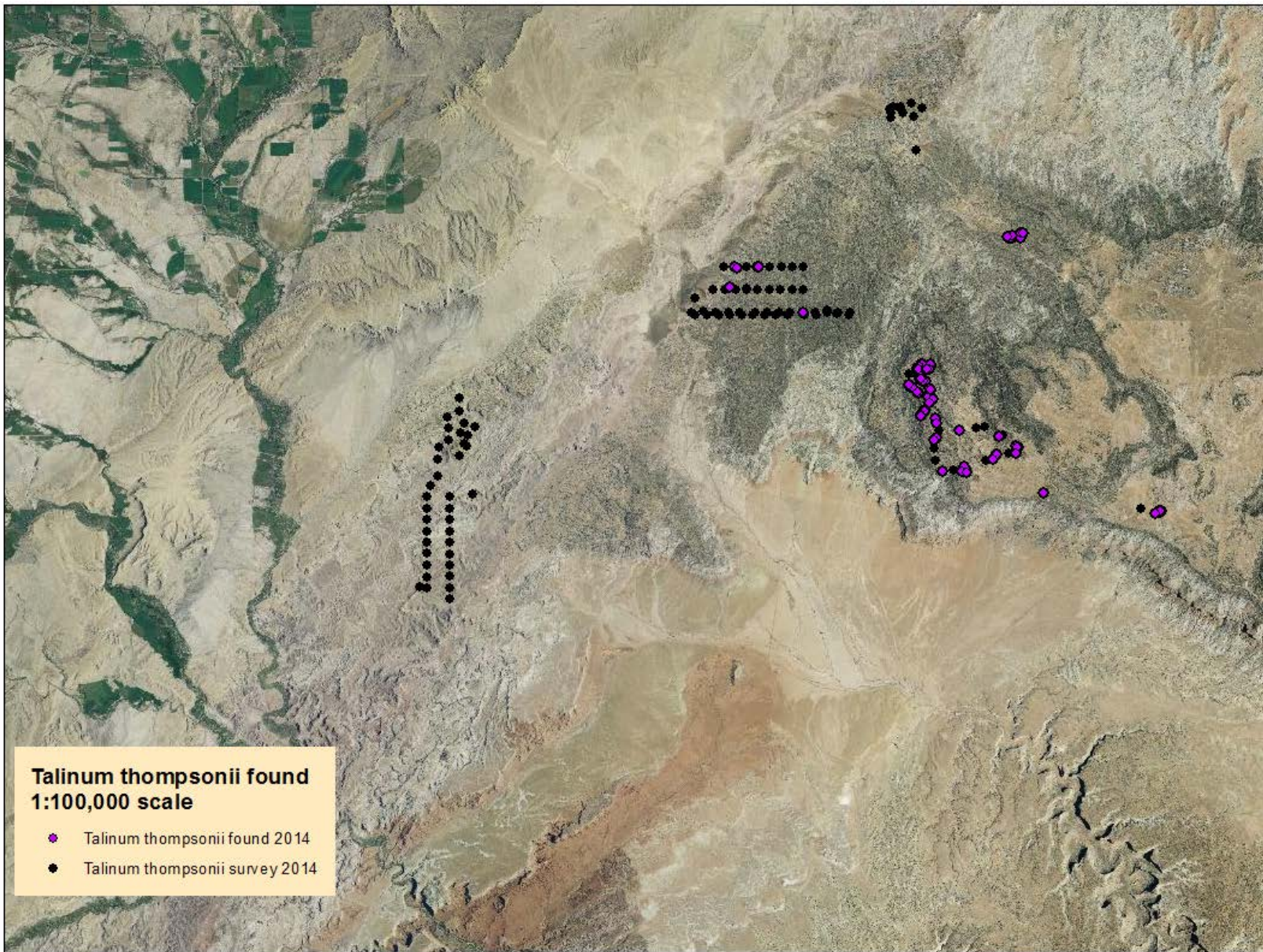
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- Cooperative of Utah State University and the Utah Department of Natural Resources.
- Keep track of Rare Plants and Animals.
- Database of Sensitive Species.

# Field Survey Methods

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- Record GPS Location.
- Note presence of target species by counting all Target Plants in 30 x 30 m area.
- Note True Absence of Target Plants by recording N, Neg or 0.
- A blank cell or . indicates the point is not a true absence... it is missing value or null.
- Other endemic species should be written in “notes” column.

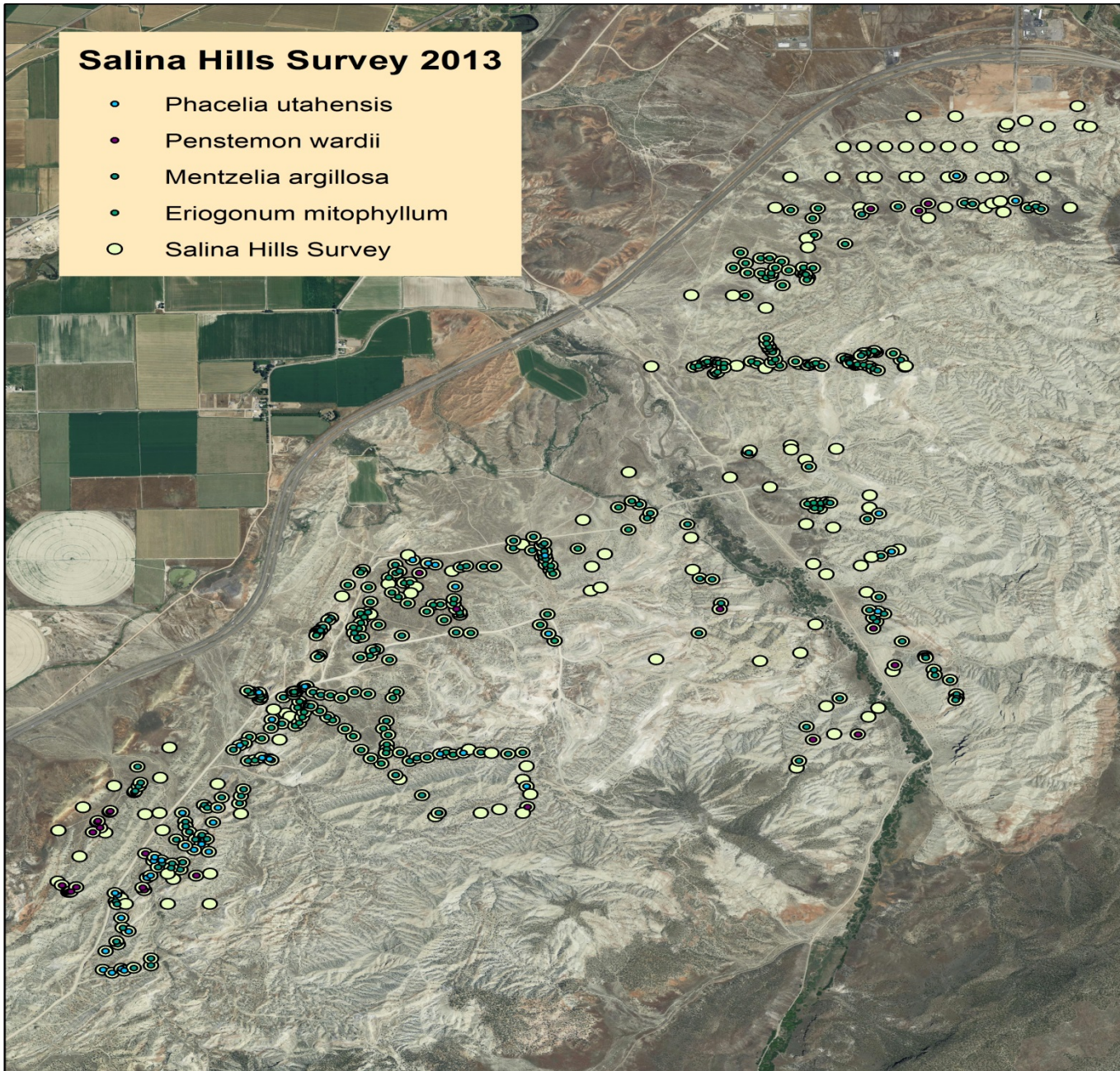


**Positive and negative points shown above**



## Salina Hills Survey 2013

- *Phacelia utahensis*
- *Penstemon wardii*
- *Mentzelia argillosa*
- *Eriogonum mitophyllum*
- Salina Hills Survey



# Importance of True Absence

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- Records negative data for spatial analysis
- Shows area surveyed
- Helps plan future surveys

# IN THE FIELD

- Record points for all target species on form.
- 0 means not present in 30 m square
- Record control points at regular intervals
- Ex: 250 m OR Time interval
- Use 30 m square for control
- Take points at major habitat changes, recording presence absence of target species.
- Short field notes if needed. Such as other endemic species.

# Why not track just use track points?

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- Field notes are important!
- No record of what was found, only that you were there.
- True absence can be used for distribution models.



# Adaptable Field Form

| 1st GPS coordinates |                     |                     |                            |                    |                                     |                          | Date                   | Surveyor                 |                          |  |
|---------------------|---------------------|---------------------|----------------------------|--------------------|-------------------------------------|--------------------------|------------------------|--------------------------|--------------------------|--|
| GPS<br>#            | Cryptantha barnebyi | Cryptantha grahamii | Glaucocarpum suffrutescens | Penstemon grahamii | Penstemon scarariosus v. albifluvis | Schoenocrambe argillacea | Schoenocrambe barnebyi | Sclerocactus brevispinus | Sclerocactus wetlandicus | Notes: Record N or Neg for survey points where target species was not found (search 30X30 meter area). Names of other sensitive species should be recorded in the notes. |
|                     |                     |                     |                            |                    |                                     |                          |                        |                          |                          |  |
|                     |                     |                     |                            |                    |                                     |                          |                        |                          |                          |  |
|                     |                     |                     |                            |                    |                                     |                          |                        |                          |                          |  |
|                     |                     |                     |                            |                    |                                     |                          |                        |                          |                          |  |
|                     |                     |                     |                            |                    |                                     |                          |                        |                          |                          |  |

# Use Columns for the Target sp.

| 1st GPS coordinates 663458, 4437825 |   |                     |                     |                            | Date 1 may<br>16   |                                     | Surveyor Mr. Botanist    |                        |                          |                          |  |
|-------------------------------------|---|---------------------|---------------------|----------------------------|--------------------|-------------------------------------|--------------------------|------------------------|--------------------------|--------------------------|--|
| GPS #                               |   | Cryptantha barnebyi | Cryptantha grahamii | Glaucocarpum suffrutescens | Penstemon grahamii | Penstemon scarariosus v. albifluvis | Schoenocrambe argillacea | Schoenocrambe barnebyi | Sclerocactus brevispinus | Sclerocactus wetlandicus | Notes: Record N or Neg for survey points where target species was not found (search 30X30 meter area). Names of other sensitive species should be recorded in the notes. |
| 1                                   | 5 | n                   | n                   | n                          | 1                  | n                                   | n                        | n                      | n                        | n                        | Shale barren   |
| 2                                   | n | n                   | n                   | n                          | n                  | n                                   | n                        | n                      | n                        | n                        | P-J woods  |
| 3                                   | . | .                   | .                   | .                          | .                  | 23                                  | .                        | .                      | .                        | .                        | Eriogonum ephedroides  |

# Use Columns for the Target sp.

| 1st GPS coordinates 663458, 4437825 |                       |  |   |   |   | Date 8 may<br>16 |  | Surveyor Mr. Botanist  |                                       |
|-------------------------------------|-----------------------|--|---|---|---|------------------|--|--|---------------------------------------|
| GPS<br>#                            | Penstemon<br>grahamii | Penstemon<br>scariosus var<br>albifluvis |   |   |   |                  |  | Notes: Record N or Neg for survey points where target species was not found (search 30X30 meter area). Names of other sensitive species should be recorded in the notes. |                                       |
|                                     |                       |  | 1 | 0 | 0 |                  |  |  | Juniper woodland.                     |
|                                     |                       |  | 2 | 0 | 1 |                  |  |  | Mirabilis alipes also on slope.       |
|                                     |                       |  | 3 | 3 | 0 |                  |  |  | Eriogonum ephedroides also seen here. |





# Where to find the field form

- [http://dwrcdc.nr.utah.gov/ucdc/ViewReports/Plant\\_Field\\_Form.pdf](http://dwrcdc.nr.utah.gov/ucdc/ViewReports/Plant_Field_Form.pdf)

# Where to find the field form



STATE OF UTAH  
NATURAL RESOURCES  
Division of Wildlife Resources

## Learn About Utah's Species

Vertebrate Animals

Insects and Mollusks

Plants

## Maps and GIS Data

Make A Wildlife Map

Download UDWR GIS Data

## Reports and Lists

Utah Sensitive Species List

Federal T&E Species List

Vertebrate Report

Plant Report/Field Form

The Bats of Utah

Rare and Imperiled Mollusks

Ecological Integrity Tables

## Contact

Request Information

Contact UDWR

Return to UDWR Homepage

Links

## Utah Conservation Data Center



An integral part of the Utah Division of Wildlife Resources, the Utah Conservation Data Center (UCDC) is the central repository for Utah biodiversity information. Although the UCDC focuses primarily on Utah's rare native species and other high-interest species (game animals and raptors, for example), information on all Utah vertebrate wildlife species, many invertebrate species, and numerous plant species is available.

Utah Conservation Data Center information is a collection of data from many sources. Major data contributors include the Utah Division of Wildlife Resources, the Utah Reclamation Mitigation and Conservation Commission, the United States National Park Service, the United States Forest Service, the United States Fish and Wildlife Service, the United States Bureau of Land Management, Utah State University, the University of Utah, Brigham Young University, the network of state/province Natural Heritage Programs and Conservation Data Centers, The Nature Conservancy, NatureServe, various museums, and numerous individuals.

The UCDC strives to provide accurate information in user-friendly formats. If you have a question or comment about the UCDC, Utah biodiversity data, or this web site, please e-mail us at: [habitat@utah.gov](mailto:habitat@utah.gov).

Acknowledgements - The Utah Division of Wildlife Resources would like to thank the Utah Reclamation Mitigation and Conservation Commission ([www.mitigationcommission.gov](http://www.mitigationcommission.gov)) for providing significant funding to develop our sensitive species database. We would also like to thank the many individuals who have graciously contributed photographs for use on this web site. Website designed by RS/GIS Laboratories, Utah State University ([www.gis.usu.edu](http://www.gis.usu.edu)). Dynamic Web design by DocuMedia Learning Group ([www.dmlgroup.com](http://www.dmlgroup.com)).



# Utah Conservation Data Center

Select Plant Report/Field Form

Look for the green snake

Utah Sensitive Species List

Federal T&E Species List

Vertebrate Report

Plant Report/Field Form

The Bats of Utah

Rare and Imperiled Mollusks

Ecological Integrity Tables



# Where to find the field form

- [http://dwrcdc.nr.utah.gov/ucdc/ViewReports/Plant\\_Field\\_Form.pdf](http://dwrcdc.nr.utah.gov/ucdc/ViewReports/Plant_Field_Form.pdf)



# Collection of data on a tablet computer or smartphone

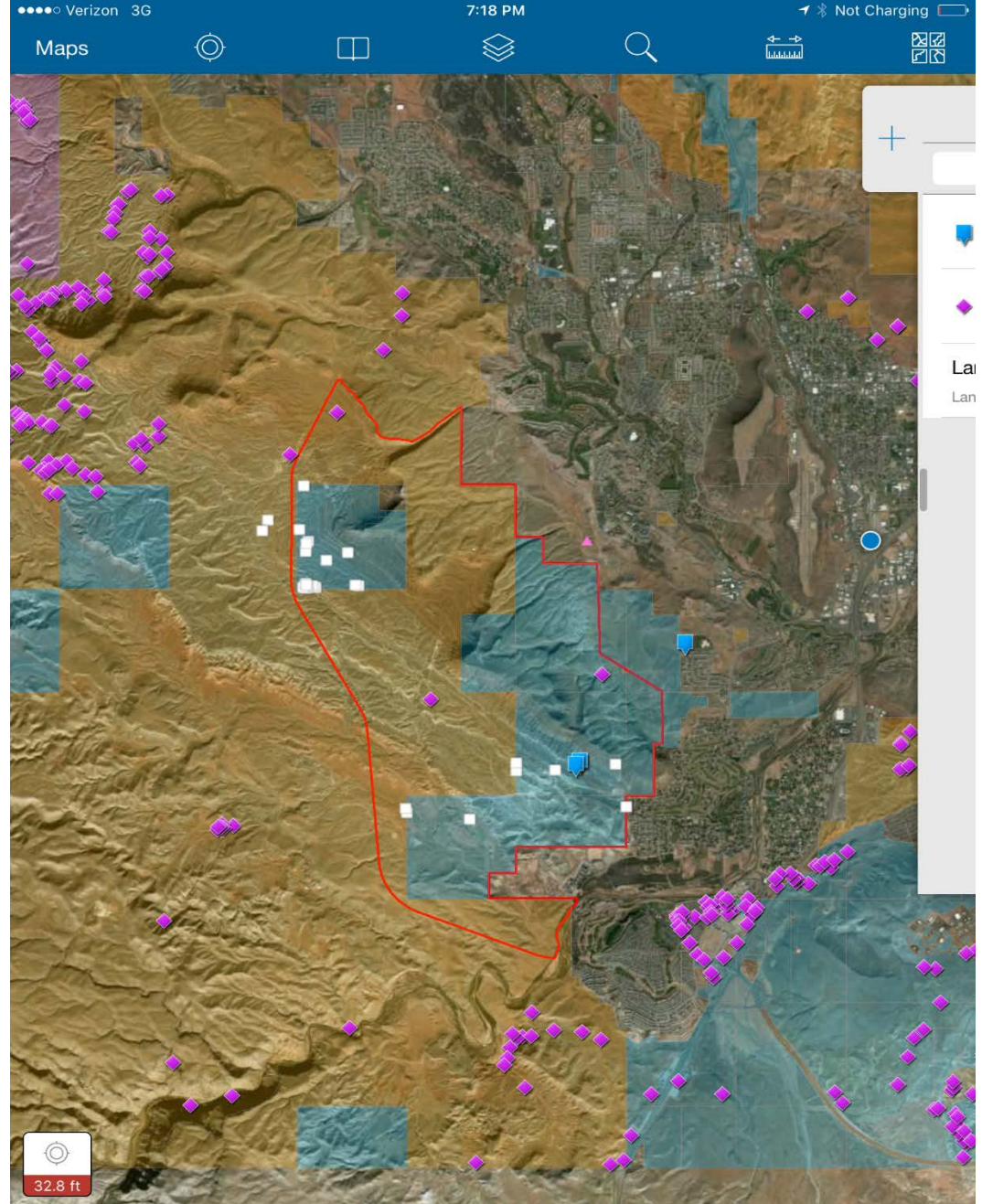
Screenshot of tablet.

Uses Collector app.

Background maps can be added.

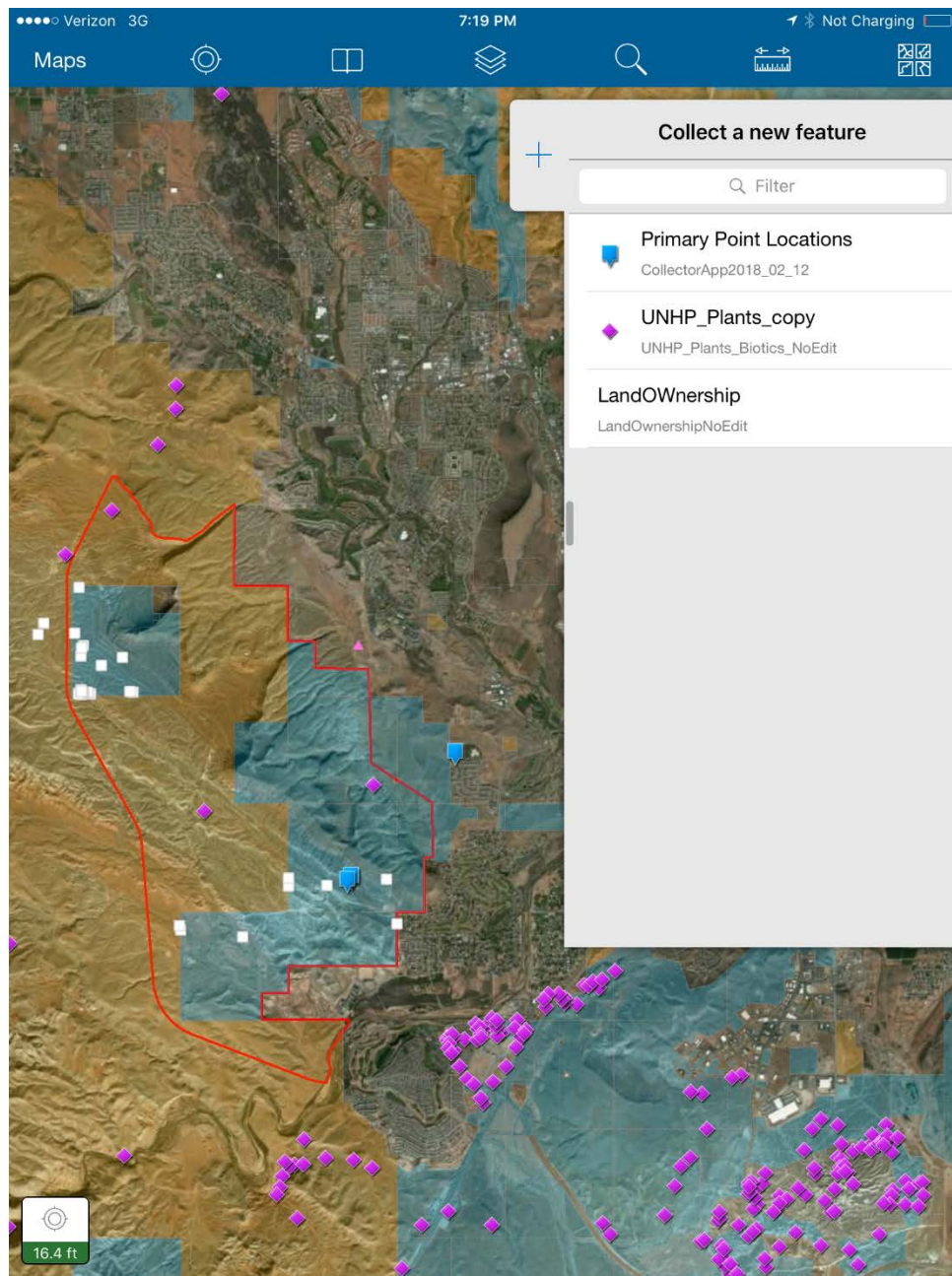
Point locations of other features can be added.

Connects directly to ARCGIS online.



# Collecting a new feature

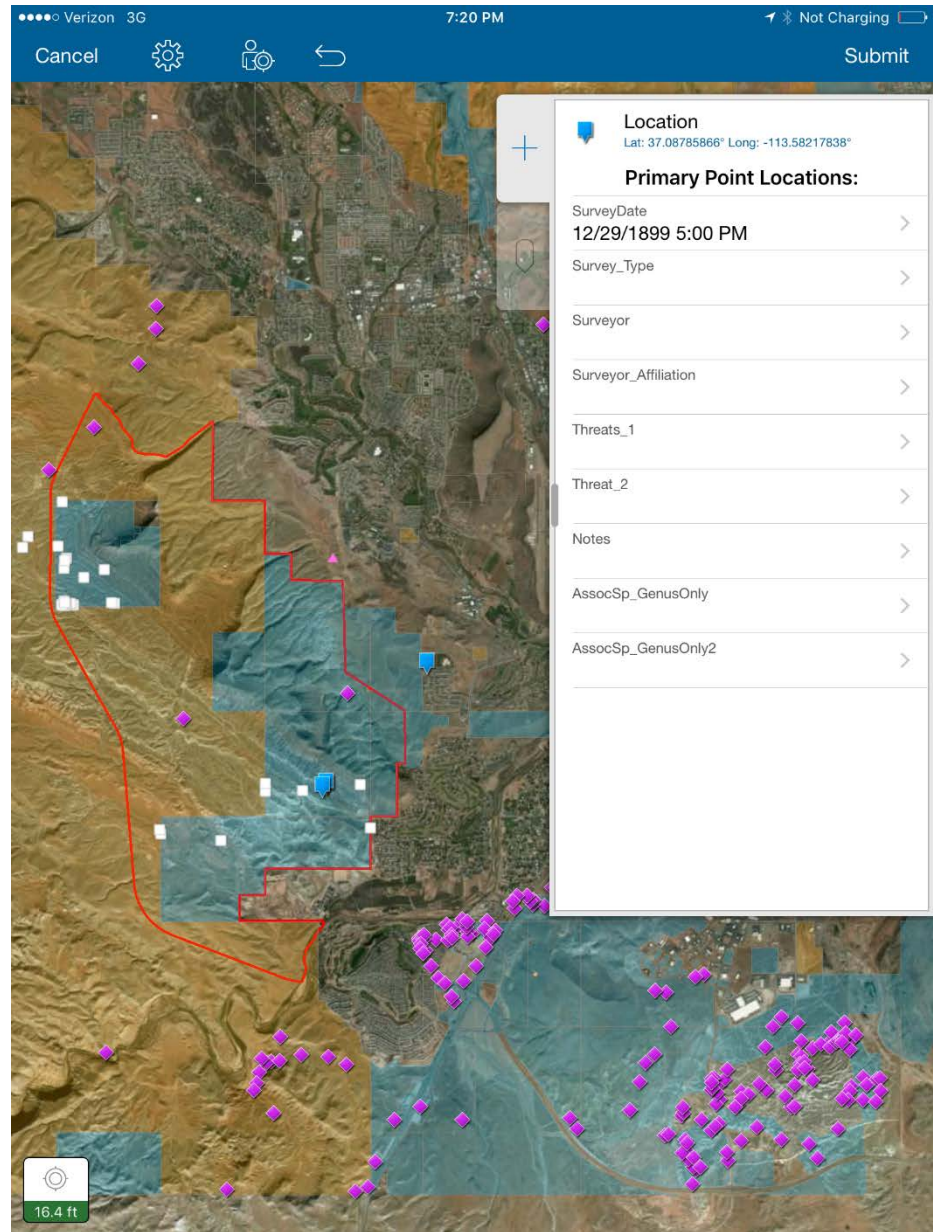
New point can be added.





## Survey information entered.

You only need to do this once on a survey.



## Details about survey point

Add Survey point information:

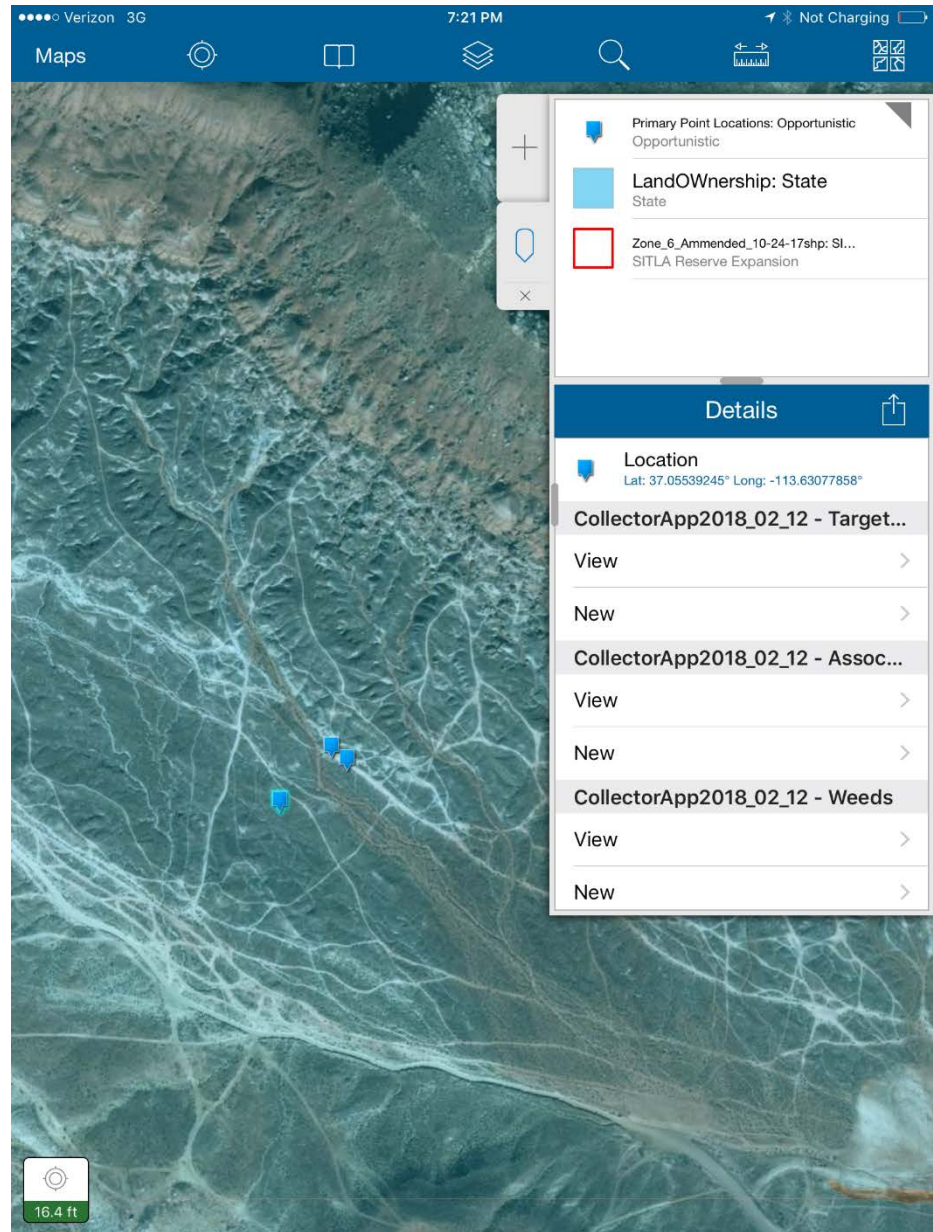
Target species

Associated species

Weeds

Threats

Field notes





# Happy surveying

- Utah Natural Heritage Program
- Thanks to all who contribute data
  
- Contact Robert Fitts 801-538-4742
- [robertdrake.fitts@aggiemail.usu.edu](mailto:robertdrake.fitts@aggiemail.usu.edu)
  
- For Tablet Information contact:
- Mindy Wheeler 801-385-1062
- [mindywheeler@Utah.gov](mailto:mindywheeler@Utah.gov)