

IDAHO RARE PLANT OBSERVATION REPORT

Fill out the form by tabbing through and completing the fields. Some fields contain check boxes and drop-down menus. If you do not have information for the field, leave it blank. Use F1 for help in any shaded field. E-mail completed form to scooke@idfg.state.id.us or send to Botany Information Manager, Idaho Conservation Data Center, Idaho Department of Fish and Game, PO Box 25, Boise, ID 83707.

Species: Lewisia sacajaweana

Date of Observation: 14 July 2012

Company: American CuMo Mining Corporation, John R. Moeller Ph.D. JMoeller@Forsgren.com

Address: 415 S. 4th Street, Boise, ID 83702

Phone: (208) 863 7343

Observer(s): Conservation Seeding and Restoration, Inc. Kelly V. Tindall & Kent Fothergill

County: Custer

Quad: Banner Summit

Township: 11 N Range: 11 E NW 1/4 of NW 1/4 of Section 15

Township: 11 N Range: 11 E NE 1/4 of NE 1/4 of Section 16

GPS Information: Enter either UTM's or latitude/longitude coordinates from GPS, as well as datum, way points (optional) and accuracy information in the table below. If you did not take GPS readings, please leave this table blank.

Have your GPS Coordinates been differentially corrected? Yes No Unsure

Do you have this report location digitized already? Yes No

If yes, you may send shape-files in lieu of a paper map. Did you submit shape-files with this form? Yes No.

If yes, list projection of shape-files:

Please give the parameters if the projection is not standard:

Datum	Way Point	UTM Northing	UTM Easting	Latitude	Longitude	Accuracy
Datum	WP#			44.289654	-115.173284	+/- 2/5
GCS_WGS_1984						
Datum	WP#					+/-

If you have more coordinates, please list them under Additional Comments.

Minimum Elevation: 7655 ft.

Maximum Elevation: 8144 ft.

Stand # or other identification #: _____

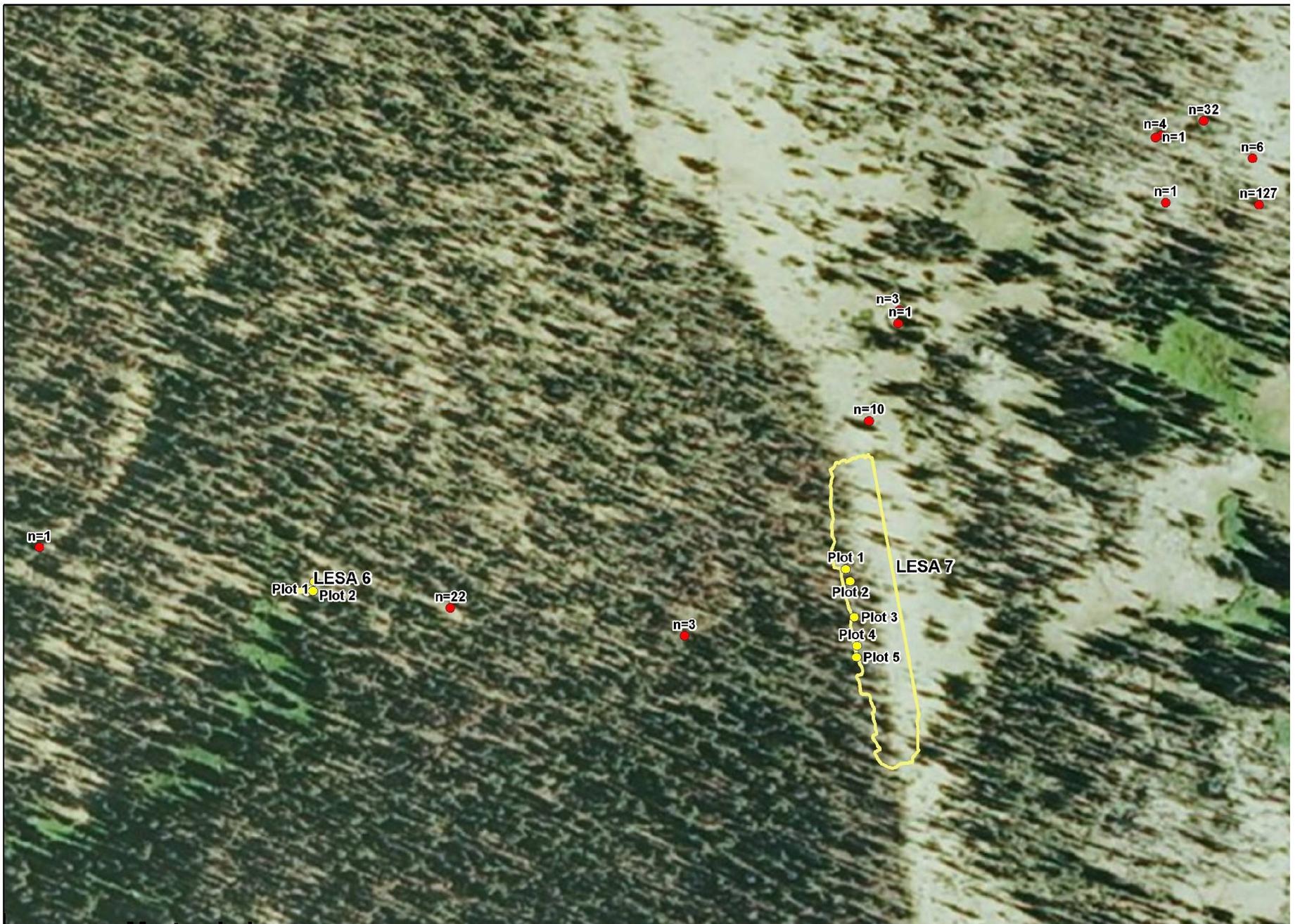
Directions (be specific): _____

Is this a new location? Yes No **Unsure?** Give occurrence # if known: _____

Mapping Instructions:, If submitting paper maps, complete A - C. If submitting shape-files complete parts B and C.

A) Please attach a photocopy of the appropriate part of the USGS 7.5 minute quad (or comparable map) and delineate the population and all subpopulations (if present) on the map using the guidelines listed below. Label subpopulations if you have population and/or habitat information for them.

* If the population/subpopulation area is < 12.5 meters (40 ft.) in diameter, place a single point on the map marking its location. If necessary, indicate these point locations with an arrow so they are easier to see.



Marten Lake

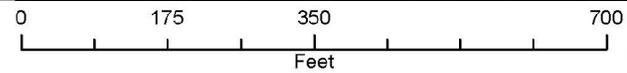


Plot



Location Monitored

Population Area



Map Produced by Michael T. Callen 7/24/2012

* If the population/subpopulation area is >12.5 meters (40 ft.) in diameter, draw a polygon on the map marking its location.

* If the population/subpopulation follows the boundary of a trail, lake, stream, road, etc., draw the boundary on the edge of this feature. Where needed, add notes on where boundary lines are.

B) How accurately do you feel you mapped or digitized the population compared to its actual location on the ground? Use the guidelines to determine how many meters (m) or miles on the ground correspond to millimeters (mm.) or inches (in.) on a 1:24,000 scale map. Within 25 m (0 - 1 mm. on map) Custom:

C) I sent a hard-copy map via U.S. mail. Other:

Population Information - Please fill in this section with the information for the entire population. If subpopulations exist and you have information for them, complete the subpopulation information forms on the last page.

Total # of individuals in the population(s) is _____ Actual Estimated

What was counted? Genets Ramets N/A (non-vascular etc.) Unknown

Phenology: _____% seedling _____% non-reproductive _____% reproductive _____% dormant _____% unknown

The size of the population area is _____

Population vigor is excellent good fair poor

Do you feel you mapped the full extent of the population? Yes No Unsure

Is there more potential habitat in the area that hasn't been surveyed? Yes No Unsure

The survey was: very thorough somewhat thorough cursory incidental observation

Additional population comments: _____

Habitat Description – Please fill in this section with information for the entire population, using ranges where appropriate. If subpopulations exist and there is specific habitat information or threats that need noting, use the forms on page 4. Please avoid abbreviations if possible, thanks!

General habitat description Open areas within high altitude forest to open escarpment

Aspect: _____ Slope: _____

Substrate/soil: Rocky/ well-drained granitic

Light regime: _____

Community type: Abies lasiocarpa with some Pinus contorta overstory

Associated Species include: Achillea millefolium, Cymopterus, Polygonum, Claytonia

Look-alike species that are present: Claytonia

Comment on threats to the population and its immediate habitat including level and imminency of threat if known.

Include factors such as land use, disturbance, disease or predation, invasive weeds, etc: Overall there appears to be very little threat to this population. Both sub-populations are bisected by a trail open to multiple forms of transport. Bench Creek Trail shows many signs of four-wheeler wear at lower elevations – similar impacts at the higher elevations could change habitat. A small campfire has been built within subpopulation 2.

CONDITION is an integrated measure of the quality of biotic and abiotic factors, structures, and processes within the occurrence, and the degree to which they affect the continued existence of the occurrence. Condition has the following components: reproduction and health for species, ecological processes, species composition and biological structure, and abiotic/chemical factors.

Briefly comment on the CONDITION of the occurrence: Plants were primarily vegetative and snow was evident nearby, it is still early in the season for this population.

Overall condition is: A (excellent)

LANDSCAPE CONTEXT is an integrated measure of the quality of biotic and abiotic factors, structures, and processes surrounding the occurrence, and the degree to which they affect the continued existence of the EO. Components of Landscape Context are: landscape structure and extent, including genetic connectivity, and condition of the surrounding landscape.

Briefly comment on the LANDSCAPE in the area surrounding the population. Include factors such as current and past land use (farmland, residential area etc.), disturbance factors, and fragmentation: Area is an escarpment

Overall landscape is: A (excellent)

Land Owner/Managers (forest/ranger district/BLM/ or private land owner if known): Boise and Challis National Forest and Sawtooth National Recreation Area

Owner Comments: _____

Management, Monitoring, and Research Needs (include any steps that you think should be taken to protect the population): Full extent of this population remains unknown. The entire escarpment and should be examined for *Lewisia sacajawena*.

Collector/Collection #: NA

Herbarium: NA

Photo Attached? Yes No

Other knowledgeable individuals: _____

Additional Comments (anything you think is important that did not fit in any other space on the form):

Population estimates for subpopulations with estimated #'s of individuals were obtained by:

- 1) obtaining a GPS perimeter polygon of the perceived limits of the subpopulation with a Trimble Juno.
 - 2) censusing at least 3 randomly placed 1 m² plot frames within the subpopulation polygon for LESA
 - 3) the average # of LESA/ m² for all plot frame counts was multiplied by area of subpopulation polygon in m². (Area of polygon was determined using Arc – GIS).
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Subpopulation Information

Subpopulation # 1 N 44.28984 W-115.17852 Subpopulation area: _____

The total # of individuals in subpopulation is 1 Actual Estimated

Population vigor is excellent good fair poor

Habitat information: Pinus contorta overstory, Arenaria, Polygonia, Cymopterus present

Threats to this subpopulation: Trail traffic

Subpopulation Information

Subpopulation # 2 N 44.28965 W-115.17674 Subpopulation area: 7 square meters

The total # of individuals in subpopulation is 112 Actual Estimated

Population vigor is excellent good fair poor

Habitat information: Pinus contorta overstory, Arenaria, Polygonia, Cymopterus present

Threats to this subpopulation: Trail traffic

<u>Plot</u>	<u>Vegetative</u>	<u>Reproductive</u>
1	28	0
2	4	0

Subpopulation Information

Subpopulation # various Subpopulation area: Various pts.

The total # of individuals in subpopulation is 207 Actual Estimated

Population vigor is excellent good fair poor

Habitat information: Pinus contorta overstory, Arenaria, Polygonia, Cymopterus present

Threats to this subpopulation: Trail traffic

Latitude	Longitude	Comment
44.289359	-115.174339	3 LESA plants
44.289514	-115.175857	22 LESA plants all v 3m ²
44.290342	-115.173111	10 LESA plants all v 1m ²
44.290792	-115.172908	1 LESA plant
44.290853	-115.172898	3 LESA plants all v
44.291327	-115.171152	1 LESA plants
44.291309	-115.170548	127 LESA plants all v 3m ²
44.291523	-115.170583	6 LESA all v 1m ²
44.291704	-115.170893	32 LESA plants al lv 2m ²
44.291641	-115.171171	4 LESA plants 1m ²
44.291630	-115.171208	1 LESA plants

Subpopulation Information

Subpopulation # 3 N 44.28965 W-115.17328

Subpopulation area: 3968 square meters

The total # of individuals in subpopulation is 127,770

Actual Estimated

Population vigor is excellent good fair poor

Habitat information: Pinus contorta overstory, Arenaria, Polygonia, Cymopterus present

Threats to this subpopulation: Trail traffic

<u>Plot</u>	<u>Vegetative</u>	<u>Reproductive</u>
1	20	1
2	27	0
3	47	1
4	63	0
5	2	0

