

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](mailto: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: 15 July 2012

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

Address: 415 S. 4<sup>th</sup> Street, Boise, ID 83702

Phone: (208) 863 7343

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

County: Boise

Quad: Scott Creek

Township: 09N Range: 06E NE 1/4 of SE 1/4 of Section 11

Township: \_\_\_\_\_ Range: \_\_\_\_\_ 1/4 of \_\_\_\_\_ 1/4 of Section \_\_\_\_\_

**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 GCS_WGS_1984	WP#			44.131441	-115.708144	+/- 2/5
Datum	WP#					+/-

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

Minimum Elevation: 7450 ft.

Maximum Elevation: 7600 ft.

Stand # or other identification #: OC 32

Directions (be specific): \_\_\_\_\_

Is this a new location?  Yes  No  Unsure? Give occurrence # if known: 32

**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.**

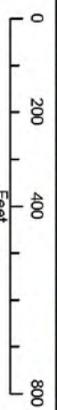
\* If the population/subpopulation area is < 12.5 meters (40 ft.) in diameter, place a single point on the map marking its location. If necessary, indicate these point locations with an arrow so they are easier to see.



# Deadwood Lookout OC 32 North

● Plot ● Location Monitored

□ Population Extent



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



n=13 n=3  
n=4 n=2

Plot 1 n=1

n=1 n=1  
n=5 n=7  
OG32  
Pop 6

OG32  
Pop 8  
OG32  
Pop 7  
Plot 2  
Plot 3  
Plot 1  
Plot 4  
Plot 3  
Plot 2  
Plot 1





# Deadwood Lookout OC 32 South

● Monitoring Location



Population Extent



Map Produced by Michael T. Callen 7/27/2012



\* 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.

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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:

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**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 7095  Actual  Estimated

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

Phenology: \_\_\_\_\_ % seedling 31.1 % non-reproductive 67.5 % reproductive 1.4 % dormant \_\_\_\_\_ % unknown

The size of the population area is about 72 acres

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: It is difficult without removal of plant to determine if a vegetative plant is a seedling.

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**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: Population occurs on a ridge that contains a forest road

Aspect: \_\_\_\_\_ Slope: \_\_\_\_\_

Substrate/soil: Granitic, rocky

Light regime: Full

Community type: Scattered *Abies lasiocarpa* and *Pinus albicaulis*

Associated Species include: *Achillea millefolium*, *Arenaria*, *Castilleja*, *Eriogonum*, *Erythronium grandiflorum*,

*Linanthus*, *Lupinus*, *Penstemon*, *Polygonum*, *Potentilla*, and *Sambucus racemosus*

Look-alike species that are present: \_\_\_\_\_

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: The road that runs through these subpopulations appears to create habitat as evidence by the many plants in the roadway, and also poses a threat in the form of increased usage and maintenance activities.

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**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: The road is central feature of the habitat for this occurrence. ATV tracks were found in many subpopulations.

Overall **condition** is: A (excellent)

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**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: There is plenty of un-surveyed land that looks like potential habitat in the area. The population appears to be secure.

Overall **landscape** is: A (excellent)

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Land Owner/Managers (forest/ranger district/BLM/ or private land owner if known): Boise National Forest, Lowman RD

Owner Comments: \_\_\_\_\_

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Management, Monitoring, and Research Needs (include any steps that you think should be taken to protect the population): Plant should be surveyed on a regular basis.

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 m<sup>2</sup> plot frames within the subpopulation polygon for LESA
  - 3) the average # of LESA/ m<sup>2</sup> for all plot frame counts was multiplied by area of subpopulation polygon in m<sup>2</sup>. (Area of polygon was determined using Arc – GIS).
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### **Subpopulation Information**

Subpopulation # 1

Subpopulation area: 1600 m<sup>2</sup>

The total # of individuals in subpopulation is 23

Actual

Estimated

Population vigor is  excellent  good  fair  poor

Habitat information: Mostly in road edges. *Abies lasiocarpa* is a roadside tree in spots. Associated with *Achillea millefolium*, *Balsamorhiza*, *Linanthus*, *Penstemon*, *Potentilla*. GPS coordinates of the four occurrence points for this subpopulation:

Point	n <sub>LESA</sub>	Lattitude	Longitude
1	1	N 44.126925°	W -115.705410°
2	18	N 44.126998°	W -115.704917°
3	2	N 44.127234°	W -115.705043°
4	2	N 44.127337°	W -115.705034°

Threats to this subpopulation: The gate for the lookout road is on the south edge of this subpopulation. Vehicles turn around and cut around the gate possibly trampling existing plants. Near the gate is an official campsite creating further traffic and also campfires.



Figure 1. Subpopulation 1: habitat view

### Subpopulation Information

Subpopulation # 1a

Subpopulation area: point

The total # of individuals in subpopulation is 1       Actual       Estimated

Population vigor is     excellent       good       fair       poor

Habitat information: small clearing in *Abies lasiocarpa*. One plant, BBCH code = 19. GPS coordinates:

N 44.127337°, W -115.705034°



**Figure 12. Subpopulation 1a: LESA, BBCH 17**

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### Subpopulation Information

Subpopulation # 2

Subpopulation area: 34.5 m<sup>2</sup>

The total # of individuals in subpopulation is 124       Actual       Estimated

Population vigor is     excellent       good       fair       poor

Habitat information: Subpopulation is in a clearing, Figure 6. shows an old foundation to the East of the population. We were unable to complete an inventory of associated plants as our presence was agitating the occupants of the fire tower.

Approximate GPS coordinates: 44° 07' 32.94" N and 115° 42' 17.26" elevation 2300 meters.

Threats to this subpopulation: Figures 1, 2, & 3 show ATV tracks through this subpopulation.



Figure 20. Subpopulation 2: habitat view.

**Subpopulation Information**

Subpopulation # 3

Subpopulation area: 107.5 m<sup>2</sup>

The total # of individuals in subpopulation is 1326       Actual       Estimated

Population vigor is     excellent       good       fair       poor

Habitat information: Many plants in road cut. *Pinus albicaulis* and *Abies lasiocarpa*

Plot	Latitude	Longitude	n <sub>LESA-vegetative</sub>	n <sub>LESA-reproductive</sub>	n <sub>LESA-senescent</sub>
1	N 44.131823°	W -115.707288°	0	20	4
2	N 44.131844°	W -115.707272°	0	7	0
3	N 44.131860°	W -115.707235°	0	6	0

Threats to this subpopulation: The road and disturbance associated with the road are probably a benefit and potential threat.

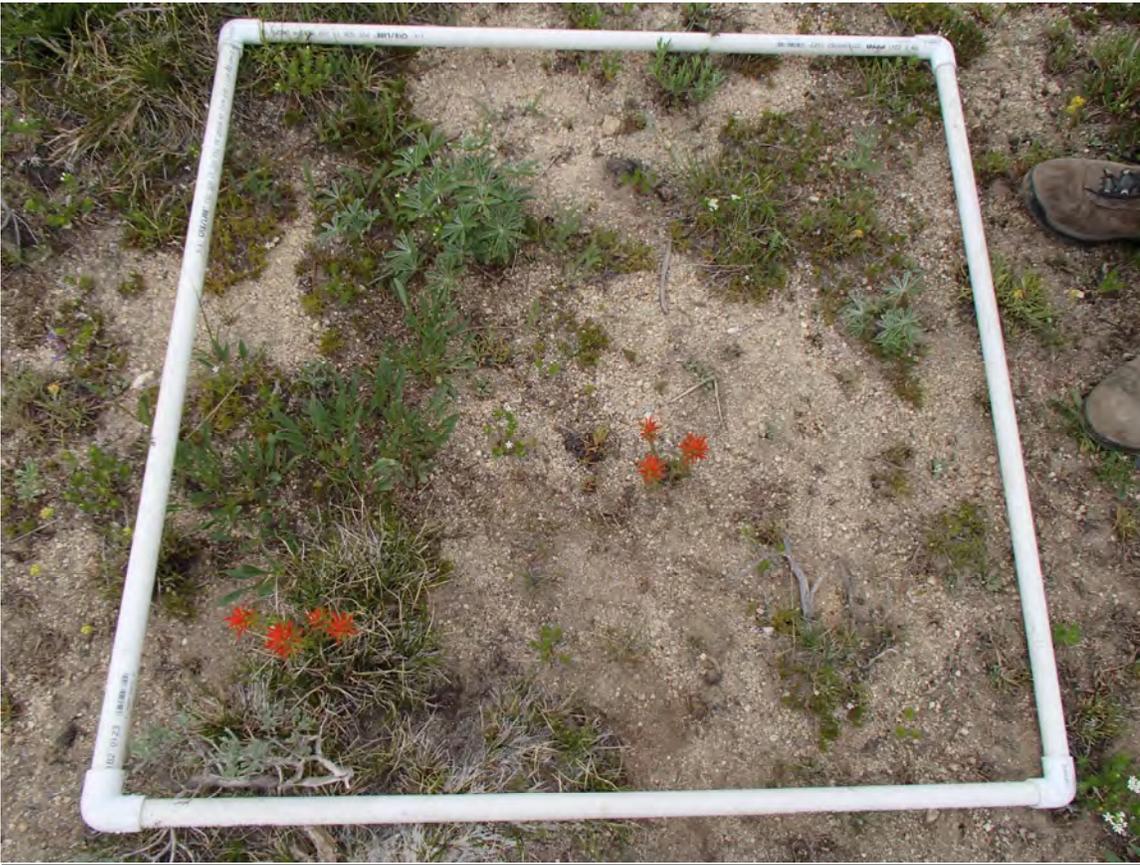


Figure 23. Subpopulation 3: plot 3.

**Subpopulation Information**

Subpopulation # 3a

Subpopulation area: Points

The total # of individuals in subpopulation is 48       Actual       Estimated

Population vigor is     excellent       good       fair       poor

Habitat information: Many plants in road cut. *Pinus albicaulis* and *Abies lasiocarpa* are the nearby trees.

Point	n <sub>LESA</sub>	Latitude	Longitude
1	2	N 44.131927°	W -115.707181°
2	1	N 44.131971°	W -115.707141°
3	17	N 44.131990°	W -115.707135°
4	6	N 44.132018°	W -115.707335°
5	1	N 44.132074°	W -115.707335°
6	1	N 44.132094°	W -115.707293°
7	3	N 44.132100°	W -115.707685°
8	1	N 44.132100°	W -115.707691°
9	1	N 44.132119°	W -115.707692°
10	2	N 44.132154°	W -115.707327°
11	5	N 44.132163°	W -115.707325°
12	2	N 44.132164°	W -115.707327°

13	3	N 44.132165°	W -115.707330°
14	2	N 44.132182°	W -115.707351°

Threats to this subpopulation: The road and disturbance associated with the road are probably a benefit and potential threat. Off-road ATV travel is evident (tire tracks) through plant population.



**Figure 24. Subpopulation 3a: obtaining GPS coordinates of LESA location.**

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## Subpopulation Information

Subpopulation # 4

Subpopulation area: 541 m<sup>2</sup>

The total # of individuals in subpopulation is 2705

Actual

Estimated

Population vigor is  excellent

good

fair

poor

Habitat information: Open area. Associated plants: *Castilleja*, *Erigeron*, *Erythronium grandiflorum*, *Lupinus*,

*Penstemon*, *Polygonum*

Plot	Latitude	Longitude	n <sub>LESA-vegetative</sub>	n <sub>LESA-reproductive</sub>	n <sub>LESA-senescent</sub>
1	N 44.133530°	W -115.707205°	0	9	0
2	N 44.133567°	W -115.707129°	0	2	0
3	N 44.133620°	W -115.707104°	0	4	0

Threats to this subpopulation: As above



Figure 25 Subpopulation 4, BBCH =65.

### Subpopulation Information

Subpopulation # 5

Subpopulation area: 423 m<sup>2</sup>

The total # of individuals in subpopulation is 2114

Actual

Estimated

Population vigor is  excellent

good

fair

poor

Habitat information: \_\_\_\_\_

Plot	Latitude	Longitude	n <sub>LESA-vegetative</sub>	n <sub>LESA-reproductive</sub>	n <sub>LESA-senescent</sub>
1	N 44.133418°	W -115.707487°	0	0	0
2	N 44.133387°	W -115.707472°	3	5	0
3	N 44.133426°	W -115.707535°	1	6	0
4	N 44.133440°	W -115.707104°	0	5	0

Threats to this subpopulation: as above



Figure 30, Subpopulation 5, habitat view.



### Subpopulation Information

Subpopulation # 8

Subpopulation area: 110 m<sup>2</sup>

The total # of individuals in subpopulation is 694

Actual

Estimated

Population vigor is  excellent

good

fair

poor

Habitat information: roadside

Plot	Latitude	Longitude	n <sub>LESA-vegetative</sub>	n <sub>LESA-reproductive</sub>	n <sub>LESA-senescent</sub>
1	N 44.139967°	W -115.709173°	12	0	2
2	N 44.139995°	W -115.709158°	0	0	0
3	N 44.140005°	W -115.7091625°	0	5	0

Threats to this subpopulation: as above

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### Subpopulation Information

Subpopulation # 9

Subpopulation area: 3 m<sup>2</sup>

The total # of individuals in subpopulation is 47

Actual

Estimated

Population vigor is  excellent

good

fair

poor

Habitat information: Roadside

Threats to this subpopulation: Subpopulation is in a road and tire tracks run over and around the subpopulation. Changes in traffic patterns could be detrimental. We found 17 ground squirrel digs within and adjacent to this subpopulation.



Figure 44. Subpopulation 9, BBCH 63.

### Subpopulation Information

Subpopulation # 9a

Subpopulation area: point

The total # of individuals in subpopulation is 1       Actual       Estimated

Population vigor is     excellent       good       fair       poor

Habitat information: roadside, N 44.142426° W-115.709603°.

Threats to this subpopulation:

note tire tracks over plants and proximity of ground squirrel digging

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### Subpopulation Information

Subpopulation # 10

Subpopulation area: points

The total # of individuals in subpopulation is 22       Actual       Estimated

Population vigor is     excellent       good       fair       poor

Habitat information: small clearing in Abies lasiocarpa

Point	n <sub>LESA</sub>	Lattitude	Longitude
1	2	N 44.144563°	W -115.710400°
2	4	N 44.144658°	W -115.710400°
3	13	N 44.144668°	W -115.710363°
4	3	N 44.144686°	W -115.710303°

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