

# Data Form for Coeur d'Alene Salamander (*Plethodon idahoensis*) Site Surveys

## Locality Information

Cluster Number:	Site Number:	Locality:					GPS EPE (ft)
State:	County:	Map Name:	T	R	S	Section Description:	
Owner:	Map Elevation: FT	Datum:	UTM Zone:	UTM North::	UTM East:		

## Habitat Information

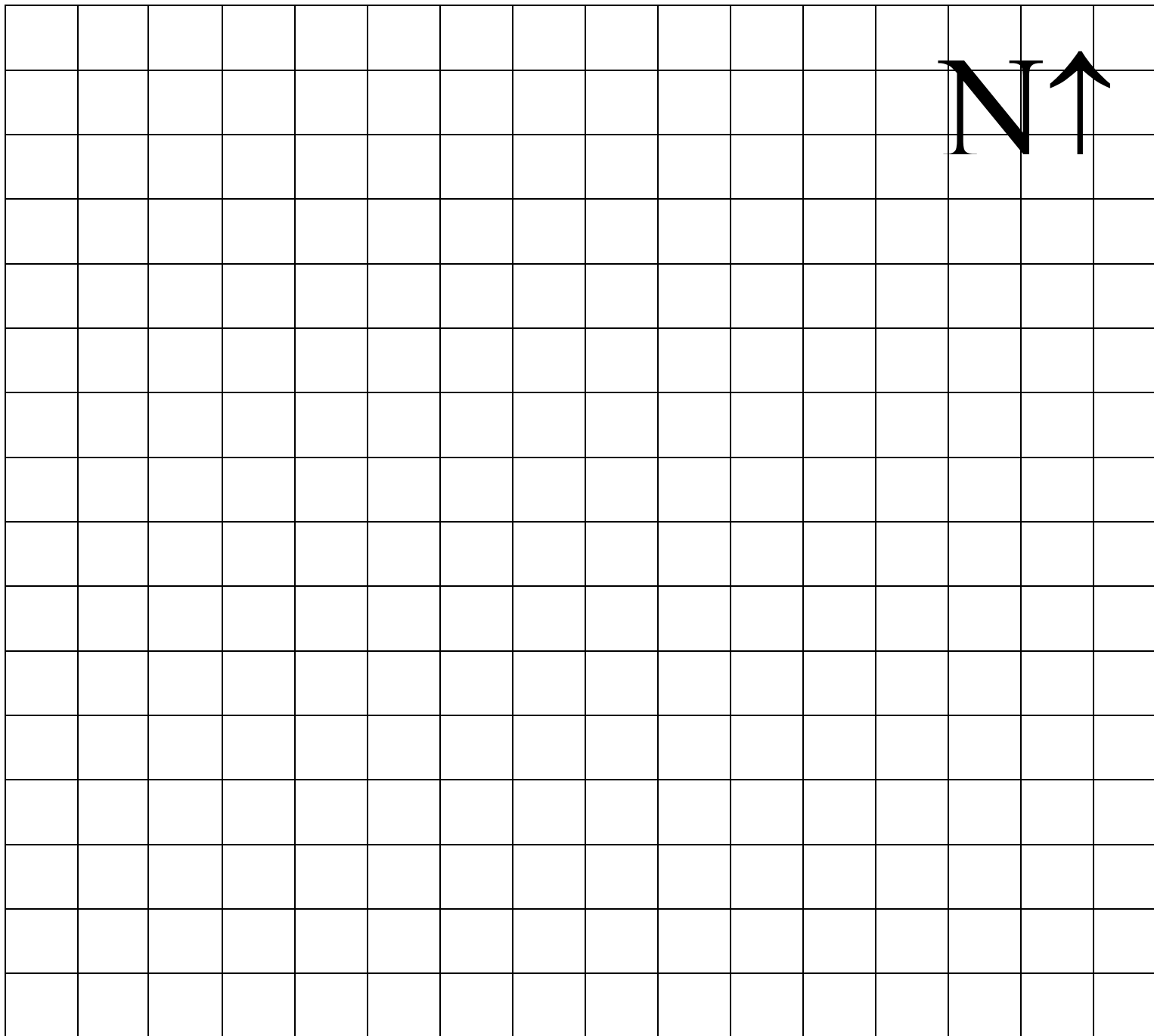
Date:	Observer(s)	Begin Time:	End Time:	Total Person Minutes of Search:	Area (M <sup>2</sup> ) Searched:					
Percentage of Site Searched: 1-25 26-50 51-75 76-100	Habitat Type:	Spring /Seep	Waterfall Sprayzone	Streamside w/o Sprayzone	Moist Site w Cobble	Moist Site w Fractured Rock	Subterranean Flow	No Suitable Habitat		
Percent Slope:	Percent Canopy Cover:	Aspect:	N	NE	NW	S	SE	SW	E	W
General Cover Type / Habitat Description and Specific Microhabitat Where Animals Were Found:										
Photo Frame Number(s) / Description(s):										
Weather:	Clear	Partly Cloudy	Overcast	Rain	Snow	Air Temp Start: °C	Air Temp End: °C			
Water Temp: °C	Water pH:	Water Flow: CFS	Days Since Last Rain:	Support Population: Y	N					
Habitat Threats:										

## Species Information

Herp Species:	Number, Life Stage, Size, and Time at First Detection (e.g., 2 x adult females, TL = 80-90mm @ 10 minutes)									
Tissue Number:	Substrate Association (Circle):									
Voucher Number & Description:	under wood/vegetation	under 4-20cm rock fragments	under >20cm rock fragments	under bryophyte mat	on bryophyte mat	in rock fracture	other _____			
Herp Species:	Number, Life Stage, Size, and Time at First Detection (e.g., 2 x adult females, TL = 80-90mm @ 10 minutes)									
Tissue Number:	Substrate Association (Circle):									
Voucher Number & Description:	under wood/vegetation	under 4-20cm rock fragments	under >20cm rock fragments	under bryophyte mat	on bryophyte mat	in rock fracture	other _____			
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Voucher Number & Description:	under wood/vegetation	under 4-20cm rock fragments	under >20cm rock fragments	under bryophyte mat	on bryophyte mat	in rock fracture	other _____			
Other Species: (slugs, snails, millipedes)	Time at First Detection:	Voucher Number:	Voucher Description / Comments:							
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# Site Map for Coeur d'Alene Salamander (*Plethodon idahoensis*) Site Surveys

Grid Scale:



\* Draw a rough sketch of the site labeling major features such as streams, talus slopes, habitat cover types, etc. Be sure to indicate where animals were detected and label the following locations on the map: **T** = temperature, **G** = GPS reading, and **P**→ = photo locations and directions of photos.

**Other Notes:**

### Site Information

**Cluster Number:** Number identifying cluster of sites being monitored for each PLID breeding locality (range = 001-999). Typically this would be the same number for all localities in a local watershed (e.g., a 6th Code (12-digit) HUC).

**Site Number:** Site number within each breeding cluster (range = 001-999).

**Locality:** Describe the specific geographic location of the site so that the type of site is described and the straight-line air distance from one or more permanent features on a 7.5-minute (1:24,000 scale) topographic map records the position of the site (e.g., Waterfall spray zone just below falls on Rock Creek, 1.5 miles north of Engle Peak).

**State:** Use the two-letter abbreviation.

**County:** Use the full county name.

**Map Name:** List the name of the USGS 7.5-minute (1:24,000 scale) topographic quadrangle map.

**T:** Record the Township number and whether it is north or south.

**R:** Record the Range number and whether it is east or west.

**S:** Record the Section number

**Section Description:** Describe the location of the site at the ¼ of ¼ section level (e.g., SENE indicates SE corner of NE corner).

**Owner:** Use abbreviation of the government agency responsible for managing the land you surveyed. (e.g. USFS, BLM). If private land was surveyed list the owner's full name to indicate that you did not trespass.

**Map Elevation:** The elevation of the site as indicated by the topographic map in feet (avoid using elevations from a GPS)

**Datum:** The map datum used (use NAD 27 in order to correspond with topographic maps).

**UTM Zone:** Universal Transverse Mercator zone recorded on the topographic map.

**UTM East:** Universal Transverse Mercator easting coordinate in meters as recorded on the topographic map or GPS receiver. Be sure to note any major differences between UTM coordinates on the map and those on the GPS receiver.

**UTM North:** Universal Transverse Mercator northing coordinate in meters as recorded on the topographic map or GPS receiver. Be sure to note any major differences between UTM coordinates on the map and those on the GPS receiver.

### Survey Information

**Date:** Use MM-DD-YY format (e.g. 05/12/00 for May, 12 of 2000).

**Observers:** List names or initials of individuals involved with survey of this site and circle the name of the recorder.

**Begin Time:** List the time the survey began in 24-hour format.

**End Time:** List the time the survey ended in 24-hour format.

**Total Person Minutes of Search:** Record the total person minutes the site was searched (e.g. if one person surveys for 15 minutes and another surveys for 30 minutes, but takes 5 minutes to measure a specimen the total person minutes is 40 minutes).

**Area (M<sup>2</sup>) Searched:** Area in square meters that was surveyed.

**Habitat Type:** Circle the appropriate habitat type.

**Percent Slope:** Percent slope of site. Enter range if variable.

**Percent Canopy Cover:** Percent canopy cover at the site - averaged if site extends over a larger area.

**Aspect:** Circle primary aspect of the site.

**Cover Type / Habitat Description:** Give a thorough description of the immediate and surrounding habitats, including forest type, hydrologic regime, inferences regarding subterranean habitat, and spray zone at the site.

**Photo Frame Number(s) / Descriptions:** The number of the photo as viewed on the camera's view screen and a description of the contents of the photograph (e.g., #13 = 1 x PLID juvenile and #14-18 = 5 x habitat). Take photos of all portions of the site and anything else that may be of interest (e.g., slugs, millipedes, snails, and potential site threats).

**Weather:** Circle weather condition during survey.

**Air Temp Start:** Record air temperature in °C at chest height in the shade at the beginning of the survey. °C = (°F - 32)/1.8

**Air Temp End:** Record air temperature in °C at chest height in the shade at the end of the survey. °C = (°F - 32)/1.8

**Water Temp:** Record water temperature in °C of water body adjacent to area surveyed.

**Water Flow:** Record estimated flow rate of water adjacent to area surveyed in cubic feet per second (CFS).

**Days Since Last Rain:** Record number of days between survey date and last significant rainfall.

**Support Population:** Based on the sites' aspect, canopy cover, presence of subterranean habitat, and presence/absence of a spray zone what is your best judgment as to whether enough habitat is present to support a population of *P. idahoensis*.

### Species Information

For each species, record the first two letters of the scientific genus and species names for all amphibian and reptile species found at the site (e.g., AMMA = *Ambystoma macrodactylum*, PLID = *Plethodon idahoensis*, ASMO = *Ascaphus montanus*, BUBO = *Bufo boreas*, THEL = *Thamnophis elegans*, THSI = *Thamnophis sirtalis*). Record the number, life stage, size, and time at first detection (e.g., 2 x adult females, TL = 80-90mm @ 10 minutes) for all life history stages encountered. Record the tissue number or range of tissue numbers for tissue samples collected (see tissue collection protocols). Record the preliminary museum voucher specimen number and description for voucher specimens collected (see voucher specimen collection protocols). Circle the substrate the animal was associated with at time of detection. Record the presence of other species detected at the site (e.g., slugs, snails, millipedes), the time at first detection, and the voucher number and description of animals collected (see voucher and tissue collection protocols).