# AMPHIBIANS OF THE COEUR d'ALENE BASIN: A SURVEY OF BUREAU OF LAND MANAGEMENT LANDS

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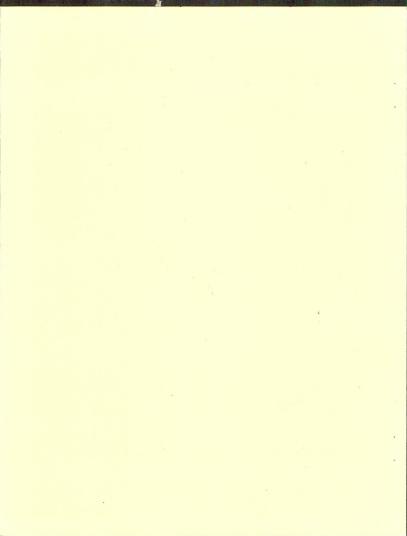
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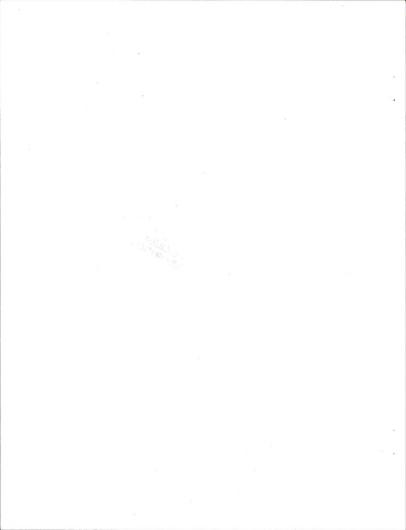
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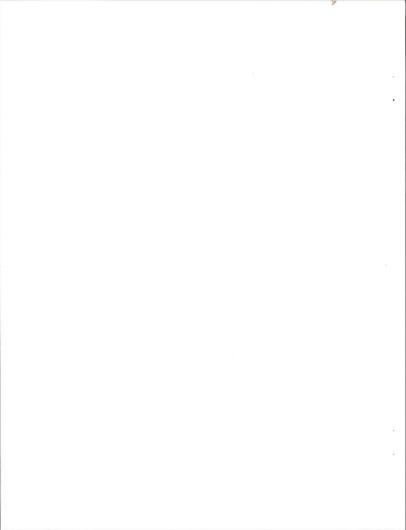
### EXECUTIVE SUMMARY

Recent wide spread declines of some amphibian populations have resulted in an increased interest by resource managers in the status of the amphibian populations in their resource areas. When managers attempt to locate current, region specific data on amphibian populations, they often fail because of a lack of information. However, to make site specific management decisions for amphibians, managers must know what species occur in their area. The goal of this three year project (springs and summers of 1994, 1995, and 1996) was to determine the occurrence, distribution, and relative abundance of amphibians on Bureau of Land Management (BLM) Lands in the Coeur d'Alene Basin in northern Idaho. This final report presents and summarizes all data collected during this survey.

To achieve this goal, we conducted amphibian surveys at 14 ponds and 21 streams. We captured 9 of the 10 species of amphibians that potentially occur in the study area. Seven of the potential species are pond breeders, 2 are stream breeders, and 1 lays eggs on land. Therefore, we needed to use several techniques to achieve our goal.

The most widely distributed and abundant pond breeding amphibian was the Long-toed Salamander (Ambystoma macrodactylum), followed by the Spotted Frog (Rana pretiosa), Pacific Treefrog (Pseudacris regilla), Western Toad (Bufo boreas), and the Bullfrog (Rana catesbeiana). The most widely distributed and abundant stream dwelling amphibian was the Tailed Frog (Ascahpus truei) followed by the Idaho Giant Salamander (Dicamptodon aterrimus). We found Coeur d'Alene Salamanders (Plethodon idahoensis) to be widely dispersed and locally abundant in the study area.

We suggest three future projects that would improve our knowledge of the herpetofauna of the Coeur d'Alene Basin. First, a monitoring program for amphibians should be initiated. After three years of surveys, we probably have a reasonable representation of what amphibians occur in the Coeur d'Alene Basin. A monitoring program would allow resource personnel to observe trends in amphibian occurrence over time in the study area. The second suggested project is a survey of Northern Alligator Lizards (Elgaria coerulea). Third, if possible, adaptive management and monitoring of amphibian and reptile populations should be attempted on a case by case basis.



#### INTRODUCTION

Recent wide spread amphibian declines have caught the attention of many wildlife managers. They have become increasingly interested in the status of the amphibian populations in their resource areas. However, when managers attempt to locate current, region specific data on amphibian populations, they often fail because of a lack of information. In the Pacific Northwest, data are often lacking on the limits of species distributions, species ecology, and life history (Nussbaum et al. 1983). As the scale of interest is changed from regional (Pacific Northwest) to local (a county), data on the occurrence, distribution, and abundance of species become harder to locate. Unfortunately, these types of data are needed to evaluate the potential effects of local land-use practices on amphibian populations (Patla and Peterson 1996, Sullivan and Peterson 1996). Therefore, the first step in developing amphibian management plans should be surveys to determine occurrence, distribution, and relative abundance of the potential species.

The goal of this three year project (springs and summers of 1994, 1995, and 1996) was to determine the occurrence, distribution, and relative abundance of amphibians on Bureau of Land Management (BLM) Lands in northern Idaho (Fig. 1). To obtain this goal, we conducted pond and/or stream surveys for amphibians in four areas (1) along U. S. Interstate 90 from Wallace, Idaho to Coeur d'Alene, Idaho; (2) along Latour Creek south of Cataldo; (3) along Coeur d'Alene lake south of Coeur d'Alene; and (4) around Lake Pend Oreille. Ten species of amphibians potentially occur in the study area. Seven of the potential species are pond breeders, two are stream breeders, and one lays eggs on land. Therefore we used several techniques to achieve our goal. This final report presents and summarizes all data collected during this survey.

## Study Area

We conducted this study in the Coeur d'Alene region of Northern Idaho (Fig. 2). The majority of the survey points occurred along U. S. Interstate 90 from Wallace, Idaho to Coeur d'Alene, Idaho. However, we also surveyed several sites outside of this corridor. We sampled two bays south of Coeur d'Alene along Lake Coeur d'Alene (Mica Bay and Loff's Bay), two lakes around Lake Pend Oreille (Gamlin and Antelope lakes), and several sites along Latour Creek south of Cataldo (Table 1). We selected a total of 14 ponds and 21 streams to survey.

Because of the fragmented and often disturbed nature of BLM land in the study area, we did not select survey sites randomly. Rather, we sampled any potential site on BLM land that we felt would contain amphibians including ponds, streams, bays, and seeps. To assist site selection, Scott Robinson (Wildlife Biologist, BLM, Coeur d'Alene District), suggested specific survey sites and provided 1:24000 scale U.S.G.S topographic maps with BLM land holdings outlined.

Site characteristics were variable. Sites ranged in elevation from approximately 900 m (3000 feet) along the Coeur d'Alene River to 1590 m (5300 feet) at Crystal Lake. The area along the Interstate 90 corridor has been highly disturbed by mining.

#### Sources of Information

We used several sources of information to generate a probable species list for the study area. We used the range maps in Stebbins (1985) to determine which species were likely to occur in the study area. We then checked this list against dot-distribution maps for the state (Nussbaum et al. 1983). Lastly, we consulted the Northern Intermountain Herpetological Database (Idaho Museum of Natural History) for museum records of potential amphibian (Table 2a) and reptile species (Table 2b).

# Field Surveys

We selected 14 ponds and 21 streams to survey. Each site was visited at least twice each year. We attempted to temporally space the survey dates to optimize the chances of correctly detecting species occurrence at each site. One survey was conducted in the early spring to determine occurrence and breeding activity, and the second survey was conducted in the summer to determine species occurrence and reproductive success.

The methodology for conducting pond surveys was different than the methodology for stream surveys. In each case we followed the U S. Fish and Wildlife Service protocol developed by Stephen Com to collect data (Heyer et al. 1994). The protocol used for pond surveys was as follows. Timing ourselves, we walked the edge of the pond and looked for adult amphibians and egg masses. Because larvae are sometimes difficult to observe, we periodically used a dipnet to sample for larvae. We also turned any cover objects that were adjacent to the ponds. If possible, we walked across the pond to determine maximum depth. At each pond we measured pH (Oakton, pH Testr 2, accurate +/- 0.2, Forestry Suppliers, Inc. Jackson, MS), water conductivity (TDS Testr Oakton accurate +/- 2%, Forestry Suppliers, Inc. Jackson, MS) and water temperature (Quick Reading Miller-Weber Cloacal Thermometer, Oueens, NY).

The protocol used to survey streams was as follows. We sampled three types of streams. Examples of the three types are as follows: (1) relatively large (approximately 1.5-3 m wide) with sparse canopy cover (Fig. 7), (2) smaller streams (<1.5 m wide) with complete canopy cover (Fig. 8), and (3) streams that have been "restored" (Fig. 9). We surveyed an approximately 100 m reach of each stream. We timed ourselves as we walked upstream turning rocks with a net held below. If a Tailed Frog (Ascaphis truei) or Idaho Giant Salamander (Dicamptodon aterrimus) was under the rock it would usually be washed into the net. At each stream we measured pH, water conductivity, and water temperature. We also found that, at low flow, some high gradient streams became a series of isolated pools. In this situation, we were able to walk up the reach of stream, peer into the pools, and see Tailed Frog tadpoles if they were present.

We also recorded observations of amphibians and reptile that were incidental to the survey sites. Incidental sites were areas that we located while driving to a specific survey site. If we found appropriate habitat, we searched there. These sites were only visited once, and searching ended when one individual was found. Incidental reptile sitings were usually opportunistic observations at survey sites or were observed as "road-kill".

### Mapping

Each site is represented on a scan of a 7.5 minute series topographic map. Facing each figure, is a summary table of the site location, site type, species breeding, and remarks. Several steps were required to prepare the maps of the survey sites for amphibians from the 1994, 1995, and 1996 field surveys (Figs. 11-33). While in the field, we marked the locations of survey sites on copies of USGS 7.5 minute series topographic maps. In the laboratory, we scanned in the appropriate portions of the topographic maps with a Hewlett-Packard ScanJet Ilcx scanner. The maps were scanned in as 256-color photo images at 180 dpi with normal sharpening, and saved as TIFF files. The TIFF files were then imported into Corel Draw 4.0 (Corel Corporation, Ottawa, Ontario, Canada). We added the site numbers and abbreviations for the amphibian and reptile species observed and then printed the maps with an Epson Color Stylus printer at 360 dpi. These maps give the most precise indications of our amphibian and reptile observation locations. We did not show the historical records on these maps because the accuracy of their locations is not as high as the 1994, 1995, and 1996 survey sites.

UTM coordinates for the 1994, 1995, and 1996 survey sites were obtained using a 36" x 48" CalComp 9500 digitizing table (CalComp, Scottsdale, AZ) to digitize coordinates from the USGS 7.5 minute series topographic maps. These coordinates should be accurate to within tens of meters. Table 1 lists the coordinates for all 1994, 1995, and 1996 survey sites.

# Data Analysis

The fragmented nature of BLM land in the study area precluded a random sample of a sufficient number of pond sites to draw statistically meaningful conclusions about pond breeding amphibians. Thus, we used descriptive statistics to analyze these data.

For the stream dwelling amphibians (Tailed Frogs) we used Exact Testing (SPSS Exact Tests 6.1 for Windows, Mehta and Patel, SPSS Inc. Chicago, IL, 1995) to determine if there were any relationships between Tailed Frog occurrence and fish presence or the presence of a mine within 2 miles upstream of the sample site. However, these analyses were post hoc and the results of the analyses are specific to the sites that we sampled -i.e., we could not draw broad conclusions about the amphibian populations outside the study area. This study was not intended to determine the effects of mining on amphibian populations. We consider the test against mine presence to be exploratory, for the purpose of guiding future research.

#### RESULTS AND DISCUSSION

# Possible Species

We searched of The Idaho Museum of Natural History Database of reptiles and amphibians for museum records from Benewah, Bonner, Kootenai, and Shoshone counties. Our search revealed that there are museum records for 10 species of amphibians from the study area (Table 2a). These species include: the Long-toed Salamander (Ambystoma macrodactylum), the Tiger Salamander (Ambystoma tigrinum), the Idaho Giant Salamander (Dicamptodon aterrimus), the Coeur d'Alene Salamander (Plethodon idahoensis), the Western Toad (Bufo boreas), the Pacific Treefrog (Pseudacris regilla), the Tailed Frog (Ascaphus truei), the Bullfrog (Rana catesbeiana), the Northern Leopard Frog (Rana pipiens), and the Spotted Frog (Rana pretiosa). We found 9 out of 10 potential species in the study area. Although there are museum records for Leopard Frogs within the northern portion of the study area, we failed to locate any Leopard Frog sites.

Four of the 10 species are afforded special state status. The Coeur d'Alene Salamander, the Western Toad, the Leopard Frog, and the Spotted Frog are classified as Idaho Department of Fish and Game Species of Special Concern and as BLM Sensitive species. In addition, the United Sates Fish and Wildlife Service (The Snake River Basin Field Office, Boise, ID) considers the Coeur d'Alene Salamander as a Watch species and the Western Toad as Watch/Species of Concern (Conservation Data Center Home Page, World Wide Web 1997).

## Pond Breeding Amphibians

Long-toed Salamander

Long-toed Salamanders (Ambystoma macrodactylum) were widely distributed in the study area. They were present at 9 of the 14 pond sites sampled, and were relatively the most abundant of all pond breeding amphibians. Larvae were observed at all sites where they were found. Long-toed Salamander breeding habitat was characterized as permanent or ephemeral ponds, generally with emergent vegetation along the shoreline (Fig. 3). Fish were never observed in the areas where Long-toed Salamander larvae were found (See Appendix 1 for list of site characteristics).

# Tiger Salamander

In 1995 we found one Tiger Salamander (Ambystoma tigrinum). This individual (found dead) was located in an area known to have fish (Gold Run Ponds) and was presumed to have been fish bait.

### Spotted Frog

Spotted Frogs (Rana pretiosa) were found to be distributed across the study area, and were the second most abundant pond breeding amphibian. Spotted Frogs were present at 6 of the 14 pond sites and eggs were observed at two sites. In the study area, Spotted Frogs were found to inhabit permanent ponds and the wet marshy areas adjacent to these ponds (Fig. 4). At all sites where Spotted Frogs were found, there were shallows with emergent and submergent vegetation.

#### Pacific Treefrog

Our data suggest that Pacific Treefrogs are not widely distributed or abundant in the study area. Pacific Treefrogs were present at two sites in the study area and we observed tadpoles at both sites. In the study area, Pacific Treefrogs were found in small ponds (including oxbow ponds) generally with emergent vegetation along the shoreline (Fig. 3)

#### Western Toad

Our data also suggest that Western Toads are not widely distributed or abundant in the study area. Western Toads were presence at two sites in the study area and we observed tadpoles at both sites. The two Western Toad sites were different. One site was a shallow marshy area connected to Lake Coeur d'Alene. The other was a large pond, lacking emergent vegetation, adjacent to the Coeur d'Alene River (Fig. 5).

### Bullfrog

Unfortunately, we located one site with breeding Bullfrogs (Fig. 6) (Gamlin Lake).
Bullfrogs (Rana catesbeiana), an introduced species, were the only amphibians found at that

site. This site was southwest of Sandpoint and adjacent to Lake Pend Oreille. Bullfrogs in Gamlin Lake may present a threat to native amphibian populations in the neighboring area if people transplant Bullfrogs from Gamlin to lakes in the Pend Oreille area. If possible, Bullfrogs should be removed. In addition, educational signs should be placed around the lake warning people not to take live Bullfrogs from Gamlin Lake to other lakes. Hopefully, this may slow the expansion of Bullfrog populations in the area.

# Stream Breeding Amphibians

Tailed Frog

The most widely distributed and abundant stream dwelling amphibian was the Tailed Frog ( $Ascahpus\ truei$ ). Tailed Frogs occurred at 9 of the 21 sites surveyed and tadpoles were found at all sites where Tailed Frogs occurred. We found adult Tailed Frogs at two sites, and three age classes of tadpoles (1 site with 3rd year tadpoles, 7 sites with 2nd year tadpoles, and 5 sites with 1st year tadpoles). Tailed Frog habitat was characterized by relatively fast moving rocky streams with little or no sediment load. The presence of tailed frogs was not positively or negatively associated with the presence of a mine two miles upstream (Fisher's Exact Test, p = 0.20) or the presence of fish (p = 1.0).

Idaho Giant Salamander

The other stream dwelling amphibian captured was a larval Idaho Giant Salamander (Dicamptodon aterrimus). We only found one site (Dry Creek) and one individual in three years of surveys. However, Idaho Giant Salamanders may be more wide-spread and more abundant than our data indicate. The site where the larval Idaho Giant Salamander was captured was a small stream (< 1m wide). The Substrate consisted of large cobbles (15 cm in length) and woody debris. There was complete canopy closure. This creek was dry in 1995. In 1996 Dry Creek was flowing, and we found Tailed Frog tadpoles and the larval Idaho Giant Salamander.

#### Terrestrial Salamanders

We found Coeur d'Alene Salamanders (*Plethodon idahoensis*) at four of the survey sites (Table 1). We also found 10 incidental Coeur d'Alene Salamander sites (Table 3). Coeur d'Alene Salamanders sites were abundant and widely dispersed in southern portion of

the study area. Coeur d'Alene Salamaner habitat usually consisted of small talus or scree, with a water source (splash zone) in the talus or adjacent to it.

#### Management Considerations

### Monitoring

We feel that the next step in this project should be to initiate a monitoring program for amphibians. After three years of surveys, we probably have a reasonable representation of what amphibians occur in the Coeur d'Alene Basin. A monitoring program would allow resource personnel to observe trends in the amphibian occurrence over time in the study area.

We selected 10 sites that are suitable for amphibian long-term monitoring (Table 4).

We used the following criteria for monitoring site selection, (1) sites had to cover the study area spatially; (2) sites had to cover the range of habitats (low and high elevation ponds, forested streams, open canopy streams, and restored streams); (3) sites had to incorporate all species, with a minimum of 2 sites per species; (4) when possible, sites had to be on BLM land; and (5) all monitoring had to be able to be completed in approximately two days per season.

Monitoring consists of repeated surveys of the same site over time (e.g., consecutive years). The goal of monitoring is to determine trends in the occurrence of amphibian species over time. The sites in Table 4 should be monitored for amphibians using the same protocol used in the initial surveys (See Methods). To monitor long term trends in terrestrial salamanders follow the Coeur d'Alene Salamander Assessment (Cassirer et al. 1994). *Incidental Searching* 

We are lacking information about the distribution and abundance of Idaho Giant Salamanders, Western Toads, and Pacific Treefrogs in the study area. We suggest that if resource personnel come upon a new/unsurveyed pond or stream, they should search for these three species. If time allows, BLM personnel should be trained to be able to properly identify amphibians and amphibian habitat in the field. This extra effort should improve our understanding of distribution and abundance of Idaho Giant salamanders, Western Toads, and Pacific Treefrogs in the study area.

Northern Alligator Lizard surveys

Northern Alligator Lizard (Elgaria coerulea) surveys should be conducted in the study area. The Northern Alligator Lizard is classified as an S2? species by the Idaho Natural Heritage Program and a Watch species by the USFWS (The Snake River Basin Field Office, Boise, ID). Very little is known about it in Idaho.

Adaptive Management

We suggest that, if possible, BLM personnel should undertake adaptive management and monitoring of amphibian populations on a case by case basis. For example, before roads are widened or newly constructed on BLM lands, managers could survey for amphibians. If the proposed project would potentially impact amphibian habitat, managers could take actions to protect the habitat. Actions may be as minor as not widening a road in an area of known Coeur d'Alene Salamander habitat, or as drastic as re-routing the roads away from known habitat. However, protecting all habitat is not always possible. Therefore, we suggest that if a project will alter known amphibian habitat, surveys should be conducted before and after the disturbance to determine possible impacts. These types of surveys may provide base-line data about species response to disturbance and possibly the time it takes for species

to recolonize disturbed habitats.

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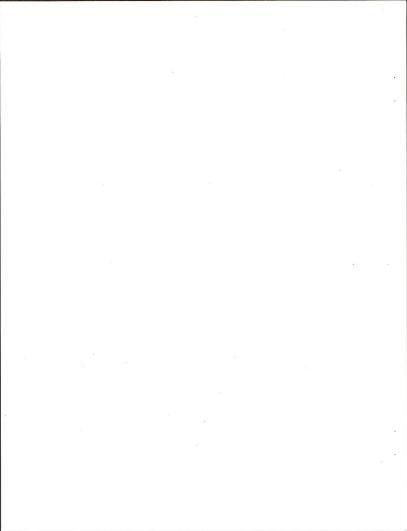


Table 1. Sites characteristics of areas sampled 1994- 1996. Site names in bold indicate a new site sampled in 1996. UTM's recorded in datum NAD27. \* indicates proposed monitoring sites. \*\*see key at bottom of table.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	Т	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks (1996)
1	*Placer Creek (stream)	Placer Creek 1.35 mi from intersection with King Street, Wallace.	ASTR	ASTR tads	Shoshone	T47N	R4E	NE SW sec. 3	580.22697	5255.961	877.5	yes	High water, only searched edges of stream. Second visit water lower, searched entire stream.
2	Cranky Gulch (stream)	Cranky Gulch - fork of C.Glch. trail #39 and St. Joe trail#3 OR 2 miles from intersection with King Street, Wallace.	THEL, ASTR	ASTR	Shoshone	T47N	R4E	NW NE sec. 9	580.214	5255.080	876	unknown	Recently flooded, ASTR possibly washed out of stream? Second visit found ASTR.
3	Nine Mile creek (stream)	9 Mile Creek - 1.9 mi N of I-90 overpass on Nine Mile Creek Road.	none	none	Shoshone	T48N	R4E	SW NE sec. 23	582.439	5260.511	888	yes	Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.
4	*Canyon Creek (stream)	Canyon Creek - 1.8 mi N of I- 90 overpass on paved road.	none	none	Shoshone	T48N	R4E	SE SE sec. 13	584.359	5261.202	930	yes	Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.
5	Canyon Creek Seep (pond)	Canyon Creek - 1.8 mi N of I- 90 overpass on paved road, east side of creek against canyon wall.	NA	AMMA larvae	Shoshone	T48N	R4E	SE SE sec. 13	584.464	5261.336	930		2 " deep, area used as ATV trails, Adult AMMA located 100 m south of breeding pond/ Entire area dry at second visit. Presume no AMMA metamorphosed.
6	Gene Day Park (pond)	Gene Day Park - 1.7 mi W of Osburn on Warm Mullan Road.	RAPR, AMMA, THEL	RAPR, AMMA, THEL, THSI	Shoshone	T48N	R3E	SW SW sec. 12	572.804	5262.734	730.2	yes	9 RAPR adults; 4 RAPR juveniles; tads; 1 AMMA adult (gravid), observed THSI eating RAPR adult.
7	Memorial Pond (pond)	Pond at turnoff to Elk Creek.	RAPR, THEL,	RAPR, AMMA	Shoshone	T48N	R3E	NW SE sec. 3	571.778	5264.042	722.4	yes	
8	*Polaris Creek (stream)	Polaris Creek - 1.6 mi S of I- 90, 1.5 mi S along improved road; hike 75 m to creek.	ASTR	ASTR	Shoshone	T48N	R3E	SE NE sec. 15	571.427	5262.200	768	yes	I found that slowly walking up stream and looking more effective than rock turning.
9	Moon Gulch (stream)	Moon Gulch - 1.4 mi N on Moon Gulch Road.	none	none	Shoshone	T49N	R3E	NE SW sec. 35	572.106	5266.265	756	yes	Recently flooded, high water.

Table 1. continued.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	T	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks
10		Montgomery Creek - 0.7 mi N of I-90	none	none	Shoshone	T48N	R3E	SW NE sec. 4	569,075	5265.054	726	yes	
11	Big Creek (stream)	Big Creek - 25 m from I-90.	none	PLID, ASTR	Shoshone	T48N	R3E	NW NW sec. 22	569.952	5260,878	784,5	yeş	Found PLID in talus slope approx. 50 m north of stream site. 5 m north foot bridge w. slope.
12	Gold Run Gulch (stream)	Gold Run Gulch2 mi S on Gold Run Road.	ASTR, THEL	none	Shoshone	T48N	R3E	NE NE sec. 9	569.560	5264.066	720	unknown	Recently flooded, high water.
13	Ponds (pond)	Series of ponds - 0.8 mi E of Gold Run Road-North of Road.	RAPR, AMTI?, THEL	RAPR, AMMA, PLID	Shoshone	T48N	R3E	SE SW sec. 3	570.526	5264.459	717	na	No pond breeding amphibians south site of road. Second trip found AMMA hatched eggs but no AMMA. PLID found in talus surrounded by aspen on the west edge of pond.
14		Jackass Creek - 0.75 mi N of I 90. North of high school.	none	ASTR- See Comments	Shoshone	T49N	R3E	NE NW sec. 31	565.817	5267.242	732	unknown	Site begins once clear of high school property. Found one ASTR tad upstream from sampling area. ASTR was immediately up-stream from collecting pool for municiple water supply.
15	*Airport Pond (pond)	Smelterville Airport Road.	none	AMMA eggs, BUBO tads	Shoshone	T49N	R2E	NE SW sec. 34	561.779	5266.242	663	na	Found one BUBO tad swimmin across pond.
16	(stream)	Trapper Creek - 1 mi S of Pine Creek Rd. on Trapper Cr. Road.	THEL	PLID	Shoshone	T48N	R2E	SW SW sec. 28	558.831	5257.756	756	yes	Found PLID in trapper creek canyon. Did not resurvey Trapper creek because 1995 site was on private property.
17		Denver Creek - at intersection with Route 3D.	none dry	none dry	Shoshone	T48N	R2E	SE SE sec. 28	559.825	5257.585	777	yes	Dry in 1996.
18	Highland Creek (stream)	Highland Creek - 0.4 mi NE of Route 3D.	none	none	Shoshone	T48N	R2E	SE NW sec. 34	560.949	5257.190	804	yes	
19	Blue Eagle Creek (stream)	Big Eagle Creek - at intersection with Route 3D.	none	none	Shoshone	T48N	R2E	NW SE sec. 34	561.059	5256.539	825	unknown	

Table 1. continued.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	T	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks
20	*Dry Gulch (stream)	Dry Gulch - at intersection with Route 3D.	none	ASTR, DIAT	Shoshone	T48N	R2E	SE SE sec. 34	561.528	5256.171	820.2	unknown	Area was dry in 1995.
21	Douglas Creek (stream)	Douglas Creek - at intersection with Route 3D.	none	none	Shoshone	T47N	R2E	NE NE sec. 3	561.665	5255.636	861	unknown	Rocks very discolored with a lot of algae.
23	Latour 1st Stream (stream)	1st stream - 2,15 mi from Latour Creek Overpass.	ASTR	not sampled in 1996	Kootenai	T48N	R1W	SW NE sec. 27	541.917	5258.496	792	unknown	Private land. Did not sample in 1996.
	Latour Across 1st Stream (stream)	Latour Creek - across from "1st stream".		not sampled in 1996	Kootenai	T48N	R1W	SW NE sec. 27	542.033	5258.577	768	unknown	Private land. Did not sample in 1996,
25	Al's Seep (seep)	Al's seep - > 7 m S Cataldo.	PLID	not sampled in 1996	Kootenai	T47N	R1W	NW SE sec. 22	541.949	5259.271	744	unknown	Private land. Did not sample in 1996.
	Dudly Ponds (ponds)	Ponds - 0.6 mi S of I-90 overpass near Dudley camping park.	RAPR, CHPI, THEL	not sampled in 1996	Kootenai	T48N	R1W	NW NE sec. 11	550.030	5265.208	642	na	Could not get permission to sample in 1996.
	Butler Creek (stream)	Intersection of Rochat Divide Road and Butler Creek.	NA	ASTR	Benewah	T78N	R1W	NW NE sec. 10	541.936	5254.115	876	unknown	
	Lost Girl Creek (stream)	Intersection of Rochat Divide Road and Lost Girl Creek.	NA	ASTR	Benewah	T47N	R1W	SE SW sec. 3	541.592	5254.378	869.7	unknown	
	Crystal Lake (pond)	Crystal Lake.		AMMA?	Benewah	T47N	R1E	NE SW sec. 31	546.628	5247.019	1596		found one salamander larvae. I assumed AMMA and released without furher inspection. Could have been AMTI used as fish bait.
	*Jack Forest Pond 1 (pond)	Jack Forest Property 1st pond.	NA	AMMA, PSRE	Kootenai	T49N	R2W	NW NW sec. 6	525.920	5272.469	786		Excellent site for teaching field trips site contains two species; easy access.
	Jack Forest Pond 2 (pond)	Jack Forest Property 2nd pond adjacent to old corral.	NA	AMMA	Kootenai	T50N		SW SW sec. 31	525.920	5272.269	762		Excellent site for teaching field trips site contains two species; easy access.

Table 1, continued.

Site no.	Name	LOCALITY	Species found 1994/95	Species found in 1996	COUNTY	Т	R	Aliquot and section	UTM EASTING (Km)	UTM NORTHING (Km)	Elevation (m)	Mine Upstream	Beck Remarks
32	Blackwell Island	Rt. 95. 0.5 mi. south of Coeur d' Alene.	NA	none	Kootenai	T50N	R4W	NW NW sec. 14	514.674	5281.129	642	na	Found no herps.
33	Loff's Bay (pond)	Loft's Bay, Lake Coeur d' Alene.	NA	AMMA, PSRE, BUBO	Kootenai .	T49N	R4W	NW NW sec. 35	512.964	5266.535	554		Very large area with several different habitat types: lake riparian (BUBU), series ponds and canals of canals (PSRE, RAPR and AMMA). Site has all speies except PLID (probably there).
34	Mica Bay (pond)	Mica Bay, Lake Coeur d' Alene.	NA	RAPR,	Kootenai	T49N	R4W	SW NE sec. 16	510.872	5271.041	645	na	All RAPR were found in mowed grass along the edge of Mica bay. Area is developed as a campground with boat docks.
35	Mica Bay Creek (stream)	Creek, bisecting BLM property.	NA	AMMA	Kootenai	T49N	R4W	SW NE sec. 16	510.867	5270.928	654	na	Adult AMMA was observed swimming across a one meter wide pool in "Mica Bay Creek".
36	*Gamlin Lake (pond)	Gamlin Lake, Glengary Road south of Sandpoint adjacent to Lake Pend Oreille.	NA	RACA, THEL	Bonner	T56N	R1E	Sec. 6;7	545.530	5341.092	630	na	Lake is filled with RACA adults- and tads. RACA presence is probably reason for no other amphibian species.
37	*Antelope Lake (pond)	Antelope Lake, 2 km southeast of Clark Fork.	NA	RAPR, THEL	Bonner	T55N	R2E	NW NW sec. 12	562.925	5331.435	826.2	na	Fish present. I also found adult RAPR and RAPR juveniles, no tadpoles.

ASTR=Tailed Frog, THEL=WEstern Terrestrial Garler Snake, AMMA=Long-loed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake
AMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD		FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	UTM Northing (km)	DAY	монтн	YEAR	COLLECTOR	REMARKS
NUMBER 4440	MUSEUM UMMZ	Ambystomatidae	Ambysioma	macrodactylum	Benewah	Between Emida And Summit Df Emida Grade On All 95 4 Mi		5215.867	19	MONTH		R A NUSSBAUM	
4450	UMMZ	Ambystomatidae	Ambysloma	macrodactyfum	Benewah	4 Mi N Of Summit Of Emida Grade On U S Alt 95	527.710	5215,867	4		1968	R A NUSSBAUM	
4829	CPS	Arritystomatidae	Ambysloma	macrodactylum	Benewah	Ptummer, 6 mi. S on US 95 Couer d'Alene	507,631	5242.471	12	September	1939		
1664	CAS	Ambystomatidae	Ambyslome	macrodactylum	Bonner	Priest Lake	510.098	5383.208	15	July	1927	E.C. VanDyke	
1665	CAS	Ambystomatidae	Ambysioma	macrodactylum	Borner	Priest Lake	510,098	5383.208	15	July	1927	E.C. VanDyke	
1666	CAS	Ambystomatidae	Ambystoma	macrodactylum	Borner	Priest Lake	510,098	5383.208	15	July	1927	E.C. VanDyke	
1667	CAS	Ambystomatidae	Ambysloma	macrodactylum	Borner	Priest Lake	510.098	5383.208	15	July	1927	E.C. VanDyke	
1668	CAS	Ambystometidae	Ambystoma	macrodactylum	Bonner	Priest Lake	510,098	5383.208	19	June		E.C. VanDyke	
4917	CPS	Ambystomatidse	Ambysloma	macrodactylum	Borner	2 miles North of Blanchard			6	June	1946		
298	CAS	Ambystomatidae	Ambystoma	macrodactylum	Koctenai	Sand Point	532.944	5346,832	7	August		Gilbert & Jenkins	
299	CAS	Ambystomatidae	Ambystoma	macroductylum	Kootenai	Sand Point	532.944	5346.832	5	August	1921	Gilbert & Jenkins	
2067	IMNH	Ambystomatidae	Ambystoma	macrodactylum	Koctenai	7.1 miles from Beauty Bay on Att. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2068	IMNH	Ambystomatidae	Ambystoma	macrodectylum	Kootensi	7.1 miles from Beauty Bay on Ait 95 toward St. Maries	519.341	5273.405	25	April	1962		
2069	IMNH	Ambystomatidae	Ambystoma	macrodactykem	Kootenal	7.1 miles from Beauty Bay on Ait. 95 toward St. Maries	519.341	5273.405	25	April	1962		
2070	IMNH	Ambystomatidae	Ambystoma	macrodactylum	Kootenai	7.1 miles from Beauty Bay on Alt. 95 toward St. Maries	519,341	5273.405	25	April	1962		
2071	IMNH	Ambystomatidae	Ambysloma	macrodactylum	Kootenai	7.1 miles from Beauty Bay on Ait. 95 toward St. Maries		5273.405	25	April	1962		
2072	IMNH	Ambystomatidae	Ambystoma	macrodactylum	Koolenai	7.1 miles from Beauty Bay on Ait, 95 toward St. Meries	519.341	5273.405	25	Aprill	1962		
2073	IMNH	Ambystomatidae	Ambystoma	macrodactyfum	Kootensi	7.1 miles from Beauty Bay on All, 95 toward St. Maries	519.341	5273.405	25	April	1962		
2074	MNH	Ambystomatidae	Ambystoma	macrodactylum	Kootenai	7.1 miles from Beauty Bay on Alt. 96 toward St. Maries		_		April	1962		
3125	UCM	Ambystomatidae	Ambysloma	macrodactylum	Koctenai	2.5 mi SW Coeur d'Alene, 2200'		5277.962	6	August	1949		
3132	UCM	Amirystomatidae	Ambysloma	macrodactylum	Kootenai	9 mi E Coeur d'Alene	532.874	5281.464	17	June	1963		
4906	CPS	Ambystomatidae	Ambysioms	macrodactylum	Shoshone	Willow Cr. 1 mi. E of Multan				July		F. Blackman (?)	2 larvae
5643	CRCM	Ambystomatidae	Ambystoma	macrodactylum	Bonner ?	Lake Pend Oreille, Maiden Rock	536,796	5327.233	5	Aug.		G.F. Jones	picked; Don. by Gardiner Jones; #47-4
3346	UIM	Ambystomatidae	Ambystoma	bgnoum	Benewah	Lake Chatcolet	347.980	4741.247	26	Juna		D. Gayman	larvae purchased at tackle shop
3348	UIM	Ambystomatidae	Ambystoma	bgrinum	Benewah	Chatcolet Lake	304.299	4687.216	04	July		D. Gayman	tarva, Gayman #45; purchased at tackle shop
3311	UIM	Ambystomatidae	Ambystoma	bgrinum	Koctenai	Black Lake	525.605	5254,840	04	July	1966	D. Gayman	tarvae,Gayman #44 & #46
4621	KU	Ambystomatidae	Ambysloma	bgrinum	Shoshone	Pinehurst	558.273	5264.645					
4587	KU	Ascaphidae	Ascaphus	truei	Shoshone	Bird Creek, Tributary to St. Joe River	603,396	5232.201	23	July	1964		Status: F, C&S. Field Nos. DCC 1720 - DCC 1722, respectively.
4588	KU	Ascaphidae	Ascaphus	truei	Shoshone	Bird Creek, Tributary to St. Joe River	603,396	5232 201	23	July	1964		Status: F, SV 44 4, C&S. Field No. DCC 1723
3285	UtM	Buforvidae	Bufo	boreas	Benewah	Emerald Creek	551.373	5213,301	20	June	1954	P. Dumas	subadult

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
	LACM	Buforvidae	Bufo	boreas	Borner	SW end Priest Lake	507.996	5371.574	18	September	1969	D. Howel	track, 2.5 m from outlet Shoshone Bay cottage
3043	LACM	Bufonidae	Bufo	boreas	Borner	Preist Lake Golf Course, 2 m S Nordman	502.000	5382.468	8	July	1970	D. Howel	lot of 99 juveniles
3962	UIM	Bufonidae	Bufo	boreas	Borner	Hager Lake N of Coolin	502.204	5382.452	09	August	1958	F. Rabe, P. Gier, & P. Lindeman	larvae;caught in insect activity traps; exact number of specimens unknown
4678	USNM	Butonidae	Bufo	boress	Bonner	Clark Fork	561,236	5332.739				Not Verified	"Nature: wet. Presence not venified." Ferrur removed by Dr. Foote, Probably not Koolenai River.
4961	MVZ	Bufonidae	Bufo	boreas	Borner	5 MI W COCALALLA	520,155	5327.478	27	July	1932	ORR R.T.	
4962	MVZ	Buforidae	Bufo	bore as	Borner	5 MI W COCALALLA	520.155	5327.478	27	July	1932	ORR R.T.	
4963	MVZ	Buforidae	Bufo	boreas	Borner	5 MIW COCALALLA	520.155	5327.478	25	July	1932	ORR R.T.	
4964	MVZ	Bufonidae	Bufo	boreas	Borner	5 MI W COCALALLA	520,155	5327.478	26	July	1932	ORR R.T.	
4966	MVZ	Buforidae	Bufo	boreas	Borner	5 MI W COCALALLA	520.155	5327.478	27	July	1932	MILLER A.H.	
4969	MVZ	Bufonidae	Buto	boreas	Bonner	5 MI W COCALALLA	520.155	5327,478	25	July	1932	MILLER A.H.	
17	AMNH	Buforidae	Bufo	boreas	Kootenai	on Floodwood River, ca. 30 miles E of Clarkia. 3-4000*	582.109	5205.943					
328	CAS	Bufonidae	Bufo	boreas	Kootenai	Mt. Carllon			18	July	1894	J.D. Snyder	
329	CAS	Buforidae	Bufo	boreas	Koolenai	Blue Lake	523.773	5259 290	18	July	1894	J.D. Snyder	
330	CAS	Buforidae	Bufo	boreas	Kootenai	Skue Lake	523,773	5259 290	11	July	1894	J.D. Snyder	
331	CAS	Bufonidae	Bufo	boreas	Kootenai	Blue Lake	523.773	5259.290	14	August	1949	J.D. Snyder	
3713	UIM	Dicsimptidentidae	Dicamptodon	ensalus	Benewah	Mannering Creek, 12 mi. north of Harvard	525,066	5211.416	31	July	1969	R, Wallace	larvae,collected by shocker from Mannering Creek
3720	UIM	Dicampidontidae	Dicamptodon	ensalus	Benewah	Mannering Creek, 12 mi. N of Harvard	525.066	5211.416	06	August	1968	R. Watace	larva
3949	UIM	Dicampidoradae	Dicamptodon	ensalus	Benewah	Mannering Creek, 12 mi. N of Harvard	525.066	5211.416	01	April	1966	R. Wallace & Herp class	adult in teaching collection
3894	UIM	Dicamptidontidae	Dicamplodon	ensalus	Shoshone	Black Prince Creek, trib. St. Joe River	574,052	5239,664	04	September	1976	G. Mauser & R. Anderson	larvae,collected by shocker
3902	UIM	Dicamptiontdae	Dicamptodon	ensalus	Shoshone	State Creek, trib. St. Joe River	583.721	5244.827	24	August	1977	G, Mauser & R, Anderson	larvae,collected by shocker
3906	UIM	Dicamptidontidae	Dicamptodon	ensatus	Shoshone	Fly Creek, trib. St. Joe River	618,873	5216.773	19	August	1977	G. Mauser & R. Anderson	lervae;collected by shocker
3919	UIM	Dicamptiontidae	Dicamptodon	ensalus	Shoshone	M.F. Pine Creek, trib. Coeur d'Alene River			15	August	1969	P. Laumeyer	lerva
3952	UIM	Dicamptidontidae	Dicamptodon	ensatus	Shoshone	near mouth of Nugget Creek, trib. St. Joe River	609,097	5229.778	11	May	1966	G. Mauser & R. Anderson	larva collected by shocker
4823	CPS	Dicamptodornidae	Dicamptodon	alerrimus	Benewah	Mannering Cr.	524.767	5210.303	12	September	1939	JRS	CPS database record has "D. erisatus"
4824	CPS	Dicampledontidae	Dicamptodon	alernmus	Benewah	Mannering Cr.	524.767	5210.303	12	September	1939	JRS	CPS database record has "D. ensatus"
4825	CPS	Qicamptodora dae	Dicamptodon	alerninus	Shoshone	Rock Run Cr. in deep carryon W. of Monumental Peak.			2	August		WCB	CPS database record has "D. ensatus"
5247	MVZ	Dicamptodontidae	Dicamptodon	ensatus	Benewah	1 MIN OF COUNTY LINE BY U.S. ALTER 95	524,965	5210.584	14	August		WINOKURR M.	
3547	UIM	Hylidae	Hyta	regita	Benewah	Chatcolet Lake	708.793	4708.861	24	April		P. Dumas	h.te
3508	UM	Hylidae	Hyla	regula .	Bonner	none	532.944	5346.832	13	April	1956	Watz	collection missing

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

_			T	T	1		UTM	UTM	т		П		
RECORD	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	Easting (km)	Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
3609	UIM	Hyldse	Hyta	regilia	Bonner	none	532.944	5346 832	07	May	1968	J. Wartz	adult actual collection date is May 1958
3740	UIM	Hytdae	Hyla	regila	Borner	7 mi. NW of Priest River	500 208	5344,807	18	May	1964	Spurgeon	adult
3745	UIM	Hytedae	Hyta	regila	Bonner	7 mi. NW of Priest River	548 975	4777.367	05	April	1968	R. Lee	adut
3803	UIM	Hy4dae	Hyla	regilla	Borner	Priest River	506.849	5336.359	30	March	1969	Vedder	subadult
5123	MVZ	Hyldae	Hysa	regilla	BONNER	BANKS OF DISAPPEARING CR.; 7.5 MI [RD.] W U.S. ALT. 10 VIA LAKESHORE DR.;S OF SANDPOINT; CEDAR HEMLOCK FOREST			19	August	1962	TEBERG É K	
2279	IMNH	Hytidae	Pseudsons	regila	Bonner	Sagle	533.145	5338,827		August	1962		
3024	LACM	Hy <b>i</b> dae	Pseudsons	regila	Borner	SW end of Priest Lake (cabin area)	507.996	5371.574	10	September	1969	D. Howel	
3032	LACM	Hytotae	Pseudsons	regila	Bonner	Lamb Creek, ca. 7 miles S Nordman	504.613	5374.275	11	July	1970	D. Howel	
3033	LACM	Hyldae	Pseudacris	regăla	Bonner	Priest Lake	510,098	5383.208	8	July	1970	D. Howell	
3054	LACM	Hytdae	Pseudacns	regila	Bonner	1.5 miles W Nordman, ca 2600 ft. (T61N, R5W, Sec 22)	502.128	5385.492	14	August	1976	D. Howel	
4832	CPS	Hylidae	Pseudsons	regala	Borner	Priest Lake, Luby Bay.	505.730	5375.988	9	September	1939	JRS	CPS database record has "Hyla regila"
4833	CPS	Leiopelmatidae	Ascaphis	truel	Shoshone	ittle N Fork of Clearwater R. 5 mi. E of Hwy crossing from Avery to Clarkia	583.859	5215.427	2	August	1940	WCB	
2026	FMNH	Leiqpelmatidae	Ascaphus	truei	Benewah	East Fork Charley Creek, Near Emida	531.393	5217.638		700,00	HC .	2	
3714	UIM	Lecopelmatidae	Ascaphus	truel	Benewah	Mannering Creek, 12 miles N of Harvard	525.066	5211.416	02	June	1968	R. Wallace	Buba
5609	UF	Leiopelmatidae	Ascaphus	truei	Benewah	12.2 ml. S. of Harvard in Mannering Creek	525,069	5210,608	22	July	1967	Ron A. Nussbaum	Ron A. Nassbaum to Albert Schwartz to L.D. Ober(5139-40). Two tadpoles.
5120	MVZ	Leicpelmatidae	Ascaphus	truei	BONNER	HIGH ON S FORK WELLINGTON CR.; SWIMMING IN POOL AT BASE	558.932	5347,655	24	July	1964	TEBERG E K	
5121	MVZ	Leiopelmatidae	Ascaphus	truei	BONNER	CREVICE WEED ON RATTLE CR.; CA. 1 MI ABOVE LIGHTNING CR.; HEMLOCK	562,822	5352.888	24	July	1964	TEBERG E.K.	
5127	MVZ	Leiopelmstdae	Ascephus	truci	BONNER	HEMLOCK; ABOVE LIGHTNING CR.; IN CREVICE WET BY DRIPS	561.885	5363.093	23	July	1964	TEBERG E K	
3065	LACM	Leiopelmatdae	Ascaphus	truel	Kootenai	Cear Canyon E. of Cour d'Alene			3	September	1949	S. & D. Mulaik	10 tedpoles
3932	UIM	Leiopelmatidae	Ascaphus	truei	Kootenai	S.F. Cedar Creek, 0.5 mi. S of I- 50	532.098	5273.449	25	August	1985	P. Connoty	adul
5145	MVZ	Leiopeimatidae	Ascaphus	truei	Koctenai	BEAUTY CR.; AT INFLOW OF CARIBOU CR.	525,611	5271.833	29	June	1982	GOODD.A.	
2046	FMNH	Leiopeimatidae	Ascaphus	truei	Shoshone	Bird Trib. To St. Joe River -	603.977	5233.778	$\vdash$				
3011	LACM	Leiopelmatidae	Ascaphus	truei	Shoshone	Bird Cr., Trib. to St. Joe River	603.977	5233,778	23	July	1964	Metter	
3017	LACM	Leicpelmatidae	Ascaphus	truer	Shoshone	Bird Cr., Trib. to St. Joe River	603.977	5233.778	22	July	1964	Metter	
3918	UIM	Leicpelmätidae	Ascaphus	Iruei	Shoshone	Inbutary to St. Joe River, Prospector Creek, 9 miles E of Avery	604.204	5228.838	21	August	1978	J. Cooper	Buck
3953	UIM	Leiopelmatidae	Ascaphus	truer	Shoshone	near mouth of Nugget Creek, tributary of St. Joe River	609,097	5229.778	15	August	1969	G Mauser & R. Anderson	larvae_collected with electoshocker

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RECORD							UTM Easting	UTM Northing					
NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	(km)	(icm)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
1919	CPS	Leiopeimatidae	Ascaphus	truer	Shoshone	Jordan Divide			24	September	1954		
492U	CPS	Leiopelmatidae	Ascaphus	truet	Shoshone	Upper Shoshone Cr. near Jordan Saddle			26	September	1954		
4993	MVZ	Leiopolmatidae	Ascephus	truet	Shoshone	BIRD CR.; TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM MONTANA LINE			23	July		METTER D.	
4999	MVZ	Leiopelmatidae	Ascaphus	truci	Shoshone	BIRD CR., TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM				July		METTER D.	
5004	MVŽ	Leicpelmatidae	Ascaphus	truei	Shoshone	BIRD CR; TRIBUTARY OF ST. JOE CR; CA B MI FROM MONTANA LINE			23	July		METTER D.	
5005	MVZ	Leicpelmatidae	Ascaphus	truei	Shoshone	BIRD CR.; TRIBUTARY OF ST. JOE CR.; CA. 8 MI FROM MONTANA LINE			23	July	1963	METTER D.	
4579	USD	Piethodoraidae	Plethodon	idahoensis	Bonner	Walf Lodge Bay	522.733	5274.030	8	September	1953		USD collection states "P, verndykei idahoensis" should be Kootenai Co.
4580	USD	Piethodontidae	Plethodon	idahoensis	Bonner	Wof Lodge Bay	522 733	5274.030	9	June	1952		USD collection states "P. verndykel idahoensis" should be Koolenai Co.
4581	USD	Plethodomidae	Plethodon	idahoensis	Bonner	Wolf Lodge Bay	522 733	5274,030	8	September	1953		USD collection states "P. verndykei idahoensis" should be Koolenai Co.
4538	SRSU	Plethodontidae	Plethodon	idahoensis	Kootenai	Tatus slope on Lake Coeur d' alene	513,215	5254.557					SRSU collection states "P. vandykei idahoensis"
4553	UL	Piethodontidae	Plethodon	idahoensis	Kootenai	5mi, from junction of Alt. 95 & interstate 90 on Alt. 95 toward St. Maries			25	April	1962	Linder	UT collection states "P. vandykei"
4555	UE	Plethodontidae	Plethodon	idahoensis	Kootenai	5mi, from junction of Alt, 95 & interstate 90 on Alt, 95 toward St. Maries			25	April	1962	Linder	UT collection states "P, vandyker"
4622	KU	Piethodontidae	Plethodon	idahoensis	Kootenai	Lake Coeur d'Alene, Wolf Bay.	522.733	5274,030	22	August	1950		Field No. WED 49. KU computer recor has "P. vandyker".
4721	USNM	Plethodontidae	Plethodon	idahoensis	Kootenai	of.		5278.466	13	September	1939	Stater, James R.	"Nature: wet. Presence not verified." Collection #2710. Elev: 2160 ft.
4722	USNM	Plethodontidae	Ptethodon	idahoensis	Kootenai	Coeur d'Alene Lake, NE corner of.	519.395	5278.466	13	September	1939	Sipp, John W.	"Nature: wet. Presence not venfied." Collection #JWS 39:13c3. Elev. 2160 f Paratype of Piethodon idahoensis (Sinter & Slipp).
4723	USNM	Plethodontidae	Piethodon	idahoensis	Koctenai	Coeur d'Alene, near.	518.890	5280.620	14	April		Hiton, William A.	"Nature: wet, In collection," Accession #186667. Donated by Pomona College
4724	USNM	Plethodorédae	Piethodon	adahoensis	Kootenai	Coeur d'Alene, near.	518,890	5280.620	14	April	1945	Hilton, William A.	"Nature; wet. Exchanged." Accession #186667. Exchanged to MCZ, HArvard University, Inv. 1242, 7 August 1958.
4725	USNM	Piethodontidae	Plethodon	Idahoensis	Kootenai	Coeur d'Alene Lake, NE of, S shore of Wolf Lodge Bay, foot of N facing slope.	525.816	5273.737	26	August		Jacobs, Jeremy F.	"Nature: wet. In collection." Accession #282426. Col. # DN-102 & DN-101, respectively. Elev: 2160 ft. Donated by Jacobs, George.
4726	USNM	Piethodontidae	Plethodon	adahoensis	Koolenai	Coeur d'Avene Lake, along the S shore of Wolf lodge Bay, 0.5 mi SW of Jict U.S. Rite I-90 & Idaho Rite. 97, on Idaho Rite. 97.	526,101	5273.642	28	June	1981	Jacobs, George J.; Jacobs, Meija L.	"Nature: wet, In collection." Accession #362095. On NNW slope of hillside along road - tabs slope. Denated by Jacobs, George J.
4727	USNM	Plethodorádae	Piethodon	idahoensis	Kootenai	Coeur d'Alene Lake, NE end of, Wolf Lodge Bay.			26	August		Jacobs, Jeremy F.	"Nature wet, In collection." Accession # 362095. Call #DN 103.
5192	MVZ	Ptethodor@dae	Plethodon	idahoensis	Koolenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		LOWE C.H.*	
5201	MVZ	Plethodortidae	Plethodon	idahoensis	Koolenai	S SHORE WOLF LODGE BAY, COEUR D'ALENE LAKE				April		STEBBINSR.C.	
6203	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY, COEUR D'ALENE LAKE		5273.866	19	April		STEBBINSR C.	
5204	MVZ	Piethodontidae	Pleshodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY: COEUR D'ALENE LAKE	521.870	5273,866	19	April	1948	STEBBINSR.C.	

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
5207	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		STEBBINSR.C.	
5212	MVZ	Plethodonbdae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE	521.870	5273,866	19	April	1948	STEBBINSR.C.	
5213	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY: COEUR D'ALENE LAKE	521.870	5273.866	19	April	1948	STEBBINSR.C.	
5214	MVZ	Plethodontidae	Plethodon	idahoensis	Koolenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		STEBBINSR.C.	
5231	MVZ	Plethodoratidae	Plethodon	idahoensis	Koolenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		LOWE C.H.*	
5232	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		LOWE C.H.*	
5233	MVZ	Plethodontidas	Plethodon	idahonnsis		COEUR D'ALENE LAKE	515.745	5270.761	7	June		KEZER J.	
5234	MVZ	Plethodontidae	Piethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		LOWE C.H."	
	MVZ	Plethodontidae	Plethodon	idehoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		TOME CH.	
5236	MVZ	Plethodontidae	Piethodon	idahoensis	Kootenal	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273,866	19	April		LOWE C.H."	
5243		Plethodoritidae	Plethodon	idshoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE COEUR D'ALENE LAKE		5273.866	19	April		KEZER J.	
	MVZ	Piethodonbdae	Plethodon	idahoensis		COEUR D'ALENE LAKE	515.745		7	June		KEZER J.	
	MVZ	Plethodor@dan	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY:			19	April		STEBBINSR C.	
5246	MVZ	Plethodonbdae	Piethodon	idahoensis		COEUR D'ALENE LAKE		5275,036	15	August		WINDKUR R.M.	
5250	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	BEAUTY BAY, N END LAKE COEUR D'ALENE							
5251	MVZ	Plethodorbidae	Plethodon	idahoensis	Koctenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		STEBBINSR.C.	
5252	MVZ	Plethodontidae	Piethodon	xtahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		LOWE C.H."	
5253	MVZ	Plethodontidas	Piethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		LOWE C.H.*	
5254	MVZ	Plethodontidae	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		STEBBINSR.C.	
5255	MVZ	Plethodontidas	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		STEBBINSR.C.	
5256	MVZ	Plethodontidas	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE		5273.866	19	April		STEBBINSR.C.	
5257	MVZ	Piethodontidas	Plethodon	idahoensis	Kootenai	S SHORE WOLF LODGE BAY; COEUR D'ALENE LAKE			19	April		STEBBINSR.C.	
5586	UINMH	Plethodontidas	Plethodon	idehoensis	Kootenal	Coeur d'Alene	518.505		17	April		W. A. Hilton	
5587	UINMH	Plethodonbdae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Leke, south shore Wolf Bay Lodge, 2160 ft elev			13	May		James Kezer	intestines removed and examined for parasites
5588	UINMH	Plethodontidas	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Kezer	Intestries removed and examined for parasites
5589	UINMH	Plethodontidae	Plethodon	idahoensis	Koolenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft ellev	521,413	5274.214	13	May	1961	James Kezer	
5590	UINMH	Plethodontdae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev	521.413	5274.214	13	May	1961	James Kezer	

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RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)		DAY		YEAR		REMARKS
5591	UINMH	Plethodontdac	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ff elev				May	1961	James Kezer	
592	UINMH	Plethodontidae	Plethodon	adahoensis	Kootenai	south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May	1961		
593	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May	-	James Kezer	
594	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274,214		May		James Kezer	
595	UINMH	Plethodontidae	Plethodon	idahoensis	Koolenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezer	
59¢	UINMH	Plethodontidas	Pleibodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274 214		May		James Kezer	
597	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alène Lake, south shore Wolf Bay Lodge, 2160 fi elev		5274.214		May	1961	James Kezer	-
598	UINMH	Plethodoraidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezer	
599	UINMH	Plethodonbidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezer	
600	UINMH	Plethodontidae	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezer	
601	UINMH	Plethodontidae	Pielhodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezer	
602	UINMH	Plethodontidae	Psethodon	idahonnsis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ff elev		5274.214		May		James Kezer	
603	UINMH	Plethodor/tidac	Plethodon	idahoensis	Kootenai	NE corner Coeur d'Alene Lake, south shore Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezer	
604	UINMH	Plethodoradac	Plethodon	idahonnsis	Kootenai	NE comer Coeur d'Alene Lake, south shora Wolf Bay Lodge, 2160 ft elev		5274.214		May		James Kezér	
605	UINMH	Plethodontidaa	Plethodon	idahonnsis	Kootenai	NE corner Coeur d'Alene Lake, south shora Wolf Bay Lodge, 2160 ft elev		5274.214		Mey		Jemes Kezer	
5607	UF	Pletradontidae	Plethodon	idahoensis	Kootenal	Coeur d' Alene Lake, Wolf Lodge Bay.	525.071	5273,743	15	May	1955	C.Dumes	8080-1 cleared and stained; 8080-2 alcoholic. Topotypes, old #4RH122.
5661	CRCM	Plethodontidae	Plethodon	idahoensis	Kootenai	Lake Coeur d'Alena	515.745	5270.761	9	June	1952	Don Duniep	proided; Det. D.M. Cochran
5662	CRCM	Plethodonádae	Plethodon	idahoensis	Kootenai	Lake Coeur d'Alens		5270.761 5281.246	8	Sept	1953	Don Duniap none	Wolf Lodge Bay
3096	MCZ	Plethodorādas	Piethodon	vandydai	Kootenai	near Coeur			_		1000		adult T43N R3W NE1/4
3457	UIM	Plethodoradse	Plethodon	vandykei	Benewah	5.5 ml. SW of Emida		5212.370		September		P. Dumas	
3985	UIM	Plethodontidas	Plethodon	vandykei	Benewah	urnamed cr., tnb. St. Joe R., adjacent to Ahrs Guich	546,881	5241,365	30	September	1987	C. Groves	subadult T46N R1E S7
12	AMNH	Plethodontidae	Plethodon	vandykei	Kootenai	Coeur d'Alene Lake					1		

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RECORD	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
1893	CM	Piethodontidae	Plethodon	vandykef	Kootenai	0.5 Mi Sw Jct I-40 & Id-97, Along S Shore Wolf Lodge Bay*						G And M	GEORGE JACOBS COLLECTION, "LOCATION ON LAKE COEURD'ALENEON TALLUS SLOPE OF NW HILLSIDE.
1894	СМ	Plethodontidae	Plethodon	vandykei	Koolenai	0.5 Mi Sw Jet I-40 & id-97, Along S Shore Wolf Lodge Bay*						G And M	GEORGE JACOBS COLLECTION. *LOCATION ON LAKE COEURD'ALENEON TALLUS SLOPE OF NW HILLSIDE.
2035	FMNH	Plethodontidae	Piethodon	vandykei	Kootenai	Coeur D'alene	516.710	5281.246					
2079	IMNH	Plethodortidae	Piethodon	vandykei	Koolenai	Int 90	522.350	5272 680	25	April	1962		
	IMNH	Plethodomidaa	Piethodon	vandykel	Koolenai	Int. 90		5272 680		April	1962		
2081	IMNH	Plethodontidae	Plethodon	vandykei	Kootenai	5 miles from jct. of Alt. 95 and Int. 90	522.350	5272.680	25	April	1962		
2082 .	IMNET	Plethodontidae	Piethodon	vandykei	Koolenal	5 miles from jct, of Alt, 95 and Int, 90	522.350	5272.680		Apnil	1962		
2083	IMNH	Piethodonādae	Plethodon	vandykni	Kootenai	5 miles from jct. of Alt. 95 and Int. 90		5272 680	25	April	1962		
2084	IMNH	Plethodorádae	Piethodon	vandykei	Kootenai	5 miles from jct. of Alt. 95 and Int. 90	522.350	5272.680		Aprill	1962		
2085	IMNH	Plethodontidae	Plethodon	vandykoi	Kootenal	5 miles from jct. of Alt. 95 and Int. 90	522.350	5272 680	25	April	1962		
3006		Piethodontidae	Plethodon	vandykei	Kootenai	Cour d' Alena	516,710	5281.246		April		J. W. Knudson	
3046	LACM	Plethodonidae	Plethodon	vandykei	Kootenai	Lake Coeur d'Alene, So, shore beauty Bay	523,961	5273.087		April	1	D. R. Paulson, R. A. Nussbaum	
3128	UCM	Plethodontidae	Pleshodon	vandykei	Kootenai	Lake	525.430	5274.040	15	May	1955		
3130	UCM	Plethodontidae	Plethodon	vandykoi	Kootenai	Beauty Bay, Coeur d'Alene Lake			5	May	1955		
3229	UIM	Plethodon@dae	Plethodon	vandykai	Kootenai	Lake	525.430	5274.040		September		P. Dumes	collection missing, T49N, R3W
3239	UIM	Plethodon@dae	Plethodon	vandykai	Kootenai	Lake	525,430	5274.040		September		P. Dumas	collecting missing; T49N, R3W
3249	UIM	Plethodontidae	Plethodon	vandykel	Kootenai	d'Alene		5274.040		May		P. Dumas	aduRT49N R3W
3307	UIM	Plethodontidae	Plethodon	vandykel	Kootenai	Beauty Bay, Coeur d'Alene Lake		5273.075	15	September		P. Dumas	collection missing; T49N, R3W, S11
3629	UIM	Plethodorádas	Plethodon	vandykei	Kootenai	Beauty Bay, south shore, Lake Coeur d'Alene	524.279	5273.075	11	May	1968	R. Wellace	edult;T49N R3W S11
3709	UIM	Plethodorádas	Pleahodon	vandykei	Kootenal	Beauty Bay, Lake Coeur d'Alene				June		R. Walace	adult some juveniles; T49N, R3W, S11
3832	ÜIM	Plethodor/lidae	Piethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene		5273.075	02	October	1969	R.L. Wellace	Adult;3 Subadults; T49N, R3W, S11
3839	UIM .	Piethodon#daa	Piethodon	vandykei	Kootenai	Beauty Bay, 3.8 ml on Hwy 95A, Lake Coeur d'Alene			05	June		E. Brodie Jr. & J. Briggs	Subadult,1 Adult, R49N, R3W, S11
3846	UIM	Plethodontdae	Piethodon	vandykei	Kootenai	Beauty Bay, Lake Coeur d'Alene		5273.075	20	May		R.L. Walace	subadult,1 adult, T49N, R3W, S11
3860	UIM	Plethodontidae	Piethodon	vandykei	Kootenal	Beauty Bay, Lake Coeur d'Alene (damp area near stream)			17	September		R.L. Wallace	Adult; 7 Subadult; T49N, R3W, S11
3884	UIM	Plethodorádse	Piethodon	vandykel	Kootenai	Beauty Bay, Lake Coeur d'Alene	524.279	5273.075	17	September	1978	R.L. Watace	adult, 10 Subadult, T49N, R3W, S11
3920	UIM	Plethodontdae	Piethodon	vandykei	Kootenai	Beauty Creek, north Coeur d'Alene Lake (substrate frozen at 2° depth)	524,279	5273.075	12	April		R.Wallace & J. Lynch	acut; 2 subacuts; T49N, R2W, S18-19
3921	UIM	Ptethodornidae	Piethodon	vandykei	Kootenai	Wolf Lodge Bay near type locality. Coeur d'Alene Lake			25	June	1978	R. Wallace & J Lynch	adult,3 subadult; T49N, R3W, S1

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	UIM	Piethodontidae	Pleshodon	vandykei	Kootenai	Unnamed Creek, north Beauty Bay Coeur d'Alene Lake	523.665	5272.096		May		R. Wallace & J. Lynch	adult;T49N R3W S11
923	UIM	Piethodontidae	Plethodon	vandykei	Kootenai	Along road by Beauty Bay (black morph site)	524.279	5273.075	23	October	1977	R. Wallace & J. Lynch	adult;4 subadult; T49N R3W S11
3924	UIM	Plethodontidae .	Plethodon	vandykei	Kootenai	Beauty Creek	525,905	5271.374	17	September	1985	R.L. Wallace	adult 1 subadult; T49N, R3W, S11
3963	UIM	Plethodontidae	Piethodon	vandykei	Kootenai	Unnamed Cr. entering Beauty Bay, Coour d'Alene Lake	523.665	5272.096	10	May	1986	J. Howard	subadult,electrophoretic specs.; vouche spec; T49N R3W S11
3986	UIM	Plethodontidae	Pleshodon	vandykei	Kootenai	NF Coeur d'Alene River, 0.6 mi downstream of mouth of LaVerne Cr.	546.879	5282.756	05	June	1987	C. Groves	adult 50N, R1E, S7
1993	UIM	Plethodontidae	Plethodon	vandykei	Kootenai	Cabouse Cr., Kootenai R. Drge.	565,532	5387.758	28	September	1989	C. Groves	AdulT61N R3E S8
3995	UIM .	Plethodontidae	Plethodon	vandykei .	Kootenai	Skitwish Cr., trib. Marie Cr., Wolf Lodge Cr., C of Alene Lake	535,987	5280.913	20	April		C. Groves	juvenieT50N R2W S24
3996	UIM	Plethodontidae	Plethodon	vandyke!	Kootenal	Coeur d' Alene Lake	535.242		10	May		C. Groves	juvenileT50N R 1W S20
3913	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Siwash Creek, 3 miles east of Avery	595,066	5231.517	12	April		R.L. Wallace	adult T45N R6E S19
3914	UIM	Plethodontidae	Piethodon	vandykei	Shoshone	Along St. Joe River, 12 miles east of Avery	603.400	5232 225	12	April		R.L. Wallace	adult, S. side of river; T45N R7E
3955	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Big Creek, 3 miles above Big Creek campground, at end of road, trib. St. Joe River			17	September	1985	R L. Wallace	Subadult 6 Subadults, 2 Adults; site originally found by Al Wilson; T46N, R3E, S7
3956	UIM	Plethodontidae	Plethodon	vandykel	Shoshone	Along St Joe River road, about 9 miles above Calder	555.061	5238.550	19	June	1985	R.L. Wallace	Subadult,3 Adults, 5 Subadults; T45N, R3E
3957	UM	Plethodonādae	Plethodon	vandykni	Shoshone	Swash Creek, trib St Joe River	592 467	5228.635	16	October		R.L. Wallace	Subadult;1 Adult, 4 Subadult; T45N, R66 S19
3958	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Along St Joe River Rd , about 12.2 mi above Calder	549.988	5241.476	21	March	1986	R.L. Wallace	Subadult,2 Adult, 4 Subadult; T45N, R46
3977	UIM	Plethodorādas	Plethodon	vandykei	Shoshone	NF St. Joe River, 0.4 mi above mouth (east side of old rd)	591.303		29	September		C. Groves	adult2 adults, 1 juvenile; T45N R5E S11
3978	UIM	Plethodontidae	Piethodon	vandykei	Shoshone	mouth (east side of old rd)	592.413		29	September		C. Groves	adult2 adults, 1 juvenile, T45N R5E S12
3979	UIM	Plethodontidae	Piethodon	vandykei	Shoshone	St. Joe River Rd., 0.8 mi downstream of mouth of Malin Cr.	608.524	5230.161	29	September		C. Groves	adult4 adults, 1 juvenile; T45N R7E S20
3980	UIM	Plethodorstdae	Piethodon	vandykei	Shoshone	St. Joe River Rd., 1.5 mi abova Shady Cr.			29	September	1987	C. Groves	adultsfurthest upstream site along St. Joe River; T44N R8E S9N 1/2
3981	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Fishhook Cr., 4.5 mi above mouth, trib. St. Joe River	587.371	5226.155	28	September	1987	C. Groves	adut1 edut, 4 juveniles; T44N R5E S4NW1/4
3982	UIM	Plethodontidae	Plethodon	vandykei	Shoshone	Marble Cr., 1.3 mi above mouth of Boulder Cr., (St. Joe River Drne)	573.109	5229.746	27	September	1987	C. Groves	subeduli T45N R3E S25NW 1/4
3983 .	UIM	Plethodontidas	Plethodon	vandykei	Shoshone	St. Joe River Rd., 4.2 mi above mouth of Marble Cr.	569.030	5235.407	30	September	1987	C. Groves	adultsseep, s. side of road; T45N R4E S16
3984	UIM	Plethodor#dae	Plethodon	vandykei	Shoshone	St Joe River Rd., 2.3 mi above Avery Ranger Station	587.167	5233.218	30	September	1987	C. Groves	adutseep, s side of rd.; T45N R5E S7
3987	UIM	Plethodonadae	Plethodon	vandykei	Shoshone	Coeur d'Alene River, 2.6 mi above Kit Price Cempground			15	May		C. Groves	adultsT51N, R3E, S23
3988	UIM	Plethodontidae	Plethodon	vandykci	Shoshone	Coeur d'Alene River, 0.3 mi about mouth Cardinal Cr.			03	October		C. Groves	adultone juversile; T52N, R3E, S28
3350	UIM	Ranidae	Rana	calesbeiana	Kootensi	Black Lake		5254 840	21	May		D. Gayman	adult
3351	UIM	Ranidaa	Rane	calesbeiana	Kootenal	Fernan Lake			01		1967		adult .
4826	CPS	Raridae	Rans	catesbevana	Kootenai	Harnson	515.088	5255.563	13	September	1939		Tadpoles
4912	CPS	Renidae	Rana	catesbelana	Kootenai	2 mi. N of Harrison	515.143	5258.745	13	September	1939	JRS	

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4690	USNM	Ranidae	Rana	calestrians	Kootenai	Coeur d'Alene Lake, NE end of, Wolf Ledge Bay.	522 733	5274.030		August		Jacobs, Douglas B.	"Nature wet. In collection." Collection #V 134. Donated by Jacobs, George J Accession #362095.
3608	UIM	Ranidae	Rana	pipiens	Borner	none .	532.944	5346.832	18	May	1964	J. Waitz	adult1 subadult, actual collection date is May 1958
3908	UIM	Ranidae	Rana	pipiens	Borner	Cocolalia		5327.941	17	June		J. Keating	larvae
4691	USNM	Ranidae	Rana	pipiens	Bonner	Sandpoint	533,303	5347.792	20	September	1892	Not Verified	"Nature: wet. Presence not verified." Accession #027718
4694	USNM	Ranidae	Rana	ppiens	Bonner	Hope, near Lake Pend Oreite	551.477	5343.927	1	July		Not Verified	"Nature; wet, Presence not verified." Donated by Bureau of Fisheries.
4695	USNM	Ranidae	Rana	pipiens	Bonner	Lake Pend d'Oreille, Baird Island			15	July		Not Verified	"Nature: wet. Presence not venfied." Donated by Bureau of Fisheries.
4907	CPS	Ranidao	Rana ,	Piprens	Bonner	5 mi NE of Sand Point		5351.538		September	1939		CPS database record has "R p pipions."
5647	CRCM	Ranidae	Rana	pipiens	Bonner	Clark Fork		5332.739	30	July	1947	G.F. Jones	picided; Don. by Gardiner Jones; #47-45
41	AMNH	Ranidas	Rana	pretiosa	Benewah	Calder Ranger Station; +/- 3000'							
3678	UIM	Ranidae	Rana	pretiosa	Benewah	Emerald Creek		5196.244	10	August		E. Howard	adult
3711	UIM	Ranidae	Rana	pretiosa	Benewah	Mannering Creek, 12 miles N of Harvard			20	April		R. Walace	hite
4820	MSUM	Ranidaa	Rana	pretiosa	Benewah	5 mi, SW of Emids.		5212.002	30	April		Fitzner, R. E.	
4908	CPS	Ranidaa	Rane	pretiosa	Benewah	Hangman near Tensed		5222 449	12	September	1939		CPS database record has "R p pretiosa."
5038	MVZ	Ranidae	Rane	pretiosa	Benewah	1 MIN OF CO. LINE ON U.S. ALT. 95	509.723	5209.217	14	August		WINOKUR R.M.	
3019	LACM	Ranidae	Rano	pretiosa	Bonner	2 miles E Nordman (W of Priest Lake)		5385 902	17	September		D. Howell	
3020	LACM	Ranidaa	Rana	pretosa	Bonner	Priest River at Dickensheet Campground just S of Priest	507.470	5366.191	10	September		D. Howel	
3021	LACM	Ranidae	Rana	pretiosa	Bonner	Kalispet Creek, 3 miles S Nordman, W Priest Lake	502.378	5382.911		September		D. Howell	
3022	LACM	Ranidae	Rena	pretiosa	Borner	Reeder Creek, 2 miles W Nordman, W Priest Lake	500,902	5386.317	16	September	1969		
3023	LACM	Ranidaa	Rana	pretiosa	Bonner	Chase Laka (S. of Priest Lake)			10	September	1969		
3044	LACM	Ranidse	Rans	pretiosa	Bonner	Reeder Creek, 2 miles W Nordmen, 2700'	500.902	5386,317	8	August		D. Howell	
3055	LACM	Ranidae	Rana	pretiosa	Bonner	2.5 miles W Nordman	498.357	5385.956	26	August		D. Howell	
3262	UIM	Ranidae	Rana	pretiosa	Bonner	Mirror Laka	537.199	5334.462	19	August		J. Weitz	Buba
3264	UIM	Ranidae	Rane	pretiosa	Bonner	Mirror Laka	537.199	5334.462	19	August	1955		adult
3516	UIM	Ranidae	Rene	pretiosa	Bonner	Mirror Laka	537.199	5334.462	28	June	1955	J. Waitz	adultactual collection date is May 1958
3518	UIM	Ranidae	Rene	pretiosa	Bonner	2 miles E of Coolin, Lamb Creek		5369.520	04	May		P. Durnas	adult
3584	UIM	Ranidae	Rana	pretiosa	Bonner	Mirror Lake	537.199	5334.462	23	February		P. Dumas	collection missing
3727	UIM .	Ranidae	Rana	pretiosa	Bonner	7 miles NW of Priest River			06	April		R. Lee	
3728	UIM	Ranidae	Rana	pretiosa	Bonner	Priest River	506.849	5336,359	22	August	1956	L. Brown	adulti subadult
3732	UIM	Ranidae ·	Rana	pretiosa	Bonner	2 miles E of Priest River	509.678	5336.230	22	April	1956	B. Barns	adut

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD NUMBER	MUSEUM	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	UTM Easting (km)	Northing (km)	DAY	MONTH	YEAR	COLLECTOR	REMARKS
	UIM	Raridae	Rana	pretiosa	Bonner	7 miles NW of Priest River	500,208	5344.807	23	August	1958	Spurgeon	th.ce
3746	UIM	Ranidae	Rana	pretiosa	Bonner	3 miles NW of Priest River	503.479	5340.140	28	October	1953	B. Vedder .	adult
3768	UIM	Raridae	Rana	pretiosa	Bonner	Priest River	506,849	5336,359	28	June	1955	B. Vedder	subadult
3960	UIM	Randae	Rana	pretosa	Bonner	Kanksu Marsh S of Coolin	511.777	5368.686	20	April	1990	P. Lindeman	adult
3961	UIM	Raridae	Rana	pretiosa	Bonner	Kanksu Marsh S of Cooks	511.777	5368.686	20	April	1990	F. Rabe, P. Gier, & P. Lindeman	larvaecaught in insect activity traps
4247	UMMZ	Raridae	Rana	pretosa	Bonner	Preist Lake Cavanaugh Bay	512 293	5374.977	24	August	1950	R PORTERAND A SCHWARTZ	
4702	USNM	Ranidae	Rana	pretiosa	Bonner	Sandpoint	533.303	5347.792	20	September	1892	Not Verified	"Nature: wet. Presence not ventied." Accession #027718 for all specimens.
4703	USNM	Ranidae	Rans	pretiosa	Bonner	Sandpoint	533,303	5347.792	7	August	1893	Not Ventied	"Nature: wet. Presence not venified." Accession #028136 for all specimens.
4710	USNM	Raridae	Rana	pretosa	Borner	Hope, near, Lake Pend d'Oreile.	551.477	5343.927	13	July	1896	Not Verified	"Nature: wet. Presence not verified." Donated by Bureau of Fisheries.
4574	CPS	Raridae	Rana	pretiosa	Bonner	Luby Bay at Priest Lake	505.730	5375.988	9	Sepetember	1939	JRS	CPS database record has "R p pretosa."
4974	MVZ	Raridae	Rana	pretosa	Bonner	5 MI W COCOLALLA	520.155	5327.478	26	July	1932	MILLER A H.	
300	CAS	Raridae	Rana	pretiosa	Kootenai	Sand Point	532.944	5346,832	21	August	1893	Gilbert & Jenkins	
301	CAS	Ranidae ·	Rana	pretiosa	Kootensi	Coeur D'Alene Lake			21	August	1893	Gibert & Jenkins	Exc. to CAS
302	CAS	Ranidae	Rana	pretiosa	Kootenai	Coeur D'Alene Lake			24	June	1894	Gibert & Jenkins	Exc. to CAS
332	CAS	Ranidae	Rana	pretioza	Koolenal	Mt, Cartion			4	July	1894	J.D. Snyder	
333	CAS	Ranidae	Rana	pretiosa	Kootenai	Mt. Carton			2	July	1894	J.D. Snyder	
334	CAS	Ranidae	Rona	pretiosa	Koctenai	Mt. Carllon			26	July	1894	J.D. Snyder	
481	CAS	Raridse	Rana	pretiosa	Kootenai	Coeur d'Alene Lake			Г			Gilbert & Jenkins	Lost in the earthquake and fire of 1906.
482	CAS	Ranidae	Rana	pretiosa	Kootenai	Coeur d'Alene Laka			14	August	1949	Gilbert & Jerkins	Lost in the earthquake and fire of 1906.
3724	UIM	Ranidaa	Rana	pretiosa	Kootenai	Fernan Leike	520.708	5280.143	10	August	1955	anonymous	adult .
4704	USNM	Raridae	Rana	pretiosa	Kootenai	Coeur d'Alene Lake	515.745	5270.761	21	August	1893	Not Verified	"Nature; wet. Presence not ventied." Accession #028136 for both specimens
3185	UIM	Ranidae	Rana	pretiosa	Shoshone	10 miles SE of Avery	603.623	5218.885	23	August	1958	J. Waitz	edult .
3266	UIM	Ranidae	Rena	pretiosa	Shoshone	Dismal Lake, 10 miles SE of Avery	603,623	5218.885	26	May	1962	J. Waltz	adult
3422	UIM	Ranidae	Rana	pretiosa	Shoshone	Dismal Lake, 10 mi. SE of Avery	482,875	4916.127	80	Apni	1966	P. Dumas	collection missing
3574	UM	Ranidae	Rana	pretiosa	Shoshone	23 miles E of St. Maries, St. Joe River	557,527	5235.661	04	June		P. Dumas	adult
3589	UIM	Ranidae	Rana	pretiosa	Shoshone	10 miles SE of Avery, Dismell Lake	501.308	5318,107	28	April	1962	P. Dumas	adult
3626	UIM	Ranidae	Rana	pretiosa	Shoshone	10 miles SE of Avery, Dismail Lake	603.623	5218.885	07	May		P. Dumas	adult
3690	UIM	Ranidae	Rana	pretiosa	Shoshone	23 mi E of St Maries, along St. Joe River	502 583	5196 244	28	October		Gerrett	collection missing
3805	UIM	Ranidae	Rana	presiosa	Shoshone	23 miles E of St. Maries	557,527	5235.661	04	May	1955	N. Garrett	subadult

Table 2a. Amphibian museum records for Benewah, Bonner, Kootenai, and Shoshone counties, Idaho (Northern Intermountain Herpetological Database).

RECORD		FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	Easting (km)		DAY	MONTH	YEAR	COLLECTOR	REMARKS
		Ranidae	Rana	preliosa	Shoshone	Thompson Pass			5	August		Bailey, V.	"Nature: wet, Presence not venified." Accession #052687. Year of Collection not given; collector questionable. Donated by Biological Survey.
4976	MVZ	Raridae	Rana	pretiosa	Shoshone	GLIDOEN LAKES			24	July	1932	MILLER A.H.	
1977	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	MILLER A.H.	
4982	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	ORRR.T.	
4987	MVZ	Ranidae	Rana	pretiosa	Shoshone	GLIODEN LAKES			23	July	1932	ORR'R.T.	
4988	MVZ	Ranidae	Rona	pretiosa	Shoshone	GLIDDEN LAKES			24	July	1932	ORR R.T.	
5646	CRCM	Ranidae	Rana	pretiosa	Bonner	Warren Isl, Lake Pend Oreille	550,001	5342,656	21	July .	1947	G.F. Jones	pickled; Don. by Gardiner Jones, #47-46
3028	LACM	Ranidae	Rana	sylvatica	Bonner	Reader Creek, 2.5 miles W Nordman	500.902	5386.317	6	July	1970	D. Howel	
3031	LACM	Ranidae	Rana	sylvatica	Bonner	Priest Lake	510.098	5383,208	8	July	1970	D. Howel	

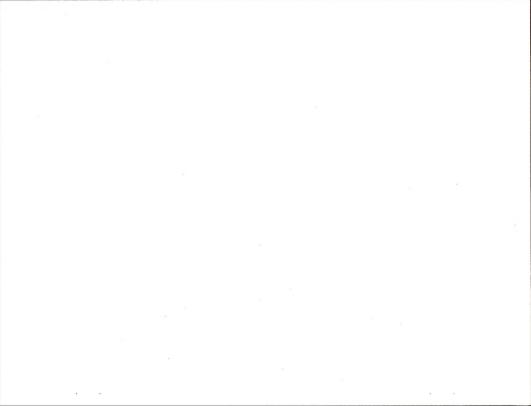


Table 2b. Reptile museum records for Benewah, Bonner, Kootenai, and Shoshone Counties, Idaho (Northern Intermountain Herpetological Database).

							T	UTM	UTM	_	T	_	r	
RECORD		CATALOG						Easting	Northir		1			
NUMBER	MUSEUM	NUMBER	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	(km)	g (km)			YEAR		REMARKS
3050	LACM	121536	Anguides	Elgaria	coerulea	Bonner	Upper priest lake, NE shore	508.022	5404,54	919	May	1966	D.R. Paulson	
3699	UIM	355	Anguidae	Gerrhonolus	coeruleus	Koolenai	1 mile W of Carlin Bay, Lake Coeur d'Alena	517.136	4903.79	4 24	July	1983	D. Johnson	adult
5644	CRCM	48	Anguidae	Germonotus	coervieus	Bonner	Warren Ist, Lake Pend Orelle	550.001	5342.65	6 21	July	1947	G.F. Jones	pickled, Don. by Gardiner Jones; #47-19
5645	CRCM	48	Anguidae	Gerrhonotus	coeruleus	Borner	Warren Isl, Lake Pend Orelle	550.001	5342.65	6 21	July	1947	G.F. Jones	pickled: Don. by Gardiner Jones, #47-28
2513	IMNH	713	Boidae	Charina	bottae	Benewah	3 miles from Beauty Bay on Alt. 95 toward St. Maries	519.880	5273.06	1 25	April	1962		
3286	UIM	100	Boides	Charina	bottas	Benewah	Heyburn Park Campground-Benewah Lake	523.720	5243.91	1 18	July	1969	Mauser	adult
3674	UIM	341	Boidae	Cherina	bottae	Benewah	on S side of Chatcolet Lake		5244.16		June	1966	D. Gayman	juvenile;
3440	UIM	201	Boidee	Charina	bottan	Bonner	near Priest River		5336.35		July		W. Dailey	ackat;
4769	USNM	40121	Boidea	Charina	bottae	Bonner	Hope, on Pend d'Oreile Lake.	551,477			June		Alexander, Cox (2 individuals?)	"Nature: wet. in collection." Coll. #897. Donated by Bureau of Fisheries.
4861	CPS	6359	Boidea	Charina	bottes		East Sand Point		5346.61		June	1955		CPS database record has "C. bottae."
4862	CPS	6360	Boidse	Charina	bottae	Bonner	Elmiria		5369,55		June	1955		CPS database record has "C. bottae."
5319	MVZ	15287	Boldae	Charina	bottae	Bonner	5 MI W COCOLALIA	520.155	5327.47	8 1	August	1932	DRR R.T.	
461	CAS	2955	Boidse	Charina	bottae	Kootenai	Hoodoo Valley,	1		14	August	1895	J.D. Snyder	41 scale rows. See 4188 (tag lost; new # given). Orig # 2955-now # 4188.
462	CAS	2956	Boidee	Charina	bottae	Kootenai	Blue Lake.		5259.29		July	1895	J.D. Snyder	41 scale rows.
4821	MSUM	13419	Boldse	Cherina	bottas	Kootenai	Couer d'Alene	518,505	5281.71				Stephenson, S.	
3427	UIM	194	Boidae	Charina	bottae	Shoshone	Buzzard Roost L.D.			04	August		C. Engler	adult;
2509	IMNH	709	Colubridae	Coluber	constrictor	Benewah	3 miles from Beauty Bay; all, 95 toward St. Maries		5273.06		April	1962		
3478	UIM	226	Colubridas	Coluber	constrictor	Kootenai	Post Falls		5284.64		Мау		anonymous	adult actual collection date is May 1964
4772		44262	Colubridae	Coluber	constrictor	Kootenai	Coeur d'Alene .		5281,710	1	May		Not Verified	"Nature: wet. Presence not verified." Accession #52687. Donated by
3447	UIM	205	Colubridae	Pituophis	melanoleucus	Kootenai	Post Falls		5284,64		Мау		anonymous	adult;actual collection date is May 1964
3531	UIM	256	Colubridae		ologans	Benewah	Emerald Creek		5213.30		June		P. Dumas	j.veršie;
3056	LACM	125291	Colubridae		elegans	Bonner	1.5 miles W Nordman, ca. 2600'		5385.49	1	August		D. Howell	
3108	MCZ	43101	Colubridae	Thamnophis	elegans	Borner	Cooln	511.341	5369.61	1			none	
3525	UIM	253	Colubridas	Thamnophis	eiogans	Bonner	Priest River	506,849	5336.355	30	March	1964	D. Malm	adult;
3528	UIM	255	Colubridas	Thamnophis	elegans	Bonner	3 miles SE of Priest River	501.395	5181.328	8 23	March	1964	D. Malm	edut;
4249	UMMZ	102503	Colubridae	Thamnophis	elegaris	Bonner	3 Mi N Of Clark Fork	1	5338,267		August		WE DUELLMAN	
4250	UMMZ	102504	Colubridae	Thamnophis		Bonner	3 Mi N Of Clark Fork	561.104			August		WE DUELLMAN	YOUNG BORN TO 102503 SHORTLY AFTERCAPTURE
4787	USNM	21468	Colubridae	Thamnophis		Bonner	Sendpoint		5347.792	l	August		Not Verified	"Nature: wet. Presence not ventiled." Accession #28136.
4793	USNM	40090	Colubridae	Thamnophis		Bonner	Gamans Lake, near Lake Pend d'Oreille,		5341.187		July		Not Verified	"Nature: wet. Presence not ventled." Donated by Bureau of Fisheries.
4794	USNM	40106	Colubridae	Thamnophis	ciogans	Bonner	Hope, Lake Pend d'Oreille.	551.477	5343.927	29	June	1896	Not Verified	"Nature: wet. Presence not venfied." Donated by Bureau of Fisheries.

Table 2b. Reptile museum records for Benewah, Bonner, Kootenai, and Shoshone Counties, Idaho (Northern Intermountain Herpetological Database).

RECORD		CATALOG						UTM Easting	UTM Northin					
NUMBER	MUSEUM	NUMBER	FAMILY	GENUS	SPECIES	COUNTY	LOCALITY	(km)	g (km)	DAY		YEAR		REMARKS
4795	USNM	40110	Colubridae	Themnophis	elegans	Bonner	Hope, near, Gamins Lake, near Lake Pend d'Oreille.	546.144	5341.187	6	July	1896	Not Verified	"Nature: wet. Presence not venfied." Donated by Bureau of Fisheries.
4879	CPS	10090	Colubridae	Thamnophis	elegans	Bonner	Elmira Shoshone Creek			18	June	1955	Leo Black	CPS database record has "T e vagrans
5264	MVZ	181884	Colubridae	Themnophis	eiegans	Borner	UNIVERSITY OF IDAHO WILDLIFE & RANGE SCIENCE FEILD STA; CA 15 M E CLARK FORK	563.931	5332.552	30	June	1982	G000 D.A.	
5265	MVZ	181886	Colubridae	Themnophis	elegans	Bonner	CA. 1 MI E CLARK FORK	562 992	5332,911	30	June	1982	G000 D.A.	
5266	MVZ	181885	Colubridae	Thamnophis	elegans	Bonner	UNIVERSITY OF IDAHO WILCLIFE & RANGE SCIENCE FEILD STA : CA 1.5 M E CLARK FORK	563.931	5332.552	30	Juna	1982	GOOD D.A.	
375	CAS	2667	Colubridaa	Thamnophis	ciogans	Kootenai	Blue Lake,	523.773	5259.290	14	July	1894	J.O. Snyder	
2514	IMNH	714	Colubridas	Thamnophis	elegans	Kootenai	.6 miles up Beauty Creek	525 237	5272.277	25	April	1962		
3523	UM.	252	Colubridas	Thamnophis	elegans	Koctenal	Fernan Lake	520.708	5280,143	03	June	1964	anon.	adult;
3527	UIM	254	Colubridae	Thamnophis	elegans	Koolenai	Post Fals	504.128	5284.641	01	May	1964	anon.	adult, actual collection date is May 1964
4807	USNM	206041	Colubridae	Thamnophis	elegans	Kootenal	Coeur d'Alene, 5 mi S of US-10 on Wolf Lodge Creek Road	528.984	5277.542	15	July	1977	Busack, Stephen D.; Visnaw, Jeanne A.	"Nature: wet. Presence not in collection." Accession #328486
5274	MVZ	181895	Colubridae	Themnophis	elegans	Kootenai	4 MI W & 0.5 MI S SPADE'S MTN.	538.797	5292 297	29	June	1982	GOODOA	
5275	MVZ	181894	Colubridae	Thamnophis	elegans	Kootenal	4 MI W & 0,5 MI S SPADE'S MTN.	538.797	5292 297	29	June	1982	GOODO A.	
5276	MVZ	181896	Colubridaa	Thamnophis	elegans	Kootenai	4 MI W & 0.5 MI S SPADE'S MTN.	538,797	5292,297	29	June	1982	GOODDA	
5278	MVZ	181897	Colubridae	Thermophis	elogans	Koolenai	HAYDEN LAKE; S SHARE	521.410	5288.490	29	June	1982	GOOD D.A.	
5279	MVZ	181893	Colubridae	Thamnophis	elegans	Kootensi	4 MI W & 0.5 MI S SPACE'S MTN.	538.797	5292.297	29	June	1982	GOODD A.	
5280	MVZ	181889	Colubridae	Thamnophis	elegans	Kootenai	4 MI W & 0.5 MI S SPACE'S MTN.	538,797	5292 297	29	June	1982	GOCDD.A.	
5281	MVZ	181888	Colubridae	Thamnophis	elegans	Kootenal	BEAUTY CR.; AT INFLOW INTO COEUR D'ALENE LAKE	524.211	5273.057	27	June	1982	GOCOD.A.	
5282	MVZ	181890	Colubridaa	Thamnophis	elegans	Kootenai	4 M I W & 0.5 MI S SPADES MTN.	538.797	5292.291	29	June	1982	GOODDA	
5283	MVZ	181892	Colubridae	Thamnophis	elegans	Kootenai	4 MI W & 0.5 MI S SPADE'S MTN.	538.797	5292.297	29	June	1982	GOODD A.	
5284	MVZ	181891	Colubridae	Thamnophis	elegans	Kootenal	4 MIW & 0.5 MIS SPADE'S MTN.	538,797	5292.297	29	June	1982	GOODOA	
340	CAS	1658	Colubridae	Themnophis	ciogans	Shoshona	Wardner.	566.214	5264.632	18	August	1893	Dr. C.H. Gilbert	
3120	ου	28907	Colubridae	Thamnophis	elegans	Shoshona	Clarkia	556,433	5206.615	T	June	1957		
3121	ου	28908	Colubridae	Thamnophis	elegens	Shoshone	Clarida	556.433	5206.615	14	June	1957		
3122	OU .	28909	Colubridas	Thamnophis	elegans	Shoshone	Clerkia	556,433	5206.615		June	1957		
3535	UIM	258	Colubridas	Thamnophis	elegans	Shoshone	Buzzard Roost L.O.			04	August	1938	Englei	adult;
4881	CPS	10092	Colubridate	Thamnophis	elegans	Shoshone	Near Cathederal Peak	564.059	5310.028	24	September	1954	MLJ	CPS database record has cat. # 1092 "T elegans."
42	AMNH	129588	Colubridae	Themnophis	zirlalis	Benewah	Calder Ranger Station; +/- 3000'	561,506	5235.861	Г				
4844	CPS	4079	Colubridas	Themnophis	Sirtahs	Benewah	7 mi. NW of St. Maries	523.940	5248.204	13	September	1939	JRS	CPS database record has "T. s panetalis"
3025	LACM	54042	Colubridae	Themnophis	sirtaks	Borner	2 miles Will of Nordman (W of Priest lake)	500.868	5386.344	16	September	1966	O Howell	
3109	MCZ	43102	Colubridae	Thamnophis	sirtalis	Borner	Cooln	511.341	5369.611				none	

Table 2b. Reptile museum records for Benewah, Bonner, Kootenai, and Shoshone Counties, Idaho (Northern Intermountain Herpetological Database).

RECORD		CATALOG						UTM Easting		L				REMARKS
NUMBER 1585	MUSEUM	NUMBER 283	FAMILY Colubridae	GENUS Thamnophis	SPECIES Sylais	COUNTY	LOCALITY  2 miles E of Priest River	(km) 509.678	g (km) 5336.23	DAY	MONTH	YEAR 1964	Burns	adult.
3585	UM	283	Coubridae			DOLAND								
3588	UM	285	Colubridae	Thamnophis	swłaks	Bonner	Blanchard	603.623	5218.88	5 03	July	1960	anonymous	juversle;
4842	CPS	4076	Colubridae	Thamnophis	sidalis	Bonner	Coolin		5369.43		August	1939		CPS database record has "T. s. panietalis"
4843	CPS	4078	Colubridae	Thamnophis		Borner	5 mr. NE. of Sand Point.		5351,53	l	September	1939		CPS database record has "T, s, parietels"
361	CAS	2649	Colubridae	Thamnophis	sirtalis	Kootenai	Blue Lake.		5259.29		July	1894		
362	CAS	2650	Colubridae	Thamnophis	sitalis	Kootenai	Skie Lake		5259.29		July		J.O. Snyder	
363	CAS	2651	Colubridae	Thamnophis		Kootenai	Blue Lake		5259.29		July		J.O. Snyder	
364 .	CAS	2652	Colubridae	Thamnophis	sutais	Kootenai	Slue Lake.		5259.29		July		J.O. Snyder	
365	CAS	2653	Cokendae	Thamnophis	sitais	Kootenal	Stue Lake		5259.29	I	July		J.O. Smyder	
366	CAS	2654	Colubridae	Thamnophis	sirtais	Kootenai	Stue Lake.		5259.29		July		J.O. Snyder	
367	CAS	2655	Colubridae	Thamnophis	sirtais	Kootenai	Blue Lake		5259.29		July		J.O. Snyder	
368	CAS	2656	Colubridae	Thamoophis	sirtais	Koolenai	Stue Lake.	523.773	5259.29		July		J.O. Snyder	
369	CAS	2657	Colubridae	Thamnophis	sirtalis	Kootenai	Kaniksu Lake, vicinity of lower end of the lake.			26	July		J.O. Snyder	
370	CAS	2658	Colubridae	Thumaophis	sirtaAs	Kootenai	Karıksu Lake, vicinity of lower end of the lake.		-	26	July		J.O. Snyder	
371	CAS	2659	Colubridae	Thamnophis	sirtaks	Koolenai	Vicinity Mt. Carllon.			3	July		J.O. Snyder	
372	CAS	2663	Colubridae	Thamnophis	sirtalis	Kootenai	Bue Lake.		5259.29		July		J.O. Snyder	
373	CAS	2665	Colubridae	Thamnophis		Kootenai	Blue Lake.		5259.29	l	July		J.O. Snyder	
374	CAS .	2666	Colubridae	Themnophis		Kootenai	Blue Lake.		5259.29	Ι	July	1894	J.O. Snyder	
1899	CM	91656	Colubridae	Thamnophis		Kootenai	Spirit Lake		5309.48		July	1959		
1900	CM	91725	Colubridae	Themnophis		Kootenai	Spirit Lake		5309.48	T.,	July	1959		G.C. SCHAEFER COLLECTION.
4810	USNM	260901	Colubridae	Thamnophis	sirtalis filchi	Kootenai	Coeur d'Alene Lake, NE end of, Worl Lodge Bay.		5274.03		August		Jacobs', Douglas B.	"Nature wet in collection." Accession #362095. Coll #DE 101 and #DE 102
3623	UM	304	Emyddae	Chrysemys	picta	Borner	Mirror Lake	504.707	5196.51		Mey		J. Weitz	adult, Actual collection date was May 1958, 1 adult and 1 hatching
3753	UIM	386	Emydidae	Chrysemys	picta	Kootenal	Rainey Hill Rd., Medicine Lake			11	October		P. Lindeman	adult,male; preserved 29 Oct, 1986
3836	UIM	441	Emyddae	Chrysenys	picta beti	Bonner	Hager Lk., NW Bonner Co., w of Priest Lake	502.204	5382.45	2 20	May		P. Lindeman	adult;T61N R5W S34
4741	USNM	21474	Iguaridae	Phrynosoma		Bonner	Sandpoint		5347.79		August		Evermann; Gibert (2 individuals?)	"Nature well in collection." Accession #28136. Coll #58.
4846	CPS	4081	Scincidae	Eumeces	skiltonienus	Borner	4.5 mi. NW. Hope		5350.00			1939	JRS	
2517	IMNH	717	Scincidae	Eumeces	skittonianus	Kootenai	3 miles from Beauty Bay on Alt. 95		5273 06		April	1962		
4847	CPS	4082	Scincidae	Eumeces	skiltonienus	Kootenai	10 mi SE of Harrison		5246.73	1	September	1939		
4848	CPS	4083	Sonoidse	Eumeces	skillonranus	Koolena	4 ms. Sw Coeur D'Alene		5276.23	l	September	1939		
5648	CRCM	48	Scincidae	Eumeces	skillonianus	Borner	Pack River	543,897	5356.78	19	July	1947	G.F. Jones	pickled Don by Gardiner Jones #47-3

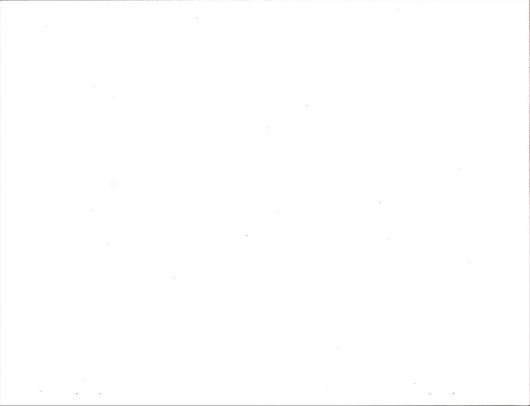


Table 3. incidental observations by J.E. Janovetz and J.M. Beck.

description	Species	No.	Date	Observer	Habitat Description	Remarks
Moon Gulch Road - 1.2 mile N of I-90	THEL	1	7/1/94	Jeff E. Janovetz	coniferous forest	
Pine Creek - 20 m S of mile 3 overpass	THEL	1	9/04/94	Jeff E. Janovetz		
100 m S of intersection of E and W forks of Pine Creek	CHBO	1	9/04/94	Jeff E. Janovetz		Road kill
25' N of Latour Creek overpass	THEL	1	9/04/94	Jeff E. Janovetz		
0.25 mi S of Latour Cr. overpass	THEL	1	9/04/94	Jeff E. Janovetz		
In front of Page sewage plant; E of Smelterville	THEL	1	7/30/95	Jeff E. Janovetz	near sewage pond	
KOA Kampground Pinehurst	AMMA	4	5/8/96	JMB	Under logs adjacent to wetlands	
Canyon Creek - 1.8 mi N of I-90 overpass on paved road, east side of creek against canyon wall	AMMA	1	5/9/96	JMB -	Under cardboard at base of young white pine	
Moon Gulch Road culvert. 1.4 miles N. of intersection of Moon Gulch roas and Silver Valley road.	PLID	1	5/9/96	JMB	under draining culvert of an east facing slope, draining into moon guich	
Big Creek along mountain side, 0.6 miles from intersection with Rt. 90	PLID	1	5/10/96	JMB	Seep on north facing slope, Shale and gravel with pooled water at base of slope. Moss, gravel, and cottonwoods	
Big Creek along mountain side, 0.6 miles from intersection with Rt. 90	AMMA	1	5/10/96	JMB	Seep on north facing slope, shale and gravel with pooled water at base of slope. Moss, gravel, and cottonwoods	gravid
Trapper Creek road approx 200m from intersection of East fork of Pine Creek road	PLID	2	5/11/96	JMB	Talus	
North fork of Pine creek immediately after first bridge past Trapper Creek. Adjacent to borrow pit.	PLID		5/11/96	JMB		
first set of ponds west of Latour creek road	CHPI	3	5/11/96	JMB	Ponds with basking logs and lily pads	Turtles basking

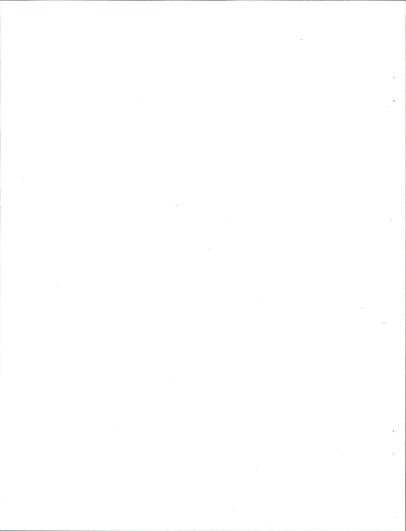


Table 3. continued.

Animal's Location - verbal description	Species	No.	Date	Observer	Habitat Description	Remarks
Jack Forest Property, 75 meters SW of Pond 1. 1.2 miles from Wolf Lodge Bay exit 22 on Yellowstone Trail road. Park at gate and walk to site	PLID	1	5/12/96	JMB	large moss covered talus	very close to surface
PLID Type Locality Wolf Lodge Bay site #1. 0.4 miles from wolf lodge bay exit 22 Rt. 90	PLID	1	5/12/96	JMB	N. facing slope, talus, splash zone	found in large moss covered talus 3 m from seep
Wolf Lodge Bay site # 2. 1.1 miles from Wolf Lodge Bay exit 22 Rt. 90	PLID	1	5/12/96	JMB	Dry Talus, North facing slope	Not associated with a spash zone
Wolf Lodge Bay site # 3. 2.2 miles from Wolf Lodge Bay exit 22, Rt. 90	PLID	2	5/12/96	JMB	Talus slope with moss cover, no splash zone	Gravid female
Beauty Creek. Forest service road # 438 and Wolf Lodge Bay road intersection	PSRE	?	5/12/96	JMB	Pond created by road at inlet to Lake Coeur d' Alene	Calling Males
Jackass Creek directly above first water diversion	ASTR	1	6/20/96	JMB	Stream with 100% CC.	No ASTR found below the water diversion
Beauty Creek	ASTR	3	6/28/96	JMB	Stream with 100 CC	USFS Land
Rock outcrop along Varnum Creek. Dripping water over moss	PLID	2	6/28/96	JMB	Rock outcrop with exposed talus. Moss covered	USFS Land
Varnum creek below rock out crop	ASTR	1	6/28/96	JMB	Stream with 100 CC	USFS Land
Lost Man Creek NW site of Varnum creek canyon, trib. to Varnum Creek.	PLID	1	6/28/96	JMB	High gradient rocky stream with water cascading down .	Adult PLID was found crawling in and amoung the rocks and water

ASTR=Tailed Frog, THEL=WEstern Terrestrial Garter Snake, AMMA=Long-loed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake, AMTI=Tiger Salamander, LDID=Coaur D'Alene Salamander, BUBO=Western Toad, DIAT=Idaho Gian Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.

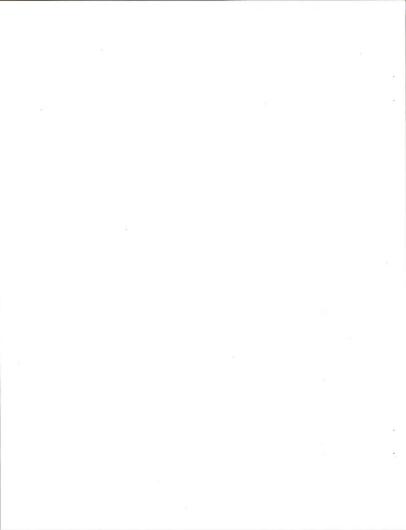
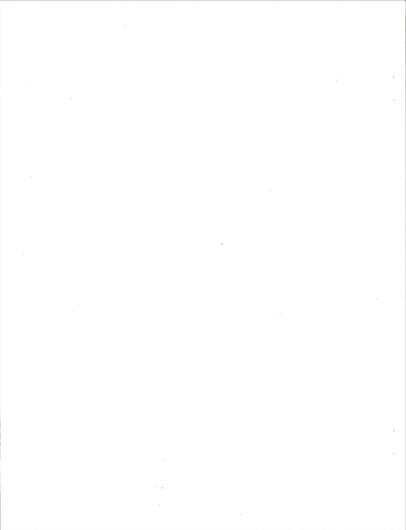


Table 4. List of potential long-term amphibian monitoring sites in the Coeur d' Alene Basin.

Site no.	Name	Species found 1994/95	Species found in 1996	COUNTY	Т	R	Aliquot	UTM EASTING km	UTM NORTHING km
1	Placer Creek (stream)	ASTR	ASTR tads	Shoshone	T47N	R4E	NE SW sec. 3	580.22697	5255.961
4	Canyon Creek (stream)	none	none	Shoshone	T48N	R4E	SE SE sec. 13	584.359	5261.202
8	Polaris Creek (stream)	ASTR	ASTR	Shoshone	T48N	R3E	SE NE sec. 15	571.427	5262.200
13	Gold Run Ponds (pond)	RAPR, AMTI ?, THEL	RAPR, AMMA, PLID	Shoshone	T48N	R3E	SE SW sec. 3	570.526	5264.459
15	Airport Pond (pond)	none	AMMA eggs, BUBO tad	Shoshone	T49N	R2E	NE SW sec. 34	561.779	5266.242
20	Dry Gulch (stream)	none	ASTR, DIAT	Shoshone	T48N	R2E	SE SE sec. 34	561.528	5256.171
30	Jack Forest Pond 1 (pond)	NA	AMMA, PSRE	Kootenai	T49N	R2 W	NW NW sec. 6	525.920	5272.469
33	Loff's Bay (pond)	NA	AMMA, PSRE, BUBO	Kootenal	T49N	R4 W	NW NW sec. 35	512.964	5266,535
36	Gamlin Lake (pond)	NA	RACA, THEL	Bonner	T56N	R1E	Sec. 6;7	545.530	5341.092
37	Antelope Lake (pond)	NA	RAPR, THEL	Bonner	T55N	R2E	NW NW sec. 12	562.925	5331.435

ASTR=Tailed Frog, THEL=Western Terrestrial Garter Snake, AMMA=Long-loed Salamander, RAPR= Spotted Frog, THSI=Common Garter SnakeAMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treefrog.



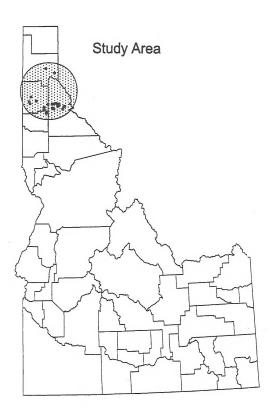
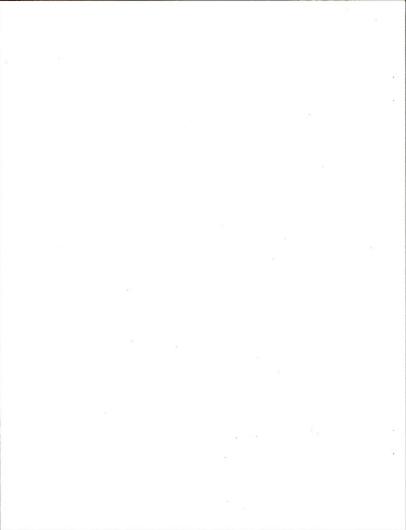


Figure 1. Study area. Solid dots indicate sampling sites.



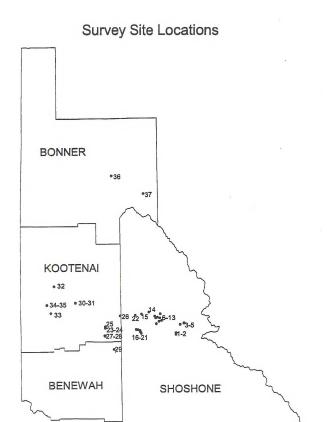
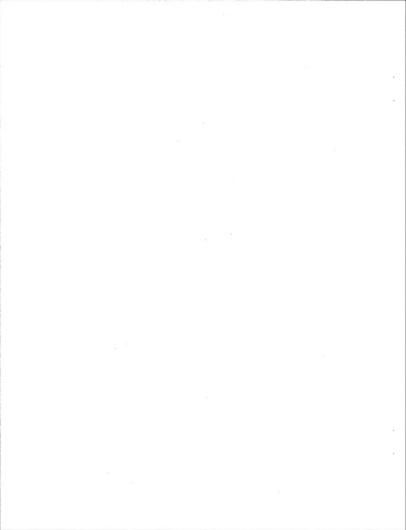


Figure 2. Survey site locations. See Table 1 for site names.



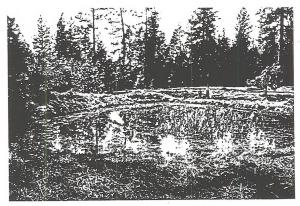


Figure 3. Jack forest Pond 1, site # 30. Photo taken from the east side of the pond looking west toward the road. 12 May 1996. (Long-toed Salamander and Pacific Treefrog)

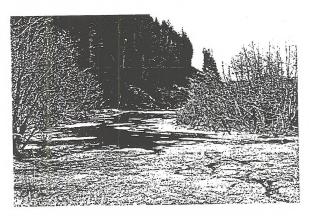
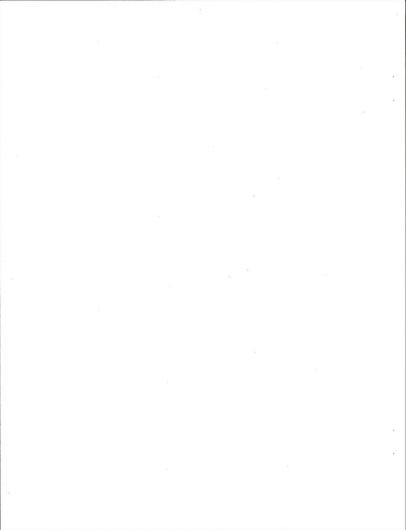


Figure 4. Gene Day Park, site #6. Photo taken from the southwest side of the pond (parking lot side) looking northwest. 8 May 1996. (Spotted Frog, Long-toed Salamander, and Common Garter Snake)



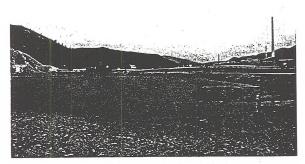


Figure 5. Airport Pond, site # 15. Photo taken from the east side of pond looking west toward Smelterville. 10 May 1996. (Long-toed Salamander, and Western Toad)

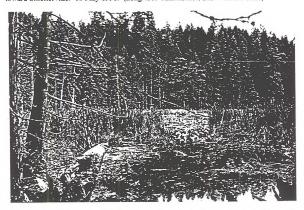


Figure 6. Gamlin Lake, site # 36. Photo taken from the southern most point looking north across the bay. 17 September 1996. (Bullfrog)

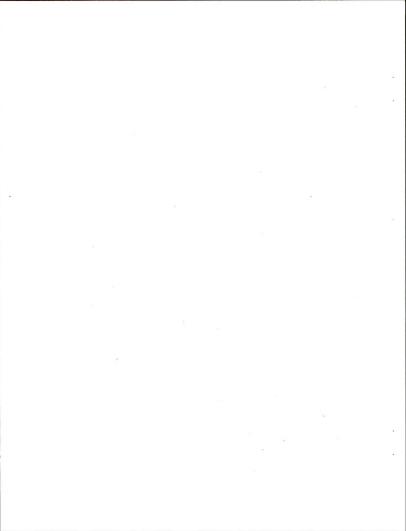




Figure 7. Placer Creek, site # 1. Photo taken from the beginning of the transect looking north. 8 May 1996. (Tailed Frog)

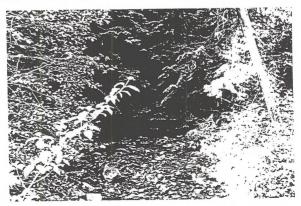
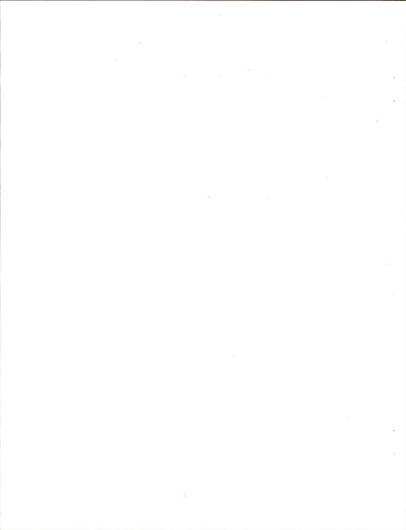


Figure 8. Lost Girl Creek, site # 28. Photo taken from Rochat Divide Road looking southwest. 26 June 1996. (Tailed Frog)





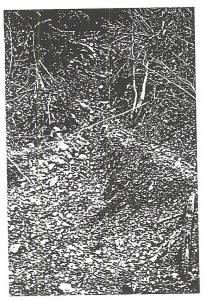
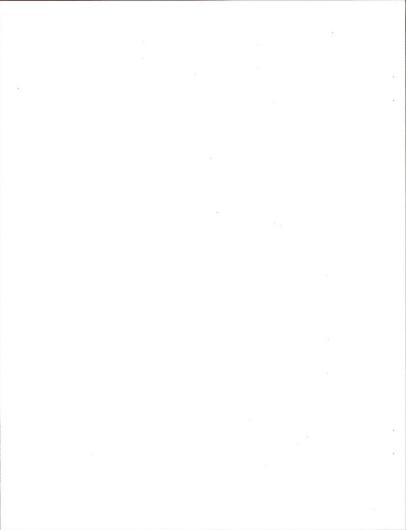
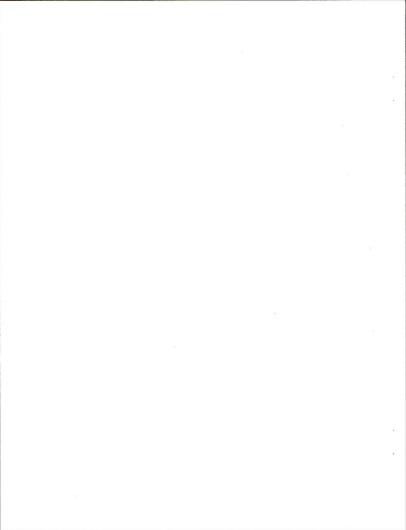


Figure 9. (above) Canyon Creek, site # 4. Photo taken from the beginning of the transect looking north. 8 May 1996. (No amphibians observed)

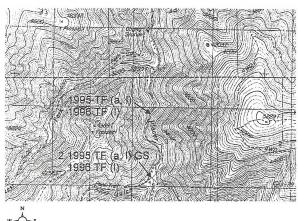
Figure 10. Wolf Lodge Bay incidental site. Photo taken from turn-out across from the first spring. Photo looking North. 18 June 1996. (Coeur d'Alene Salamander)



Site No.	Site Name	Location	Туре	Species Breeding	Remarks
1	Placer Creek	Placer Creek 1.35 mi from intersection with King Street, Wallace.	stream	Tailed Frogs	High water, only searched edges of stream. Second visit water lower, searched entire stream.
2	Cranky Gulch	Cranky Gulch - fork of C.Glch. trail #39 and St. Joe trail#3 OR 2 miles from intersection with King Street, Wallace.		Tailed Frogs	Recently flooded, ASTR possibly washed out of stream? Second visit found ASTR.



#### Wallace, Idaho Central



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering)

Garter Snake CS = Common Garter Snake 1 km

a = adult(s)

c = calling e = eggs

1 = larvae or tadpoles

m = metamorphs (amphibian)

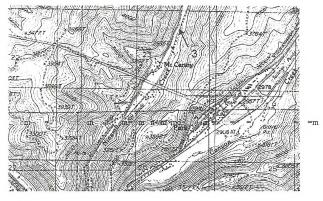
n = neonates (reptile)

i = juveniles

Figure 11. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Wallace Idaho Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
3		9 Mile Creek - 1.9 mi N of I-90 overpass on Nine Mile Creek Road.	stream		Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.

## Wallace, Idaho Northeast





LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

CS = Common Garter Snake

#### 1 km

a = adult(s)

c = calling e = eggs

1 = larvae or tadpoles

m = metamorphs (amphibian)

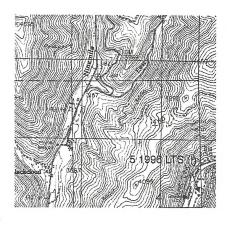
n = neonates (reptile)

j = juveniles

Figure 12. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Wallace Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
4	Canyon Creek	Canyon Creek - 1.8 mi N of I-90 overpass on paved road.	stream		Site highly disturbed. Entire area reclaimed, pools added, channel altered, few aquatic insects.
5	Canyon Creek Seep	Canyon Creek - 1.8 mi N of I-90 overpass on paved road, east side of creek against canyon wall.	pond	Long-toed Salamanders	2 * deep, area used as ATV trails, Adult AMMA located 100 m south of breeding pond/ Entire area dry at second visit. Presume no AMMA metamorphosed.

# Osburn, Idaho Southeast Corner





IGS = Idaho Giant Salamander CDS = Coeur d'Alene Salamander TF = Tailed Frog WT = Western (Boreal) Toad PTF = Pacific Treefrog SF = Spotted Frog

LTS = Long-toed Salamander

BF = Bullfrog
GS = Western Terrestrial (Wandering)
Garter Snake

CS = Common Garter Snake

a = adult(s)
c = calling
e = eggs
1 = larvae or tadpoles
m = metamorphs (amphibian)

n = neonates (reptile)

i = juveniles

Figure 13. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Osburn Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
6		Gene Day Park - 1.7 ml W of Osburn on Warm Mullan Road,	pond	Long-toed Salamanders, Spotted Frogs	PAPR adults; 4 RAPR juveniles; tads;     AMMA adult (gravid), observed THSI eating RAPR adult.

#### Kellogg East, Idaho Southeast

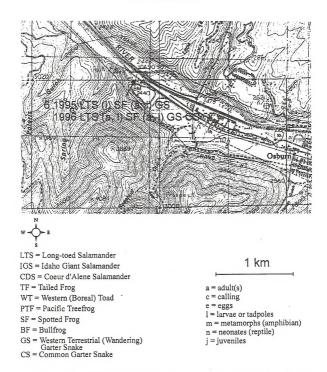
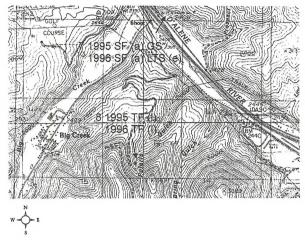


Figure 14. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
7	Memorial Pond	Pond at turnoff to Elk Creek.	pond	Long-toed Salamanders	
8	Polaris Creek	Polaris Creek - 1.6 mi S of I-90, 1.5 mi S along improved road; hike 75 m to creek.	stream	Tailed Frogs	I found that slowly walking up stream and looking more effective than rock turning.

## Kellogg East, Idaho South Central



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

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1 km

a = adult(s)

c = calling e = eggs

l = larvae or tadpoles

m = metamorphs (amphibian)

n = neonates (reptile)

j = juveniles

Figure 15. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
9	Moon Gulch	Moon Gulch - 1.4 mi N on Moon Gulch Road.	stream		Recently flooded, high water.
10	Montogomery Creek	Montgomery Creek - 0.7 mi N of I- 90	stream		

### Kellogg East, Idaho Central

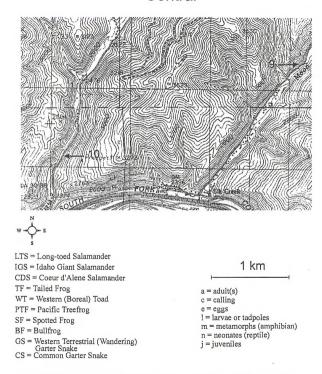


Figure 16. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
11	Big Creek	Big Creek - 25 m from I-90.	stream	Tailed Frogs	Found PLID in talus slope approx. 50 m north of stream site. 5 m north foot bridge w. slope.

## Polaris Peak, Idaho North Central

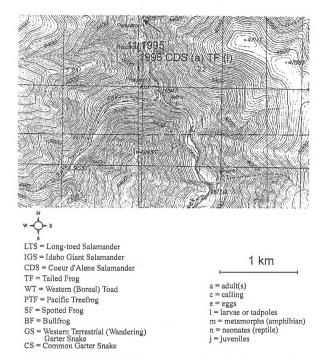


Figure 17. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Polaris Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
12		Gold Run Gulch2 mi S on Gold Run Road.	stream	Tailed Frogs	Recently flooded, high water.
13		Series of ponds - 0.8 mi E of Gold Run Road-North of Road.	pond	Long-toed salamanders	No pond breeding amphibians south site of road. Second trip found MMA hatched eggs but no AMMA. PLID found in talus surrounded by aspen on the west edge of pond.

## Kellogg East, Idaho South Central

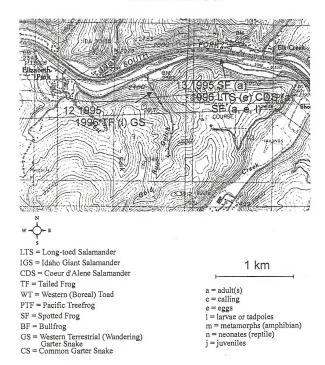
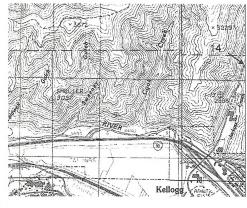


Figure 18. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg East Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
14	Jackass Creek	Jackass Creek - 0.75 mi N of I-90. North of high school.	stream	see remarks	Site begins once clear of high school property. Found one ASTR tad upstream from sampling area. ASTR was immediately up-stream from collecting pool for municiple water supply.

### Kellogg West, Idaho East Central





LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

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Garter Snake

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1 km

a = adult(s)

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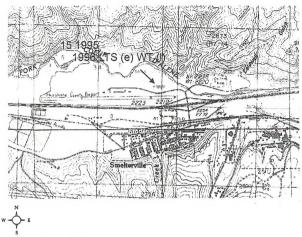
n = neonates (reptile)

i = juveniles

Figure 19. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg West Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
15	Airport Pond	Smelterville Airport Road.	pond	Long-toed Salamanders and Western Toads	Found one BUBO tad swimming across pond.

# Kellogg West, Idaho South Central



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

 $\mathrm{BF} = \mathrm{Bullfrog}$ 

GS = Western Terrestrial (Wandering)

Garter Snake

CS = Common Garter Snake

1 km

a = adult(s)

c = calling e = eggs

l = larvae or tadpoles m = metamorphs (amphibian)

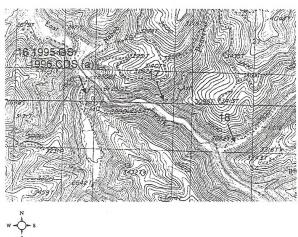
n = neonates (reptile)

i = juveniles

Figure 20. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg West Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
16	Trapper Creek	Trapper Creek - 1 ml S of Pine Creek Rd. on Trapper Cr. Road.	stream	see remarks	Found PLID in trapper creek canyon. Did not survey trapper creek because 1995 site was on private property.
17	Denver Creek	Denver Creek - at Intersection with Route 3D.	stream		Dry in 1996.
18	Highland Creek	Highland Creek - 0.4 mi NE of Route 3D.	stream		

## Masonia, Idaho North Central



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

CS = Common Garter Snake

1 km

a = adult(s)c = calling

e = eggs

1 = larvae or tadpoles m = metamorphs (amphibian)

n = neonates (reptile)

j = juveniles

Figure 21. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Masonia Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
19	Blue Eagle Creek	Big Eagle Creek - at intersection with Route 3D.	stream		
20	Dry Gulch	Dry Gulch - at intersection with Route 3D.	stream	Tailed Frogs, and Idaho Glant Salamanders	Area was dry in 1995.
21	Douglas Creek	Douglas Creek - at intersection with Route 3D.	stream		Rocks very discolored with a lot of algae.

### Masonia, Idaho North Central

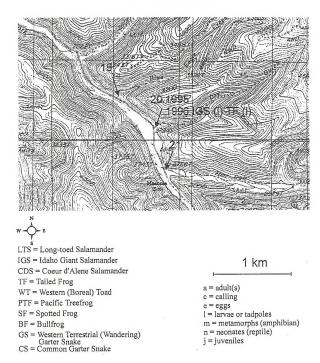


Figure 22. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Masonia Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
22	KOA Kampground	Pinehurst Idaho.	pond	Long-toed Salamaders and Spotted Frogs	Man-made ponds and wetlands full of AMMA, and RAPR.

### Kellogg West, Idaho Southeast

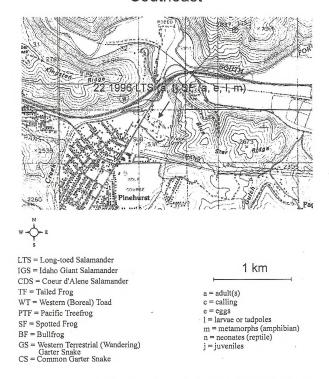


Figure 23. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Kellogg West Quadrangle Idaho, 7.5 minute series (Topographic) 1985 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
23	Latour 1st Stream	1st stream - 2.15 ml from Latour Creek Overpass.	stream	Tailed Frogs	Private land. Did not sample in 1996.
24	Latour Across 1st Stream	Latour Creek - across from "1st stream".	stream		Private land. Did not sample in 1996.
25	Al's Seep	Al's seep - > 7 m S Cataldo.	seep		Private land. Did not sample in 1996.

# Rochat Peak, Idaho North Central

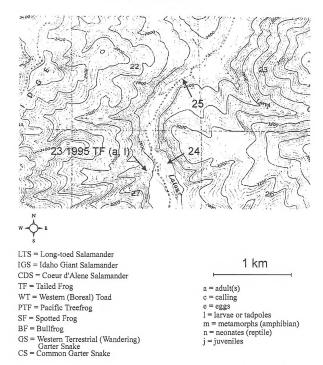
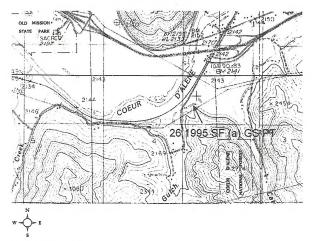


Figure 24. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Rochat Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1950 map. The numbers correspond to the site numbers in Table 3, Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Type	Species Breeding	Remarks
26	Ponds	Ponds - 0.6 mi S of I-90 overpass near Dudley camping park.	pond		Could not get permission to sample in 1996.

### Cataldo, Idaho East Central



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

PTF = Tailed Frog

WT = Western (Boreal) Toad .

TF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

= Common Garter Snake

PT = Painted Turtle

1 km

a = adult(s)

c = calling

e = eggs

1 = larvae or tadpoles m = metamorphs (amphibian)

n = neonates (reptile)

i = juveniles

Figure 25. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Cataldo Quadrangle Idaho, 7.5 minute series (Topographic) 1985 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location Type	Species Breeding	Remarks
27	Butler Creek	Intersection of Rochat Divide Road stream and Butler Creek.	Tailed Frogs	
28	Lost Girl Creek	Intersection of Rochat Divide Road stream and Lost Girl Creek.	Tailed Frogs	

#### Rochat Peak, Idaho Center

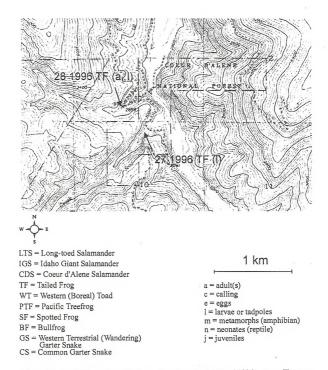
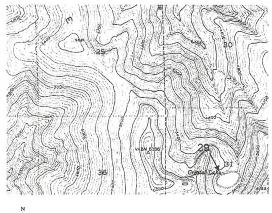


Figure 26. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Rochat Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
29	Crystal Lake	Crystal Lake.	pond		found one salamander larvae. I assumed AMMA and released without furher inspection. Could have been AMTI used as fish bait.

### Rochat Peak, Idaho Southeast Corner





LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering)

Garter Snake

CS = Common Garter Snake



a = adult(s)c = calling

e = eggs

1 = larvae or tadpoles m = metamorphs (amphibian)

n = neonates (reptile)

j = juveniles

Figure 27. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Rochat Peak Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
30	Jack Forest . Pond 1	Jack Forest Property 1st pond.	pond	Long-toed Salamanders and Pacific Treefrogs	Excellent site for teaching field trips site contains many species with easy access.
31	Jack Forest Pond 2	Jack Forest Property 2nd pond adjacent to old corral.	pond	Long-toed Salamanders and Pacific Treefrogs	Excellent site for teaching field trips site contains many species with easy access.

### Fernan Lake, Idaho Southeast

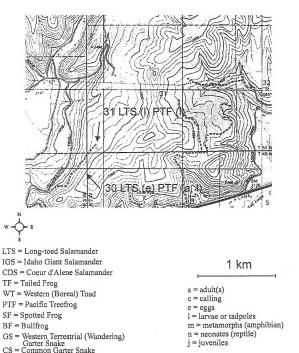
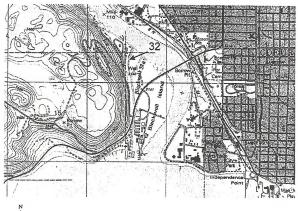


Figure 28. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Fernan Lake Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
32	Blackwell Island	Rt. 95. 0.5 mi. south of Coeur d' Alene.			Found no herps.

# Coeur d'Alene, Idaho Center



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

CS = Common Garter Snake

#### 1 km

a = adult(s)c = calling

e = eggs

1 = larvae or tadpoles

m = metamorphs (amphibian)

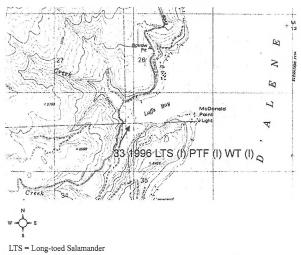
n = neonates (reptile)

j = juveniles

Figure 29. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Coeur d' Alene Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
33	Loft's Bay	Loft's Bay, Lake Coeur d' Alene.	bay, canals, stream	Long-toed Salamanders, Western Toads, and Pacific Treefrogs	Very large area with several different habitat types: lake riparian (BUBU), series ponds and canals of canals (PSRE, RAPR and AMMA). Site has all speles except PLID (probably there).

## Mica Bay, Idaho West Central



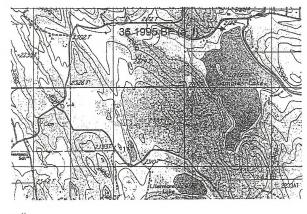
IGS = Idaho Giant Salamander 1 km CDS = Coeur d'Alene Salamander TF = Tailed Frog a = adult(s)WT = Western (Boreal) Toad c = calling PTF = Pacific Treefrog e = eggs SF = Spotted Frog 1 = larvae or tadpoles BF = Bullfrog m = metamorphs (amphibian) n = neonates (reptile) GS = Western Terrestrial (Wandering) Garter Snake j = juveniles

CS = Common Garter Snake

Figure 30. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Mica Bay Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
34	Mica Bay	Mica Bay, Lake Coeur d' Alene.	bay		All RAPR were found in mowed grass along the edge of Mica bay, area is developed as a campground with boat docks.
35	Mica Bay Creek	Creek, bisecting BLM property.	stream		Adult AMMA was observed swimming aacross a one meter wide pool in "Mice Bay Creek".

### Talache, Idaho Northeast Corner



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

CS = Common Garter Snake



a = adult(s)c = calling

e = eggs1 = larvae or tadpoles

m = metamorphs (amphibian)

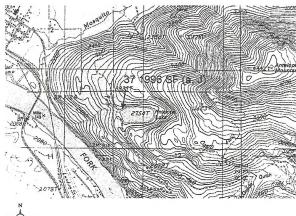
n = neonates (reptile)

i = iuveniles

Figure 32. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Talache Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	Site Name	Location	Туре	Species Breeding	Remarks
36	Gamlin Lake	Gamlin Lake, Glengary Road south of Sandpoint adjacent to Lake Pend Oreille.	pond	Bullfrogs	Lake is filled with RACA adults and tads. RACA presence is probably reason for no other amphibian species.

## Clark Fork, Idaho Southeast Corner



LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d' Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

TF = Pacific Treefrog SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering)

Garter Snake

CS = Common Garter Snake

#### 1 km

a = adult(s)c = calling

e = eggs

1 = larvae or tadpoles m = metamorphs (amphibian)

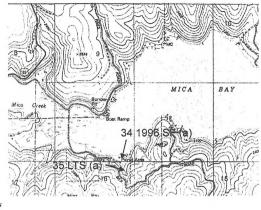
n = neonates (reptile)

j = juveniles

Figure 33. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Clark Fork Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.

Site No.	SIte Name	Location	Туре	Species Breeding	Remarks			
37	Antelope Lake	Antelope Lake, 2 km southeast of Clark Fork.	pond		Fish present. I also found adult RAPR and RAPR juveniles.			

### Mica Bay, Idaho Northwest





LTS = Long-toed Salamander

IGS = Idaho Giant Salamander

CDS = Coeur d'Alene Salamander

TF = Tailed Frog

WT = Western (Boreal) Toad

PTF = Pacific Treefrog

SF = Spotted Frog

BF = Bullfrog

GS = Western Terrestrial (Wandering) Garter Snake

Garter Snake CS = Common Garter Snake 1 km

a = adult(s)

c = calling

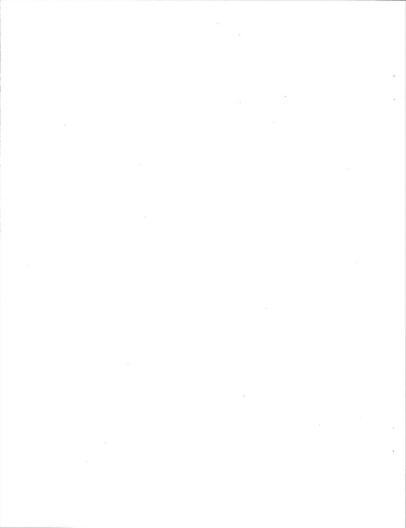
e = eggs

1 = larvae or tadpoles m = metamorphs (amphibian)

m = metamorphs (amphibian) n = neonates (reptile)

j = juveniles

Figure 31. Amphibian and reptile observations from the 1995 and 1996 survey. The map was scanned from the Mica Bay Quadrangle Idaho, 7.5 minute series (Topographic) 1986 map. The numbers correspond to the site numbers in Table 3. Capital letters indicate species. Small case letters indicate life stage. See legend above.



Appendix 1. Site characteristics not included in Table 1.

Site no.	Name	Species found 94/95	Species found in 1996	Map Name	OWNER	FISH?	pН	Cond.	Water Temp.	Туре	STAGES	Number Observed	Hydrologic Unit
	Placer Creek	ASTR	ASTR	Wallace Idaho	BLM	yes	9	50	6	stream	tads 2nd year	1	17010302016
2	Cranky Gulch	THEL, ASTR	ASTR	Wallace Idaho	BILM	none seen	8.6	40	5	stream	tads 1st and second year	1,4	17010302
3	Nine Mile creek	none	none	Wallace Idaho	BLM	none seen	8.2	80	7	stream			17010302018
4	Canyon Creek	none	none	Wallace Idaho	BLM	none seen	8.4	50	4	stream			17010302015
5	Canyon Creek Seep	NA -	AMMA	Wallace Idaho	BLM	no	8.7	50	13	pond	eggs; larvae	< 500	17010302
6	Gene Day Park	RAPR, AMMA, THEL	RAPR, AMMA, THEL, THSI	Kellog East	City	none seen	7.7	90	5	pond	tads, adults		
7	Memorial Pond	RAPR, THEL,	RAPR, ANIMA	Kellog East		none seen	8.2	170	10	pond	RAPR adults, AMMA eggs		
8	Polaris Creek	ASTR	ASTR	Kellog East	BLM	none seen	8.2	90	5	stream	1st year, 2nd yea	ar 9,3	17010302
9	Moon Gulch	none	none	Kellog East	private?	none seen	8.4	60	7	stream			17010302
10	Montogomery Creek	none	none	Kellog East		yes	8.4	40	7	atream			17010302
11	Blg Creek	none	PLID, ASTR	Polaris Peak	BLM	yes	8.4	30	5	stream	adult PLID, ASTR tads, 1st, 2nd, 3rd	1 PLID, 6 ASTR	17010302012
12	Gold Run Gulch	ASTR, THEL	none	Kellog East	BLM	none seen	8.4	80	8	stream			17010302
13	Gold Run Ponds	RAPR, AMTI 7, THEL	RAPR, AMMA, PLID	Kellog East	?	yes	7.5	130	17	pond	RAPR Adults; AMMA eggs	10,2	
14	Jackass Creek	none	ASTR- See Comments	Keliog West	BLM	none seen	8.2	40	8	stream			17010302
15	Airport Pond	none	AMMA BUBO	Kellogg West	7	yes	7.8	120	13	pond	AMMA eggs, BUBO tads	1 mass	
16	Trapper Creek	THEL	PLID	Masonia, Idaho	?	none seen	7.7	20	12	stream			17010302
17	Denver Creek	none dry	none dry	Masonia, idaho	BLM	none seen	dry	dry	dry	atream			17010302
18	Highland Creek	none	none	Masonia, Idaho	BLM	none seen	7.5	80	15.	stream			17010302
19	Blue Eagle Creek	none	none	Masonia, Idaho	BLM	none seer				stream			17010302

Appendix 1. continued.

Site no.	Name	Species found 94/95	Species found in 1996	Map Name	OWNER	FISH?	pH	Cond.	Water Temp.	Туре	STAGES	Number	Hydrologic Unit
20	Dry Gulch	none	ASTR, DIAT	Masonia, idaho	BLM	none seen				stream	ASTR 2nd year, DIAT larvae	1,1	17010302
21	Douglas Creek	none	none	Masonia, Idaho	BLM	yes	7.8	20	13	stream			17010302
22	KOA Kampground		AMMA, RAPR	Kellog West, Idaho	Private	no -				pond			
23	Lalour 1st Stream	ASTR	not sampled in 1996	Rochat Peak	Private	na	8.1	30	10.5	stream	NA	NA	17010303
24	Latour Across 1st Stream		not sampled in 1996	Rochat Peak	Private	na	8.2	10	15	stream	NA	NA	17010303
25	Al's Seep	PLID	not sampled in 1996	Rochat Peak	Private	na				seep	NA	NA	
26	Ponds	RAPR, CHPI, THEL	not sampled in 1996	Cataldo	Private	na	9.7	80	25	pond	NA	NA	
27	Butler Creek	NA	ASTR	Rochat Peak	USFS	yes	8.2	80	8	stream	1 first, 4 2nd	1 first, 4 2nd	17010303
28	Lost Girl Creek	NA	ASTR	Rochat Peak	BLM	none seen	8.3	80	7	stream	1st, 2nd, adult	2,5,1	17010303
29	Crystal Lake		AMMA?	Rochat Peak	BLM	yes	7.2	70	18	pond	larvae	1	
30	Jack Forest Pond 1	NA	AMMA, PSRE	Fernan Lake	BLM	none seen	8.5	40	16	pond	PSRE adult, tade, AMMA egge	1,100's	
31	Jack Forest Pond 2	.NA	AMMA	Fernan Lake	BLM	none seen	8.3	50	18	pond	PSRE tads, AMMA larvae		
32	Blackwell Island	NA	none	Coeur d' Alene	BLM								
33	Loft's Bay	NA	AMMA, PSRE, BUBO	Mica Bay	Private	none seen	8	120	18	bay, canals, stream	BUBO tada,	hundreds of all; two RAPR adults	
34	Mica Bay	NA	RAPR,	Mica Bay	BLM	yes	7.0	120	17	bay		5	

#### Appendix 1. continued.

Site no.	Name	Species found 94/95	Species found in 1996	Map Name	OWNER	FISH?	pН	Cond.	Water Temp.	Туре	STAGES	Number	Hydrologic Unit
35	Mica Bay Creek	NA	AMMA	Mica Bay	BLM	none seen				stream	adult	1	
36	Gamlin Lake	NA	RACA, THEL	Talache	BLM	yes	7.3			pond	RACA adults, and tads.	three RACA adults, hundreds of tads	
37	Antelope Lake	NA	RAPR. THEL	Clark Fork	BLM	yes	9.0	140	18	pond			

ASTR=Tailed Frog, THEL=Western Terrestrial Garter Snake, AMMA=Long-toed Salamander, RAPR= Spotted Frog, THSI=Common Garter Snake
AMTI=Tiger Salamander, PLID=Coeur D' Alene Salamander, BUBO=Western Toad, DIAT=Idaho Giant Salamander, CHPI=painted Turtle, PSRE=Pacific Treetrog.



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