



Colorado Herpetofaunal Atlas

Field Survey Data Sheets





Colorado Herpetofaunal Atlas
Field Survey Data Sheet
 ver. 02/12/03 CDM

Starred Items * are required.

***Observer Identification Number:** _____ ***Date** _____ ***Survey Start Time (24 hour)** _____ : _____ **Survey End Time (24 hour)** _____ :

Weather: Clear <50%Cloudy >50%Cloudy Rain Snow **Wind:** Calm Light Strong **Air Temp:** _____ F C

Location Section

***Location Description** _____

County _____ **State** _____ **Elevation (feet)** _____

Township _____ **Range** _____ **Section** _____ **Quarter section** _____

UTM Zone _____ **UTM Easting (x)** _____ **UTM Northing (y)** _____ NAD27 NAD83 **GPS Estimated Accuracy(%)** _____

Longitude _____ **Latitude** _____ **Landowner** _____

Submitted: topo sketch photo N/A **Electronic?** **UTM Source:** abs map UNK description auto from website

Location Comments: _____

Habitat Section [optional]

Habitat Type: Alpine Tundra Subalpine Forest Montane Forest Mountain Shrubland Semidesert Shrubland Sandhill
 Shortgrass Plains Other Plains Grassland Shortgrass Semidesert Mountain Meadow -Parkland Lowland Riparian
 Mountain Riparian Marsh/Wet Meadow Beaver Pond Lake/Pond (open water) River/Creek (open water) Intermittent Pond
 Intermittent Stream Agriculture Urban/Suburban Cliff/Exposed Bedrock/Talus

Habitat Origin: natural man-made **Drainage Flow:** permanent occasional none

Primary Substrate: boulder/ bedrock cobble sand/gravel silt/mud other unknowr

Square Feet of Habitat Searched: _____ **Entire Site Searched:**

Aspect (slope faces): N S E W NE NW SE SW NA **Topography:** flat gentle steep

Habitat Comments: _____



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Aquatic/Riparian Section [optional]

Aquatic/Wetland Site Length (feet) _____ Aquatic/Wetland Site Width (feet) _____ Length of Shoreline Searched (feet): _____

Water Temperature: _____ <input type="checkbox"/> Celsius <input type="checkbox"/> Fahrenheit		Water Color: <input type="checkbox"/> clear <input type="checkbox"/> stained	Turbidity: <input type="checkbox"/> clear <input type="checkbox"/> cloudy
Dissolved Oxygen (ppm) _____		Conductivity (mhos/cm) _____	Hardness (ppm) _____
Total Alkalinity (ppm) _____		pH _____	PHTH Alkalinity (ppm) _____
Max Water Depth: <input type="checkbox"/> <1 ft <input type="checkbox"/> 1-2 ft <input type="checkbox"/> >2 ft		Stream Order: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5+	
North Shoreline Characteristics: <input type="checkbox"/> shallows <input type="checkbox"/> no shallows <input type="checkbox"/> emergent veg <input type="checkbox"/> no emergent veg			
% of Lake Margin w/Emergent Vegetation: <input type="checkbox"/> 0 <input type="checkbox"/> 1-25 <input type="checkbox"/> 25-50 <input type="checkbox"/> >50		Fish present: <input type="checkbox"/>	Aquatic Water Code: _____

Emergent Vegetation Species (in order of abundance) _____

Distance to Forest Edge (feet) _____ Forest Tree Species _____

Aquatic/Riparian Comments:

Species Observation Section 1

*Scientific Name) _____ OR *Common Name _____

*Stage: <input type="checkbox"/> adult <input type="checkbox"/> juveniles <input type="checkbox"/> larvae <input type="checkbox"/> egg masses	* # of Individuals: _____	Gender: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> both <input type="checkbox"/> unk
Calling: <input type="checkbox"/>	Calling Index: <input type="checkbox"/> Indiv can be counted <input type="checkbox"/> Indiv can be distinguished, some overlap <input type="checkbox"/> Calls continuous, overlapping	
Malformity Observed: <input type="checkbox"/>	Malformity Location: <input type="checkbox"/> body <input type="checkbox"/> head <input type="checkbox"/> limb <input type="checkbox"/> multiple	
Type of Observation: <input type="checkbox"/> incidental report <input type="checkbox"/> regular monitoring <input type="checkbox"/> full site survey		
Identification Method: <input type="checkbox"/> visual in hand <input type="checkbox"/> visual not in hand <input type="checkbox"/> aural	Identification Confidence: <input type="checkbox"/> certain <input type="checkbox"/> uncertain	
Observation Confirmed by Second Party: <input type="checkbox"/>	Species Photo Submitted: <input type="checkbox"/>	
Capture Method: <input type="checkbox"/> hand <input type="checkbox"/> dip net <input type="checkbox"/> seine <input type="checkbox"/> trap <input type="checkbox"/> NA <input type="checkbox"/> other	Voucher Specimen: <input type="checkbox"/>	

Museum Acronym for Voucher _____ Museum Number of Voucher _____

Species Comments:



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Starred Items * are required.

Species Observation Section 2

*Scientific Name) _____ OR *Common Name _____

*Stage: <input type="checkbox"/> adult <input type="checkbox"/> juveniles <input type="checkbox"/> larvae <input type="checkbox"/> egg masses		*# of Individuals: _____	Gender: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> both <input type="checkbox"/> unk
Calling: <input type="checkbox"/>	Calling Index: <input type="checkbox"/> Indiv can be counted <input type="checkbox"/> Indiv can be distinguished, some overlap <input type="checkbox"/> Calls continuous, overlapping		
Malformity Observed: <input type="checkbox"/>	Malformity Location: <input type="checkbox"/> body <input type="checkbox"/> head <input type="checkbox"/> limb <input type="checkbox"/> multiple		
Type of Observation: <input type="checkbox"/> incidental report <input type="checkbox"/> regular monitoring <input type="checkbox"/> full site survey			
Identification Method: <input type="checkbox"/> visual in hand <input type="checkbox"/> visual not in hand <input type="checkbox"/> aural		Identification Confidence: <input type="checkbox"/> certain <input type="checkbox"/> uncertain	
Observation Confirmed by Second Party: <input type="checkbox"/>		Species Photo Submitted: <input type="checkbox"/>	
Capture Method: <input type="checkbox"/> hand <input type="checkbox"/> dip net <input type="checkbox"/> seine <input type="checkbox"/> trap <input type="checkbox"/> NA <input type="checkbox"/> other		Voucher Specimen: <input type="checkbox"/>	

Museum Acronym for Voucher _____ Museum Number of Voucher _____

Species Comments:

Species Observation Section 3

*Scientific Name) _____ OR *Common Name _____

*Stage: <input type="checkbox"/> adult <input type="checkbox"/> juveniles <input type="checkbox"/> larvae <input type="checkbox"/> egg masses		*# of Individuals: _____	Gender: <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> both <input type="checkbox"/> unk
Calling: <input type="checkbox"/>	Calling Index: <input type="checkbox"/> Indiv can be counted <input type="checkbox"/> Indiv can be distinguished, some overlap <input type="checkbox"/> Calls continuous, overlapping		
Malformity Observed: <input type="checkbox"/>	Malformity Location: <input type="checkbox"/> body <input type="checkbox"/> head <input type="checkbox"/> limb <input type="checkbox"/> multiple		
Type of Observation: <input type="checkbox"/> incidental report <input type="checkbox"/> regular monitoring <input type="checkbox"/> full site survey			
Identification Method: <input type="checkbox"/> visual in hand <input type="checkbox"/> visual not in hand <input type="checkbox"/> aural		Identification Confidence: <input type="checkbox"/> certain <input type="checkbox"/> uncertain	
Observation Confirmed by Second Party: <input type="checkbox"/>		Species Photo Submitted: <input type="checkbox"/>	
Capture Method: <input type="checkbox"/> hand <input type="checkbox"/> dip net <input type="checkbox"/> seine <input type="checkbox"/> trap <input type="checkbox"/> NA <input type="checkbox"/> other		Voucher Specimen: <input type="checkbox"/>	

Museum Acronym for Voucher _____ Museum Number of Voucher _____

Species Comments:



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Starred Items * are required.

Species Observation Section 4

*Scientific Name) _____ OR *Common Name _____

* <u>Stage</u> : <input type="checkbox"/> adult <input type="checkbox"/> juveniles <input type="checkbox"/> larvae <input type="checkbox"/> egg masses		* <u># of Individuals</u> : _____	<u>Gender</u> : <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> both <input type="checkbox"/> unk
<u>Calling</u> : <input type="checkbox"/>	<u>Calling Index</u> : <input type="checkbox"/> Indiv can be counted <input type="checkbox"/> Indiv can be distinguished, some overlap <input type="checkbox"/> Calls continuous, overlapping		
<u>Malformity Observed</u> : <input type="checkbox"/>	<u>Malformity Location</u> : <input type="checkbox"/> body <input type="checkbox"/> head <input type="checkbox"/> limb <input type="checkbox"/> multiple		
<u>Type of Observation</u> : <input type="checkbox"/> incidental report <input type="checkbox"/> regular monitoring <input type="checkbox"/> full site survey			
<u>Identification Method</u> : <input type="checkbox"/> visual in hand <input type="checkbox"/> visual not in hand <input type="checkbox"/> aural		<u>Identification Confidence</u> : <input type="checkbox"/> certain <input type="checkbox"/> uncertain	
<u>Observation Confirmed by Second Party</u> : <input type="checkbox"/>		<u>Species Photo Submitted</u> : <input type="checkbox"/>	
<u>Capture Method</u> : <input type="checkbox"/> hand <input type="checkbox"/> dip net <input type="checkbox"/> seine <input type="checkbox"/> trap <input type="checkbox"/> NA <input type="checkbox"/> other		<u>Voucher Specimen</u> : <input type="checkbox"/>	

Museum Acronym for Voucher _____ Museum Number of Voucher _____

Species Comments:

Species Observation Section 5

*Scientific Name) _____ OR *Common Name _____

* <u>Stage</u> : <input type="checkbox"/> adult <input type="checkbox"/> juveniles <input type="checkbox"/> larvae <input type="checkbox"/> egg masses		* <u># of Individuals</u> : _____	<u>Gender</u> : <input type="checkbox"/> M <input type="checkbox"/> F <input type="checkbox"/> both <input type="checkbox"/> unk
<u>Calling</u> : <input type="checkbox"/>	<u>Calling Index</u> : <input type="checkbox"/> Indiv can be counted <input type="checkbox"/> Indiv can be distinguished, some overlap <input type="checkbox"/> Calls continuous, overlapping		
<u>Malformity Observed</u> : <input type="checkbox"/>	<u>Malformity Location</u> : <input type="checkbox"/> body <input type="checkbox"/> head <input type="checkbox"/> limb <input type="checkbox"/> multiple		
<u>Type of Observation</u> : <input type="checkbox"/> incidental report <input type="checkbox"/> regular monitoring <input type="checkbox"/> full site survey			
<u>Identification Method</u> : <input type="checkbox"/> visual in hand <input type="checkbox"/> visual not in hand <input type="checkbox"/> aural		<u>Identification Confidence</u> : <input type="checkbox"/> certain <input type="checkbox"/> uncertain	
<u>Observation Confirmed by Second Party</u> : <input type="checkbox"/>		<u>Species Photo Submitted</u> : <input type="checkbox"/>	
<u>Capture Method</u> : <input type="checkbox"/> hand <input type="checkbox"/> dip net <input type="checkbox"/> seine <input type="checkbox"/> trap <input type="checkbox"/> NA <input type="checkbox"/> other		<u>Voucher Specimen</u> : <input type="checkbox"/>	

Museum Acronym for Voucher _____ Museum Number of Voucher _____

Species Comments:

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Helpful Information for Field Survey Data Sheet

version 02/27/03 CDM

This document provides helpful information for filling out the Field Survey Data Sheet. Read it carefully before you start!

If you follow the direction provided here, then transferring the information on your field data sheet to the online Observation Entry form will be easy.

Instructions for Field Survey Data Sheet



Items in **Bold type with an asterix (*)** are required items.

Every field survey data sheet requires these seven items: **OIN, Date, Start Time, Location Description, Species Name, Stage, and Number of Individuals.**



All other items are **Optional**.

Any and all information that you can provide is helpful, but not necessary. If you are unsure how to fill in a section, then leave it blank.

An incomplete but accurate report is better than a complete but inaccurate report.

Habitat Section (optional)

<input type="checkbox"/> Alpine Tundra <input type="checkbox"/> Sagebrush Steppe <input type="checkbox"/> Subalpine Forest <input type="checkbox"/> Montane Forest <input type="checkbox"/> Mountain Shrubland <input type="checkbox"/> Woodland Shrubland <input type="checkbox"/> Woodland	
<input type="checkbox"/> Chionodox Plains <input type="checkbox"/> Other Plains Grassland <input type="checkbox"/> Shrubgrass Steppe/land <input type="checkbox"/> Montane Meadow/Parkland <input type="checkbox"/> Lowland Riparian	
<input type="checkbox"/> Mountain Riparian <input type="checkbox"/> Basin/Wet Meadow <input type="checkbox"/> Beaver Pond <input type="checkbox"/> Lake/Pond (open water) <input type="checkbox"/> River/Creek (open water) <input type="checkbox"/> Intermittent Pond	
<input type="checkbox"/> Intermittent Stream <input type="checkbox"/> Agricultural <input type="checkbox"/> Urban/Suburban <input type="checkbox"/> Disturbed/Developed Area	
Habitat Type: <input type="checkbox"/> natural <input type="checkbox"/> semi-natural <input type="checkbox"/> other	
Duration Substrate: <input type="checkbox"/> bare/rock/bedrock <input type="checkbox"/> cobble <input type="checkbox"/> sand/gravel <input type="checkbox"/> silt/mud <input type="checkbox"/> other <input type="checkbox"/> water/soil	
Degree Part of Habitat Searched: _____ Entry Site Searched: <input type="checkbox"/>	
Abiotic (Soil, Snow) <input type="checkbox"/> N <input type="checkbox"/> S <input type="checkbox"/> E <input type="checkbox"/> W <input type="checkbox"/> NE <input type="checkbox"/> SE <input type="checkbox"/> SW <input type="checkbox"/> NW	
Topography: <input type="checkbox"/> flat <input type="checkbox"/> low <input type="checkbox"/> steep	
Habitat Comments:	



Multiple boxes on the data survey form means you should choose only one option.

Pick the choice that most closely describes the conditions.

For example: chose "Clear" **OR** "<50% Cloudy" **OR** ">50% Cloudy" **OR** "Rain" **OR** "Snow" for the weather conditions.

Weather: Clear <50% Cloudy >50% Cloudy Rain Snow



One box on the data survey form means you should insert a checkmark for a "Yes".

If the answer to a question or space on the form is "Yes" or "True", then insert a checkmark. If the answer is "No" or "False", then leave the box blank.

Malformity Observed:



Obtain your **Observer Identification Number (OIN)** online.

When you fill in the online Observer Registration Form (look on the 'Be an Observer' page), you will be able to obtain your OIN. You can use the same OIN every time you submit data.

Instructions for Field Survey Data Sheet (CONTINUED)



Keep written comments **brief**.

The required *Location Description* section has space for up to 100 characters. Other comments sections have text space for up to 255 characters. Be sure to include only comments pertinent to that section. Don't put 'species' comments in the 'location' comments box. There is space provided for *Location Comments*, *Habitat Comments*, *Aquatic/Riparian Comments*, and *Species Comments*.



Collecting herpetofauna should be done by experts.

Only experts working in association with a museum should collect voucher specimens.

If you do handle any organism, be sure to treat it with care and return it back exactly where you found it.



Photographs are an excellent way to document an observation.

Send photos to Tina Jungwirth at the Colorado Division of Wildlife. Be sure to include your OIN, Observation Location Number, and Field Sheet Number. These numbers will be assigned to you after you enter your observation information online.

Check the box next to "Species Photo Submitted?" on the data form.

emailto:

Tina.Jungwirth@state.co.us

mail to:

Tina Jungwirth
CDOW Herpetologist
6060 Broadway
Denver, CO
80216

Species Photo Submitted



You can use one Field Survey Data Sheet for *multiple observations at the same location*.

The Field Survey Data Sheet has five (5) species observation sections. Since you can only record one stage per observation, a species observation will consist of one stage of one species. For example: Species Observation Section 1 may have "Bullfrog, adult, 5 individuals", Species Observation Section 2 may have "Bullfrog, egg masses, 25 individuals" [meaning 25 separate egg masses], and Species Observation Section 3 may have "Leopard Frog, adult, 2 individuals."

If you observe more than five species or stages at a location, you will need to fill out another Data Survey Field Form. Be sure to fill out all of the required information on the second form, too.



Observations from *multiple locations* should be on different data sheets.

Use a different Field Survey Data Sheet for each location you observe.



Submit your data with the *online Observation Entry form*.

If you do not have access to the Internet, submit your data to Tina Jungwirth at the Colorado Division of Wildlife (see address above). Keep copies of the data you send.

Field Survey Data Sheet - Glossary

Aspect. The direction a hillslope faces.

Aquatic Water Code . The official CDOW water code that is currently maintained by the Hatchery Section in Denver Headquarters

Emergent vegetation. Plants that are rooted and can grow up through standing water (e.g., cattails). These plants are not floating or submerged.

Global Positioning System (GPS). A navigation system that uses satellites to measure a location.

Malformity. A deformity or abnormality in some part of the body.

Stage. A phase or period of time in the course of development.

Stream order. A measure of how segments of a stream system are arranged. A "1" stream section is an unbranched tributary, a "2" stream section occurs after the junction of the first tributary, a "3" stream section occurs after the junction of the second tributary, and so on.

Substrate. The material or substance that is at the base of an environment (e.g., the materials that make up a stream bed or forest floor).

Topographic map. A map showing the surface features of a region. Available from the U.S. Geological Survey (USGS).

Topography. The surface features of a place or region (e.g., slopes).

Turbidity. Muddy or cloudy because sediment is stirred up or suspended.

Universal Transverse Mercator (UTM) grid. A coordinates system used in mapping.

Voucher Specimen. An example organism placed in a museum.

 ***If you have any questions about the Field Survey Data Sheet, contact your volunteer observer coordinator or CDOW state herpetologist.***