# **NEW ORGANIZATION**

# **Amphibian and Reptile Conservation**

by Maria G. Essig, Idaho Herpetological Society

X O Y

Despite their representing a greater portion of the nation's biodiversity than either mammals or birds, reptiles and amphibians are, ironically, the least understood of vertebrates.

— Whit Gibbons

Long-nose snakes and striped chorus frogs were once common throughout the Treasure Valley surrounding Boise, but Mark Gerber would be "extremely surprised" to find one there today. President of the Idaho Herpetological Society, Gerber has been tracking many species of reptiles and amphibians (collectively called herps) in southern Idaho for the past 10 years and has witnessed first-hand the decline of some native Idaho herps. He has also seen an increase in numbers of non-native animals such as bullfrogs, which often outcompete natives for territory and food. Gerber's concerns about maintaining Idaho's native reptile and amphibian populations are shared by researchers, scientists, and herp enthusiasts throughout the state. These concerned people are gaining a powerful new ally, an organization called Partners in Amphibian and Reptile Conservation (PARC).

Although the sharp decline of amphibians around the world has been in the news, reptiles have not received the same level of attention. One advantage of PARC is its focus on both amphibians and reptiles. Organized in 1998, the group seeks to

"conserve amphibians, reptiles, and their habitats as integral parts of our ecosystem and culture through proactive and coordinated public and private partnerships."



Horned lizard in southwest Idaho.

Modeled after the successful Partners in Flight organization, which raises awareness and takes action about the alarming decline of migratory birds that breed in North America and migrate to the tropics for winter, PARC is dedicated to raising awareness about and helping reptiles and amphibians.

Set up as an umbrella organization, PARC is bringing together state agencies, private groups, and individuals, professionals and nonprofessionals alike, who share PARC's mission. The practical goals of PARC include:

- Educating the public about the importance of herps in our environment, leading to acceptance and appreciation of these animals.
- Standardizing data collection techniques in order to provide comparable information and help recognize

trends.

- Using collected data to establish an organized base of knowledge about reptiles and amphibians throughout the United States and the world.
- Creating a user-friendly interface for accessing information and policies involving reptiles and amphibians.
- Determining the habitat needs of threatened herp species and working with landowners and land managers to provide those needs.

The information collected by PARC will help Idaho researchers confirm both positive and negative changes in herp populations. For example, Gerber believes that the range of tiger salamanders in Idaho has actually expanded as the salamanders use new irrigation canals as corridors to establish populations in areas previously unreachable. At the same time, housing develoments are destroying habitat of other native herps, such as the ground snake and long-nose snake. Other, less obvious threats also exist. Collared lizards are declining where removal of large stones for landscaping purposes damages the rocky outcrops that are the lizards' preferred habitat. And no one knows the impacts caused by people who may overlook Idaho permitting regulations and remove from the wild large numbers of native reptiles or amphibians.

Declining, threatened, or endangered herps are not the only interest of PARC. In an effort to ensure children of the future the thrill of seeing a collared lizard outlined against the sky, watching tadpoles grow into frogs, or raising a garter snake, PARC wants to "keep common native species common."

Magnificent animals, reptiles and amphibians play an important role in our planet's ecosystem. PARC is dedicated to conserving this valuable resource. As Dr. Whit Gibbons, herpetologist at the University of Georgia's Savannah River Ecology Laboratory and one of the founding members of PARC, wrote, "Reptiles and amphibians are sentinels of our environmental health. If they are declining, disappearing, then we need to make amends. Because what happens to them is a sign of what could happen to other wildlife; and we won't be far behind."

For more information about PARC, check their website at www.parcplace.org. If you're interested in furthering the PARC mission or participating in an Idaho PARC working group, contact Dr. Charles Peterson, Professor of Ecology and Herpetology, at Idaho State University (208/236-3922 or petechar@isu.edu). For more information about PARC or the Idaho Herpetological Society, contact Mark Gerber, IHS President (208/378-6236 or mgerber@IdahoHerpetologicalSociety.com).

## **NEWS & EVENTS**

# Mark Your MAY Calendar: **International Migratory Bird Day and Other Birding Events**

All these Saturday events are free-of-charge. Bring your binoculars and dress for the weather conditions.

# Kootenai National Wildlife

Refuge - May 13

Contact: Dan Pennington, USFWS (208) 267-3888

Time: Early morning to early after-

Activities: Try several bird-watching walks, including one for marsh birds and one for forest birds, all beginning at the Refuge. There are also demonstrations, including activities for the kids, such as bird- or bat house building.

## Camas National Wildlife Refuge -May 20

Contact: Gerry Deutscher, USFWS (208) 662-5423

Time: 8 a.m. to 4 p.m.

Activities: Come to the Refuge anytime within this period to join a birdwatching tour, each lasting about an

hour.

## American Falls Fish Hatchery -May 13

Contact: Chuck Trost, ISU (208) 236-3337

Time: 8:00 a.m. to 5:00 p.m.

Activities: At the hatchery join guided birding tours of the reservoir area

throughout the day.

## Salmon Region, Idaho Department of Fish and Game - May 13

Contact: Vicky Runnoe, IDFG (208) 756-2271

Time: 9:00 a.m. to 3:00 p.m.

Activities: Meet at the IDFG Salmon Regional office. Morning activities will include discussion of birding, field guides, binoculars, bird identification from slides. Afterwards, there will be a birding tour outdoors, as well as a birdbanding demonstration.

## Craters of the Moon National Monument - May 13

Contact: Mike Munts, USPS (208) 527-3257

Reservation is required.

Time: 9:00 a.m. to noon Activities: Join the all-morning, guided bird-watching tour at Craters. (Group size for this all-morning trip will be limited for maximum birding success, so call ahead.)

## Roberts Community Center, then to Market Lake Wildlife Management Area - May 20

Contact: Mark Delwiche, Audubon (208) 525-9414

Time: 9:00 a.m. to 2:00 p.m.

Activities: Visit the Community Center to see displays, bird-carvers, a falconer. During these hours, guided birdwatching tours will leave from here for the marsh, each tour lasting approximately an hour.

**Boise District Bureau of Land** Management - Bird Banding

Trips - May 6, 13, and 27

Contact: Nancy Taylor-Grant, BLM (208) 384-3463

Pre-registration is required

for any trip

Time: 8:00 a.m. to 5:00 or 6:00 p.m. Activities: Meet at the Boise District BLM office for any of the following allday bird-banding trips. Call ahead to reserve your space.

May 6: western screech-owls

May 13: western screech-owls

May 27: ferruginous hawks

## Bird-Window Collisions from page 2

common among cardinals, robins, and bluebirds, but I have observed chickadees and nuthatches doing the same thing.

One construction technique being tested in homes and in commercial buildings is to tilt the windows slightly to reflect the ground instead of the treetops. It remains to be seen if this will prove effective or practical. People like Dr. Klem have shown that bird strikes are a real problem. The

beginning of a solution is our increased awareness of the problem. As more people become aware, more research will hopefully provide more solutions. Then it is up to each of us to implement the ideas and reduce this needless form of bird death.

For more information, contact Betty Miller at Whispering Pines, P.O. Box 8568, Moscow, ID 83843; 1/888/882-8344; or www.wpines.com.

# INSTRUCTIONS FOR FILLING OUT THE AMPHIBIAN AND REPTILE INDIVIDUAL OBSERVATION FORM

Please provide whatever information you can. To simplify reporting a number of observations, you may wish to use the multiple observation form. Thank you

Common Name/Species: Provide the common or scientific name of the animal if you are able to identify it. If you cannot identify it, please describe it as accurately as possible. Include the exact or estimated number (1-10, 10-100, more than 100, etc.) observed.

Date: Include the year and clearly distinguish between day and month (e.g., 6 June 1992).

Time. Include AM or PM or use military time.

Please include your name, affiliation, address, and phone number so we can contact you if we need further information, a copy of the photograph, etc.

Have you seen this species before?

**Description:** Describe the animal as accurately as you can so we can confirm your identification or so we can identify it from your description. Characteristics to note include size/length, shape, color, pattern (e.g., striped, banded, blotched, or unicolor), skin texture (e.g., smooth, shiny, rough, scaled, etc.), pupil shape (round or elliptical), and presence or absence of limbs and tail. See the references below for more information on identifying characteristics. Did you photograph the animal?

Behavior: Behavioral descriptions are useful in identifying animals and are inherently interesting. For example, Was the animal moving or still? Did it crawl or jump or hop? Was it fast or slow? Was it trying to escape from you or was it hunting or feeding? Did it vocalize? What did it sound like?

Location: Be as accurate as possible. Try to describe the site so that someone else could relocate it from your directions. For example, in a small pond, 30 yards north of Highway X, 4.5 miles N and 3.3. miles east of a known landmark (junction, the center of a town, etc.). Please include the exact coordinates if you know them (latitude and longitude, UTMs, or Range, Township, Section, quarter section, etc.). Accurate locality information can greatly enhance the value of your observation.

Habitat: Describe the major cover type (forested [needleleaf, broadleaf, or mixed], non-forested [alpine, grassland, shrubland, or barren], riparian and wetlands [forested or scrub-shrub riparian, marsh, pond, or lake], or developed land [agricultural or urban]). Also describe the immediate area around the animal (burrow, talus slope, stream bank, etc.).

Weather: Include such information as the air temperature, water temperature, wind conditions, cloud cover, precipitation, etc.

Remarks: Please include any other information you consider relevant.

#### **Useful References**

Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second edition. Wyoming Game and Fish Dept. 137 pp.

Corkran, C.C. and C.R. Thoms. 1996. Amphibians of Oregon, Washington, and British Columbia - A Field Identification Guide. Lone Pine Publishing, Vancouver, British Columbia. [very complete]

Leonard, W.P., H.A. Brown, L.C. Jones, K.R. McAllister, and R.M. Storm. 1993. Amphibians of Washington and Oregon. Seattle Audubon Society, Seattle, Washington. [excellent color photographs]

Nussbaum, R.A. E.D. Brodie, and R.M. Storm. 1983. Amphibians and reptiles of the Pacific Northwest. University of Idaho Press, Moscow. 332 pp. [The best general source of information on the amphibians and reptiles of Idaho]

Koch, E.D. and C.R. Peterson. 1996. Amphibians and Reptiles of Yellowstone and Grand Teton National Parks. University of Utah Press. 188 pp. Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. Houghton Mifflin Co., Boston. 336 pp. [The best field guide to the

amphibians and reptiles of the western United States]
Storm, R.M., W.P. Leonard, H.A. Brown, R.B. Bury, D.M. Darda, L.V. Diller, and C.R. Peterson. 1995. Reptiles of Washington and Oregon. Scattle Audubon Society Trailside Series. 176 pp. [excellent color photographs]

## **AMPHIBIAN AND REPTILE INDIVIDUAL OBSERVATION FORM**

(April 2002)

	information you can, even if you are	
Species:		Number of Animals
Observation Date:	// Time:	am pm (circle one)
Observer Name(s)		
Affiliation:		
Address:		
Phone No:	Have you seen th	is species before?
Description of Animal (s	size, color, pattern, pupil shape, skin	texture, etc.):
		Did you photograph the animal?
Description of Animal's	Behavior:	
Longitude; UTM coordinate	ates; or Range, Township, and Section	es north and 3.3 miles east of known landmark; ion):
Habitat:		
Weather: (temperature, c	loud cover, wind, etc.):	
Remarks:		
Remarks:		

Pocatello, Idaho 83209
(208) 282-3922 office 2824570 FAX E-mail: petechar@isu.edu Website: www.isu.edu/~petechar

## CHECKLIST OF AMPHIBIANS AND REPTILES OF BIG CREEK DRAINAGE, IDAHO1

(Version June 2002)

Status/Comments<sup>2</sup>

#### **CLASS AMPHIBIA**

Order Urodela Salamanders and Newts

Family Ambystomatidae Mole Salamanders

Ambystoma macrodactylum Long-toed Salamander Confirmed

Family Dicamptodontidae Pacific Mole Salamanders

Dicamptodon aterrimus Idaho Giant Salamander Possible

Order Anura Frogs and Toads

Family Ascaphidae Tailed Frogs

Ascaphus montanus Rocky Mountain Tailed Frog Confirmed

Family Bufonidae True Toads

Bufo boreas Western Toad Confirmed USDS NF Sensitive Species

Family Hylidae True Tree Frogs

Pseudacris (=Hyla) regilla Pacific Treefrog Possible

Family Ranidae True Frogs

Rana luteiventris Columbia Spotted Frog Confirmed

Indicator species for Salmon/Challis NF

#### CLASS REPTILIA

### **Order Squamata**

Suborder Lacertilia Lizards

Family Iguanidae Iguanids

Sceloporus graciosus Common Sagebrush Lizard Possible

Family Scincidae Skinks

Eumeces skiltonianus Western Skink Possible

Suborder Ophidia Snakes

Family Boidae Boas

Charina bottae Rubber Boa Confirmed

Family Colubridae Harmless Snakes

Coluber constrictorEastern RacerConfirmedPituophis cateniferGopher SnakeConfirmedThamnophis elegansTerrestrial Garter SnakeConfirmedThamnophis sirtalisCommon Garter SnakePossible

Family Viperidae Vipers

Crotalus viridis Prairie Rattlesnake Confirmed

Prepared by C.R. Peterson, Herpetology Laboratory, Idaho State University & The Idaho Museum of Natural History

<sup>&</sup>lt;sup>1</sup> Species names are consistent with Crother, B.I. 2000. Scientific and Standard English Names of Amphibians and Reptiles of North America North of Mexico, with Comments Regarding Confidence in Our Understanding. SSAR Herpetological Circular No. 29. Pp. iv + 1-82. Family names follow Pough et al. 2001.

## Herpetology Laboratory, Idaho State University



## Sources of Information on Amphibians and Reptiles

#### References:

Corkran, C.C. and C.R. Thoms. 1996. Amphibians of Oregon, Washington, and British Columbia - A Field Identification Guide. Lone Pine Publishing, Vancouver, British Columbia. [Very complete]

Duellman, W.E. and L. Trueb. 1985. Biology of Amphibians. McGraw Hill, New York. [The best general amphibian text.]

Groves, C. 1994. Idaho's Amphibians and Reptiles. Nongame Leaflet #7. Idaho Department of Fish and Game.

Halliday, T. and K. Adler. 1987. The Encyclopedia of Amphibians and Reptiles. Facts on File Publications, New York. 143 pp. [An excellent general introduction to the biology of amphibians and reptiles; accurate, clearly written, and well illustrated]

Heyer, W.R., R.W. McDiarmid, M.Donnelly, and L. Hayek, (editors). 1994. Measuring and monitoring biological diversity - Standard methods for amphibians. Smithsonian Institution Press, Washington, D.C. [The single most comprehensive source for information on sampling amphibians.]

Karns, D.R. 1986. Field herpetology: methods for the study of amphibians and reptiles in Minnesota. Occasional Paper No. 18, Division of Comparative Biology, James Ford Bell Museum of Natural History, University of Minnesota, Minneapolis. [Contains good descriptions of techniques for finding and monitoring populations.]

Koch, E.D. and C.R. Peterson. 1996. Amphibians and Reptiles of Yellowstone and Grand Teton National Parks. University of Utah Press. 188 pp. [detailed species accounts]

Leonard, W.P., H.A. Brown, L.C. Jones, K.R. McAllister, and R.M. Storm. 1993. Amphibians of Washington and Oregon. Seattle Audubon Society, Seattle, Washington. [excellent color photographs]

Nussbaum, R.A. E.D. Brodie, and R.M. Storm. 1983. Amphibians and reptiles of the Pacific Northwest. University Press of Idaho, Moscow. 332 p. [Although somewhat dated, one of the best general source of information on the amphibians and reptiles of Idaho.]

Olson, D.H, W.P. Leonard, and R.B. Bury (editors). Sampling Amphibians in Lentic Habitats. Northwest Fauna 4. [An excellent summary of amphibian sampling techniques for pond-breeding amphibians in the Pacific Northwest.]

Pough, F.H., J.B. Heiser, and W.N. McFarland. 1989. Vertebrate Life. Third edition. Macmillan Publishing Co., New York. [An excellent textbook on vertebrate zoology; especially good chapters on amphibians and reptiles].

Pough, F.H., R.M. Andrews, J.E. Cadle, M.L. Crump, A.H. Savitzky, and K.D. Wells. 1998. Herpetology, Prentice-Hall,

Inc. Upper Saddle River, New Jersey. 577 pp. [The best introductory textbook of herpetology]

Stebbins, R.C. 2003. Western amphibians and reptiles. Third edition. Houghton Mifflin Co., Boston. 544 pp. [The best field guide to the amphibians and reptiles of the western United States.]

Stebbins, R.C. and N.W. Cohen. 1995. A Natural History Amphibians. Princeton University Press. 316 pp.

St. John, Alan. 2002. Reptiles of the Northwest. Lone Pine Press. 256 pp. [Excellent photos and illustrations]

Storm, R.M., W.P. Leonard, H.A. Brown, R.B. Bury, D.M. Darda, L.V. Diller, and C.R. Peterson. 1995. Reptiles of Washington and Oregon. Seattle Audubon Society Trailside Series. 176 pp. [excellent color photographs]

### **Amphibian Calls:**

Sounds of the North American Frogs. 1958. The Smithsonian Institution. Folkways Cassette Series:06166. [Describes types and characteristics of calls; to order, call 202 287-3262]

Voices of the Night. 1982. Library of Natural Sounds. Cornell Laboratory of Ornithology. 159
Sapsucker Woods Road, Ithaca, NY 14850. [Calls of many species of North American frogs and toads]

Davidson, C. 1995. Frog and Toad Calls of the Pacific Coast - Vanishing Voices. Library of Natural Sounds. Cornell Laboratory of Ornithology. 159 Sapsucker Woods Road, Ithaca, NY 14850.

### **Organizations:**

Conservation Data Center, Nongame and Endangered Wildlife Program, Idaho Department of Fish and Game, 600 S. Walnut, P.O. Box 25, Boise, ID 83707; (208) 334-3402.

Herpetology Laboratory. Department of Biological Sciences, Idaho State University, and Idaho Museum of Natural History. Campus Box 8007, ISU, Pocatello, ID 83209. (208) 236-3922. E-mail: petechar@isu.edu. Website: <a href="http://www.isu.edu/~petechar">http://www.isu.edu/~petechar</a> – provides links to Idaho Amphibian and Reptile Website, ISU Herpetology Laboratory, and the Digital Atlas of Idaho.

Idaho Herpetological Society. P.O. Box 44484, Boise, Idaho 83711-0484. [Publishes *Idaho Herp News* four times per year; Mark Gerber, President]

IUCN/SSC Declining Amphibian Populations Task Force (DAPTF). [Publishes *FrogLog* four times per year; John Baker, Editor. Department of Biology, The Open University, Walton Hall, Milton Keynes, MK7 6AA, United Kingdom; E-mail: j.m.r.baker@open.ac.uk; World Wide Web http://acs-info.open.ac.uk/info/other/FROGLOG.html]

Pacific Northwest Amphibian and Reptile Consortium (PNARC). [A subcommittee of the Society for Northwestern Vertebrate]

# AMPHIBIAN AND REPTILE MULTIPLE OBSERVATION FORM (1 November 1996)

me iliation dress one Number e the instruction	s for filling out the Ampl	hibian and Reptile Individ	dual Observation Form for details	s on what information to provide.	
SPECIES	DESCRIPTION	DATE & TIME	LOCALITY	HABITAT	REMARKS
				Ship and a second	

#### INSTRUCTIONS FOR FILLING OUT THE AMPHIBIAN AND REPTILE MULTIPLE OBSERVATION FORM

The purpose of this form is to provide an efficient format for reporting multiple observations of amphibians and reptiles.

Please include your name, affiliation, address, and phone number so we can contact you if we need further information, a copy of the photograph, etc.

Common Name/Species: Provide the common or scientific name of the animal if you are able to identify it. If you cannot identify it, please describe it as accurately as possible. Indicate life stage (adult, juveniles, larvae, or eggs). Use separate lines for different life stages. Include the exact or estimated number (1-10, 10-100, more than 100, etc.) observed.

Description: Briefly describe the animal so we can confirm your identification or so we can identify it from your description. Characteristics to note include size/length, shape, color, pattern (e.g., striped, banded, blotched, or unicolor), skin texture (e.g., smooth, shiny, rough, scaled, etc.), pupil shape (round or elliptical), and presence or absence of limbs and tail. See the identification cards or the references below for more information on identifying characteristics.

Date and Time.: Include the year and clearly distinguish between day and month (e.g., 6 June 1992). Include AM or PM or use military time.

Location: Be as accurate as possible. Try to describe the site so that someone else could relocate it from your directions. For example, in a small pond, 30 yards north of Highway X, 4.5 miles N and 3.3. miles east of a known landmark (junction, the center of a town, etc.). Please include the state, county, and exact coordinates if you know them (latitude and longitude, UTMs, or Range, Township, Section, quarter section, etc.). Accurate locality information can greatly enhance the value of your observations.

Habitat: Describe the major cover type (forested [needleleaf, broadleaf, or mixed], non-forested [alpine, grassland, shrubland, or barren], riparian and wetlands [forested or scrub-shrub riparian, marsh, pond, or lake], or developed land [agricultural or urban]). Also describe the immediate area around the animal (burrow, talus slope, stream bank, etc.).

Remarks: Include other relevant information concerning behavior, weather, etc. Behavioral descriptions are useful in identifying animals and are inherently interesting. For example, Was the animal moving or still? Did it crawl or jump or hop? Was it fast or slow? Was it trying to escape from you or was it hunting or feeding? Did it vocalize? What did it sound like? Useful weather information includes air temperature, water temperature, wind conditions, cloud cover, precipitation, etc. Indicate here if you photographed the animal.

#### **Useful References**

Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second edition. Wyoming Game and Fish Dept. 137 pp.
 Corkran, C.C. and C.R. Thoms. 1996. Amphibians of Oregon, Washington, and British Columbia - A Field Identification Guide.
 Lone Pine Publishing, Vancouver, British Columbia. [very complete]

Leonard, W.P., H.A. Brown, L.C. Jones, K.R. McAllister, and R.M. Storm. 1993. Amphibians of Washington and Oregon. Seattle Audubon Society, Seattle, Washington. [excellent color photographs]

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Storm, R.M., W.P. Leonard, H.A. Brown, R.B. Bury, D.M. Darda, L.V. Diller, and C.R. Peterson. 1995. Reptiles of Washington and Oregon. Seattle Audubon Society Trailside Series. 176 pp. [excellent color photographs]

Please send completed forms to:

Dr. Chuck Peterson
Idaho Museum of Natural History
Box 8007, Idaho State University
Pocatello, Idaho 83209-8007

(208) 282-3922 office 282-4570 FAX Internet: petechar@isu.edu Website: www.isu.edu/~petechar

#### IDAILY RARE ANIMAL VESERVATION RELVAT

A list of rare animals for which we are seeking information and the types of information sought are shown on the back side of this form. Please refer to this list when sending us information. Please enter all available information. Kana pretiosa Date of Observation: (0-11-05 Holly Kaneh Location of Observation: (Be specific, use place names we can locate on topo maps): County: Idaho 1/4 of 9 1/4 of Section 2 UTM Elevation: 6990 A 0661093 **Ouad Name** 5015698 torest Landowner/Manager: (e.g., BLM district, national forest) Type of Observation: (tracks, scat, nest, colony, sighting) Number of Individuals Seen (include sex and age class): Habitat Description: & Sub-alpine meadow in slow moving water Frog Rana pretiosa Date of Observation: Location of Observation: (Be specific, use place names we can locate on topo maps): T RIZE SW 1/4 of NE 1/4 of Section 30 Quad Name Private Adjacent Landowner/Manager: (e.g., BLM district, national forest) Tadpole Sightings Type of Observation: (tracks, scat, nest, colony, sighting) Number of Individuals Seen (include sex and age class): 3 adatts in the vicinity Muck) In es on Root

Please return form to: Idaho Conservation Data Center, Idaho Department of Fish and Game, P. O. Box 25, Boise ID 83707, (208) 334-3402

adjacent.

A list of rare animals fo	r which we are seeking	g information and the types of	information sought are shown on the
back side of this form.	Please refer to this list	when sending us information.	Please enter all available information.

Species Name: Tailed Frog (2007) Date of Observation: 7-26-63
Observer(s): Troy Hinck, Corey Shake Phone: ()
Address: Taylor Ranch Field Research Station HC83 Box 8070 Cascade, ID
Location of Observation: (Be specific, use place names we can locate on topo maps): approx, 2 mi
uptressen up Mud Cr. from it's mouth (confluence w/ Monumental Cr.)
County: Valley TZON R ILE 1/4 of Section 30
Elevation: 6700 ft Quad Name Center Mtn.
Landowner/Manager: (e.g., BLM district, national forest) U.S. Forest Service
Type of Observation: (tracks, scat, nest, colony, sighting) Sighting
Number of Individuals Seen (include sex and age class): 1 adult female, possibly 2 other abults
Habitat Description: Riparian Streambank
Other Comments: found streamside in wet regetation right after heavy rainfall.  The other two frogs weren't positively identified but booked most likely to be tailed frogs as well.
Species Name: Spotled Frog (Rana pretiosa) Date of Observation: 7-23-03  Observer(s): Holly Akenson, Corey Shake, Troy Hinck, Mackenzie Shardlow  Phone: ()
Address: Taylor Ranch Field Station HC83 Box 8070 Cascade ID 83611
Location of Observation: (Be specific, use place names we can locate on topo maps): approx 100-150 m
up Monumental Cr. from the month of Mud Cr. ±50 m downstream
County: Valley THE RIE NW 1/4 of SE 1/4 of Section 28 Crossing
Elevation: 5500ft Quad Name Monument
Landowner/Manager: (e.g., BLM district, national forest) U.S. Forest Service
Type of Observation: (tracks, scat, nest, colony, sighting) Sighting
Number of Individuals Seen (include sex and age class): 2 adults
Habitat Description: standing sidewater surrounded by grass w/ varrous aquatic veg.
Other Comments:

Please return form to: Idaho Conservation Data Center, Idaho Department of Fish and Game, P. O. Box 25, Boise ID 83707, (208) 334-3402



# Amphibians and Reptiles of the Big Creek Drainage, Frank Church – River of No Return Wilderness

Taylor Ranch, Idaho 29 June 2000

Charles R. Peterson
Herpetology Laboratory
Department of Biological Sciences and Idaho Museum of Natural History
Idaho State University
Pocatello, Idaho 83209-8007

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## Outline

- I. General Introduction
  - A. Sources of Information
  - B. Types and Characteristics of Amphibians and Reptiles
  - C. Importance of Amphibians and Reptiles
  - D. Status and Conservation
  - E. Reporting Observations
  - F. Detection/Collection Techniques
- II. Amphibians and Reptiles of South Central Idaho
  - A. Identification
  - B. Distribution
  - C. Natural History
  - D. Conservation

#### **Books and Journals**

### General:

Beebee, T.J.C. 1996. Ecology and Conservation of Amphibians. Conservation Biology Series No. 7 (eds. Goldsmith, F.B. and E. Duffey), Chapman and Hall, New York.

Duellman, W.E. and L. Trueb. 1986. Biology of Amphibians. New York: McGraw-Hill Book Co.

Halliday, T. and K. Adler (editors). 1987. The Encyclopedia of Reptiles and Amphibians. Facts on File, Inc. New York.

Pough, F. H., R.M. Andres, J.E. Cadle, M.L, Crump. A.H. Savitzky, and K.D. Wells. 1998. Herpetology. Prentice-Hall, Inc. Upper Saddle.

Powell, R., J.T. Collins, and E.D. Hooper, Jr. 1998. Amphibians and Reptiles of the Continental United States and Canada. University Press of Kansas, Lawrence, Kansas.

Stebbins, R.C. and N.W. Cohen. 1995. A Natural History of Amphibians. Princeton University Press, Princeton, New Jersey.

### **North America**

Conant, R. and J.T. Collins. 1991. A Field Guide to Reptiles and Amphibians. Eastern and Central North America. Houghton Mifflin Co., Boston. 450 pp.

Stebbins, R.C. 1985. A Field Guide to Western Reptiles and Amphibians. Houghton Mifflin Co., Boston.

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Campbell, H. W., and S. P. Christman. 1982. Field techniques for herpetofaunal community analysis. Pages 193-200. In: Scott, N. J., Jr. ed. Herpetological communities. U.S. Fish and Wildlife service Wildlife Research Report 13, Washington, D. C., USA.

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## **Audio Tapes and Compact Disks:**

Sounds of the North American Frogs. 1958. The Smithsonian Institution. Folkways Cassette Series:06166. [Describes types and characteristics of calls; to order, call 202 287-3262]

Voices of the Night. 1982. Library of Natural Sounds. Cornell Laboratory of Ornithology. 159 Sapsucker Woods Road, Ithaca, NY 14850. [Calls of many species of North American frogs and toads]

Davidson, C. 1995. Frog and Toad Calls of the Pacific Coast - Vanishing Voices. Library of Natural Sounds. Cornell Laboratory of Ornithology. 159 Sapsucker Woods Road, Ithaca, NY 14850.

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## **Herpetological Societies:**

American Society of Ichthyologists and Herpetologists (ASIH)

Herpetologists League (HL)

Society for the Study of Amphibians and Reptiles (SSAR)

Idaho Herpetological Society. You can contact the IHS at P.O. Box 44484, Boise, ID 83711-0484.

## Some Herpetological Web Sites:

Amphibian Information Website (http://monitoring2.pwrc.nbs.gov/amphibs/)

Declining Amphibian Populations Task Force (http://www2.open.ac.uk/Ecology/J Baker/JBtxt.htm)

Digital Atlas of Idaho (http://imnh.isu.edu/digitalatlas/)

Idaho Amphibian and Reptile Web Site (http://www.isu.edu/~petechar/idar/idarmenu.htm)

Herp Link - contains many links to other herpetological sites. (http://home.ptd.net/~herplink/org.html)

North American Amphibian Monitoring Program (NAAMP) (http://www.im.nbs.gov/amphibs.html)

North American Reporting Center for Amphibian Malformations (http://www.npsc.nbs.gov./narcam/index.htm)

Partners in Amphibian and Reptile Conservation (http://www.parcplace/.org/)

Savannah River Ecology Laboratory's Herpetology Home Page (http://www.uga.edu/~srelherp/)

Treating and Preventing Venomous Snake Bites (http://www.fda.gov/fdac/features/995 snakes.html)

#### Some Conservation Web Sites:

Idaho Conservation Data Center (http://www2.state.id.us/fishgame/cdcranks.htm)

Montana Natural Heritage Program (http://nris.state.mt.us/mtnhp)

Oregon Natural Heritage Program Amphibians (http://www.heritage.tnc.org/nhp/us/or/amph.htm)

WHEN PLAN

Oregon Natural Heritage Program Reptiles (http://www.heritage.tnc.org/nhp/us/or/rept.htm)

Washington Natural Heritage Program (http://www.wa.goov/dnr/htdocs/fr/nhp/refdesk/lists/animal\_ranks.html)

Wyoming Natural Diversity Database (http://uwadmnweb.uwyo.edu/wyndd/herp.htm)

### CHECKLIST OF IDAHO AMPHIBIANS<sup>1</sup>

(Version February 2000)

#### Status/Comments<sup>2</sup>

#### Order Urodela Salamanders and Newts

Family Ambystomatidae

Ambystoma tigrinum Ambystoma macrodactylum Mole Salamanders

Tiger Salamander Long-Toed Salamander

Family Dicamptodontidae

Dicamptodon aterrimus

Pacific Mole Salamanders

Idaho Giant Salamander

endemic to northern Rockies

Family Plethodontidae

Plethodon idahoensis

Lungless Salamanders

Coeur d'Alene Salamander

SSC, W. FSR1 S, BLM S. endemic to northern Rockies

Family Salamandridae

Taricha granulosa

Newts

Roughskin Newt

introduced?

Order Anura Frogs and Toads

Family Leiopelmatidae

(=Ascaphidae) Ascaphus truei **Bell Toads** 

Tailed Frog

**Family Bufonidae** 

Bufo boreas

True Toads

Western Toad

SSC, W, SC, FSR1 S, BLM S, declines in se Idaho?

Bufo woodhousii

Woodhouse's Toad

Family Hylidae

True Tree Frogs

Hyla regilla

Pacific Tree (Chorus) Frog

(= Pseudacris)

Pseudacris {triseriata} maculata Boreal Chorus Frog

Family Pelobatidae

Scaphiopus intermontanus (=Spea intermontana)

Archaic Toads

Great Basin Spadefoot

**Family Ranidae** 

Rana catesbeiana Rana pipiens

Rana luteiventris

Rana sylvatica

True Frogs

Bullfrog Northern Leopard Frog

Columbia Spotted Frog

Wood Frog

Introduced, game species

SSC, SC, FSR1 S, BLM S, declines in Idaho

SSC, C (sw Idaho), FSR4 S, BLM S

SC

<sup>1</sup> Names are generally consistent with Collins, J.T. (1990). Standard Common and Current Scientific Names for North American Amphibians and Reptiles. Third Edition. SSAR Herpetological Circular No. 19: 1-41.

<sup>&</sup>lt;sup>2</sup> SSC = State Species of Special Concern; C = USFWS Candidate for Threatened and Endangered Species status; W = USFWS Snake River Field Office Watch Species; SC = USFWS Snake River Field Office Species of Concern; FSR# = Forest Service Region 1 or 4; BLM = Bureau of Land Management; S = Sensitive Species

## CHECKLIST OF IDAHO REPTILES<sup>1</sup>

(Version June 1997)

#### Status/Comments<sup>2</sup>

#### Order Testudines Turtles

Clemmys marmorata

Family Emydidae Chrysemys picta Pond and River Turtles
Painted Turtle
Western Pond Turtle

some introduced populations; possible declines? one recorded from 1800's; SSC

Order Squamata

Suborder Lacertilia

Lizards

Family Anguidae

Anguids

Elgaria coerulea

Northern Alligator Lizard

SSC

Family Crotaphytidae

Crotaphytus bicinctores Gambelia wislizeni Mojave Black-collared Lizard Longnose Leopard Lizard SSC

Family Phrynosomatidae

Phrynosoma douglassi Phrynosoma platyrhinos Sceloporus graciosus Sceloporus occidentalis Uta stansburiana Short-horned Lizard Desert Horned Lizard Sagebrush Lizard Western Fence Lizard Side-blotched Lizard declines in se Idaho?

Family Scincidae

110

Eumeces skiltonianus

Western Skink

Family Teiidae

Cnemidophorus tigris

Western Whiptail

### Suborder Ophidia Snakes

Family Boidae

Boas

Skinks

Charina bottae

Rubber Boa

Family Colubridae

Harmless Snakes

Coluber constrictor

Racer Pingneck Snak

Diadophis punctatus

Ringneck Snake

SSC, BLM S

Hypsiglena torquata Masticophis taeniatus Night Snake

Pituophis catenifer

Striped Whipsnake Gopher Snake

Rhinocheilus lecontei

Longnose Snake

SSC, BLM S

Sonora semiannulata Thamnophis elegans Ground Snake Western Terrestrial Garter Snake SSC, BLM S

Thamnophis sirtalis

Common Garter Snake

declines in se Idaho?

Family Viperidae

Vipers

Crotalus viridis

Western Rattlesnake

Names are generally consistent with Collins, J.T. (1990). Standard Common and Current Scientific Names for North American Amphibians and Reptiles. Third Edition. SSAR Herpetological Circular No. 19: 1-41.

<sup>&</sup>lt;sup>2</sup>? = unverified occurrence; SSC = State Species of Special Concern; C = USFWS Candidate Species for Threatened and Endangered Species status; BLM S = BLM Sensitive Species

Prepared by C.R. Peterson, Herpetology Laboratory, Idaho State University & The Idaho Museum of Natural History

## Conservation Status of the Amphibians and Reptiles of the Intermountain West

	Scientific name	Common Name	Global Rank (GRANK)	State Rank (SRANK) Idaho	State Rank (SRANK) Oregon	State Rank (SRANK) Montana	State Rank (SRANK) Wyoming	State Rank (SRANK) Washington	Idaho Dept of F&G State Status	Oregon Dept. of F&W Status	U.S. Fish and Wildlife Service	U.S.D.A Forest Service Region 1	U.S.D.A Forest Service Region 4	BLM ID
Amphibians	Ambystoma macrodactylum	Long-toed Salamander	G5	S5		S5		S5						
	Ambystoma tigrinum	Tiger Salamander	G5	S5		S5		S3		SU				
	Dicamptodon aterrimus	Idaho Giant Salamander	G3	S3		SR								
	Plethodon idahoensis	Coeur d'Alene Salamander	G3	S3		S2			SC		W	S		S
	Taricha granulosa	Rough-skin Newt	G5		_	SE1								-
	Ascaphus truei	Tailed Frog	G4	S3	S3	S4								
	Bufo boreas	Western Toad	G4	S4	S4	S3S4	S2	S3S4	SC	SV	W/SC	S		S
	Bufo woodhousei	Woodhouse's Toad	G5	S3	S2	S4		S3		SP	W	1		
	Scaphiopus intermontanus	Great Basin Spadefoot	G5	S4	ALC: U	SR	1							
	Hyla regilla	Pacific Treefrog	G5	S5	1	S4		S5						1
	Pseudacris maculata	Boreal Chorus Frog	G5	S4	The same	S5	1111111		1000		17.700			
WE TE ST	Rana catesbiana	Bullfrog	G5		201	SE3		SE						
	Rana clamitans	Green Frog	G5	1000	4	SR		SE					-	1
777	Rana pipiens	Northern Leopard Frog	G5	S3	S2	S3S4	S3	S1	SC	SC	SC	S	7.70	S
	Rana luteiventris	Columbia Spotted Frog	G4	S3S4	S2	S4	S2S3	S3S4	SC	SU	*C		S	S
	Rana sylvatica	Wood Frog	G5	S4		SR	S2 ·							
Reptiles	Chrysemys picta	Painted Turtle	G5	S4	S2	S5		S5		sc	39.37			
	Elgaria coerulea	Northern Alligator Lizard	G5	S2		S3		S5			w		-	-
	Crotaphytus bicinctores	Mojave Black-Collared Lizard	G5	S2	S2			F1 - 0 - 1	SC	SV	W			S
1338	Gambelia wislizenii	Longnose Leopard Lizard	G5	S5	S4		1		1 E E	SU				-
	Phrynosoma douglassi	Short-Horned Lizard	G5	S5		F - 7 T - 8		S5					12.3.3	
11-	Phrynosoma platyrhinos	Desert Horned Lizard	G5	S4	S3		(D-304-			SV				1
	Sceloporus graciosus	Sagebrush Lizard	G5	S5	S5	S3S4		77		SV				1
	Sceloporus occidentalis	Western Fence Lizard	G5	S4	11-11-11-11		100		1	1				-
-	Uta stansburiana	Side-Blotched Lizard	G5	S4			1000	S5				-		1
	Eumeces skiltonianus	Western Skink	G5	S5	10000	S3S4	1.00	S5				1		
	Cnemidophoris tigris	Western Whiptail	G5	S4										
	Charina bottae	Rubber Boa	G5	S5	-	S4	S2S3	S5		-	-	-		-
7.00	Coluber constrictor	Racer	G5	S5	-		-	S5				1		-
	Diadophis punctatus	Ringneck Snake	G5	S1				S3	SC		W	-		S
	Hypsiglena torquata	Night Snake	G5	S3	-			S4	1			-		-
7	Masticophis taeniatus	Striped Whipsnake	G5	S4		-		S1		-	-	-		
	Pituophis catenifer	Gopher Snake	G5	S5	-	S5	-	S5		-		+	-	
	Rhinochelius lecontei	Longnose Snake	G5	S3		- 55	1	- 00	SC	-	W	-		S
	Sonora semiannulata	Ground Snake	G5	S3	S2	-	-		SC	SP	W	-		S
	Thamnophis elegans	Western Terrestrial Garter Snake	G5	S5	OL.		1	S5	- 00	- Or		-		-
	Thamnophis sirtalis	Common Garter Snake	G5	S5	-	S4		S5	-			-		-00-
-	Crotalus viridis	Western Rattlesnake	G5	S5	S4	S4	S1S2	S5	-	SV		-		
C	Crotaius viriuis	VVESICIII Natuesiiake	Go	33	34	34	3132	90		SV		-		

#### Conservation Status of the Amphibians and Reptiles of the Intermountain West

#### Global and State Ranks (The Nature Conservancy)

- G = Global rank indicator; denotes rank based on rangewide status
- S = State rank indicator; denotes rank based on status within Idaho
- 1 = Critically imperiled because of extreme rarity or because some factor of its biology makes it especially vulnerable to extinction (typically 5 or fewer occurrences)
- 2 = Imperiled because of rarity or because other factors demonstrably make it very vulnerable to extinction (typically 6 to 20 occurrences)
- 3 = Rare or uncommon but not imperiled (typically 21 to 100 occurrences)
- 4 = Not rare and apparently secure, but with cause for long-term concern (usually more than 100 occurrences)
- 5 = Demonstrably widespread, abundant, and secure
- E = An exotic extablished in the state; may be native in nearby regions.
- R = Reported in the state; but lacking documentation which would provide a basis for either accepting or rejecting the report.

#### Idaho Department of Fish and Game State Status

- SC = Species of special concern; native species which are either low in numbers, limited in distribution, or have suffered significant habitat losses.
- T = Threatened; any species likely to be classified as Endangered within the foreseeable future throughout all or a significant portion of its Idaho range.
- E = Endangered; any species in danger of extinction throughout all or a significant portion of its Idaho range.

#### U. S. Fish and Wildlife Service Federal Status

- LE = Listed Endangered; taxa in danger of extinction throughout all or a significant portion of their range.
- LT = Listed Threatened; taxa likely to be classified as endangered within the foreseeable future throughout all or a significant portion of their range.
- PE = Proposed Endangered; taxa proposed to be listed as endangered (formal rulemaking in progress)
- PT = Proposed Threatened; taxa proposed to be listed as threatened (formal rulemaking in progress)
- C = Candidate species; taxa for which the USFWS has on file sufficient information on biological vulnerability and threats to support issuance of a proposed rule to list, but
- \* = Indicates Great Basin Population of Rana luteiventris
- SC = Species of concern; in Idaho
- W = Watch species: in Idaho

#### U. S. D. A. Forest Service

S = Sensitive species; taxa that are identified by the Regional Forester for which viability is a concern, as evidenced by significant current or predicted downward trends in W = Watch; Region 1, headquartered in Missoula, MT, currently utilizes this designation for plant species.

#### **Bureau of Land Management**

S = Sensitive Species; taxa that are under status review by U. S. Fish and Wildlife Service/National Marine Fisheries Service, whose numbers are declining so rapidly that W = Watch List: in 1996. BLM added a Watch list of species whose populations and range appear to be restricted, but information is lacking as to the cause or the species is

#### Oregon Department of Fish and Wildlife

- SC = Critical; species for which listing as threatened or endangered is pending; or those for which listing as threatened or endangered may be appropriate if immediate
- SV = Vulnerable; species fow which listing as threatened or endangered is not believed to be imminent and can be avoided through continued or expanded use of adequate
- SP = Peripheral or Naturally Rare; peripheral species refer to those whose Oregon populations are on the edge of their range. Naturally rare species are those which low
- SU = Undetermined Status; animals in this category are species for which status is unclear. They may be susceptible to population decline of sufficient magnitude that they

#### **Links of Conservation Interest**

Idaho Conservation Data Center

http://www2.state.id.us/fishgame/cdcranks.htm

Oregon Natural Heritage Program

http://www.heritage.tnc.org/nhp/us/or/rept.htm

http://www.heritage.tnc.org/nhp/us/or/amph.htm

Washington Natural Heritage Program

http://www.wa.goov/dnr/htdocs/fr/nhp/refdesk/lists/animal\_ranks.html

Wyoming Natural Diversity Database

http://uwadmnweb.uwyo.edu/wyndd/herp.htm

Montana Natural Heritage Program

http://nris.state.mt.us/mtnhp

# INSTRUCTIONS FOR FILLING OUT THE AMPHIBIAN AND REPTILE INDIVIDUAL OBSERVATION FORM

Please provide whatever information you can. To simplify reporting a number of observations, you may wish to use the multiple observation form. Thank you

Common Name/Species: Provide the common or scientific name of the animal if you are able to identify it. If you cannot identify it, please describe it as accurately as possible. Include the exact or estimated number (1-10, 10-100, more than 100, etc.) observed.

Date: Include the year and clearly distinguish between day and month (e.g., 6 June 1992).

Time. Include AM or PM or use military time.

Please include your name, affiliation, address, and phone number so we can contact you if we need further information, a copy of the photograph, etc.

Have you seen this species before?

Description: Describe the animal as accurately as you can so we can confirm your identification or so we can identify it from your description. Characteristics to note include size/length, shape, color, pattern (e.g., striped, banded, blotched, or unicolor), skin texture (e.g., smooth, shiny, rough, scaled, etc.), pupil shape (round or elliptical), and presence or absence of limbs and tail. See the references below for more information on identifying characteristics. Did you photograph the animal?

**Behavior:** Behavioral descriptions are useful in identifying animals and are inherently interesting. For example, Was the animal moving or still? Did it crawl or jump or hop? Was it fast or slow? Was it trying to escape from you or was it hunting or feeding? Did it vocalize? What did it sound like?

Location: Be as accurate as possible. Try to describe the site so that someone else could relocate it from your directions. For example, in a small pond, 30 yards north of Highway X, 4.5 miles N and 3.3. miles east of a known landmark (junction, the center of a town, etc.). Please include the exact coordinates if you know them (latitude and longitude, UTMs, or Range, Township, Section, quarter section, etc.). Accurate locality information can greatly enhance the value of your observation.

Habitat: Describe the major cover type (forested [needleleaf, broadleaf, or mixed], non-forested [alpine, grassland, shrubland, or barren], riparian and wetlands [forested or scrub-shrub riparian, marsh, pond, or lake], or developed land [agricultural or urban]). Also describe the immediate area around the animal (burrow, talus slope, stream bank, etc.).

Weather: Include such information as the air temperature, water temperature, wind conditions, cloud cover, precipitation, etc.

Remarks: Please include any other information you consider relevant.

#### **Useful References**

Baxter, G.T. and M.D. Stone. 1985. Amphibians and Reptiles of Wyoming. Second edition. Wyoming Game and Fish Dept. 137 pp.

Corkran, C.C. and C.R. Thoms. 1996. Amphibians of Oregon, Washington, and British Columbia - A Field Identification Guide. Lone Pine Publishing, Vancouver, British Columbia. [very complete]

Leonard, W.P., H.A. Brown, L.C. Jones, K.R. McAllister, and R.M. Storm. 1993. Amphibians of Washington and Oregon. Seattle Audubon Society, Seattle, Washington. [excellent color photographs]

Nussbaum, R.A. E.D. Brodie, and R.M. Storm. 1983. Amphibians and reptiles of the Pacific Northwest. University of Idaho Press, Moscow. 332 pp. [The best general source of information on the amphibians and reptiles of Idaho]

Koch, E.D. and C.R. Peterson. 1996. Amphibians and Reptiles of Yellowstone and Grand Teton National Parks. University of Utah Press. 188 pp. Stebbins, R.C. 1985. A field guide to western reptiles and amphibians. Houghton Mifflin Co., Boston. 336 pp. [The best field guide to the amphibians and reptiles of the western United States]

Storm, R.M., W.P. Leonard, H.A. Brown, R.B. Bury, D.M. Darda, L.V. Diller, and C.R. Peterson. 1995. Reptiles of Washington and Oregon. Seattle Audubon Society Trailside Series. 176 pp. [excellent color photographs]

# AMPHIBIAN AND REPTILE MULTIPLE OBSERVATION FORM

(June 1997)

iation ress	-				
ne Number	BARRY AND A	- Anna Salahan		ENERGY TO A SECOND	
Control of the Contro	ctions for filling out the Amph	ibian and Reptile Multiple	Observation Form for details	on what information to prov	vide.
SPECIES	DESCRIPTION	DATE & TIME	LOCATION	HABITAT	REMARKS
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				46	

# AMPHIBIAN AND REPTILE INDIVIDUAL OBSERVATION FORM

(16 August 1997)

		f you are unsure of the species.
Species:		Number of Animals
Observation Date:/_	/ Time:	am pm (circle one)
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Affiliation:		
Address:		
Phone No:	Have yo	u seen this species before?
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Habitat:		
	YALL	
Weather: (temperature, cloud	d cover, wind, etc.):	
Remarks:		
Please return to:	Dr. Chu	ck Peterson

Dr. Chuck Peterson Idaho Museum of Natural History Box 8007, Idaho State University Pocatello, Idaho 83209

(208) 236-3922 office 236-4570 FAX Internet: petechar@isu.edu

Herpetology Laboratory, Idaho State University and Idaho Museum of Natural History, Box 8007, Pocatello, ID 83209 (208) 236-3922 voice 236-4570 FAX e-mail: petechar@isu.edu

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RDER	1		2 3	100	4 5	6			
'H m	SITE WIDTH	m	MAXIMUM DE	PTH	< 1M 1	-2 M >21	М		
UBSTRATE S	SILT/MUD SAN	ND/GRAVEL	COBBLE BO	OULDER/BED	DROCK OTHER				
MARGIN WITH	EMERGENT V	EGETATION		0	1. 25	25 - 50	>50		
VEGETATION	SPECIES (IN O	RDER OF A	BUNDANCE)		1	25-50	750		
			(60)				The same of the sa		
RELINE CHAP	PACTERISTICS	120	ISHALLOWS	SHALLOWS	EMERGENT V	EG EME	RGENT VEG		
RELINE CHAP	RACTERISTICS		SHALLOWS PRESENT FOREST TRE	ABSENT	EMERGENT V PRESENT	TAX	ERGENT VEG		
	AND REPTILE  ADULT  ADULT  ESEARCHEDT  RADIATION:  RATURE (1 M STEMPERATE  COLOR  RIPTION  NATURAL  TEMPORARY  WETLAND INVIERDER  THE METLAND INVIERDER  WETLAND INVIERDER  THE METLAND INVIERDER  THE METHAN INVIERDER	ADULT JUVENILE  ADULT JUVENILE  ADULT JUVENILE  ADULT JUVENILE  ESEARCHED? YES  RADIATION: CLEAR PROPERTURE (1 M SHADED)  TEMPERATURE (1 CM)  COLOR CLEAR  RIPTION PUT SKETCH  NATURAL MAN-MADE  TEMPORARY OF PERMANER  WETLAND INVENTORY CLAS  ROER 1  TH m SITE WIDTH  UBSTRATE SILT/MUD SAN  MARGIN WITH EMERGENT V	ADULT JUVENILE METAM.  ADULT JUVENILE METAM.  YES ??? NO  E SEARCHED? YES NO  RADIATION: CLEAR PARTIAL O  RATURE (1 M SHADED) °C OR F  TEMPERATURE (1CM)  COLOR CLEAR STAINED  RIPTION PUT SKETCH AND ADDITION  NATURAL MAN-MADE MAN-MODIFI  TEMPORARY OF PERMANENT LAKE/POI  METLAND INVENTORY CLASIFICATION  ROER 1  TH m SITE WIDTH m  UBSTRATE SILT/MUD SAND/GRAVEL  MARGIN WITH EMERGENT VEGETATION	R S UTM ZONE/D  AND REPTILE SPECIES PRESENT (INDICATE NUMBERS  ADULT JUVENILE METAM. LARVAE  ADULT JUVENILE METAM. LARVAE  ESEARCHED? YES NO IF NO, IDICATE  RADIATION: CLEAR PARTIAL OVERCAST  RATURE (1 M SHADED) °C OR F  TEMPERATURE (1CM) PH:  COLOR OLEAR STAINED  RIPTION PUT SKETCH AND ADDITIONAL COMMENTATION  RIPTI	R S UTM ZONE/DATUM  AND REPTILE SPECIES PRESENT (INDICATE NUMBERS IN CATEGORY  ADULT JUVENILE METAM. LARVAE EGGS  ADULT JUVENILE METAM. LARVAE EGGS  E SEARCHED? YES NO IF NO, IDICATE AREA:  RADIATION: CLEAR PARTIAL OVERCAST  RATURE (1 M SHADED) °C OR F % CLOUD CO  TEMPERATURE (1CM) PH: CONDUCTIVE  COLOR CLEAR STAINED TURBIDITY  RIPTION PUT SKETCH AND ADDITIONAL COMMENTS ON BACK  NATURAL MAN-MADE MAN-MODIFIED DRAINAGE  TEMPORARY OF PERMANENT LAKE/POND MARSH BOG STREAM  WETLAND INVENTORY CLASIFICATION GAP ANALY  RIPTION GA	COUNTY MAP NAME OWNER  R S UTM ZONE/DATUM NORTHING  AND REPTILE SPECIES PRESENT (INDICATE NUMBERS IN CATEGORIES IF POSSIBLE  ADULT JUVENILE METAM. LARVAE EGGS CALLING  ADULT JUVENILE METAM. LARVAE EGGS CALLING  FISH SPECIES:  E SEARCHED? YES NO IF NO, IDICATE AREA:  RADIATION: CLEAR PARTIAL OVERCAST WIND: CALM  RATURE (1 M SHADED) °C OR F % CLOUD COVER: P  TEMPERATURE (1CM) PH: CONDUCTIVITY S  COLOR CLEAR STAINED TURBIDITY CLEAR CLO  RIPTION PUT SKETCH AND ADDITIONAL COMMENTS ON BACK OF SHEET  NATURAL MAN-MADE MAN-MODIFIED DRAINAGE PERMANEN  TEMPORARY OF PERMANENT LAKE/POND MARSH BOG STREAM SPRING/SEEP  WETLAND INVENTORY CLASIFICATION GAP ANALYSIS COVER TYPE  TOTAL STATES SILT/MUD SAND/GRAVEL COBBLE BOULDER/BEDROCK OTHER  MARGIN WITH EMERGENT VEGETATION  1 - 25	R S UTM ZONE/DATUM NORTHING EAS  AND REPTILE SPECIES PRESENT (INDICATE NUMBERS IN CATEGORIES IF POSSIBLE)  ADULT JUVENILE METAM. LARVAE EGGS CALLING TECHNIQUE  ADULT JUVENILE METAM. LARVAE EGGS CALLING TECHNIQUE  ESEARCHED? YES NO IF NO, IDICATE AREA: meta  RADIATION: CLEAR PARTIAL OVERCAST WIND: CALM LIGHT MEDIUI  RATURE (1 M SHADED) °C OR F % CLOUD COVER: PRECIPTATION:  TEMPERATURE (10M) PH: CONDUCTIVITY SAMPLE?  COLOR CLEAR STAINED TURBIDITY CLEAR CLOUDY  RIPTION PUT SKETCH AND ADDITIONAL COMMENTS ON BACK OF SHEET  NATURAL MAN-MADE MAN-MODIFIED DRAINAGE PERMANENT OCCASIONA  TEMPORARY OF PERMANENT LAKE/POND MARSH BOG STREAM SPRING/SEEP ACTIVE OF INAC  WETLAND INVENTORY CLASIFICATION GAP ANALYSIS COVER TYPE (IF KNOWN)  DOER 1 2 3 4 5 6  "H m SITE WIDTH m MAXIMUM DEPTH < 1M 1-2 M > 2.1  UBSTRATE SILT/MUD SAND/GRAVEL COBBLE BOULDER/BEDROCK OTHER:  MARGIN WITH EMERGENT VEGETATION  0 1-25 25-50		

## University of Idaho











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DeVlieg Taylor Assistantship 2007-2009

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Movement and habitat selection of prairie rattlesnakes in the Big Creek drainage of the Frank Church Wilderness

Background and Planning DeVlieg Taylor Undergraduate Scholar 2006

#### **Abstract**

**Research Summary** 

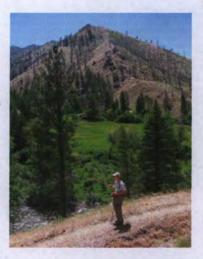
Many species of reptiles and amphibians at the northern latitudes of western North America make seasonal movements between over-wintering, breeding, and foraging habitats. However, topography and recent fire disturbance have the potential to act as barriers to these movements. Prairie rattlesnakes are known to exhibit long-distance, straight lined movements between hibernacula and summer foraging/breeding habitat, yet it is largely unknown how these movements are affected by topography and recent fire disturbance.



Understanding how such barriers influence

these movements can contribute to our knowledge of how animals modify their behavior to obtain key resources and can aid in establishing suitable management and conservation guidelines for this species. Although the prairie rattlesnake is widespread throughout much of the western US, its distribution in Idaho is restricted to the upper Salmon River drainage. This species is fairly common in the lower Big Creek drainage. The rugged mountainous landscape of the Big Creek drainage make it an ideal location to study to effects of topography on rattlesnake movement and habitat selection and its location within the Frank Church Wilderness helps to minimize the effects of additional human disturbance. My study will examine the effects of prey and mate distribution,

topography, and the effects of the 2006 Dunce Creek Fire on the movement patterns and habitat selection of prairie rattlesnakes in the Big Creek drainage of the Frank Church



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Wilderness



**Update** 

for Field Season 2008

I have currently collected data on rattlesnake movement during the summers of 2006 and 2007 using radio telemetry. It appears that rattlesnakes in the Big Creek drainage are capable of fairly extensive movements in this rugged landscape. I have had some telemetered snakes move over 2.5 kilometers from their hibernaculum. Although some rattlesnakes will spend the summer in relatively low elevations near valley bottoms, others spend the summer along the tops and sides of ridges in upland habitats. I have also had rattlesnakes cross Big Creek and its tributaries. It appears that the mountainous topography of the Big Creek drainage does not act as an absolute barrier to rattlesnake movement. However, it does appear to influence their movements to some extent by causing some individuals to move along topographic features such as tributary drainages or ridge lines.

During 2007, I monitored six individuals that I also radio tracked in 2006. These individuals appeared to use the same general activity areas during both summers and also returned to the same area to over-winter. During the summer of 2008, I will radio track some rattlesnakes that I also tracked in 2006 and 2007 and so obtain movement data from up to three consecutive summers on these snakes. I will also sample the abundance of small mammal prey in different habitat types within the Big Creek drainage to see if rattlesnakes are using the most prey abundant habitats.

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