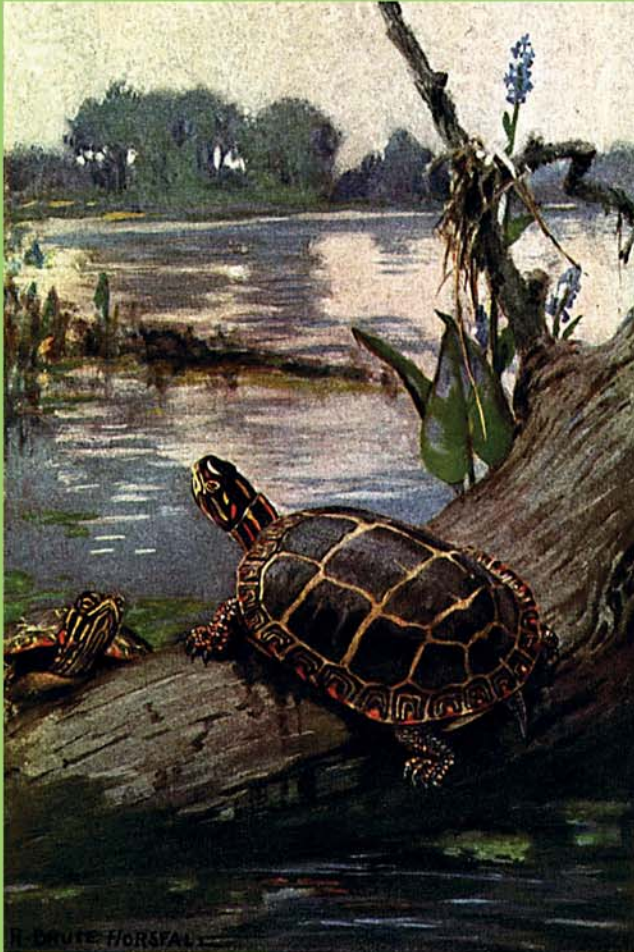


Herper's Field Survey Journal



Chad Arment

Herper's Field Survey Journal

A Field Notebook
for
Herpetofaunal
Surveys

Chad Arment

Coachwhip Publications
Landisville, Pennsylvania

Copyright © 2005 by Chad Arment. All rights reserved.

Published by Coachwhip Publications.

Publisher's Cataloging-in-Publication Data

Arment, Chad.

Herper's field survey journal: a field notebook
for herpetofaunal surveys / Chad Arment. —
1st ed. — Landisville, Pa.: Coachwhip Publica-
tions, 2005.

p. ; cm.

ISBN: 1-930585-19-5 (pbk.)

Library of Congress Control Number:
2005900407

1. Reptile surveys. 2. Amphibian surveys.

I. Title.

QL645 2005

598.1

CONTENTS

Purpose for a Herp Survey Journal	7
Issues for a Herp Survey Journal	9
Survey Sheets	11
Sketched Maps of Survey Sites	194
Appendix: Resources	199

PURPOSE FOR A HERP SURVEY JOURNAL

Field herping naturally leads to an increased interest in monitoring reptile and amphibian species encountered. This may focus on groups (snakes or frogs), locations (county or park), or times (annual or seasonal). A survey journal records search parameters and environmental conditions, as well as a description of species encountered on a given outing.

A survey journal is useful for evaluating presence, abundance, and diversity of species over a given period of time. If several herp enthusiasts actively maintain journals for a specific area over several years, their compiled data should provide a rough profile of the native herpetofauna. That information should be made available to professional herpetologists and published in local or regional herpetological society bulletins.

While professional surveys require detailed environmental measurements for statistical analysis, enthusiasts can provide usable basic data for local conservation programs. This is just one way to repay the enjoyment of observing these fascinating creatures in the wild. This field survey journal has notation space for 90 outings. This should function well for an active annual survey or an intensive seasonal survey.

Special Note:

Some reptiles and amphibians are protected by State and/or Federal regulations. Please ascertain and follow the law.

Venomous species and crocodylians should never be handled or approached without proper training. Before going into the field, make certain you can identify any dangerous local species.

Please be responsible in the field — don't needlessly destroy habitat. Carefully replace logs and rocks. Don't stress animals with overhandling.

ISSUES FOR A HERP SURVEY JOURNAL

When filling out the survey sheets, be as specific as possible. It may be difficult to remember details when you need them in the future if you don't write them down. Unusual specimens should be photographed for voucher purposes.

Herpetofaunal surveys encompass many methods. A few of the most common include:

General walkthroughs: Choose a path through potential habitat, and walk it when conditions are not too cold or too hot. Walk the edges of ponds or marshes. Use binoculars to slowly scan further out. Carefully lift debris with a solid snake hook, and replace just as carefully. (Debris should be rolled or lifted from the opposite side, so that potential defensive thrusts by snakes don't automatically hit your legs.) Visual recognition takes practice, as many species are cryptic in coloration.

Road surveys: Drive slowly along good habitat in early mornings or evenings during warmer weather. Snakes and turtles may be found wandering across. During the breeding season, toads may be found on roads in great numbers. Roadkill should be noted. Be very careful when road cruising as it can be dangerous. Don't get out of the car unless you have good visibility in both directions and are on a low-traffic road. Some areas have laws against driving for this purpose.

Frog call surveys: Find a road that goes past several suitable amphibian habitats. During the breeding season, drive to these locations in the early evenings and monitor them for calling frogs and toads with a recording device.

Trapping surveys: Some states and localities require permits for trapping amphibians or reptiles. Pitfall traps, drift-fence funnels, dip-nets, and other devices can be used to capture herps. This requires constant monitoring, as animals may die if left in the traps too long. Specifics can be found in texts listed in the resources appendix.

SURVEY SHEETS

SAMPLE FORM

Date: **Day-Month-Year**

Time: **Starting Time**
Ending Time

Individuals Present:

Names of people helping with survey

Location:

**Be specific with geographic data.
Use permanent landmarks when possible.
Mapping and GPS data works well if available.
Include state, county, and land owner.
Maps can be sketched on pages at back of book.**

Temperature and Weather Conditions:

Air temperature, water temperature, wind, cloud cover, and precipitation. Water turbidity (clear or cloudy) and depth should also be noted.

Habitat:

Factors to note include vegetation, soil type, drainage, substrate, human development, presence of water, topology, and elevation.

Methods:

Visual, Hand Collected, Trapped, Voucher

Other Animals Observed:

Predators, Prey, Fish

Species Encountered:

Note (when possible) species, description, gender, life stage, measurements, abundance, and behavior.

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

Date:

Time:

Individuals Present:

Location:

Temperature and Weather Conditions:

Habitat:

Methods:

Other Animals Observed:

Species Encountered:

SKETCHED MAP FOR SURVEY SITE

Location:

SKETCHED MAP FOR SURVEY SITE

Location:

SKETCHED MAP FOR SURVEY SITE

Location:

SKETCHED MAP FOR SURVEY SITE

Location:

SKETCHED MAP FOR SURVEY SITE

Location:

APPENDIX: RESOURCES

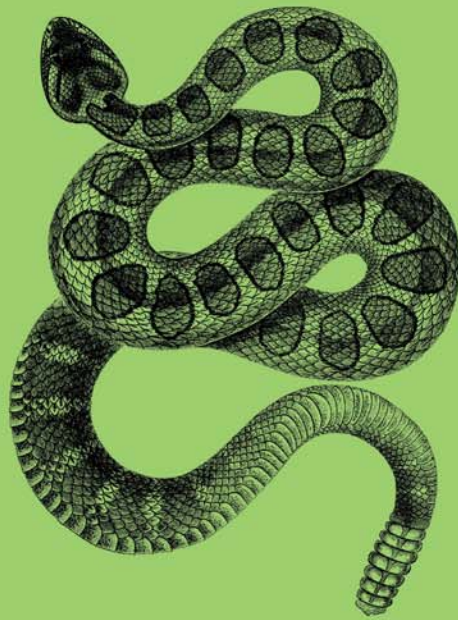
Herp surveys require good field guides (numerous national and state guides are available) to properly identify species. Catching species, assuming it's legal and feasible, may require hooks, tongs, waders, dip-nets, and other paraphernalia. Binoculars and recording equipment (cameras and tape recorders) are also useful.

Journals like *Herpetological Review* often contain survey techniques. Two books of interest include:

- Heyer, W. Ronald, et al. 1994. *Measuring and Monitoring Biological Diversity: Standard Methods for Amphibians*. Washington, D.C.: Smithsonian Institution Press.
- Olson, Deanna H., et al. 1997. *Sampling Amphibians in Lentic Habitats*. Northwest Fauna No. 4. Olympia, WA: Society for Northwestern Vertebrate Biology.

There are several sources online which are useful to field herpers for identification and systematics, as well as general field techniques:

CaliforniaHerps.com
Herper.com
NAHerpetology.org
Pingleton.com
Reptile-database.org
ReptilesOfAZ.com
SnakesAndFrogs.com
SSARherps.org
VenomousReptiles.org
WildHerps.com
www.flmnh.ufl.edu/herpetology/
www.open.ac.uk/daptf/



Take field herping to the next level!

Embark on an organized study to document local reptiles and amphibians. You can add to the biogeographical and ecological knowledge of these species while deepening your appreciation for them.

