

MARCH, 1986

ANNOUNCEMENTS

1986 KHS Field Trip to Cheyenne Bottoms

Cheyenne Bottoms Wildlife Refuge will be the site for the annual Kansas Herpetological Society field trip, 16-18 May 1986. The refuge is located five miles north and two miles east of Great Bend, Kansas in Barton County. Come prepared to camp out at the management compound on the refuge if you like, or find your own niche.

This is a timely year in which to hold our field trip at the Bottoms, because it's been eleven years since the KHS met there. Biological, geological and hydrological field studies of the Bottoms are being conducted this year in response to the "Save the Bottoms" campaign, which is concerned with the survival of this great natural marsh. The KHS membership could contribute substantially to the herpetological portion of these studies through data amassed during the field trip.

This is the 12th year in the field for KHS, the 3rd trip to the Bottoms, and marks the 30th field trip in KHS history. Over the years, these field trips have yielded more than 800 new county records since the publication of Collins' Amphibians and Reptiles in Kansas in 1974. An abundance of interesting herps have been found on previous forays, so plan on coming out for a herpin' good time. See you there!

If you have any questions about this trip, contact:

Kelly J. Irwin, Scoutmaster
Box 4355
Topeka, Kansas 66604
phone (913) 354-1195

Herpetological Meetings in Springfield, Missouri

Ever wanted to see what goes on at a meeting of the Herpetologists' League or Society for the Study of Amphibians and Reptiles? This year the combined meeting of the two societies will be held at Southwest Missouri State University in Springfield, Missouri, which is a short drive for many KHS members.

The meeting will be the 34th anniversary of HL and the 29th of SSAR, but the big celebration will center around the 50th anniversary of the publication of the journal, Herpetologica. The meeting will run from 10-15 August. Some of the highlights will include a Distinguished Herpetologists Lecture on the 11th, the famous Dennis-Jutterblock slide shows of herps and herpers on the 12th, the Regional Society Symposium ("The Role of Regional Societies in Public Education"), the Zoo Liason Committee Symposium ("Snake Venom Poisoning"), a symposium on "The Behavioral Ecology of Salamanders," live exhibits of Missouri herps, and a Herpetology Exam (just for fun). Socials are scheduled for Sunday and

Monday, with the annual auction (as usual run by KHS member J.T. Collins) and barbeque on Wednesday, and a formal banquet on Thursday.

In addition, there will be the usual sessions of research papers, and a large commercial exhibitors display area with sales of equipment and books, t-shirts, sculpture and art. Dorm rooms will be available for the incredibly low price of \$10/night, plus area hotels will have blocks of rooms available at special rates.

The annual meeting of these two societies is a fascinating experience. It is a chance to see what the latest research in herpetology is all about, to meet people with interests similar to yours, and learn an awful lot about reptiles and amphibians (not to mention about herpetologists).

For further information and registration forms, contact:

Don Moll or Robert Wilkinson
Department of Biology
Southwest Missouri State University
Springfield, Missouri 65804

Nature and Wildlife Photography Seminar

April 5, from 9 a.m. to 5:30 p.m., Leonard Lee Rue, one of the most published wildlife photographers in North America, will present a seminar on nature and wildlife photography in Amarillo, Texas. In 40 years, Rue has sold to over 1200 different companies and publications in 42 countries, including over 1000 national magazine covers. The seminar will cover the use of photographic equipment, close-up techniques, photographing flowers, insects, reptiles, amphibians, birds and mammals, with question and answer periods. The seminar will be held at the Quality Inn Central, 601 Amarillo Boulevard West, Amarillo, Texas.

The registration is \$35 (\$20 for students). Send checks (with name, address and phone) to GOLDEN SPREAD SEMINARS, Box 774, Amarillo, Texas, 79105. Phone (806) 352-1008.

Help Needed with Hibernation Study

Owen J. Sexton and Peter J. Jacobson are soliciting information to help determine the geographic variability of winter activities of snakes throughout the United States and Canada.

The basic hypothesis that they are investigating is related to earlier studies by Sexton on the cues regulating the activities of snakes within dens in a cave hibernaculum. A simplified version of their hypothesis in the present study is that hibernation (=brumation) occurs in those geographic localities at which the temperature of the soil surface is below the temperature of the deeper soil strata. They have examined the literature to ascertain the distribution of hibernation dens of various species. Most of these data refer to dens in northern areas or at high elevations. Consequently, they are anxious to obtain new information about winter activities of snakes in more south-

erly areas.

By "den" they mean a retreat, usually underground, which is used each year as a refugium during cold periods. Most such "dens" will be used communally by individuals of one or more species. Second, they are very interested in conservation and will identify the location of your sites only to the extent which you feel is adequate for the protection of the site.

A simple survey form is available which asks if the snakes hibernate in intraspecific communal underground dens within their warm season home range or out of it, hibernate as isolated individuals, seek temporary refugia, or are active.

If you can contribute some data to this project, write for survey forms to:

Dr. Owen J. Sexton
Department of Biology
Washington University
Campus Box 1137
St Louis, Missouri 63130

Ornate Box Turtle for State Reptile Update

As of press time for this KHS Newsletter, Kansas Legislative House Bill No. 3014 by the Committee on Energy and Natural Resources reads as follows:

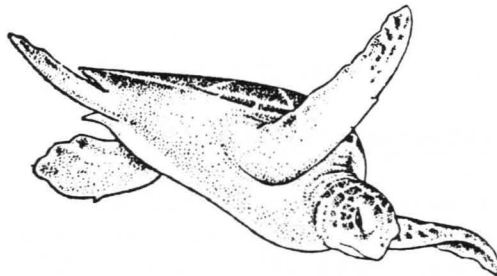
AN ACT designating the Terrapene ornata, Agassiz (ornate box turtle) as the official state reptile.

Be it enacted by the Legislature of the State of Kansas:

Section 1. The Terrapene ornata, Agassiz (ornate box turtle) is hereby designated as and declared to be the official reptile of the state of Kansas.

Sec. 2. This act shall take effect and be in force from and after its publication in the statute book.

The KHS extends its congratulations to the Sixth Grade Class of Caldwell Elementary School for getting this most appropriate legislation before the state.



FEATURE ARTICLES

New Records of Amphibians and Reptiles in Kansas for 1985

By
Joseph T. Collins
Museum of Natural History
The University of Kansas
Lawrence, Kansas 66045

The new county and maximum size records listed below are those accumulated or brought to my attention since the publication of records for 1984 (Collins, 1984). Publication of these new records permits me to give credit and express my appreciation to the many individuals who collected or obtained specimens and donated them to me for deposition in an institutional collection. Further, recipients of this list are permitted an opportunity to update the range maps and size maxima sections in "Amphibians and Reptiles in Kansas" (Collins, 1982). Finally, these new records represent information that greatly increases our knowledge of the distribution and physical proportions of these creatures in Kansas, and thus gives a better understanding of their biology. This report is my eleventh in a series that has appeared annually since 1976.

The Kansas specimens listed below represent the first records for the given county based on a preserved, cataloged voucher specimen in an institutional collection, or represent size maxima larger than those listed in Collins (1982). All new records are presented in the following standardized format: common and scientific name, collection and catalog number, county, specific locality, date of collection, and collector(s). New size maxima are presented with the size limits expressed in both metric and English units. Common names are those of Collins et al. (1982).

The records listed below are deposited in the herpetological collection of the Museum of Natural History, The University of Kansas, Lawrence (KU). I am most grateful to members of the Kansas Herpetological Society, and personnel of the Kansas Biological Survey and Kansas Fish and Game Commission, who spent many hours in search of some of the specimens reported herein. Support for field work, that led to discovery of some of the specimens listed below, was given via research grants from the Kansas Nongame Wildlife Program (Chickadee Checkoff). Special thanks are due to Philip S. Humphrey, Director, and William E. Duellman, Curator, of the Museum of Natural History, The University of Kansas.

NEW COUNTY RECORDS

TIGER SALAMANDER (Ambystoma tigrinum)

BARTON CO: Cheyenne Bottoms Waterfowl Refuge on dike between Pools 1 and 2, 22 September 1985, W. Hoffman (KU 204039). BUTLER CO: 9.6 km NE Rosalia, April 1985, E. Ray and J.C. Fraser (KU 204040).

GRAY TREEFROG (Hyla chrysoscelis-versicolor complex)

ANDERSON CO: ca 2.4 km S Garnett, Sec. 1, T21S, R19E, 21 September 1985, J. Ray (KU 204042). COFFEY CO: 2.8 km S and 4.8 km E Gridley, Sec. 2, T23S, R14E, 8 June 1985, J.T. Collins, K.J. Irwin, L. Miller and K.M. Irwin (KU 203705). WABAUNSEE CO: Maple Hill, Sec. 24, T11S, R12E, 3 June 1985, K.J. Irwin and K.M. Irwin (KU 203695).

SPOTTED CHORUS FROG (Pseudacris clarkii)

BUTLER CO: within city limits of Rose Hill, 18 September 1985, B. Griffith, J. Waite and J. Word (KU 204043).

WESTERN CHORUS FROG (Pseudacris triseriata triseriata)

SEDGWICK CO: SE of Derby, 1.6 km N Sumner County line and 1.6 km W Butler County line, 22 September 1985, W. Reager and L. Roberson (KU 204044).

PLAINS LEOPARD FROG (Rana blairi)

NORTON CO: North Fork Solomon River at Lenora, 18 May 1965, J.T. Collins and J. Whipple (KU 203293).

BULLFROG (Rana catesbeiana)

STANTON CO: 10.4 km W Manter and 4 km N Rt. 160 on Bear Creek, 19 June 1983, J.T. Burkhart (KU 204109).

PLAINS NARROWMOUTH TOAD (Gastrophryne olivacea)

CLAY CO: 7.2 km E Clifton on Ks. Rt. 9, Sec. 3, T6E, R2E, 19 May 1985, J.T. Collins (KU 203299). KIOWA CO: Sec. 10, T29S, R16W, 2 May 1985, K.L. Brunson (KU 203660). SMITH CO: Sec. 8, T5S, R15W, 18 May 1985, J.T. Collins, L. Miller and J. Whipple (KU 203298).

STINKPOT (Sternotherus odoratus)

FRANKLIN CO: 11.2 km S and 3.2 km E Ottawa, Middle Creek, 21 April 1985, E. Hooper, Jr. (KU 203816).

MISSOURI COOTER (Chrysemys floridana hoyi)

COWLEY CO: NNE Dexter on Ks. Rt. 38, Sec. 29, T32S, R7E, 26 May 1985, J.T. Collins, S.L. Collins and L. Miller (KU 203363).

RED-EARED SLIDER (Chrysemys scripta elegans)

COFFEY CO: Sec. 11, T20S, R13E, 3 November 1985, B. May (KU 204148).

WESTERN SPINY SOFTSHELL (Trionyx spiniferus hartwegi)

ELK CO: Elk River at Elk Falls, 26 May 1985, J.T. Collins, S.L.

Collins and L. Miller (KU 203362). KIOWA CO: Sec. 14, T30S, R17W, 11 August 1985, T. Dillenbeck and S. Hillard (KU 204079).

TEXAS HORNED LIZARD (Phrynosoma cornutum)

BARTON CO: ca 18 km N Claflin, Sec. 4, T16S, R11W, 4 May 1985, A. Kamb (KU 203654).

FIVE-LINED SKINK (Eumeces fasciatus)

COFFEY CO: 6.4 km S and 1.6 km E Burlington, Sec. 12, T22S, R15E, 9 June 1985, J.T. Collins, K.J. Irwin and K.M. Irwin (KU 203621).

PRAIRIE-LINED RACERUNNER (Cnemidophorus sexlineatus viridis)

REPUBLIC CO: Sec. 35, T4S, R4W, 4 August 1985, D. Loring (KU 204051). SMITH CO: Sec. 8, T5S, R15W, 18 May 1985, O. Karch (KU 203302).

WESTERN WORM SNAKE (Carphophis amoenus vermis)

ALLEN CO: Humboldt, 10 May 1985, T. Taggart (KU 204054).

PRAIRIE RINGNECK SNAKE (Diadophis punctatus arnyi)

CLAY CO: ca 2.9 km E jct Ks. Rts. 15 and 182, Sec. 15, T9S, R3E, 1 June 1985, A. Kamb (KU 203655). NORTON CO: Sec. 10, T5S, R22W, 18 May 1985, J.T. Collins, L. Miller and J. Whipple (KU 203307).

PLAINS BLACKHEAD SNAKE (Tantilla nigriceps)

NORTON CO: 6.4 km E Lenora, T5S, R23W, 18 May 1985, L. Miller et. al. (KU 203312). PHILLIPS CO: Kirwin National Wildlife Refuge area, 18 May 1985, L. Miller (KU 203313).

EASTERN YELLOWBELLY RACER (Coluber constrictor flaviventris)

CLAY CO: 6.4 km S Washington County line on Ks. Rt. 15 at Garfield Center, 17 May 1985, J.T. Collins (KU 203305). SHERMAN CO: 16 km S and 8 km W Goodland, 28 August 1983, J.T. Burkhart (KU 204110).

COACHWHIP (Masticophis flagellum)

KEARNY CO: 14.4 km W and 5.6 km S Lakin, 3 July 1983, J.T. Burkhart (KU 204112).

GREAT PLAINS RAT SNAKE (Elaphe guttata emoryi)

SMITH CO: Sec. 17, T5S, R15W, 18 May 1985, C. Karch (KU 203310).

MILK SNAKE (Lampropeltis triangulum)

ELK CO: 5.6 km NE Oak Valley, 19 April 1985, B. Anderson and J.C. Fraser (KU 204057). NEOSHO CO: 1.6 km S and 2.4 km E Erie, 21 April 1985, D. Fulgham and J.C. Fraser (KU 204058). SMITH CO:

Sec. 8, T5S, R15W, 18 May 1985, O. Karch (KU 203311).

TEXAS LONGNOSE SNAKE (Rhinocheilus lecontei tessellatus)

KIOWA CO: Anchor-D Ranch, Sec. 14, T30S, R17W, 24 May 1985, S. Hillard and T. Dillenbeck (KU 203663).

WESTERN RIBBON SNAKE (Thamnophis proximus)

SHAWNEE CO: jct. 101st Street and Old U.S. Rt. 75, S of Topeka, 16 October 1985, K.J. Irwin (KU 204078).

LINED SNAKE (Tropidoclonion lineatum)

NESS CO: 17.6 km S and 8 km E Ness City on U.S. Rt 283, 2 August 1985, L. Good (KU 204061). REPUBLIC CO: Sec. 9, T3S, R2W, 18 August 1985, D. Loring (KU 204060).

BLOTCHED WATER SNAKE (Nerodia erythrogaster transversa)

KIOWA CO: Sec. 25, T30S, R17W, 10 August 1985, S. Hillard (KU 204080). SHAWNEE CO: Sec. 25, T13S, R15E, 11 May 1985, K.J. Irwin (KU 203644).

DIAMONDBACK WATER SNAKE (Nerodia rhombifera rhombifera)

ELK CO: just S Grenola, 26 May 1985, J.T. Collins, S.L. Collins and L. Miller (KU 203357).

MASSASAUGA (Sistrurus catenatus)

ELK CO: 0.4 km E Cowley County line on U.S. Rt. 160, 26 May 1985, J.T. Collins, S.L. Collins and L. Miller (KU 203361).

NEW MAXIMUM SIZE RECORDS

PLAINS BLACKHEAD SNAKE (Tantilla nigriceps)

PHILLIPS CO: Kirwin National Wildlife Refuge area, 18 May 1985, L. Miller (KU 203313). Total length = 375 mm (14 3/4 inches). Female.

BLOTCHED WATER SNAKE (Nerodia erythrogaster transversa)

PRATT CO: South Fork Ninnescah River, Lemon Park, Pratt, 9 March 1985, T. Dillenbeck (KU 203662). Total length = 1410 mm (55 1/2 inches). Female.

LITERATURE CITED

Collins, J.T. 1982. Amphibians and reptiles in Kansas. Second edition. Univ. Kansas Mus. Nat. Hist. Pub. Ed. Ser. 8: 1-356.

Collins, J.T. 1984. New records of amphibians and reptiles in Kansas for 1984. Kansas Herp. Soc. Newsl. 58: 14-20.

Collins, J.T., R. Conant, J.E. Huheey, J.L. Knight, E.M. Rundquist and H.M. Smith. 1982. Standard common and current scientific names for North American amphibians and reptiles. Second edition. SSAR Herp. Circ. 12: 1-28.

BIBLIOGRAPHY

The publications listed below are those with direct references to amphibians and reptiles in Kansas that have been published or discovered since the update of county and size maxima records by Collins (1984).

Anderson, S. 1984. Areography of North American fishes, amphibians and reptiles. American Mus. Novitates 2802: 1-16.

Ballinger, R.E., D.L. Droge and S.M. Jones. 1981. Reproduction in a Nebraska sandhills population of the northern prairie lizard Sceloporus undulatus garmani. American Midl. Nat. 106(1): 157-164.

Barden, A. 1942. Activity of the lizard, Cnemidophorus sexlineatus. Ecology 23(3): 336-342.

Belfit, S.C. and V.F. Belfit. 1985. Notes on the ecology of a population of Eumeces obsoletus (Scincidae) in New Mexico. Southwest. Nat. 30(4): 612-614.

Berger, T.J. 1985. Spatial distribution and habitat utilization by tadpoles. Abstract 65th Ann. Meet. American Soc. Ich. Herp. p. 41.

Capron, M. 1984. The cottonmouth in Kansas. Kansas Herp. Soc. Newsl. 58: 9-11.

Capron, M. 1985. A western diamondback rattlesnake released in Sumner County, Kansas. Kansas Herp. Soc. Newsl. 59: 5-6.

Capron, M. 1985. Thunder snakes, blow vipers, and others. Kansas Herp. Soc. Newsl. 60: 9-10.

Capron, M. 1985. The quest for Kansas snappers. Kansas Herp. Soc. Newsl. 61: 16-18.

Capron, M. 1985. (Letter to editor). Kansas Wildlife 42(6): center section.

Collins, J.T. 1984. New records of amphibians and reptiles in Kansas for 1984. Kansas Herp. Soc. Newsl. 58: 14-20.

Collins, J.T. (editor). 1985. Natural Kansas. Univ. Press Kansas, Lawrence. xii + 266 pp.

- Collins, J.T. and D.M. Hillis. 1985. Final report to the Kansas Fish and Game Commission on the gray treefrogs of Kansas. Kansas Fish and Game Contract #76 Final Report. 12 pp.
- DeMarco, V.G., R.W. Drenner and G.W. Ferguson. 1985. Maximum prey size of an insectivorous lizard, Sceloporus undulatus garmani. Copeia 1985(4): 1077-1080.
- Duellman, W.E. and L. Trueb. 1985. Biology of amphibians. McGraw-Hill, Inc., New York. xvii + 670 pp.
- Fitch, H.S. 1985. Variation in clutch and litter size in New World reptiles. Univ. Kansas Mus. Nat. Hist. Misc. Pub. 76: 1-76.
- Fitch, H.S. 1985. Observations on rattle size and demography of prairie rattlesnakes (Crotalus viridis) and timber rattlesnakes (Crotalus horridus) in Kansas. Univ. Kansas Mus. Nat. Hist. Occ. Paper 118: 1-11.
- Fitch, H.S. and J.T. Collins. 1985. Integradation of Osage and broad-banded copperheads in Kansas. Trans. Kansas Acad. Sci. 88(3-4): 135-137.
- Frost, D.R. 1985. Amphibian species of the world. Allen Press and Assoc. Syst. Colls., Lawrence, Kansas. v + 732 pp.
- Gorman, W.L. 1985. Patterns of color polymorphism in the cricket frog, Acris crepitans, in Kansas. Abstracts 65th Ann. Meet. American Soc. Ich. Herp. pp. 67-68.
- Guarisco, H. 1985. Opportunistic scavenging by the bullfrog, Rana catesbeiana (Amphibia, Anura, Ranidae). Trans. Kansas Acad. Sci. 88(1-2): 38-39.
- Heinrich, M.L. 1985. Life history notes: Pseudacris triseriata triseriata. Herp. Review 16(1): 24.
- Heinrich, M.L. and D.W. Kaufman. 1985. Herpetofauna of the Konza Prairie Research Natural Area, Kansas. Prairie Nat. 17(2): 101-112.
- Irwin, K.J. 1985. Field trip time again. Kansas Herp. Soc. Newsl. 59: 1-2.
- Irwin, K.J. 1985. Distribution, abundance, and habitat preference of the alligator snapping turtle in southeastern Kansas. Kansas Fish and Game Contract #50 Final Report. 43 pp.
- Lillywhite, H.B. 1985. Behavioral control of arterial pressure in snakes. Physiol. Zool. 58(2): 159-165.
- Lorraine, R. 1980. Snakes vs. cars. Iowa Herp. Soc. Newsl. 3(2): 7.
- Malaret, L. 1985. Geographic and temporal variation in the life history of Crotophytus collaris (Sauria, Iguanidae) in Kansas and

- Mexico. Doctoral Thesis, University of Kansas. 173 pp.
- McAllister, C.T. 1985. Food habits and feeding behavior of Crotaphytus collaris collaris (Iguanide) from Arkansas and Missouri. Southwest. Nat. 30(4): 597-600.
- Metcalf, A.L. and E.L. Metcalf. 1985. Longevity in some ornate box turtles (Terrapene ornata ornata). Journ. Herp. 19(1): 157-158.
- Miller, L. 1985. Investigation of the green frog Rana clamitans melanota in southeastern Kansas. Kansas Fish and Game Contract #2A Final Report. 16 pp.
- Miller, L. 1985. KHS 1985 field trip to Kirwin Reservoir. Kansas Herp. Soc. Newsl. 61: 11-12.
- Moehn, L.D. 1981. Microhabitat preference in the broadheaded skink. Bull. Chicago Herp. Soc. 15(2): 49-53.
- Moehn, L.D. 1981. Differential abundance of the broadheaded skink, Eumeces laticeps, and the five-lined skink, Eumeces fasciatus, in southern Illinois. Bull. Chicago Herp. Soc. 16(1): 6-11.
- Packard, G.C., M.J. Packard and W.H.N. Gutzke. 1985. Influence of hydration of the environment on eggs and embryos of the terrestrial turtle Terrapene ornata. Physiol. Zool. 58(5): 564-575.
- Perez, R. 1985. Some say supplier of slimy salamanders shouldn't stop sales. Wall Street Journal. 9 August 1985.
- Platt, D.R. 1985. Changes in size of populations of snakes on sand prairies in south central Kansas. Absracts 117th Ann. Meet. Kansas Acad. Sci. p. 41.
- Platt, D.R. 1985. Population trends and habitat assessment of snakes and lizards in south central Kansas. Kansas Fish and Game Contract #80 Final Report. 37 pp.
- Ptacek, M. Schulenberg. 1984. Reproductive ecology and habitat analysis of the northern spring peeper (Hyla crucifer crucifer) in Cherokee County, Kansas. Kansas Herp. Soc. Newsl. 61: 12-14.
- Roble, S.M. 1985. Observations on satellite males in Hyla chrysoscelis, Hyla picta, and Pseudacris triseriata. Journ. Herp. 19(3): 432-436.
- Rudolph, D.C. 1978. Aspects of the larval ecology of five plethodontid salamanders of the western Ozarks. American Midl. Nat. 100(1): 141-159.
- Sattler, P.W. 1985. Introgressive hybridization between the spadefoot toads Scaphiopus bombifrons and S. multiplicatus (Salientia: Pelobatidae). Copeia 1985(2): 324-332.
- Schaefer, J. 1985. The extinct: Losses and lessons. Kansas Wildlife

42(2): 26-30.

Simmons, J.E. (editor). 1984. Record turtle from Kansas. Kansas Herp. Soc. Newsl. 58: 11-13.

Simmons, J.E. (editor). 1985. Commercial herping in Kansas. Kansas Herp. Soc. Newsl. 59: 4.

Smits, A.W. and H.B. Lillywhite. 1985. Maintenance of blood volume in snakes: Transcapillary shifts of extravascular fluids during acute hemorrhage. Journ. Comp. Physiol. B. 155: 305-310.

Sprackland, R.G. 1985. Thoughts of a midwestern naturalist. Kansas Herp. Soc. Newsl. 59: 14-15.

Wiley, E.O. and R.L. Mayden. 1985. Species and speciation in phylogenetic systematics, with examples from the North American fish fauna. Ann. Missouri Bot. Gard. 72: 596-635.

Wood, R.D. 1985. Critical habitats for endangered and threatened herps of Kansas. Kansas Herp. Soc. Newsl. 60: 13-15.



In Praise of the Tiger

By

Martin Capron

Box 542

Oxford, Kansas 67119

The first Tiger Salamander (Ambystoma tigrinum) I obtained was one my father brought home to me, a robust personable amphibian that had been discovered lurking in a machine shop after a rainy summer night. And while my uncle in Missouri had occasionally shown me salamanders on his farm (Slimy Salamanders, Plethodon glutinosus, and Smallmouth Salamanders, Ambystoma texanum), this was the first of such creatures that proved easy to feed and keep. And keep it I did. His home was crude enough, I suppose, a fish bowl with three inches of damp mud in the bottom on our back porch, but at least he ate well. Moths, worms, crickets, raw hamburger, canned dog food and occasional tidbits of hot dogs I smuggled away from the table made up his fare. When tornado-bearing storms threatened, I would refuse to leave for the shelter of my grandmother's cellar unless the salamander went with me and once, disgruntled by some parental reprimand, I packed the salamander in a shoe box along with three banana cream cookies and a pocket knife and ran away from home. They caught me, though, two blocks away, salamander in hand. I was barely five years old.

In the years since I have come to know a great many animals both in captivity and in nature. I have raised pythons from bouncing 24-inch babies into troublesome 16-foot adults and caught Tiger Snakes in the bush country of South Australia. Yet, I have never found a creature quite as hardy, as elusive, nor as downright likeable as the common Tiger Salamander.

Perhaps I am prejudiced...old friends are hard to beat, after all. But there is more to it than that, more than the memory of that bug-eyed yellow and black buddy of mine and me hitting the open road together. I obtained several others like him by the age of 10 or 11, yet I had never captured one myself. They were brought to me by schoolmates whose parents had found them in rural basements or well-houses, but despite my vigorous searching, I could find nary a one myself.

When I did finally discover one, it was in the most unlikely of situations. I had finally decided that the finding of salamanders was for a chosen few, that salamanders were almost mythical in their scarcity. Then, one warm March afternoon, I traveled to a favorite collecting spot in the Flint Hills for some "first of the year" herping. It was dry for March, and very warm, and already young Collared Lizards (Crotaphytus collaris) basked on rimrock exposures.

About a hundred yards along the ridge I came upon a tiny Massasauga (Sistrurus catenatus) coiled beside a flat rock the size of a man's hat. Things were looking up, I thought. Then, a quarter mile away along the ridge, I moved a real Kelly Irwin rock--a hundred pounds of nearly immovable limestone. To my surprise and utter delight a half-grown Tiger Salamander reposed beneath it in the hard, gravelly soil. Here, atop a high, wind swept flint hill in the most hostile of seasons, I had found my Tiger. It was a triumph so sweet no mild snake find nor

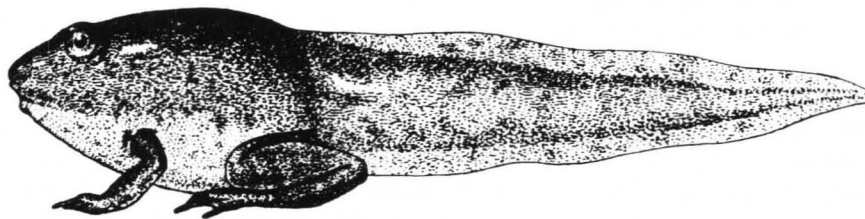
maximum length record could ever match it. I was fourteen.

As adolescence brought with it a driver's license and a series of decrepit old autos, I hit the road. To the west, of all places, I discovered Tiger Salamanders far more common. Several abandoned wells, cellars, and stock tanks are on my list of places to check when I travel into western Kansas...all of them locales most memorable for the Tigers I have captured in them, though kingsnakes, rattlers and coachwhips also have been found there.

Still, the one beneath the rock in the Flint Hills remains the only one I have ever found in a "natural" situation, excluding a pond I know from which local bait seiners have brought me a sampling in the early spring. These individuals gladly showed me the buckets full of larval Tigers they had caught and donated a few for my collection but they kept their locality information a tight-lipped secret. Such are fishermen. In any case, I discovered the locality one night when one of the seiners quaffed one brew too many at a local bar and let the cat out of the bag. I have ventured to this pond several times during early spring rains, but never observed any adults there, even during nighttime rains. Perhaps they breed there in the fall. I do not know.

In captivity, these creatures rank as one of the most desirable of herp captives. Capable of enduring long periods of neglect so long as they remain moist, Tigers live long, happy lives in their home terrarium, be it a twenty gallon tank or dime store fish bowl. Fed upon insects, earthworms, dog food, raw meat or newborn mice, they attain a size and weight remarkable for salamanders. Being creatures of the night and of subterranean habit, they lack the basic need for sunlight necessary to most lizards. Chills that would fell most reptiles fail to even faze the hardy Tigers. And as I have found, Tigers grow old quite gracefully with their owners...often reaching twenty years of age.

It is, as I have increasingly discovered, a situation wherein an animal so familiar to most herpers as the Tiger salamander is overlooked by novices seeking rarer, more exotic charges. In the end, one realizes that sometimes the most familiar of creatures are the most interesting and most desirable of captives. I have changed "favorites" many times over the years, selling or trading off former focal points of my collection. Yet, in an out-of-the-way corner, a ten gallon aquarium smeared with mud remains. In it reside three Tigers of various vintages. They have withstood changes and power failures and extended vacations with their Cheshire grins intact. They still horrify friends when, while feeding, they clamp down on a finger and hang on tenaciously even when removed from their home. And in the field, I am still as thrilled at the discovery of a fat Tiger Salamander beneath a rock or in an old well as John Fraser is with a big red milk snake.



West Texas at Its Best

By
John Fraser
Fredonia, Kansas

Venturing into the field to find, observe, and sometimes collect reptiles and amphibians has always been and will always be one of my most enjoyable outdoor activities. Whether it be locally in Wilson County, or off in another state, I'm not only obsessed, but fascinated by it. The following account is true. Although some events are amplified, they deserve to be, and words cannot begin to convey the amount of satisfaction and thrills that Don Nitcher and I enjoyed on this trip.

Having planned for weeks in advance for the journey, I loaded my 1978 Datsun truck with gear, tools, ice chests, etc, and left Fredonia, Kansas at 4:30 p.m. on Tuesday, 11 June 1985, heading west on K-96. I picked up Don Nitcher near Towanda, took I-35 at Wichita, and headed south. By 10 p.m. we were in Oklahoma City to spend the night at Joe Branham's house. Joe, also a reptile enthusiast, showed us his collection of snakes and caimans. We will always remember our stay at Joe's house, as his two cats, in the house, were active all night, letting out passionate screeches at five to ten minute intervals. This did not keep me awake, but the next morning, Don's eyes showed red lines of devastation from apparent lack of sleep.

On Wednesday, we left Oklahoma City on I-35 at 9:00 a.m., passed the outskirts of Fort Worth, Texas on I-820 at 1:00 p.m., and continued southwest on US 377 to Brady, where we picked up US 190 to Eldorado, then south on US 277. We reached Sonora at 7:30 p.m., stayed on US 277 for 20 more miles, then took TX 189 southwest. At 8:50 we were on TX 163, better known to herpers as "Juno Road." After some 20 miles on Juno Road we met up with my friend Brian Hubbs from Los Angeles. Brian, like us, was here in hopes of locating a beautiful tri-colored kingsnake crossing one of these quiet desert roads.

Brian told us about an unfortunate incident two nights earlier. Driving the Juno Road, he had come upon a divine light-phase Gray-banded Kingsnake (Lampropeltis mexicana alterna) lying peacefully on the road. He was driving too fast to stop, so he straddled the snake with his tires so he would not hit it. For some asinine reason, which he could not explain, he then backed up to get the snake in his headlights. This was a mistake. He apparently clipped the snake's head with one of his tires, killing it.

Brian also told us a cold front had pushed through earlier that day and the whole area had received a steady rainfall from 11:00 a.m. to 1:00 p.m.

Continuing southward, we arrived in Comstock at 10:00 p.m., with the air temperature only 68 F and dropping. We headed west on US 90, then northwest on TX 1024 for Pandale. After cruising for 7-8 miles, we had turned around to head back when we ran into Stu Tennyson and his family from Moore, Oklahoma. Stu said reptile activity had been fairly slow for several nights, though his wife, Dorothy, had found a nice two-foot dark-phase Gray-banded Kingsnake the night before 3.5 miles W of

Langtry on the south shoulder of US 90. This boosted our spirits, and we continued hunting, eventually finding our first herp, a Texas Banded Gecko, Coleonyx brevis, sitting on a rock cut 3.5 miles W of Comstock. We quit at midnight, having seen no more herps, with the air temperature down to 65 F.

Thursday morning, 13 June, we awoke in Seminole Canyon State Park in Campground #29, which would be our base for the next five days. Around 11:30 we drove towards Langtry and at noon saw our first snake, a three-foot Western Coachwhip, Masticophis flagellum testaceus, just west of Osman Canyon. We next stopped at the ghost town of Shumla (8 miles E of Langtry on US 90) which consists of a half-dozen tattered and crumbling stone buildings. Lifting a piece of damp cardboard, I found a Short-lined Skink, Eumeces tetragrammus brevilineatus. Don and I then each found a Southern Prairie Lizard, Sceloporus undulatus consobrinus, beneath a sheet of tin. Moving on, we stopped at a railroad crossing 3 miles west of Comstock and found a Texas Spotted Whiptail, Cnemidophorus gularis gularis and eight Texas Banded Geckos.

When evening finally came, we left camp at 8:30 p.m. under clear skies and a temperature of 76 F. The first snake of the evening was a three-foot Western Diamondback Rattlesnake, Crotalus atrox, on the road at 8:45. We drove on at 15-25 mph to the top of a hill 3 miles east of Langtry, where we both immediately noticed a blackish-orange banded snake resting on the south shoulder. Jumping out of the truck with flashlights, we were truly awed by the beauty of the fifteen-inch dark-phase female Gray-Banded Kingsnake, moving very slowly across the shoulder of the highway. After "careful" observation of this specimen, we went on driving, occasionally passing another set of slow-moving headlights. At 10:43 p.m. we spotted another snake starting to move off the shoulder into the grass. I ran out to find it and immediately identified it as a Desert Kingsnake, Lampropeltis getulus splendida, three feet in length and attractively marked. We were now 2.5 miles west of Langtry. At 12:20 a.m., we saw a one-foot Texas Night Snake, Hypsiglena torquata jani, just west of Langtry. The last snake of the night was a DOR Western Diamondback Rattlesnake 0.25 miles west of the Pecos River High Bridge, at 1:43 a.m.

Friday, 14 June, we woke up late and found that Brian Hubbs had joined us in camp. Brian had seen a three-foot Baird's Rat Snake, Elaphe bairdi, on Juno road the night before, and was surprised we had found several snakes out. The other hunters around Langtry had not seen any all evening.

That night, despite five hours of driving around Langtry, with air temperatures of 77-74 F, we found nothing.

Saturday we decided to concentrate on the Juno road area, between Baker's crossing and the litter barrel three miles north. Besides Don, Brian and I, another longtime friend of mine had shown up, David Doherty of College Station, Texas, and his Dad, who was from Houston.

We found our first snake at 9:20 p.m., a three-foot Western Diamondback, then minutes later another one. An hour later, our headlights picked up a very white-looking snake, which we jumped out of the car and identified as a three-foot Trans-Pecos Ratsnake, Elaphe subocularis, a very appealing, bug-eyed snake of this region. We soon met up with Brian, and he told us he had found several Texas Night Snakes. David pulled up and said he and his dad had just found a beautiful, two-foot long dark phase Gray-banded Kingsnake minutes earlier, down the road a short distance. We all commended them on their lucrative find and

continued cruising. At 11:20, we spotted a tri-colored body, and jumped out to find an attractive Texas Longnose snake, Rhinocheilus lecontei tessellatus, two feet long, sliding across the pavement. As we were heading back to camp two hours later, near Park Road #67 in Seminole Canyon Park, we saw a large, whitish snake on the road in front of us. It was a five-foot long Trans-Pecos Ratsnake. The time was 1:57 a.m., and the air temperature was still 76 F.

Another herper friend showed up on Sunday afternoon, 16 June. John Hollister, from San Antonio, drifted into camp to prepare for the evenings drive. Everyone except Brian decided to try the Langtry area.

After several hours of driving and not observing any reptilian movement, I drove 15 miles to the west of Langtry to near the town of Pumpville, in Terrell County. Here we found a fresh DOR four-foot Desert Kingsnake, 3.5 miles east of the US-90 Pumpville junction, at 1:29 a.m. Heading back towards Langtry, we found our only other snake for the night, a one-foot Texas Night Snake, five miles west of Langtry at 1:42 a.m. Pulling into camp at 2:50 a.m., we found Brian and John Hollister already retired for the night, with nothing to show for their efforts.

Monday, 17 June, turned out to be the most memorable day of our entire trip. It began as most of our other days had. I woke up in mid-morning, took a shower, and just as I came out of the shower, I noticed an attractive three-foot Western Coachwhip laying contentedly beneath the park's sprinkler system, which happened to be running. After the coachwhip was photographed, it slid off into the nearest bush. Another four-foot coachwhip was observed in the evening on US 90, at 6:30 pm.

Leaving camp in advance of the setting desert sun, we were soon at Langtry and found our first snake of the night at 9:51, a one-foot Texas Night Snake, moving across the Loop 25 road that connects Langtry to US 90. At 10:01 we found a one-foot Trans-Pecos Ratsnake moving on the shoulder of US-90 just east of Langtry. We next found a two-and-a-half-foot Great Plains Ratsnake, Elaphe guttata emoryi, 3.5 miles east of Langtry at 11:09.

With the passing of midnight, we met John Hollister on the Pandale dirt road, just a mile north of Langtry. Hollister had seen several snakes, including a Trans-Pecos Copperhead, Agkistrodon contortrix pictigaster. One-half hour later, we all resumed driving, so I decided to make a quick pass on Loop 25. We started down the Loop slowly from Chamberline station, as it has a much darker type of asphalt road surface than US 90. We had just passed through Langtry when I noticed a broad-orange banded snake, stretched out in the middle of the road some 100 yards east of the Judge Roy Bean Visitor Center. It was a 15-inch intermediate-phase Gray-banded Kingsnake. It had very wide orange bands with a nice medium-shade of gray bands. It was 12:39 a.m., and 84 F.

Moving steadily along, we turned off the Loop and began going east on US 90. We slowed down so Don could use my 200,000 candle-power Q-Beam Spotlight to look for activity on the rock cuts along the highway. After a mile, Don suddenly yelled "There's one!" Looking up on the cut, eight feet off the ground, we saw a magnificent male light-phase Gray-banded Kingsnake crawling at an angle up the cut. Don and I watched the snake a few seconds, until the euphoric thrill of finding it settled down. This was certainly the most brilliantly colored Gray-banded Kingsnake Don or I had ever seen in the wild. The light gray bands, narrow black bands, and fluorescent orange bands gave this snake a "knock-out" appearance, to any kingsnake lover. Moving on, shining

cuts, as we approached the east edge of Eagle Nest Canyon, Don yelled "Snake!" and we immediately recognized a Trans-Pecos Ratsnake resting in a horizontal crack, five feet off the ground.

We continued west of Langtry, then turned around and started back with Don still checking all the cuts. Some two miles from Chamberline station, Don told me to "Whoa!" and I eagerly complied. As I jumped out of the Datsun, Don held the light on a horizontal body resting 12 feet above the ground. I climbed quickly up and was face-to-face with a 15 inch female dark-phase Gray-banded Kingsnake, that resembled the first one we found on Thursday night. Finding one Gray-banded Kingsnake in an evening's road cruising is quite an accomplishment, but finding three in a single night, well, that is every kingsnake hunters dream come true. We graciously accepted the night as a once-in-a-lifetime occurrence and resumed cruising. Every few minutes, slow moving lights passed us from the opposite side of the road. At 3:07 a.m. we spotted another snake, this one on the shoulder of US 90, three miles east of Langtry. We got out and examined our last snake of the night, a Trans-Pecos Ratsnake. Over the next hill, we met up with John Hollister, who told us he had just found a nice two-foot female light-phase Gray-banded Kingsnake a few minutes earlier. We retired back to camp at 4:56 a.m., satisfied with our observations.

Tuesday, 18 June, we were up by 10:00 a.m. Having heard of a cool front and advancing rainstorm due to hit Val Verde County that afternoon, we pulled up stakes and left for Del Rio and a motel room. Brian joined us for a couple of nights.

The evening was soon upon us, and we were on the road destined for Langtry at 8:00 p.m. when we met John Hollister coming in from the west. He had just come from Langtry, and reported that it was raining steadily and the wind was whipping through hard over there. We decided that area was out for the night, so we headed north from Del Rio on US 277. After we had cruised 25 miles north, we turned around and started back and came upon Brian. He had his flashlight on a rock cut on the east side of the road, so we all watched a three-foot Baird's Ratsnake, Elaphe bairdi, slither back into its catacomb of crevices and fissures. Driving on, not another snake was to be seen that night, though toads were abundant on the dampened highway. We quit around midnight, somewhat disappointed, as the rain began to fall steadily.

Wednesday, 19 June, we arrived just outside of Langtry as the sun was setting. It was obvious that the area had received a fair amount of rain, as water was standing in numerous places and the rock cuts along US 90 were darkened from being well-soaked. Driving until midnight, we left Langtry, having seen no herps. Just outside of Comstock, we turned northwest towards Pandale on TX 1025. Here we ran into Mike Chambers and his wife, both from Kansas City, Missouri. They had been in the Big Bend National Park area for three nights, and had found several Trans-Pecos Ratsnakes and Texas Night Snakes, but had seen no Lampropeltis. Like us, they had seen no snakes this night, either, though it was a perfect night to observe toads, as we had all seen dozens of them. Wishing them the best of luck, we went our separate ways, and parked the truck back at the motel at 1:45 a.m.

Thursday, we checked out of the motel, said goodbye to Brian and John, and left for the Big Bend area, some 250 miles to the southwest.

In the small town of Study Butte, we secured a motel room and headed out as the sun was setting, driving slowly north on TX 118, with clear skies and a comfortable temperature of 81 F. At 9:26 p.m. we

found our first snake, an Eastern Blackneck Garter Snake, Thamnophis cyrtopsis ocellatus, freshly run over. We next found a Ground Snake, Sonora semiannulata and then, turning back south, a slender white body was spotted that turned out to be a one-foot Trans-Pecos Ratsnake. These snakes, as well as the following snakes, were all found on a stretch of TX 118 seven to ten miles north of Study Butte. These three miles cross through two large rockcuts and many slopes of the Christmas Mountains. We passed one other apparent herper vehicle, a small white truck with California plates. Later, they stopped and talked to us at intervals, and indicated that they, too, were finding snakes that evening.

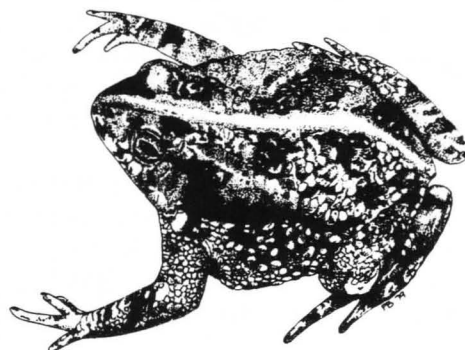
Driving on, the next snake found, at 10:28, was an eight-inch Plains Blackhead Snake, Tantilla nigriceps. The next hour passed quickly, with no reptile movement, and then at 12:03 a.m. we found another Trans-Pecos Ratsnake stretched out in the center of the road. Our last snake of the night was a Texas night snake found at 12:49.

Friday, 21 June, we turned off TX 118 onto TX 170 and proceeded northwest during the last hour of daylight. The day had been hot, 105 F, and we arrived at the Big Hill, some 15 miles northwest of Lajitas, just before sunset. Checking the mercury, it was still close to 100 F and holding as dark set in and we began driving towards Redford. Over the next 15 miles, we saw no reptiles, just numerous bats flying around, so we turned back. Back at the Big Hill at 10:00 p.m., it was still 100 F, so we decided to leave there and give TX 118 a try. When we got to 7 miles north of Study Butte on TX 118 at 11:15, it was 85 F, so we made several passes over the next three miles, observing only an occasional scorpion. Shortly after midnight, we parked the truck back in Study Butte.

The next morning, Saturday, 22 June, we were both awake by 6:00 a.m., so in one last attempt, we jumped in the Datsun and drove ten miles north again, just before the sun was about to rise. Having time to make only one pass over this area before sunrise, we did not see a thing.

Back in Study Butte, we packed the truck and were on the road home by 7:30 a.m. We passed Fort Worth at 6:30 p.m., and arrived in Moore, Oklahoma, at 10:00 to spend the night at Stu Tennyson's home.

We left Moore on Sunday, 23 June at 9:30 and were at Don's home in Wichita at 12 noon. After reminiscing with Don about our journey and very productive 11-day observation of reptiles from the deserts to the mountainous regions of West Texas, I said goodbye to him and drove the last 85 miles of this extraordinary trip. I arrived in Fredonia and shut the engine off at home at 3:20 p.m., having just added another 3,677 miles to the odometer...



BOOK REVIEW

Mattison, Christopher. 1982. The Care of Reptiles and Amphibians in Captivity. Blandford Press, Dorset [England]. 304 pp, numerous black-and-white photos, line drawings, 48 color photos. Available from: Sterling Publishing Company, 2 Park Avenue, New York, New York, 10016. Price: \$17.95

I am frequently asked to recommend a good, general book on the care of amphibians and reptiles. Until recently, I had never seen a good one, other than the now out-of-print The Keeper and the Kept by Karl Kauffield. Now, at last, I have found one that deserves attention. Written with the novice in mind, this book is easily the best I have seen for an introduction to the care of reptiles and amphibians in captivity. It contains enough detailed information to also be of great interest to experienced keepers.

Part I covers general care of reptiles and amphibians, and Part II deals with particular species and their requirements in captivity. Appendix I outlines some of the laws regulating traffic in reptiles and amphibians, and Appendix II lists some herpetological societies. Unfortunately, this list is rather short. The major societies are included, but the list for regional societies consists only of the three big ones in the United States-- New York, Maryland, and Chicago. It's too bad a better list of regional societies in the United States was not given for North American readers. There is also a short glossary (only 20 terms defined), a short Bibliography, and good indexes to common and scientific names.

The book begins with a brief introduction to reptiles and amphibians, followed by useful hints for selecting animals, building cages, and setting up healthy enclosures for them. Mattison covers plants, lighting, and heat sources in this discussion. One chapter is devoted to breeding food for captive animals, something usually neglected in books of this sort. The food items covered are brine-shrimp, Daphnia, white-worms, mealworms, crickets, and flies.

Concerning breeding the reptiles and amphibians themselves, Mattison writes, "More than anything else, the successful breeding and rearing of any animal species is a yardstick by which the keeper can measure his or her skill in creating the right environment, and in practising good management for that particular species." It is certainly nice to see the emphasis in an introductory book on how much can be done besides just keeping the animals healthy in cages.

The chapter on diseases discusses prevention, nutrition, bacterial and protozoan infections. This chapter is really too short to be of a lot of help to advanced keepers, but has some good basic information for beginners. The treatment of handling reptiles and amphibians is good, but for some reason he does not discuss tubing for handling venomous species. This is a very useful technique, much safer for both snake and handler, than pinning the animal down and picking it up. The snake is coaxed up a clear, plexiglass tube far enough it can't turn its head around, then grasped at the tube so that it can't back out. With the head and neck of the snake up in the tube, you can then examine the snake, administer oral medications, etc., without having to hold the snake's head.

Part II of the book is quite interesting. Mattison has selected certain species that are popular in captivity, and discusses their care

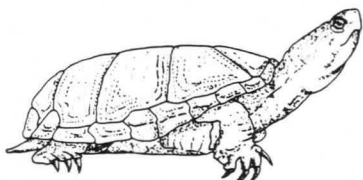
and requirements for maintenance by family and then in more detail for certain particular species. This section covers 15 species of salamanders, 42 frogs and toads, 21 turtles, 53 lizards, 45 non-venomous snakes, and 14 venomous snakes.

The coverage of venomous snakes raises a serious issue. Who is the intended audience for this book? Most anyone keeping reptiles and amphibians in captivity will find useful material in it, but I rather imagine that most of the readers will be private collectors. Mattison does give a stern warning about the folly of keeping venomous species in private collections.

The book was published in England, and some of the ideas expressed in it tell a lot about the pet trade in Europe. The most obvious thing is that North American reptiles and amphibians are very popular there. I have seen several European price lists recently that are rich in American species, and have received letters from England and Germany inquiring about how to keep Trans-Pecos Ratsnakes and Gray-banded King-snakes, both of which are supposedly protected under Texas state law. Going through the index to scientific names, I counted 6 species of North American salamanders, 18 frogs and toads, 14 turtles, 13 lizards, and 41 snakes.

The only shortcoming I found with this book was not enough was said about some topics, however, no one book can ever hope to cover it all. A lot is packed into its 304 pages. The very good quality of the 48 color photos makes helps make it worth the price. Keeping reptiles and amphibians in captivity is still more art than science, and not everyone will agree with all of the ideas presented in this book. But, for a one-volume, general introduction that is for more than just beginning herpers, this is a very good buy.

--John E. Simmons
Museum of Natural History
University of Kansas
Lawrence, Kansas 66045



A FINAL WORD FROM THE EDITOR

I want to encourage all of you who can make it to attend the Society for the Study of Amphibians and Reptiles and Herpetologists' League meeting in Springfield, Missouri this August (see the announcement on page 1). A lot of interesting things go on, and the registration fee is very low for a meeting of this sort. It is the best way I know of to meet other people who share your interest in herpetology.

Thanks to Marty Capron for the beautiful new cover illustration for the newsletter, and accompanying article on Tiger Salamanders. Good job, Marty.

Dues envelopes went out with the December KHS Newsletter, but as of press time, not too many have been returned. With the change to first class postage, it is more important than ever that you pay your KHS dues promptly.

Thanks for help assembling, labeling and stamping the last newsletter to Sofia Ana Simmons.

**ANNOUNCING
A LIMITED TIME 25% DISCOUNT SALE FOR
SELECTED SSAR PUBLICATIONS**

The following publications are offered at a 25% discount (from our 1986 price sheet) for orders received prior to June 30, 1986.

Journal of Herpetology, Vols. 13-18 only: Prices reduced from \$5.00 to \$3.50 per individual number of each volume.

Herpetological Review, Vols. 1-15: All volumes and numbers that are in stock (see below for out-of-print numbers). Prices reduced from \$2.00 to \$1.50 per individual number of each volume.

Herp. Review Nos. Out-of-Print:

Vol. 1 No. 7 (1969)	Vol. 6 No. 1 (1975)
Vol. 3 No. 2 (1971)	Vol. 6 No. 4 (1975)
Vol. 4 No. 1 (1972)	Vol. 10 No. 2 (1979)
Vol. 5 No. 2 (1974)	Herp. Review Cumulative Index (1967-1976)

Cumulative Index to volumes 1-10 of *Journal of Herpetology*. \$3.50.

Catalogue of American Amphibians & Reptiles: Imprinted binder, taxonomic tabs, and accounts 1-390. \$277.50.

Reproductive Biology and Diseases of Captive Reptiles. James B. Murphy and Joseph T. Collins (eds.), 1980, 287 p. illust. (paperbound) \$18.75.

Contribution to the Herpetology of Arabia. J. Anderson, 1896, 160 p. illus. (one plate in color) (clothbound) \$18.00.

Papers on the Higher Classification of Frogs. E. D. Cope, 1864, 32 p. (paperbound). \$1.50.

A Preliminary Study of the Thermal Requirements of Desert Reptiles, R. B. Cowles and C. M. Bogert, 1944. 52 p., 11 plates (paperbound) \$3.75.

Vertebrados del Viaje al Pacifico: Batracios, M. J. De la Espada, 1875, 208 p., 6 plates. (clothbound) \$13.50.

Systema Reptilium, L. J. Fitzinger, 1843, 128 p., index. (paperbound) \$9.00.

The Rattlesnakes, Genera *Sistrurus* and *Crotalus*, H. K. Gloyd, 1940, 300 p., plus 31 plates of photographs, index. (clothbound) \$18.75.

North American Herpetology, J. E. Holbrook, 1842, 1032 p., 147 plates (20 reproduced in full color), Regular edition (clothbound) \$45.00.

Herpetology of Brazil, J. B. von Spix and J. G. Wagler, 1824-1825, 400 p., 98 plates (one in color). (clothbound) \$27.00.

Handbook of the Snakes of the United States and Canada, Vol. 3 and Bibliography, A. H. Wright and A. A. Wright, 187 p. (clothbound) \$13.50.

A Brief Outline of Suggested Treatments for Diseases of Captive Reptiles (Herp. Circular 4), James B. Murphy, 1975, 13 p. \$1.00.

Vernacular Names of South American Turtles (Herp. Circular 10), Russell A. Mittermeier, Federico Medem and Anders G. J. Rhodin, 1980, 44p. \$1.75.

Recent Instances of Albinism in North American Amphibians and Reptiles (Herp Circular 11), Stanley Durkacz, 1981, 36 p., \$2.25.

Silver Anniversary Membership Directory (Herp. Circular 13), including addresses of all SSAR members, addresses and publications of the herpetological societies of the world, and a brief history of the Society. 1983, 56 p., 4 photographs. \$1.50.

RECENT HERPETOLOGICAL LITERATURE: Number 1 (1983), 66 p. \$3.00.
Number 2 (1984), 38 p. \$3.00.

Color Print

SILVER ANNIVERSARY COMMEMORATIVE PRINT. A full-color print (11.5 x 15.25 inches) of a Gila Monster (*Heloderma suspectum*) on natural background, from a watercolor by David M. Dennis. Issued as part of Society's 25th Anniversary in 1982. Each \$5.00.

Send orders to Dr. Douglas H. Taylor, Department of Zoology, Miami University, Oxford, Ohio, 45056, USA. Please make checks payable to "SSAR." All USA orders are postpaid; shipments outside the USA will be charged only the *additional* shipping costs in excess of domestic rates. Overseas customers must pay in USA funds or by International Money Order, or may charge to MasterCard or Visa (give account number and expiration date). A complete list of Society publications and membership information can be obtained from Dr. Taylor.



SOCIETY FOR THE STUDY OF AMPHIBIANS AND REPTILES

Society for the Study of Amphibians and Reptiles is a non-profit organization established to advance research, conservation, and education concerning amphibians and reptiles. Begun as a regional society in 1958, SSAR is today the largest international herpetological organization. It is recognized as having the most diverse society-sponsored program of professional services and publications for herpetologists. Membership is open to anyone with an interest in herpetology.

Activities

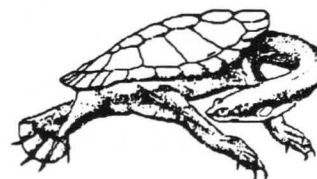
An annual meeting is held each August at a university or field station. Informal and relatively inexpensive facilities are chosen to encourage student participation. Contributed papers, symposia, workshops, and a variety of exhibits contribute to make this week-long event the world's major herpetological meeting. The Society makes a concerted effort to involve a diverse segment of its membership in committee activities designed to further our knowledge of amphibians and reptiles and manage the affairs of the Society. Committees include Conservation, Grants- in-Herpetology, Kennedy Award (committee awards a cash prize for the best student paper published in the *Journal of Herpetology*), Long-range Planning, Meetings, Nominating, Regional Society Liaison, and Zoo Liaison.

Publications

SSAR sponsors six publication series: *Journal of Herpetology*, *Herpetological Review*, *Facsimile Reprints in Herpetology*, *Herpetological Circulars*, *Contributions to Herpetology*, and *Catalogue of American Amphibians and Reptiles*.

Membership Privileges

Members elect the Society's officers and Board of Directors. Each year, members receive *Journal of Herpetology*, *Herpetological Review*, and occasional pamphlet-length *Facsimile Reprints*. SSAR members also receive substantial discounts on book-length *Facsimile Reprints*, *Herpetological Circulars*, and *Contributions to Herpetology*. Individuals electing higher membership categories (sustaining and contributing) receive the same publications and services, but provide additional financial support which allows the Society to expand and improve its programs more rapidly than would otherwise be possible.



SSAR MEMBERSHIP and SUBSCRIPTION APPLICATION

Please check the appropriate category:

MEMBERSHIP

Student member	\$ 17.00 ()
Regular member	22.00 ()
Sustaining member	35.00 ()
Contributing member	50.00 ()
Air Mail Delivery of Publications	12.00 ()

SUBSCRIPTIONS

<i>Herpetological Review</i>	10.00 ()
Air Mail Delivery	6.00 ()
<i>Catalogue of American Amphibians and Reptiles</i> (20 loose-leaf accounts)	10.00 ()

TOTAL \$ _____

Payment Method: Check or Money Order (), MasterCard (), VISA (). A receipt will be sent only upon request.

Credit Card Acct. No: _____

Expiration Date: _____

Your signature authorizes SSAR to debit your credit card account. Note: A 3% bank charge will be added to your credit card account.

Signature: _____

Send your name, address, and remittance to:

Dr. Henri C. Seibert, SSAR Treasurer
Department of Zoological and Biomedical Sciences
Ohio University
Athens, Ohio 45701, USA