



KANSAS
HERPETOLOGICAL
SOCIETY
NEWSLETTER



NUMBER 39

OCTOBER 1980

THIS ISSUE OF THE KANSAS HERPETOLOGICAL SOCIETY NEWSLETTER
IS DEDICATED TO DR. HENRY S. FITCH, WHOSE UNENDING ENTHUSIASM
IN THE EXPLORATION OF NATURE HAS BEEN A CONSTANT INSPIRATION
TO THE MANY PEOPLE WHO HAVE BEEN ASSOCIATED WITH HIM THROUGH
THE YEARS.

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UNIVERSITY OF KANSAS

**NATURAL HISTORY
RESERVATION**

**BIOLOGICAL RESEARCH
AREA**

**HUNTING AND TRESPASSING
NOT PERMITTED**

NOVEMBER MEETING AT MUSEUM OF NATURAL HISTORY, LAWRENCE: NOVEMBER 23

The annual meeting of the KHS will be held on Saturday, November 23, in the Public Education room located on the sixth floor of the KU Museum of Natural History, in Lawrence, Kansas. Coffee and doughnuts will be served from 9:30 AM until 10:00, when the lecture presentations begin.

The following presentations will be given at the annual meeting:

- 1) Marty Capron - "Sojourn into the Australian 'Out-back'"
Marty will show slides of his exciting trip into the Australian bush.
- 2) Alan Smits - "The biology of the Giant Spiny Chuckwalla (Sauromalus hispidus) in Baja California."
Al will give us a slide presentation of his field studies in the beautiful deserts of Baja California. He will also bring a LIVE specimen for us to observe and photograph.
- 3) Robert Sprackland - "The biology of Storr's Monitor (Varanus storri).
Bob will give us a slide presentation dealing with the biology of this small cousin of the Komodo Dragon (Varanus komodoensis).
- 4) Peter Gray - "A Slide Presentation of Some Members of the Anuran Genus Atelopus."
- 5) Richard Seigel - "The Status of the Massasauga (Sistrurus catenatus)."
Rich will tell us of his field work at Squaw Creek concerning the biology and current status of this diminutive rattlesnake which is found in marshes and near the edges of ponds.

In addition to the above presentations, we urge you to bring your ten best slides to show at the meeting.

Elections of KHS officers for the following year will be held at this annual meeting. So be prepared to nominate one or more KHS members for President-elect 1981 and Secretary-Treasurer 1981. To date, Joseph T. Collins has been nominated for the first position, and, Larry Miller has been nominated for the second post.

Following the slide presentations and the election, there will be a guided tour of the museum's Live Snake Exhibit, which is also located on the sixth floor. This exhibit features almost all of the snakes that occur in the state of Kansas.

This is the BIG ANNUAL MEETING, so mark the date on your calendar and plan to attend.

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SEPTEMBER KHS MEETING ENJOYABLE FOR THOSE WHO ATTENDED

September 26 was a cool evening for those who camped at the new Clinton Lake, but, everyone appeared to sleep well after visiting until nearly midnight. All were up early Saturday morning and immediately went to the KU Natural History Reservation located north of Lawrence. The ten people that had camped at the lake arrived shortly after 8:00 AM, and, Dr. Fitch was just getting ready to start his guided walk through the area. Several other KHS members were already there.

Dr. Fitch first showed the group a patternless Osage copperhead (Agkistrodon contortrix phaeogaster). This rare color pattern is currently known from only a few copperheads, all of which were found on the Reservation. Several members of the group took a few minutes to photograph the unusual snake, as Dr. Fitch attempted to get the reptile to pose for photos.

The brisk walk through the reservation was quite educational and enjoyable. Since 1948 Dr. Fitch has been studying the natural history of the snakes in the area, and showed the group his marking and trapping methods. A highlight for some of the younger members was a demonstration of the marking technique (clipping several ventral scales under the tail) on some live copperheads that were found in the traps. When the group returned to Dr. Fitch's home, they took a short break and shared some cool watermelon before going to Atchison County.

The weather began to turn colder. Therefore, the only herps that were seen include: an ornate box turtle (Terrapene o. ornata), a northern cricket frog (Acris crepitans), and a bullfrog (Rana catesbeiana). Tom Lucier of Dodge City, with the aid of Annie Burkhart and Susan Parke, decided to collect fish with the aid of a seine. They got a lot of exercise and a few specimens. The other members of the group encouraged those who were seining, and even took a few pictures of the episode.

Jeff and Anne Burkhart fixed an excellent evening meal for the group. Everyone enjoyed the stew and bread and, of course, roasting marshmallows over the campfire. As the sun went down, those remaining decided to spend some time around the campfire telling stories, reciting poetry, and just relaxing. It was about sundown when the last KHS member arrived. Roasting marshmallows and conversation went on until the early morning hours. It was a quiet, cool, and peaceful evening, and a very enjoyable and relaxing time was had by all.

The next morning we awoke to the smell of bacon and eggs. Jeff and Anne had fixed breakfast for the group. It had been another good meeting. Those attending really enjoyed themselves and they only wished a few more KHS members would have been able to join them for the weekend. As those remaining Sunday morning bid their final goodbyes, they were thinking about seeing each other at the BIG annual meeting at the Museum of Natural History in Lawrence in November.

-----Larry Miller, 524 North Osage St., Caldwell, KS 67022.

JOINT ANNUAL MEETING SSAR/HL IN MILWAUKEE

In the early part of August, the Society for the Study of Amphibians and Reptiles (SSAR) and the Herpetologists' League (HL) held a joint annual meeting hosted by the University of Wisconsin-Milwaukee and the Milwaukee Public Museum. Herpetologists and their cohorts throughout the United States, Canada, Europe, and Australia, gathered in Milwaukee for five days of herpetological enjoyment. A large contingent from the University of Kansas arrived late in the evening of the first day, after a very enjoyable journey which took some of us along scenic Lake Shore Drive at sunset. Max Nickerson, one of our gracious hosts, was there to greet us and direct us to the accommodations which had been provided.

The next four days were filled with paper sessions and parties. Many of the papers were part of three separate symposia which had been organized for the meeting. There was an international crocodylian symposium which emphasized the reproductive biology and conservation of crocodylians; a regional herpetological society symposium on endangered herpetile biology; and, a symposium in honor of Dr. Henry S. Fitch.

Some of the more notable papers include:

- 1) "Predation by Giant Crab Spiders on the Puerto Rican Tree Frog, Eleutherodactylus coqui." by D.R. Formanowicz, Jr. Through field experiments, Formanowicz discovered that giant crab spiders (Sparassidae) are potentially important predators of juvenile Puerto Rican tree frogs.
 - 2) "Preliminary Observations on Endogenous Heat Production after Feeding in Python molurus bivittatus (Reptilia, Serpentes, Boidae)." The authors, D.L. Marcellini and A. Peters, discovered that the body temperatures of the fed pythons were greater than those of the same individuals before feeding. Note that this temperature difference is seen in the absence of an external heat source. The cause of this temperature difference is still being investigated.
 - 3) "Lingual Salt Glands in Crocodylus porosus." Two Australian researchers have recently discovered that this crocodile has 30-40 pores on the tongue which produce secretions that have a sodium concentration which is 4-6 greater than found in other bodily secretions. The discovery of lingual salt glands answers many questions that have plagued researchers in this field for many years.
 - 4) "A Visit to Stephen's Island, Home of the Tuatara." by R.R. Goellner. Ron showed slides of his trip to Stephen's Island where he saw the tuatara (Sphenodon punctatus) in its natural habitat. The New Zealand government strictly protects this animal from human interference and the possibility of inadvertently introducing rats onto the island. The rats on neighboring islands have completely destroyed the tuatara's eggs, which take over a year to hatch. The St. Louis Zoo is currently trying to breed the tuatara in a specially designed room that simulates its natural environment.
 - 5) "Detection and Evasion of Fringe-lipped bats (Trachops cirrhosus) by the Common Pond Frog (Physalaemus pustulosus)." by M.D. Tuttle, L.K. Taft and M.J. Ryan. Merlin showed us some amazing slides of this bat preying upon the pond frog. Field and lab studies showed that the bat can distinguish different frog species by their calls, and, locate them with amazing accuracy. The frogs detect the bats visually, cease to call, then dive beneath the water's surface.
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There were many other papers that were very interesting and enjoyable, but are too numerous to mention. Some of the social highlights of the meeting include: a picnic at the Milwaukee County Zoo, and, an ethnic banquet at the Milwaukee Public Museum, which was followed by Bulgarian folk dancing. In addition, there were many informal gatherings marked by fascinating conversations which often continued through most of the night. There also was a fabulous banquet in honor of Dr. Henry S. Fitch.

-----Hank Guarisco, Museum of Natural History, Lawrence, Ks 66044.



CRACK DOWN RESULTS IN TWO SEA TURTLE INDICTMENTS

Grand juries in Brownsville, Texas, and Miami, Florida, recently returned indictments on a number of seafood firms and associated individuals for illegal trade in Endangered Pacific (olive) Ridley (Lepidochelys olivacea) sea turtles. The indictments follow year long and 18 month investigations, respectively, by government wildlife and customs agents.

A 12-count indictment was handed down on July 22, 1980, in Brownsville on two seafood firms and their owners for illegally importing and receiving over eight tons of endangered sea turtle meat. Service officials estimate that about 1,300 individuals had to be slaughtered to obtain the eight tons of filet tips, and chunks of turtle meat imported the Texas and Pennsylvania firms.

Two of the individuals were charged with illegally receiving, concealing, and selling the protected meat which they knew had been imported into the United States in violation of the Endangered Species Act of 1973. One of them was also charged with importing meat fraudulently labeled as fish filets.

The Miami indictment handed down on August 7, 1980, involves four men and six corporations for illegally importing 45 tons of meat from the Endangered Pacific Ridley into this country, and is the largest case in the nation's history involving the smuggling of sea turtle products. A 13-count indictment charges the defendants with conspiracy, transporting sea turtle meat with fraudulent documents, or importing turtle meat in violation of the Act and the Convention on International Trade in Endangered Species (CITES). Service officials estimate that about 7,500 individuals from Mexico had to be slaughtered to obtain the 89,572 pounds of meat tips, chunks, and filets that were illegally imported into Miami International Airport between January 1978 and June 1979.

In the Miami indictments, two Mexican nationals and three Mexican companies were named. All but one of these individuals and companies were involved in a conspiracy, the indictment charges. According to it, the defendants agreed to use the term "chunked turtle meat - Dermatemys mawii" on the various customs entry documents accompanying the shipments. Dermatemys mawii is a Mexican fresh-water species of turtle whose importation into the States at present is legal.

Both the Brownsville and Miami cases are part of a larger federal crackdown by five agencies aimed at curbing the booming illegal trade in endangered species products in the United States. The participating agencies are Interior's Fish and Wildlife Service, National Marine Fisheries Service in the Department of Commerce, U.S. Customs Service in the Department of Treasury, the Animal and Plant Health Inspection Service in the Department of Agriculture, and the Department of Justice.

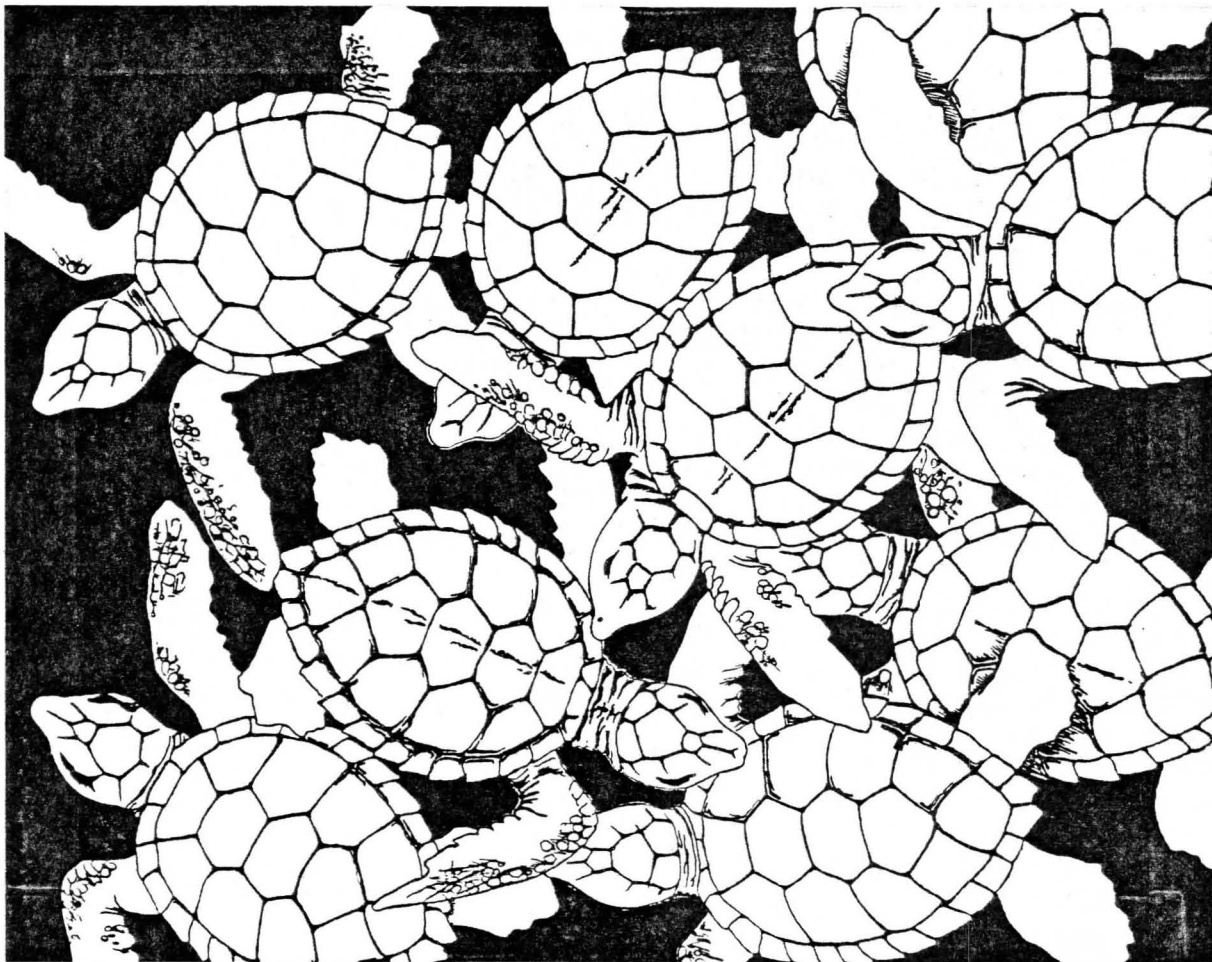
It is a violation of the Act to import any type of sea turtle products, including meat, into the United States. This country banned all imports of sea turtle products in 1978. The breeding colonies of the Ridley turtle on the Pacific coast of Mexico and the Gulf of California were listed as Endangered in 1978. Elsewhere, the species is listed as Threatened.

The adult Pacific Ridley weighs an average of 85 pounds and yields about 12 pounds of meat per animal. The meat, oil, and eggs of this species are in high demand, the prized meat going into the restaurant market and the eggs used in cooking and eaten as an aphrodisiac. In addition, the hides of the Ridley can be tanned and fashioned into shoes, handbags, and belts.

Collectively, the four species of sea turtle most heavily exploited for illegal trade (green, hawksbill, Atlantic Ridley, and Pacific Ridley) represent the most profitable wild animal on the international market today. Raw tortoise-shell, for example, now exceeds the prices paid for elephant ivory. Over 50 percent of a sea turtle - meat, shell, skin, and oil - is marketable in some form.

Criminal violations of the Act carry a maximum fine of \$20,000 and a jail sentence of up to 1 year. Criminal violations of customs law carry a maximum fine of \$10,000 and a jail sentence of up to 5 years.

---Clare Senecal, Endangered Species Technical Bulletin, 5(8):4, August, 1980



drawing by Delfi Messinger

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1980 SSAR GRANTS - IN - HERPETOLOGY

The Society for the Study of Amphibians and Reptiles is pleased to announce the following awards in the 1980 Grants-in-Herpetology Program:

Graduate Student Research:

- 1) Richard B. King, Purdue University. "Selection and Polymorphism in Merodia sipedon." \$175.
- 2) Jonathan A. Campbell, University of Kansas. "A Biogeographic Analysis of the Herpetofauna of the Sierra de las Minas, Guatemala." \$75.
- 3) Joseph C. Mitchell, University of Tennessee. "Life Histories of Two Species of Fresh Water Turtles." \$25.
- 4) Lawrence L. Woolbright, State University of New York at Albany. "Food Availability as a Determinant of Body Size in Populations of the Treefrog, Eleutherodactylus coqui." \$25.

Regional Herpetological Societies:

- 1) Kansas Herpetological Society. "Preparation of a Public Brochure on Protected Amphibians and Reptiles." \$200.
- 2) Wisconsin Herpetological Society. "Herpetological Education Information Brochures." \$100.

Herpetological Conservation:

- 1) Richard Seigal, University of Kansas. "Conservation and Management of the Western Massasauga, Sistrurus catenatus tergeminus, in Kansas and Missouri." \$225.
- 2) Michael W. Klemons, American Museum of Natural History. "Distribution and Conservation of the Connecticut Herpetofauna." \$75.

Herpetological Research in Zoos: (No proposals were received this year).

The SSAR extends its congratulations to all recipients of awards and encourages the submission of proposals for next year's program. The SSAR also expresses its thanks to the 1980 Grants-in-Herpetology Committee, composed of: Harry W. Greene (Chairperson), Terry E. Graham (Conservation), John D. Groves (Zoo Research), Linda E. Maxson (Graduate Student Research) and Martin J. Rosenberg (Regional Herpetological Societies).

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MANAGING FOR SNAKES?

About the only managing most folks want to do with snakes is to manage to avoid them, but according to Tom Johnson that's not right. Johnson, herpetologist for the Conservation Department, is author of a leaflet for the Department called, "A Guide to Amphibian and Reptile Conservation." The 15-page leaflet is available from the Department's Field Service Agents. It has been praised outside the state

boundaries as a landmark publication. "It is such a unique approach to the conservation of amphibians and reptiles," says Richard Funk in a review for the Chicago Herpetological Society, "that we alert non-Missourians to its existence. What makes this pamphlet outstanding is that it is published by a state conservation department and it thoughtfully encourages the conservation of non-game animals."

Johnson wrote a definitive book on Missouri's amphibians and is working on a reptile book. He has spent hundreds of hours slogging around in ponds, swamps and other less-than-inviting areas, often in the dark of night, to observe, photograph and record on tape the frogs, toads, turtles, lizards, snakes and other creatures that live there. Johnson's tips to Missouri's more than 300,000 pond owners include how to provide habitat, improve woodlands and manage prairies for amphibians and reptiles.

---taken from Missouri Wildlife 41(4), August 1980

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COALITION FOR THE PRESERVATION OF TALLGRASS PRAIRIE

The concept of a Tallgrass Prairie National Park or Reserve in the Flint Hills of Kansas and the Osage Hills in Oklahoma and Kansas is gaining strength despite recent reports to the contrary. Interest, in fact, never has been higher in assuring that a significant stand of tallgrass prairie will remain in perpetuity. To broaden the base of support for this ideal, the Coalition for the Preservation of Tallgrass Prairie was formed in March of this year. Initial leadership in the Prairie Coalition comes from members of Save the Tallgrass Prairie, Inc., the organization dedicated to that end; the National Audubon Society, the Sierra Club, and several smaller regional groups. Lots of company is welcome. A coalition of individuals and especially organizations provides a strong show of interest within the affected states, and the door is open to additional members and groups who have similar views. Feel free to contact any of the following people in your area: Michael P. Martin, Derby, Thomas R. Kneil, Wichita, Elaine Shea, Shawnee Mission (Save the Tallgrass Prairie, Inc.), Dianne Thompson or Betty Elder, Hays, Kent Foerster, Topeka, Charles Stough, Lawrence, Ivan Boyd, Baldwin.

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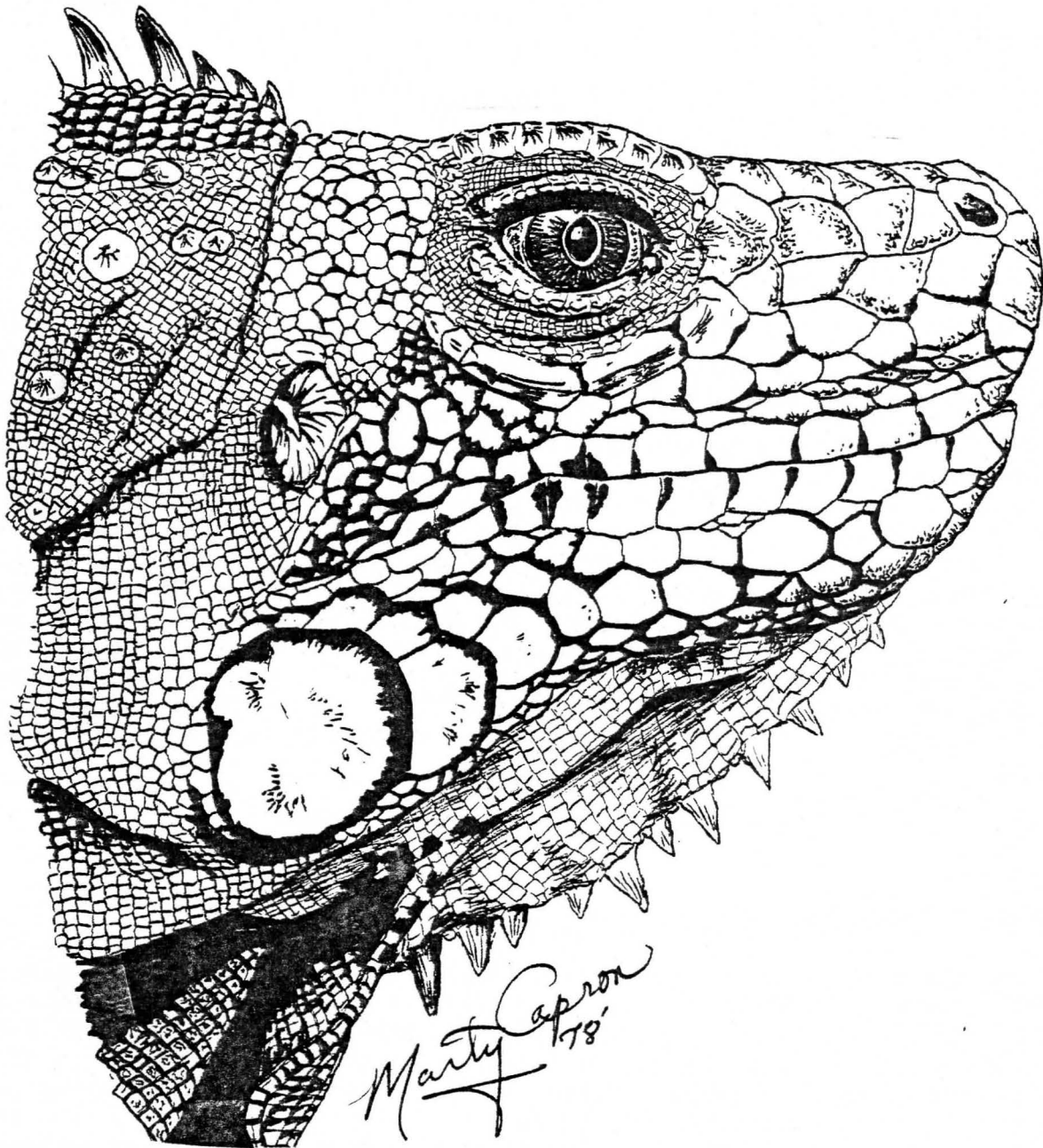
NEW HERPETOLOGICAL HUSBANDRY BOOK AVAILABLE

The "Inventory of Live Reptiles and Amphibians in North American Collections, Current January 1, 1980" is now available. This inventory gives information on location and sex of all individual reptiles and amphibians of 912 species and 1,093 forms, held in 49 public and 33 private collections. There are also 32 pages of miscellaneous breeding information, including dates of egg laying and hatching, types of incubation media used, and incubation temperatures. The 156-page report is now available for \$15.00 each, including packaging and postage, from: Frank L. Slavens, P.O. Box 30744, Seattle, Washington 98103.

REPTILE DEALER SENTENCED

One of the nation's largest dealers in rare reptiles has been sentenced to a year in jail and fined \$10,000 for smuggling endangered species. Henry A. Molt Jr., thirty-nine, operator of the Philadelphia Reptile Exchange in Willow Grove, Pa., was convicted of importing 10 radiated tortoises, an endangered species native to Madagascar, and trying to sell them to the Bronx, N.Y and Knoxville, Tenn. zoos for \$10,000.

---taken from "New Mexico Wildlife"



TOAD SKINS WERE 'HIGH' FOR TRIBE

People get high on all sorts of things these days - booze, pills and pot. Ancient Cherokee Indians probably used toad skins. According to a researcher at Winthrop College, that's probably what tribal members were doing two hundred to four hundred years ago with the piles of toads they left around camp.

Jeannette Runquist, a biology instructor, says based on her work at an archeological dig near Asheville, N.C., she's reached that conclusion.

"You can tell, or at least guess, a lot about Indians by noting what bones are found near tribal sites," the 36-year-old professor said. "You look at how many there are and whether or not they might have been used for anything by the Indians."

At the Asheville site and another near Franklin, N.C., the remains of 750 toads, 10,000 bones in all, were discovered. She says it was unlikely the bones would be found in one spot by accident. She bases her theory on research among other North American tribes. She says, "a certain tribe of Indians in Mexico dried, pulverized, and inhaled toad skins." The active ingredient is a little-known hallucinogen called bufotenine, which is also toxic, she said.

-----Lawrence Journal-World, July 15, 1980

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MORE NEWS AND VIEWS ABOUT PESTICIDE DRIFT

About twenty people attended a meeting at the Land Institute July 26 to discuss problems connected with pesticide use. Larry Miller showed some slides of aerial sprayers which illustrated some of the pesticide problems in Kansas. Other speakers were J. Howard Duncan, Director of the Bureau of Sanitation of the Department of Health and Environment; Freeman Biery, Director of the Weed and Pesticide Division of the Kansas State Board of Agriculture; Bill Greenwood, Noxious Weed Administrator; and Jon Flint, Pesticide Use Law Administrator for the Weed and Pesticide Division. They gave short presentations and then answered many questions.

Those present represented widely varying viewpoints and many different parts of Kansas. Duncan, Biery and Flint were quite candid in telling of their goals, problems, and areas where concerned citizens might help. All agreed that pesticide misuse is a serious problem. Biery and Flint told of the Weed and Pesticide Division's efforts to see that pesticides remain on the target and do not drift. They mentioned some of the problems they face:

- 1) There is not very much control over the unlicensed applicator of non-restricted pesticides.
- 2) Complaints must be investigated immediately (within 72 hours if possible), but many people do not know how to get help.
- 3) During the peak application season, there are so many samples to analyze that results often do not get back to those filing complaints for 3-4 weeks.

4) New FAA regulations permit numbers on aerial spray planes to be so small that planes cannot be identified from the ground.

Many other problems were brought up by others in the course of the discussion. Insurance problems, problems with county and city spraying, and problems concerning bees were among those discussed.

Duncan, Biery and Flint all encouraged organized efforts to reduce pesticide misuse. They emphasized the need to help educate pesticide applicators and the public and to work with legislators in improving the law. Enforcement agencies, they pointed out, cannot initiate legislation, but when legislation is proposed, they can identify problems and offer suggestions. One message was clear: a show of public support for the present strict policy on drift would encourage the Board of Agriculture to continue such a policy and might be necessary to offset contrary pressures from the pesticide industry.

Following the presentations and discussion, a few people met to organize a group to pursue some of the suggestions made during the discussion. They have tentatively adopted the name, "Kansans for Safe Pest Control." Some of the concerns which the group hopes to address are: legislation involving pesticide damage claims, herbicide use and alternative methods of brush control along road right-of-ways, protection of bees from pesticides, increasing the size of identification numbers required on spray planes, improving applicator training, and informing the public about what can be done when pesticide-related problems arise.

Those interested in joining us may write or call Terry Shafer, RR 3, Lawrence 66044 (913-842-1348) or Larry Miller, 524 N. Osage, Caldwell, 67022 (316-845-2680) for information.



DRAWING BY DELFI MESSINGER

PUBLICATIONS OF DR. HENRY S. FITCH

The following chronological list of publications is presented in honor of a great natural historian. A glance at this list will reveal the diversity of the author's interests. Although well known for his herpetological works, Dr. Fitch has also explored aspects of the natural history of mammals, birds, and spiders.

1933. Bird notes from southwestern Oregon. Condor, 35:167-168 (with J.O.Stevenson.)
1934. New alligator lizards from the Pacific Coast. Copeia, 1934:6-7.
1934. A shift of specific names in the genus Gerrhonotus. Copeia, 1934:172-173.
1935. An abnormal pattern in a gopher snake. Copeia, 1935:144-146.
1935. Natural history of the alligator lizards. Trans. Acad.Sci.St. Louis, 29:1-38.
1936. Amphibians and reptiles of the Rogue River Basin, Oregon. Amer.Mid.Nat., 17:634-652.
1938. Rana boylei in Oregon. Copeia, 1938:148.
1938. An older name for Triturus similans Twitty. Copeia, 1938:148-149.
1938. A systematic account of the alligator lizards (Gerrhonotus) in the western United States and lower California. Amer.Mid.Nat., 20:381-424.
1939. Desert reptiles in Lassen County, California. Herpetologica, 1:151-152.
1939. Leptodeira in northern California. Herpetologica, 1:152-153.
1940. A biogeographical study of the Ordinoides artenkreis of garter snakes (genus Thamnophis). Univ.Calif.Pub.Zool., 44:1-150.
1940. A field study of growth and behavior of the fence lizard. Univ.Calif.Pub.Zool., 44:151-172.
1940. Some observations on horned owl nests. Condor, 42:73-75.
1941. The feeding habits of California garter snakes. Calif.Fish & Game, 27:1-32.
1941. Geographic variation in the garter snake species Thamnophis sirtalis in the Pacific coast region of North America. Amer.Mid.Nat., 26:570-592.
1942. Interrelations of rodents and other wildlife of the range. Univ.Calif.Agr. Exp.Sta.Bull., 663:96-129 (with E.E. Horn).
1946. Observations on Cooper's hawk nesting and predation. Calif.Fish & Game, 32:144-154 (with B. Glading and V. House).
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1946. Feeding habits of the Pacific rattlesnake. Copeia, 1946:64-71 (with H. Twining).
1946. Behavior and food habits of the red-tailed hawk. Condor, 48:205-237 (With F. Swenson and D.F. Tillotson).
1946. Trapping the California ground squirrel. J.Mammal., 27:220-224 (with E.E. Horn).
1947. The California ground squirrel by J. M. Linsdale (book review). J.Mammal., 28:191-192.
1947. A field study of a rattlesnake population. Calif.Fish & Game, 33:103-123 (with B. Glading).
1947. Variation in the skins (Reptilia: Lacertilia) of the Skiltonianus group. Univ.Calif.Pub.Zool., 48:169-220 with T. L. Rodgers).
1947. Predation by owls in the Sierran foothills of California. Condor, 49:137-151.
1947. Ecology of a cottontail rabbit (Sylvilagus audubonii) population in central California. Calif.Fish & Game, 33:159-184.
1947. Rattlesnakes on the range. Pacific Stockman, 13:8-9 (with K.A. Wagon).
1947. Rattlesnakes on western farm lands. Western Dairy Jour., Sept.:23, 78-79. (with K.A. Wagon).
1947. Ground squirrels mean destroyed forage. Western Livestock Jour., Oct.:37, 109, 110, 112.
1948. Further remarks concerning Thamnophis ordinoides and its relatives. Copeia, 1948:121-126.
1948. Habits and economic relationships of the Tulare kangaroo rat. J.Mammal., 29:5-35.
1948. Ecology of the California ground squirrel on grazing lands. Amer.Mid.Nat., 39:513-596.
1948. A study of coyote relationships on cattle range. J.Wildlife Mgmt., 12:73-78.
1949. Sparrow adopts kingbirds. Auk, 66:368-369.
1949. Outline for ecological life history studies of reptiles. Ecology, 30:520-532.
1949. Use of California annual-plant forage by range rodents. Ecology, 30:306-321 (with J.R. Bentley.).
1949. Study of snake populations in central California. Amer.Mid.Nat., 41:513-579.
1949. Road counts of snakes in western Louisiana. Herpetologica, 5:87-90.
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1950. A new style live-trap for small mammals. J.Mammal., 31:364-365.
1951. Remarks concerning the systematics of the collared lizard (Crotaphytus collaris), with a description of a new subspecies. Trans.Kans.Acad.Sci., 54:548-559 (with W. Tanner).
1951. A simplified type of funnel trap for reptiles. Herpetologica, 7:77-80.
1952. The armadillo in the southeastern United States. J.Mammal., 33:21-37 (with P. Goodrum and C. Newman).
1952. The University of Kansas Natural History Reservation. Univ.Kansas Publ.,Mus. Nat.Hist.Misc.Publ., #4:1-38.
1952. Ecological Animal Geography by Hesse, Allee and Schmidt. Wilson Bull., 64: (Book review).
1953. Ecology of the opossum on a natural area in northeastern Kansas. Univ.Kansas Publ.,Mus.Nat.Hist., 7:305-338 (with L.L. Sandidge).
1953. Natural communities by L.R. Dice. Wilson Bull., 65:121-123. (Book review).
1954. Seasonal acceptance of bait by small mammals. J.Mammal., 35:39-47.
1954. Life history and ecology of the five-lined skink (Eumeces fasciatus). Univ. Kansas Publ., Mus.Nat.Hist., 8:1-156.
1955. Habits and adaptations of the Great Plains skink (Eumeces obsoletus). Ecol. Monogr., 25:59-83.
1955. Observations on the summer tanager in northeastern Kansas. Wilson Bull., 67:45-54 (with V.R. Fitch).
1955. The coyote on a natural area in northeastern Kansas. Trans.Kansas Acad.Sci., 58:211-221 (with R.B. Packard).
1956. A field study of the ant-eating frog (Gastrophryne olivacea). Univ.Kansas Publ.,Mus.Nat.Hist., 8:275-306.
1956. An ecological study of the collared lizard (Crotaphytus collaris). Univ. Kansas Publ.,Mus.Nat.Hist., 8:213-274.
1956. A ten-year old skink? Herpetologica, 12:328.
1956. Early sexual maturity and longevity under natural conditions in the Great Plains narrow-mouthed frog. Herpetologica, 12:281-282.
1956. Temperature responses of amphibians and reptiles in northeastern Kansas. Univ.Kansas Publ.,Mus.Nat.Hist., 8:417-476.
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1956. The forest habitat of the University of Kansas Natural History Reservation. Univ.Kansas Publ.,Mus.Nat.Hist., 10:77-127 (with R.L. McGregor).
1956. The molluscan record of succession on the University of Kansas Natural History Reservation. Trans.Kansas Acad. Sci., 59:442-454 (with D.H. Lokke).
1956. Ecological observations on the woodrat, Neotoma floridana. Univ.Kansas Publ. Mus.Nat.Hist., 8:499-533 (with D.G. Rainey).
1957. Aspects of reproduction and development in the prairie vole (Microtus ochrogaster). Univ.Kansas Publ.,Mus.Nat.Hist., 10:129-161.
1957. Observations on hibernation and nests of the collared lizard, Crotaphytus collaris. Copeia, 4:305-307 (with J.M. Legler).
1958. Natural history of the six-lined racerunner (Cnemidophorus sexlineatus). Univ.Kansas Publ.,Mus.Nat.Hist., 11:11-62.
1958. Home ranges, territories and seasonal movements in vertebrates of the Reservation. Univ.Kansas Publ.,Mus.Nat.Hist., 11:63-326.
1959. A patternless phase of the copperhead. Herpetologica, 15:21-24.
1959. Aspects of needed research on North American grasslands. Trans.Kansas Acad. Sci., 62:175-183 (with five other authors.).
1960. Criteria for determining sex and breeding maturity in snakes. Herpetologica, 16:49-51.
1960. Autecology of the copperhead. Univ.Kansas Publ.,Mus.Nat.Hist., 13:85-288.
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