

# KANSAS HERPETOLOGICAL SOCIETY



## NEWSLETTER

NUMBER 29

FEBRUARY 1979

### KHS TO VISIT THE SEDGWICK COUNTY ZOO

The next meeting of the Kansas Herpetological Society will be held on 24 March 1979 at the Sedgwick County Zoo in Wichita, Kansas. Everyone should plan to attend as it will be an excellent meeting. We missed all of you since our January meeting in Lawrence was snowed out! The agenda for our March meeting is:

- 9:30-10:15 -- In the lecture room of SCZ -- chit chat and coffee.
- 10:15-10:35 -- J. T. Collins -- "Kansas herps: what has been done and what needs to be done how the KHS can help".
- 10:35-10:55 -- Janice Perry -- "Dance" behavior in snakes".
- 10:55-11:35 -- Gene Trott and Larry Miller -- "How to use a camera for herp pictures (illustrated)". The do's and don't's of photography -- how to get good shots.
- 11:35-11:50 -- James Knight -- "Graduate study in herpetology at Kansas University". What's going on and by whom.
- 11:50- 1:00 -- Lunch time -- The KHS Executive Council will meet at this time. All KHS members are encouraged to come to these meetings and give ideas and suggestions. It is your Society!
- 1:00-1:30 -- Business Meeting
- 1:30-2:30 -- Peter Gray, Kirk Mullen and David Grow -- "The role of the zoo in Herpetology! What is happening herpetologically at the SCZ and Oklahoma City Zoo will be discussed.

## 1978 TREASURER'S REPORT

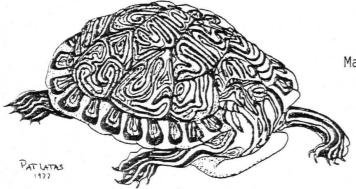
#### INCOME

Balance carried forward from 1977 Contributing memberships for 1978 (2)	\$ 193.23 30.00 381.00
Regular memberships for 1978 (127) Contributing memberships for 1979 (1)	15.00
Regular memberships for 1979 (10 @ \$3.00)	30.00
(90 @ \$4.00) Donations	360.00 39.00
Sale of checklists	19.19 78.50
Sale of past Newsletters Sale of group pictures	21.00
Auction sale	<u>254.73</u>

Total Income \$1421.65

## **EXPENSES**

Printing of Newsletters (Feb.) (April) (June) (Aug.) (Oct.) (Dec.)  Printing of covers for Newsletters Postage Copying of past Newsletters Supplies and other expenses	50.17 73.44 35.44 41.81 43.33 43.33 165.73 285.44 21.00 5.58
Total Expenses	\$765.27



Balance on hand January 1, 1979

Marjorie Perry, Secretary-Treasurer

\$656.38

### SAVE THESE IMPORTANT KHS DATES

The KHS Executive Council has planned the 1979 meeting and field trip dates of the Society, as follows:

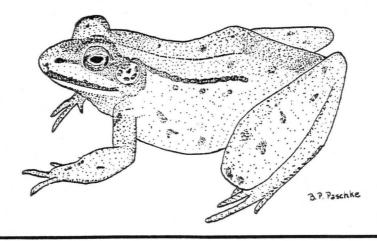
Meeting	March 24
Field Trip	May 25-28
Field Trip	July 20-22
Field Trip	September 14-16
6th Annual Meeting	November 17

Be sure to mark these dates down on your calendar and plan to attend! Bring friends, too!!

## A NEW FAUNAL RECORD FOR KANSAS?

On 5 October 1978 a man rushed into the Sedgwick County Zoo office and reported a decaying turtle shell on a sand bar of the Arkansas River in north Wichita. He reported the shell to be equal in size to the Aldabra tortoises the SCZ has on display. Our secretary relayed the information to me, and I headed toward the Arkansas River during my lunch hour. I was in high hopes of finding the shell of an alligator snapper (Macroclemys temmincki) but had no luck in locating the shell that day. The following day I decided to continue my search and after a short while I came upon the shell which was no doubt a sea turtle shell. In a state of surprise I gathered up the shell and ajoining pieces and took them back to the zoo. By examining the shell and using Conant's Field Guide we decided the shell was probably from a green sea turtle (Chelonia mydas). How the shell came to be in the Arkansas River is pure speculation. There were no skull or limb bones found. What's your thought on this? Are there really sea turtles in the Arkansas River?

--KIRK MULLEN, Sedgwick County Zoo, 5555 Zoo Boulevard, Wichita, Kansas



## LETTER TO JOSEPH T. COLLINS - OF INTEREST TO REGIONAL HERP SOCIETIES

The reason for this letter is that I want to tell you about the situation in Jasper County, South Carolina (Oketee). What has happened there is simple enough—too many snake—hunters and too much trouble in the last eight years, resulting in a complete ban on all snake hunters and snake hunting in the whole Oketee area by the three major plantation/corporations which used to permit snake hunting carte blanche. I have been up to see and stay with personal friends there during the last two years, and have talked to the superintendents of Oketee, Chelsea Plantation, and Good Hope Corporation, and each one said that no snake hunting is permitted for any reason on their vast land holdings. In addition, they are even turning away photographers, and legitimate museum and zoo personnel. The superintendent of Oketee told me he never knew there were so many zoos and museums in the country until people tried to con him into believing they were from museums and zoos!

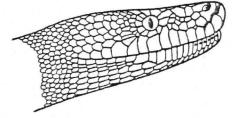
The reason for the complete prohibition is that much theft and burglary of snake-hunters camps has occurred in recent years, as well as one incident involving the shooting-up of a local mobile home by supposed snake-hunters. I have not been able to determine if any prosecutions of collectors took place (it could have been local residents) or what individuals were involved, but it is enough to say that every one in all of Jasper and Beaufort Counties is down on snake-hunters for good, and any snake hunter planning to go there this spring or any time should be aware of this situation.

I'm trying to mend fences up there with my Jasper County friends—trying to convince them that most herpetologists are not crooks or gun-happy. It is difficult to persuade these people who were so very hospitable in the past but who now think all scientists are trespassers and yankee (expletive deleted). I had not been to Oketee for over eight years until the spring of 1977 when I first became aware of all these things. My old friend Horace Phillips is as much a southern gentleman as ever, but is very bitter about much that has happened in his own back yard. The only good thing is that the herpetofauna will benefit immensely.

Since you are in contact with every regional herp society in the country, you have my permission to duplicate my letter and send it to all of them if you think it would help.

Sincerely,

Denny Magee 5488 North River Road Jacksonville, Florida 32211 21 January 1979



### CURRENT LITERATURE

This current literature section has been compiled by J. T. Collins, and contains titles of books and articles on amphibians and reptiles of possible interest to KHS members. Generally, titles listed here are those written by KHS members, those which contain direct reference to Kansas herpetofauna, or those of significance regarding North American amphibians and reptiles.

- Bechtel, H. B 1978. Color and pattern in snakes (Reptilia, Serpentes). Journ. Herp., 12(4):521-532.
- Bechtel, H. B. and E. Bechtel
  1978. Heredity of pattern mutation in the corn snake, <u>Elaphe g.</u>
  guttata, demonstrated by captive breedings. Copeia, 1978(4): 719-721.
- Fitch, H. S. and E. R. Hall
  1978. A 20-year record of succession on reseeded fields of tallgrass
  prairie on the Rockerfeller Experimental Tract. Univ. Kansas
  Mus. Nat. Hist. Spec. Pub., 4:1-15. (Contains a list of the
  amphbians and reptiles observed).
- Gillingham, J. C. and C. C. Carpenter
  1978. Snake hibernation: construction of and observations on a
  man-made hibernaculum (Reptilia, Serpentes). Journ. Herp.,
  12(4):495-498.
- Greenberg, N. and P. D. MacLean (editors)
  1978. Behavior and neurology of lizards, an interdisciplinary
  symposium. Dept. Health, Education and Welfare Publ. No.
  (ADM) 77-491:xiii + 352 p. Price unknown.
- Heatwole, H.
  1976. Reptile ecology. Univ. Queensland Press, Queensland, Australia.
  xv + 178 p. Price approx. \$7.00.
- Johnson, T. R.
  1978. Tips on the management of amphibians and reptiles on private lands. Missouri Dept. Conservation Publ. 14 p.
- Kamb, A.
  1978. Unusual feeding behavior in the red milk snake, Lampropeltis triangulum syspila. Trans. Kansas Acad. Sci., 81(3):273.
- Murphy, J. B. and B. L. Armstrong
  1978. Maintenance of rattlesnakes in captivity. Univ. Kansas Mus.
  Nat. Hist. Spec. Pub., 3:1-40. Available from Publications
  Secretary, Museum of Natural History, Univ. Kansas, Lawrence

66045, for \$3.00 + \$.50 handling + \$.09 state tax = total \$3.59.

Smith, H. M.

1978. Amphibians of North America. Golden Press, New York. 160 p. \$4.95.

Taylor, E. H. and A. Salvador

1978. Afrikanische blindwuhlen im naturhistorischen museum Madrid, nebst beschreibung des <u>Schistometopum garzonheydti</u> n. sp. (Amphibia: Gymnophiona: Caeciliidae). Salamandra, 14(2):58-62. This is the last paper published by Edward H. Taylor.

Trauth, S. E.

1978. Ovarian cycle of <u>Crotaphytus collaris</u> (Reptilia, Lacertilia, Iguanidae) from Arkansas with emphasis on corpora albicantia, follicular atresia and reproductive potential. Journ. Herp., 12(4):461-470.

VanDenburgh, J.

1978. Herpetology of lower California. SSAR Facsimile Reprint. Consists of three papers published by VanDenburgh during 1895-1896. Available from the SSAR.

#### A FIELD TRIP TO THE RED HILLS

Late in September, Eddie Stegall and Peter Gray decided to do some herping in the Red Hills. Encouraged by milder days and cool nights, we hoped that the herps might be more active. We left Wichita on the evening of the 28th after a beautiful 80° day. Most of our herping was done in Barber and Commanche counties, within the area between Medicine Lodge and Coldwater, south of Highway 160 and north of the state line.

We arrived at dusk for dinner in Anthony, Kansas. After dinner we began road hunting in ernest along Highway 2. Although the scarcer species eluded our efforts, we were able to record a number of the more common varieties. Our first night out, a large Red-sided Garter Snake (Thamnophis sitalis parietalis) was collected on the road between Kiowa and Hardner. Also recorded was a large DOR, adult Prairie Rattlesnake (Crotalus viridis viridis) on the road going west of Hardner. The snake's rattles obviously had been removed. After dark the temperature dropped into the 60's. After traversing High 281 and the Gyp Hill Road we decided to stop hunting. Since public camping areas are as scarce as atrox in the Red Hills, we pulled off on the "scenic overlook" west of Medicine Lodge. A strong steady wind had come up and the night was uncomfortably cool, but the brightness and beauty of the stars compensated for the discomfort. A quarter moon rose just before dawn and set quickly.

After sunrise, we re-travelled the Gyp Hill Road back down to Hardner. We stopped to investigate some old foundations and found two abandoned storm cellars full of bats. Eddie enthusiastically entered the crypt-like chambers while I was instructed to "block the exit." Using a snake bag wrapped around his hand he captured a Cave Myotis (Myotis velifer) and a Western Big-eared Bat (Plectotus townsendi) while I stood in the doorway. Eddie was highly amused when I fell down attempting to avoid a terrified bat. In Kansas, both species are generally restricted to the Red Hills with the Western Big-eared being the rarer species.

After that episode we decided to travel the dirt roads of Barber and Comanche counties until we connected with Highway 1. I knew several spots back in the hills where I thought we might find snakes. Herping was good all morning. We missed two good finds along the road-side when I was unable to stop our truck quickly enough. One loss was a large yellow and black snake that Eddie thought was an Eastern Hognose (Heterodon platyrhinos). The other was a garter snake of some sort, possibly the phantom marcianus we'd been hoping for, but more likely a Western Ribbon Snake (Thamnophis proximus proximus). Like magic they both dissappeared into the short grass boardering the road.

I know one spot where there was a large rift in the gypsum bedrock underlying the grassy hills. Within this miniature canyon was a small seep and two caves as well as the foundation of an old sod house. Although we didn't find any snakes we were able to observe some interesting natural phenomena. As we climbed down into the shade we noticed that the branches of the surrounding oaks were heavily laden with Monarch Butterflies (Danaus plexippus) which had massed together for their annual migration southward. I shook one branch and the butterflies dispersed like cottonwood seeds. All around us hundreds of Monarchs circled and glided in the calm air. A little further down we found a lone elm tree that was oozing sap. Crawling all over its trunk and limbs were several kinds of wasps. Thre were extra-large black wasps with orange wings as well as smaller honey-colored wasps. They crawled and tumbled over each other in their eagerness to feed. We also noticed Angle Wings (Polygonia), Hackberry Butterflies (Asterocamps), and Diptera being attracted to the sap. We crawled back into the two caves which were probably only one long cave. We saw more bats and in the twilight area caught a Spotted Chorus Frog (Pseudacris clarki). This is interesting since there was plenty of water in more open areas.

Back up on the grassy area overlooking the canyon, I began turning over old boards. In one pile I found a scorpion (<u>Vejoridae</u>? <u>Buthidae</u>?) as well as several Brown Spiders (<u>Loxosceles reclusa</u>). I also found a large centipede (<u>Scolopendra sp.</u>). All of these are quite common in the Gyp Hills.

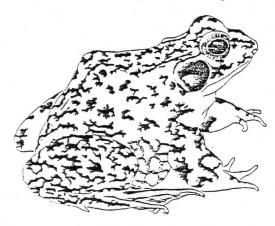
Sometimes there is a tendency to fail to appreciate the exotic nature of our indigenous fauna, thinking that exotic forms are only found in exotic places. I was impressed with the number of venomous forms we observed. In addition the above venomous Arthropods we also collected or observed

tarantulas (<u>Theraphosidae</u>), a tarantula-size Wolf Spider (<u>Lyoscidae</u>), and both venomous snakes found in the region. Technically, even the Bullhead (<u>Ictuhurus</u> sp.) we saw drifting in a spring-fed creek was venomous although it is hardly dangerous. In total we observed about ten venomous species. The Black Widow Spider (<u>Latrodectus mactans</u>) is no doubt found in the area as well. The range of the Short-tailed Shrew (<u>Blarina brevicauda</u>), a venomous mammal, includes the eastern half of adjacent Harper County.

All in all, we were able to make positive identifications on six species of frogs: Blanchard's Cricket Frog (<u>Acris crepitans blanchardi</u>), Great Plains Toad (<u>Bufo cognatus</u>), Rocky Mountain Toad (<u>Bufo woodhousei woodhousei</u>), Leopard Frog (<u>Rana blari</u>), Plains Spadefoot Toad (<u>Scaphiopus bombifrons</u>), Spotted Chorus Frog (<u>Pseudacris clarki</u>); two species of turtles: Alligator Snapping Turtle (<u>Macroclemys temmincki</u>), Plains Yellow Mud Turtle (<u>Kinosternon flavescens flavescens</u>); two species of lizards: Eastern Collared Lizard (<u>Crotaphytus collaris collaris</u>), Northern Prairie Lizard (<u>Sceloporus undulatus garmani</u>); and nine species of snakes: Blotched Water Snake (<u>Nerodia erythrogaster transversa</u>), Northern Water Snake (<u>Nerodia sipedon</u>), Bullsnake (<u>Pituophis melanolucus sayi</u>), Eastern Yellow Bellied Racer (<u>Coluber constrictor flaviventris</u>), Lined Snake (<u>Tropidoclonion lineatum</u>), Prairie Rattlesnake (<u>Crotalus viridis viridis</u>), Red-sided Garter Snake (<u>Thamnophis sirtalis parietalis</u>), Western Massasauga (<u>Sisturus catenatus tergeminus</u>). Tentative identifications of five other species are: Eastern Ornate Box Turtle (<u>Terrapene ornata ornata</u>), Threetoed Box Turtle (<u>Terrapene carolina triunguis</u>), Red-eared Turtle (<u>Chrysemys scripta elegans</u>), Eastern Hognose Snake (<u>Heterodon platyrhinos</u>) and Western Ribbon Snake (<u>Thamnophis proximus proximus</u>).

Other mammals worthy of note were a Badger ( $\underline{\text{Taxidea}}$   $\underline{\text{taxus}}$ ), a Raccoon ( $\underline{\text{Procyon}}$   $\underline{\text{lotos}}$ ), a Hispid Pocket Mouse DOR ( $\underline{\text{Perognathus}}$   $\underline{\text{hispidus}}$ ), and a White-footed Mouse ( $\underline{\text{Peromyscus}}$  sp.) inhabiting an abandoned Barn Swallow nest in one of the storm cellars we investigated. We observed numerous birds with an abundant number of Sparrow Hawks ( $\underline{\text{Falco}}$   $\underline{\text{sparvarius}}$ ). Our trip lasted about 24 hours and covered about 430 miles.

-- PETER GRAY and EDDIE STEGALL, Sedgwick County Zoological Society.



### ANNOUNCEMENT - BOOKS FOR SALE

The following three titles are duplicates from my personal library, and are available for purchase. All are originals in good condition.

- 1) Cope, E. D. 1889. The batrachia of North America. U.S. Natl. Mus. Bull., 34: 1-525 + plates. Hardbound. Price: \$50.00 postpaid.
- 2) Gloyd, H. K. 1940. The rattlesnakes, genera <u>Sistrurus</u> and <u>Crotalus</u>. Spec. Pub. Chicago Acad. Sci., 4: 1-270 + 31 plates. Original softbound covers. Price: \$40.00 postpaid.
- 3) Holbrook, J. E. 1836. North American Herpetology (Volume <u>One</u> only). 120 pp. The rare original first edition, gray hardbound. Price: \$250.00 postpaid.

Individuals interested in purchasing any of these books should send a certified check for the appropriate amount made out to <u>Joseph T. Collins</u>, Route 1, Box 150, Lawrence, Kansas 66044. This offer expires on 31 March 1979.

### IS ORME DAM REALLY NECESSARY?

In one year the Bureau of Reclamation plans to build Orme Dam at the junction of the Salt and Verde Rivers in central Arizona. This means, there will no longer be a Salt River. Nor will there be Bald Eagles, since the three nesting pairs living here will have their habitats destroyed. In addition, the Ft. McDowell Yavapai-Apaches will be forced to move off most of the lands granted them by treaty.

Orme Dam is part of the Central Arizona Project. The C.A.P. intends to bring water from the Colorado River and dump it behind Orme Dam. Before the water reaches there, it must be pumped  $1000 \, \text{ft.}$  uphill, over  $160 \, \text{miles}$  of desert in an open concrete ditch. This will require more than twice the electricity now produced by  $\underline{all}$  the Salt River Project dams.

By the time the water reaches Phoenix, millions of gallons will have evaporated. The already salty Colorado water will be even saltier. It will be mixed with the drinking water coming down from the Salt and Verde behind Orme Dam.

The reptiles and amphibians of the Orme Dam site represent one of the most ecologically diverse vertebrate groups occurring in central Arizona. Forty-nine species of arboreal, terrestrial, fossorial, semi-aquatic and aquatic reptiles and amphibians occur in the dam site. Densities of many species are higher along the rivers as compared to the adjacent desert,

most likely a result of increased diversity of microhabitats and increased habitat space in the reparian situation. Several species common in the reparian habitat do not occur in the adjacent desert. Construction of the Orme Dam will catastrophically affect the herpetofauna in three stages:

1) Habitat destruction related to channelling of the lake bottom.

 Subsequent flooding resulting in further habitat loss and drowning of animals.

3) Stress on resident shoreline populations due to immigration of reptiles and amphibians able to escape flood waters.

Ecologically and economically, the reptiles and amphibians of the Orme Dam site represent a very important group of organisms. The construction of the proposed Orme Dam will result in widespread habitat destruction resulting in local extinction of many reptiles and amphibians, in addition to implementing stressful competition on resident shoreline populations. The unique faunal complex of the Verde-Salt system coupled with the use of these reparian habitats as distributional pathways suggests that this system is an important and uniquely situated community in the Sonoran Desert.

The herpetofauna that will be affected by the construction of Orme Dam includes Tiger salamander (Ambystoma tigrinum), Couch's spadefoot toad (Scaphiopus hammondi), Colorado River toad (Bufo alvarius), Woodhouse's toad (Bufo woodhousei), Red-spotted toad (Bufo punctatus), Great Plains toad (Bufo cognatus), Leopard frog (Rana pipiens), Bullfrog (Rana catesbeiana), Banded gecko (Coleonyx variegatus), Desert iguana (Dipsosaurus dorsalis), Chuckualla (Sauromalus obesus), Greater earless lizard (Cophosaurus texana), Zebra-tailed lizard (Callisaurus draconoides), Leopard lizard (Gambelia wislizeni), Desert spiny lizard (Sceloporus magister), Side-blotched lizard (Uta stansburiana) Long-tailed brush lizard (Urosaurus graciosus), Tree lizard (Urosaurus ornatus), Regal horned lizard (Phrynosoma solare), Western whiptail (Cnemidophorus tigris), Gila monster (<u>Heloderma suspectum</u>), Western blind snake (<u>Leptotyphlops</u> humilis), Spotted leaf-nosed snake (Phyllorhynchus decurtatus), Saddled leafnosed snake (Phyllorhynchus browni), coachwhip (Masticophis flagellum), Sonora whipsnake (Masticophis bilineatus), Western patch-nosed snake (Salvadora hexalepis), Glossy snake (Arizona elegans), Gopher snake (Pituophis melanoleucus), Sonoran kingsnake (Lampropeltis getulus), Leaf-nosed snake (Rhinocheilus lecontei), Black-necked garter snake (Thamnophis cyrtopsis), Checkered garter snake (Thamnophis marcianus), Western ground snake (Sonora semiannulata), Western shovel-nosed snake (Chionactis occipitalis), Banded sand snake (Chilomeniscus cinctus), Western black-headed snake (Tantilla planiceps), Sonoran lyre snake (Trimorphodon lambda), Night snake (Micruroides euryxanthus), Western diamondback rattlesnake (Crotalus atrox), Sidewinder rattlesnake (Crotalus cerastes), rattlesnake (Crotalus molossus), Tiger rattlesnake (Crotalus tigris), and Mojave rattlesnake (Crotalus scutulatus).

For information on how you can help, write to:

Citizens Concerned About the Project P.O. Box 2628 Phoenix, Arizona 85002

#### SSAR ANNUAL MEETING NEWS

The 22nd annual meeting of the Society for the Study of Amphibians and Reptiles will be held in conjunction with the 27th annual meeting of the Herpetologist's League at the University of Tennesses, Knoxville, Tennessee, from 12 to 16 August 1979.

#### PROGRAM SUMMARY:

Sunday, 12 August Registration, SSAR Board of Directors Meeting, HL

Board Meeting, Third Annual Regional Herp Society

Conference (SSAR), Liaison Committee Meeting

Monday, 13 August Contributed Papers, Iguanine Lizard Behavior and

Ecology Symposium (SSAR), Social

Tuesday, 14 August Contributed Papers, Iguanine Lizard Behavior and

Ecology Symposium (SSAR), Captive Reptile and Amphibian Management Symposium (SSAR), Picnic,

SSAR General Business Meeting

Wednesday, 15 August Contributed Papers, Desmognathine Salamander

Systematics Workshop (HL), HL Business Meeting

Thursday, 16 August Contributed Papers, Salamander Mimicry Symposium (HL)

#### SPECIAL ACTIVITIES:

Herpetological Art Show and Crafts Show and Sale. Depending on interest: Spouse and family trips to Biltmore Mansion (Asheville, North Carolina); Gatlinburg, Tennessee; University of Tennessee Arboretum and the Museum of Atomic Energy, Oak Ridge, Tennessee. Daytime child care may be available if demand warrants it.

#### GENERAL INFORMATION:

Pre-registration forms, including call for papers and other information, will be mailed to members of the two societies in February. Copies of the meeting information will be sent on request to interested persons.

Housing in air-conditioned dormitories will be available.

Transportation: Individuals planning to travel by air should make reservations into McGee-Tyson Airport in Knoxville.

#### LOCAL COMMITTEE CHAIRPERSON:

Arthur C. Echternacht, Department of Zoology and Graduate Program in Ecology, Walters Life Science Building, University of Tennessee, Knoxville, Tennessee 37916, Phone: (615) 974-6041.

#### ARE YOU CERTAIN THAT THE SPECIMENS YOU OBTAINED ON YOUR LAST COLLECTING TRIP WERE NOT PROTECTED OR CONTROLLED BY STATE REGULATIONS?

Did you realize that Alabama regulates the collection of 221 plant and 377 animal species, Michigan controls 117 species, Oklahoma controls 351 species, and the list continues. The majority of States have regulations which apply to the acquisition of scientific specimens.

Determining what species are controlled in various States is difficult and time consuming. In order to help you deal with this problem, The Association of Systematics Collections will soon be making available a:

#### Directory of State Protected Species: A reference to species controlled by non-game regulations.

This directory contains listings of regulated plant and animal species for each of the 50 states and the Virgin Islands. In addition, for each state, the <u>Directory of State</u> Protected Species includes:

- 1. Federal Endangered or Threatened status for all state listed species.
- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) status for all of the state listed species.
- 3. State/Federal endangered species cooperative agreement information.
- Requirements for scientific collecting permits.
   Address and telephone number for state permit granting agencies.

If you are involved in the collection or acquisition of plants and/or animals within the United States for scientific purposes; or if you work for any of the  $z \infty s$ , museums, or Universities with active collecting programs, this is an invaluable source of information.

This $\underline{\text{Directory}}$ is available to persons af \$17.50. The price for persons not affiliated	with ASC member institutions, until 1 April
1979 is 37.50; after 1 April 1979 it will be \$	50.00.
ORDER	FORM
Please send mecopies of ASC's <u>Directory</u> species controlled by non-game regulation	
SEND TO:	Mail orders to:
Name	Association of Systematics Collections Museum of Natural History
Address	University of Kansas Lawrence, KS 66045 (913/864-4867)
City State Zip	asc

(Institutional affiliation)