

Miscellaneous Notes.

While collecting for the Survey in McPherson county, in the summer of 1884, the director found the curious and interesting *Azolla Americana* growing abundantly upon the shallow water and mud at the margin of Lake Inman. It seems not to have been hitherto recorded from Kansas. Later it has been sent to us from Neosho River at Oswego by Dr. W. S. Newlon.

Buthus Carolinianus appears to be generally distributed in Kansas, but is evidently not common in our northern and eastern counties. I have found it abundant in stony places on the Gypsum Hills of Barber county. A specimen from south of Emporia has been contributed by Mr. Frank Kizer, and a number of young from McPherson Co., by Dr. John Rundstrom. Scorpions (which are probably of this species) are reported as occurring commonly in the vicinity of Wallace, in the northwestern part of the State, and, less commonly, as far northeast as Douglas county.

A specimen taken near the fire, in a house in Medicine Lodge, in cold weather, has been contributed by Mr. G. L. Johnston.

Dr. H. C. Wood first recorded this species from Kansas, and appears to have been also the first to recognize the peculiar subtropical affinities of the fauna of Kansas. (See his monograph of the North American *Pedipalpi*, under *B. Caroliniana*.)

Elevation above sea-level having a marked influence upon the distribution of insects, it may be interesting to note, in connection with Mr. Bruner's report on *Orthoptera*, the elevations of the respective localities which furnished the specimens. They are as follows, the numbers usually referring to the elevation at the depot grounds of the A. T. & S. F., U. P., and S. K. railroads:

Town.	County.	Elevation.
Ellis.....	Ellis (western).....	2,117
Garden City.....	Finney (formerly Sequoyah).....	2,827
Great Bend.....	Barton.....	1,841
Lindsborg.....	McPherson.....	1,332
Medicine Lodge.....	Barber.....	1,449
Oswego.....	Labette.....	895
Reno Center.....	Reno.....	1,525-1,550
Sun City.....	Barber.....	(?) 1,750
Topeka.....	Shawnee.....	884

Many of the Barber Co. specimens were collected on the Gypsum Hills, 200-500 feet above the valley elevation above given for Medicine Lodge.

Prof. E. D. Cope, of paleontological and herpetological fame, has twice paused in his passage across the continent to note the progress of our work and bestow a word of cheer. In one of these brief visits, he discovered among some unstudied material recently collected by the director of the Survey in Barber county, a specimen of *Rhinocheilus LeContei*, B. and G., which shows some remarkable variations from the typical species. A brief note upon this specimen will appear from the pen of the Professor in our next Report.

The specimen was brought, living, to the director of the Survey, by Mr. Chaney Smith of Medicine Lodge, who captured it in a garden in that

town. It has previously been reported from southern Texas and California only, and it is therefore needless to say that the discovery of this rare and beautifully colored serpent in southern Kansas greatly extends its known range and adds yet one more emphatic link to the already strong chain of evidence which asserts that the fauna of southern Kansas has many features usually regarded as sub-tropical.

The genus *Pinus* has never appeared on any of the local lists relating to the flora of Kansas.

Dr. J. H. Oyster, of Paola, who recently passed through Topeka, and stopped long enough to glance at the Washburn cabinet and the work of the Biological Survey, called our attention to the fact that a species of *Pinus* has been ascribed to Kansas by Prof. Sargent in his "Report on the Forest Trees of North America." On referring to that work, we find (p. 200) *Pinus mitis*, Mich., the Short-leaved Yellow Pine, given as native to southeastern Kansas. It is certainly not common, even in that favored section of the State.

During a brief trip to Cherokee county, Dr. Oyster learned that large pines had been felled in that county by the settlers, but could learn of none still standing, save a few saplings, the locality of which he was unable to visit. He was, however, informed by reliable parties that there exists a small group of pines at a point almost exactly on the line between Kansas and Indian Territory, while a considerable grove of the same exists but a very few miles further south.

We would gladly record any more definite observations as to the past or present occurrence of *Pinus* in Kansas; and those able to furnish such are respectfully requested to communicate with the director of the Survey.

The expense of publishing the first two *Bulletins* having, for various unforeseen reasons, proved relatively greater than it will henceforth be, the occasion for issuing *Bulletin* 3 arrived and found the funds available for that purpose temporarily exhausted. To avoid an interruption which would have been in many ways detrimental to the work of the Survey, we issued a call to various friends of the Survey for aid. The following responded and became the *Patrons of Bulletin* 3, by contributing sums of one to five dollars, thus enabling us to keep the publication abreast of the work:

George J. Angell, Esq.,
S. A. Baldwin, Esq.,
Miss Mara A. Becker.
George Brinkman, Esq.,
Jerry M. Fields, Esq.,
L. L. Jewell, Esq.,
Lucius T. Matthews, Esq.,
Ralph E. McCampbell, Esq.,
Angus McMillan, Esq.,

J. R. Mead, Esq.,
W. S. Newlon, M. D.
Andrew Sabine, M. D.
B. B. Smyth, Esq.,
William Tweeddale, Esq.,
Louis Watson, M. D.
And three friends of the Survey, whose names are withheld.

We take this opportunity to return our sincere thanks to these kind friends for their prompt assistance, and we trust that we shall have no need of making any further call for aid, other than such as they are now giving by way of specimens and observations.