

Sources of Fish Collections other than Kansas Museum of Natural History and the Sternberg Museum at Fort Hays State University

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As part of the Aquatic GAP project, we will be mapping fish collections in order to determine areas of high biodiversity and develop predictive models for unsampled areas. While these data should offer insight into the current abundances and distributions of fish populations in Kansas, they do not necessarily reflect the historic distribution and assemblage of fishes in the state. In order to assess changes in fish populations over time, it is necessary to assemble a collection of historic fish records to serve as a reference point for current studies analyzing changes in abundance and distribution. The majority of Kansas fish collection records are located at the Kansas Museum of Natural History and the Sternberg Museum at Fort Hays State University. However, additional collections are located in museums around the country, and as part of this project we will attempt to identify and document these collections. Below are summaries of the holdings of eight natural history museums that possess historic fish collections taken from Kansas. This list is not all-inclusive, and will be updated as more information is obtained.

- 1) American Museum of Natural History: The American Museum of Natural History in New York has in its holdings 30 collection records from Kansas, ranging from 1909-1985. Specimens have been identified to species, the number of specimens collected is noted, and in most cases the collection date and collector are noted. The collection site is described for all specimens; the depth of the description is variable, ranging from general (i.e. "middle branch of mill creek") to a more exact location (i.e. "deer creek 10.5mi S, 0.5mi W of Lawrence"). None of the collection sites for these data have been geo-referenced. There are no syntypes, holotypes, or other notable specimens in this collection.
- 2) Cornell University Museum of Vertebrates: The Cornell University Museum of Vertebrates has in its holdings 52 collection records from Kansas, ranging from 1909-1981. Specimens have been identified to species, the number of specimens collected is noted, and in most cases the collection date and collector are noted. The collection site is described for all specimens, and the location of that site is relatively specific; distance from a reference point in miles is provided for most specimens. Some of the later collections provide latitude and longitude coordinates for the collection site. There are no syntypes, holotypes, or other notable specimens in this collection.
- 3) University of Florida Museum of Natural History: The Florida Museum of Natural History has in its holdings 48 collection records from Kansas, ranging from 1885-1954. Specimens have been identified to species, the number of specimens in the collection is noted, and the collection date and collector is noted for all specimens. The collection sites are poorly described; many specimens have no description of the collection site, and those that do only give the drainage in which the specimen was collected. No latitude and longitude measurements or other indicator of locality is provided. No information regarding syntypes, holotypes, or other notable specimens is provided.
- 4) Harvard University Museum of Comparative Zoology: The Museum of Comparative Zoology has in its holdings 89 collection records from Kansas,

ranging from the mid-1800's to 1991. Most specimens have been identified to species, although several Cyprinidae have been only identified down to genus. The number of specimens is noted in most cases. Because many of these specimens were collected in the 1800's, information about the exact collection date and the collector is missing from many of these records. The location of the collection site is also poorly described for many of these specimens; most records will note the river from which the collection was taken or the town near which the collection was taken, but no additional information. Notable specimens from this collection include the syntypes of *Fundulus kansae* (unknown 1870), and the syntype of *Cliola topeka* (Cragin 1884).

- 5) National Museum of Natural History-Smithsonian Institution: The Smithsonian Institution has in its holdings 255 collection records from Kansas, ranging from the mid 1800's to the mid 1900's. Due to the age of some of these collections, information about the specimens is often incomplete. Most specimens have been identified to species, and the number of specimens collected is noted in most cases. Collection date and collector information is very variable among these specimens; it is included for some and missing for others. However, the Smithsonian's holdings do include specimens collected by prominent historical figures, including David Starr Jordan. Again, because these collections were taken many years ago the collection site is generally not well documented, if at all. In cases where information regarding locality is provided, it usually consists of either the county or drainage from which the specimens were taken. The Smithsonian Institution has the syntypes of many species in its holdings.
- 6) Texas Memorial Museum of Science and History: The Texas Memorial Museum of Science and History possesses 1 collection record from Kansas, taken in 1967. The collection consists of one *Fundulus notatus*, taken by Setzer on 5/23/67 near Riverton, Kansas. No other information is provided.
- 7) Tulane Museum of Natural History: The Tulane Museum of Natural History has in its holdings 80 collection records from Kansas, ranging from 1941-1985. All specimens have been identified to species, the number of specimens collected is noted, and the collection date is present for all specimens. The location of the collection sites are very well documented; distance in miles from a reference point is provided, in addition to latitude and longitude measurements for most sites. No syntypes or holotypes are noted in this collection.
- 8) University of Washington Burke Museum of Natural History and Culture: The Burke Museum has in its holdings 3 collection records from Kansas. These consist of two *Aplodinotus grunniens*, two *Etheostoma cragini*, and one *Polydictus olivaris*. Collection date and collector information is provided for the latter specimen but not the two former specimens. A general locality is provided for the collection site. No other information regarding these specimens is provided.