Blanding's Turtle and Herpetology Survey of Northeastern South Dakota

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Conclusion

The Big Sioux Valley has a wide variety of Herpetofauna and it appears that the numbers of many species and populations is secure. Of course...some are doing better than others. Here is a brief summary of the current status of some species:

Western Fox Snake: I was quite pleasantly surprised to find these large snakes in good numbers and widely scattered throughout the valley. They seem to be abundant around the lower Brule Creek area as well. One possible reason may be that they have adapted to life among the humans...as many were found near buildings. They do pretty much stay within a mile or two of the valley and its adjoining ravines as very few were found far out onto the surrounding monoculture croplands.

Bull Snakes: I was quite disappointed at not finding more of these! Only one road kill juvenile was found in Iowa and although I heard of several reports of sightings from reliable park staff...I didn't find any on the South Dakota side. There is plenty of likely habitat scattered about all up and down the valley.

Racer: I hadn't expected to find any during this summer but one dead one right at the very southern tip of the Coteau-des Prairie gave me the hope that these extremely elusive serpents may yet be found wherever there is rugged terrain and rolling grassland.

Red Milk Snake: The big disappointment of the summer! This is the one species that I most wanted to find (besides the Lined Snakes...of course) but instead came up with NONE. You really need a lot of "flippable cover" (flat rocks and boards) to find these and there just wasn't much of that out there. An old field herpers saying came to mind that proved to be true: :These snakes may be found almost anywhere...but more often than not...will be found Nowhere!

Garter Snakes: In a nut shell: Can be found anywhere! Although they are not as abundant as Plains Garters in the N.E. portion of the state (one snake every mile) I encountered them almost every day in a wide variety of habitats.

RedBelly Snake: These were found mostly in the Fall but can be seen throughout the season. I thought I would find a lot more of these than I did but that might be because the Big Sioux Valley may be the very western edge of their range (except for the Black Hills variety). More research is needed to determine how far into the state they occur.

RingNeck Snakes: These little gems were a rare delight whenever I found them. By far the biggest concentration is around the abandoned Quartzite quarry at Arrowhead Park near East Sioux Falls. On more than one occasion I lost track of the numbers I was finding especially in the Spring! These too are hard to locate in areas where there is a lack of flat rocks, boards and junk to look under.

Lined Snakes: The crowning achievement of the Summer expedition! They were found in a total of 6 new locations (3 in South Dakota) Surprizingly though...none were found at Union Grove State Park...one of the original sites from the 1930's I believe. And none at all were found in Union County...but this does not mean they no longer exist there. These things can only be seen in numbers on only a few warm sunny days during early October. I found a total of 12 during this season (3 living and 9 dead) and by far the highest concentration of them can be found along the bluffs and ravines between Brandon and the Cactus Hills N.E. of Sioux Falls. And now that it has been established that they can be found all up and down the lower Sioux Valley...it is my belief that more of them will be found to the north. The Prairie Highlands in the N.E. part of the state contain very likely habitat and because of their brief window of activity...I think more isolated colonies will be discovered in the future from Sioux Falls north up the Big Sioux. Prairie bluff habitat seems to be their strong hold and because of this there is a reason to believe that they could turn up along the James, Vermillion, and the Missouri Valley all the way up into North Dakota and beyond. (There IS an isolated colony of Prairie Skinks in Manitoba!) I wouldn't be a bit surprised if some turn up that far north.

No Green Snakes, Western or Eastern Hognose, Water Snakes or Prairie Rattlers were encountered along the Big Sioux Valley during this field season.

SoftShell Turtles: Spiny Softshells (apalone spinifera) were documented in the Big Sioux River up to the Klondike Bridge in Lincoln Co. Last year they were found right up to Falls Park at Sioux Falls. It is hard for me to believe that the Falls are a barrier to further migration up the river...but the field season of 2002 failed to reveal any above that point. They WERE found in Split Rock, Beaver, and Pipestone Creeks all the way up to the border with Minnesota! A new addition to the findings of 2003, however, was the documentation of the presence of Smooth Softshell Turtles. (apalone mutica) These were seen as far north as the mouth of the Rock River in the very N.E. corner of Union County. All of these turtles were found in the main channel only and as of right now it is believed that they will not be found in the smaller tributaries. However...we used to think the same about Spiny Softshells until they began turning up in the smallest of creeks miles away from any major river! Time will tell if more will be found farther up the valley in the future.

...Snapping Turtles and Painted Turtles were located almost everywhere there is water.(

...Map Turtles were not found in the Big Sioux during this past season even though they are documented in the Missouri. And even though they are known as "big river" turtles...I was surprised that I didn't see at least one or 2 sometime during the summer. This is even more of a puzzle since last June when I saw one in a tiny tributary of the Cannon River in south central Minnesota. The Cannon itself is not thought of as a "big enough" river for Map Turtles...so the lack of them in a river the size of the Big Sioux is a curious thing to consider. (Of course they could be there. They are nervous types and don't like being looked at even from a great distance away!)

No Box Turtles were found and this was no surprise as very little likely habitat seems to exist along the way.

Amphibians: Tree Frogs: I failed to detect the call of Tree Frogs but that was because I was not in the likely areas during their breeding season. I'm sure populations exist and would certainly like to go back and hear their call sometime next year.

Bull Frogs: They have been found in scattered populations outside of their traditional natural range and were probably introduced by fishermen. These will have to be monitored because of the fact that they can be a nuisance species. At this time, however, they don't seem to be over running the entire valley ecosystem and gobbling up everything in their path like Cane Toads in Australia!

Chorus Frogs: Still a very common sound in all likely habitat in the southeastern counties.

Cricket Frogs: The "other" crowning achievement of the summer! I didn't expect to find as many as I did. However, the populations that I heard were all widely scattered and except for a few exceptions ...most were heard calling from man-made environments such as stock ponds and dammed up creek systems. These colonies will have to be closely monitored in the future as every location contained but a slight handful of calling males. Since they are at the very edge of their known range and because they are declining in all northern populations...their future in the state seems critical. Because of their short life spans...they are quite susceptible to annihilation due to droughts and pesticide use.

Leopard Frogs were encountered in all habitats but never in large numbers and none were found to be plagued by deformities.

The only kind of Toad I didn't find were Plains Spadefoots. Again...they are elusive and apparently hard to find in great numbers.

No Salamanders were located either during this field season. ???

In Conclusion: I consider myself very fortunate in having had the opportunity to explore this vast ecosystem! I look forward to continue to explore the area in the future, as great portions of the Valley are quite un-disturbed by human activity. A notable exception would have to be the areas around Sioux Falls and Brandon: The rampant "development" in the form of housing divisions in certain portions is ...to say the least...quite sickening to behold! Entire valleys and prairie habitats are completely over-run with out of control urban development and I consider this to be a crime against the Natural Heritage of South Dakota! A vast difference can easily be seen from one side of the valley to the other: It seems like Iowa has set aside more tracts of the valley as public land and conservation zones where as the South Dakota side seems to be lacking in public access to the river. One fisherman summed it up like this: "To get to the Big Sioux...you have to go to Iowa!" Still...in all fareness...the people on both sides are extremely friendly to the wandering traveler. And the open minded attitude towards the natural heritage and conservation of the region is quite refreshing! To say the least: I am very impressed. And I look forward to continue my travels and explorations in South Dakota. Sincerely: Tom Jessen. Mankato, Minn.