Conservation Biology Research Grants Program Natural Heritage & Nongame Research Program Division of Ecological Services Minnesota Department of Natural Resources

The purpose of this trip was to attempt to collect the Five-lined skink, Eumeces fasciatus (Reptilia; Sauria, Scincidae) outside of known collecting sites in Minnesota where habitat seemed favorable.

A REPORT SUBMITTED TO
THE MINNESOTA NATURAL HERITAGE PROGRAM

Bruce J. Brecke July, 1979

RENVILLE COUNTY

PREVIOUS RECORDS:

None

RESULTS:

27 July (afternoon)

En route to Marshall, Lyon County, Minnesota, I decided to drive along the Minnesota River Valley and check some sites along the way. Entering Morton, I decided to investigate a large outcrop of the Morton gneiss ("Morton quartz monzonite gneiss" of Lund, 1950) located in the SW1/4 Sec. 31, T113N, R34W. Here I found the quarrying to have been extensive in the past; much of the habitat that would seem to be suitable for skinks has been drastically altered. The only areas that looked favorable to me were at the top of the outcrops. Here I collected hatchling Prairie skinks, Eumeces septentrionalis, of which I preserved two. I also collected and examined (but later released) a fox snake, Elaphe v. vulpina, which I believe is a county record for this species.

Next, I investigated an outcrop of the same rock in the NW1/4 of Sec. 31, an area that was well exposed, but here I found very little surficial material, and no skinks were found.

LYON COUNTY

PREVIOUS RECORDS:

None. Carl Ernst (pers. comm.) stated that he had seen, but not collected \underline{E} . $\underline{fasciatus}$ "around Lake Marshall" during his years there (1969-1972), as a faculty member.

RESULTS:

28 July (morning - afternoon)

I was permitted access to the vertebrate collection at Southwest State University by Alan Holmes, a faculty member at SSU. Examination revealed that the only specimen of E. fasciatus in the collection was that from a biological supply house in a jar labeled "Lizard Collection". No localities were given on any of the tags.

With no other data to rely on, I made the short drive to Lake Marshall. Much of the area surrounding Lake Marshall at present is under cultivation or development, so I drove the SW1/4, Sec. 25, Tl10N, R41W, along the southeast shore. Access was hampered by a dense understory, so my efforts there were limited to stripping the bark from a few dead trees, which yielded nothing of interest. I then searched along a railroad track that passes close to the lake at this point, and managed to collect only a prairie skink, E. septentrionalis, and an American toad, Bufo americanus, both of which I believe are county records.

The area around Lake Marshall, although Spring collecting may prove it to be more productive, does not appear to me to be typical Minnesota habitat for E. fasciatus. It seems to me that the occurrence of this species in habitat such as this would have previously come to our attention.

REDWOOD COUNTY

PREVIOUS RECORD:

RESULTS:

"Redwood County", no other data.

I returned to the area north of Delhi in the Minnesota River bottoms and searched the SW1/4 of Sec. 30 to the NW1/4, Sec. 32, T114N, R36W, (east side of road). The habitat here looks promising for E. fasciatus, except that the outcrops here ("morton quartz monzonite gneiss" of Lund, 1950) showed low relief with little loose surficial material. Experience with E. fasciatus on my previous trip may have biased my collecting efforts somewhat, as I chose the elevated, well-drained exposed areas of the outcrop to concentrate my search. Unfortunately, no skinks were found, but I believe the area should be investigated further in the Spring. A western chorus frog, Pseudacris t. triseriata, was collected, which I believe is a county record for this species.

I decided that a return to the Sacred Heart bridge locality might give me a reason for my lack of success north of Delhi, as skinks are reported to be secretive in the later summer months (H.S. Fitch, 1954; Fitch, pers. comm.), so I was somewhat surprised when I encountered three E. fasciatus (1 hatchling, 2 adults) between 18:15 - 18:45 CDT in SW1/4 SW1/4, Sec.7, T114N, R37W. One of the adults was collected and preserved. A hatchling prairie skink was collected and preserved also.

The red-sided garter snake, Thamnophis sirtalis parietalis, which had been so abundant in this area just 2 weeks before, was not found save for 1 individual, which I forced to regurgitate a leopard frog, Rana p. pipiens.

RENVILLE COUNTY

PREVIOUS RECORDS:

None

RESULTS:

29 July (morning)

I searched the SW1/4 of Sec.20, T113N, R35W, about a mile north of North Redwood, the site of an abandoned quarry. There I found the outcrop to be extensively overgrown and efforts here proved to be fruitless. I feel that areas with little or no exposure to direct sunlight are not favored by E. fasciatus. Again, this was the "Morton quartz monzonite gneiss" of Lund (1950). Most of the other outcrops in this series (Secs. 28, 34) have been heavily grazed.

REDWOOD COUNTY

RESULTS:

This was my first view of the area south of Franklin. After a brief reconnaissance from the road, I decided that a search of the heavily grazed outcrops in this series would be a waste of time, so I chose the area intriguingly named "Cedar Mountain" (Lund, 1950, pl. III) E1/2, Sec.15, W1/2 Sec.14, T112N, R34N, "Cedar Mountain" was about 1/2 mile from the road, across a marsh and some heavily grazed pasture. The pasture in which this outcrop is located didn't appear to have been grazed for the past 2-3 years, however, "Cedar Mountain" was pretty well overgrown, and consequently seemed to offer little prime habitat for E. fasciatus. Most of the exfoliated material from this outcrop lay in shaded woods. Only near the summit of this outcrop did the habitat appear favorable, but again, a lack of surficial material minimized my collecting efforts. I would not rule out the "Cedar Mountain" locality. Spring collecting when skinks are more conspicuous, may prove to be profitable.