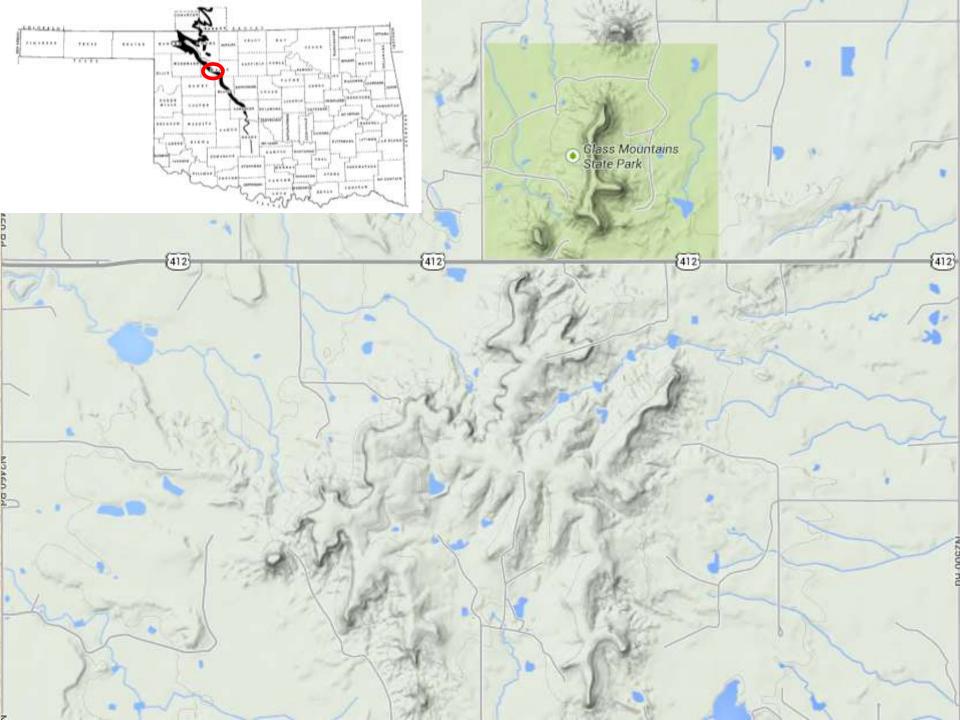


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Webster Groves Nature Study Society
Entomology Group Meeting
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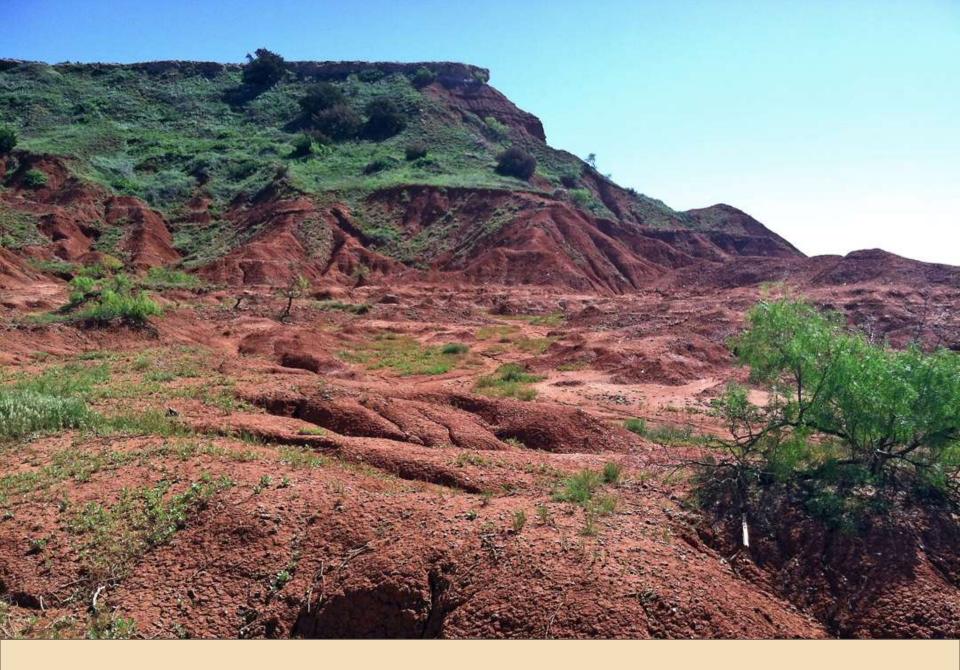


Figure 1. Outline map of Oklahoma showing distribution of Blaine outcrops in northwestern Oklahoma and adjacent Kansas.





The Gloss Mountains are a system of gypsum capped, red clay buttes and mesas.



Red clays laid down in the Permian (230–280 mya) dominate the landscape.



A thick cap of gypsum protects the softer red clays beneath.



Gloss Mountain State Park is at the northernmost end of the range.



The Park includes Cathedral Mountain and Lone Peak.



The view atop Cathedral Mountain extends "forever".



Swift Tiger Beetle (*Cylindera celeripes*)



The beetles dart between clumps of vegetation in the gypsum exposures.



Rearing the Swift Tiger Beetle



Frosted Dromo Tiger Beetle (*Dromochorus pruinina*) (Coleoptera: Cicindelidae)



Adults are most active during late afternoon to early evening.



A large tiger beetle larva peers from its burrow—but what species is it?



Two large larvae were found in the drainage below this mesa on the south side of the highway.



Swift Tiger Beetle larval burrow



Swift Tiger Beetle 3rd-instar larva



Swift Tiger Beetle abdominal hump



Swift Tiger Beetle larvae sitting in their burrows



The first ever "reared" Swift Tiger Beetle



Aphonopelma hentzi (Arachida: Araneae)



This male is distinguishable by its enlarged pedipalps.



Males wander during fall looking for female burrows.



The top of Cathedral Mountain.



Microstylum morosum (Diptera: Asilidae)



This is the largest robber fly in North America.



More typically found in the desert southwest, this species has also recently been found in southwestern Missouri (Caney Mountain).



Trimerotropis latifasciata (Orthoptera: Acrididae)



Nymphs are equally well camouflaged.



Trichodes bibalteatus (Coleoptera: Cleridae)



The second (lower) pair of eyes distinctly smaller than the first identify this as the larva of the Great Plains Giant Tiger Beetle (Amblycheila cylindriformis).



Great Plains Giant Tiger Beetle (Amblycheila cylindriformis)



Occurrence of *Amblycheila cylindriformis*. White arrows indicate where adults were found (red clay/gypsum exposures in native prairie habitat). None were seen in exposures away from slopes in either native (zone 1) or altered prairie (zone 2) or further down in roadside drainages (zone 3).



Great Plains Giant Tiger Beetles make long-lived, interesting "pets", but so far few people have succeeded in breeding them.



Amblycheila "on white"



Toothy jaws make these beetles terrifying predators



Eleodes suturalis (Coleoptera: Tenebrionidae)



Eleodes suturalis "on white"



Eleodes hispilabris (Coleoptera: Tenebrionidae)



Scolopendra heros (Chilopoda)



"Beady little eyes"



Amblycheila cylindriformis larval burrow



Burrow diameter of ~8mm identifies this as a 3rd instar larva.



Dig around the burrow, carefully excavating along the grass stem, until the larva is reached.



Amblycheila cylindriformis 3rd instar larva.



The distinctly smaller 2nd pair of eyes confirm this is not *Tetracha* or *Cicindela*.



The distinctly separated hooks on the 5th abdominal segment confirm it is *Amblycheila*.



The numerous stout setae are also characteristic of the genus.



Soil plug with Frosted Dromo Tiger Beetle larva in burrow.



Frosted Dromo Tiger Beetle larva extracted from burrow.



Distinguished from *Amblycheila* by the more elongate, narrowly separated hooks.



Lateral view of abdominal hump.



Frosted Dromo Tiger Beetle (*Dromochorus pruinina*)



Crossidius pulchellus (Coleoptera: Cerambycidae) on Gutierrezia sarothrae



Acmaeodera macra (Coleoptera: Buprestidae) on Heterotheca subaxillaris



Ptilophorus wrightii (Coleoptera: Rhipiphoridae) on Juniperus virginiana (I thought it was ovipositing)



Another one on *Rhus aromatica*. Why is it holding its wings outstretched?



The exerted ovipositor suggests the female may be engaged in "calling" behavior.



Juniper is a recent invasive as a result of land use practices.



Chrysobothris octocola (Coleoptera: Buprestidae) on Prosopis glandulosa.



Brachystola magna (Plains lubber grasshopper) (Orthoptera: Romaleidae)



The "quintessential" generalized insect head!



Chauliognathus limbicollis (Coleoptera: Cantharidae) on Heterotheca subaxillaris



Epicauta sp. (Coleoptera: Meloidae) on Heterotheca stenophylla



Plionoma suturalis (Coleoptera: Cerambycidae) on Prosopis glandulosa.



Previously known from the desert southwest (Texas to Arizona).



Chrysobothris quadrilineata (Coleoptera: Buprestidae) on Juniperus virginiana.



This juniper-associated jewel beetle has not been recorded from Oklahama.



Paratyndaris prosopis (Coleoptera: Buprestidae) on Celtis sp.



Acanthochalcis nigricans (Hymenoptera: Chalcididae) on Juniperus virginiana.



Phyllophaga cribrosa (Coleoptera: Scarabaeidae). The flightless adults are most often found on the ground or low vegetation.



Chrysobothris purpureovittata (Coleoptera: Buprestidae) on Celtis sp.



Apiomerus spissipes (Hemiptera: Reduviidae) on Echinacea sp.



Pediodectes haldemani (Orthoptera: Tettigoniidae) on Opuntia phaecantha.



Peek-a-boo!



Eremochrysa punctinervis (Neuroptera: Chrysopidae) on Prosopis glandulosa.



Bee on *Echinocereus* sp.



Western diamondback rattlesnake (*Crotalus atrox*) juvenile





Western diamondback rattlesnake (Crotalus atrox) adult

Thank You!





Beetles in the Bush

See more of my photographs at:

Beetles in the Bush

http://beetlesinthebush.wordpress.com (just Google it!)