## TECTONIC LINEARS OF THE OZARKS GLADES REGION OF SOUTHWESTERN MISSOURI

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## **ABSTRACT**

Prominent linear or fracture patterns are visible on air photos of the "glades" region of southwestern Missouri. A combination of competent dolomite rock, thin soil cover and hilly terrane emphasize this visibility.

Field mapping and a comparison with regional tectonics show the linears to be related to the major tectonic features of the region. The dominant trend is northeasterly, parallel to tensional fault and graben structure in southwest Missouri. Subordinate trends are north-westerly and east-west.

Preliminary work indicates a relationship between the linears and zinc-lead occurrences in south-western Missouri and possibly northwestern Arkansas. Fracturing and shearing at the extremities of major linears (faults and grabens) caused brecciation and prepared the ground for deposition of ores where ore bearing solutions were available.

Tectonic considerations indicate that similar linear elements (difficult to detect) may be present under the thick residual cover of south-central and southeastern Missouri. Recognition of these hidden linears may lead to discovery of additional mineralization similar to that in southwestern Missouri.