Debris Flow on Hwy 374

This debris flow probably occurred between April 22 and 24, 2004 in response to a heavy rain event. As of March 2005 you could still see the flow along Highway 374 between Mockingbird Hill and Vendor, in Newton County. The flow started approximately 200 feet above the highway in shales and thin sandstones in the lower part of the Bloyd Formation. The picture below shows various sizes of rocks mixed with shale and mud that traveled down slope.
The debris flow then traveled over the Prairie Grove Sandstone Member of the Hale Formation (shown in above picture) knocking down trees and carrying large limbs, and various size rocks down slope until it stopped near the highway (1st picture.)

Debris flows of this type are not an uncommon event in the Ozarks. They usually occur during extended periods of rain. However, most of these events occur out of sight of the highways and are quickly grown over and obscured.

This debris flow was the product of a heavy rainfall event that occurred in Boone and Newton Counties during the 21st and the 24th of April 2004. The National Weather Service at Little Rock noted 9.32 inches of precipitation at Deer, Arkansas, Newton County (approx. 10 miles from debris flow), within a seventy-two hour period (through 7 am on 4/24/2004) with isolated 10+inch amounts noted.

Angela Braden
Geologist
Arkansas Geological Commission
2005