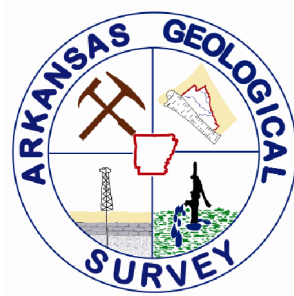


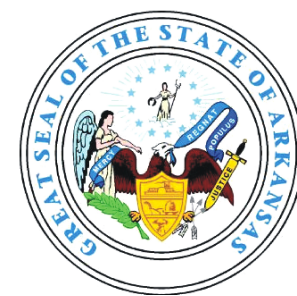
GEOLOGIC MAP OF THE HON QUADRANGLE, SEBASTIAN AND SCOTT COUNTIES, ARKANSAS



Geology by Boyd R. Haley and Charles G. Stone
1994

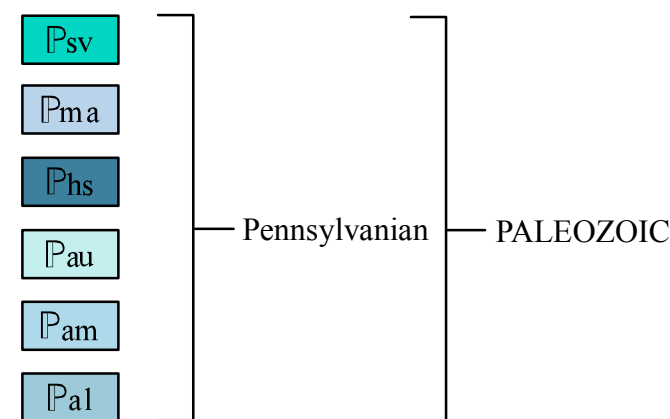
Edited by William D. Hanson
Digital Compilation by Brandy R. Rakes
2007

Arkansas Geological Survey, Bekki White, State Geologist



HON QUADRANGLE
ARKANSAS
7.5 MINUTE SERIES (TOPOGRAPHIC)

Correlation of Map Units



Description of Map Units

- Psv** **Savanna Formation (Pennsylvanian)** - The Formation consists of dark-gray shale, silty shale, coal beds, with minor amounts of light-gray siltstone and gray very fine to fine sandstone. In this unit a few plant and invertebrate fossils occur. This unit is about 1600 feet thick and was deposited in a fluvial environment.
- Pma** **McAlister Formation (Pennsylvanian)** - The Formation consists of gray to black shale, tan to gray, thin-bedded sandstone, with a few coal beds. Plant and invertebrate fossils may be found from several horizons in the unit, which is 500 to 2300 feet thick. The unit was deposited in a fluvial environment.
- Phs** **Hartshorne Formation (Pennsylvanian)** - The Formation consists of brown to gray, massive, cross-bedded, medium-grained sandstone, and some coal beds in the lower part of the unit. Plant fossils occur in the unit but are not abundant. This formation was deposited in a fluvial environment and ranges in thickness from about 10 to 300 feet.
- Pau** **Atoka Formation upper (Pennsylvanian)** - The Formation consists of marine tan to gray silty sandstone, grayish-black shale, and thin coal beds. Only in the Arkansas Valley and frontal Ouachita Mountain provinces is this formation split into the upper, middle, and lower members. The Atoka Formation has a thickness of about 25,000 feet.
- Pam** **Atoka Formation middle (Pennsylvanian)** - The Formation consists of marine tan to gray silty sandstone and grayish-black shale. Only in the Arkansas Valley and frontal Ouachita Mountain provinces is this formation split into the upper, middle, and lower members. The Atoka Formation has a thickness of about 25,000 feet.
- Pal** **Atoka Formation lower (Pennsylvanian)** - The lower Atoka is a sequence of marine, mostly tan to gray silty sandstones and grayish-black shales. Some rare calcareous beds and siliceous shales are known. This unit has the largest areal extent of any of the Paleozoic formations in the state, and has a total thickness of about 25,000 feet.

Symbols

- ~ Contact
— Thrust Fault
| 45° Strike and Dip
× Pit
× Quarry
× Abandoned Pit

Mineral Commodities

- Sh Shale
CS Crushed Stone

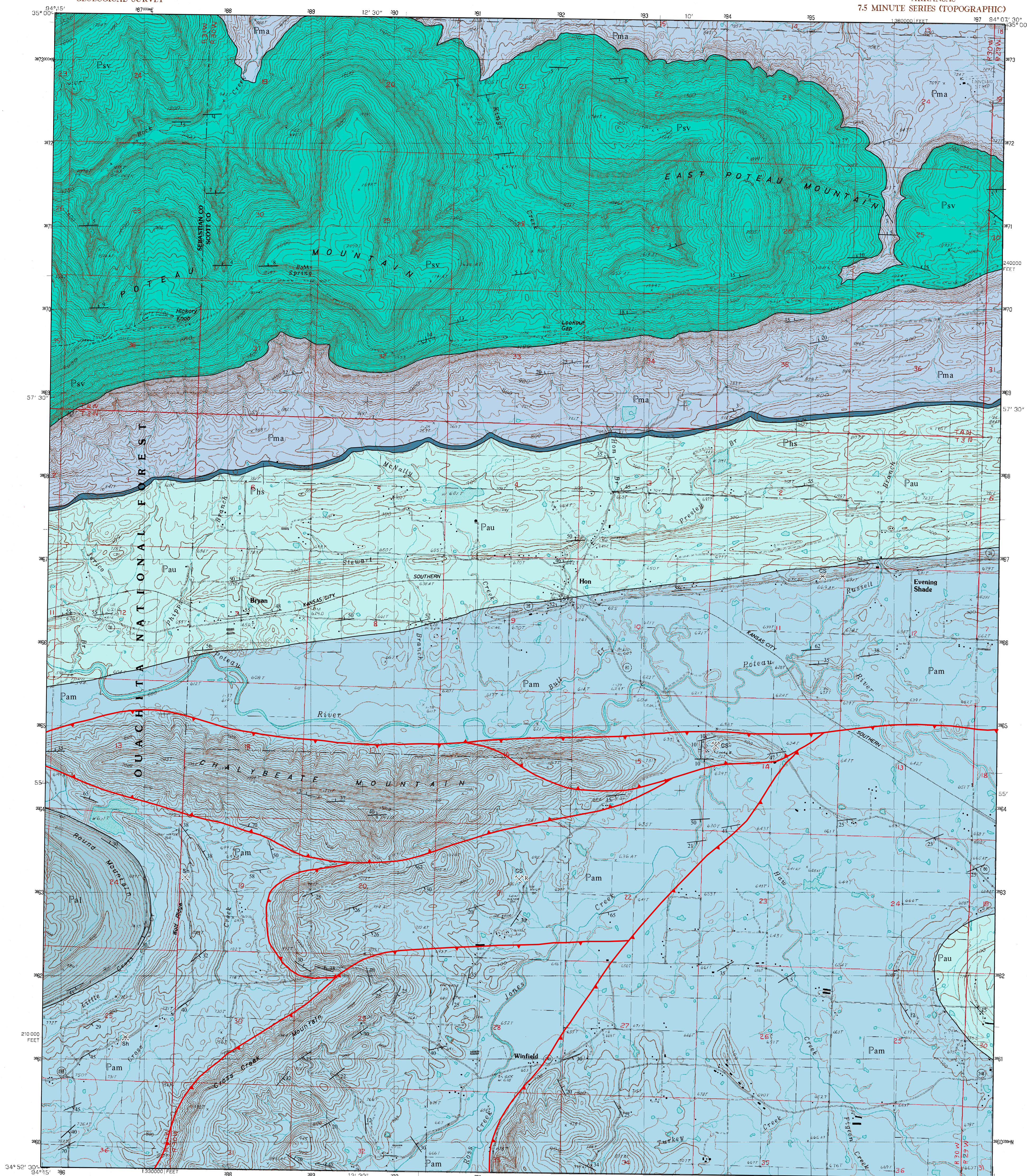
References

- Haley, B. R., and Stone, C. G., 1976, Geologic Worksheet of the Waldron Quadrangle Arkansas: Arkansas Geological Commission, Open-file report, scale 1:62,500.
- Howard, J. M., 2006, Arkansas Mineral Commodity Database, In-house data: Arkansas Geological Commission.
- McFarland, J. D., 2004, Stratigraphic Summary of Arkansas: Arkansas Geological Commission Information Circular 36, 39p.
- Miser, H. D., and Purdue, A. H., 1929 Geology of the DeQueen and Caddo Gap Quadrangles, Arkansas: U.S. Geological Survey, Bulletin 808, 195p., scale 1:125,000.

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PRODUCED BY THE UNITED STATES GEOLOGICAL SURVEY
CONTROL BY: USGS AND 906/NOAA
COMPILED FROM AERIAL PHOTOGRAPHS TAKEN: 1979
FIELD CHECKED: 1982 MAP EDITED: 1980
PROJECTION: LAMBERT CONFORMAL CONIC
GRID INHERITS UNIVERSAL TRANSVERSE MERCATOR ZONE 18
UTM GRID DESIGNATION: 18Q UTM
1983 MAGNETIC NORTH DECLINATION: 0°41' WEST
VERTICAL DATUM: 1987 NORTH AMERICAN DATUM
To place on the predicted North American Datum of 1983,
move the projection lines as shown by dashed corner ticks
(7 meters south and 18 meters east)
There may be private inholdings within the boundaries of any
Federal and State Reservations shown on this map.
No distinction made between houses, barns, and other buildings

PROVISIONAL MAP
Produced from original
manuscript drawings. Informa-
tion shown as of date of
photography.

SCALE 1:24 000
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000
METERS
1000 0 1000 2000 3000 4000 5000 6000 7000 8000 9000
METERS
CONTOUR INTERVAL 20 FEET
CONTROL ELEVATIONS SHOWN TO THE NEAREST 10 FEET
OTHER ELEVATIONS SHOWN TO THE NEAREST FOOT
To convert feet to meters multiply by 0.3048
To convert meters to feet multiply by 3.2808
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
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AND THE ARKANSAS GEOLOGICAL COMMISSION, LITTLE ROCK, ARKANSAS 72204

QUADRANGLE LOCATION
1 2 3
4 5
6 7 8
Hartington
Ark
Caddo
Waldron
Henderson Mtn.
Pottaw
Mtn

ROAD LEGEND
Improved Road
Unimproved Road
Trail
Interstate Route
U.S. Route
State Route

HON, ARKANSAS
PROVISIONAL EDITION 1983

34994-H2-TT-024

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