

ASSOCIATION
OF
MISSOURI GEOLOGISTS



SIXTH ANNUAL MEETING

October 2 & 3, 1959

Sponsored by the
DEPARTMENT OF GEOLOGY
UNIVERSITY OF MISSOURI
Columbia

ASSOCIATION OF MISSOURI GEOLOGISTS

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M. G. Mehl

R. B. Aylor

FIELD TRIP LEADERS

M. G. Mehl

R. B. Aylor

PROGRAM

Friday, October 2

2 to 5 P.M.: Registration and Open House, Swallow Hall,
Department of Geology, University of Missouri

6:30 P.M.: Dinner at Memorial Student Union, Costs \$2.50.
Speaker will be Prof. Gerhard H. Beyer,
Chairman of Department of Chemical Eng-
ineering, who will discuss the new Nuclear
Training Program of Missouri.

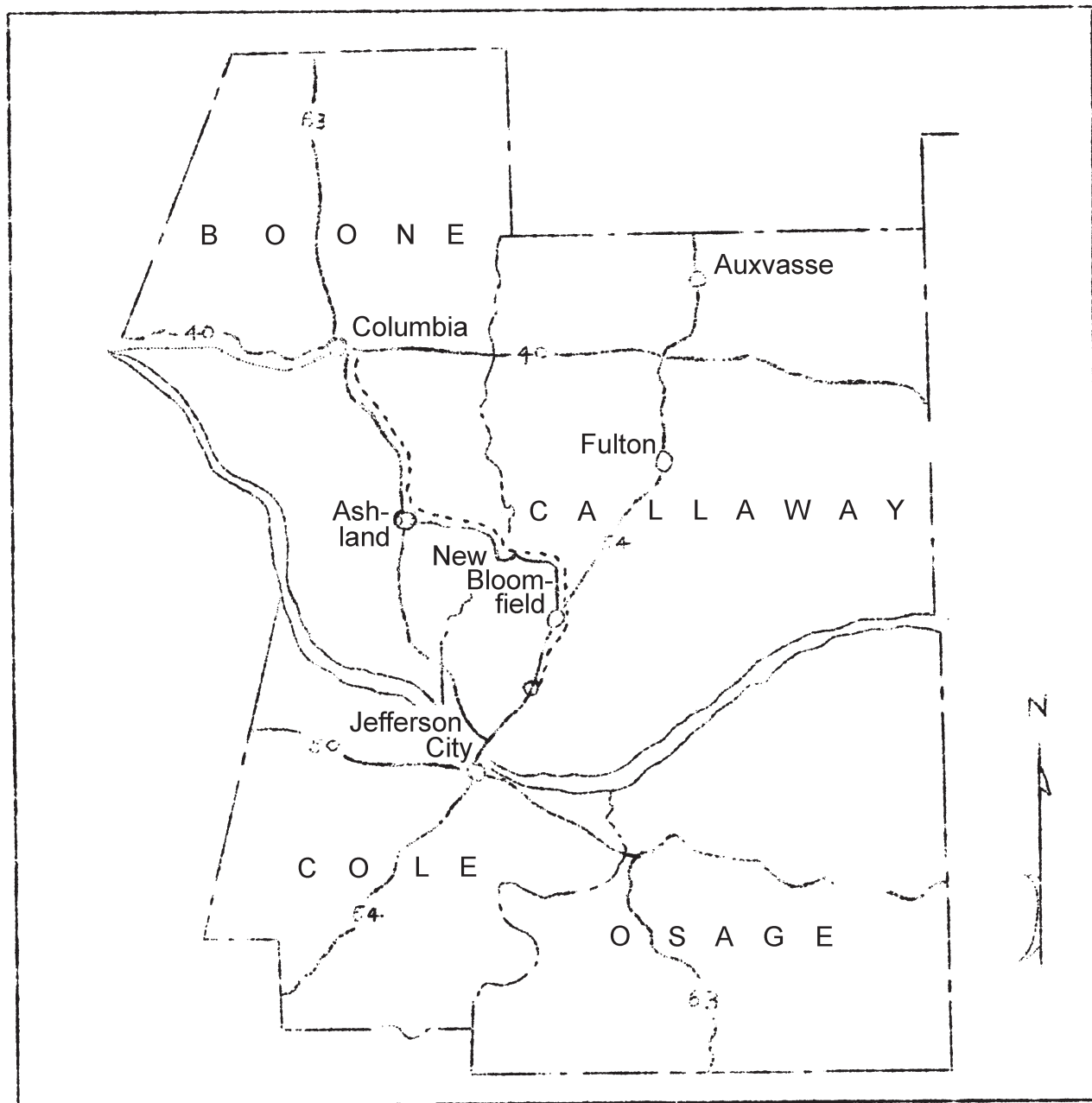
Business meeting: Following dinner.
Election of officers

Saturday, October 3

7:45 A.M.: Assemble at Stadium ParkingLot (Football
Field), intersection of Providence Road
and Stadium Road. Depart 8:00 A.M. sharp
for trip west of Columbia.

12:00 Noon: Lunch at Columbia. It would be difficult
to accommodate everyone at the same eating
establishment mainly because of the parking
problem, therefore it is suggested that
each person choose his own spot.

1:15 P.M.: Reassemble at intersection of East Broad-
way and Rock Hill Road for afternoon trip
south of Columbia. Discussion of Devonian-
Mississippian boundary problem by Dr. Mehl.



— ROUTE OF MORNING TRIP

- - - ROUTE OF AFTERNOON TRIP

FIELD TRIP LOG

Saturday October 3, 1959

Morning Trip

Assemble at Stadium Parking Lot, Intersection at Providence Road and Stadium Road.

Miles
0.0 Intersection - Stadium Road and Providence Road. Proceed north on Providence.

.64 Caution: Traffic light at Stewart Road. Stay in thru lane continue north.

1.06 Caution: Traffic light at Broadway. Stay in thru lane. Continue north.

2.0 Caution: Traffic light at Old Highway 40. Continue north.

2.35 Go over overpass, turn left (west). Enter Hwy. 70 with caution and proceed west.

4.62 Underpass.

5.02 Burlington limestone on south side of road.

5.40 Burlington limestone on both sides of road.

5.66 Burlington limestone on north.

6.32 Burlington limestone on both sides of road.

6.83 Perche Creek bridge.

7.39 Burlington limestone on both sides.

8.0 Underpass.

8.41 Burlington limestone on both sides.

8.68 STOP #1. Burlington limestone. This is a relatively new exposure created by the new highway construction and is selected for this stop because of the several filled sinks and slump structures.

9.14 Burlington limestone on both sides of road.

9.65 -
10.13 Burlington limestone on both sides of road.

Cont.

- 10.75 Enter Pennsylvanian shale.
- 10.89 STOP #2. Lower Verdigris limestone underlain by coal and shale.
- 11.27 STOP #3. Pleistocene on both sides of road.
- 11.70 Intersection - Route 0.
- 12.07 Pleistocene both sides of road.
- 12.23 Pleistocene both sides of road.
- 12.64 Intersection - private road.
- 12.78 Pleistocene both sides of road.
- 13.20 Pleistocene both sides of road.
- 13.90 There are many sinkholes in this area.
- 14.01 Underpass - Rocheport Road.
- 14.16 STOP #4. Burlington on both sides of road. Overlain by residual clay, above which is an old soil dated as Loveland, then loess to top of hill. This is an excellent fresh exposure of Burlington showing stylolite development and much chert.
- 14.45 Note large fill across valley. Burlington exposures to west.
- Turn around here and return to Columbia for lunch.
- Reassemble at 1:15 p.m. at intersection of East Broadway and Rock Hill Road.

FIELD TRIP LOG

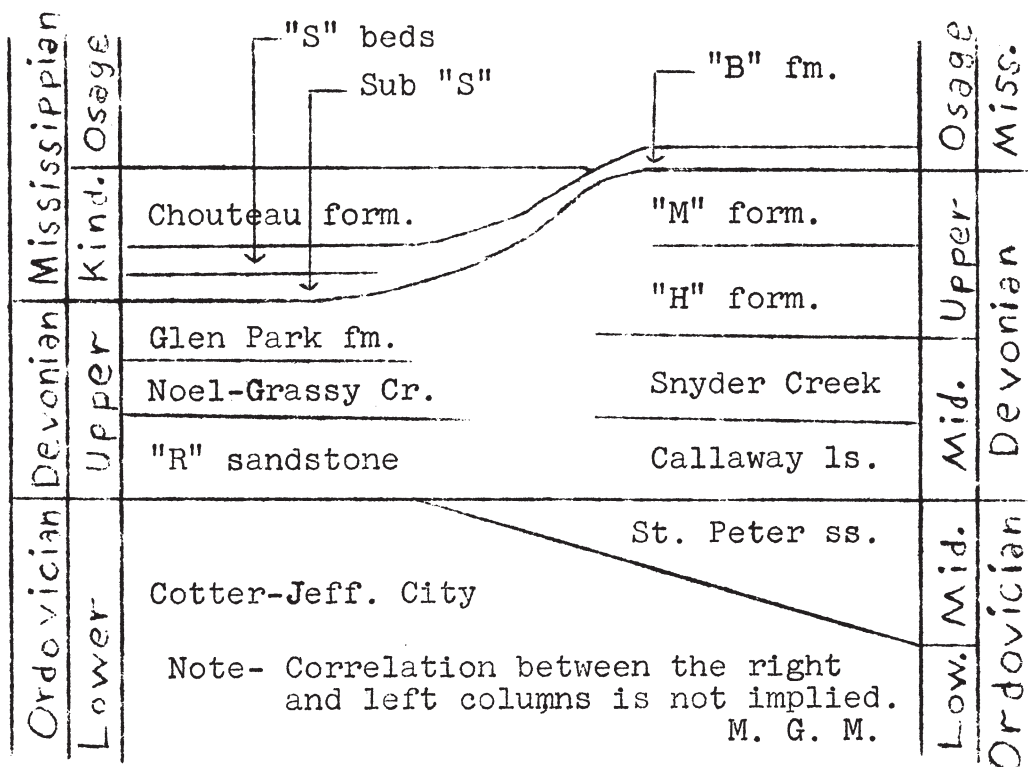
Saturday October 3, 1959

Afternoon Portion

The major objective of this afternoon circuit is to examine the complexity of the basal relations of the Mississippian in Central Missouri and the marked variation of the relationship over comparatively short distances. Exceptionally good fossil collecting is promised as indicated in the several sections studied.

The accompanying diagram is intended to show in a generalized manner the relationship of the lower Mississippian and upper Devonian units involved, several of which have not been officially named. These are indicated by letter only.

Vertical position of Stratigraphic Units involved in the Basal Relations of the Mississippian in Central Missouri.



NOTE- The "B" formation cuts across "time zones" -- the "S" beds do not. The "S" beds constitute the oldest Mississippian in Missouri over much of the state but are not represented in the area of the field trip.

The "M" formation is best developed in Warren County.
The "H" formation is limited to small patches in Callaway County.

"Bushberg" (not shown here) can not be identified with certainty outside of Jefferson County.
Glen Park and Noel (with basal "R" sandstone) do not extend into the area of the field trip.

FIELD TRIP LOG

Saturday October 3, 1959

Afternoon Portion

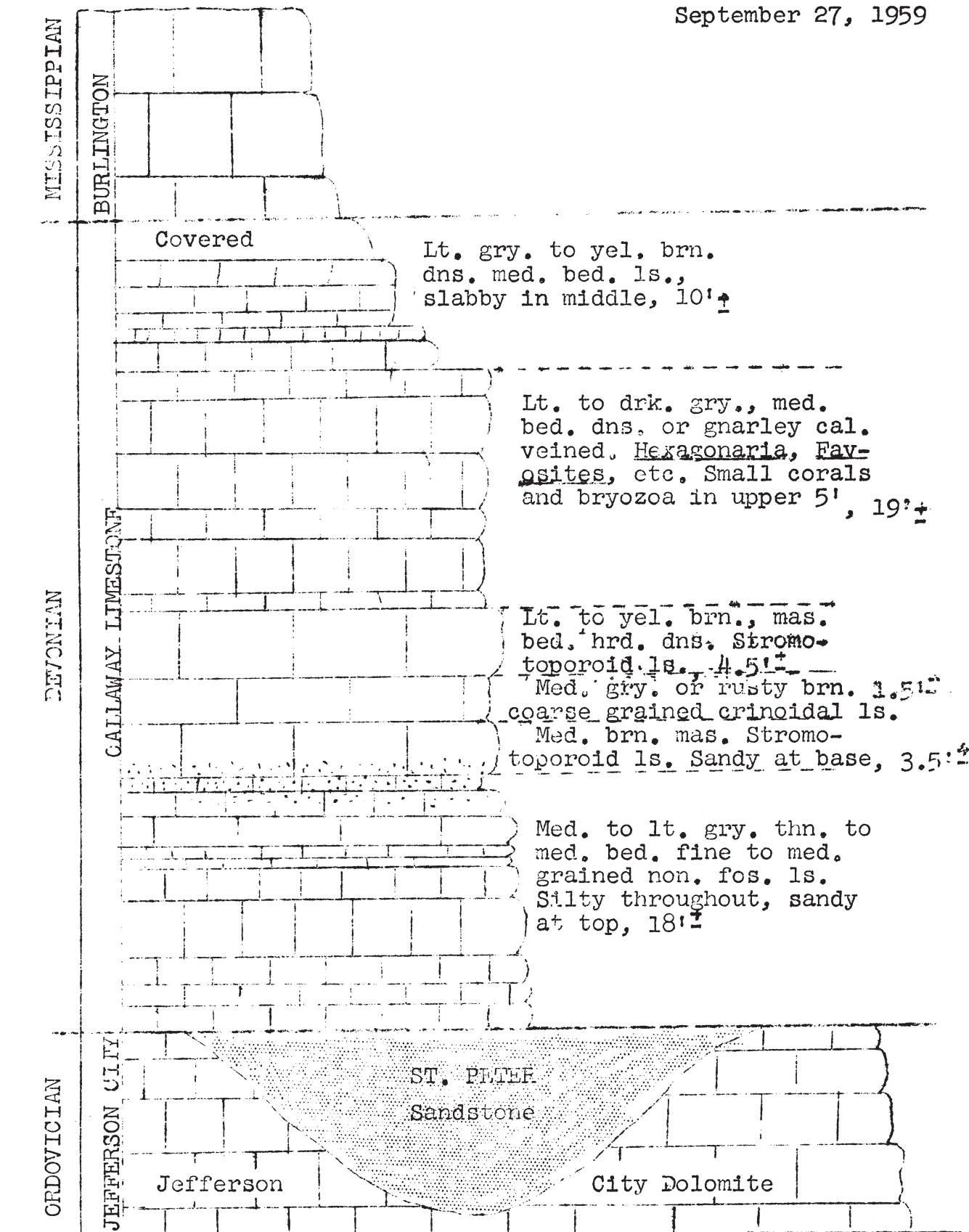
Miles Assemble at East Broadway and Rock Hill Road.
0.0 Intersection - Rock Hill Road and Broadway.
0.9 Caution: intersection Broadway and Hwy.63.
Turn right on 63 and proceed south.
.34 Burlington limestone on both sides of road.
.49 Hinkson Creek bridge.
1.65 Ashland Road intersection.
1.85 Grindstone Creek bridge.
3.02 Intersection - Route A C
5.75 KOMU-TV on left. Tower is 790 feet high. Land
elevation here is about 840 ft.
6.70 Bonne Femme Creek bridge.
9.10 Intersection - Route H.
10.70 Bass Creek bridge. Burlington limestone west
of bridge.
13.85 Caution: Approaching Ashland. Prepare for left
turn.
14.32 Ashland - Turn left (east) on Route Y.
16.35 Chert conglomerate on north side of road.
17.65 Burlington on left (north). You are now in
University Game Preserve.
18.04 Road to right goes to dam. Continue east on Y.
19.23 STOP #1. Left side of road (north) exposes good
section of Calloway, which lies in contact with
Jefferson City dolomite at foot of hill. On
south side of road, in creek, there is an
exposure of St. Peter ss.

BOONE COUNTY, MISSOURI

SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 46 N., R. 11 W.

Measured by George Fraunfelter

September 27, 1959

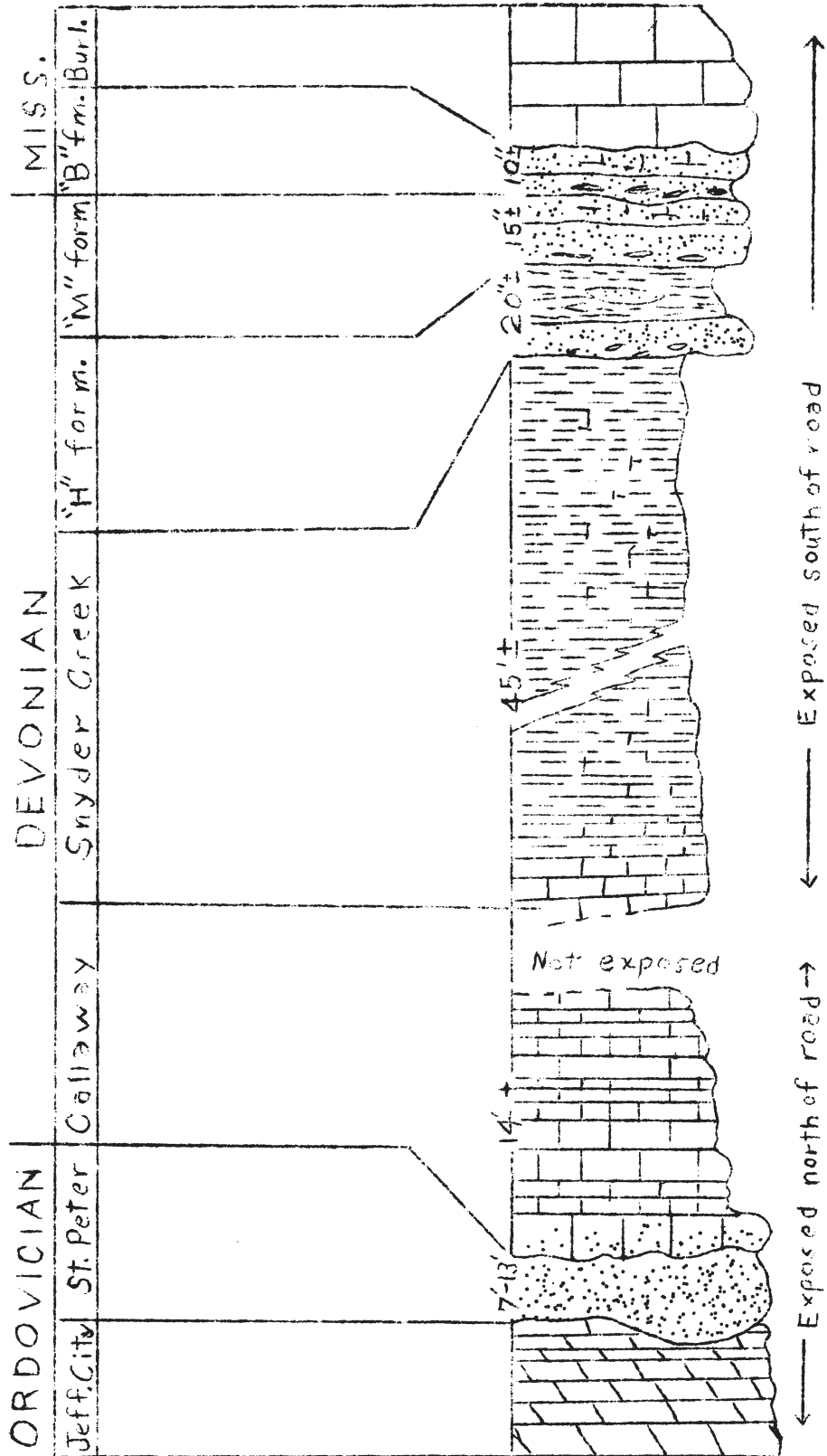


Cont.

- 19.44 Jefferson City dolomite on north.
- 19.73 Cedar Creek - County line between Boone and Callaway Counties. Route becomes Callaway County V.
- 20.06 Callaway limestone on right (south).
- 24.22 Guthrie. Turn right (south) on Route J.
- 27.00 Junction Routes J & Y. Turn left (east) on J.
- 27.3 New Bloomfield.
- 28.25 Junction with Hwy. 54.
- 28.45 Bridge. Burlington limestone in creek bed.
- 29.65 Sandstone in road. Pennsylvanian.
- 30.39 STOP #2. Snyder Creek Shale. Good fossil locality.
- See Section No. 352.
- Turn around at bottom of hill and return to Hwy. 54 at New Bloomfield.
- Reset speedometer.
- 0.0 Intersection - Hwy. 54. Turn left (south) on 54, proceed south.
- 2.15 Intersection - gravel road opposite KRCG-TV. Turn right (west) on gravel road.
- 3.18 T. intersection. Turn left (south).
- 3.51 STOP #3. Walk west along creek about one-quarter mile to exposure. Discussion here by Dr. Mehl. See Section 467.

Callay County, Missouri

SE.NE.SE, sec. 33, T. 46 N., R. 10 W..



Callaway County, Missouri

NE.SE.SE. sec. 11, T. 45 N., R. 11 W..

