

GAMBRILL STATE PARK MAP OF GEOLOGIC FEATURES



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GEOLOGIC UNITS

Diabase dike(s)

Jd dark gray to black diabase;
weathers to red-brown boulders

Weverton Formation

mainly gray, metamorphosed sandstones (quartzites),
conglomerates and metamorphosed shales (phyllites)

€wm Maryland Heights Member
interbedded sandstones/quartzites,
shales and conglomerates

€wmq light gray quartzite (subunit)

€wb Buzzard Knob Member
sandstones/quartzites

Loudoun Formation

€ZI dark gray conglomerates and phyllites;
contains white quartz veins

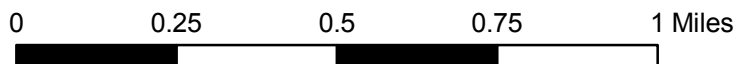
€Zlp dark gray phyllite (subunit)

Catoctin Formation

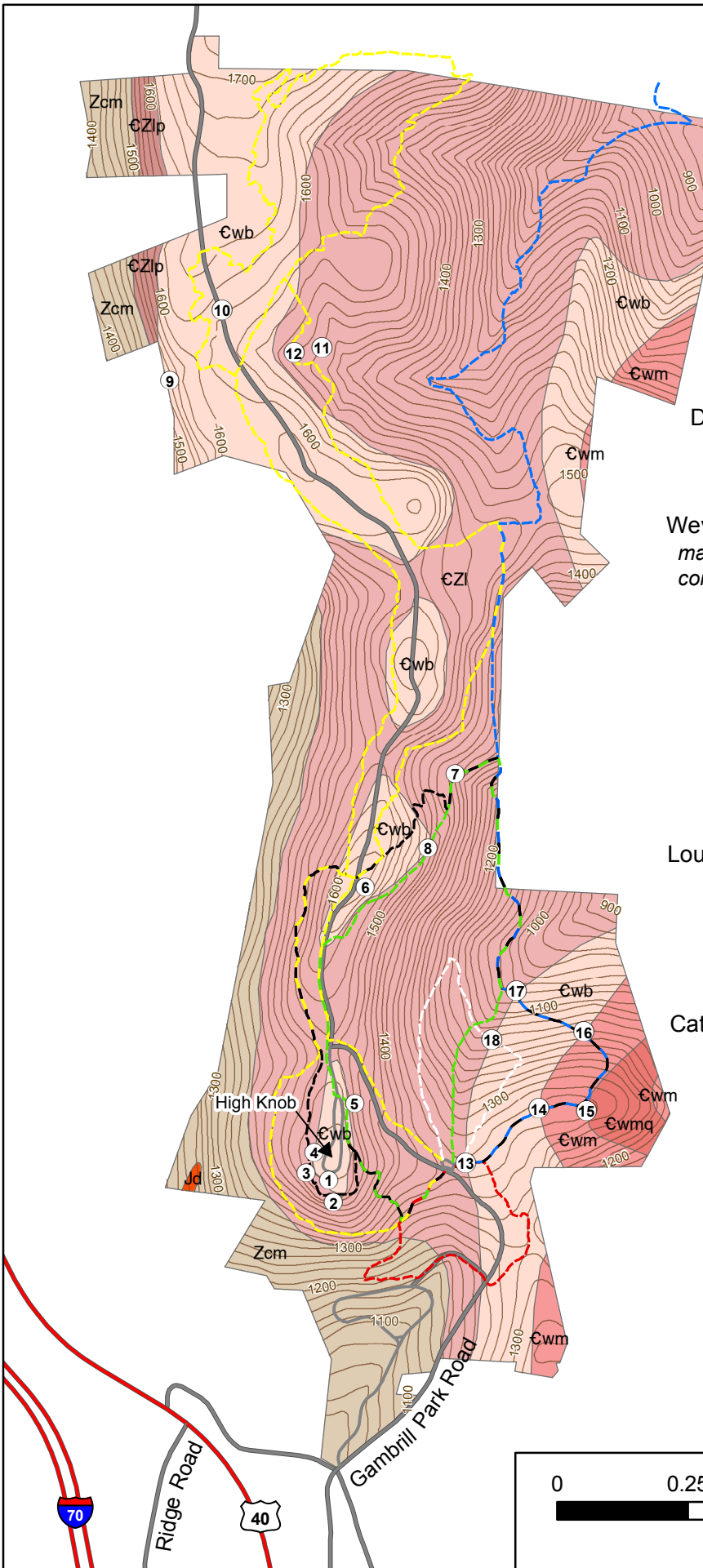
Zcm greenish metamorphosed basalt

Trails

- Yellow Poplar Trail
- Black Locust Trail
- Green Ash Trail
- Red Maple Trail
- White Oak Trail
- Catoctin Trail (blue)



Contour interval 20 ft





Stop 1



Stop 3



Stop 2



Stop 15



Stop 4

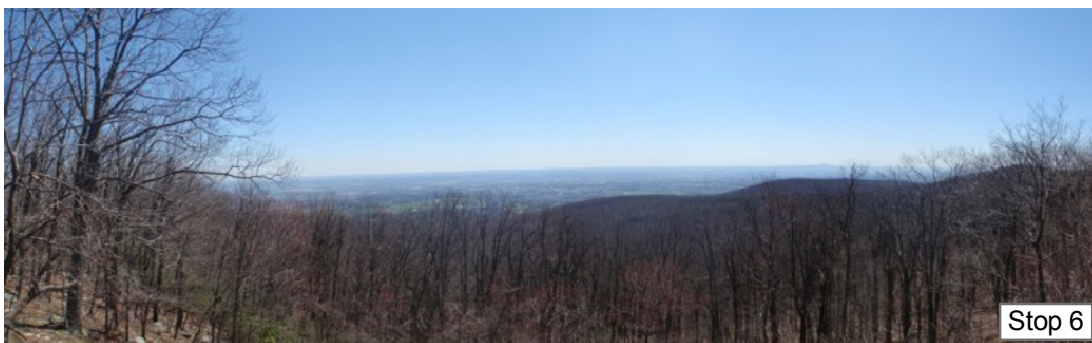


Stop 7 Bootjack Spring sluice shown



Stop 9 Weverton Fm close up view

| Stop # | Geologic Feature | GPS coordinates Degrees, dec. min. (NAD 83) | |
|--------|--|--|-------------|
| | | N Lat | W Lon |
| 1 | Weverton (Buzzard Knob) outcrop | 39 27.70059 | 77 29.73260 |
| 2 | Loudoun outcrop | 39 27.68044 | 77 29.72229 |
| 3 | Middletown Valley overlook | 39 27.71560 | 77 29.78080 |
| 4 | Weverton-Loudoun contact | 39 27.74690 | 77 29.76408 |
| 5 | South Frederick Valley overlook | 39 27.82807 | 77 29.67772 |
| 6 | North Frederick Valley overlook | 39 28.18785 | 77 29.65761 |
| 7 | Bootjack Spring | 39 28.37850 | 77 29.46606 |
| 8 | Weverton-Loudoun contact | 39 28.25407 | 77 29.52286 |
| 9 | Weverton (Buzzard Knob) cliff | 39 29.02927 | 77 30.08253 |
| 10 | Weverton (Buzzard Knob) outcrop | 39 29.14803 | 77 29.97088 |
| 11 | Loudoun outcrop | 39 29.08658 | 77 29.75662 |
| 12 | Loudoun outcrop | 39 29.07696 | 77 29.81639 |
| 13 | Loudoun-Weverton contact | 39 27.73073 | 77 29.43834 |
| 14 | Buzzard Knob-Maryland Heights contact | 39 27.82149 | 77 29.28180 |
| 15 | Maryland Heights - quartzite subunit contact | 39 27.81866 | 77 29.17985 |
| 16 | Maryland Heights-Buzzard Knob contact | 39 27.94981 | 77 29.18700 |
| 17 | Loudoun-Weverton contact | 39 28.01713 | 77 29.33200 |
| 18 | Loudoun-Weverton contact | 39 27.93573 | 77 29.38417 |



Stop 6