

# Calcareous Rocky Summit/Rock Outcrop Community

State Rank: S2 - Imperiled



Small Calcareous Rock Outcrop with Plantain-leaf Sedge. Photo: Michael Batchner.

**Description:** Calcareous Rocky Summit/Rock Outcrop Communities are open communities, usually on steep, mid-slope exposed marble bedrock occurring as ledges mixed with low cliffs. Whether the community is considered to be cliff or rock outcrop would depend on relative patch size and dominant condition. Most occurrences are small, and can occur as clusters in a forest matrix. Shrubs and herbaceous plants co-dominate; steeper, moister ledges and cliffs support a rich community of ferns.

**Characteristic Species:** Ridgetop occurrences of Calcareous Rocky Summits support relatively sparse herbaceous vegetation that includes ivory sedge, purple clematis, long-leaved bluet, balsam-ragwort, and lyre-leaved rock-cress. Shrubs include round-leaved dogwood, round-leaved shadbush, and

less commonly northern prickly rose, hairy honeysuckle, and downy arrow-wood. Calcareous Rock Outcrops below the ridgelines tend to be moister and lightly shaded by trees characteristic of Rich, Mesic Forests including sugar maple, white ash, and hop-hornbeam. The herbaceous layer includes species of rich forests such as plantain-leaf sedge, but typically has a high proportion of ferns such as bulblet fern, fragile fern, ebony spleenwort, maidenhair spleenwort, walking fern, and blunt lobed wood fern as well as rarer purple cliff-brake and wall rue spleenwort. Other plants on these ledges include Pennsylvania sedge, harebell, peduncled sedge, early saxifrage, smooth rock-cress, and wild columbine. This community often has non-native invasive species including Morrow's honeysuckle, Japanese barberry, and multiflora rose.



Northern Prickly Rose. Photo: PB Weatherbee.

**Differentiating Among** three types of Rocky Summit/Rock Outcrop Communities: Presence of plantain-leaf sedge, maidenhair spleenwort, or walking fern indicates Calcareous Rocky Summit/Rock Outcrop Communities. Calcareous communities may be near patches of Rich, Mesic Forests. The calcareous rock

outcrop community is usually more densely vegetated than either other with both shrubs and herbaceous plants on moister ledges that also support an abundance of ferns. Wild columbine, climbing fumitory, eastern red cedar, and/or pink corydalis occur in Circumneutral and Calcareous Rocky Summit/Rock Outcrop Communities but not Acidic Rocky Summit/Rock Outcrop Communities. The acidic community is often associated with dry oak - pine forests; the circumneutral with hop-hornbeam woodlands, or forests with a mix of oaks, hickories and sugar maples.

**Differentiating from Other Ridgetop Communities:** Rock Cliffs are arbitrarily defined as vertical to near vertical (>60% slope), occupying >5000 sq. ft. Rocky outcrops are not as steep overall. Open Talus/Coarse Boulder Communities are sparsely vegetated on broken rocks on a slope. Ridgetop shrublands include scrub oak, pitch pine, and heath species usually lacking or barely present in calcareous conditions. Yellow Oak Dry Calcareous Forests have closed or nearly closed canopies and little bare rock.

**Habitat for Associated Fauna:** Most animals of rock outcrop communities are not sensitive to the chemistry of the rock, but rather are responding to the elevation and dryness of



the habitat. Any differences in resident fauna between calcareous and acidic outcrops are most likely due to geographical differences in species. Outcrops tend to be fairly small, and only a part of the habitat of most vertebrate animals. No turtles, frogs or toads would be expected.

**Examples with Public Access:** Bartholomew's Cobble (TTOR), Sheffield; Rounds Rock, Mt. Greylock Reservation, New Ashford / Cheshire.



Calcareous Outcrop. Photo: Michael Batchner.

Calcareous Rocky Summit/Rock Outcrop Communities are sparsely vegetated, dry, open communities, usually on steep, mid-slope calcareous ledges in the marble regions of Berkshire County.

