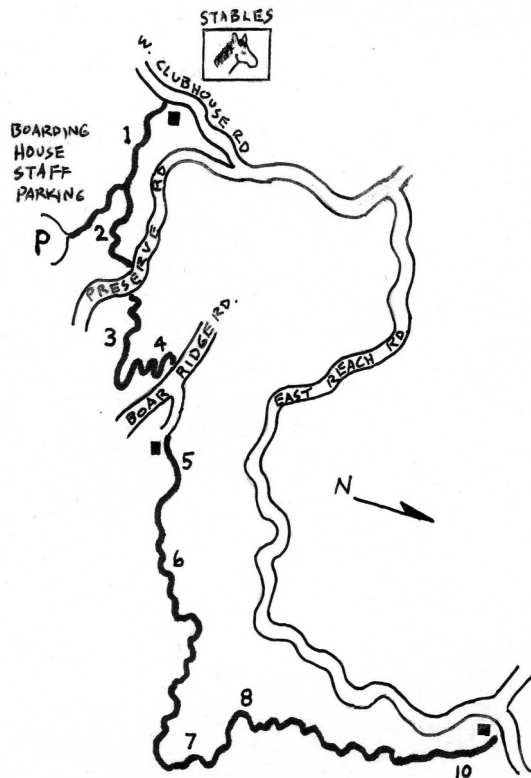hold on our most shallow and stony soils. Their thick, furrowed bark protects them from many ground fires, and the extensive anchoring root system seeks out deep moisture pockets. Here the cycle of freeze-thaw rock weathering is being enhanced by the wedge-like force of a growing tree and its roots.

Big Woods Trail 3

Map not to scale

STABLES

W. CLUBHOUSE RD.

BOARDING
HOUSE
STAFF
PARKING

P

PRESERVE RD.

BEAR RIDGE RD.

EAST REACH RD.

1
2
3
4
5
6
7
8
10

N

TRAIL	⌒⌒	⌒⌒	ROADS
INTERPRETIVE BOXES	■	2	INTERPRETIVE POSTS
STREAMS	≈≈ ⇢	P	PARKING AREAS

HIKING SAFETY GUIDELINES

- *Carry water with you*

- *Stay on designated trail*

- *Inform a friend of your hiking plans*

- *Hike with another person*

- *Leash your pet*

- *Carry a cell phone with fully charged and extra battery*

- *Carry important medication/first aid*

- *Call Security or the Trust Nature Center if you need help*

BALSAM MOUNTAIN TRUST

Balsam Mountain Trust
Phone: *(828)631-1060*

BMP Security
Phone: *(828)631-1011*

BALSAM MOUNTAIN TRUST

Big Woods Trail 3

Cucumbertree   *Magnolia acuminata*

Terrain: Steep slopes with switchbacks on a mulched foot trail and gentle grades along an old logging road.

Trail elevation: Total elevation change of 600'

Trail length: A complete loop is 3.6 miles; spur trail past Licklog Falls is 1.24 miles.

Trail Difficulty: Moderately strenuous eastern section; strenuous western section.

Must see: Licklog Falls on spur 3A

1) Along this portion of Cashie Branch, abundant **rosebay rhododendron** (*Rhododendron maximum*) follows the stream channel and spreads up the opposing, north-facing slope. On the south-facing slope, notice how the rhododendron gives way to **mountain laurel** (*Kalmia latifolia*) with an ascent into more sun-bathed elevations. The direction a slope faces, called <u>aspect</u>, harbors different plant associations due to changes in sunlight availability and moisture retention.

2) The **sweetshrub** (*Calycanthus floridus*) is tolerant of shady forest understories, but here in a forest edge with plenty of sunlight it forms a robust colony. Aromatic maroon flowers in spring and opposite, glossy leaves make this adaptable native a good choice for landscaping.

3) **Cucumbertree** (*Magnolia acuminata*) is the largest species of magnolia native to this region. It has furrowed brownish bark, large oval leaves pointed on each end and lumpy, oblong fruits reminiscent of a small cucumber. Here a fine specimen grows tall and straight in this moist, west-facing cove. It is surrounded by equally tall and straight tuliptrees, or tulip poplars (*Liriodendron tulipifera*), close relatives also of the magnolia family but with grayish bark, flat-tipped leaves and conelike fruits made up of winged seed. The soft, fine-grained wood of both species is similar and usually mixed together for a variety of purposes in the lumber trade.
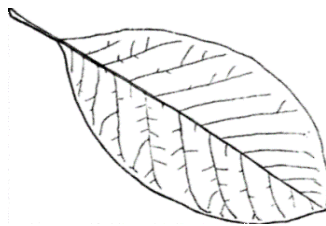
4) On the upper reaches of this southwest-facing slope is an oak-dominated forest, mostly of scarlet, chestnut, and white oaks. You will notice a drastic change of canopy members as you travel onward, out of this site with its sunny aspect and thin, acidic soils. Here one of the taller canopy members, a **scarlet oak** (*Quercus coccinea*), has been struck by lightning- the trunk scar being visible on the uphill side of the tree.

5) You are in the midst of a northern hardwood forest community on this north-facing slope, elevation about 4000 ft. It was last logged about 1981. The multiple-trunked trees are the result of stumps re-sprouting, carrying with them a burden of pipevine and grape which excel in climbing small stems. Common canopy trees here are cherry, ash, birch and magnolia, though at least 8 other species occur. All are currently intensely competing for sunlight, casting dense shade that also affects the herb layer.

6) A fast-growing colonizer of forest disturbances in high elevations is the **fire cherry** (*Prunus pensylvanica*), recognizable by its thin, smooth, reddish-brown bark with horizontal streaks (lenticels). This cherry is not long-lived like its more common relative the black cherry (*Prunus serotina*), which has dark gray, scaly bark; seen just downslope. The small red fruits of fire cherry are eaten extensively by many birds, and pits falling into sunny openings enable the tree to reach precocious maturity in a fleeting life cycle. Rarely do these trees exceed 30 years of age and 18 inches diameter.

7) The view downslope into this cove hardwood forest, last logged about 1928, illustrates maturity of canopy trees. As canopy height rises, layers of shade-tolerant plants appear. Diversity of species generally increases, though some plants may disappear. At this location, sugar maple, red maple, magnolia, tuliptree and northern red oak comprise most of the canopy, with high diversity in understory, shrub and herb layers.

8) Rounding this small, west-facing ridge a veritable thicket of **mountain laurel** is established. The oak-dominated forest above it is well adapted to this exposed landform and its thin, rocky soils that can become quite dry in summer. The incidence of natural fire on these sites also favors the oaks by intermittently removing shrubby competition over their seedlings. A long interval of fire protection can aid proliferation of mountain laurel, which impedes oak regeneration - how many oak seedlings/saplings do you see under the laurel?

9) This mature forest received a crown thinning in 2003. Selected dominant trees were cut to promote canopy space and enhanced growth of residual large trees. Species composition was also changed by removing an over-abundance of tuliptrees from the canopy, striving for a more typical representation of species in this mountain oak-hickory and adjoining rich cove community. The natural transition of this forest to a diverse, multi-aged condition typically seen in old stands can be accelerated by carefully applied forestry practices, which modify the even-aged forests that originate from clear-cutting.

10) Above the trail and within a prominent rock outcropping can be seen a trademark denizen of Appalachian forests, the **chestnut oak** (*Quercus montana*). Also called rock oak for obvious reasons, these trees excel in maintaining a tenacious