WILDFLOWER #87 answer: TABLE MOUNTAIN PINE (*Pinus pungens*)

You can recognize Table Mountain pine from far off by the gnarly shape. The upper limbs are irregular on the crooked trunk; the long lower branches sweep the ground, protecting the thin soil below from erosion and runoff. The top is sometimes flattened. The tree’s shape suggests the rugged environment where it grows—dry rocky or shaly slopes and steep cliff edges in the Appalachian Mountains. The taproot must find a way through crevices in rock.

Close up, you can know Table Mountain pine by its cones. Young male cones on the branch tips are pink-purple; young female cones, in whorls of 2 to 7, are yellow and seated farther back. Scales on the stout, strongly attached adult cones bear formidable hooked spines.

The cones are serotinous—they take their time to open. They mature in two years, but most of them stay closed for up to 25 years after that. Other pines scatter their seeds at once, but Table mountain pine is an "aerial seed bank," a year-round reserve of nourishment for red squirrels, turkeys, and other wildlife.

Fire opens 60 percent of the cones while clearing away competition. The whole tree is adapted to fire, with thick plated bark, pitchy sap to seal wounds, self-pruning limbs, and deep roots. Without intense fires, Table mountain pine keeps thriving on dry, rocky sites but gives way to hardwoods on deeper soil.

*Pungens* means “piercing,” for the spines or maybe for the sharp scent, a third identifier. The twisty needles are light green, two (sometimes three) to a bundle, and if you bruise them, they smell like tangerine. The resin used to be distilled and inhaled in steam to soothe coughs, bronchitis, and even tuberculosis.

WILDFLOWER #88

*Clues:* Dense tussocks of shiny stems tell you the soil is wet.