

Rare and Uncommon Vascular Plants of Traprock Habitats.

<i>Conservation Status</i>	<i>Scientific name</i>	<i>Common name</i>	<i>Preferred habitat</i>		<i>USACE Wetland Indicator Status</i>
	Ferns				
UC	<i>Asplenium rhizophyllum</i>	walking fern	Usually upland, shaded, high pH cliffs, tree bases		NI
T	<i>Asplenium ruta-muraria</i>	wall-rue spleenwort	Moist ledges		NI
E	<i>Cheilanthes lanosa</i>	hairy lip fern	Dry ledges		UPL
UC	<i>Cystopteris bulbifera</i>	bulbil fragile fern	Cliffs, balds, or ledges, ridges or ledges, talus and rocky slopes		FACW
E	<i>Diplazium pycnocarpon</i>	narrow-leaved glade fern	Rich moist soil, shade, toe of slope		FACW
SC	<i>Dryopteris goldiana</i>	Goldie's wood fern	Rich, moist soils		FAC
UC	<i>Gymnocarpium dryopteris</i>	northern oak fern	Cliffs, balds, or ledges, forests, talus and rocky slopes		FACU
SC	<i>Lygodium palmatum</i>	climbing fern	Forests, forest edges and swamp margins, mainly on peaty, acidic, sandy soils		FACW
UC	<i>Pellaea atropurpurea</i>	purple cliff-brake	Rock crevices on high-pH cliffs		UPL
UC	<i>Woodsia ilvensis</i>	rusty cliff fern	Cliffs, balds, ridges or ledges, talus and rocky slopes		UPL
UC	<i>Woodsia obtusa</i>	blunt-lobed cliff fern	Cliffs and rocky slopes, predominantly on high-pH substrate		UPL
	Orchids				
SC(H)	<i>Aplectrum hyemale</i>	putty root	Moist to wet deciduous forests, often rocky		NI
E	<i>Coeloglossum viride</i>	long-bracted green orchid	Mesic to wet-mesic deciduous and evergreen-deciduous forests, fens, swamps, meadows		FAC
UC	<i>Corallorhiza odontorhiza</i>	fall coral-root	Moist upland forests, usu. open understory		NI
SC	<i>Cypripedium parviflorum</i>	yellow lady's-slipper	Wooded swamps, moist decid. woods		FAC
E	<i>Cypripedium reginae</i>	showy lady's-slipper	Wooded swamps		FACW
UC	<i>Galearis spectabilis</i>	showy orchid	Moist deciduous forest, high pH, leafmold, wetland or upland		NI
E	<i>Liparis liliifolia</i>	lily-leaved wide-lipped orchid	Rich, moist to dry soils		FACU

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SC(H)	<i>Malaxis bayardii</i>	Bayard's adder's-mouth	Woodlands with Pinus and Quercus, dry sandy fields, and among heaths in well-drained soils		NI
E	<i>Malaxis unifolia</i>	green adder's-mouth	Rich, moist deciduous woods and wetlands		FAC
SC	<i>Plantanthera hookeri</i>	Hooker's bog orchid	Rich moist or dry woods		FAC
	Sedges				
SC(H)	<i>Carex crawfordii</i>	Crawford's sedge	Open, xeric to hydric soils, often in human-disturbed areas such as fields and roadsides.		FACW
SC	<i>Carex foenea</i>	straw sedge	Woodlands, cliffs, sandy fields, and open, disturbed soil		UPL
Div. 2 Flora Cons. 2012	<i>Carex glaucoidea</i>	blue sedge	Dry woods,		FAC
Div. 2 Flora Cons. 2012	<i>Carex gracilescens</i>	slender loose-flowered sedge	Edges of wetlands & forests		NI
UC (formerly SC)	<i>Carex hirsutella</i>	hirsute sedge	Slightly to very moist soil, sometimes in wetlands		NI
SC	<i>Carex hitchcockiana</i>	Hitchcock's sedge	Rich, very moist to slightly moist, deciduous woods, often in wetlands		NI
UC (formerly SC)	<i>Carex lupuliformis</i>	false hop sedge	Wooded swamps, non-acidic		OBL
SC	<i>Carex molesta</i>	troublesome sedge			FAC
SC	<i>Carex oligocarpa</i>	rich woods sedge	Rich decid. Woodlands, slightly to very moist, rocky, sub-acidic, occ. in wetlands		NI,
UC	<i>Carex sparganioides</i>	bur-reed sedge			FACU
E	<i>Carex reznicekii</i>	Reznicek's sedge	Moist to slightly moist, subacidic, rocky, uplands		NI
UC	<i>Carex siccata</i>	dry land sedge	Dry, well-drained, often coarse soils of fields, balds, and oak-pine woodlands		UPL
UC (formerly SC)	<i>Carex squarrosa</i>	squarrose sedge	Open wetlands with non-acidic soils		OBL
SC	<i>Carex typhina</i>	cattail sedge	Wet meadows & decid. 'woods, bottomlands		OBL
E	<i>Carex willdenowii</i>	Willdenow's sedge	Dry deciduous woods		UPL
UC	<i>Trichophorum planifolium</i>	bashful clubsedge	Dry to moist woodlands, usually under oak		NI
	Grasses				

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Div. 2 Flora Cons. 2012	<i>Elymus glabriflorus</i>	southeastern wild-rye	Dry-mesic, deciduous forests, usually occurring on hills ridges, including trap rock, in shallow soils associated with Quercus and/or Carya		NI
UC	<i>Elymus trachycaulus</i>	slender wild-rye (wheat grass)	Thin, dry, rocky woods		FACU
E	<i>Milium effusum</i>	millet grass	Mesic, deciduous forests, often at mid-elevations and frequently associated with circumneutral or basic bedrock		FACU
E	<i>Muhlenbergia capillaris</i>	hair-awned muhly	Rocky forests and woodlands where it occurs on ridges and trap rock		FACU
E	<i>Piptatherum pungens</i>	short-awned mountain-rice grass	Deciduous or mixed evergreen-deciduous woodlands and barrens, dry-mesic to xeric openings		UPL
Div. 2 Flora Cons. 2012	<i>Poa saltuensis</i> ssp. <i>languida</i>	weak spear grass	Slightly moist to wet, cliff bases		NI
SC	<i>Schyzachne purpurascens</i>	false melic grass (purple oat grass)	Dry rocky woods		FACU
iv. 2(a) Flora Cons. 2012	<i>Sphenopholis nitida</i>	shiny wedgescale	Dry-mesic to mesic forests and woodlands, often on hillsides and rocky slopes, sometimes associated with cliff bases and outcrops		UPL
E	<i>Sporobolus clandestinus</i>	hidden dropseed	On ledge and thin soils of ridges and rocky slopes, usually on trap rock, but also occurring on limestone		UPL
(98 SC)	<i>Sporobolus compositus</i>	rough dropseed	dry roadsides, ledges, thin subacidic soil		NI
E	<i>Sporobolus heterolepis</i>	prairie dropseed	dry open soil		FACU
E	<i>Sporobolus neglectus</i>	small dropseed	Ledges, river shore outcrops, dry sandy soil of roadsides and fields, often in regions of high-pH bedrock and/or till		FACU
E	<i>Trisetum spicatum</i>	narrow false oat	River shore outcrops, ledges, often in regions of high-pH bedrock		FAC
	Other herbaceous plants				

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E	<i>Agastache nepetoides</i>	catnip giant-hyssop (yellow giant-h)	Forest borders and fragments, shaded roadsides, rocky banks		FACU
E	<i>Agastache scrophulariifolia</i>	purple giant-hyssop	Forests, frequently dry-mesic, rocky types, forest fragments, roadsides, river banks, riparian forests		NI
UC	<i>Asclepias verticillata</i>	whorled milkweed	Rocky woodlands, open glades, balds, cliff bases		UPL
SC(H)	<i>Blephilia hirsuta</i>	hairy wood-mint	Glades, dry woods		FACU
UC	<i>Boechera stricta</i>	Canada rockcress	Rocky woodlands and forests, cliffs, and talus slopes in regions of moderate to high-pH bedrock		FACU
UC	<i>Boechera laevigata</i>	smooth rockcress	Rocky woodlands and forests, cliffs, and talus in regions of high-pH bedrock		NI
iv. 2(a) Flora Cons. 20	<i>Boechera missouriensis</i>	green rockcress	Rocky woodlands and forests, cliffs, and balds in regions of moderate - to high-pH bedrock		NI
SC(H)	<i>Calystegia spithamea</i>	upright false bindweed	Upland fields, roadsides		NI
UC	<i>Cardamine concatenata</i>	cut-leaved toothwort	Rich, mesic, upland and riparian forests.		FACU
E	<i>Castilleja coccinea</i>	scarlet painted-cup (Indian paintbrush)	Wet-mesic to hydric meadows, often on higher pH substrates		FAC
Div. 2 Flora Cons. 2012	<i>Cerastium nutans</i>	nodding chickweed	Rocky woodlands and forests, outcrops and talus slopes		FACU
E	<i>Chamaelirium luteum</i>	devil's bit (fairy wand)	Dry-mesic to mesic soils of fields, forest openings, and deciduous and evergreen-deciduous woodlands and forests on trap rock, limestone, and other bedrock types		FACU
UC	<i>Clematis occidentalis</i>	purple virgin's-bower	Rich moist slopes, sometimes wetlands		NI
UC	<i>Conopholis americana</i>	American squaw-root	Forested moist slopes, sometimes wetlands		NI
T	<i>Corydalis flavula</i>	yellow corydalis	Rocky woods		FACU

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SC(H)	<i>Cynoglossum virginianum</i>	southern wild comfrey	Deciduous and mixed evergreen-deciduous forests, sometimes associated with disturbances such as trails and old logging roads		NI
UC	<i>Desmodium canescens</i>	hoary tick-trefoil	Mostly upland fields, edges		NI
E	<i>Desmodium cuspidatum</i>	large-bracted tick-trefoil	Dry to moist forested rocky slopes, sometimes wetlands		NI
SC	<i>Desmodium glabellum</i>	smooth tick-trefoil	Woodlands, roadsides, open powerline rights-of-way		NI
SC	<i>Dicentra canadensis</i>	squirrel-corn	Rich woods, moist forested rocky slopes, sometimes wetlands		N I
SC	<i>Draba reptans</i>	Carolina whitlow-mustard	Sandy and rocky fields, ledges, balds		N I
SC	<i>Drymocallis arguta</i>	tall wood-beauty (tall cinquefoil)	Rocky slopes, glades, dry fields		FACU
SC	<i>Endodeca serpentaria</i>	Virginia serpentaria (Virginia snake)	Dry, rich, rocky, deciduous or mixed-deciduous forests		UPL
UC	<i>Eupatorium pubescens</i>	hairy thoroughwort	Dry-mesic, often sandy, woodlands, fields, and clearings		NI
UC	<i>Eupatorium sessilifolium</i>	upland thoroughwort	Rocky forests, usually wetlands		NI
UC	<i>Eutrochium purpureum</i>	purple (sweet-scented) Joe-Pye weed	Woodlands, forests, fields, pastures.		FAC
UC	<i>Helianthus divaricatus</i>	Woodland sunflower	Wooded hillsides, often subacidic, sometimes wetlands		NI
T	<i>Houstonia longifolia</i>	Long-leaf bluet	Glades, river & lake shores, often in wetlands		NI
SC(H)	<i>Hybanthus concolor</i>	(eastern) green violet	Rich, deciduous forests and woodlands, rocky slopes		FACU
E	<i>Hydrastis canadensis</i>	goldenseal	Rich, mesic, often rocky forests, usually associated with limestone and trap bedrock		NI
SC	<i>Hydrophyllum virginianum</i>	eastern waterleaf (Virginia waterleaf)	Rich, moist soil, rocky subacidic hillsides, usually wetlands		FAC
SC	<i>Lespedeza repens</i>	creeping bush-clover	Dry glades, open upland areas		NI
SC	<i>Liatris novae-angliae</i>	northern blazing star	open upland areas		NI
E	<i>Linnaea borealis</i> ssp. <i>americana</i>	American twinflower	Wetlands, forests- usually evergreen		NI

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E	<i>Moehringia macrophylla</i>	Large-leaved grove-sandwort	cliffs, talus, and thin soil over ledges and balds, usually associated with serpentine bedrock, but infrequently on limestone and trap rock	FACU
E	<i>Moneses uniflora</i>	one-flowered-shinleaf (single delight)	Dry-mesic to hydric, deciduous to evergreen forests and swamps	FAC
UC	<i>Myosotis verna</i>	spring forget-me-not	Ledges, pastures, woodlands, dry, open banks, waste areas	FACU
E	<i>Oligoneuron rigidum</i>	stiff flat-topped-goldenrod	Upland edges, subacidic soil	NI
SC	<i>Opuntia humifusa</i>	eastern prickly-pear	Open upland areas	NI
SC	<i>Oxalis violacea</i>	violet wood sorrel	Rich soil, moist - dry glades	NI
E	<i>Packera anonyma</i>	Small's ragwort or groundsel	Open fields, meadows, roadsides, disturbed sites, in drying or sandy soils	UPL
E	<i>Packera paupercula</i>	balsam groundsel (balsam ragwort)	Glades, thin soil	FAC
SC	<i>Panax quinquefolius</i>	American ginseng	Rich, moist forest, occ. in wetlands	NI
SC(H)	<i>Phaseolus polystachios</i> var. <i>polystachios</i>	wild bean		NI
E	<i>Polymnia canadensis</i>	white-flowered leaf-cup	Subacidic, rocky soil, talus slopes, upland forest	NI
UC	<i>Polygonum tenue</i>	slender knotweed	Uplands roadsides, edges	NI,
UC	<i>Pycnanthemum ×clinopodioides</i>	basil mountain-mint	woods, thickets, hybrid not species per Haines 2011	NI
E	<i>Pycnanthemum torrei</i>	Torrey's mountain-mint	Dry woods, thickets	NI
UC	<i>Pyrola chlorantha</i>	green-flowered shinleaf	Dry-mesic to mesic forests and woodlands	FACU
Petitioned to become SC in 2020, Div. 2 Flora Cons. 2012	<i>Ranunculus micranthus</i>	small-flowered crowfoot (rock butter)	Deciduous forests and woodlands, ridges	FAC
SC	<i>Ribes rotundifolium</i>	Appalachian gooseberry	Mostly uplands, forests	NI
E	<i>Scutellaria parvula</i> var. <i>missouriensis</i>	little skullcap	Woodlands, ledges, balds, river banks, meadows, fields, disturbed soil, often associated with thin soils over bedrock	NI
T	<i>Sibbaldiopsis tridentata</i>	three-toothed-cinquefoil	Summits, outcrops	FACU
UC	<i>Silene caroliniana</i>	wild campion (wild pink)	Well-drained well-lit areas	NI

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T	<i>Silene stellata</i>	starry campion	Deciduous forest & edges, usually upland		NI s
UC	<i>Solidago squarrosa</i>	squarrose goldenrod	Upland subacidic habitats		NI
UC	<i>Solidago ulmifolia</i>	elm-leaved goldenrod	Upland subacidic edge & partly open areas		NI
SC	<i>Stellaria borealis</i>	boreal stitchwort	Wet woods		FACW
SC	<i>Trichostema brachiatum</i>	pennyroyal bluecurls (fluxweed)	Dry soil, upland ledges, hillsides		NI.
E	<i>Triosteum angustifolium</i>	lesser horse-gentian	Rocky forests and woodlands, ledges, railroads		FAC
UC	<i>Triosteum aurantiacum</i>	orange-fruited horse-gentian	Dry-mesic to mesic forests, woodlands, and forest borders		NI
List 2020, Div. 2 Flora	<i>Triosteum perfoliatum</i>	perfoliate-leaved horse-gentian	Forests, woodlands, fields, pastures, often on dry-mesic, sandy substrate		NI
E	<i>Uvularia grandiflora</i>	large-flowered bellwort	Moist, rich areas, sometimes wetlands		NI
SC(H)	<i>Verbena simplex</i>	narrow-leaved vervain	Dry or sandy uplands		NI
E	<i>Viola adunca</i>	hook-spurred violet	Woodlands, sandy fields, roadsides, open rights-of-way, sandplains, clearings		FACU
	Woody plants				
UC	<i>Arctostaphylos uva-ursi</i>	red bearberry	Dry summits of hills and ridges, sand plains, dry, open, often sandy, clearings and rights-of-way		UPL
SC	<i>Celastrus scandens</i>	American bittersweet	Forests and forest edges, rocky slopes, river banks		FACU
Div. 2 Flora Cons. 2012	<i>Morus rubra</i>	red mulberry	Rich, often calcareous woods		FACU
UC	<i>Pinus rigida</i> (in larger numbers)	pitch pine	Nutrient-poor, sandy and/or rocky soils		NI
T	<i>Populus heterophylla</i>	swamp cottonwood	Wooded swamps, 'bottomlands		OBL
UC	<i>Quercus prinoides</i>	dwarf chestnut oak	Dry, sandy fields and roadsides, woodlands, rocky hillsides and ridges		FACU

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UC	<i>Quercus stellata</i>	post oak	Dry-mesic woodlands, fields, and barrens, often with rocky ridges and slopes		FACU
SC(H)	<i>Rhus aromatica</i>	fragrant sumac	glades, shallow soil		UPL
SC	<i>Rubus cuneifolius</i>	sand blackberry	Fields, rocky pastures and hillsides, clearings		UPL
UC	<i>Sorbus americana</i>	American mountain-ash	Temperate, boreal, and subalpine forests, ridge tops, swamps		FAC
UC	<i>Taxus canadensis</i>	American yew	Forests, predominantly deciduous and mixed evergreen-deciduous types		FACU
UC	<i>Vaccinium stamineum</i>	deerberry	Rocky forests, woodlands, ridges, balds		FACU
UC	<i>Viburnum rafinesquianum</i>	downy arrowwood	NI upland forested slopes, subacidic soils		
SC(H)	<i>Vaccinium vitis-idaea</i> ssp. <i>minus</i>	mountain cranberry	dry shallow, rocky soil, uplands		NI

NOTES:

Total E: 34

Total T: 5

Total SC: 27

Total SC(H): 11

Total CTlisted: 77

Total Div. 2 Fl.Co: 10

Total UC: 43

(uncommon)

Total that may occur in wetlands: 79

Appendix1 - USACE Codes for Wetland Indicator Status

OBL = *Obligate* - occurs only in wetland

FAC = *Facultative species* equally likely to be found in wetland as upland.

UPL = *occurs only in uplands*

FACW = *facultative wetland species* occurs in both wetlands and uplands. More often in wetland

FACU = *facultative upland species*

occurs in both wetlands and uplands

More often in upland

NI = *Not an indicator species* (not listed)

Not on official US Army Corps

(USACE) Northcentral and Northeast

2016 Regional Wetland Plant List.

Frequently, rare plants not on list.

NI-uplands or NI-wetland: status herein based on personal observations and published

Appendix 2 - State Endangerment Codes.

Connecticut: (State of Connecticut Dept. of Energy & Environmental Protection, Bureau of Natural Resources 2016, Public Act 89-224.

E = Endangered - any native species documented by biological research and inventory to be in danger of extirpation throughout all or a significant portion of its range within Connecticut and to have no more than five occurrences in the state, and any species determined to be an "endangered species" pursuant to the federal Endangered Species Act.

T= Threatened - any native species documented by

biological research and inventory to be likely

to become an endangered species within the foreseeable future throughout all or a significant portion of its range within Connecticut and to have no more than nine occurrences in the state, and any species determined to be a "threatened species" pursuant to

Total #species in each color code

Total:

	OBL FAC FACW
NI	wetland habitat 35

	FACU
NI	some wetland habitat 44

	UPL 55
	NI (upland habitat)

Total: species that may occur in wetlands: 79

Appendix 3. "Flora Cons. 2012" explanation.

From: Brumback, W.E. and Jessica Gerke. 2013. Flora Conservanda:

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accounts of species habitats.

Sources of Habitat & Nomenclature Information

1. Haines, Arthur. 2013 Flora Novae-Angliae. New England Wildflower Society. Yale University Press. <https://gobotany.newenglandwild.org/>
2. Arsenault, Matt et al. 2013 The Sedges of Maine University of Maine Press
3. Fernald, Merritt L. 1950. Gray's Manual of Botany. New York
4. Graves et al, Committee of CT Botanical Society, 1910. Bulletin #14. Flower Plants & Ferns Connecticut Geology & Natural History Survey.
5. Dreyer et al, Committee of CT Botanical Society, 2014. Native & Naturalized Vascular Plants of Connecticut Checklist. Memoirs of CBS #5 CT College Arboretum, New London.

NOTE that this is a "living" list, to be checked, modified/ enlarged as additional rare or very uncommon plants are observed by members of CBS in trap rock habitats. If a species recovers it will be deleted.

the federal Endangered Species Act, except for such species determined to be endangered by the Commissioner in accordance with section 4 of **Public Act 89-**

SC = Special Concern - any native plant species or any native nonharvested wildlife species documented by scientific research and inventory to have a naturally restricted range or habitat in the state to be at a low population level, to be in such high demand by man that its unregulated taking would be detrimental to the conservation of its population.

'SC(H) = Special Concern (Historic) - species not documented in CT in the last 20years. probably no longer extant in the state,

UC (uncommon category) is used for species infrequently encountered in Connecticut.

Flora Conservanda categories (Division 2 or Division 1) included if plant is not otherwise listed.

Div. 2 = Regionally Rare Taxa. Within New England these taxa have 20 or fewer current occurrences (observed within the last 20-25 years).

Div. 2(a) = A taxon with slightly more than 20 occurrences in New England that is vulnerable to extirpation due to other important factors (population size and trends, area of occupancy, overall viability geographic distribution, habitat rarity and integrity, and/or degree of protection)