

**Table I-1: Native and Recommended Non-Invasive Plants (with Green Roof listings)**

Type	Latin Name	Common Name	National Wetland Indicator*	Hydrologic Zone**	Inundation Tolerance	Drought Tolerance (N=none; L=low; M=medium; H=high)	Salt Tolerance (N=none; L=low; M=medium; H=high)	Mature Canopy Spread	Mature Height	Light Requirement	Nativity	Commercial Availability (C=container; P=plug; S=seed)	Notes
fern	<i>Adiantum pedatum</i>	maidenhair fern	FAC-	4, 5, 6	no	L	N		1-3'	part shade-full shade	Phila. County	C	slightly acidic soils
fern	<i>Dennstaedtia punctilobula</i>	hayscented fern	UPL	4, 5, 6	no	L	U		1-2'	part sun-shade	Phila. County	C	groundcover; grows easily in poor soils
fern	<i>Dryopteris marginalis</i>	marginal wood fern	FAC+	4, 5, 6	no	L	U		1-2'	part sun-shade	Phila. County	C	evergreen
fern	<i>Onoclea sensibilis</i>	sensitive fern	FACW	(3, 4) 5	saturated	N	U		1-2'	sun-shade	Phila. County	P, S	groundcover; needs consistent moisture
fern	<i>Osmunda cinnamomea</i>	cinnamon fern	FACW	2 (3, 4)	saturated	M	N		2-4'	part sun-shade	Phila. County	P, S	acidic soils
fern	<i>Osmunda regalis</i>	royal fern	OBL	2 (3, 4)	saturated	L	N		2-4'	part sun-shade	Phila. County	P, S	groundcover; acidic soils
fern	<i>Polystichum acrostichoides</i>	Christmas fern	FACU-	6	no	M	U		1-3'	part shade-full shade	Phila. County	C	groundcover; evergreen; silvery fiddleheads
fern	<i>Thelypteris noveboracensis</i>	New York fern	FAC	(3, 4) 5	saturated	M	N		1-2.5'	part shade-shade	Pennsylvania	C	groundcover; delicate fronds spread rapidly in moist areas
forb	<i>Achillea millefolium</i>	yarrow		5, 6			H	2-3'	3'	full sun	US		
forb	<i>Acorus americanus</i>	sweet flag	OBL	3, 4	sat, 0-6"	L	M		4'	full sun	Pennsylvania	P, S	occurs in shallow water of ponds

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forb	<i>Agastache rupestris</i>	threadleaf giant hyssop	FACU	5, 6		M	L	1'	1-2'	full sun	US		
forb	<i>Allium cernuum</i>	nodding onion	FACU	5, 6		H	H	1'	1-2'	full sun-part shade	US		
forb	<i>Anaphalis margaritacea</i>	pearly everlasting		5, 6	no	M	N		1-3'	full sun-part shade	Phila. County	S	attractive white, globular flowers
forb	<i>Anemone canadensis</i>	meadow anemone		2, 3, 4, 5			H	2-3'	1-2'	full sun-part shade	US		
forb	<i>Aquilegia canadensis</i>	columbine	FAC	(4, 5) 6	no	M	N		2'	part-full shade	Phila. County	P, S	flowers with scarlet sepals and yellow petal blades; very adaptable
forb	<i>Asarum canadense</i>	wild ginger	FACU-	4, 5, 6	seasonal	L	N		1'	part-full shade	Phila. County	P, S	groundcover; semi-evergreen; spreads rapidly; small purple/brown flowers
forb	<i>Asclepias incarnata</i>	swamp milkweed	OBL	2 (3, 4)	sat, 0-6"	N	N		2-6'	full sun-part shade	Phila. County	P, S	pink-rose purple flowers in several umbels
forb	<i>Asclepias syriaca</i>	common milkweed	FACU-	5, 6	no	M	N		2-6'	full sun	Phila. County	P, S	fragrant brownish-pink flowers in umbels
forb	<i>Asclepias tuberosa</i>	butterfly-weed		5, 6	no	H	N		2-3'	full sun	Phila. County	P, S	bright orange flowers in umbels
forb	<i>Baptisia australis</i>	blue false indigo		4, 5, 6	seasonal	H	N		3-6'	full sun	Pennsylvania	P, S	showy blue flowers; shrub-like; nitrogen fixer; adaptable
forb	<i>Baptisia tinctoria</i>	wild indigo		5, 6	no	H	N		2-3'	full sun-part shade	Phila. County	P, S	sandy, acidic soils; yellow pea-like flowers; dark blue-green leaves
forb	<i>Bidens aristosa</i>	tickseed sunflower	FACW-	4, 5, 6	seasonal	L	N		1-3'	full sun	US	S	daisy-like yellow flower

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forb	<i>Bidens cernua</i>	bur marigold	OBL	3, 4, 5	saturated	L	N		1-3'	full sun	Phila. County	S	many flowers crowded together into a head
forb	<i>Bidens frondosa</i>	beggars-ticks	FACW	5, 6	no	L	N		1-4'	full sun	Phila. County	S	orange flowers; adaptable
forb	<i>Boltonia asteroides</i>	white doll's daisy	FACW	2, 3, 4, 5	seasonal	H	L	2-4"	2-6'	full sun	US		
forb	<i>Caltha palustris</i>	marsh marigold	OBL	2, 3, 4	sat, 0-6"	N	N		1-2'	full sun-part shade	Phila. County	P, S	ideal for wetland gardens; clump-forming
forb	<i>Chamaecrista fasciculata</i>	partridge-pea	FACU	4, 5, 6	no	M	L		to 3'	full sun	Phila. County	S	showy yellow flowers; found on stream banks
forb	<i>Chelone glabra</i>	white turtlehead	OBL	3, 4, 6	seasonal	L	N		2-3'	full sun-part shade	Phila. County	P, S	snapdragon-type white flowers
forb	<i>Chrysogonum virginianum</i>	green and gold		6	no	N	N		1'	part shade	Pennsylvania	P, S	groundcover; golden daisy-like flowers continue until frost; spreads easily
forb	<i>Cimicifuga racemosa</i>	black snakeroot		4, 5, 6	seasonal	L	N		3-8'	full sun-part shade	Pennsylvania	C	woodland edge plant; white, wand-like blooms
forb	<i>Coreopsis grandiflora/ lanceolata/verticillata</i>	tickseed	N/A	5, 6		H	H	1-3'	1-3'	full sun	US		
forb	<i>Dicentra eximia</i>	wild bleeding heart		5, 6	no	L	N		1.5'	part shade-shade	Pennsylvania	C	mound of finely-cut foliage; delicate pink hearts
forb	<i>Dodecatheon media</i>	shooting star	FACU	5, 6	no	L	N		1-2'	part shade	Phila. County	C	nodding white, pink, or lilac flowers in a terminal umbel
forb	<i>Echinacea purpurea</i>	eastern purple coneflower	N/A	2, 3, 4, 5	seasonal	L	L	1-2'	2-5'	full sun-part shade	US		

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forb	<i>Eupatorium coelestinum</i>	mist flower	FAC	4, 5, 6	seasonal	M	N		2'	full sun-part shade	Pennsylvania	P, S	groundcover; blue flowers on neat foliage; spreads easily
forb	<i>Eupatorium fistulosum</i>	joe-pye-weed	FACW	(3, 4) 5	seasonal	L	N		to 10'	sun-shade	Phila. County	S	many white flowers in large, branching clusters
forb	<i>Eupatorium hyssopifolium</i>	hyssopleaf thoroughwort		5, 6	no	M	M		1-4'	full sun-part shade	Phila. County	P, S	white flowers in flat-topped terminal clusters
forb	<i>Eupatorium maculatum</i>	spotted joe-pye-weed	FACW	(3, 4) 5	seasonal	L	N		to 5'	full sun-part shade	Pennsylvania	P, S	light purple flowers; attracts butterflies
forb	<i>Eupatorium perfoliatum</i>	boneset	FACW+	(2, 3) 4	seasonal	L	U		2-5'	full sun-part shade	Phila. County	P, S	clusters of grayish-white flowers
forb	<i>Eupatorium purpureum</i>	joe-pye-weed	FAC	3 (4, 5)	seasonal	L	U		6-8'	full sun-part shade	Phila. County	P, S	vanilla-scented flowers
forb	<i>Eupatorium rugosum</i>	white snakeroot		5, 6	no	M	M	1'	1-5'	sun-shade	Phila. County	P, S	white flowers in large clusters
forb	<i>Eurybia divaricata</i>	white wood aster		4 (5, 6)	no	M	L	1-2'	1-3'	part-full shade	Phila. County	P, S	white rays, center yellow and reddish-purple
forb	<i>Filipendula rubra</i>	queen of the prairie	FACW	4, 5, 6	seasonal	N	U		4-6'	full sun-part shade	Pennsylvania	S	prefers well-drained moist soils; foamy clusters of blooms
forb	<i>Gaillardia aristata, x grandiflora</i>	blanketflower	N/A	5, 6		M	H		1-3'	full sun	US		
forb	<i>Gaillardia pulchella</i>	Indian blanket			no	H	H		1-2'	full sun-part shade	US		
forb	<i>Geranium maculatum</i>	wild geranium	FACU	4, 5, 6		H	H		1-2'	full sun-part shade	US		

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forb	<i>Helenium autumnale</i>	sneezeweed	FACW+	3, 4, 5	seasonal	L	N		3-5'	full sun-part shade	Phila. County	P, S	showy yellow daisy-like flowers; moist meadows; stream banks
forb	<i>Helianthus angustifolius</i>	swamp sunflower	FACW	3, 4, 5	seasonal	M	N		6-8'	full sun	Pennsylvania	S	yellow flowers with maroon centers
forb	<i>Helianthus giganteus</i>	swamp sunflower	FACW	3, 4, 5	seasonal	L	N		5-10'	full sun-part shade	Phila. County	S	yellow flowers on red-purple stems
forb	<i>Heliopsis helianthoides</i>	ox-eye		3, 4, 5, 6	seasonal	M	U		2-5'	full sun-part shade	Phila. County	P, S	pale yellow cone-shaped rays with yellow disks
forb	<i>Heuchera americana</i>	alumroot		5, 6	no	M	U		1-1.5'	full sun-part shade	Phila. County	P, S	groundcover; white airy flowers
forb	<i>Hibiscus moscheutos</i>	swamp mallow	OBL	2, 3	sat, 0-12"	N	M		3-7'	full sun-part shade	Phila. County	P, S	large pink, purplish, or white flowers with a dark center
forb	<i>Houstonia caerulea</i>	bluets	FACU	5, 6	no	M	U		2-8'	full sun-part shade	Phila. County	S	delicate pale blue flowers with yellow centers
forb	<i>Iris versicolor</i>	blue-flag iris	OBL	2 (3, 4)	sat, 0-6"	N	L		1-3'	full sun	Phila. County	P, S	blue-violet flowers
forb	<i>Liatris microcephala</i>	Appalachian blazing star				M			1-5'	full sun	US		
forb	<i>Liatris spicata</i>	spiked gay-feather	FAC+	4, 5	seasonal	L	L		4-5'	full sun	Phila. County	P, S	easy to grow; tall spikes of lavender blooms
forb	<i>Lillium superbum</i>	Turk's-cap lily	FACW+	4, 5	seasonal	N	U		3-8'	full sun	Phila. County	S	nodding flowers, orange or orange-red with spots
forb	<i>Lobelia cardinalis</i>	cardinal flower	FACW+	3, 4	saturated	M	N		2-5'	part-full shade	Phila. County	P, S	brilliant scarlet red flowers

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forb	<i>Lobelia siphilitica</i>	great-blue lobelia	FACW+	3, 4	saturated	N	U		1-3'	full sun-part shade	Phila. County	P, S	blue-white flowers
forb	<i>Maianthemum racemosum</i>	false-Solomon's Seal		5, 6	no	L	U		1-3'	shade	Phila. County	C	creamy-white flowers in branched, pyramidal clusters
forb	<i>Mertensia virginica</i>	Virginia bluebells	FACW	5, 6	no	L	N		1-2'	full-part shade	Phila. County	C	woodland flower; entire plant dies back by mid-summer
forb	<i>Mimulus ringens</i>	Allegheny monkey flower	OBL	3, 4	saturated	N	U		1-3'	full sun-part shade	Phila. County	P, S	blue-violet flowers
forb	<i>Monarda bradburiana</i>	eastern beebalm						2-3'	1-2'	full sun-part shade	US		
forb	<i>Monarda didyma</i>	bee-balm	FAC+	(4, 5) 6	no	N	U		2-5"	full sun	Phila. County	C	red flowers, scented leaves
forb	<i>Monarda fistulosa</i>	wild bergamot	UPL	5, 6	no	N	L		2-4"	full sun-part shade	Phila. County	P, S	pink to lavender flowers, scented leaves
forb	<i>Monarda punctata</i>	horsemint	UPL	6	no	M	U		2-3"	full sun	Pennsylvania	P, C	pink, showy bracts and yellow flowers with purple spots
forb	<i>Oenothera fruticosa</i>	sundrops	FAC	5, 6	no	L	H		1-2"	full sun	Phila. County	P, S	bright yellow flowers in spike or racemes
forb	<i>Peltandra virginica</i>	arrow-arum	OBL	(1, 2) 3	sat, 0-1'	N	L		1-2'	full sun	Phila. County	P, S	emergent aquatic; resembles an arrowhead
forb	<i>Penstemon digitalis</i>	white beardtongue	FAC	5, 6	no	H	M		2-4'	full sun-part shade	Phila. County	P, S	white with purple tinged tubular flowers
forb	<i>Penstemon hirsutus</i>	hairy beardtongue				H			1.25-2.75'	full sun-part shade	Pennsylvania		corolla pale violet-purple with whitish lobes

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forb	<i>Phedimus spurius</i>	creeping stonecrop			no	M		2-3'	2-6'	part sun-shade	non-native		petals pink or white; creeping with erect stem tips
forb	<i>Phedimus ellacombianus</i>	yellow stonecrop				H		0.25-0.50'	to 0.5'	full sun-part shade	non-native		groundcover; yellow, showy flowers
forb	<i>Phedimus kamtschaticum</i>	orange stonecrop							to 3dm	full sun	non-native		flowers yellow; decumbent (lying along the ground, with extremity curving upward)
forb	<i>Phedimus kamtschaticus var. floriferum</i>	Weihenstephaner Gold								full sun	non-native		
forb	<i>Phediums middendorffianus</i>	stonecrop								full sun	non-native		succulent perennial herb with fleshy, flat, or round leaves; flowers yellow, white, or red
forb	<i>Phedimus takesimensis</i>	Takeshima stonecrop				H		0.75'	to 0.5'	full sun-part shade	non-native		groundcover; flowers yellow;
forb	<i>Phemeranthus calycinus (syn. Talinum calycinus)</i>	Fame Flower			no			0.75-1'	to 0.75'	full sun	US		flowers rose pink or rose red, open at noon until mid-afternoon
forb	<i>Phlox maculata</i>	wild sweet-william	FACW	4, 5	seasonal	M	N		1-3'	full sun	Phila. County	P, S	deep pink to rose-purple flower clusters
forb	<i>Phlox paniculata</i>	summer phlox	FACU	4, 5, 6	no	M	U		2-6'	full sun-part shade	Phila. County	P	magenta pink flower clusters
forb	<i>Phlox subulata</i>	moss phlox		6	no	M	N		3-5'	full sun-part shade	Pennsylvania	C	groundcover; evergreen; forms mats; good for hillsides and rocky areas
forb	<i>Physostegia virginiana</i>	obedient plant	FAC+	4, 5	seasonal	L	U		1-5'	full sun-part shade	Phila. County	P, S	tall graceful plant with pink tubular flowers; very tolerant

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forb	<i>Polygonatum biflorum</i>	Solomon's Seal	FACU	5, 6	no	L	U		1-3'	full-part shade	Phila. County	C	greenish bell-shaped flowers hang from leaf axils in pairs
forb	<i>Polygonum pensylvanicum</i>	Pennsylvania smartweed	FACW	2 (3, 4)	sat, 0-6"	M	L		to 6'	full sun	Pennsylvania	S	attractive pink flowers; great species for disturbed sites and stream banks
forb	<i>Pontederia cordata</i>	pickerel-weed	OBL	2 (3, 4)	saturated	N	L		1-3'	full sun	Phila. County	P, C	heart-shaped leaves with purple flowers in a spike
forb	<i>Pycnanthemum virginianum</i>	Virginia mountain mint	FAC	2, 3, 4, 5	seasonal	M	L	2'	2-3'	full sun	US		
forb	<i>Ruellia humilis</i>	fringeleaf wild petunia	FACU	5, 6		H	L	1-2'	1-2'	full sun-part shade	US		
forb	<i>Rudbeckia fulgida</i>	early coneflower	FAC	5, 6	no	M	U		1.5'	full sun-part shade	Pennsylvania	P, S	yellow flowers with black eyes
forb	<i>Rudbeckia hirta</i>	black-eyed susan	FACU-	4, 5, 6	no	M	N		1-3'	full sun-part shade	Pennsylvania	P, S	flowers from seed in the first year
forb	<i>Rudbeckia laciniata</i>	tall coneflower	FACW	4, 5	seasonal	H	N		5-10'	full sun-part shade	Pennsylvania	P, S	yellow flowers with drooping rays and green eyes; moist thickets; swamps
forb	<i>Rudbeckia triloba</i>	three-lobed coneflower	FACU	5, 6	no	M	U		1-3'	full sun-part shade	Pennsylvania	P, S	yellow flowers with large, black eyes; moist to dry soils
forb	<i>Sagittaria latifolia</i>	arrowhead	OBL	1, 2, 3	sat, 0-2'	N	N		1-4'	full sun	Phila. County	P, S	emergent aquatic, tubers are edible
forb	<i>Saururus cernuus</i>	lizard's tail	OBL	2, 3, 4	sat, 0-1'	N	U		2-4'	sun-part shade	Phila. County	P, S	emergent aquatic, fragrant white flowers
forb	<i>Sedum ternatum</i>	wild stone crop		6	no	M	U		3-8'	full sun-part shade	Phila. County	P, S	groundcover, like rocky banks

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forb	<i>Sedum x</i>	stone crop	N/A	4, 5, 6	seasonal	H	H	1-2'	1-2'	full sun	US		pink bloom color
forb	<i>Sedum aizoon</i>	stonecrop						1.5-2'	1-1.5'	full sun	non-native		
forb	<i>Sedum acre</i>	moss stonecrop				M	H	1-2'	to 4"	full sun-part shade	non-native		flowers yellow; evergreen, creeping, mat-forming with erect flowering stems
forb	<i>Sedum album</i>	white stonecrop				M		1-1.5'	to 6"	full sun-part shade	non-native		flowers white; mat-forming from creeping steams with erect flowering stems
forb	<i>Sedum montanum ssp. Orientale</i>	Spanish stonecrop				M				full sun-part shade			
forb	<i>Sedum reflexum</i>	blue spruce						1-1.5'	to 0.75'	full sun	US		
forb	<i>Sedum rupestre 'Angelina'</i>	stonecrop				M	M	1-2'	to 6"	full sun			
forb	<i>Sedum sexangulare</i>	tasteless stonecrop				M		1-2'	to 6"	full sun			
forb	<i>Sedum hybridum 'Immergrunchen'</i>	hybrid stonecrop								full sun-part shade			
forb	<i>Senecio aureus</i>	golden ragwort	FACW	4, 5	seasonal	L	N		1-3'	sun-shade	Phila. County	P, S	groundcover; flowers in terminal clusters with many golden rays
forb	<i>Solidago bicolor</i>	silver-rod		5, 6	no	M	U		1-3'	part sun-shade	Phila. County	S	only native white goldenrod
forb	<i>Solidago nemoralis</i>	gray goldenrod		6	no	M	N		1-3'	full sun-part shade	Phila. County	S	dry, sterile soils; yellow flower clusters

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forb	<i>Solidago odora</i>	sweet goldenrod		6	no	M	U		2-4'	full sun-part shade	Phila. County	S	leaves smell and taste like licorice
forb	<i>Solidago rugosa</i>	wrinkle-leaf goldenrod	FAC	3, 4, 5	no	M	N		3-7'	sun-part shade	Phila. County	P, S	yellow flowers
forb	<i>Solidago sempervirens</i>	sea-side goldenrod	FACW	3, 4, 5	seasonal	H	M		3-5'	full sun	Phila. County	P, S	showy yellow flowers
forb	<i>Symphotrichum cordifolius</i>	blue wood aster		5, 6	no	M	L		1.5-4'	part-full shade	Phila. County	P, S	blue-violet to rose disk and ray flowers
forb	<i>Symphotrichum novae-angliae</i>	New England aster	FAC	(3, 4) 5	seasonal	M	L		2-8'	full sun-part shade	Phila. County	P, S	rays bright pink or purple
forb	<i>Symphotrichum novi-belgii</i>	New York aster	FACW+	(3, 4) 5	seasonal	L	N		1-4'	full sun	Phila. County	P, S	violet to blue rays with yellow disks
forb	<i>Tiarella cordifolia</i>	foamflower	FAC-	5, 6	no	L	U		1'	part sun-full shade	Pennsylvania	P, S	groundcover; spreads rapidly; leaves are evergreen; flowers are small and white
forb	<i>Tradescantia virginiana</i>	spiderwort	FACU	5, 6	no	M	N		1-3'	full sun-part shade	Phila. County	P, S	long blooming; deep blue-purple or white flower; dry to moist soils
forb	<i>Vallisneria americana</i>	wild celery	OBL	1	sat, 1' min.	N	N		1'	full sun-part shade	Pennsylvania	C	tolerant of murky water and high nutrient loads
forb	<i>Verbena hastata</i>	blue vervain	FACW+	3, 4	saturated	N	U		2-6'	full sun	Phila. County	P, S	violet blue flowers in erect spikes
forb	<i>Veronia novaborensis</i>	New York ironweed	FACW+	3, 4	saturated	M	N		5-6'	full sun	Phila. County	P, S	30-50 small rose-purple flowers on a head
forb	<i>Zizia aurea</i>	golden zizia	FAC	5, 6	no	L	H		2-3'	full sun-part shade	Phila. County	C	umbels of yellow flowers; all leaves are compound

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grass	<i>Andropogon gerardii</i>	big bluestem	FACW+	(4, 5) 6	no	H	L		3-6'	full sun	Phila. County	P, S	warm-season grass
grass	<i>Andropogon virginicus</i>	broom sedge	FACU	5, 6	no	H	N		3-8'	full sun-part shade	Phila. County	P, S	warm-season grass
grass	<i>Andropogon tenarius</i>	splitbeard bluestem				M		1-2'	2-3'	full sun-part shade	Pennsylvania		
grass	<i>Bouteloua curtipendula</i>	side oats grama							1-3.5'	full sun	Pennsylvania		warm-season grass; dry, rocky, or sandy sites
grass	<i>Bouteloua gracilis</i>	blue grama						1.5-2'	to 2'	full sun	non-native		
grass	<i>Chasmanthium latifolium</i>	river oats	FACU	4, 5	seasonal	M	N		2-3'	full sun-part shade	Pennsylvania	P, S	groundcover; resembles bamboo; dangling "oats"
grass	<i>Danthonia spicata</i>	poverty grass		6	no	L	U		1-3'	full sun	Pennsylvania	P, S	usually found in poor, dry soils; very tolerant; cool-season
grass	<i>Distichlis spicata</i>	seashore saltgrass	FACW+	5, 6	no	M	H		1'	full sun	Phila. County	P, S	especially useful in saline wetlands; dense roots act as a pollutant filter
grass	<i>Eleocharis palustris</i>	creeping spike-rush	OBL	2, 3, 4	sat, 0-6"	L	L		1-2'	full sun	Pennsylvania	P, S	forms dense tufts; roots fix nitrogen; important food and cover for waterfowl
grass	<i>Elymus canadensis</i>	Canada rye	FACU+	4, 5, 6	seasonal	M	M		3-6'	full sun-part shade	Phila. County	S	cool season, clump-forming grass with wheat-like spikes that remain until winter
grass	<i>Elymus virginicus</i>	Virginia wild rye	FACW-	4, 5	seasonal	M	N		2-3'	part shade-shade	Phila. County	P, C	spreads easily; good for erosion control; very tolerant

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grass	<i>Eragrostis spectabilis</i>	purple lovegrass	UPL	5, 6	no	H	N		1-2.5'	full sun	Phila. County	P, S	groundcover; delicate purple flowers seem to float above the plant
grass	<i>Glyceria grandis</i>	American mannagrass	OBL	2, 3, 4	seasonal	N	U		to 5'	full sun	Phila. County	S	decorative cool-season bunchgrass; purple seed heads
grass	<i>Glyceria striata</i>	fowl mannagrass	OBL	(2, 3) 4	seasonal	L	N		2-4'	full sun-part shade	Phila. County	P, S	clump forming
grass	<i>Hordeum jubatum</i>	foxtail barley	FAC	5, 6	no	M	M		1-3'	full sun	Phila. County	S	soft and airy appearance; compaction resistant; often found on roadsides
grass	<i>Leersia oryzoides</i>	rice cutgrass	OBL	(2, 3) 4	sat, 0-6"	L	N		2-5'	full sun	Phila. County	P, S	single flower clusters slightly drooping
grass	<i>Panicum dichotomiflorum</i>	smooth panic-grass	FACW-	4, 5, 6	seasonal	N	M		5-7'	full sun-part shade	Phila. County	S	green or purple inflorescence
grass	<i>Panicum virgatum</i>	switch-grass	FAC	(4, 5) 6	seasonal	M	M		3-6'	full sun-part shade	Phila. County	P, S	groundcover; bluish-green foliage; purple panicle of flowers
grass	<i>Schizachyrium scoparium</i>	little bluestem	FACU	6	no	H	N		2-3'	full sun	Phila. County	P, S	warm-season grass, tolerates poor, dry soils
grass	<i>Sorghastrum nutans</i>	indian grass	UPL	5, 6	no	M	M		5-7'	full sun	Phila. County	P, S	warm-season grass
grass	<i>Sporobolus asper</i>	tall dropseed	UPL			M			2-4'		Pennsylvania		warm-season grass
grass	<i>Sporobolus heterolepis</i>	prairie dropseed	UPL	4, 5, 6	seasonal	L	L	2-3'	2-4'	full sun	US		
grass	<i>Tridens flavus</i>	purpletop	FACU	6	no	H	N		2-5'	full sun	Phila. County	P, S	groundcover; purple drooping branches

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grass	<i>Typha angustifolia</i>	narrow-leaved cattail	OBL	1 (2, 3)	sat, 0-1'	L	M		to 6'	full sun	Pennsylvania	P, S	provides food and cover for geese, ducks, and spawning fish
grass	<i>Typha latifolia</i>	broad-leaved cattail	OBL	1, 2, 3	sat, 0-1'	N	L		to 10'	full sun-part shade	Pennsylvania	P, S	provides food and cover for geese, ducks, and spawning fish
grass	<i>Zizania aquatica</i>	wild rice	OBL	2, 3, 4	saturated	N	L		to 9'	full sun	Phila. County	S	yellow-red edible grains; found in tidal and non-tidal marshes; requires still water
grass-like	<i>Alisma subcordatum</i>	southern water-plantain	OBL	2	sat, 0-1'	N	N		to 4'	full sun	Phila. County	S	emergent aquatic, slow moving water
grass-like	<i>Carex crinita</i>	finged sedge	OBL	2 (3, 4)	saturated	L	N		to 4'	full sun-part shade	Phila. County	P, C	groundcover; emergent aquatic, distinctive sedge
grass-like	<i>Carex lurida</i>	lurid sedge	OBL	2, 3, 4	saturated	L	N		to 3'	full sun-part shade	Phila. County	P, C	seed heads resemble small sweetgum fruits; remains attractive in warm temps
grass-like	<i>Carex pensylvanica</i>	Pennsylvania sedge		5, 6	seasonal	M	N		3-15"	part-full shade	Phila. County	P, C	slow-spreading
grass-like	<i>Carex scoparia</i>	broom sedge	FACW	3 (4) 5	sat, 0-6"	N	L		1-3'	full sun	Phila. County	P, S	green flowers in clusters at the top of the stem
grass-like	<i>Carex stricta</i>	tussock sedge	OBL	1 (2, 3) 4	sat, 0-6"	L	N		to 3'	full sun	Phila. County	P, C	emergent aquatic
grass-like	<i>Carex vulpinoidea</i>	fox sedge	OBL	1, 2 (3) 4	sat, 0-6"	L	N		to 3'	full sun-part shade	Phila. County	P, C	seed heads resemble a fox's tail
grass-like	<i>Juncus effusus</i>	soft rush	FACW+	(2, 3) 4	sat, 0-1'	M	L		2-3'	full sun	Phila. County	P, C	clump forming

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grass-like	<i>Juncus gerardii</i>	black-grass	FACW+	3, 4	sat, 0-6"	N	H		1-2'	full sun-part shade	Phila. County	P, C	purplish to burgundy flower clusters
grass-like	<i>Pontederia cordata</i>	pickerel-weed	OBL	1, 2, 3	sat, 0-1'	N	L		1-3'	full sun	Phila. County	S	emergent aquatic, heart-shaped leaves, purple flowers
grass-like	<i>Schoenoplectus (Scirpus) pungens</i>	three-square	FACW+	2, 3, 4	sat, 0-6"	N	H		1-3'	full sun	Phila. County	P, S	good bank stabilizer; erosion control; spreads easily
grass-like	<i>Scirpus cyperinus</i>	wool-grass	FACW+	2 (3, 4)	saturated	L	N		to 6'	full sun	Phila. County	P, C	forms dense tussocks; large inflorescence
grass-like	<i>Scirpus polyphyllus</i>	bulrush	OBL	2, 3, 4	saturated	N	U		to 4'	shade	Phila. County	S	numerous leaves along stem, flowers at the top of the stem
grass-like	<i>Sparganium americanum</i>	bur-reed	OBL	(2, 3) 4	sat, 0-6"	N	N		1-3'	full sun	Phila. County	P, C	emergent aquatic
grass-like	<i>Sparganium eurycarpum</i>	giant bur-reed	OBL	1 (2, 3)	sat, 0-12"	N	N		2-4'	full sun	Phila. County	P, C	emergent aquatic
shrub	<i>Alnus serrulata</i>	smooth alder	OBL	(1, 2) 3	sat, 0-3"	L	N	6-10'	6-10'	full sun	Phila. County	C	stabilizes stream banks, roots fix nitrogen
shrub	<i>Amelanchier canadensis</i>	serviceberry	FAC	4, 5, 6	seasonal	L	H	15-20'	6-20'	full sun-part shade	Phila. County	C	compaction sensitive
shrub	<i>Aronia arbutifolia</i>	red chokeberry	FACW	3 (4, 5)	seasonal	L	M	3-4'	6-10'	full sun-part shade	Phila. County	C	compaction resistant, bank stabilizer, white flowers
shrub	<i>Aronia melanocarpa</i>	black chokeberry	FAC	3 (4, 5)	seasonal	M	M	3-6'	5-10'	full sun-part shade	Phila. County	C	compaction tolerant, white flowers
shrub	<i>Baccharis halimifolia</i>	groundsel-tree	FACW	4, 5, 6	seasonal	L	M	6-12'	6-12'	full sun	Phila. County	C	compaction resistant

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shrub	<i>Cephalanthus occidentalis</i>	buttonbush	OBL	1 (2, 3)	sat, 0-3"	M	M	4-8'	3-6'	full sun	Phila. County	C	compaction tolerant, interesting flowers
shrub	<i>Chionanthus virginicus</i>	fringetree	FAC+	4, 5	seasonal	M	N	12-20'	12-25'	sun-shade	Phila. County	C	white, pendulous, fragrant flowers; gold fall color; very adaptable; acidic soils
shrub	<i>Clethra alnifolia</i>	sweet pepperbush	FAC+	3, 4, 5	seasonal	L	M	4-6'	3-8'	full sun-shade	Phila. County	C	compaction tolerant, acidic soils
shrub	<i>Comptonia peregrina</i>	sweet-fern		6	no	H	N	4-8'	2-5'	full sun-part shade	Pennsylvania	C	very adaptable; aromatic leaves; nitrogen fixer
shrub	<i>Cornus amomum</i>	silky dogwood	FACW	(3, 4) 5	seasonal	L	N	8'	6-10'	full sun-part shade	Phila. County	C	compaction tolerant, bank stabilizer, white flowers
shrub	<i>Cornus racemosa</i>	gray dogwood	FAC-	3 (4, 5)	seasonal	M	N	10-15'	10-15'	full sun-shade	Phila. County	C	compaction tolerant, very adaptable, white flowers
shrub	<i>Cornus sericea</i>	red-osier dogwood	FACW+	(3, 4) 5	seasonal	L	N	8-12'	7-9'	full sun	Phila. County	C	compaction tolerant, stream bank stabilizer, red bark
shrub	<i>Corylus americana</i>	hazelnut	FACU-	4 (5, 6)	no	M	N	8-13'	8-10'	full sun-light shade	Phila. County	C	compaction tolerant, edible nuts
shrub	<i>Dasiphora fruticosa</i>	bush cinquefoil	N/A	4, 5, 6	seasonal	H	H	3-5'	2-4'	full sun-part shade	US		
shrub	<i>Diervilla lonicera</i>	northern bush honeysuckle	N/A	Outer		H	L	1-4'	1-4'	full sun-part shade	US		
shrub	<i>Euonymus americanus</i>	hearts-a-burstin'	FAC	4, 5, 6	seasonal	N	N	4-6'	4-6'	full sun-part shade	Phila. County	C	small brown flowers; fuchsia hearts; green stems add winter interest
shrub	<i>Hamamelis virginiana</i>	witch-hazel	FAC-	4 (5, 6)	no	L	N	15-20'	20-30'	full sun-shade	Phila. County	C	ornamental, unusual yellow flowers

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shrub	<i>Hydrangea arborescens</i>	wild hydrangea	FACU	3, 4, 5	no	N	U	3-5'	3-5'	part-full shade	Phila. County	P, S	creamy white flowers; dry to moist soil
shrub	<i>Hypericum densiflorum, prolificum</i>	St. John's wort	FACW	2, 3, 4, 5	seasonal	L	H	1-5'	1-6'	full sun-part shade	US		
shrub	<i>Ilex verticillata</i>	winterberry	FACW+	(3, 4) 5	seasonal	L	N	3-12'	6-12'	full sun-part shade	Phila. County	C	compaction resistant, red berries persist through winter
shrub	<i>Itea virginica</i>	Virginia sweet spire	OBL	3, 4, 5	seasonal	L	N	3-5'	3-9'	sun-shade	Pennsylvania	C	fragrant white tassels; good fall color
shrub	<i>Juniperus communis</i>	juniper		6	no	H	N	7-13'	5-10'	full sun	Phila. County	C	mounded shrub; deep taproot; high wildlife value; evergreen
shrub	<i>Leucothoe racemosa</i>	swamp sweetbells	FACW	3, 4, 5	seasonal	L	L	3-8'	3-8'	part-full shade	Pennsylvania	C	white drooping flowers; evergreen leaves; moist soil
shrub	<i>Lindera benzoin</i>	spicebush	FACW-	3, 4, 5	seasonal	L	M	6-12'	6-12'	full sun-shade	Phila. County	C	compaction tolerant, drought sensitive
shrub	<i>Lonicera sempervirens</i>	trumpet honeysuckle	FACU	6	no	L	N	3-6'	10-20'	full sun-part shade	Phila. County	P, S	vine with bright orange trumpet-shaped flowers; flood intolerant
shrub	<i>Myrica pensylvanica</i>	bayberry	FAC	(3, 4) 5	seasonal	H	M	5-9'	9'	full sun	Phila. County	C	compaction resistant, roots fix nitrogen, winter fruits
shrub	<i>Parthenocissus quinquefolia</i>	Virginia creeper	FACU	4, 5, 6	seasonal	H	M	5-10'	30-50'	full sun-part shade	Phila. County	C	very adaptable vine; compaction resistant; beautiful red fall color
shrub	<i>Physocarpus opulifolius</i>	ninebark	FACW	3, 4, 5	seasonal	H	N	4-6'	5-10'	full sun	Phila. County	C	compaction resistant
shrub	<i>Rhododendron maximum</i>	rosebay	FAC	3, 4, 5	seasonal	H	N	4-25'	4-25'	full sun-part shade	Phila. County	C	acidic soil, compaction sensitive

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shrub	<i>Rhododendron periclymenoides</i>	pinxterbloom azalea	FAC	4, 5, 6	seasonal	M	N	4-7'	4-6'	full sun-part shade	Phila. County	C	pink flowers open before leaves are out; moist, acid, well-drained soil
shrub	<i>Rhododendron viscosum</i>	swamp azalea	FACW+	(3, 4) 5	seasonal	M	N	6-12'	5-8'	full sun-part shade	Phila. County	C	compaction resistant, showy pink and white flowers
shrub	<i>Rhus aromatica</i>	fragrant sumac		5, 6	no	M	U	6-10'	2-4'	full sun-part shade	Pennsylvania	C	spicy smelling leaves; good fall color
shrub	<i>Rhus copallina</i>	winged sumac		6	no	H	M	10-20'	7-15'	full sun	Phila. County	C	compaction sensitive; flood intolerant
shrub	<i>Rhus glabra</i>	smooth sumac		4 (5, 6)	no	M	N	9-15'	9-15'	full sun	Phila. County	C	grows well in poor soils; flood and compaction intolerant
shrub	<i>Rhus typhina</i>	staghorn sumac		6	no	H	M	15-25'	15-25'	full sun	Phila. County	C	flood intol., compaction sensitive
shrub	<i>Rosa carolina</i>	pasture rose	UPL	5, 6	no	H	M	5-10'	4-6'	full sun	Phila. County	C	compaction tolerant; flood intolerant
shrub	<i>Rosa palustris</i>	swamp rose	OBL	2 (3, 4)	saturated	L	N	4-6'	6'	full sun	Phila. County	C	easy to establish
shrub	<i>Rosa virginiana</i>	wild rose	FAC	3 (4, 5)	seasonal	L	N	3-5'	4-6'	full sun	Phila. County	C	very pretty; low maint; tolerant of poor soils
shrub	<i>Rubus allegheniensis</i>	common blackberry	FACU-	4, 5, 6	no	H	N	6-12'	3-6'	full sun-part shade	Phila. County	C	compaction tolerant; edible fruit
shrub	<i>Rubus occidentalis</i>	blackcap raspberry		6	no	M	N	5-11'	3-4'	full sun-part shade	Pennsylvania	C	tasty fruits; purple & white stems provide winter interest; forms thickets
shrub	<i>Salix discolor</i>	pussy-willow	FACW	3, 4, 5	seasonal	L	N	10-12'	10-15'	full sun	Phila. County	C	compaction resistant, roots easily from cuttings

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shrub	<i>Salix exigua</i>	sandbar willow	OBL	3, 4, 5	seasonal	M	L	10-15'	10'	full sun	Phila. County	C	found on sandy, gravelly bars or shores
shrub	<i>Salix sericea</i>	silky willow	OBL	3, 4, 5	seasonal	L	N	10-15'	10'	full sun-part shade	Phila. County	C	found in swamps, bogs, and on stream banks
shrub	<i>Sambucus canadensis</i>	American elder	FACW	(3, 4) 5, 6	seasonal	M	M	5-12'	5-12'	full sun-shade	Phila. County	C	compaction resistant
shrub	<i>Spiraea alba var. latifolia, latifolia</i>	white meadowsweet	FAC+	2, 3, 4, 5, 6	seasonal	H	L	3-4'	3-5'	full sun	US		
shrub	<i>Spiraea tomentosa</i>	steeplebush	FACW-	4, 5, 6	seasonal	M	N	3-6'	3-6'	full sun	Phila. County	C	compaction resistant
shrub	<i>Vaccinium angustifolium</i>	low-bush blueberry	FACU-	4, 5, 6	seasonal	H	N	2'	1-3'	full sun-part shade	Phila. County	C	compaction sensitive; very sweet berries; very flood tolerant; needs acidic soil
shrub	<i>Vaccinium corymbosum</i>	highbush blueberry	FACW-	3, 4, 5, 6	seasonal	L	H	8-12'	6-12'	full sun-part shade	Phila. County	C	compaction resistant, acidic soils
shrub	<i>Vaccinium pallidum</i>	early low blueberry	FACU-	4, 5, 6	seasonal	H	U	2-3'	1-3'	full sun-part shade	Phila. County	C	white flowers; sweet edible fruit; wildlife value; compaction sensitive, very flood tolerant
shrub	<i>Vaccinium stamineum</i>	deerberry	FACU	6	no	H	N	5-10'	5-10'	full sun-part shade	Pennsylvania	C	white flowers; edible fruit; high wildlife value; dry to moist soil
shrub	<i>Viburnum acerifolium</i>	maple-leaved viburnum	UPL	5, 6	no	H	N	2-4'	4-6'	full sun-part shade	Phila. County	C	creamy white flowers; blue berries; dry to moist soil; wildlife value
shrub	<i>Viburnum dentatum</i>	southern arrow-wood	FAC	3 (4, 5)	seasonal	M	M	6-12'	6-12'	full sun-part shade	Phila. County	C	compaction tolerant; heat resistant
shrub	<i>Viburnum lentago</i>	nannyberry	FAC	4, 5, 6	no	H	N	6-12'	15-18'	full sun-part shade	Phila. County	C	white flowers; sweet black berries; very adaptable; high wildlife value

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shrub	<i>Viburnum nudum</i>	possum haw	OBL	3, 4, 5	seasonal	L	N	12-20'	12-20'	full sun-part shade	Phila. County	C	white flowers; glossy leaves; high wildlife value; compaction resistant
shrub	<i>Viburnum prunifolium</i>	black haw	FACU	4, 5, 6	no	M	N	6-12'	15-20'	full sun-part shade	Phila. County	C	white flowers; black berries; very adaptable; high wildlife value
shrub	<i>Viburnum trilobum</i>	American cranberry	FACW	3, 4, 5	seasonal	M	N	8-12'	8-12'	full sun-part shade	Phila. County	C	white flowers; edible red berries; moist to boggy soil; high wildlife value
tree	<i>Acer rubrum</i>	red maple	FACW	3 (4, 5)	seasonal	L	N	30-50'	40-60'	sun-shade	Phila. County	C	tolerant of many soils, tolerates acidic soil, rapid growth; suitable street tree
tree	<i>Acer saccharinum</i>	silver maple	FACW	3 (4, 5)	seasonal	L	N	35-70'	50-70'	full sun-part shade	Phila. County	C	very tolerant of poor soils
tree	<i>Acer saccharum</i>	sugar maple	FACU	4, 5, 6	no	M	N	30-60'	60-75'	full sun-part shade	Phila. County	C	intolerant of crowding, pollution, and drought
tree	<i>Amelanchier laevis</i>	smooth serviceberry		4, 5, 6	seasonal	M	M	15-40'	25'	full sun-part shade	Phila. County	C	compaction sensitive
tree	<i>Asimina triloba</i>	pawpaw	FACU+	4, 5, 6	no	L	N	15-30'	15-20'	full sun-part shade	Phila. County	C	unusual maroon flower; very large leaves; moist soil; compaction sensitive
tree	<i>Betula lenta</i>	sweet birch	FACU	4, 5, 6	seasonal	M	N	40-60'	40-55'	full sun-part shade	Phila. County	C	sensitive to soil compaction
tree	<i>Betula nigra</i>	river birch	FACW	(3, 4) 5	seasonal	L	N	40-60'	40-70'	full sun	Phila. County	C	good bank stabilizer; acidic soils
tree	<i>Betula populifolia</i>	gray birch	FAC	(4, 5) 6	seasonal	M	N	10-20'	20-40'	full sun	Phila. County	C	poor soils, short lived tree, early successional species

Type	Latin Name	Common Name	National Wetland Indicator*	Hydrologic Zone**	Inundation Tolerance	Drought Tolerance (N=none; L=low; M=medium; H=high)	Salt Tolerance (N=none; L=low; M=medium; H=high)	Mature Canopy Spread	Mature Height	Light Requirement	Nativity	Commercial Availability (C=container; P=plug; S=seed)	Notes
tree	<i>Carpinus caroliniana</i>	hornbeam	FAC	3 (4, 5) 6	seasonal	L	N	20-35'	50-75'	heavy shade	Phila. County	C	compaction sensitive
tree	<i>Carya cordiformis</i>	bitternut hickory	FACU+	5, 6	seasonal	H	N	50-75'	50-75'	full sun-part shade	Phila. County	C	dry, moist, or wet soil; high wildlife value; good fall color; compaction tolerant
tree	<i>Carya glabra</i>	pignut hickory	FACU-	4 (5, 6)	no	H	N	35-50'	50-60'	full sun-part shade	Phila. County	C	compaction sensitive, warm south-facing slopes
tree	<i>Carya ovata</i>	shagbark hickory	FACU	4 (5, 6)	no	M	N	50-70'	75-100'	full sun-part shade	Phila. County	C	compaction tolerant, distinctive peeling bark
tree	<i>Celtis occidentalis</i>	hackberry	FACU	4, 5, 6	no	H	M	40-60'	40-60'	full sun-part shade	Phila. County	C	fruit persists into winter; deep-rooting; good street tree
tree	<i>Cercis canadensis</i>	eastern redbud	FACU-	4, 5, 6	no	H	N	25-35'	20-30'	full sun-part shade	Phila. County	C	not good in acidic soils; nitrogen fixer
tree	<i>Chamaecyparis thyoides</i>	Atlantic white cedar	OBL	(1, 2) 3, 4	saturated	N	N	20'	50'	part sun-shade	Pennsylvania	C	usually found in areas with fluctuating water tables
tree	<i>Cornus florida</i>	flowering dogwood	FACU-	4, 5, 6	no	M	N	15-30'	30-50'	sun-shade	Phila. County	C	understory tree; nice ornamental
tree	<i>Crataegus crus-galli</i>	cockspur hawthorn	FACU	5, 6	seasonal	H	M	20-25'	20-30'	full sun-part shade	Phila. County	C	keeps berries all winter; tolerant of many soils
tree	<i>Crataegus pruinosa</i>	frosted hawthorn		4, 5	seasonal	M	U	20-24'	24'	full sun-part shade	Pennsylvania	C	white flowers; adaptable; high wildlife value
tree	<i>Fagus grandifolia</i>	American beech	FACU	4 (5, 6)	no	M	N	40-80'	50-70'	sun-shade	Phila. County	C	compaction intolerant; intolerant of poorly-drained soils
tree	<i>Fraxinus americana</i>	white ash	FACU	4 (5, 6)	no	L	N	60-80'	50-80'	full sun-part shade	Phila. County	C	well-drained soils; compaction tolerant

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tree	<i>Fraxinus pennsylvanica</i>	green ash	FACW	3, 4, 5	seasonal	M	L	35-50'	50-60'	full sun	Phila. County	C	good bank stabilizer, compaction resistant; good street tree, but may develop surface roots with age
tree	<i>Gleditsia triacanthos</i>	honeylocust		3, 4, 5	seasonal	H	L	50-75'	50-75'	full sun	Phila. County	C	gold fall color; very adaptable; compaction tolerant; taproot; good street tree
tree	<i>Ilex opaca</i>	American holly	FACU	4, 5, 6	no	M	L	10-20'	40-50'	full sun-part shade	Phila. County	C	acidic well drained soils; intolerant of wind
tree	<i>Juglans nigra</i>	black walnut	FACU	5, 6	seasonal	L	N	75-100'	50-75'	full sun	Phila. County	C	flood and compaction tolerant; yellow-green flowers give way to edible nuts
tree	<i>Juniperus virginiana</i>	eastern red cedar	FACU	4, 5, 6	no	H	M	8-25'	50-75'	full sun	Phila. County	C	flood and shade intolerant; very tolerant of many soils; beautiful reddish bark
tree	<i>Liquidambar styraciflua</i>	sweetgum	FAC		seasonal	L	M	20-30'	60-75'	full sun	Phila. County	C	heat and flood tolerant; outstanding fall color; good street tree
tree	<i>Liriodendron tulipifera</i>	tulip tree	FACU	4, 5, 6	no	M	L	30-50'	70-100'	full sun-part shade	Phila. County	C	heat and compaction sensitive; rapid growth
tree	<i>Magnolia virginiana</i>	sweetbay magnolia	FACW+	3, 4, 5	seasonal	N	M	10-20'	10-20'	sun-shade	Phila. County	C	sandy-peaty acidic soil; attractive, fragrant flowers
tree	<i>Nyssa sylvatica</i>	sourgum	FAC	2 (3, 4) 5	seasonal	L	M	20-30'	30-50'	full sun	Phila. County	C	compaction tolerant; heat resistant
tree	<i>Pinus rigida</i>	pitch pine	FACU	4, 5, 6	no	M	M	30-50'	40-60'	full sun	Phila. County	C	acidic soils; compaction sensitive; heat resistant
tree	<i>Pinus strobus</i>	white pine	FACU	4, 5, 6	no	N	N	20-40'	50-100'	full sun-part shade	Phila. County	C	heat and compaction sensitive; long-lived; tolerant of poor soils

Type	Latin Name	Common Name	National Wetland Indicator*	Hydrologic Zone**	Inundation Tolerance	Drought Tolerance (N=none; L=low; M=medium; H=high)	Salt Tolerance (N=none; L=low; M=medium; H=high)	Mature Canopy Spread	Mature Height	Light Requirement	Nativity	Commercial Availability (C=container; P=plug; S=seed)	Notes
tree	<i>Pinus virginiana</i>	scrub pine		5, 6	no	H	N	10-20'	15-40'	full sun	Phila. County	C	tolerant of poor sterile soils; beautiful golden foliage in winter
tree	<i>Platanus occidentalis</i>	sycamore	FACW-	3, 4, 5	seasonal	L	N	75-100'	75-100'	full sun-part shade	Phila. County	C	compaction resistant
tree	<i>Populus deltoides</i>	cottonwood	FACU-	3, 4, 5	seasonal	L	L	35-60'	75-100'	full sun	Phila. County	C	compaction resistant; pioneer species
tree	<i>Populus grandidentata</i>	large-toothed aspen	FACU-	4, 5, 6	no	L	N	20-30'	50-70'	full sun	Phila. County	C	compaction sensitive; pioneer species
tree	<i>Populus tremuloides</i>	quaking aspen	FACU	4, 5, 6	seasonal	L	N	20-30'	35-50'	full sun	Phila. County	C	compaction sensitive; pioneer species
tree	<i>Prunus serotina</i>	black cherry	FACU	4, 5, 6	no	M	N	30-60'	50-60'	full sun	Phila. County	C	compaction intolerant; pioneer species
tree	<i>Quercus alba</i>	white oak	FACU	4, 5, 6	no	M	M	50-80'	50-80'	full sun-part shade	Phila. County	C	compaction very sensitive; acidic soils; long lived
tree	<i>Quercus bicolor</i>	swamp white oak	FACW+	2, 3, 4, 5	seasonal	L	L	50-60'	50-60'	full sun-part shade	Phila. County	C	compaction resistant
tree	<i>Quercus coccinea</i>	scarlet oak		5, 6	no	M	N	40-50'	50-75'	full sun	Phila. County	C	compaction intolerant, long lived, nice fall color
tree	<i>Quercus falcata</i>	southern red oak	FACU-	6	no	H	N	50-60'	70-80'	full sun-part shade	Phila. County	C	high winter wildlife value; found in dry to moist woods
tree	<i>Quercus marilandica</i>	blackjack oak		5, 6	no	H	L	15-40'	30-40'	full sun	Phila. County	C	very flood intolerant; compaction sensitive
tree	<i>Quercus palustris</i>	pin oak	FACW	(3) 4, 5, 6	seasonal	L	N	40-60'	60-70'	full sun	Phila. County	C	acidic well drained soils; compaction resistant; good street tree

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tree	<i>Quercus phellos</i>	willow oak	FACU-	(3, 4) 5	seasonal	N	N	25-50'	40-60'	full sun-part shade	Phila. County	C	acidic soils; tolerates poor drainage; compaction tolerant
tree	<i>Quercus rubra</i>	red oak	FACU-	5, 6	no	M	M	50-75'	60-75'	full sun	Phila. County	C	acidic soils; compaction and pollution tolerant
tree	<i>Quercus velutina</i>	black oak		5, 6	no	L	N	40-50'	50-60'	full sun-part shade	Phila. County	C	compaction intolerant; acidic soils
tree	<i>Salix nigra</i>	black willow	FACW+	(2, 3) 4	seasonal	L	N	20-35'	35-50'	full sun	Phila. County	C	compaction resistant
tree	<i>Sassafras albidum</i>	sassafras	FACU	6	no	H	N	25-40'	30-60'	full sun-part shade	Phila. County	C	compaction intolerant; pioneer species; flood intolerant
tree	<i>Tilia americana</i>	basswood	FACU	(4, 5) 6	no	M	N	30-50'	60-80'	full sun-part shade	Phila. County	C	compaction sensitive; fragrant pale yellow spring flowers
tree	<i>Ulmus americana</i>	American elm	FACW-	(3) 4, 5, 6	seasonal	H	H	50-75'	60-90'	full sun	Phila. County	C	rare due to Dutch elm disease; new resistant stock; graceful vase form
tree	<i>Ulmus rubra</i>	slippery elm	FAC-	(3) 4, 5, 6	seasonal	H	H	50-75'	60-90'	full sun-part shade	Phila. County	C	seeds are eaten by birds and small mammals; shade tolerant

\*Footnotes, references, and legend may be viewed on the following two pages.

## Footnotes

\* NATIONAL WETLAND INDICATOR (probability of occurring in a wetland):

OBL Obligate wetland species

FACW Facultative wetland species

FAC Facultative species

FACU Facultative upland species

UPL Upland species

(+) Indicates that the species occurs in the higher portion of the range

(-) Indicates that the species occurs in the lower portion of the range

Those species with no wetland indicator are virtually intolerant of flooding or prolonged soil saturation during the growing season.

## \*\* HYDROLOGIC ZONES

### Zone 1: Open water - Permanent pool (12 inches - 6 feet)

This zone is best colonized by submergent plants, if at all. This deep water zone is not usually planted for several reasons: there are few species that can grow in this zone, and many are not commercially available; open water areas provide unique habitat; and deep water aquatic plants may clog the stormwater facility outlet structure. The benefits of planting in this zone include the absorption of nutrients in the water column; enhanced sediment deposition; improved oxidation; and the creation of additional habitat.

### Zone 2: Shallow water terrace/Aquatic bench (6 inches -1 foot)

This zone offers ideal conditions for a wide variety of emergent wetland plants. These areas typically fringe the ponding area and are permanently inundated.

### Zone 3: BMP Fringe - Low marsh (0-6 inches regular inundation)

This zone is typically the shoreline of a pond or wetland - its width determined by the design slope. This zone is usually inundated except during periods of drought and is the interface between the emergent wetland plantings and the upland plantings. Plants must be able to withstand periods of inundation as well as periods of drought and should have some capacity for slope stabilization.

### Zone 4: BMP Fringe - High Marsh (periodic inundation, saturated soils)

This zone extends upslope from zone 3 and may be inundated after storms. It constitutes the majority of the temporary extended detention area. Plants selected should be able to withstand periodic inundation after storms as well as significant drought during the summer.

### Zone 5: Floodplain terrace (infrequent inundation, temporarily saturated soils)

Zone 5 is infrequently saturated by floodwaters that quickly recede in a day or less. Plants should be able to withstand infrequent inundation as well as drought and should offer some slope stabilization.

### Zone 6: Upland (never inundated)

This zone extends above the maximum design water surface elevation. Plant selection should be based on local soil and light conditions, and on the amount of available space for plantings.

### Original references

The Plants of Pennsylvania: An Illustrated Manual, Ann Rhoads, Timothy Block, Anna Anisko

Fairmount Park Commission: Selected Trees & Shrubs Native to Philadelphia County (brochure)


Fairmount Park Commission: Selected Wildflowers, Ferns, Grasses, Sedges, & Rushes Native to Philadelphia County (brochure)

[U.S. Department of Agriculture, Natural Resources Conservation Service: PLANTS Database](#)


[The Kemper Center for Home Gardening: PlantFinder](#)

[University of Connecticut Plant Database](#)

### Legend and Green Roof references

 Included in the Green Roof plant list, already in Table I-1

 Included in the Green Roof plant list, not yet in Table I-1

 Plants of Pennsylvania

 [Chicago Botanic Garden](#)

*Other added data includes:*

[NC State Extension](#)

[Missouri Botanical Garden](#)

\*Table I-1 last revised 2025