

Conservation of Native Wild Plants

Proposed Rulemaking Changes to Title 17,
Chapter 45

Department of Conservation and Natural Resources,
Bureau of Forestry, Wild Plant Program
August 2022

Rebecca Bowen, Chief, Division of Conservation
Science and Ecological Resources

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pennsylvania
DEPARTMENT OF CONSERVATION
AND NATURAL RESOURCES

Topics

Plants and Regulations

- Wild Plant Program
- Listing Process
- Proposed rulemaking changes
- Timeline
- Comments



Screw-stem	<i>Bartonia paniculata</i> ssp. <i>paniculata</i> (photo: Andrew Rohrbaugh, DCNR)
Currently:	Not Listed
Proposed:	Rare
Reason:	Small populations, limited range, (63 sites)

Legal Authority

Conservation and Natural Resources Act

- Act 18, created DCNR; Section 305 “Ecological and geological services” gives authority to survey for ecological resources and provide the results in a convenient form.



American Bugbane	<i>Actaea podocarpa</i> (photo: Steve Grund, Western Pennsylvania Conservancy)
Currently:	Threatened
Proposed:	Rare
Reason:	Surveys found more sites, but range is limited (50 sites)

Legal Authority

Conservation and Natural Resources Act

- Act 18, created DCNR; Section 305 “Ecological and geological services” gives authority to survey for ecological resources and provide the results in a convenient form.

Wild Resource Conservation Act (WRCA)

- June 23, 1982, P.L. 597, No. 170 (October 30, 1993)
- “Preserve and enhance flora and fauna species”
 - Conduct investigations on wild plants; determine status
 - Enforcement system to protect plant species
 - Permit for collection
 - License for selling vulnerable species
 - Public and private wild plant sanctuaries



Mountain Bugbane	<i>Actaea podocarpa</i> (photo: Steve Grund, Western Pennsylvania Conservancy)
Currently:	Threatened
Proposed:	Rare
Reason:	Surveys found more sites, but range is limited (50 sites)

Legal Authority

Conservation of Pennsylvania Native Wild Plants

- Title 17, Chapter 45
- To implement the Wild Resource Conservation Act
 - Definitions, taxonomy
 - Classified plants
 - Unlawful Conduct
 - Wild Plant Management Permits
 - Vulnerable Plant management
 - Wild Plant Sanctuaries



Lance-leaved Loosestrife	<i>Lysimachia hybrida</i> (Photo: Kelly Sitch, DCNR)
Currently:	Not Listed
Proposed:	Endangered
Reason:	Very rare, sensitive habitat (5 sites)

Wild Plant Program

BOF mission:

The mission of the Bureau of Forestry is to ensure the long-term health, viability, and productivity of the Commonwealth's forests and to **conserve native wild plants.**

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Sourwood	<i>Oxydendrum arboreum</i> (Photo: Steve Grund, Western PA Conservancy)
Currently:	Tentatively Undetermined
Proposed:	Delist
Reason:	Too common for listing.

Wild Plant Program

Conserve Native Wild Plants:

Native Wild Plant: Any plant species growing in PA before European colonization.



<u>PA Flora</u>		
Total Vascular Plants in PA		~3000*
		(includes subspecies & varieties)
Total Native Plants in PA		2,084*
		(about 2/3 of all vascular plants, does not include non-vascular plants like bryophytes, algae, mosses, liverworts, etc)
Listed Species		582
(Endangered, Threatened, Rare, Extirpated, Tentatively Undetermined)		
* These numbers are approximate. This is the most up-to-date information available to DCNR. The number of species varies depending on the reference source used, and its inclusion or exclusion of varieties and subspecies.		

Midland sedge	<i>Carex mesochorea</i> (photo: Dwayne Estes, CC BY-NC 4.0, iNaturalist)
Currently:	Tentatively Undetermined
Proposed:	Delist
Reason:	Too common, not in need of conservation (abundant)

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Why Are Plants Important?

- Ecological Benefits
 - Habitat for wildlife: Food, shelter
 - Pollinators
 - Healthy soil and water
 - First link in Food chain
 - Biodiversity
 - Sustainability
- Human & Ecosystem Services
 - Oxygen
 - Food
 - Products, commodities
 - Health, pharmaceuticals
 - Aesthetics

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**Whorled
milkweed**

Asclepias verticillata

(Photo: George F. Mayfield, CC
BY-SA 2.0 Wikimedia Commons)

Currently:	Not Listed
Proposed:	Threatened
Reason:	Population declines, limited habitat, food to monarchs (10 sites)

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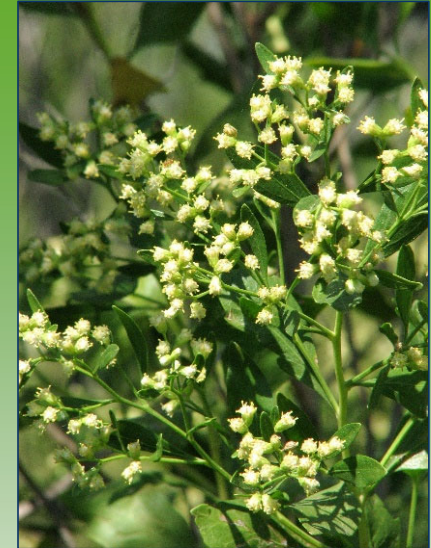
(Photo: George F. Mayfield, CC
BY-SA 2.0 Wikimedia Commons)

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Proposed:	Threatened
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Why Are Native Plants Important?

- Native animals depend on native plants
 - Food, shelter, habitat
 - Wildlife adaptations to specific native plants (e.g. moth and host plants)
- Native plants more important to an ecosystem than non-native
 - Better erosion control (e.g. native bunch grasses stabilize soil better than invasive like spotted knapweed)
 - More diversity, better habitat for wildlife (e.g. richer food web)
- Native plants are better adapted to sites

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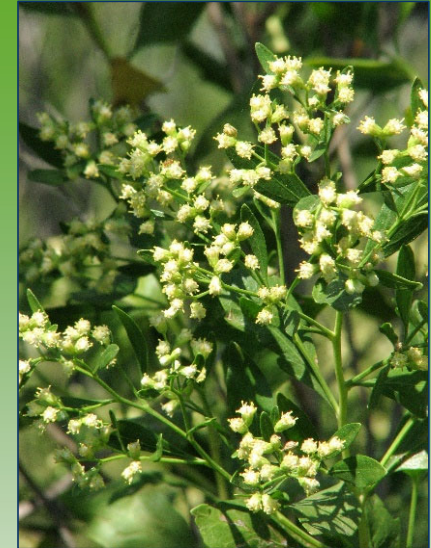


Eastern baccharis	<i>Baccharis halimifolia</i> (photo: PA Natural Heritage Program)
Currently:	Rare
Proposed:	Delist
Reason:	Expanding range, utilizes roadsides influence by de-icing salts, highly mobile species

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Why Conserve Rare Native Plants?

- Indicators of health of ecosystem
 - Rare because they inhabit unusual or degraded habitats
 - Indicate a bigger problem
 - Show us which habitats need help
- Ecosystem balance:
 - Loss of one species
 - Potential negative impact on all species in ecosystem

Wild Resource Conservation Act (WRCA):
rare and endangered species are in need of active
management;
in public interest to preserve and enhance such species
for the benefit of all.



Wedge-leaved violet	<i>Viola glaberrima</i> (photo: Bonnie Isaac, Carnegie Museum of Natural History, used with permission)
Currently:	Tent. Undetermined
Proposed:	Endangered
Reason:	Previously considered a variety of <i>Viola tripartita</i> (2 sites)

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Why Update Chapter 45?

- Stay up to date with science
 - DCNR's responsibility from WRCA
 - Targets for conservation or management activities
- Benefit to planning officials, conservation groups, businesses
 - Better informed planning, development and conservation activities
 - Information used in DEP permitting process



Water-plantain spearwort	<i>Ranunculus ambigens</i> (photo: Scott Schuette, WPC PNHP, CC BY-NC 4.0, iNaturalist)
Currently:	Not listed
Proposed:	Threatened
Reason:	population declines, small populations; threatened by deer pressure, changes in hydrology and invasive plants (10 populations)

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**Water-plantain
spearwort**

***Ranunculus
ambigens***

(photo: Scott Schuette, WPC
PNHP, CC BY-NC 4.0,
iNaturalist)

Currently: Not listed

Proposed: Threatened

Reason: population declines,
small populations;
threatened by deer
pressure, changes in
hydrology and invasive
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- Benefit to Pennsylvanians
 - More accurate representation of native plant species that need protection
 - Supports PA's Constitution: public natural resources be conserved and maintained for benefit of all people (Pa.Const. Art. I § 27).



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 - Supports PA's Constitution: public natural resources be conserved and maintained for benefit of all people (Pa.Const. Art. I § 27).
- Maintain the list over time



**Water-plantain
spearwort**

***Ranunculus
ambigens***

(photo: Scott Schuette, WPC
PNHP, CC BY-NC 4.0,
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Currently:

Not listed

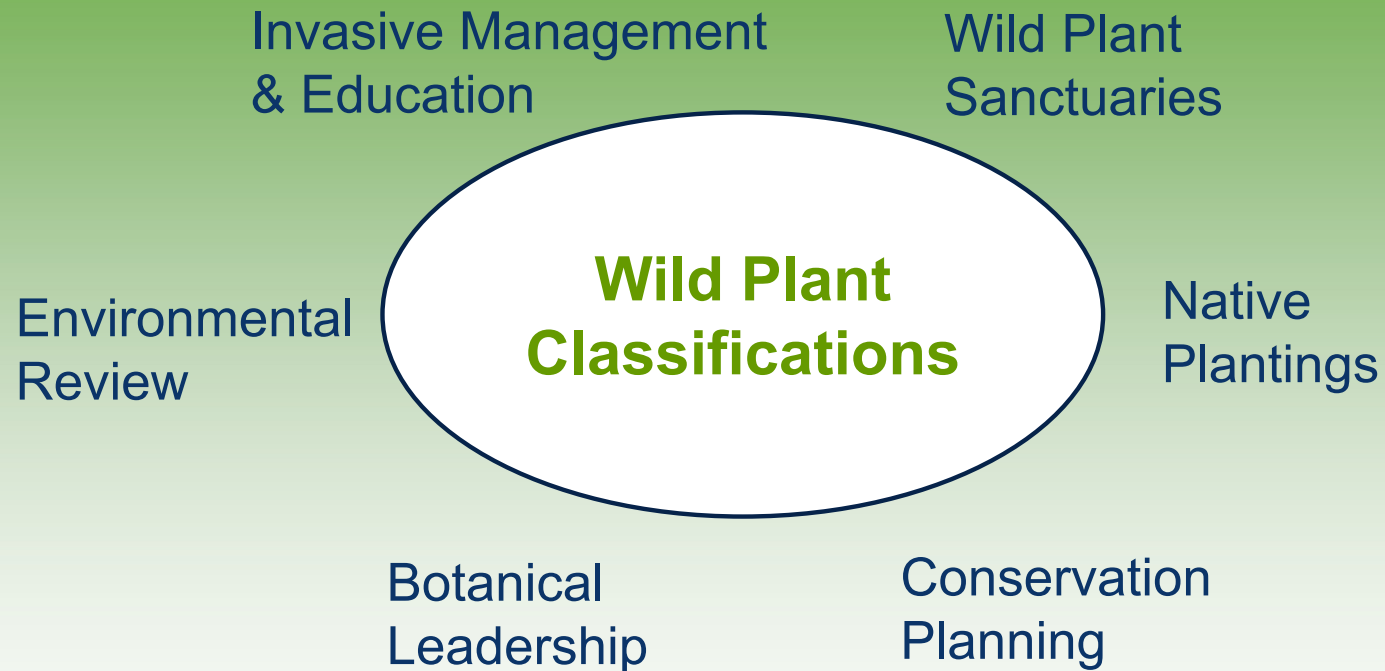
Proposed:

Threatened

Reason:

population declines,
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Wild Plant Program



Listing Process

- Continually evaluating species and listings
 - Habitat conditions across PA not static
 - New scientific information from inventories and field investigations
- Process for making changes to the list
 - adding, deleting, and changing listings
 - PA Biological Survey (PABS)
 - Vascular Plant Technical Committee
 - Rare Plant Forum



Yellow fringed-orchid	<i>Platanthera ciliaris</i> (Photo: Emilee Euker, DCNR)
Currently:	Tent. Undetermined
Proposed:	Threatened
Reason:	population declines, but can tolerate some disturbance (32 populations)

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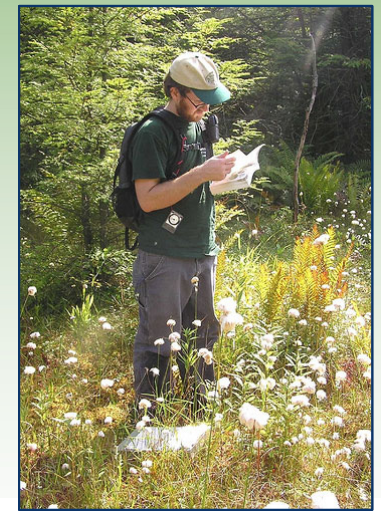
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Listing Process

Data gathering & public input

- Vascular Plant Technical Committee (VPTC)
 - Members: Expert botanists from universities, natural history museums, conservation organizations, environmental consulting firms, state and federal agencies
 - Meet 2 times a year
 - Make recommendations to DCNR for status changes
- Public Meeting: Rare Plant Forum (RPF)
 - RPF members: Professional and amateur botanists, academia, consultants, botanical society members
 - Meet once a year
 - Discuss in open forum
- DCNR reviews the recommendations and other information to determine appropriate classification for wild plant species

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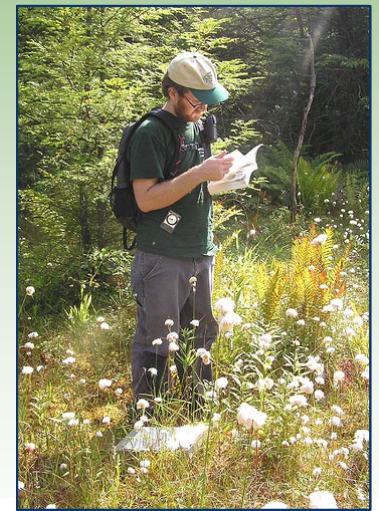


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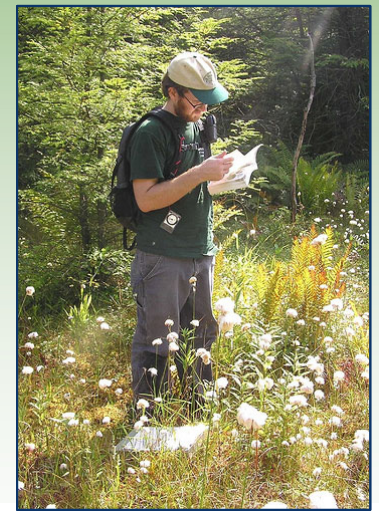


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Listing Process

- Data used to make changes or suggestions
 - Scientific research on species taxonomy
 - Botanical field inventories and surveys by DCNR ecologists, academia, environmental consultants, and PNHP biologists
 - Known occurrences of species tracked through PNDI database
 - Historical records maintained at museums and universities
 - Genetic studies
- Factors considered when determining listing status
 - Numbers of individuals, number of known sites (populations)
 - Degree of threat to the species
 - Rare or specialized habitat, habitat decline
 - Securely protected in a natural area
 - Lack of survey information
 - Vulnerable life history, such as dependence on a specific pollinator

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Colic root	<i>Aletris farinosa</i> (photo: Scott Martin via the Pennsylvania Natural Heritage Program)
Currently:	Tent. Undetermined
Proposed:	Endangered
Reason:	Extremely rare, Small population sizes, population decline(4 sites)

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Rulemaking Process

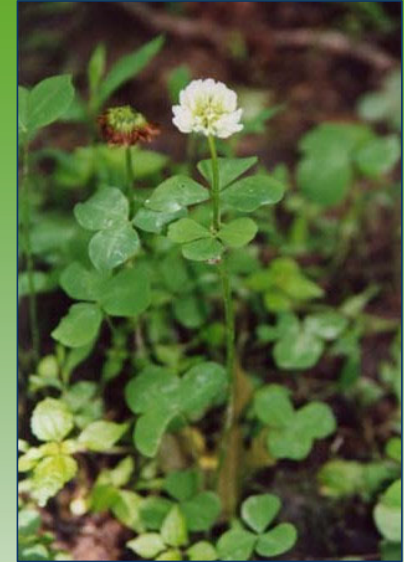
- Input from stakeholder groups: Botanical experts and public
 - VPTC, RPF, field data
- DCNR develops proposed regulation changes
- Regulation Process: once as proposed and final
 - Governor's Office, Office of Budget, Attorney General, Legislative Committees
 - Independent Regulatory Review Commission (IRRC)
 - Pennsylvania Bulletin, public comment period

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Spreading rockcress	<i>Arabis patens</i> (photo: Brent Steury. (Orrell T (2020). NMNH, Smithsonian Institution))
Currently:	Not listed.
Proposed:	Threatened
Reason:	Globally vulnerable, population declines, sensitive habitat (10 populations)

Proposed Changes 2022



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Running buffalo clover	<i>Trifolium stoloniferum</i> (photo: U.S. FWS, Sarena Selbo, public domain)
Currently:	Not listed.
Proposed:	Endangered
Reason:	federally-listed species recently discovered in PA, very few populations and globally rare plant (5 populations)

Chapter 45 Proposed Changes 2022

What's changing:

There are a total of 82 substantive changes proposed:

- 24 plant species will be added
- 28 species will be reclassified from one status to another
- 30 species will be removed from classification

Overall:

- 6 species downgraded (moving from a higher classification to lower e.g., Endangered to Rare)
- 22 species upgraded (moving from lower classification to higher e.g., Tentatively Undetermined to Threatened)
- 6 fewer species listed as a result.



Yellow watercress	<i>Rorippa palustris</i> (L.) Besser var. <i>palustris</i> (photo: sgraue, CC BY-NC 4.0, iNaturalist)
Currently:	Tent. Undetermined
Proposed:	Delist
Reason:	common and not in need of conservation (abundant)

Wild Plant Classifications

Definitions:

- Extirpated
 - Believed to be extinct from PA; may or may not exist outside PA. If an Extirpated plant species is found to exist, the species automatically becomes Endangered.
- Endangered
 - In danger of extinction throughout natural range in PA, if critical habitat is not maintained or if the species is greatly exploited.
- Threatened
 - May become endangered throughout natural range in PA, if critical habitat is not maintained to prevent their further decline, or if exploited.
- Rare
 - uncommon in PA because they may be found in restricted geographic areas or in low numbers throughout this Commonwealth
- Tentatively Undetermined
 - Believed to be in danger of population decline—unsure due to taxonomic uncertainties or evidence; Taxonomic status uncertain of questionable
- Special Concern Populations:
 - Colonies, groups or single individuals of a unique occurrence in PA deserving protection; unusual geographic locations, unisexual pops
- Vulnerable:
 - In danger of decline b/c of beauty, economic value, use as cultivar or other removal reasons

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Plant Classification Changes

<u>PA Flora</u>		<u>Number</u>
Total Native Plants in PA		
	Native Plants	2,084
Listed Species		
	Extirpated plants	102
	Endangered plants	232
	Threatened plants	78
	Rare plants	39
	Tentatively Undetermined	128
	Vulnerable	3
	Special Populations	0
	TOTAL	582
		(29% of total native vascular plants; 17% for just Rare, Threatened and Endangered)



Puttyroot orchid	<i>Aplectrum hyemale</i> (photo: Jason Ryndock, Pennsylvania Natural Heritage Program)
Currently:	Rare.
Proposed:	Delist
Reason:	More common than previously thought, may not be limited by habitat (at least 64 populations)

24 additions:

- 10 Endangered
- 2 Extirpated
- 7 Rare
- 5 Threatened

N=Not currently listed;
PX=PA Extirpated;
PE=PA Endangered;
PT=PA Threatened;
PR= PA Rare

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<u>Scientific Name</u>	<u>Common Name</u>	<u>Proposed</u>	<u>Reason for Change</u>
<i>Acalypha deamii</i>	Two-Seeded Copperleaf	PX	Only one population was known and not observed since 1900s (0 populations)
<i>Utricularia subulata</i>	Slender Bladderwort	PX	known only from one herbarium specimen from 1900s, but surveys have not relocated it (0 populations)
<i>Arnoglossum reniforme</i>	Great Indian Plantain	PE	population decline, extreme rarity (1 population)
<i>Astragalus canadensis</i>	Canadian Milk-vetch	PE	population declines, invasive species; limestone habitats tend to be at risk (7 populations)
<i>Carex roanensis</i>	Roan Mountain Sedge	PE	globally-rare species, very few and small populations, recently found in PA (4 populations)
<i>Fraxinus quadrangulata</i>	Blue Ash	PE	extreme rarity; threatened by forest pest emerald ash borer (1 population)
<i>Hierochloa hirta</i>	Common Northern Sweet Grass	PE	extreme rarity, habitat threatened by invasive species, and fen and wetland impacts (4 populations)
<i>Lysimachia hybrida</i>	Lance-Leaved Loosestrife	PE	small populations, habitat loss and impacts to temporary ponds (5 populations)
<i>Marshallia pulchra</i>	Beautiful Barbara's buttons	PE	all populations of <i>Marshallia grandiflora</i> were redetermined to be <i>Marshallia pulchra</i> , extremely limited habitat (16 populations)
<i>Spiraea corymbosa</i>	Dwarf Spiraea	PE	population decline due to loss of habitat; name change from <i>Spiraea betulifolia</i> Pallas var. <i>corymbosa</i> (Raf.) Maxim. to <i>Spiraea corymbosa</i> Raf. (4 populations)
<i>Trifolium stoloniferum</i>	Running Buffalo Clover	PE	federally-listed species recently discovered in PA, very few populations and globally rare plant (5 populations)
<i>Viola glaberrima</i>	Wedge-leaved violet	PE	extremely rare; populations of <i>Viola glaberrima</i> were previously attributed to <i>Viola tripartita</i> (2 populations)
<i>Ageratina aromatica</i>	Small-Leaved White-Snakeroot	PT	population decline, specialized habitat (7 populations)
<i>Arabis patens</i>	Spreading Rockcress	PT	Globally vulnerable, population declines, sensitive habitat (10 populations)
<i>Asclepias verticillata</i>	Whorled Milkweed	PT	population declines, sensitive and limited habitat (10 populations)
<i>Bromus kalmii</i>	Kalm's Brome	PT	population decline; succession, invasive plants and habitat loss (12 populations)
<i>Galium latifolium</i>	Purple Bedstraw	PT	populations have few individuals making it more vulnerable to disturbance (23 populations)
<i>Ranunculus ambigens</i>	Water-Plantain Spearwort	PT	population declines, small populations; threatened by deer pressure, changes in hydrology and invasive plants (10 populations)
<i>Stellaria borealis</i>	Northern Stitchwort	PT	population decline due to habitat loss, contracting habitat range (20 populations)
<i>Andropogon gyrans</i>	Elliott's Beardgrass	PR	limited, geographic distribution, threats to existing populations (32 populations)
<i>Asplenium pinnatifidum</i>	Lobed Spleenwort	PR	population declines, habitat fragmentation (27 populations)
<i>Bartonia paniculata</i> ssp. <i>paniculata</i>	Screw-Stem	PR	small number of individuals in populations, limited to boggy open wetlands; but tolerates some disturbed habitat (63 populations)
<i>Erythronium albidum</i>	White Trout-Lily	PR	population declines, small population sizes, geographically limited; threatened by invasive plants and habitat loss (48 populations)
<i>Lorinseria areolata</i>	Netted Chain Fern	PR	found in low numbers in PA, in a restricted geographic distribution, limited by habitat (37 populations)

28 species
moving from
one
classification
to another

<u>Scientific Name</u>	<u>Common Name</u>	<u>Current</u>	<u>Proposed</u>	<u>Reason for Change</u>
<i>Hypericum gymnanthum</i>	Clasping-Leaved St. John's-Wort	PX	PE	globally-uncommon species; thought to be extirpated but rediscovered (1 population)
<i>Cyperus retrorsus</i>	Retorse Flatsedge	PE	PX	not observed in 50 years after surveys; habitat destroyed (0 populations)
<i>Gymnopogon ambiguus</i>	Broad-Leaved Beardgrass	PE	PX	one historic location was known, now destroyed, not observed elsewhere (0 populations)
<i>Carex collinsii</i>	Collins' Sedge	PE	PT	more populations than previously thought, but still limited by habitat availability (18 populations)
<i>Passiflora lutea</i>	Passion-Flower	PE	PT	more populations recently observed, still uncommon statewide and small populations (20 populations)
<i>Thalictrum coriaceum</i>	Thick-Leaved Meadow-Rue	PE	PT	more populations discovered, but still uncommon, limited by habitat availability (21 populations)
<i>Asplenium bradleyi</i>	Bradley's Spleenwort	PT	PE	population declines, habitat loss or degradation (6 populations)
<i>Bidens bidentoides</i>	Swamp Beggar-Ticks	PT	PE	globally uncommon, limited to special habitat, population decline (9 populations)
<i>Camassia scilloides</i>	Wild Hyacinth	PT	PE	extremely rare, habitat subject to conversion and invasive species (4 populations)
<i>Carex schweinitzii</i>	Schweinitz's Sedge	PT	PE	globally-uncommon species, very few populations, range constricted, specialized habitat (6 populations)
<i>Carex sterilis</i>	Sterile Sedge	PT	PE	steep population decline, small population sizes. Changing common name from Atlantic sedge to sterile sedge (8 populations)
<i>Cypripedium reginae</i>	Show Lady's-Slipper	PT	PE	population decline; threatened by impacts to wetland habitat, deer herbivory and poaching (7 populations)
<i>Gaylussacia brachycera</i>	Box Huckleberry	PT	PE	globally-rare, slow growing and low germination rates, extreme rarity (3 populations)
<i>Salix candida</i>	Hoary Willow	PT	PE	extreme rarity; limited by habitat, population decline (2 populations)
<i>Actaea podocarpa</i>	Mountain Bugbane	PT	PR	more populations than previously thought, but still uncommon and geographically limited (50 populations)
<i>Carex paupercula</i>	Bog Sedge	PT	PR	more populations than previously thought but still restricted by geographic range (45 populations)
<i>Solidago roanensis</i>	Mountain Goldenrod	PR	PT	population decline, range constricted (10 populations)
<i>Cuscuta coryli</i>	Hazel Dodder	TU	PX	last observed in 1950s, field surveys failed to refind. Also correcting minor spelling mistake (changing to "coryli") (0 populations)
<i>Aletris farinosa</i>	Colic-Root	TU	PE	multiple threats to habitat, population decline, very few sites remaining with small population sizes (3 populations)
<i>Carex lupuliformis</i>	False Hop Sedge	TU	PE	population declines, invasive plants, succession, impact to wetlands (11 populations)
<i>Corallorhiza wisteriana</i>	Spring Coral-Root	TU	PE	population decline, small population sizes, orchid species vulnerable to collection (5 populations)
<i>Gratiola aurea</i>	Golden Hedge-Hyssop	TU	PE	population declines, extreme rarity (3 populations)
<i>Lythrum alatum</i>	Winged Loosestrife	TU	PE	severe population declines, wetland habitat is threatened by degradation and invasive plants, extremely rare (1 population)
<i>Carex longii</i>	Long's Sedge	TU	PT	population declines, invasion, herbivory, habitat loss (15 populations)
<i>Castilleja coccinea</i>	Eastern Paintbrush	TU	PT	population declines, limited by limestone or diabase soils (15 populations)
<i>Platanthera ciliaris</i>	Yellow Fringed-orchid	TU	PT	population declines, small variable populations; requires wetland soil but can tolerate some disturbance (32 populations)
<i>Carex buxbaumii</i>	Brown Sedge	TU	PR	relatively few populations and found in a restricted geographic range, habitat fragmentation (22 populations)
<i>Juncus biflorus</i>	Grass-Leaved Rush	TU	PR	uncommon, with geographic limitations; populations have small numbers of individuals that are more vulnerable to disturbance (39 populations)

N=Not currently listed;
PX=PA Extirpated;
PE=PA Endangered;
PT=PA Threatened;
PR= PA Rare

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30 species
being
delisted

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<u>Scientific Name</u>	<u>Common Name</u>	<u>Current</u>	<u>Reason for Change</u>
<i>Carex alopecoidea</i>	Foxtail Sedge	PX	not found in PA (0 populations)
<i>Distichlis spicata</i>	Sea-Shore Salt-Grass	PX	not native to PA
<i>Matelea carolinensis</i>	Carolina Milkvine	PX	not native and does not occur in Pennsylvania (0 populations)
<i>Myrica heterophylla</i>	Evergreen Bayberry	PX	does not occur in Pennsylvania (0 populations)
<i>Carex grvida</i>	Heavy Sedge	PE	not found in PA (0 populations)
<i>Cyperus acuminatus</i>	Short-Pointed Flatsedge	PE	not native to PA
<i>Desmodium humifusum</i>	Trailing Tick-Trefoil	PE	hybrid of two common species, not a conservation concern
<i>Diarrhena obovata</i>	Obovate Beakgrain	PE	more common than previously thought with large populations, expanding range, not limited by habitat (abundant)
	Small-Floating		
<i>Glyceria borealis</i>	Mannagrass	PE	more common than previously thought, not limited by habitat quality (at least 19 populations)
<i>Juncus longii</i>	Long's Rush	PE	not found in PA; specimens of this species found to be another species (0 populations)
			Not found in PA; all populations of <i>Marshallia grandiflora</i> were redetermined to be <i>Marshallia pulchra</i> (0 populations)
<i>Marshallia grandiflora</i>	Large-flowered Marshallia	PE	
<i>Vitis novae-angliae</i>	New England Grape	PE	found to be a sterile hybrid of two common species, and is a hybrid without conservation value (abundant)
<i>Digitaria cognatum</i>	Fall Witch-Grass	PT	able to use disturbed areas, not limited by habitat, not in decline (abundant)
<i>Spiraea betulifolia</i> var. <i>corymbosa</i>	Dwarf Spiraea	PT	Name changed to <i>Spiraea corymbosa</i> Rafinesque
<i>Aplectrum hyemale</i>	Puttyroot	PR	more common than previously thought, may not be limited by habitat (at least 64 populations)
<i>Baccharis halimifolia</i>	Eastern Baccharis	PR	expanding habitat, utilizes roadsides influence by de-icing salts, highly mobile species (abundant)
			more populations than thought, large numbers of individuals in populations; secure and not a conservation concern (at least 50 populations)
<i>Collinsia verna</i>	Spring Blue-Eyed Mary	PR	
<i>Eleocharis olivacea</i>	Capitate Spike-Rush	PR	more widespread and frequent than previously thought (at least 40 populations)
<i>Tipularia discolor</i>	Crane-fly Orchid	PR	more common than previously thought (at least 83 populations)
<i>Adiantum pedatum</i> ssp. <i>caulderi</i>	Northern Maidenhair Fern	TU	not found in PA (0 populations)
<i>Ambrosia psilostachya</i>	Naked-Spiked Ambrosia	TU	not native to PA
<i>Carex mesochorea</i>	Midland Sedge	TU	more populations of this species found; common and not a conservation concern (abundant)
			grows in disturbed habitat, expanding its range; more common than previously thought and not a conservation concern (abundant)
<i>Cyperus odoratus</i>	Rusty Flatsedge	TU	
<i>Elatine minima</i>	Small Waterwort	TU	more frequent and widespread than had previously been thought; not limited by habitat (abundant)
<i>Elymus virginicus</i> var. <i>submuticus</i>	Wild Rye	TU	not native to PA
<i>Oxydendrum arboreum</i>	Sourwood	TU	more common than previously thought, able to utilize disturbed habitat, expanding range (at least 31 populations)
<i>Rorippa palustris</i> var. <i>palustris</i>	Yellow Cress	TU	common and not in need of conservation (abundant)
<i>Salix petiolaris</i>	Meadow Willow	TU	more common than previously thought (at least 32 populations)
<i>Salvia reflexa</i>	Lance-Leaved Sage	TU	not native to Pennsylvania
<i>Viola tripartita</i>	Three-Parted Violet	TU	not found in Pennsylvania, populations previously attributed to this species are <i>Viola glaberrima</i> (0 populations)

Summary at a Glance

Summary	No. Species
# Add (currently <i>unlisted</i>)	24
# Upgrade (currently listed)	22
# Downgrade (currently listed)	6
# Delist(currently listed)	30
<u>Total changes</u>	<u>82</u>
<i>Net Species</i>	-6
Total Add or Upgrade:	46
Total DL or downgrade:	36



Crane fly orchid	<i>Tipularia discolor</i> (photos: Rebecca Bowen, DCNR)
Currently:	Rare.
Proposed:	Delist
Reason:	more common than previously thought (at least 83 populations)

Summary

<u>Classification</u>	<u>Currently Listed</u>	<u>Added (currently unlisted)</u>	<u>Reclassified as this Classification</u>	<u>Reclassified out of this Classification</u>	<u>Delisted</u>	<u>Final Number of Species</u>	<u>Net Change</u>
Extirpated	102	2	3	1	4	102	0
Endangered	232	10	14	5	8	243	11
Threatened	78	7	7	10	2	80	2
Vulnerable	3	0	0	0	0	3	0
Rare	39	5	4	1	5	42	3
Tentatively Undetermined	128	0	0	11	11	106	-22
Special Populations	0	0	0	0	0	0	0
TOTAL	582	24	28	28	30	576	-6

Plant Species Accounts

- [Plant Species Accounts Link](#)
- Presenting data to public for plants with status changes
- Short accounts explaining how species fit the proposed status
 - Species description
 - Habitat needs
 - Ranges: world, US, PA
 - Listing in other states
 - Distribution of populations—historical and present
 - Threats to the populations
 - Trends
 - VPTC recommendations



Foxtail sedge	<i>Carex alopecoidea</i> (photo: Courtesy: Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center (unrestricted use))
Currently:	Extirpated.
Proposed:	Delist
Reason:	not found in PA (0 populations)

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Foxtail sedge	<i>Carex alopecoidea</i> (photo: Courtesy: Sally and Andy Wasowski, Lady Bird Johnson Wildflower Center (unrestricted use))
Currently:	Extirpated.
Proposed:	Delist
Reason:	not found in PA (0 populations)

Timeline & Comments

- Proposed rulemaking is scheduled for publishing in the *Bulletin* Aug. 27, 2022.
- We are seeking your comments!
- RA-Ch45WildPlant@pa.gov



Wild hyacinth	<i>Camassia scilloides</i> (photo: Courtesy Alan Cressler, Lady Bird Johnson Wildflower Center (unrestricted use))
Currently:	Threatened.
Proposed:	Endangered
Reason:	extremely rare, habitat subject to conversion and invasive species (4 populations)

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Timeline Details

- Next step, receive comments:
 - 30-day Public Comment Period, Legislative Committees
 - RA-Ch45WildPlant@pa.gov
 - 60 d comment period for the Independent Regulatory Review Commission (IRRC)
- DCNR addresses all comments
- IRRC hearing
- DCNR develops Final Rulemaking Package
- DCNR delivers to IRRC and Committees as Final Rulemaking
- Publication of Final Rulemaking in *PA Bulletin*

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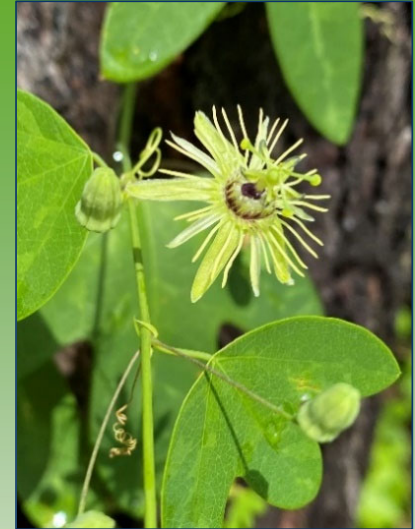


Spring coral-root	<i>Corallorhiza wisteriana</i> (photo: Eric Hunt, CC BY-SA 4.0, Wikimedia Commons)
Currently:	Tent. Undetermined.
Proposed:	Endangered
Reason:	population decline, small population sizes, orchid species vulnerable to collection (5 populations)

Looking Ahead

- DCNR reviewing all data & info on plant species
 - New info constantly being obtained
 - Keep up with current science
- Anticipate more rulemaking change packages in future
 - Approximately one rulemaking package every 2 years
 - Work through VPTC recommendations
 - Goal to keep the list of classified plants up to date

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Passion-flower

Passiflora lutea

(photo: Clayton Bownds, CC BY-NC 4.0, iNaturalist)

Currently:	Endangered
Proposed:	Threatened
Reason:	more populations recently observed, still uncommon statewide and small populations (20 populations)

Our Role Continues...

- Our role in WRCA and Chapter 45
- Nature is constantly changing, DCNR keeps up with changes
 - Continued VPTC and RPF meetings
 - Continued surveys, inventories
 - Continued gathering information
 - Continued leaders in botanical knowledge in PA
- Use the best available scientific information and input to classify species

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Hoary willow <i>Salix candida</i> (photo: Gwyneth Govers, CC BY-NC 4.0, iNaturalist)	
Currently:	Threatened
Proposed:	Endangered
Reason:	extreme rarity; limited by habitat, population decline (2 populations)

Contact Information

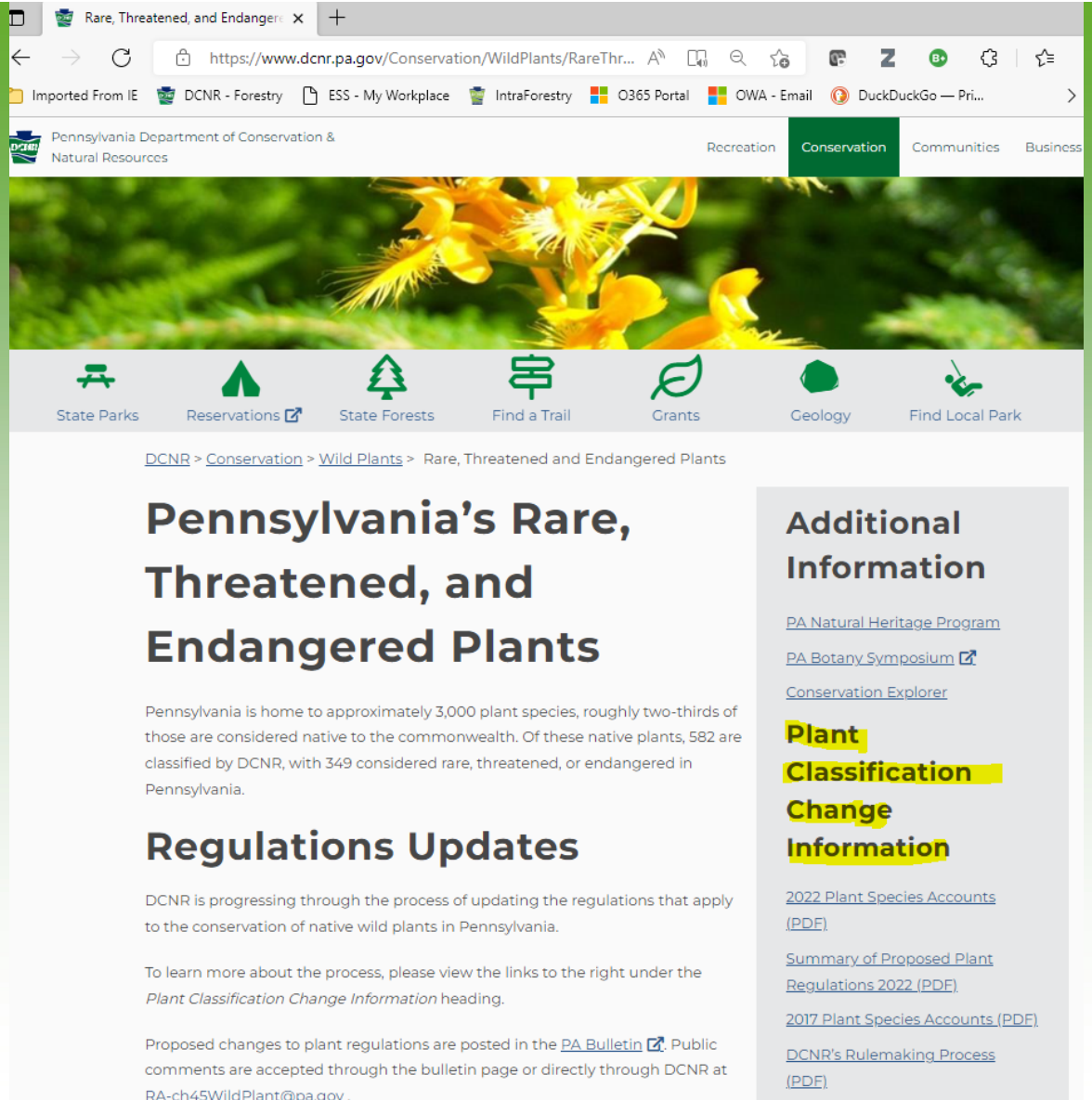
Website:

<https://www.dcnr.pa.gov/Conservation/WildPlants/RareThreatenedAndEndangeredPlants/Pages/default.aspx>

Email:

RA-Ch45WildPlant@pa.gov

www.dcnr.state.pa.us



The screenshot shows a web browser displaying the Pennsylvania Department of Conservation & Natural Resources (DCNR) website. The page is titled "Pennsylvania's Rare, Threatened, and Endangered Plants". The header includes the DCNR logo and navigation links for Recreation, Conservation, Communities, and Business. A secondary navigation bar features icons for State Parks, Reservations, State Forests, Find a Trail, Grants, Geology, and Find Local Park. The main content area has a breadcrumb trail: "DCNR > Conservation > Wild Plants > Rare, Threatened and Endangered Plants". The title "Pennsylvania's Rare, Threatened, and Endangered Plants" is prominently displayed. Below the title, a paragraph states: "Pennsylvania is home to approximately 3,000 plant species, roughly two-thirds of those are considered native to the commonwealth. Of these native plants, 582 are classified by DCNR, with 349 considered rare, threatened, or endangered in Pennsylvania." A section titled "Regulations Updates" follows, with text indicating that DCNR is updating regulations and providing links for more information. On the right side, there is a sidebar titled "Additional Information" containing links to the PA Natural Heritage Program, PA Botany Symposium, Conservation Explorer, and a section for "Plant Classification Change Information" which includes links to 2022 Plant Species Accounts, Summary of Proposed Plant Regulations 2022, 2017 Plant Species Accounts, and DCNR's Rulemaking Process.

Rare, Threatened, and Endangered

<https://www.dcnr.pa.gov/Conservation/WildPlants/RareThreatenedAndEndangeredPlants/Pages/default.aspx>

Imported From IE DCNR - Forestry ESS - My Workplace IntraForestry O365 Portal OWA - Email DuckDuckGo — Pri...

Pennsylvania Department of Conservation & Natural Resources

Recreation Conservation Communities Business

State Parks Reservations State Forests Find a Trail Grants Geology Find Local Park

DCNR > Conservation > Wild Plants > Rare, Threatened and Endangered Plants

Pennsylvania's Rare, Threatened, and Endangered Plants

Pennsylvania is home to approximately 3,000 plant species, roughly two-thirds of those are considered native to the commonwealth. Of these native plants, 582 are classified by DCNR, with 349 considered rare, threatened, or endangered in Pennsylvania.

Regulations Updates

DCNR is progressing through the process of updating the regulations that apply to the conservation of native wild plants in Pennsylvania.

To learn more about the process, please view the links to the right under the *Plant Classification Change Information* heading.

Proposed changes to plant regulations are posted in the [PA Bulletin](#). Public comments are accepted through the bulletin page or directly through DCNR at RA-ch45WildPlant@pa.gov.

Additional Information

[PA Natural Heritage Program](#)
[PA Botany Symposium](#)
[Conservation Explorer](#)

Plant Classification Change Information

[2022 Plant Species Accounts \(PDF\)](#)
[Summary of Proposed Plant Regulations 2022 \(PDF\)](#)
[2017 Plant Species Accounts \(PDF\)](#)
[DCNR's Rulemaking Process \(PDF\)](#)

Thank you!



**Lance-leaved
sage**

Salvia reflexa
(photo: bennyep (CC BY-NC
4.0, iNaturalist))

Currently:	Tent. Undetermined
Proposed:	Delist
Reason:	not native to Pennsylvania