

PROPOSED RULEMAKING

DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

[17 PA. CODE CH. 45]

Conservation of Pennsylvania Native Wild Plants

The Department of Conservation and Natural Resources (Department) proposes to amend Chapter 45 (relating to conservation of Pennsylvania native wild plants) to read as set forth in Annex A.

A. Effective Date

This proposed rulemaking will go into effect upon final-form publication in the *Pennsylvania Bulletin*.

B. Contact Persons

The primary contact for questions regarding this proposed rulemaking is Rebecca H. Bowen, Chief, Ecological Services, Bureau of Forestry, Department of Conservation and Natural Resources, P.O. Box 8552, Harrisburg, PA 17105-8552, (717) 787-3444, rebbowen@pa.gov. The secondary contact for questions regarding this proposed rulemaking is Stephen Ekema-Agbaw, Assistant Counsel, Office of Chief Counsel, Department of Conservation and Natural Resources, P.O. Box 8767, Harrisburg, PA 17105, (717) 772-4171, sekema@pa.gov.

C. Statutory Authority

This rulemaking is proposed under section 7 of the Wild Resource Conservation Act (WRCA) (32 P.S. § 5307) and sections 305(a)(9) and 313(g) of the Conservation and Natural Resources Act (CRNA) (71 P.S. §§ 1340.305(a)(9) and 1340.313(g)).

Section 7(a) of the WRCA provides that “the [former] Department of Environmental Resources shall. . .conduct investigations on wild plants in order to ascertain information relating to. . .other biological and ecological data to classify plants and to determine management measures necessary for their continued ability to sustain themselves successfully.” Under section 7(c) of the WRCA, “[o]n the basis of such determinations, the Environmental Quality Board shall issue regulations not later than two years from the effective date of” the WRCA. Under section 7(c) of the WRCA, “[t]he Environmental Quality Board may add or delete species as conditions change and may modify regulations to reflect the changing environment.”

Section 305(a)(9) of the CRNA transferred to the Department “the powers and duties vested in the Department of Environmental Resources by the. . .Wild Resource Conservation Act.” The former Department of Environmental Resources was the Department’s predecessor in this interest. Section 313(g) of the CRNA transferred to the Department “the powers and duties previously vested in the Environmental Quality Board by. . .[s]ections 7, 8 and 9” of the WRCA.

D. Purpose and Background

Purpose

This rulemaking proposes to amend Chapter 45 by updating: 1) the classification lists of native wild plants; 2) the scientific and common names of certain native wild

plants; and 3) the reference source that the Department uses for the names of native wild plants.

Regarding updates to the classification lists of native wild plants, this rulemaking proposes to amend the following classification lists: Pennsylvania Extirpated (§ 45.11); Pennsylvania Endangered (§ 45.12); Pennsylvania Threatened (§ 45.13); Pennsylvania Rare (§ 45.14); and Tentatively Undetermined (§ 45.21).

This rulemaking proposes to amend the classification lists by: 1) adding plants that are currently unclassified to a classification list; 2) reclassifying plants already on a classification list to a new classification; and 3) removing plants from the classification lists altogether (declassifying them).

Process of classifying native wild plants in Pennsylvania

Native wild plant species are those plant species that existed in this Commonwealth prior to European settlement. There are approximately 2,800 native wild plant species that currently exist or formerly existed in this Commonwealth. The Department classifies approximately 1/5 of these species because they are a conservation concern; the other 4/5 are considered secure and thus not classified.

The Department begins the process of classifying native wild plants by collecting and analyzing data on native wild plant species in this Commonwealth. The Department uses the following data to make its classification decisions: numbers of populations known in this Commonwealth; number of individuals within populations; the plant’s range (amount of ground that it covers); threats such as pests, invasive species and habitat loss; decrease or increase in population numbers; and taxonomic information. The previous list is not exhaustive. The Department analyzes this data to determine the population, distribution, habitat needs, limiting factors, and other biological and ecological information about each plant species.

An important piece of data that the Department uses to make classification decisions are referred to as “State ranks.” In this Commonwealth, each plant species receives a State rank from the Pennsylvania Natural Heritage Program (PNHP). The PNHP assigns these ranks based on a methodology created by Nature Serve, an international network of natural heritage programs. The purpose of Nature Serve’s methodology is to bring consistency to the biodiversity conservation efforts of individuals and organizations throughout the Western Hemisphere. This methodology is used across North America, Central America and South America. By using this standard tool, the Department ensures its evaluation methods are, at a minimum, equivalent to that of other states and countries in the Western Hemisphere and that its classification decisions are based on sound science.

Throughout this process the Department also receives data, information and recommendations from the Pennsylvania Biological Survey’s Vascular Plant Technical Committee (Committee). The Committee is composed of professional botanists working throughout this Commonwealth in academic, consulting, governmental and conservation organizations. Each year, the Committee makes classification recommendations for native wild plants based on the research and expertise of its professional botanists.

The Department assimilates and reviews all data and recommendations it collects and receives, and determines

the appropriate classifications for each native wild plant species under the definitions in Chapter 45.

Native wild plant classifications

Under section 7(a) of the WRCA, how plants are classified determines the “management measures necessary for their continued ability to sustain themselves successfully.” Native wild plant species that are at risk of extinction in this Commonwealth need greater protection than those less susceptible to this risk. Chapter 45 designates the level of risk facing native wild plant species in this Commonwealth by classifying them as follows:

Pennsylvania Extirpated (§ 45.11)—A classification of plant species believed to be extinct in this Commonwealth. If a plant species classified as Pennsylvania Extirpated is later found to exist in this Commonwealth it will automatically be considered classified as Pennsylvania Endangered.

Pennsylvania Endangered (§ 45.12)—A classification of plant species that are in danger of extinction throughout most or all of their natural range in this Commonwealth if critical habitat is not maintained or if the species is greatly exploited by man. This classification also includes populations of plant species that have been classified as Pennsylvania Extirpated but are subsequently found to exist in this Commonwealth.

Pennsylvania Threatened (§ 45.13)—A classification of plant species that may become endangered throughout most or all of their natural range in this Commonwealth if critical habitat is not maintained to prevent their further decline, or if the species is greatly exploited by man.

Pennsylvania Rare (§ 45.14)—A classification of plant species that are uncommon in this Commonwealth because they have low population numbers or are only found in restricted geographic areas.

Pennsylvania Vulnerable (§ 45.15)—A classification of plant species that are in danger of population decline in this Commonwealth because of their beauty, economic value, use as a cultivar or other factors which indicate that persons may seek to remove these species from their native habitats.

Special Concern Population (§ 45.20)—A classification of plant species that the Department has determined to be a unique occurrence deserving protection. Among the factors used to classify a plant species as a Special Concern Population are the existence of unusual geographic locations, unisexual populations or extraordinarily diverse plant populations.

Tentatively Undetermined (§ 45.21)—A classification of plant species that are in danger of population decline but do not meet the criteria for any other classification due to taxonomic uncertainties, limited historical records or insufficient data.

Updating species nomenclature

This proposed rulemaking updates the scientific and common names of certain native wild plant species to conform to the Department’s new taxonomic source material.

The current nomenclature used to identify species taxonomy in Chapter 45 comes from John T. Kartesz’s 1980 publication, *A Synonymized Checklist of the Vascular Flora of the United States, Canada and Greenland, Volume 2: The Biota of North America*. The Department now uses *The Plants of Pennsylvania Second Edition*

(2007) by Ann Fowler Rhoads and Timothy A. Block as a reference. This proposed rulemaking updates the reference to reflect the most up-to-date information on native wild plants in this Commonwealth. This necessitates an update to the scientific and common names in Chapter 45 to remain consistent with the new source material. Additionally, this proposed rulemaking corrects minor grammatical errors and misspellings of species names.

Pennsylvania Natural Diversity Inventory

The proposed amendments will be incorporated into the Pennsylvania Natural Diversity Inventory (PNDI).

The PNDI is a database that maintains the Department’s list of native wild plant classifications, as well as native rare wildlife classifications from the Game Commission, the Fish and Boat Commission and the United States Fish and Wildlife Service. The PNDI provides the most current, reliable and objective scientific information about ecological resources in this Commonwealth and it is used to help inform environmental decisions in the Commonwealth. Most notably, the Department of Environmental Protection (DEP) uses the PNDI to inform its environmental permitting decisions.

The overwhelming majority of users use the PNDI as part of the process of obtaining a DEP permit. The DEP requires permit applicants to screen their land use projects through the PNDI for potential impacts to threatened or endangered species to receive a DEP permit; threatened and endangered plant species are thereby protected by the DEP’s permitting process.

Although this proposed rulemaking will result in updates to the plant data in the PNDI, this proposed rulemaking will not affect the DEP’s permitting process. The process of obtaining a DEP permit is beyond the scope of this proposed rulemaking. Instead, the PNDI’s connection to this proposed rulemaking is limited to its use of the plant data that will result from the proposed amendments. No person, business, small business or organization will be required to invest in additional administrative procedures as a direct result of this proposed rulemaking.

Finally, because this proposed rulemaking will remove more species from classifications than it adds, there may be fewer classified plant species for prospective DEP permit applicants to account for when applying to obtain DEP permits. Depending on the project type, location and classified plant species in question, prospective DEP permit applicants may see no change in the amount of mitigation required to address impacts to threatened and endangered species and fulfil permit requirements.

E. Summary of this Proposed Rulemaking

Subchapter A. General provisions

The definition of “unlisted” is proposed to be deleted from § 45.2 (relating to definitions) because it is not used in Chapter 45.

Proposed amendments to § 45.3 (relating to classified plant taxonomy) update the taxonomic source material that the Department uses for the nomenclature of native wild plants from John T. Kartesz and Rosemarie Kartesz, *A Synonymized Checklist of the Vascular Flora of the United States, Canada and Greenland, Volume 2: The Biota of North America* (1980), to Ann Fowler Rhoads and Timothy A. Block, *The Plants of Pennsylvania An Illustrated Manual Second Edition* (2007), Philadelphia, Pennsylvania: University of Pennsylvania Press.

Subchapter B. Classified plants

There are 130 substantive proposed amendments to Subchapter B (relating to classified plants), with 79 proposed name changes and 51 classification changes. The substantive proposed amendments include: 9 currently unclassified plant species proposed to be newly classified; 11 currently classified plant species proposed to be reclassified; 31 currently classified plant species that are proposed to be unclassified; and 79 currently classi-

fied plant species with proposed name changes.

For the purposes of this proposed rulemaking, a substantive name change is one that changes the meaning of the plant name (see the following “plant name changes” section). This proposed rulemaking makes minor grammatical corrections to plant names (that is, adding periods, deleting commas and fixing spelling errors) that do not change the meaning of the plant name and are therefore not substantive.

Newly classified and reclassified plant species

<i>Scientific Name</i>	<i>Common Name</i>	<i>Current</i>	<i>Proposed</i>	<i>Reason for Change</i>	<i>Habitat / Identification Window</i>
<i>Asclepias variegata</i> L.	White Milkweed	TU	PE	Population decrease; habitat decline	Dry woods; flowers late May—July
<i>Baptisia australis</i> (L.) R. Br.	Blue False Indigo	N	PT	Population decrease; unique/rare habitat	River cobble bars and banks; flowers May—June, identifiable most months by leaf and seed pod
<i>Coeloglossum viride</i> (L.) Hartm.	Long-Bracted Green Orchis	TU	PE	Population decrease; vulnerable to exploitation	Rich woods; flowers May—August
<i>Cypripedium parviflorum</i> Salisb. var. <i>makasin</i> (Source: <i>Flora of North America</i>)	Northern Small Yellow Lady’s-Slipper	N	PE	Taxon split into distinct subspecies; low numbers; unique/rare habitat; vulnerable to exploitation	Moist woods, bogs; flowers April—June
<i>Epilobium strictum</i> Muhl.	Downy Willow-Herb	PE	PR	Population increase; habitat decline; unique/rare habitat	Wet meadows, marshes, fens, thickets; flowers July—September
<i>Equisetum scirpoides</i> Michx. (Source: <i>Flora of North America</i>)	Dwarf Scouring-Rush	N	PE	Recent discovery in this Commonwealth; low numbers; unique/rare habitat	Wet woods and peaty openings; identifiable year-round
<i>Fraxinus profunda</i> (Bush) Bush	Pumpkin Ash	N	PE	Low numbers; unique/rare habitat; vulnerable to exotic pest	Wet bottomland forest, often in shallow water; identifiable year-round
<i>Goodyera tessellata</i> Lodd.	Checkered Rattlesnake-Plantain	TU	PE	Population decrease; habitat decline; vulnerable to exploitation	Moist coniferous and deciduous forest; flowers July—early September
<i>Lycopodiella margueritae</i> J. G. Bruce, W. H. Wagner & Beitel	Marguerite’s Clubmoss	N	PE	Low numbers; global rarity; unique/rare habitat; vulnerable to exploitation	Moist sandy wetlands and shores; sporulates August—October
<i>Lysimachia quadriflora</i> Sims	Four-Flowered Loosestrife	TU	PX	Population extirpated	Wet meadows, fens; flowers July—August
<i>Malaxis bayardii</i> Fernald	Adder’s-Mouth	PR	PE	Population decrease; global rarity; vulnerable to exploitation	Dry open upland forest, shale barrens; flowers July—September
<i>Platanthera aquilonis</i> Sheviak, Lindleyana (Source: <i>Flora of North America</i>)	Northern Green Orchid	N	PE	Taxon split into distinct species; low numbers; vulnerable to exploitation	Wet meadows, marshes, fens, stream banks, moist deciduous forest slopes; flowers June—August
<i>Platanthera huronensis</i> (Nutt.) Lindl.	Huron Green Orchid	N	PE	Taxon split into distinct species; low numbers; vulnerable to exploitation	Wet meadows, bogs, woods; flowers June—August

<i>Scientific Name</i>	<i>Common Name</i>	<i>Current</i>	<i>Proposed</i>	<i>Reason for Change</i>	<i>Habitat / Identification Window</i>
<i>Platanthera peramoena</i> (A. Gray) A. Gray	Purple Fringeless Orchid	TU	PT	Low numbers; unique/rare habitat; vulnerable to exploitation	Moist meadows, low wet woods, ditches; flowers July—August
<i>Potentilla anserina</i> L.	Silverweed	PT	PR	Unique/rare habitat; tolerant of disturbance	Moist sandy or gravelly shores, or ballast; flowers May—June, identifiable by leaf spring—fall
<i>Ratibida pinnata</i> (Vent.) Barnhart	Gray-Headed Prairie Coneflower	TU	PE	Population decrease	Dry fields, limestone uplands, open roadsides; flowers June—August
<i>Rubus cuneifolius</i> Pursh	Sand Blackberry	TU	PE	Population decrease; habitat decline; unique/rare habitat	Sandy dry open thickets and roadsides; flowers May—June, fruits in July, identifiable by leaf spring—fall
<i>Solidago uliginosa</i> Nutt.	Bog Goldenrod	N	PT	Population decrease; unique/rare habitat	Bogs, swamps, wet meadows, fens; flowers August—October
<i>Vitis rupestris</i> Scheele	Sand Grape	PX	PE	Recent rediscovery in this Commonwealth; low numbers; global rarity; unique/rare habitat	River cobble bars and banks; flowers in May, fruits August—November; identifiable by leaf spring—fall
<i>Zigadenus glaucus</i> (Nutt.) Nutt.	White Camas	N	PE	Recent discovery in this Commonwealth; low numbers; unique/rare habitat	Limestone ledges; flowers in August

Key: N—Currently Unclassified; PX—Pennsylvania Extirpated (§ 45.11); PE—Pennsylvania Endangered (§ 45.12); PT—Pennsylvania Threatened (§ 45.13); PR—Pennsylvania Rare (§ 45.14); PV—Pennsylvania Vulnerable (§ 45.15); TU—Tentatively Undetermined (§ 45.21)

Classified plant species being declassified

<i>Scientific Name</i>	<i>Common Name</i>	<i>Current</i>	<i>Proposed</i>	<i>Reason for Change</i>	<i>Habitat / Identification</i>
<i>Alopecurus carolinianus</i> Walt.	Tufted Foxtail	PE	DC	Determined to be nonnative to this Commonwealth; determined to be invasive; high numbers	Swamps, ditches, moist meadows; flowers late May—June
<i>Aster firmus</i> Nees	Firm Aster	TU	DC	Tolerant of disturbance; high numbers	Wet meadows, swamps, fens; flowers August—October
<i>Atriplex littoralis</i> L.	Seaside Orach	PX	DC	Recent rediscovery in this Commonwealth; determined to be nonnative to this Commonwealth	Coastal areas, beaches, salt-treated roadsides; flowers/fruits August—November
<i>Cynanchum laeve</i> (Michx.) Pers.	Smooth Swallow-Wort	PE	DC	Population increase; determined to be invasive; tolerant of disturbance	River banks, agricultural fields, roadsides; flowers July—August
<i>Elephantopus carolinianus</i> Raeusch.	Elephant's-Foot	PE	DC	Population increase; tolerant of disturbance	Open woodlands, woodland borders, serpentine barrens; flowers August—October

<i>Scientific Name</i>	<i>Common Name</i>	<i>Current</i>	<i>Proposed</i>	<i>Reason for Change</i>	<i>Habitat / Identification</i>
<i>Elodea canadensis</i> L. C. Rich.	Broad Waterweed (Male Plants)	TU	DC	High population numbers	Shallow water of rivers, creeks, lakes, ponds; flowers late June—early August
<i>Juncus gymnocarpus</i> Coville	Coville's Rush	PR	DC	Population increase; tolerant of disturbance	Swamps, seeps, springheads; flowers/fruits in summer
<i>Lemna obscura</i> (Austin) Daubs	Little Water Duckweed	PX	DC	Determined to be nonnative to this Commonwealth; tolerant of disturbance	Shallow water, often in disturbed areas; identifiable by leaf spring—fall
<i>Lycopodium selago</i> L.	Mountain Clubmoss	PX	DC	Misidentified; redetermination	Cool boreal cliffs, forests, meadows, shores; sporulates July—September
<i>Myriophyllum heterophyllum</i> (Michx.)	Broad-Leaved Water-Milfoil	PE	DC	Recent rediscovery in this Commonwealth; determined to be nonnative to this Commonwealth	Still water of ponds, lakes; flowers June—July
<i>Nelumbo lutea</i> (Willd.) Pers.	American Lotus	PE	DC	Determined to be nonnative to this Commonwealth; determined to be invasive	Ponds and other quiet water; flowers June—September
<i>Panicum bicknellii</i> Nash (Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth Edition)	Bicknell's Panic-Grass	TU	DC	Taxonomic uncertainties	Wet or moist sandy woods; flowers May—early July and late summer—early fall
<i>Panicum longiligulatum</i> Nash (Morris Arboretum, 1992, Pennsylvania Flora Database)	Long-Ligule Panic-Grass	TU	DC	Taxon lumped with another species	Dry woods, slopes, clearings; flowers May—early July and late summer—early fall
<i>Panicum recognitum</i> Fern. (Morris Arboretum, 1992, Pennsylvania Flora Database)	Fernald's Panic-Grass	TU	DC	Taxon lumped with another species	Moist sandy woods; flowers May—early July and late summer—early fall
<i>Paronychia fastigiata</i> (Raf.) Fern. var. <i>paleacea</i> Fern.	Chaffy Whitlow Wort	TU	DC	Taxon lumped with another species	Dry, rocky, sandy open woods and edges; flowers July—September
<i>Platanthera hyperborea</i> (L.) Lindl.	Leafy Northern Green Orchid	PE	DC	Misidentified; redetermination	Wet tundra, stream banks; flowers July—August
<i>Polygonum robustius</i> (Small) Fern.	Robust Smartweed	PT	DC	Population increase; disturbance tolerant	Swamps, lake shores, streams; flowers July—October
<i>Potamogeton illinoensis</i> Morong	Illinois Pondweed	TU	DC	High numbers; disturbance tolerant	Rivers, streams, lakes, ponds; flowers/fruits summer—fall
<i>Prenanthes crepidinea</i> Michx.	Crepis Rattlesnake-Root	PE	DC	Population increase	Open and forested floodplains, banks; flowers August—November
<i>Pycnanthemum pycnanthemoides</i> (Leavenw.) Fern.	Southern Mountain-Mint	PE	DC	Misidentified; redetermination	Open habitat; flowers July—September

Scientific Name	Common Name	Current	Proposed	Reason for Change	Habitat / Identification
<i>Solidago purshii</i> Porter	Pursh's Goldenrod	TU	DC	Taxon lumped with another species	Bogs, swamps, sedge meadows, fens; flowers August—October
<i>Spirodela punctata</i> (Mey.) C. H. Thompson	Eastern Water-Flaxseed	TU	DC	Determined to be nonnative to this Commonwealth	Ponds, lakes, swamps, sluggish streams; identifiable by leaf spring—fall
<i>Tradescantia ohiensis</i> Raf.	Ohio Spiderwort	TU	DC	High numbers; disturbance tolerant	Alluvial woods, waste ground; flowers May—July
<i>Trautvetteria caroliniensis</i> (Walt.) Vail	Carolina Tassel-Rue	PR	DC	High numbers; disturbance tolerant	Wooded seepage slopes, stream banks, bogs; June—July
<i>Utricularia inflata</i> Walt.	Floating Bladderwort	PX	DC	Determined to be nonnative to this Commonwealth; determined to be invasive	Lakes, ponds, standing water; flowers May—October
<i>Utricularia minor</i> L.	Lesser Bladderwort	PT	DC	Population increase; disturbance tolerant; determined to be invasive	Lakes, ponds, swamps, standing water; flowers June—August
<i>Utricularia purpurea</i> Walt.	Purple Bladderwort	PR	DC	Population increase; disturbance tolerant	Lakes, ponds, standing water; flowers July—early September
<i>Veronica catenata</i> Pennell	Pennell's Speedwell	TU	DC	Taxonomic uncertainties	Wet fields, ditches, stream edges in shallow water; flowers May—September
<i>Viola nephrophylla</i> Greene	Northern Bog Violet	TU	DC	Misidentified; redetermination	Bogs, wet meadows, ditches, stream banks; flowers May—July
<i>Viola pedatifida</i> G. Don	Prairie Violet	PE	DC	Misidentified; redetermination	Open prairies, savannas; flowers April—June
<i>Zannichellia palustris</i> L.	Horned Pondweed	TU	DC	Population increase; disturbance tolerant	Streams, ponds, lakes, springs, tidal mudflats; flowers May—October

Key: DC—Declassified; N—Currently Unclassified; PX—Pennsylvania Extirpated (§ 45.11); PE—Pennsylvania Endangered (§ 45.12); PT—Pennsylvania Threatened (§ 45.13); PR—Pennsylvania Rare (§ 45.14); PV—Pennsylvania Vulnerable (§ 45.15); TU—Tentatively Undetermined (§ 45.21)

Plant name changes

Pennsylvania Extirpated (§ 45.11)

The names of 16 native wild plant species classified as Pennsylvania Extirpated are proposed to be changed as follows:

Carex aenea Fern. to *Carex foenea* Willd.

Erianthus giganteus (Walt.) Muhl. to *Saccharum giganteum* (Walter) Pers.

Eupatorium album L. to *Eupatorium album* L. var *album*

Gentianopsis procera (Holm) Ma. to *Gentianopsis virgata* (Raf.) Holub

Helianthus angustifolius L. to *Helianthus angustifolius* L.

Hypericum stans (Michx.) P. Adams & Robson to *Hypericum crux-andreae* (L.) Crantz

Koeleria cristata (L.) Pers. to *Koeleria macrantha* (Ledeb.) Schultes

Lycopodium sabinifolium Willd. to *Diphasiastrum sabinifolium* (Willd.) Holub.

Panicum leibergii (Vasey) Scribn. (Gleason, H. A. and A. Cronquist, *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 1991, Second Edition) to *Dichanthelium leibergii* (Vasey) Freckmann

Panicum spretum Schultes (Gleason, H. A. and A. Cronquist, *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 1991, Second Edition) to *Dichanthelium spretum* (Schult.) Freckmann

Phoradendron serotinum (Raf.) M. C. Johnston to *Phoradendron leucarpum* (Raf.) Reveal & M. C. Johnst.

Sagittaria stagnorum Small to *Sagittaria filiformis* J. G. Sm.

Scirpus heterochaetus Chase to *Schoenoplectus heterochaetus* Chase (Sojak)

Sisyrinchium arenicola E. P. Bickn. to *Sisyrinchium fuscatum* E. P. Bicknell

Sparganium minimum (Hartm.) Fries to *Sparganium natans* L.

Triglochin palustre L. to *Triglochin palustris* L.

Pennsylvania Endangered (§ 45.12)

The names of 28 native wild plant species classified as Pennsylvania Endangered are proposed to be changed as follows:

Alisma plantago-aquatica L. var. *americana* Schultes & Schultes to *Alisma triviale* Pursh

Aster borealis (Torr. & Gray) Prov. to *Symphyotrichum boreale* (Torr. & Gray) Á. Löve & D. Löve

Aster nemoralis Ait. to *Oclemena nemoralis* (Aiton) E. Greene

Aster solidagineus Michx. to *Sericocarpus linifolius* (L.) Britton, Stearns & Poggenb.

Aster spectabilis Ait. to *Eurybia spectabilis* (Aiton) Nesom

Cerastium arvense (L.) var. *villosissimum* Pennell to *Cerastium velutinum* Raf. var. *villossissimum* (Pennell) J. K. Morton

Cymophyllus fraseri (Andr.) Mackenzie to *Cymophyllus fraserianus* (Ker Gawl.) Kartesz & Gandhi

Cypripedium parviflorum Salisb. to *Cypripedium parviflorum* Salisb. var. *parviflorum* (Source: *Flora of North America*)

Frasera caroliniensis Walt. to *Swertia caroliniensis* (Walter) Kuntze

Hemicarpha micrantha (Vahl) Britt. to *Lipocarpa micrantha* (Vahl) G. C. Tucker

Lycopodium alopecuroides L. to *Lycopodiella alopecuroides* (L.) Cranfill

Lycopodium porophilum Lloyd & Underwood to *Huperzia porophila* (F. E. Lloyd & Underw.) Holub

Megalodonta beckii (Torr. ex Spreng.) Greene to *Bidens beckii* (Torr. ex Spreng.) Greene

Myriophyllum exalbescens Fern. to *Myriophyllum sibiricum* Komarov

Onosmodium hispidissimum Mackenzie to *Onosmodium molle* Michx. var. *hispidissimum* (Mack.) Cronquist

Oryzopsis pungens (Torr. ex Spreng.) A. S. Hitchc. to *Piptatherum pungens* (Torr. ex Spreng.) Dorn

Panicum scoparium (Lam.) Gould (Morris Arboretum, 1992, Pennsylvania Flora Database) to *Dichanthelium scoparium* (Lam.) Gould

Panicum xanthophysum (Gray) Freckmann (Morris Arboretum, 1992, Pennsylvania Flora Database) to *Dichanthelium xanthophysum* (A. Gray) Freckmann

Polygonum careyi Olney to *Persicaria careyi* (Olney) Greene

Polygonum setaceum Baldw. ex Ell. var. *interjectum* Fern. to *Persicaria setacea* (Baldwin) Small

Sagittaria calycina Engelm. var. *spongiosa* Engelm. to *Sagittaria calycina* Engelm.

Scirpus acutus Muhl. ex Bigelow to *Schoenoplectus acutus* (Muhl. Ex Bigel.) Löve & Löve

Scirpus smithii Gray to *Schoenoplectus smithii* (A. Gray) Sojak

Scirpus torreyi Olney to *Schoenoplectus torreyi* (Olney) Palla

Scleria reticularis Michx. to *Scleria muhlenbergii* Steud.

Senecio antennariifolius Britt. to *Packera antennariifolia* (Britton) W. A. Weber & Á. Löve

Solidago spathula DC. spp. *randii* var. *racemosa* (Greene) Gleason to *Solidago simplex* Kunth ssp. *randii* (Porter) Ringius var. *racemosa* (Greene) Ringius

Tomanthera auriculata (Michx.) Raf. to *Agalinis auriculata* (Michx.) S. F. Blake

Pennsylvania Threatened (§ 45.13)

The names of nine native wild plant species classified as Pennsylvania Threatened are proposed to be changed as follows:

Aster depauperatus (Porter) Fern. to *Symphyotrichum depauperatum* (Fernald) Nesom

Aster novi-belgii L. to *Symphyotrichum novi-belgii* (L.) Nesom var. *novi-belgii*

Cimicifuga americana Michx. to *Actaea podocarpa* DC

Euthamia tenuifolia (Pursh) Greene to *Euthamia caroliniana* (L.) Greene ex Porter & Britton

Juncus alpinus Vill. to *Juncus alpinoarticulatus* Chaix in Vill. ssp. *nodulosus* (Wahlenb.) Hamet-Ahti.

Juncus balticus Willd. to *Juncus arcticus* Willd. var. *littoralis* (Engelm.) Boivin.

Lycopodium appressum (Chapman) Lloyd & Underwood to *Lycopodiella appressa* (Chapm.) Cranfill

Spiraea betulifolia Pallas ssp. *corymbosa* (Raf.) Taylor & MacBryde to *Spiraea betulifolia* Pallas var. *corymbosa* (Raf.) Maxim.

Talinum teretifolium Pursh to *Phemeranthus teretifolius* (Pursh) Raf.

Pennsylvania Rare (§ 45.14)

The names of four native wild plant species classified as Pennsylvania Rare are proposed to be changed as follows:

Panicum commonsianum Ashe var. *euchlamydeum* (Skinners) Pohl (Morris Arboretum, 1992, Pennsylvania Flora Database) to *Dichanthelium commonsianum* (Ashe) Freckmann var. *euchlamydeum* (Shinners) Pohl

Prunus pumila L. to *Prunus pumila* L. var. *pumila*

Scirpus fluviatilis (Torr.) Gray to *Schoenoplectus fluviatilis* (Torr.) Strong

Senecio anonymus Wood to *Packera anonyma* (A. W. Wood) W. A. Weber & Á. Löve

Pennsylvania Vulnerable (§ 45.15)

The name of *Cypripedium pubescens* Willd. is proposed to be changed to *Cypripedium parviflorum* Salisb. var. *pubescens* (Willd.) Correll.

Tentatively Undetermined (§ 45.21)

The names of 21 native wild plant species classified as tentatively undetermined are proposed to be changed as follows:

Aristida curtissii (Gray) Nash to *Aristida dichotoma* Michx. var. *curtissii* A. Gray

Aster dumosus L. to *Symphyotrichum dumosum* (L.) Nesom

Aster ericoides L. to *Symphyotrichum ericoides* (L.) Nesom

Cassia marilandica L. to *Senna marilandica* (L.) Link

Hedyotis purpurea (L.) Torr. & Gray to *Houstonia purpurea* L. var. *purpurea*

Liatris scariosa (L.) Willd. var. *nieuwlandii* Lunell and *Liatris scariosa* (L.) Willd. var. *novae-angliae* Lunell combined *Liatris scariosa* (L.) Willd.

Malaxis brachypoda (Gray) Fern. to *Malaxis monophyllos* (L.) Swartz var. *brachypoda* (A. Gray) F. Morris & E. A. Eames

Nuphar lutea (L.) Sibthorp & Sm. ssp. *pumilum* (Timm) E. O. Beal to *Nuphar microphylla* (Pers.) Fernald

Panicum annulum Ashe (Morris Arboretum, 1992, Pennsylvania Flora Database) to *Dichantheium annulum* (Ashe) LeBlond

Panicum boreale Nash (Gleason, H. A. and A. Cronquist, *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 1991, Second Edition) to *Dichantheium boreale* (Nash) Freckmann

Panicum commonsianum Ashe var. *commonsianum* (Morris Arboretum, 1992, Pennsylvania Flora Database) to *Dichantheium commonsianum* (Ashe) Freckmann

Panicum lucidum Ashe (Fernald, M. L., *Gray's Manual of Botany*, 1970, Eighth Edition) to *Dichantheium lucidum* (Ashe) LeBlond

Panicum villosissimum Nash (Gleason, H. A. and A. Cronquist, *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 1991, Second Edition) to *Dichantheium villosissimum* (Nash) Freckmann

Panicum yadkinense Ashe (Gleason, H. A. and A. Cronquist, *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 1991, Second Edition) to *Dichantheium yadkinense* (Ashe) Mohlenbr.

Potamogeton filiformis Pers. to *Potamogeton filiformis* Pers. var. *borealis* (Raf.) St. John

Pycnanthemum pilosum Nutt. to *Pycnanthemum verticillatum* (Michx.) Pers. var. *pilosum* (Nutt.) Cooperr.

Ranunculus trichophyllus Chaix (Gleason, H. A. and A. Cronquist, *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*, 1991, Second Edition) to *Ranunculus aquatilis* L. var. *diffusus* With.

Rhynchospora globularis (Chapman) Small to *Rhynchospora recognita* (Gale) Kral

Senecio plattensis Nutt. to *Packera plattensis* (Nutt.) W. A. Weber & Á. Löve

Uvularia puberula Michx. to *Uvularia pudica* Michx.

F. Benefits, Costs and Compliance Benefits

This proposed rulemaking will benefit State, county and municipal conservation planning officials, conservation groups and other organizations concerned with the welfare of the environment because it more accurately represents the plants in this Commonwealth in need of the most protection. Additionally, this proposed rulemaking benefits the citizens of this Commonwealth by protecting this Commonwealth's natural resources, which is a constitutional right. See Pa.Const. Art. I, § 27.

Keeping up-to-date classifications of native wild plants, ensures that the Department and other public and private conservation organizations are targeting the appropriate species in their conservation efforts. This will help maintain the biodiversity of ecological systems in this Commonwealth.

Compliance costs

This proposed rulemaking does not prescribe anything for a group or entity to comply with. This proposed rulemaking updates the Commonwealth's classified lists of native wild plants, updates the scientific and common names of certain native wild plant species, and updates the reference source of the nomenclature that the Department uses for native wild plant species taxonomy. There are no compliance costs associated with this proposed rulemaking.

Paperwork requirements

There will be no increase in the amount of required paperwork associated with this proposed rulemaking.

G. Sunset Review

The regulations will be reviewed in accordance with the sunset review schedule published by the Department to determine whether the regulations effectively fulfill the goals for which they were intended.

H. Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on November 6, 2017, the Department submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the Senate and House Environmental Resources and Energy Committees. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria in section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) which have not been met. The Regulatory Review Act specifies detailed procedures for review prior to final publication of the rulemaking by the Department, the General Assembly and the Governor.

I. Public Comments

Interested persons are invited to submit comments regarding this proposed rulemaking to Rebecca H. Bowen, Ecological Services Section, Bureau of Forestry, Department of Conservation and Natural Resources, P.O. Box 8552, Harrisburg, PA 17105-8552 (hand delivery, express mail or first class mail to Rachel Carson State Office Building, 6th Floor, 400 Market Street, Harrisburg, PA 17101-2301). Comments submitted by facsimile will not be accepted. Comments must be received by the Department 30 days from the date this proposed rulemaking is published in the *Pennsylvania Bulletin*.

Comments may also be submitted to the Department at RA-Ch45WildPlant@pa.gov and must also be received by the Department 30 days from the date this proposed rulemaking is published in the *Pennsylvania Bulletin*. Use "Chapter 45 proposed rulemaking" as the subject line. A return name and United States Postal Service mailing address must be included in each transmission.

CINDY ADAMS DUNN,
Secretary

Fiscal Note: 7B-8. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 17. CONSERVATION AND NATURAL RESOURCES

PART I. DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

Subpart D. RESOURCE CONSERVATION

CHAPTER 45. CONSERVATION OF PENNSYLVANIA NATIVE WILD PLANTS

Subchapter A. GENERAL PROVISIONS

§ 45.2. Definitions.

The following words and terms, when used in this chapter, have the following meanings, unless the context clearly indicates otherwise:

* * * * *

Tentatively Undetermined—A classification of plant species which are believed to be in danger of population decline, but which cannot presently be included within another classification due to taxonomic uncertainties, limited evidence within historical records or insufficient data.

[*Unlisted*—Plant species which are native to this Commonwealth, presently capable of sustaining their populations successfully, not in need of protection currently and currently not included in classifications under this chapter.]

Wild plants—Naturally occurring native flora, except those commonly considered an agricultural commodity, including green and nongreen species or subspecies, variety or a part, product, seed or progeny thereof.

§ 45.3. Classified plant taxonomy.

Nomenclature used to identify species taxonomy [contained within Subchapter B is according to Kartesz, J. T. and Rosemarie Kartesz, 1980 *A Synonymized Checklist of the Flora of the U. S., Canada, and Greenland*] in Subchapter B (relating to classified plants) is according to Rhoads, A. F. and Block, T. A. (2007), *The Plants of Pennsylvania An Illustrated Manual Second Edition*, Philadelphia, Pennsylvania: University of Pennsylvania Press, unless a different taxonomic source is indicated immediately following the scientific name.

Subchapter B. CLASSIFIED PLANTS

§ 45.11. Pennsylvania Extirpated.

Plant species classified as Pennsylvania Extirpated are as follows:

<i>Scientific Name</i>	<i>Common Name</i>
<i>Aeschynomene virginica</i> (L.) [BSP.] Britton, Stearns & Poggenb.	Sensitive Joint-Vetch
<i>Agalinis decemloba</i> (Greene) Pennell	[Blue-Ridge False-Foxglove] Blue Ridge False Foxglove
<i>Agrostis altissima</i> [(Walt.) Tuckerman] (Walter) Tuck.	Tall Bentgrass
<i>Arctostaphylos uva-ursi</i> (L.) Spreng.	Bearberry Manzanita
<i>Asclepias rubra</i> L.	Red Milkweed
<i>Astragalus neglectus</i> (Torr. & A. Gray) Sheldon	Cooper's Milk-Vetch
[Atriplex littoralis L.	Seaside Orach]
<i>Berberis canadensis</i> P. Mill.	American Barberry
<i>Buchnera americana</i> L.	[Blue Hearts] Bluehearts
<i>Carex adusta</i> Boott	Crowded Sedge
[Carex aenea Fern.	Fernald's Hay Sedge]
<i>Carex alopecoidea</i> Tuckerman	Foxtail Sedge
<i>Carex backii</i> Boott	Rocky Mountain Sedge
<i>Carex barrattii</i> [Schwein] Schwein. & Torr.	Barratt's Sedge
<i>Carex chordorrhiza</i> [Ehrh. ex] L.f.	Creeping Sedge
Carex foenea Willd.	Fernald's Hay Sedge
<i>Carex hyalinolepis</i> Steud.	[Shore-Line] Shoreline Sedge
<i>Carex nigra</i> (L.) Reichard	Black Sedge
<i>Carex sartwellii</i> Dewey	Sartwell's Sedge
<i>Chamaecyparis thyoides</i> (L.) [BSP.] Britton, Stearns & Poggenb.	Atlantic [White Cedar] White-Cedar
<i>Commelina erecta</i> L.	Slender [Day-Flower] Dayflower
<i>Commelina virginica</i> L.	Virginia [Day-Flower] Dayflower

<i>Scientific Name</i>	<i>Common Name</i>
<i>Coreopsis rosea</i> Nutt.	Pink Tickseed
<i>Crassula aquatica</i> (L.) [Schoenl.] Schönland	[Water Pigmy-Weed] Water-Pigmyweed
<i>Crotonopsis elliptica</i> Willd.	Elliptical Rushfoil
<i>Cynoglossum boreale</i> [Fern.] Fernald	Northern Hound's Tongue
<i>Cyperus polystachyos</i> Rottb.	Many-Spiked Flatsedge
<i>Cypripedium candidum</i> Muhl. ex Willd.	Small White Lady's-Slipper
<i>Desmodium sessilifolium</i> (Torr.) Torr. [&] and A. Gray	Sessile-Leaved Tick Trefoil
<i>Dichanthelium leibergii</i> (Vasey) Freckmann	Leiberg's Panic Grass
<i>Dichanthelium spretum</i> (Schult.) Freckmann	Eaton's Witchgrass
<i>Diphasiastrum sabinifolium</i> (Willd.) Holub.	Fir Clubmoss
<i>Distichlis spicata</i> (L.) Greene	Sea-Shore Salt-Grass
<i>Draba reptans</i> (Lam.) [Fern.] Fernald	Carolina Whitlow-Grass
<i>Echinacea laevigata</i> (C. L. [Boynt.] Boynton & Beadle) S. F. Blake	Smooth Purple Coneflower
<i>Elatine americana</i> (Pursh) Arn.	[Long-Stemmed Water-Wort] Long-Stem Waterwort
<i>Eleocharis tricostata</i> Torr.	Three-Ribbed Spike-Rush
<i>Eleocharis tuberculosa</i> (Michx.) [Roemer & Schultes] Roem. & Schult.	Long-Tuberled Spike-Rush
<i>Elodea schweinitzii</i> [(Planch.) Caspary] (Planch) Casp.	Schweinitz's Waterweed
[<i>Erianthus giganteus</i> (Walt.) Muhl.	Sugar Cane Plumegrass]
<i>Eriocaulon decangulare</i> L.	[Ten-Angled] Ten-Angle Pipewort
<i>Eriocaulon parkeri</i> B. L. [Robins.] Rob.	Parker's Pipewort
<i>Eryngium aquaticum</i> L.	Marsh Eryngo
<i>Eupatorium album</i> L. var album	White Thoroughwort
<i>Eupatorium leucolepis</i> [(DC.) Torr] (DC) Torr. & A. Gray	White-Bracted Thoroughwort
<i>Euphorbia obtusata</i> Pursh	Blunt-Leaved Spurge
<i>Fimbristylis puberula</i> (Michx.) Vahl	Hairy Fimbr
<i>Galactia regularis</i> (L.) [BSP.] Britton, Stearns & Poggenb.	Eastern Milk-Pea
<i>Galactia volubilis</i> (L.) [Britt.] Britton	[Downey] Downy Milk-Pea
<i>Gentiana catesbaei</i> [Walt.] Walter	Elliott's Gentian
[<i>Gentianopsis procera</i> (Holm) Ma.	Lesser Fringed-Gentian]
<i>Gentianopsis virgata</i> (Raf.) Holub	Narrow-Leaved Fringed Gentian
[<i>Helianthum</i>] <i>Helianthus angustifolius</i> L.	Swamp Sunflower
<i>Hordeum pusillum</i> Nutt. Á. Löve	[Little Barley] Little-Barley
<i>Hottonia inflata</i> [Ell.] Elliott	American Featherfoil
<i>Hydrocotyle umbellata</i> L.	Many-Flowered Pennywort
<i>Hypericum adpressum</i> [Bart.] Raf. ex Barton	Creeping St. John's-Wort
<i>Hypericum crux-andreae</i> (L.) Crantz	St. Peter's-Wort
<i>Hypericum</i> [<i>denticuiatum</i> Walt.] <i>denticulatum</i> Walter	Coppery St. John's-Wort
<i>Hypericum gymnanthum</i> Engelm. & A. Gray	Clasping-Leaved St. John's-Wort
[<i>Hypericum stans</i> (Michx.) P. Adams & Robson	St. Peter's-Wort
<i>Ilex glabra</i> (L.) Gray	Ink-Berry]
<i>Ilex glabra</i> (L.) A. Gray	Inkberry
<i>Itea virginica</i> L.	[Virginia Willow] Virginia-Willow
<i>Juncus greenii</i> Oakes & [Tuckerman] Tuck.	Greene's Rush

<i>Scientific Name</i>	<i>Common Name</i>
<i>Koeleria</i> [<i>cristata</i> (L.) Pers.] <i>macrantha</i> (Ledeb.) Schultes	Junegrass
<i>Leiophyllum buxifolium</i> (Berg.) [Ell.] Elliott	Sand-Myrtle
[<i>Lemna obscura</i> (Austin) Daubs	Little Water Duckweed]
<i>Lespedeza stuevei</i> Nutt.	Tall [Bush Clover] Bush-Clover
<i>Limosella australis</i> R. Br.	Awl-Shaped Mudwort
<i>Lobelia nuttallii</i> [Roemer & Schultes] Roem. & Schult.	Nuttall's Lobelia
<i>Ludwigia sphaerocarpa</i> [Ell.] Elliott	Spherical-Fruited Seedbox
[<i>Lycopodium sabinifolium</i> Willd.	Fir Clubmoss
<i>Lycopodium selago</i> L.	Mountain Clubmoss]
<i>Lysimachia quadriflora</i> Sims	Four-Flowered Loosestrife
<i>Matelea carolinensis</i> (Jacq.) Woods.	Carolina Milkvine
<i>Micranthemum micranthemoides</i> (Nutt.) Wettst.	Nuttall's Mud-Flower
<i>Muhlenbergia capillaris</i> (Lam.) Trin.	Short Muhly
<i>Myrica heterophylla</i> Raf.	Evergreen Bayberry
<i>Onosmodium virginianum</i> (L.) A. DC.	Virginia [False-Gromwell] False Gromwell
<i>Ophioglossum vulgatum</i> L. var. <i>pycnostichum</i> [Fern.] Fernald	Adders Tongue
[<i>Panicum leibergii</i> (Vasey) Scribn. (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, (Second Edition)	Leiberg's Panic-grass
<i>Panicum spretum</i> Schultes (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)	Spurred Panic-Grass]
<i>Phoradendron</i> [<i>serotinum</i> (Raf.) M. C. Johnston] <i>leucarpum</i> (Raf.) Reveal & M. C. Johnst.	Christmas Mistletoe
<i>Phyllanthus caroliniensis</i> Walt.	Carolina Leaf-Flower
<i>Platanthera cristata</i> (Michx.) Lindl.	Crested Yellow Orchid
<i>Platanthera leucophaea</i> (Nutt.) Lindl.	Prairie White-Fringed Orchid
<i>Polygala lutea</i> L.	Yellow Milkwort
<i>Populus heterophylla</i> L.	Swamp Cottonwood
<i>Potamogeton alpinus</i> Balbis	Northern Pondweed
<i>Potamogeton praelongus</i> Wulfen	[White-Stemmed] White-Stem Pondweed
<i>Prenanthes racemosa</i> Michx.	Glaucous Rattlesnake-Root
<i>Proserpinaca pectinata</i> Lam.	Comb-Leaved Mermaid-Weed
<i>Ranunculus hederaceus</i> L.	Long-Stalked Crowfoot
<i>Rhododendron calendulaceum</i> (Michx.) Torr.	Flame Azalea
<i>Rhynchospora fusca</i> (L.) [Ait] Aiton f.	Brown [Beaked-Rush] Beak-Rush
<i>Rhynchospora gracilentia</i> A. Gray	[Beaked-Rush] Beak-Rush
<i>Ruellia caroliniensis</i> [(Gmel.)] (Walter ex J. F. Gmel.) Steud.	Carolina Petunia
<i>Sabatia campanulata</i> (L.) Torr.	Slender [Marsh Pink] Marsh-Pink
<i>Sabatia stellaris</i> Pursh	Sea Pink
<i>Saccharum giganteum</i> (Walter) Pers.	Sugarcane-Plumegrass
<i>Sagittaria</i> [<i>stagnorum</i> Small] <i>filiformis</i> J. G. Sm.	Water Arrow-Head
[<i>Scirpus</i>] <i>Schoenoplectus heterochaetus</i> Chase (Sojak)	Slender [Bullrush] Bulrush
<i>Scutellaria serrata</i> Andr.	Showy Skullcap

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Sisyrinchium arenicola</i> Bickn.] <i>Sisyrinchium fuscatum</i> E. P. Bicknell	Sand Blue-Eyed Grass
<i>Smilax</i> [<i>pseudo-china</i>] <i>pseudochina</i> L.	Long-Stalked Greenbrier
<i>Sparganium</i> [<i>minimum</i> (Hartm.) Fries] <i>natans</i> L.	Small Bur-Reed
<i>Spiraea virginiana</i> [Britt.] Britton	Virginia Spiraea
<i>Spiranthes magnicamporum</i> Sheviak	Ladies'-Tresses
<i>Trifolium reflexum</i> L.	Buffalo Clover
Triglochin [<i>palustre</i>] <i>palustris</i> L.	Marsh Arrowgrass
<i>Utricularia fibrosa</i> Walt.	Fibrous Bladderwort
[<i>Utricularia inflata</i> Walt.	Floating Bladderwort]
<i>Utricularia resupinata</i> B. D. Greene ex Bigelow	Northeastern Bladderwort
[<i>Vitis rupestris</i> Scheele	Sand Grape]

§ 45.12. Pennsylvania Endangered.

Plant species classified as Pennsylvania Endangered are as follows:

<i>Scientific Name</i>	<i>Common Name</i>
<i>Aconitum reclinatum</i> A. Gray	White Monkshood
<i>Acorus americanus</i> (Raf.) Raf.	Sweet Flag
<i>Agalinis auriculata</i> (Michx.) S. F. Blake	Eared False Foxglove
[<i>Agalinis paupercula</i> (Gray) Britt.] <i>Agalinis paupercula</i> (A. Gray) Britton	Small-Flowered [False-Foxglove] False Foxglove
[<i>Alisma plantago-aquatica</i> L. var. <i>americana</i> Schultes & Schultes] <i>Alisma triviale</i> Pursh	Broad-Leaved Water-Plantain
<i>Alnus viridis</i> [(Chaix) DC.] (Vill.) DC	Mountain Alder
[<i>Alopecurus carolinianus</i> Walt.	Tufted Foxtail]
<i>Amelanchier bartramiana</i> (Tausch) M. [Roemer] Roem.	Oblong-Fruited Serviceberry
<i>Ammania coccinea</i> Rottb.	Scarlet Ammannia
<i>Anemone cylindrica</i> A. Gray	[Long-Fruited] Long-Headed Anemone
<i>Arabis missouriensis</i> Greene	Missouri [Rock-Cress] Rockcress
<i>Arethusa bulbosa</i> L.	[Swamp-Pink] Dragon's-Mouth
<i>Arnica acaulis</i> [(Walt.) BSP.] (Walter) Britton, Stearns & Poggenb.	Leopard's-Bane
<i>Artemisia campestris</i> L. ssp. <i>caudata</i> (Michx.) Hall & [Clements] Clements.	Beach Wormwood
<i>Asclepias variegata</i> L.	White Milkweed
<i>Asplenium resiliens</i> Kunze	Black-Stemmed Spleenwort
[<i>Aster borealis</i> (Torr. & Gray) Prov.	Rush Aster
<i>Aster nemoralis</i> Ait.	Bog-Aster
<i>Aster solidagineus</i> Michx.	Narrow-Leaved White-Topped Aster
<i>Aster spectabilis</i> Ait.	Low Showy Aster]
<i>Bidens beckii</i> (Torr. ex Spreng.) Greene	Beck's Water-Marigold
<i>Boltonia asteroides</i> (L.) [L'Her.] L'Hér.	Aster-Like Boltonia
<i>Cardamine pratensis</i> L. var. <i>palustris</i> Wimm. & Grab. (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)	Cuckooflower
<i>Carex atherodes</i> Spreng.	Awned Sedge
<i>Carex aurea</i> Nutt.	Golden-Fruited Sedge
<i>Carex bebbii</i> (Bailey) Fern.	Bebb's Sedge

<i>Scientific Name</i>	<i>Common Name</i>
<i>Carex bicknellii</i> [Britt.] Britton	Bicknell's Sedge
<i>Carex bullata</i> [Schkuhr] Willd.	Bull Sedge
<i>Carex careyana</i> Dewey	Carey's Sedge
<i>Carex collinsii</i> Nutt.	Collin's Sedge
<i>Carex crinita</i> Lam. var. <i>brevicrinis</i> [Fern. (Gleason, H. A. and A. Cronquist, Manual of Vascular Plants of Northeastern United States and Adjacent Canada, 1991, Second Edition)] Fernald	[Short Hair] Short-Hair Sedge
<i>Carex eburnea</i> Boott	Ebony Sedge
<i>Carex formosa</i> Dewey	Handsome Sedge
<i>Carex garberi</i> [Fern.] Fernald	Elk Sedge
<i>Carex geyeri</i> Boott	Geyer's Sedge
<i>Carex gravida</i> Bailey	Heavy Sedge
<i>Carex mitchelliana</i> M. A. Curtis	Mitchell's Sedge
<i>Carex pauciflora</i> Lightf.	Few-Flowered Sedge
<i>Carex polymorpha</i> Muhl.	Variable Sedge
<i>Carex pseudocyperus</i> L.	Cyperus-Like Sedge
<i>Carex retrorsa</i> Schwein.	Backward Sedge
<i>Carex typhina</i> Michx.	Cat-Tail Sedge
<i>Carex viridula</i> Michx.	Green Sedge
[<i>Cerastium arvense</i> (L.) var. villosissimum Pennell	Mouse-Ear Chickweed]
<i>Cerastium velutinum</i> Raf. var. villosissimum (Pennell) J. K. Morton	Octoraro Creek Chickweed
<i>Chasmanthium laxum</i> (L.) H. O. Yates	Slender [Sea-Oats] Wild-Oats
<i>Chenopodium foggii</i> [H. A.] Wahl	Fogg's Goosefoot
<i>Chrysogonum virginianum</i> L.	Green-and-Gold
<i>Cirsium horridulum</i> Michx.	Horrible Thistle
<i>Cladium mariscoides</i> (Muhl.) Torr.	[Twig Rush] Twig-Rush
<i>Clematis viorna</i> L.	[Vase-Vine] Leather-Flower
<i>Clethra acuminata</i> Michx.	Mountain [Pepper-Bush] Pepperbush
<i>Clitoria mariana</i> L.	[Butterfly-Pea] Butterfly Pea
<i>Coeloglossum viride</i> (L.) Hartm.	Long-Bracted Green Orchis
<i>Conioselinum chinense</i> (L.) [BSP.] Britton, Stearns & Poggenb.	Hemlock-Parsley
<i>Cryptogramma stelleri</i> [(Gmel.)] (Gmel.) Prantl	Slender [Rock-Brake] Rockbrake
[<i>Cymophyllus fraseri</i> (Andr.) Mackenzie] <i>Cymophyllus fraserianus</i> (Ker Gawl.) Kartesz & Gandhi	Fraser's Sedge
[<i>Cynanchum laeve</i> (Michx.) Pers.	Smooth Swallow-Wort]
<i>Cyperus acuminatus</i> Torr. & Hook.	Short-Pointed Flatsedge
<i>Cyperus diandrus</i> Torr.	Umbrella [Flatsedge] Sedge
<i>Cyperus houghtonii</i> Torr.	Houghton's Flatsedge
<i>Cyperus refractus</i> Engelm. [ex Steud.]	Reflexed Flatsedge
<i>Cyperus retrorsus</i> Chapman	Retorse Flatsedge
[<i>Cypripedium parviflorum</i> Salisb.	Small Yellow Lady's-Slipper]
<i>Cypripedium parviflorum</i> Salisb. var. makasin (Source: <i>Flora of North America</i>)	Northern Small Yellow Lady's-Slipper
<i>Cypripedium parviflorum</i> Salisb. var. parviflorum (Source: <i>Flora of North America</i>)	Southern Small Yellow Lady's-Slipper
<i>Delphinium exaltatum</i> [Ait.] Aiton	Tall Larkspur

<i>Scientific Name</i>	<i>Common Name</i>
<i>Desmodium humifusum</i> (Muhl.) Beck	Trailing Tick-Trefoil
<i>Diarrhena obovata</i> (Gleason) Bradenburg [(Morris Arboretum, 1992 Pennsylvania Flora Database)]	[American Beakgrain] Obovate Beakgrain
<i>Dicentra eximia</i> [(Ker-Gwal.)] (Ker Gwal.) Torr.	Wild [Bleeding-Hearts] Bleeding-Heart
<i>Dichanthelium scoparium</i> (Lam.) Gould	Velvety Panic Grass
<i>Dichanthelium xanthophysum</i> (A. Gray) Freckmann	Slender Panic Grass
<i>Dodecatheon meadia</i> L.	[Common] Shooting-Star
<i>Dryopteris campyloptera</i> (Kunze) Clarkson	Mountain Wood Fern
<i>Echinochloa walteri</i> (Pursh) A. Heller	Walter's Barnyard-Grass
<i>Eleocharis caribaea</i> (Rottb.) S. F. Blake	Capitate Spike-Rush
<i>Eleocharis compressa</i> [Sullivant (Gleason, H. A. and A Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)] Sull.	Flat-Stemmed Spike-Rush
<i>Eleocharis elliptica</i> Kunth	Slender Spike-Rush
<i>Eleocharis obtusa</i> (Willd.) [Schultes] Schult. var. <i>peasei</i> Svenson [(Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth edition)]	Wright's Spike-Rush
<i>Eleocharis parvula</i> [(Roemer & Schultes) Link ex Buff.] (Roem. & Schult.) Link ex Buffon & Fingerh.	[Little-Spike] Dwarf Spike-Rush
<i>Eleocharis pauciflora</i> (Lightf.) Link var. <i>fernaldii</i> [Svens. (Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth edition)] Swenson	Few-Flowered Spike-Rush
<i>Eleocharis quadrangulata</i> (Michx.) [Roemer & Schultes] Roem. & Schult.	Four-Angled Spike-Rush
<i>Eleocharis rostellata</i> (Torr.) Torr.	Beaked Spike-Rush
<i>Eleocharis tenuis</i> (Willd.) [Schultes] Schult. var. <i>verrucosa</i> (Svenson) Svenson [(Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)]	Slender Spike-Rush
[<i>Elephantopus carolinianus</i> Raeusch.	Elephant's-Foot
<i>Epilobium strictum</i> Muhl.	Downey Willow-Herb]
<i>Equisetum scirpoides</i> Michx. (Source: <i>Flora of North America</i>)	Dwarf Scouring-Rush
<i>Equisetum variegatum</i> Schleich. [ex Weber & C. Mohr]	Variegated [Horsetail] Scouring-Rush
<i>Eriophorum gracile</i> [W. D. J.] Koch ex Roth	Slender [Cottongrass] Cotton-Grass
<i>Eriophorum tenellum</i> Nutt.	Rough [Cottongrass] Cotton-Grass
<i>Euphorbia ipecacuanhae</i> L.	Wild Ipecac
<i>Euphorbia purpurea</i> (Raf.) [Fern.] Fernald	Glade Spurge
<i>Eurybia spectabilis</i> (Aiton) Nesom	Showy Aster
<i>Festuca paradoxa</i> Desv.	Cluster Fescue
[<i>Frasera caroliniensis</i> Walt.	American Columbo]
<i>Fraxinus profunda</i> (Bush) Bush	Pumpkin Ash
<i>Galium labradoricum</i> [(Wieg.) Wieg.] Wiegand	[Labrador Marsh] Bog Bedstraw
<i>Gaylussacia dumosa</i> (Andr.) Torr. & A. Gray	Dwarf Huckleberry
<i>Geranium bicknellii</i> [Britt.] Britton	Cranesbill
<i>Glyceria borealis</i> (Nash) [Batchelder] Batch.	[Small-Floating Manna-Grass] Small Floating Mannagrass
<i>Glyceria obtusa</i> (Muhl.) Trin.	Blunt Manna-Grass
<i>Goodyera tessellata</i> Lodd.	Checkered Rattlesnake-Plantain
<i>Gymnopogon ambiguus</i> (Michx.) [BSP.] Britton, Stearns & Poggenb.	Broad-Leaved Beardgrass
<i>Helianthemum bicknellii</i> [Fern.] Fernald	Bicknell's Hoary Rockrose

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Hemicarpha micrantha</i> (Vahl) Britt.	Common Hemicarpha]
<i>Heteranthera multiflora</i> [(Griseb) Horn. (Gleason, H. A. and A Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)] (Griseb.) Horn.	Multi-Flowered Mud-Plantain
<i>Hieracium traillii</i> Greene	Maryland Hawkweed
<i>Hierochloa odorata</i> (L.) Beauv.	Vanilla Sweet-Grass
<i>Huperzia porophila</i> (F. E. Lloyd & Underw.) Holub	Sandstone-Loving Firmoss
<i>Hydrophyllum macrophyllum</i> Nutt.	Large-Leaved Water-Leaf
<i>Iodanthus pinnatifidus</i> (Michx.) Steud.	[Purple Rocket] Purple-Rocket
<i>Iris cristata</i> [Soland.] Sol. ex Aiton	[Crested Dwarf] Dwarf Crested Iris
<i>Iris prismatica</i> Pursh	Slender Blue [Iris] Flag
<i>Iris verna</i> L.	Dwarf Iris
<i>Isotria medeoloides</i> (Pursh) Raf.	Small-Whorled Pogonia
<i>Juncus brachycarpus</i> Engelm.	Short-Fruited Rush
<i>Juncus dichotomus</i> [Ell.] Elliott	Forked Rush
<i>Juncus longii</i> Fern.	Long's Rush
<i>Juncus militaris</i> Bigelow	Bayonet Rush
<i>Juncus scirpoides</i> Lam.	Scirpus-Like Rush
<i>Lespedeza angustifolia</i> (Pursh) [Ell.] Elliott	[Narrowleaf Bushclover] Narrow-Leaved Bush-Clover
<i>Ligusticum canadense</i> (L.) [Britt.] Britton	Nondo Lovage
<i>Linum intercursum</i> [Bickn.] E. P. Bicknell	Sandplain Wild Flax
<i>Linum sulcatum</i> Riddell	[Grooved-Yellow] Grooved Yellow Flax
<i>Lipocarpha micrantha</i> (Vahl) G. C. Tucker	Common Hemicarpha
<i>Listera australis</i> Lindl.	Southern Twayblade
<i>Listera cordata</i> (L.) R. Br.	[Heart-Leaved] Heartleaf Twayblade
<i>Listera smallii</i> [Wieg.] Wiegand	Kidney-Leaved Twayblade
<i>Lithospermum carolinense</i> (J. F. Gmel.) [MacM.] MacMill.	Hispid Gromwell
<i>Lithospermum latifolium</i> Michx.	American Gromwell
<i>Lobelia kalmii</i> L.	Brook Lobelia
<i>Lobelia puberula</i> Michx.	Downy Lobelia
<i>Lonicera oblongifolia</i> (Goldie) Hook.	Swamp [Fly Honeysuckle] Fly-Honeysuckle
<i>Lonicera villosa</i> (Michx.) [Roemer & Schultes] Roem. & Schult.	Mountain [Fly Honeysuckle] Fly-Honeysuckle
<i>Ludwigia decurrens</i> [Walt.] Walter	Upright Primrose-Willow
<i>Ludwigia polycarpa</i> Short & Peter	False Loosestrife Seedbox
[<i>Lycopodium alopecuroides</i> L.	Foxtail Clubmoss
<i>Lycopodium porophilum</i> Lloyd & Underwood	Rock Clubmoss]
<i>Lycopodiella alopecuroides</i> (L.) Cranfill	Foxtail Bog Clubmoss
<i>Lycopodiella margueritae</i> J. G. Bruce, W. H. Wagner & Beitel	Marguerite's Clubmoss
<i>Lycopus rubellus</i> [Moench] Moench.	Taper-Leaved Bugle-Weed
<i>Lyonia mariana</i> (L.) D. Don	[Stagger-Bush] Staggerbush
<i>Malaxis bayardii</i> Fernald	Adder's-Mouth
<i>Marshallia grandiflora</i> Beadle & F. E. Boynton	Large-Flowered Marshallia
<i>Matelea obliqua</i> (Jacq.) [Woods.] Woodson	Oblique Milkvine

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Megalodonta beckii</i> (Torr. ex Spreng.) Greene	Beck's Water-Marigold]
<i>Mitella nuda</i> L.	Naked Bishop's-Cap
<i>Monarda punctata</i> L.	Spotted Bee-Balm
<i>Montia chamissoi</i> (Ledeb. ex Spreng.) Greene	Chamisso's Miner's-Lettuce
<i>Muhlenbergia uniflora</i> (Muhl.) Fern.	Fall Dropseed Muhly
[<i>Myriophyllum exalbescens</i> Fern.	Northern Water-Milfoil]
<i>Myriophyllum farwellii</i> Morong	Farwell's Water-Milfoil
[<i>Myriophyllum heterophyllum</i> Michx.	Broad-Leaved Water-Milfoil]
<i>Myriophyllum sibiricum</i> Komarov	Northern Water-Milfoil
<i>Myriophyllum verticillatum</i> L.	Whorled Water-Milfoil
<i>Najas marina</i> L.	Holly-Leaved Naiad
[<i>Nelumbo lutea</i> (Willd.) Pers.	American Lotus]
<i>Oclemena nemoralis</i> (Aiton) E. Greene	Leafy Bog Aster
[<i>Onosmodium hispidissimum</i> Mackenzie] <i>Onosmodium molle</i> Michx. var. <i>hispidissimum</i> (Mack.) Cronquist	False Gromwell
<i>Ophioglossum engelmannii</i> Prantl	Limestone [Adder's Tongue] Adder's-Tongue
[<i>Oryzopsis pungens</i> (Torr. ex Spreng.) A. S. Hitchc.	Slender Mountain-Ricegrass
<i>Panicum amarum</i> Ell. var. <i>amarulum</i> (A. S. Hitchc. & Chase) P. G. Palmer (Morris Arboretum, 1992, Pennsylvania Flora Database)	Southern Sea-Beach Panic-Grass
<i>Panicum scoparium</i> (Lam.) Gould (Morris Arboretum, 1992, Pennsylvania Flora Database)	Velvety Panic-Grass
<i>Panicum xanthophysum</i> (Gray) Freckmann (Morris Arboretum, 1992, Pennsylvania Flora Database)	Slender Panic-Grass]
<i>Packera antennariifolia</i> (Britton) W. A. Weber & Á. Löve	Cat's-Paw Ragwort
<i>Panicum amarum</i> Elliott var. <i>amarulum</i> (A. Hitchc. & Chase) P. G. Palmer	Beachgrass
<i>Parnassia glauca</i> Raf.	[Carolina] Grass-of-Parnassus
<i>Passiflora lutea</i> L.	Passion-Flower
<i>Paxistima canbyi</i> A. Gray	Canby's Mountain-Lover
<i>Persicaria careyi</i> (Olney) Greene	Carey's Smartweed
<i>Persicaria setacea</i> (Baldwin) Small	Swamp Smartweed
<i>Phlox ovata</i> L.	Mountain Phlox
<i>Phlox subulata</i> L. ssp. <i>brittonii</i> (Small) Wherry	Moss Pink
<i>Piptatherum pungens</i> (Torr. ex Spreng.) Dorn	Slender Mountain Ricegrass
<i>Platanthera aquilonis</i> Sheviak, Lindleyana (Source: <i>Flora of North America</i>)	Northern Green Orchid
<i>Platanthera dilatata</i> (Pursh) Lindl. ex Beck	[Leafy White Orchid] Tall White Bog-Orchid
[<i>Platanthera hyperborea</i> (L.) Lindl.	Leafy Northern Green Orchid]
<i>Platanthera huronensis</i> (Nutt.) Lindl.	Huron Green Orchid
<i>Poa autumnalis</i> Muhl. ex [Ell.] Elliott	Autumn Bluegrass
[<i>Polemonium vanbruntiae</i> Britt.] <i>Polemonium van-bruntiae</i> Britton	Jacob's-Ladder
<i>Polygala cruciata</i> L.	Cross-Leaved Milkwort
<i>Polygala curtissii</i> A. Gray	Curtis' Milkwort
<i>Polygala incarnata</i> L.	Pink Milkwort
[<i>Polygonum careyi</i> Olney	Carey's Smartweed

<i>Scientific Name</i>	<i>Common Name</i>
<i>Polygonum setaceum</i> Baldw. ex Ell. var. <i>interjectum</i> Fern.	Swamp Smartweed]
<i>Polystichum braunii</i> [(Spenner)] (Spenn.) Fee	Braun's Holly Fern
<i>Populus balsamifera</i> L.	Balsam Poplar
<i>Potamogeton friesii</i> Rupr.	Fries' Pondweed
<i>Potamogeton gramineus</i> L.	Grassy Pondweed
<i>Potamogeton hillii</i> Morong	Hill's Pondweed
<i>Potamogeton obtusifolius</i> Mert. & Koch	Blunt-Leaved Pondweed
<i>Potamogeton pulcher</i> [Tuckerman] Tuck.	Spotted Pondweed
<i>Potamogeton strictifolius</i> A. Benn.	Narrow-Leaved Pondweed
<i>Potamogeton tennesseensis</i> [Fern.] Fernald	Tennessee Pondweed
<i>Potamogeton vaseyi</i> J. W. Robbins	Vasey's Pondweed
<i>Potentilla fruticosa</i> L.	Shrubby Cinquefoil
<i>Potentilla paradoxa</i> Nutt. [ex Torr. & Gray]	Bushy Cinquefoil
<i>Potentilla tridentata</i> [(Soland) Ait.] Aiton	Three-Toothed Cinquefoil
[<i>Prenanthes crepidinea</i> Michx.	Crepis Rattlesnake-Root]
<i>Prunus maritima</i> [Marsh.] Marshall	Beach Plum
<i>Prunus nigra</i> Ait.	Canada Plum
<i>Ptilimnium capillaceum</i> (Michx.) Raf.	Mock Bishop-Weed
[<i>Pycnanthemum pycnanthemoides</i> (Leavenw.) Fern.	Southern Mountain-Mint]
<i>Pycnanthemum torrei</i> Benth.	Torrey's Mountain-Mint
<i>Quercus falcata</i> Michx.	[Spanish] Southern Red Oak
<i>Quercus phellos</i> L.	Willow Oak
<i>Quercus shumardii</i> [Buckl.] Buckley	[Shumard's] Shumard Oak
<i>Ranunculus fascicularis</i> Muhl. ex J.M. Bigelow	Tufted Buttercup
<i>Ratibida pinnata</i> (Vent.) Barnhart	Gray-Headed Prairie Coneflower
<i>Rhamnus lanceolata</i> Pursh	Lanceolate Buckthorn
<i>Rhexia mariana</i> L.	Maryland Meadow-Beauty
<i>Rhododendron atlanticum</i> (Ashe) [Rehd.] Rehder	Dwarf Azalea
<i>Rhynchospora capillacea</i> Torr.	Capillary [Beaked-Rush] Beak-Rush
<i>Ribes missouriense</i> Nutt. ex Torr. & A. Gray	Missouri Gooseberry
<i>Rubus cuneifolius</i> Pursh	Sand Blackberry
<i>Ruellia humilis</i> Nutt.	Fringed-Leaved Petunia
<i>Sagittaria calycina</i> Engelm. [var. <i>spongiosa</i> Engelm.]	Long-Lobed [Arrow-Head] Arrowhead
<i>Scheuchzeria palustris</i> L.	Pod-Grass
[<i>Scirpus acutus</i> Muhl. ex Bigelow	Hard-Stemmed Bullrush]
<i>Schoenoplectus acutus</i> (Muhl. ex Bigel.) Löve & Löve	Hard-Stemmed Bulrush
<i>Schoenoplectus smithii</i> (A. Gray) Sojak	Smith's Bulrush
<i>Schoenoplectus torreyi</i> (Olney) Palla	Torrey's Bulrush
<i>Scirpus ancistrochaetus</i> Schuyler	Northeastern [Bullrush] Bulrush
[<i>Scirpus smithii</i> Gray	Smith's Bullrush
<i>Scirpus torreyi</i> Olney	Torrey's Bullrush]
<i>Scleria minor</i> [(Britt.) W.] (Brittton) Stone	[Minor Nutrush] Small Nut-Rush
[<i>Scleria reticularis</i> Michx.	Reticulated Nutrush]
<i>Scleria muhlenbergii</i> Steud.	Reticulated Nut-Rush
<i>Scleria verticillata</i> Muhl. ex Willd.	Whorled [Nutrush] Nut-Rush

<i>Scientific Name</i>	<i>Common Name</i>
<i>Sedum rosea</i> (L.) Scop.	Roseroot Stonecrop
[<i>Senecio antennariifolius</i> Britt.	Cat's-Paw Ragwort]
<i>Sericocarpus linifolius</i> (L.) Britton, Stearns & Poggenb.	Narrow-Leaved White-Topped Aster
<i>Shepherdia canadensis</i> (L.) Nutt.	Canada Buffalo-Berry
<i>Sida hermaphrodita</i> (L.) Rusby	[Sida] Virginia Mallow
<i>Sisyrinchium atlanticum</i> [Bickn.] E. P. Bicknell	Eastern [Blue-Eyed Grass] Blue-Eyed-Grass
<i>Solidago arguta</i> [Ait. var. <i>harrissii</i> (Steele) Cronq.] Aiton var. <i>harrissii</i> (E. S. Steele) Cronquist	Harris' Goldenrod
<i>Solidago curtissii</i> Torr. & A. Gray	Curtis' Goldenrod
<i>Solidago erecta</i> Banks ex Pursh	Slender Goldenrod
[<i>Solidago spathulata</i> DC. ssp. <i>randii</i> var. <i>racemosa</i> (Greene) Gleason] <i>Solidago simplex</i> Kunth ssp. <i>randii</i> (Porter) Ringius var. <i>racemosa</i> (Greene) Ringius	Sticky Goldenrod
<i>Sorbus decora</i> (Sarg.) Schneid.	Showy Mountain-Ash
<i>Sparganium androcladum</i> (Engelm.) Morong	Branching Bur-Reed
<i>Spiranthes casei</i> Catling & Cruise	Case's Ladies'-Tresses
<i>Spiranthes ovalis</i> Lindl.	October Ladies'-Tresses
<i>Spiranthes romanzoffiana</i> Cham.	Hooded Ladies'-Tresses
<i>Spiranthes vernalis</i> Engelm. & A. Gray	Spring Ladies'-Tresses
<i>Sporobolus clandestinus</i> (Biehler) A. [S.] Hitchc.	Rough Dropseed
<i>Sporobolus cryptandrus</i> (Torr.) A. Gray	Sand Dropseed
<i>Sporobolus heterolepis</i> (A. Gray) A. Gray	Prairie Dropseed
<i>Stachys nuttallii</i> [Shuttlw.] Shuttlew. ex Benth.	Nuttall's Hedge-Nettle
<i>Swertia caroliniensis</i> (Walter) Kuntze	American Columbo
<i>Symphotrichum boreale</i> (Torr. & Gray) Á. Löve & D. Löve	Northern Bog Aster
<i>Taenidia montana</i> [(Mackenzie) Cronq. (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)] (Mack.) Cronquist	Mountain Pimpernel
<i>Thalictrum coriaceum</i> (Britt.) Small	Thick-Leaved Meadow-Rue
[<i>Tomanthera auriculata</i> (Michx.) Raf.	Eared False-Foxglove]
<i>Trichostema setaceum</i> Houtt.	Narrow-Leaved Blue-Curls
<i>Trifolium virginicum</i> Small	[Kate's Mountain] Kate's-Mountain Clover
<i>Triphora trianthophora</i> [(Sw.)] (Swartz) Rydb.	Nodding Pogonia
<i>Triplasis purpurea</i> [(Walt.) Chapman] (Walter) Chapm.	Purple Sandgrass
<i>Trollius laxus</i> Salisb. [ssp. laxus]	Spreading Globe-Flower
<i>Veronia glauca</i> (L.) Willd.	Tawny Ironweed
<i>Viburnum nudum</i> L.	Possum Haw Viburnum
<i>Viola brittoniana</i> Pollard	Coast Violet
[<i>Viola pedatifida</i> G. Don	Prairie Violet]
<i>Vitis novae-angliae</i> [Fern.] Fernald	New England Grape
<i>Vitis rupestris</i> Scheele	Sand Grape
<i>Zigadenus glaucus</i> (Nutt.) Nutt.	White Camas

§ 45.13. Pennsylvania Threatened.

Plant species classified as Pennsylvania Threatened are as follows:

<i>Scientific Name</i>	<i>Common Name</i>
<i>Aconitum uncinatum</i> L.	Blue Monkshood
<i>Actaea podocarpa</i> DC	American Bugbane
<i>Ammophila breviligulata</i> [Fern.] Fernald	American Beachgrass
<i>Arceuthobium pusillum</i> [M. E.] Peck	Dwarf Mistletoe
<i>Aristida purpurascens</i> Poir.	Arrow-Feather Three-Awned Grass
<i>Asplenium bradleyi</i> D. C. [Eat.] Eaton	Bradley's Spleenwort
[<i>Aster depauperatus</i> (Porter) Fern.	Serpentine Aster
<i>Aster novi-belgii</i> L.	Long-Leaved Aster]
<i>Baptisia australis</i> (L.) R. Br.	Blue False Indigo
<i>Bidens bidentoides</i> (Nutt.) Britt.	Swamp Beggar-Ticks
<i>Bouteloua curtipendula</i> (Michx.) Torr.	Tall Gramma
<i>Camassia scilloides</i> (Raf.) Cory	Wild Hyacinth
<i>Carex alata</i> Torr.	Broad-Winged Sedge
<i>Carex aquatilis</i> Wahlenb.	Water Sedge
<i>Carex cryptolepis</i> [Mackenzie] Mack.	Northeastern Sedge
<i>Carex diandra</i> Schrank	Lesser Panicked Sedge
<i>Carex flava</i> L.	Yellow Sedge
<i>Carex oligosperma</i> Michx.	Few-Seeded Sedge
<i>Carex paupercula</i> Michx.	Bog Sedge
<i>Carex prairea</i> Dewey	Prairie Sedge
<i>Carex schweinitzii</i> [Dewey ex] Schwein.	Schweinitz's Sedge
<i>Carex sterilis</i> Willd.	Atlantic Sedge
<i>Carex tetanica</i> Schkuhr	Wood's Sedge
<i>Carex wiegandii</i> [Mackenzie] Mack.	Wiegand's Sedge
<i>Chamaesyce polygonifolia</i> (L.) Small	[Small Sea-Side] Seaside Spurge
<i>Chrysopsis mariana</i> (L.) [Ell.] Elliott	Maryland Golden-Aster
[<i>Cimicifuga americana</i> Michx.	Mountain Bugbane]
<i>Cypripedium reginae</i> [Walt.] Walter	Showy Lady's-Slipper
<i>Digitaria cognatum</i> (Schultes) Pilger	Fall Witch-Grass
<i>Dodecatheon amethystinum</i> (Fassett) Fassett	Jeweled Shooting-Star
<i>Eleocharis intermedia</i> [Schultes] (Muhl.) Schult.	Matted Spike-Rush
<i>Eleocharis robbinsii</i> Oakes	Robbins' Spike-Rush
<i>Ellisia nyctelea</i> L.	Ellisia
<i>Erigenia bulbosa</i> (Michx.) Nutt.	Harbinger-of-Spring
<i>Eriophorum viridicarinatum</i> (Engelm.) [Fern.] Fernald	Thin-Leaved Cottongrass
[<i>Euthamia tenuifolia</i> (Pursh) Greene] <i>Euthamia caroliniana</i> (L.) Greene ex Porter & Britton	Grass-Leaved Goldenrod
<i>Fimbristylis annua</i> (All.) [Roemer & Schultes] Roem. & Schult.	Annual Fimbry
<i>Gaylussacia brachycera</i> (Michx.) A. Gray	Box Huckleberry
<i>Hypericum densiflorum</i> Pursh	Bushy St. John's-Wort
<i>Hypericum majus</i> (A. Gray) [Britt.] Britton	[Larger] Canadian St. John's-Wort
<i>Ilex opaca</i> [Ait.] Aiton	American Holly

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Juncus alpinus</i> Vill.] <i>Juncus alpinoarticulatus</i> Chaix in Vill. ssp. <i>nodulosus</i> (Wahlenb.) Hämet-Ahti.	Richardson's Rush
[<i>Juncus balticus</i> Willd.] <i>Juncus arcticus</i> Willd. var. <i>littoralis</i> (Engelm.) Boivin.	Baltic Rush
<i>Juncus brachycephalus</i> (Engelm.) L. Buch.	Small-Headed Rush
<i>Juncus torreyi</i> Coville	Torrey's Rush
<i>Lathyrus japonicus</i> Willd.	Beach [Peavine] Pea
<i>Lathyrus ochroleucus</i> Hook.	Wild Pea
<i>Linnaea borealis</i> L.	Twinflower
<i>Lobelia dortmanna</i> L.	Water Lobelia
[<i>Lycopodium appressum</i> (Chapman) Lloyd & Underwood	Southern Bog Clubmoss]
<i>Lycopodiella appressa</i> (Chapm.) Cranfill	Appressed Bog Clubmoss
<i>Magnolia tripetala</i> (L.) L.	Umbrella Magnolia
<i>Magnolia virginiana</i> L.	[Sweet Bay] Sweetbay Magnolia
<i>Melica nitens</i> [(Scribn.) Nutt. ex Piper] Nutt.	Three-Flowered Melic Grass
<i>Minuartia glabra</i> (Michx.) Mattf.	Appalachian Sandwort
<i>Myrica gale</i> L.	[Sweet Bayberry] Sweet-gale
<i>Myriophyllum tenellum</i> Bigelow	Slender Water-Milfoil
<i>Najas gracillima</i> (A. Braun) Magnus	Bushy Naiad
<i>Nymphoides cordata</i> [(Elli.) Fern.] (Elliott) Fernald	Floating-Heart
<i>Oenothera argillicola</i> [Mackenzie] Mack.	Shale-Barren Evening-Primrose
<i>Panicum tuckermanii</i> [Fern. (Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth edition)] Fernald	Tuckerman's Panic-Grass
<i>Phemeranthus teretifolius</i> (Pursh) Raf.	Round-Leaved Fameflower
<i>Platanthera peramoena</i> (A. Gray) A. Gray	Purple Fringeless Orchid
<i>Poa paludigena</i> [Fern. & Wieg.] Fernald & Wiegand	Bog Bluegrass
[<i>Polygonum robustius</i> (Small) Fern.	Robust Smartweed]
<i>Potamogeton confervoides</i> Reichenb.	Tuckerman's Pondweed
<i>Potamogeton richardsonii</i> (Benn.) Rydb.	Red-Head Pondweed
[<i>Potentilla anserina</i> L.	Silverweed]
<i>Ptelea trifoliata</i> L.	[Common Hop-Tree] Hoptree
[<i>Ranunculus longirostre</i> Godr.] <i>Ranunculus longirostris</i> Godron	Eastern White Water-Crowfoot
<i>Ribes triste</i> Pallas	Wild Red Currant
<i>Ruellia strepens</i> L.	Limestone Petunia
<i>Salix candida</i> Flugge ex Willd.	Hoary Willow
<i>Salix serissima</i> (Bailey) [Fern.] Fernald	Autumn Willow
<i>Scirpus pedicellatus</i> [Fern.] Fernald	Stalked [Bullrush] Bulrush
<i>Scleria pauciflora</i> Muhl. ex Willd.	Few-Flowered Nutrush
<i>Solidago uliginosa</i> Nutt.	Bog Goldenrod
<i>Spiraea betulifolia</i> Pallas [ssp.] var. <i>corymbosa</i> (Raf.) [Taylor & MacBryde] Maxim.	Dwarf Spiraea
<i>Streptopus amplexifolius</i> (L.) [DC.] DC	[White] Twisted-Stalk
[<i>Talinum teretifolium</i> Pursh	Round-Leaved Fame-Flower]
<i>Symphotrichum depauperatum</i> (Fernald) Nesom	Serpentine Aster
<i>Symphotrichum novi-belgii</i> (L.) Nesom var. <i>novi-belgii</i>	New York Aster
<i>Utricularia intermedia</i> [Hayne.] Hayne	Flat-Leaved Bladderwort

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Utricularia minor</i> L.	Lesser Bladderwort]
<i>Viola appalachiensis</i> L. K. Henry	Appalachian Blue Violet
<i>Vittaria appalachiana</i> Farrar & Mickel [(Morris Arboretum, 1992, Pennsylvania Flora Database)]	Appalachian Grass-Fern

§ 45.14. Pennsylvania Rare.

Plant species classified as Pennsylvania Rare are as follows:

<i>Scientific Name</i>	<i>Common Name</i>
<i>Amaranthus cannabinus</i> (L.) Sauer	[Waterhemp] Water-Hemp Ragweed
<i>Andromeda polifolia</i> L.	Bog-Rosemary
<i>Aplectrum hyemale</i> (Muhl. ex Willd.) Nutt.	Puttyroot
<i>Baccharis halimifolia</i> L.	Eastern Baccharis
<i>Cakile edentula</i> [(Bigel.)] (Bigelow) Hook.	American Sea-Rocket
<i>Carex disperma</i> Dewey	Soft-Leaved Sedge
<i>Carex lasiocarpa</i> Ehrh.	[Slender] Many-Fruited Sedge
<i>Collinsia verna</i> Nutt.	Spring Blue-Eyed Mary
<i>Cyperus engelmannii</i> Steud.	Engelmann's Flatsedge
<i>Cyperus schweinitzii</i> Torr.	Schweinitz's Flatsedge
<i>Dichanthelium commonsianum</i> (Ashe) Freckmann var. <i>euchlamydeum</i> (Shinners) Pohl	Cloaked Panic Grass
<i>Eleocharis olivacea</i> Torr.	Capitate Spike-Rush
<i>Epilobium strictum</i> Muhl.	Downy Willow-Herb
<i>Gaultheria hispidula</i> (L.) Muhl. ex Bigelow	Creeping Snowberry
<i>Juncus filiformis</i> L.	Thread Rush
[<i>Juncus gymnocarpus</i> Coville	Coville's Rush]
<i>Ledum groenlandicum</i> Oeder	Common Labrador-Tea
<i>Lupinus perennis</i> L.	Blue Lupine
<i>Lygodium palmatum</i> (Bernh.) Sw.	Hartford Fern
[<i>Malaxis bayardii</i> Fern. (Fernald, M. L., <i>Gray's Manual of Botany</i>, 1970, Eighth edition)	Bayard's Malaxis]
<i>Menziesia pilosa</i> (Michx.) Juss.	Minniebush
<i>Opuntia humifusa</i> (Raf.) Raf.	Eastern Prickly-Pear Cactus
<i>Orontium aquaticum</i> L.	Golden Club
[<i>Panicum commonsianum</i> Ashe var. <i>euchlamydeum</i> (Skinners) Pohl (Morris Arboretum, 1992, Pennsylvania Flora Database)	Cloaked Panic-Grass]
<i>Packera anonyma</i> (A. W. Wood) W. A. Weber & Á. Löve	Appalachian Groundsel
<i>Potamogeton robbinsii</i> Oakes	Flat-Leaved Pondweed
<i>Potamogeton zosteriformis</i> [Fern.] Fernald	Flat-Stemmed Pondweed
<i>Potentilla anserina</i> L.	Silverweed
<i>Prunus pumila</i> L. var <i>pumila</i>	Sand Cherry
<i>Pyrolaria pubera</i> Michx.	Buffalo-Nut
<i>Ranunculus micranthus</i> (Gray) Nutt. ex Torr. & Gray	Small-Flowered Crowfoot
<i>Rotala ramosior</i> (L.) Koehne	[Tooth-Cup] Toothcup
<i>Sagittaria subulata</i> (L.) L. Buch.	[Subulata Arrow-Head] Subulate Arrowhead
<i>Schizachyrium scoparium</i> (Michx.) Nash var. <i>littorale</i> (Nash) Gould	Seaside Bluestem
[<i>Scirpus fluviatilis</i> (Torr.) Gray	River Bullrush]
<i>Schoenoplectus fluviatilis</i> (Torr.) Strong	River Bulrush
<i>Sedum telephoides</i> Michx.	Allegheny Stonecrop

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Senecio anonymus</i> Wood	Plain Ragwort]
<i>Solidago roanensis</i> Porter	Tennessee Golden-Rod
<i>Tipularia discolor</i> (Pursh) Nutt.	Crane-fly Orchid
[<i>Trautvetteria caroliniensis</i> (Walt.) Vail	Carolina Tassel-Rue]
<i>Trillium nivale</i> Riddell	Snow Trillium
[<i>Utricularia purpurea</i> Walt.	Purple Bladderwort]
<i>Wolffiella gladiata</i> (Hegelm.) Hegelm.	Bog-mat
<i>Xyris montana</i> Ries.	Yellow Eyed Grass
<i>Zizania aquatica</i> L.	Indian Wild Rice

§ 45.15. **Pennsylvania Vulnerable.**

Plant species classified as Pennsylvania Vulnerable are as follows:

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Cypripedium pubescens</i> Willd.] <i>Cypripedium parviflorum</i> Salisb. var. <i>pubescens</i> (Willd.) Correll	Large Yellow Lady's-Slipper
<i>Hydrastis canadensis</i> L.	[Golden-Seal] Goldenseal
<i>Panax quinquefolius</i> L.	Ginseng

§ 45.21. **Tentatively Undetermined.**

Plant species classified as Tentatively Undetermined are as follows:

<i>Scientific Name</i>	<i>Common Name</i>
<i>Adiantum pedatum</i> L. ssp. <i>caulderi</i> Cody	Northern Maidenhair Fern
<i>Agalinis obtusifolia</i> Raf.	False-Foxglove
<i>Aletris farinosa</i> L.	Colic-Root
<i>Ambrosia psilostachya</i> DC.	Naked-Spiked Ambrosia
<i>Amelanchier humilis</i> [Wieg.] Wiegand	Low Serviceberry
<i>Amelanchier obovalis</i> (Michx.) Ashe	Coastal Juneberry
<i>Amelanchier sanguinea</i> (Pursh) DC.	Roundleaf [Serviceberry] Juneberry
<i>Andropogon glomeratus</i> [(Walt.) BSP.] (Walter) Britton, Stearns & Poggenb.	Bushy Bluestem
<i>Antennaria solitaria</i> Rydb.	Single-Headed Pussy-Toes
<i>Arabis hirsuta</i> (L.) Scop.	Western Hairy Rock-Cress
[<i>Aristida curtissii</i> (Gray) Nash] <i>Aristida dichotoma</i> Michx. var. <i>curtissii</i> A. Gray	Poverty Grass
<i>Aristida longespica</i> Poir. var. <i>geniculata</i> (Raf.) [Fern.] Fernald	Long-Spike Three-Awned Grass
<i>Aristolochia macrophylla</i> Lam.	Pipevine
[<i>Asclepias variegata</i> L.	White Milkweed
<i>Aster dumosus</i> L.	Bushy Aster
<i>Aster ericoides</i> L.	White Heath Aster
<i>Aster firmus</i> Nees	Firm Aster]
<i>Carex buxbaumii</i> Wahlenb.	Brown Sedge
<i>Carex crawfordii</i> [Fern.] Fernald	Crawford's Sedge
<i>Carex haydenii</i> Dewey	Cloud Sedge
<i>Carex limosa</i> L.	Mud Sedge
<i>Carex longii</i> [Mackenzie] Mack.	Long's Sedge
<i>Carex lupuliformis</i> Sartwell [ex Dewey]	False Hop Sedge
<i>Carex meadii</i> Dewey	Mead's Sedge
<i>Carex mesochorea</i> [Mackenzie] Mack.	Midland Sedge

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Cassia marilandica</i> L.	Wild Senna]
<i>Castilleja coccinea</i> (L.) Spreng.	Scarlet Indian Paintbrush
<i>Chasmanthium latifolium</i> (Michx.) H. O. Yates	[Wild Oat] Wild-Oats
<i>Chenopodium capitatum</i> (L.) [Aschers.] Asch.	Strawberry Goosefoot
[<i>Coeloglossum viride</i> (L.) Hartman	Long-Bracted Green Orchid]
<i>Corallorrhiza wisteriana</i> Conrad	Spring Coral-Root
<i>Crataegus brainerdii</i> Sarg.	Brainerd's Hawthorne
<i>Crataegus mollis</i> (Torr. & A. Gray) Scheele	Downy Hawthorne
<i>Cuscuta cephalanthi</i> Engelm.	[Button-Bush] Buttonbush Dodder
<i>Cuscuta corylii</i> Engelm.	Hazel Dodder
<i>Cuscuta polygonorum</i> Engelm.	Smartweed Dodder
<i>Cyperus odoratus</i> L.	Rusty Flatsedge
<i>Cyperus tenuifolius</i> (Steud.) Dandy	Thin-Leaved Flatsedge
<i>Cystopteris laurentiana</i> [(Weatherby)] (Weath.) Blasdell	Laurentian Bladder-Fern
<i>Desmodium glabellum</i> (Michx.) [DC.] Kuntze	Tall Tick-Trefoil
<i>Desmodium nuttallii</i> (Schindl.) Schub.	Nuttall's Tick-Trefoil
<i>Dichanthelium annulum</i> (Ashe) LeBlond	Annulus Panic Grass
<i>Dichanthelium boreale</i> (Nash) Freckmann	Northern Panic Grass
<i>Dichanthelium commonsianum</i> (Ashe) Freckmann	Cloaked Panic Grass
<i>Dichanthelium lucidum</i> (Ashe) LeBlond	Shining Panic Grass
<i>Dichanthelium villosissimum</i> (Nash) Freckmann	Long-Haired Panic Grass
<i>Dichanthelium yadkinense</i> (Ashe) Mohlenbr.	Yadkin River Panic Grass
<i>Dracocephalum parviflorum</i> Nutt.	American Dragonhead
<i>Elatine minima</i> (Nutt.) Fisch. & C. A. Mey	Small [Water-Wort] Waterwort
[<i>Elodea canadensis</i> L. C. Rich.	Broad Waterweed (Male Plants)]
<i>Elymus virginicus</i> L. var. <i>submuticus</i> Hook.	Wild Rye
<i>Epilobium palustre</i> L.	Marsh Willow-Herb
<i>Eupatorium rotundifolium</i> L.	Round-Leaved Thoroughwort
<i>Filipendula rubra</i> (Hill) B. L. [Robins.] Rob.	Queen-of-the-Prairie
<i>Gentiana alba</i> Muhl. ex Nutt.	Yellow Gentian
<i>Gentiana saponaria</i> L.	Soapwort Gentian
<i>Gentiana villosa</i> L.	Striped Gentian
<i>Glyceria acutiflora</i> Torr.	Sharp-Flowered Manna-Grass
[<i>Goodyera tessellata</i> Lodd.	Checkered Rattlesnake-Plantain]
<i>Gratiola aurea</i> Muhl. ex Pursh	Golden Hedge-Hyssop
<i>Gymnocarpium appalachianum</i> [Pryer & Windham (Morris Arboretum, 1992, Pennsylvania Flora Database)] K. M. Pryer & Haufler	Appalachian Oak Fern
[<i>Hedyotis purpurea</i> (L.) Torr. & Gray] <i>Houstonia purpurea</i> L. var. <i>purpurea</i>	Purple [Bluet] Bluets
<i>Hypericum drummondii</i> (Grev. & Hook) Torr. & A. Gray	Nits-and-Lice
<i>Juncus biflorus</i> Elliott [(Gleason, H. A. and A. Cronquist,, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada, 1991, Second Edition</i>)]	Grass-Leaved Rush
<i>Lathyrus palustris</i> L.	Vetchling
<i>Lemna turionifera</i> Landolt [(Morris Arboretum, 1992, Pennsylvania Flora Database)]	Winter Duckweed
<i>Leucothoe racemosa</i> (L.) A. Gray	Swamp Dog-Hobble

<i>Scientific Name</i>	<i>Common Name</i>
[<i>Liatrix scariosa</i> (L.) Willd. var. <i>novae-angliae</i> Lunell	New England Gay-Feather
<i>Liatrix scariosa</i> (L.) Willd. var. <i>nieuwlandii</i> Lunell	Nieuwland's Gay-Feather]
<i>Liatrix scariosa</i> (L.) Willd.	Northern Blazing-Star
<i>Lonicera hirsuta</i> [Eat.] Eaton	Hairy Honeysuckle
<i>Luzula bulbosa</i> (A. W. Wood) Rybd.	[Common] Wood-Rush
[<i>Lysimachia quadriflora</i> Sims.	Four-Flowered Loosestrife]
<i>Lythrum alatum</i> Pursh	Winged Loosestrife
[<i>Malaxis brachypoda</i> (Gray) Fern.	White Adder's Mouth]
<i>Malaxis monophyllos</i> (L.) Swartz var. <i>brachypoda</i> (A. Gray) F. Morris & E. A. Eames	White Adder's-Mouth
<i>Meehania cordata</i> (Nutt.) [Britt.] Britton	[Heartleaf] Heart-Leafed Meehania
<i>Muhlenbergia cuspidata</i> [(Nutt.)] (Torr.) Rydb.	Sharp-Pointed Muhly
[<i>Nuphar lutea</i> (L.) Sibthorp & Sm. ssp. <i>pumilum</i> (Timm) E. O. Beal	Yellow Cowlily]
<i>Nuphar microphylla</i> (Pers.) Fernald	Small Yellow Pond-Lily
<i>Oenothera pilosella</i> Raf.	Evening-Primrose
<i>Oxydendrum arboreum</i> (L.) DC.	Sourwood
<i>Oxypolis rigidior</i> (L.) Raf.	Stiff Cowbane
[<i>Panicum annulum</i> Ashe (Morris Arboretum, 1992, Pennsylvania Flora Database)	Annulus Panic-Grass
<i>Panicum bicknellii</i> Nash (Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth edition)	Bicknell's Panic-Grass
<i>Panicum boreale</i> Nash (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)	Northern Witchgrass
<i>Panicum commonsianum</i> Ashe var. <i>commonsianum</i> (Morris Arboretum, 1992, Pennsylvania Flora Database)	Commons' Panic-Grass]
<i>Packera plattensis</i> (Nutt.) W. A. Weber & Á. Löve	Prairie Ragwort
<i>Panicum flexile</i> [(Gattinger) Scribn. (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)] (Gatt.) Scribn.	Wiry Witchgrass
<i>Panicum longifolium</i> Torr. [(Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)]	[Long-Leaf Panic-Grass] Long-Leaved Panic Grass
[<i>Panicum longiligulatum</i> Nash (Morris Arboretum, 1992, Pennsylvania Flora Database)	Long-Ligule Panic-Grass
<i>Panicum lucidum</i> Ashe (Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth edition)	Shining Panic-Grass
<i>Panicum recognitum</i> Fern. (Morris Arboretum, 1992. Pennsylvania Flora Database)	Fernald's Panic-Grass
<i>Panicum villosissimum</i> Nash (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)	Long-Haired Panic-Grass
<i>Panicum yadkinense</i> Ashe (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)	Yadkin River Panic-Grass]
<i>Paronychia fastigiata</i> (Raf.) [Fern.] Fernald var. <i>nuttallii</i> (Small) [Fern.] Fernald	Whitlow Wort
[<i>Paronychia fastigiata</i> (Raf.) Fern. var. <i>paleacea</i> Fern.	Chaffy Whitlow Wort]
<i>Parthenium intergrifolium</i> L.	American Fever-Few
<i>Paspalum floridanum</i> (Michx.) var. <i>glabratum</i> Engelm. ex Vasey	Florida Beadgrass
<i>Paspalum laeve</i> (Michx.) var. <i>pilosum</i> Scribn.	Field Beadgrass

<i>Scientific Name</i>	<i>Common Name</i>
<i>Paspalum setaceum</i> Michx.	Slender Beadgrass
<i>Phlox pilosa</i> L.	Downy Phlox
<i>Phyla lanceolata</i> (Michx.) Greene	Lance Fog-Fruit
<i>Physalis virginiana</i> [P.] Mill.	Virginia Ground-Cherry
<i>Platanthera ciliaris</i> (L.) Lindl.	Yellow Fringed Orchid
<i>Platanthera hookeri</i> (Torr. ex Gray) Lindl.	Hooker's Orchid
[<i>Platanthera peramoena</i> (Gray) Gray]	Purple-Fringeless Orchid]
<i>Pluchea odorata</i> (L.) Cass.	Shrubby Camphor-Weed
<i>Poa languida</i> A. [S.] Hitchc.	Drooping Bluegrass
<i>Podostemum ceratophyllum</i> Michx.	Riverweed
<i>Polygala polygama</i> [Walt.] Walter	Racemed Milkwort
<i>Polygonella articulata</i> (L.) Meisn.	Eastern Jointweed
<i>Polygonum amphibium</i> L. var. <i>stipulaceum</i> (Coleman) Fern.	Stipuled Water-Smartweed
<i>Polygonum ramosissimum</i> Michx.	Bushy Knotweed
<i>Potamogeton filiformis</i> Pers. var. <i>borealis</i> (Raf.) St. John	Slender Pondweed
[<i>Potamogeton illinoensis</i> Morong]	Illinois Pondweed]
<i>Potamogeton oakesianus</i> J. W. Robbins	Oakes' Pondweed
<i>Potamogeton perfoliatus</i> L.	Clasping-Stemmed Pondweed
[<i>Pycnanthemum pilosum</i> Nutt.] <i>Pycnanthemum verticillatum</i> (Michx.) Pers. var. <i>pilosum</i> (Nutt.) Cooperr.	Hairy Mountain-Mint
<i>Ranunculus aquatilis</i> L. var. <i>diffusus</i> With.	White Water-Crowfoot
<i>Ranunculus flammula</i> L.	Lesser Spearwort
[<i>Ranunculus trichophyllus</i> Chaix (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i>, 1991, Second Edition)]	Northeastern White Water-Crowfoot
<i>Ratibida pinnata</i> (Vent.) Barnh.	Gray-Headed Prairie Coneflower]
<i>Rhamnus alnifolia</i> [L'Her] L' Hér	Alder-Leaved Buckthorn
[<i>Rhynchospora globularis</i> (Chapman) Small] <i>Rhynchospora recognita</i> (Gale) Kral	Small Globe Beak-Rush
<i>Ribes lacustre</i> (Pers.) Poir.	Swamp Currant
<i>Rorippa palustris</i> (L.) Besser var. <i>palustris</i> (Gleason, H. A. and A. Cronquist, <i>Manual of Vascular Plants of Northeastern United States and Adjacent Canada</i> , 1991, Second Edition)	Yellow Cress
<i>Rosa virginiana</i> P. Mill.	Virginia Rose
[<i>Rubus cuneifolius</i> Pursh]	Sand Blackberry]
<i>Rubus setosus</i> Bigelow	Small Bristleberry
<i>Rumex hastatulus</i> [Baldw. ex Ell.] Baldwin ex Elliott	[Heart-Winged] Heart Sorrell
<i>Salix petiolaris</i> Sm.	Meadow Willow
<i>Salvia reflexa</i> Hornem.	Lance-Leaved Sage
<i>Samolus parviflorus</i> Raf. [(Fernald, M. L., <i>Gray's Manual of Botany</i> , 1970, Eighth edition)]	Pineland Pimpernel
<i>Saxifraga micranthidifolia</i> (Haw.) Steud.	Lettuce Saxifrage
<i>Scleria triglomerata</i> Michx.	Whip Nut-Rush
<i>Scutellaria saxatilis</i> Riddell	Rock Skullcap
[<i>Senecio plattensis</i> Nutt.]	Prairie Ragwort]
<i>Senna marilandica</i> (L.) Link	Wild Senna
<i>Sisyrinchium albidum</i> Raf.	[Blue-Eyed Grass] Blue-Eyed-Grass
[<i>Solidago purshii</i> Porter]	Pursh's Goldenrod]

<i>Scientific Name</i>	<i>Common Name</i>
<i>Solidago rigida</i> L.	Hard-Leaved Goldenrod
<i>Spiranthes tuberosa</i> Raf.	[Little] Slender Ladies'-Tresses
[<i>Spirodela punctata</i> (Mey.) C. H. Thompson	Eastern Water-Flaxseed]
<i>Stachys hyssopifolia</i> Michx.	Hyssop Hedge-Nettle
<i>Stylosanthes biflora</i> (L.) [BSP.] Britton, Stearns & Poggenb.	Pencil-Flower
<i>Symphotrichum dumosum</i> (L.) Nesom	Bushy Aster
<i>Symphotrichum ericoides</i> (L.) Nesom	White Heath Aster
<i>Taxus canadensis</i> Marsh.	American Yew
[<i>Tradescantia ohiensis</i> Raf.	Ohio Spiderwort]
<i>Trillium flexipes</i> Raf.	Declined Trillium
<i>Triosteum angustifolium</i> L.	[Yellow-Leaved Tinker's-Weed] Horse Gentian
<i>Tripsacum dactyloides</i> (L.) L.	Eastern [Gamma-Grass] Gammagrass
<i>Uvularia</i> [<i>puberula</i>] <i>pudica</i> Michx.	Mountain Bellwort
[<i>Veronica catenata</i> Pennell	Pennell's Speedwell]
<i>Viburnum trilobum</i> [Marsh.] Marshall	[Highbush Cranberry] Highbush-Cranberry
[<i>Viola nephrophylla</i> Greene	Northern Bog Violet]
<i>Viola renifolia</i> A. Gray	Kidney-Leaved [White] Violet
<i>Viola tripartita</i> [Ell.] Elliott	Three-parted Violet
<i>Vitis cinerea</i> [var. baileyana Munson] (Englem. in A. Gray) Englem. ex Millardet var. baileyana (Munson) Comeaux	Possum-Grape
<i>Wolffia borealis</i> (Engelm.) Landolt [(Morris Arboretum, 1992, <i>Atlas of the Flora of Pennsylvania</i>)]	Dotted [Water-Meal] Dotted Watermeal
[<i>Zanichellia palustris</i> L.	Horned Pondweed]

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[L-2017-2600599]

Motor Carrier Age Requirement

The Pennsylvania Public Utility Commission, on July 12, 2017, adopted a proposed rulemaking order to amend § 29.503 (relating to age restrictions) for consistency with Department of Health regulations by reducing the minimum age requirement for paratransit drivers from 21 years of age to 18 years of age in limited circumstances.

Executive Summary

The Pennsylvania Public Utility Commission's current regulations require that drivers of paratransit vehicles be at least 21 years old. The Department of Health oversees emergency medical transportation and allows drivers 18 years and older to operate ambulances, if the drivers have proper training and certification. Many ambulance companies also operate paratransit service and cannot utilize the under 21 year-old ambulance driver in their paratransit service. This has caused operation and hiring problems for these companies. The Pennsylvania Public Utility Commission has granted several waivers with

respect to the 21 year age requirement to paratransit operators so that ambulance drivers under 21 may also operate paratransit vehicles. 66 Pa.C.S. § 501. This proposed rulemaking reduces the minimum age requirement for paratransit drivers to 18 years of age under limited circumstances.

Public Meeting held
July 12, 2017

Commissioners Present: Gladys M. Brown, Chairperson; Andrew G. Place, Vice Chairperson; John F. Coleman, Jr.; Robert F. Powelson; David W. Sweet

Motor Carrier Age Requirement, 52 Pa. Code Chapter 29; L-2017-2600599

Proposed Rulemaking Order

By the Commission:

The Pennsylvania Public Utility Commission (Commission) proposes to amend its regulation governing the minimum driver-age requirement. See 52 Pa. Code § 29.503 Specifically, the Commission proposes to update Section 29.503, consistent with Department of Health (DOH) regulations, by reducing the minimum age requirement for paratransit drivers in limited circumstances. The Commission seeks comments from all interested parties on this proposed regulation, following as Annex A to this Order.

The Commission's regulations currently require, *inter alia*, that paratransit drivers meet a minimum age requirement. Specifically, the relevant Commission regulation provides:

52 Pa. Code § 29.503. Age restrictions.

A common or contract carrier may not permit a person to operate a vehicle in its authorized service unless that person is at least 21 years of age.

In its Order promulgating this regulation, the Commission opined that the age requirement would help to ensure the quality and safety of public utility service in Pennsylvania. 36 Pa.B. 4181 (August 5, 2006). Although the Commission recognizes that age alone may not be the sole determinant of a driver's ability, the age requirement addressed a statistically documented increase in accidents involving drivers under the age of 21.

Many organizations that provide non-emergency paratransit service also provide emergency medical transportation. The Commission has certificated 506 paratransit carriers, of which at least 155 are ambulance companies. Pursuant to DOH regulations, a driver of an ambulance must only be 18 years of age or older and must successfully complete an emergency vehicle operator's course of instruction approved by the DOH. See 28 Pa. Code § 1023.22.

Notwithstanding that drivers ages 18 and over, properly trained and vetted, are permitted to operate ambulances under the DOH's regulations, Section 29.503 effectively prevents those ambulance drivers under 21 from operating non-emergency paratransit vehicles.¹ This creates a conflict within those organizations, since the Commission's existing age requirement is causing dual-service companies to lose qualified potential employees who are under 21-years old. The inconsistency between the Commission's age requirements for paratransit drivers and the DOH's age requirements for ambulance drivers puts the dual-service companies in a cumbersome position in terms of hiring. These companies generally prefer to have younger, less experienced drivers start in paratransit service before they move up to the more demanding work of driving an ambulance. However, under the current regulatory scenario, drivers under 21 years of age are prohibited from providing paratransit service and are limited to providing ambulance service. While dual-service companies can petition the Commission for a waiver of the driver-age requirement, that process requires a significant investment of time and money on the part of the company and the Commission.²

In order to alleviate the negative impact of the Commission's paratransit driver age restrictions on dual-service companies and the need for the companies to petition for waiver of those restrictions, the Commission believes that its regulations should be modified to be consistent with the DOH regulations. As such, the Commission proposes adding a limited exception to the age requirement for paratransit drivers. If a driver is under 21 years of age, the driver will be eligible to operate a non-emergency paratransit vehicle if the DOH has certified the driver to operate an emergency medical services vehicle (EMSV) pursuant to the DOH's regulations at 28 Pa. Code Chapter 1023, Subchapter B. Drivers under the age of 21 will be required to carry their EMSV operator's

certificate issued by the DOH on board. In addition to complying with the DOH's EMSV operator's certification requirements, a paratransit vehicle driver will have to comply with all other Commission regulations for paratransit drivers. Finally, the carriers themselves will be required to (1) maintain records to prove driver certification, and (2) notify the Commission of any accident involving a paratransit vehicle driver under the age of 21.

This proposal will benefit the public by increasing the pool of potential paratransit drivers while at the same time ensuring that common and contract carriers provide safe and reliable paratransit service throughout the Commonwealth.

Regulatory Review

Under section 5(a) of the Regulatory Review Act (71 P.S. § 745.5(a)), on November 8, 2017, the Commission submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Chairpersons of the House Consumer Affairs Committee and the Senate Consumer Protection and Professional Licensure Committee. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey any comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections must specify the regulatory review criteria in section 5.2 of the Regulatory Review Act (71 P.S. § 745.5b) which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Commission, the General Assembly and the Governor of comments, recommendations or objections raised.

Order

Accordingly, under sections 501, 1501 and 2502 of the Public Utility Code (66 Pa.C.S. §§ 501, 1501 and 2502); sections 201 and 202 of the act of July 31, 1968 (P.L. 769, No. 240) (45 P.S. §§ 1201 and 1202), and the regulations promulgated thereunder at 1 Pa. Code §§ 7.1, 7.2 and 7.5; section 204(b) of the Commonwealth Attorneys Act (71 P.S. § 732.204(b)); section 5 of the Regulatory Review Act (71 P.S. § 745.5); and section 612 of The Administrative Code of 1929 (71 P.S. § 232), and the regulations promulgated thereunder at 4 Pa. Code §§ 7.231—7.234, we propose adopting the regulations set forth in Annex A; *Therefore,*

It Is Ordered That:

1. A proposed rulemaking be opened to consider the regulations set forth in Annex A.
2. The Law Bureau shall submit this proposed rulemaking order and Annex A to the Office of Attorney General for review as to form and legality and to the Governor's Budget Office for review of fiscal impact.
3. The Law Bureau shall submit this proposed rulemaking order and Annex A for review and comments to the Independent Regulatory Review Commission and the Legislative Standing Committees.
4. The Law Bureau shall deposit this proposed rulemaking order and Annex A and deposit them with the Legislative Reference Bureau to be published in the *Pennsylvania Bulletin*.
5. Original written comments referencing Docket Number L-2017-2600599 be submitted within 30 days of

¹ Paratransit vehicles—often wheelchair-accessible vans—are used to transport disabled or elderly people to and from routine medical and dental appointments and for other routine needs, such as grocery shopping.

² While only seven ambulance companies have applied for and been granted waivers to date, there is no reason to continue this inconsistency when the DOH requirements are more than sufficient to protect the public safety.

publication in the *Pennsylvania Bulletin* to the Pennsylvania Public Utility Commission, Attn: Secretary, Commonwealth Keystone Building, 2nd Floor 400 North Street, Harrisburg, PA 17120.

6. A copy of this proposed rulemaking order and Annex A shall be served on the Commission’s Bureau of Investigation and Enforcement, the Office of Consumer Advocate, the Office of Small Business Advocate, the Ambulance Association of Pennsylvania, and the Pennsylvania Taxi and Paratransit Association.

7. The contact person for legal matters on this proposed rulemaking is Joseph P. Cardinale, Jr., Assistant Counsel, Law Bureau, (717) 787-5558. Alternate formats of this document are available to persons with disabilities and may be obtained by contacting Alyson Zerbe, Regulatory Review Coordinator, Law Bureau, (717) 772-4597.

ROSEMARY CHIAVETTA,
Secretary

Fiscal Note: 57-317. No fiscal impact; (8) recommends adoption.

Annex A

TITLE 52. PUBLIC UTILITIES

PART I. PUBLIC UTILITY COMMISSION

Subpart B. CARRIERS OF PASSENGERS OR PROPERTY

CHAPTER 29. MOTOR CARRIERS OF PASSENGERS

Subchapter F. DRIVER REGULATIONS

§ 29.503. Age restrictions.

[A] (a) Except as provided in subsection (b), a common or contract carrier may not permit a person to

operate a vehicle in its authorized service unless that person is at least 21 years of age.

(b) A common or contract carrier providing paratransit service may permit a person to operate a paratransit vehicle in its authorized service if that person is at least 18 years of age. All of the following conditions shall be met:

(1) The person shall be certified as an emergency medical services vehicle operator (EMSVO) by the Department of Health (Department) after meeting the requirements under 35 Pa.C.S. § 8122 (relating to emergency medical services vehicle operators) and 28 Pa. Code §§ 1023.21—1023.34 (relating to EMS providers and vehicle operators).

(2) The person shall carry the Department-issued EMSVO certification on board while operating a paratransit vehicle.

(3) The carrier shall comply with all applicable Department regulations and maintain records for 4 years to prove each person’s EMSVO certification. The records must be available for inspection by Commission staff upon request.

(4) The carrier shall immediately notify the Commission’s Bureau of Technical Utility Services of an accident involving a paratransit driver who is under 21 years of age, regardless of the severity of the accident.

[Pa.B. Doc. No. 17-1944. Filed for public inspection November 22, 2017, 9:00 a.m.]