ANNOTATED LIST OF MARYLAND GRASSES (POACEAE)

Edward E. Terrell and Paul M. Peterson

Department of Botany
National Museum of Natural History
Smithsonian Institution
Washington, D.C. 20013-7012, U.S.A.
terr60@msn.com; peterson@si.edu

ABSTRACT
Accepted names, common names, and widely used synonyms for 347 species of grasses found in Maryland are reported. We provide information on their frequency, distribution, and conservation status.

RESUMEN
Se divulgan los nombres aceptados, nombres comunes, y los sinónimos ampliamente utilizados para 347 especies de pastos encontradas en Maryland. Proporcionamos información de su frecuencia, distribución, y estado de la conservación.

The grass family (Poaceae or Gramineae) is the fourth largest flowering plant family in the world and contains about 11,000 species in 800 genera worldwide. Twenty-three genera contain 100 or more species or about half of all grass species, and almost half of the 800 genera are monotypic or diatypic, i.e., with only one or two species (Watson & Dallwitz 1992, 1999). Specializations for open habitats and grazing tolerance, highly reduced floral structure, and wind pollination in the grasses have enabled the family to be extremely successful at planet-wide radiation and colonization. One notable feature of grasses and other monocots are intercalary meristems that allow individual culms to resprout once they have been removed. Grasses are well adapted to open, marginal, and frequently disturbed habitats, and can be found on every continent, including Antarctica.

With the infusion of molecular data our present concept and classification of the grasses is changing at a rapid rate. In Maryland we currently recognize eight subfamilies: Bambusoideae, Ehrhartoideae, Pooideae, Arundinoideae, Danthonioideae, Aristidoideae, Chloridoideae, and Panicoideae (Grass Phylogeny Working Group 2001; Soreng et al. 2009).

Over the last 120 years or so the flora of the eastern United States has been well documented. In Maryland, local treatments such as the flora of the District of Columbia and vicinity (Hitchcock 1919), Maryland grasses (Norton 1930), herbaceous plants of Maryland (Brown & Brown 1984), a checklist of plants in the Washington-Baltimore area (Hermann 1946), an annotated checklist of vascular plants of Rock Creek Park (Fleming & Canal 1995), an annotated list of the flora of Beltsville Agricultural Research Center (Terrell et al. 2000), and an annotated list of vascular plants of the Washington-Baltimore area (Shetler & Stone Orli 2002) have vastly improved our distribution records. Regional treatments have also contributed to an environmental awakening making the identification of grasses more accessible (Fernald 1950; Brown & Brown 1984; Gleason & Cronquist 1991).

The natural flora is always in a tenuous position since its survival is often in the hands of bureaucrats, politicians, and ultimately developers. Knowledge of our ever changing flora is critical to the conservation of our plant biodiversity, including the monitoring of native, introduced, and invasive species. We hope this annotated checklist will be useful to everyone who is concerned with maintaining our natural heritage and that it will serve as a useful step toward subsequent lists.
METHODS

We recognize four zones in Maryland: the coastal plain, piedmont, upper midland, and mountain. The coastal plain is east of Montgomery, Howard, Baltimore, Harford, and Cecil counties (Fig. 1) extending to Delaware and the Atlantic coast and including the lands surrounding the Chesapeake Bay. The piedmont, termed the lower midland zone in Brown & Brown (1984), includes all of the above-named five counties and the eastern part of Carroll County. The upper midland zone extends west through Washington County and a small part of Allegany County. This zone includes the northern extension of the Blue Ridge province and part of the Ridge and Valley province. The mountain zone includes most of Allegany County and all of Garrett County. This zone often has elevations above 1500 feet and its highest point is 3360 ft.

This annotated list is based on reports taken from publications and from collections at the University of Maryland (MARY) and the United States National Herbarium (US) at the National Museum of Natural History, Smithsonian Institution. The main source of distribution data was taken from Brown and Brown (1984) and often the first data listed here for a species have been taken from this source. In addition we consulted the Flora of North America, volumes 24 and 25 (Barkworth et al. 2003, 2007), a comprehensive treatment of the grasses. We cite Reed (1964) frequently because he investigated plants found on chrome, manganese, or other ore piles in the Canton area of the port district of Baltimore. Many of these species were first reports for North America or new to the DC area. Shetler and Stone Orli (2002) who produced a list for the DC area was also extensively consulted.

We include data from the Maryland Department of Natural Resources (list downloaded on 13 Nov 2007) concerning rare, threatened, and endangered species. There are no Maryland grasses federally listed as Endangered or Threatened. Seventy-three grass species are listed, including mostly species that are state-rare, regardless of how common they are in the other sections of their ranges, e.g., Zizaniopsis miliacea is very rare in Maryland, but frequent to common in the remainder of its range, Maryland to Florida and Texas and north to southeastern Missouri. Many other Maryland grasses have similar ranges, and are rated G5 for “demonstrably secure globally.” In the present list we are concerned with species that are “globally rare”. Consequently, we list here and in the text only 14 species that are designated G3 (very rare and local or with a restricted range) or G4 (secure globally but locally rare): Amphicarpum amphibarpon (G4), Bromus notowayanus (G3-G5), Calamagrostis porteri (G4), Dichanthelium aciculare subsp. aciculare (G4-G5), D. aciculare subsp. angustifolium (G4-G5), D. acuminatum subsp. leucothrix (G4), D. scabriusculum (G4), D. wrightianum (G4), Muhlenbergia glabriflora (G4), M. torreyana (G3), Panicum philadelphicum subsp. philadelphicum (G3-G5), Poa alsodes (G4-G5), P. saltuensis subsp. languida (G3-G4), Sphenopholis pensylvanica (G4).

The following abbreviations are used in the list: BARC = Beltsville Agricultural Research Center; DC = District of Columbia; DOV = Phillips Herbarium, Delaware State College, Dover, Delaware; MARY = University of Maryland herbarium; TAWES = Herbarium of the Maryland Department of Natural Resources, Annapolis, Maryland; and US = United States National Herbarium. Accepted names appear in bold, synonyms appear in regular type, and an asterisk * designates introduced species.

ANNOTATED LIST OF GRASSES OF MARYLAND

AEGILOPS L.


(AGROPYRON Gaertn.)

Agropyron repens (L.) P. Beauv. = Elymus repens

AGROSTIS L. bentgrass.

Agrostis alba of authors = Agrostis gigantea

*Agrostis canina L. – velvet bent. A lawn grass reported from Frederick Co.

*Agrostis capillaris L. – Rhode Island bentgrass, colonial bentgrass. Collections at US: Montgomery, Prince George’s, Garrett, Somerset, Wicomico cos. (all det. by M. Harvey). Locally common in lawns and fields in Montgomery and Prince George’s cos. (Terrell collections); probably occurs more widely in MD.

Agrostis eliotiana Schult. – Elliott’s bentgrass. Reported from Charles County (Shetler & Stone Orli 2002). No collections at MARY or US.


Agrostis mertensii Trin. – northern bent. Reported by Reed (1986).
Agrostis perennans (Walter) Tuck. – upland bentgrass. Frequent in piedmont and coastal plain.
Agrostis scabra Willd. – rough bentgrass. (A. hyemalis var. scabra (Willd.) Blomq. Rather widespread.
Agrostis spica-venti L. = Apera spica-venti
*Agrostis stolonifera* L. – creeping bentgrass. Widespread in suitably moist habitats.
Agrostis tenuis Sibth. = *A. capillaris*

Aira L. Hairgrass.
Aira capillaris Host = *A. caryophyllæa* var. *capillaris*
*Aira caryophyllæa* L.

Aira elegans Willd. ex Roem. & Schult. = *A. caryophyllæa* var. *capillaris*
*Aira præcoxa* L. – spike hairgrass. Prince George’s, Calvert, Worcester cos. Rare on southern coastal plain.

Alloteropsis J.Presl
*Alloteropsis cimicina* (L.) Stapf – Baltimore, ore piles (Reed 1964). (*Coridochloa cimicina* (L.) Nees ex B.D. Jacks.).

Alopecurus L.

*Alopecurus aequalis* Sobol. var. *aequalis* – short-awn foxtail. Rare, Cecil Co. Prince George’s Co., two collections from BARC (Terrell et al. 2000). Spreading via agricultural equipment on Delmarva, likely adventive (Frye).
*Alopecurus carolinianus* Walter – tufted foxtail. Infrequent, an agricultural weed of field edges (Frye).


Ammophila Host Beachgrass.


Amplicarpum Kunth

*Amplicarpum purshii* Kunth = *A. amphicarpum*

Andropogon L. Bluestem.

*Andropogon elliottii* Chapm. = *A. gyranus*

*Andropogon gerardii* Vitman – big bluestem. Infrequent throughout. Widely planted in warm season grass mixes (Frye).


**Fig. 1. Location of counties in Maryland.**
Andropogon gyrans Ashe var. gyrans – Elliott’s bluestem. Coastal plain.
Andropogon scoparius Michx. = Schizachyrium scoparium
Andropogon tenuissimus Michx.var. tenuissimus – split bluestem. Coastal plain, infrequent.
Andropogon virginicus L.
var. virginicus – broomedge bluestem. Widespread and abundant.
var. abbreviatus (Hack.) Fernald & Griscom = A. glomeratus

ANTHOXANTHUM L.
*Anthoxanthum hirtum (Schr.) Y. Schouten & Veldkamp – Reported by Kartesz & Meacham (2008).
*Anthoxanthum odoratum L. – sweet vernal grass. Abundant weed throughout MD.

APLULA L.
*Apluda mutica L. – Baltimore, chrome ore piles (Reed 1964).

ARISTIDA L. Three-awn grass
Aristida adscensionis L. – Baltimore, chrome ore piles (Reed 1964).
Aristida curtissii (A. Gray) Nash = A. dichotoma var. curtissii
var. dichotoma – Common, coastal plain and piedmont.
Aristida lanosa Muhl. ex Elliott – woolly three-awn grass. Rare, eastern shore.
Aristida longespica Poir.
var. geniculata (Rafl.) Fernald – Reported by Kartesz & Meacham (2008).
var. longespica – Frequent, coastal plain and lower piedmont.
Aristida oligantha Michx. – oldfield three-awn grass. Fairly common, coastal plain and DC area.
Aristida purpurascens Poir.
var. purpurascens – purple three-awn grass. Frequent, coastal plain.
var. virgata (Trin.) Allred – Rare, eastern shore. Five collections from Wicomico and Worcester cos. in TAWES (Frye).
Aristida tuberculosa Nutt. – seaside three-awn grass. Rare, Assateague Island, Worcester Co.

ARRHENATHERUM P. Beauv.
var. bulbosum (Willd.) Spanner – Reported from southern eastern shore.

ARTHRAxon P. Beauv.

ARUNDINARIA Michx. Cane
Arundinaria tecta (Walter) Muell. – switch cane. Rare, coastal plain.

ARUNDO L. Reed

AVENA L. Oats
*Avena fatua L. – wild oats. Rare. Baltimore, chrome ore piles (Reed 1964).
*Avena sativa L. – Oats. Cultivated, sometimes escaped and established.

AVENELLA (Bluff & Fingerh.) Drejer
Avenella flexuosa (L.) Drejer – crinkled hairgrass. Frequent, northern coastal plain and mountains.

AXONOPUS P. Beauv.

BOTHRIOCLOA P. Beauv.
*Bothriochloa pertusa (L.) A. Camus – Baltimore, chrome ore piles (Reed 1964).

BOUTELOUA Lag. Grama grass.
*Bouteloua aristidoides (Kunth) Griseb. – Baltimore, chrome ore piles (Reed 1964).
*Bouteloua barbata Lag. – Baltimore, chrome ore piles (Reed 1964).

BRACHYaria (Trin.) Griseb. = UROCHLOA, in part
Brachyaria distachya (L.) Stapf = Urochloa distachya
Brachyaria eruciformis (Sm.) Griseb. = Moorochoa eruciformis

BRACHYLYTRUM P. Beauv.
Brachylytrum erectum (Schreb.) P. Beauv. – Fairly common, piedmont and mountains.

BRIZA L. Quaking grass.

BROMUS L. Brome grass.
*Bromus arvensis L. – field biennegrass. Rare, Prince George’s, Worcester, and Talbot cos.
*Bromus briziformis Fisch. & C.A. Mey. – awnless brome. Rare, Baltimore and Dorchester cos.
Terrell and Peterson, Annotated checklist of Maryland grasses

Bromus ciliatus L.
var. ciliatus – fringed brome grass. Reported from Maryland, needing taxonomic study (Frye).
Bromus ciliatus var. laeviglumis Scribn. = B. pubescens.
Bromus dudleyi Fernald = B. ciliatus
*Bromus hordeaceus L. subsp. hordeaceus – soft chess, soft brome. Known from four counties but common weed in BARC, Prince George’s Co. (Terrell et al. 2000) and probably more widely distributed.
*Bromus inermis Leyss. – smooth brome. Sometimes grown, but established widely in a variety of habitats.
*Bromus japonicus Thunb. – Japanese brome, Japanese chess. Known from four counties but common weed in BARC, Prince George’s Co. (Terrell et al. 2000) and probably more widely distributed.
*Bromus kalmii A. Gray – Rare, Garrett Co.
Bromus latiglumis (Shear) Hitchc. – Rare, coastal plain and along Potomac River.
Bromus mollis L. = B. hordeaceus
Bromus pubescens Muhl. ex Wild. – Canada brome. Common in piedmont, also in Garrett and Allegany Cos., often referred to as B. ciliatus var. laeviglumis (B. purgans in Brown & Brown 1984).
Bromus purgans L. = B. pubescens
Bromus racemosus L. – Uncommon, reported from Anne Arundel, Baltimore, Howard, Kent, Prince George’s, Montgomery and Queen Anne’s cos.
Bromus rigidus Roth = B. diandrus
*Bromus rubens L. – foxtail chess. Rare, reported from Worcester Co.
Bromus unioloides Kunth = B. catharticus
Bromus villosus Forsk. = B. diandrus

CALAMAGROSTIS Adans. Reed Bentgrass.
Calamagrostis cinnoides (Muhl.) W.P.C. Bart. – small reedgrass. A proposal is planned to preserve this name over the name C. coarctata Torr. ex Eaton (Marr et al. 2007: 717). Widespread.

CENCHRUS L. Sandbur.
*Cenchrus echinatus L. – Baltimore, chrome ore piles (Reed 1964).

(CHAEOTHOLOCA Scribn.) = SETARIA

CHASMANTHIUM Link
Chasmanthium latifolium (Michx.) H. O. Yates – Indian wood oats. (Uniola latifolia Michx.) Frequent in Potomac drainage.

CHLORIS Sw. Finger Grass.
*Chloris verticillata Nutt. – windmill grass. Established in field adjoining library in BARC, Prince George’s Co. (Terrell et al. 2000).
*Chloris virgata Sw. – Baltimore, chrome ore piles (Reed 1964).

CINNA L. Woodreed.
Cinna latifolia (Trevir. ex Gopp.) Griseb. – drooping woodreed. Infrequent in mountain zone.

COELORACHIS Brongn.
Coelorachis rugosa (Nutt.) Nash – wrinkled jointgrass. Rare in southern eastern shore (as Manisuris rugosa in Brown & Brown 1984). No specimens from MD in MARY.

CYNODON Rich.
*Cynodon dactylon (L) Pers. – Bermuda grass. Planted in lawns and widely established as a weed.

CYNOSURUS L. Dog’s-tail Grass.
*Cynosurus cristatus L. – crested dog’s-tail grass. Rare weed, College Park, Prince George’s Co. (Shetler & Stone Orli 2002).
*Cynosurus echinatus L. – Rare weed reported from MD.

DACTYLIS Sw. Finger Grass.

DACTYLOCTENIUM Wildl.
*Dactylolcitenium aegyptium (L.) Wildl. – Rare or absent. One collection Pond s.n. (MARY) as a weed in farm plots, College Park.
*Dactylolcitenium geminatum Hack. – Baltimore, chrome ore piles (Reed 1964).

DANTHONIA Lam.& DC. Wild Oatgrass.
Danthonia compressa Aust. – mountain oatgrass. Common in western MD, also Frederick, Montgomery, Prince George’s, and Calvert cos.


Dichanthelium boreale (Nash) Freckmann – northern panicgrass. No data.


Dichanthelium commutatum (Schult.) Gould – variable panicgrass. subsp. ashei (T.G. Pearson ex Ashe) Freckmann & Lelong. No data. subsp. commutatum – Frequent.

Dichanthelium depauperatum (Muhl.) Gould – starved panic grass. Frequent in coastal plain and piedmont.


Dichanthelium ensifolium (Baldwin ex Elliott) Gould – sword-leaf panic grass. No data.

Dichanthelium latifolium (L.) Harvill – broad-leaved panic grass. Frequent in piedmont.

Dichanthelium linearifolium (Scribn.) Gould – soft-tufted panicgrass. Rare in MD.


Dichanthelium portoricense (Desv. ex Ham.) B.F. Hansen & Wunderlin subsp. patulum (Scribn. & Merr.) Freckmann & Lelong – blunt-glumed panicgrass. No data.

Dichanthelium ravenelii (Scribn. & Merr.) Gould – Ravenel’s panic grass. Rare in coastal plain.

Dichanthelium sabulorum (Lam.) Gould & C.A. Clark var. patulum = D. portoricense subsp. patulum var. thinum = D. acuminatum subsp. columbiae


Dichanthelium scoparium (Lam.) Gould – velvety panicgrass. Common in eastern MD and coastal plain.


Dichanthelium villosissimum = D. ovale subsp. villosissimum


DIGITARIA Haller Crab Grass, Finger Grass.

Digitaria ciliaris (Retz.) Koeler – southern crabgrass. Probably common.

Digitaria cognata (Schult.) Pilg. – fall witchgrass. (Leptoloma cognata (Schult.) Chase). Anne Arundel Co. (Shetler & Stone Orli 2002), Prince George’s Co., BARC (Terrell et al. 2000). Frequent on coastal plain (Frye).

Digitaria filiformis (L.) Koeler – slender crabgrass. Frequent, coastal plain.

*Digitaria ischaemum (Schreb.) Muhl. – smooth crabgrass. Common and widespread weed.

Digitaria longiflora (L.) Scop. – hairy crabgrass. Common and widespread weed.

*Digitaria sanguinalis (L.) Scop. – hairy crabgrass. Common and widespread weed.

DINEBRA Jacq.

*Dinebra retroflexa (Vahl) Panz. – Baltimore, chrome ore piles (Reed 1964).

DISTICHLIS Raf. Saltgrass.


ECHINOCHLOA P. Beauv.


*Echinochloa crusgalli (L.) P. Beauv. – barnyard grass. Common and widespread.

*Echinochloa crus-pavonis (Kunth) Hitchc. – Baltimore, chrome ore piles (Reed 1964).


var. muricata – Prince George’s Co., BARC (Terrell et al. 2000).


ELEUSINE Gaertn. Goose Grass.

*Eleusine indica (L.) Gaertn. – goose grass. Common weed especially on sidewalks and paved places.

ELYMUS L. Wildrye.

Elymus canadensis L. – Canada wildrye. Limestone regions, northern counties, Prince George’s, Talbot cos.


Elymus riparius Wiegand – riverbank wildrye. Frequent, piedmont and Worcester Co.


Elymus villosus Muhl. ex Wild. – slender wildrye. Infrequent, piedmont and coastal plain.

Elymus virginicus L.


(ELYTRIGIA Desv.) = ELYMUS Elytrigia repens (L.) Desv. ex Nevski = Elymus repens ENNEAPOGON Desv. ex P. Beauv.

*Enneapogon desvauzi P. Beauv. – Baltimore, chrome ore piles (Reed 1964).

ERAGrostis P. Beauv. Lovegrass

*Eragrostis barrelieri Davau – Baltimore, manganese ore piles (Reed 1964).


*Eragrostis curvula (Schrad.) Nees – weeping lovegrass. Planted on roadsides as erosion preventive and used for reclamation, often escaped and established (Peterson 2003a: 76).

*Eragrostis cylindriniflora Hochst. – Baltimore, manganese ore piles (Reed 1964).

Eragrostis frankii C. A. Mey. ex Steud. – Frank’s lovegrass. Piedmont, infrequent.

Eragrostis hirsuta (Michx.) Nees – big-top lovegrass Common on coastal plain (Frye).

Eragrostis hypnoides (Lam.) Britton, Sterns, & Poggenb. – Uncommon in piedmont.

Eragrostis megastachya (Koeler) Link = E. ciliensis

*Eragrostis mexicana (Hornem.) Link subsp. mexicana – Mexican lovegrass. Rare, known from Prince George’s Co.


Eragrostis pectinacea (Michx.) Nees var. pectinacea weedy lovegrass – Common and widespread weed.

*Eragrostis pilosa (L.) P. Beauv. var. pilosa – Indi lovegrass. Frequent in piedmont and coastal plain, more common east of Chesapeake Bay.

Eragrostis poaeoides P. Beauv. ex Roem. & Schult. = E. minor

Eragrostis refracta (Muhl.) Scribn. – Infrequent, reported from Wicomico and Worcester cos.


*Eragrostis trichophora* Coss. & Durieu – Baltimore, Chrome ore piles (Reed 1964).

*Eragrostis unioloides* (Rezt.) Nees ex Steud. – Baltimore, chrome ore piles (Reed 1964).

(ERIANTHUS Michx.) = SACCHARUM

Erianthus alopecuroides (L.) Eil. = Saccharum alopecuroides

Erianthus brevibarbas Michx. = S. brevibarbe

Erianthus coarctatus Emlal= S. coarctatum

Erianthus contortus Eil. = S. brevibarbe var. contortum

Erianthus giganteus (Walt.) Muhl. = S. giganteum

Erianthus ravennae (L.) Beauv. = S. ravennae

ERIOCHLOA Kunth

*Eriochloa acuminata* (J. Presl) Kunth – Baltimore, chrome ore piles (Reed 1964).


*Eriochloa punctata* (L.) Desv. ex Ham. – Baltimore, chrome ore piles (Reed 1964).

(EULALIA Kunth)

Eulalia vimineum (Trin.) A. Camus = Microstegium vimineum

FESTUCA L. Fescue.

Festuca arundinacea Schreb. = Schedonorus arundinaceus

Festuca brevila = F. trachyphylla

Festuca duriuscula L. = F. trachyphylla

Festuca elatior L. = Schedonorus arundinaceus

*Festuca filiformis* Pourn. – hare fescue. Howard Co. Escaped from cultivation.

Festuca longifolia Thuill. = F. trachyphylla

Festuca obtusa Biehler = F. subverticellata

Festuca ovina L. – sheep fescue. Planted as ornamental.

Festuca paradoxo Desv. – cluster fescue. Rare, Garrett Co. and Susquehanna Valley (Brown & Brown 1984). Apparently rare with few records (Frye).

Festuca pratensis Huds. = Schedonorus pratensis

*Festuca rubra* L. – red fescue.

subsp. commutata Gaudin – Chewings fescue. Planted for lawns and established elsewhere.

subsp. fallax (Thuill.) Nyman – Planted.

subsp. rubra. Planted.


Festuca tenuifolia Sibth. = F. filiformis


GLYCERIA R. Br. Manna Grass.

Glyceria acutiflora Torr. – Rare on coastal plain and Blue Ridge (Frye).

Glyceria canadensis (Michx.) Trin.

var. canadensis – rattlesnake grass. Mountain counties.

var. laxa (Scribn) Hitchc. – Listed as a species in coastal plain, piedmont and mountain zones (Brown & Brown 1984).

*Glyceria fluitans* (L.) R. Br. – water manna grass Reported from Baltimore. Co.


Glyceria laxa (Scribn.) Scribn. = G. canadensis var. laxa

Glyceria melicaria (Michx.) F.T. Hubb. – melic manna grass. Infrequent, mountain and piedmont.

Glyceria obtusa (Muhl.) Trin. – Atlantic manna grass. Common in coastal plain.

Glyceria septentrionalis Hitchc. – northern manna grass. Frequent in coastal plain.

Glyceria striata (Lam.) Hitchc. – fowl manna grass. Widely spread and common.

GYMNOPOGON PBeauv. Beardgrass.

Gymnopogon ambiguus (Michx.) Britton, Sterns, & Poggenb. – Frequent in coastal plain.

Gymnopogon brevifolius Trin. – Rare, Worcester and Wicomico cos.

HACKELOCHLOA Kunze

*Hackelochloa granularis* (L.) Kunze – Baltimore, chrome ore piles (Reed 1964).

(HIEROCHLOE R. Br.) = ANTHOXANTHUM

Hierochloë hirta (Schrank) Borbás = Anthoxanthum hirtum

Hierochloë odorata (L.) Wahlenb. = Anthoxanthum nitens

HOLCUS L. Velvet Grass.


HORDEUM L. Barley.


*Hordeum marinum* Huds. – Baltimore, chrome ore piles (Reed 1964).


*Hordeum murinum* L. subsp. murinum – Baltimore, chrome ore piles (Reed 1964).

Hordeum pusillum Nutt. – little barley. Frequent in coastal plain.

*Hordeum vulgare* L. – barley. Cultivated, escaping, not persisting.

HYSTRIX Moench

Hystrix patula Moench = Elymus hystrix

ISCHAEMUM L.

*Ischaemum indicum* (Houtt.) Merr. – Baltimore, chrome ore piles (Reed 1964).

*Ischaemum rugosum* Salisb. – Baltimore, chrome ore piles (Reed 1964).

KOELERIA Pers.


Koeleria phleoides (Vill.) Pers. = Rostraria cristata
LEERSIA Sw.
Leersia hexandra Sw. – southern cutgrass. Rare. Data lacking.
Leersia lenticularis Michx. – catch-fly grass. Rare, Worcester Co.
Leersia oryzae (L.) Sw. – rice cutgrass. Widespread.
Leersia virginica Willd. – white cutgrass. Widespread.

LEPTCHLOA P. Beauv.
*Leptochloa dubia* (Kunth) Nees – Baltimore, chrome ore piles (Reed 1964).

Leptochloa fusca (L.) Kunth subsp. Leptochloa panicea


Leptochloa panicea (Retz.) Ohwi subsp. brachiata (Steud.) N. Snow – Reported by Kartesz & Meacham (2008).

LEPTOLOMA Chase
Leptoloma cognata (Schult.) Chase = Digitaria cognata

LOLIUM L. Ryegrass.


MANISURIS L.
Manisuris rugosa (Nutt.) Kuntze = Coelorachis rugosa

MELICA L. Melic Grass.
Melica mutica Walter – two-flowered melic. Rare, southern MD and piedmont (Frey).

Melica nitens (Scribn.) Nutt. ex Piper – Rare, ridge and valley (Frey).

MELINIS P. Beauv.

MICROSTEGIUM Nees
*Microstegium vimineum* (Trin.) A. Camus – cover-all grass, stilt grass, Nepalese browntop. Widespread noxious weed.

MILIUM L.
*Milium effusum* L. var. cisatlanticum Fernald – tall millet grass. Locally abundant in Garrett Co. (Frey). Collections from MD in MARY.

MISCANTHUS Andersson

MNESITHEA Kunth
*Mnesithea granularis* (L.) de Koning & Sosef. = Hackelochloa granularis
*Mnesithea rugosa* (Nutt.) de Koning & Sosef. = Coelorachis rugosa

MOOROCHLOA Veldkamp.

*Moorochloa eruciformis* (Sm.) Veldkamp – Baltimore, chrome ore piles (Reed 1964). Formerly placed under *Brachiaria*.

MUHLENBERGIA Schreb.
*Muhlenbergia asperifolia* (Nees & Meyen ex Trin.) Parodi – Frederick Co. (Reed 1964).

*Muhlenbergia capillaris* (Lam.) Trin. – DC area.


*Muhlenbergia mexicana* (L.) Trin. – Infrequent in coastal plain and piedmont. Plants with lemmatal awns 3–10 mm long have been referred to as *M. mexicana var. filiformis* (Torr.) Scribn. (Peterson 2003b: 154).

*Muhlenbergia racemosa* (Michx.) Britton, Sterns, and Poggenb. – Reported from Garrett Co.


*Muhlenbergia sobolifera* (Muhl.ex Trin.) Trin. – branched muhly. Frequent, midland and mountain zones.

*Muhlenbergia sylvatica* (Torr.) Torr.ex A. Gray – woodland muhly. Rare, mostly piedmont.


*Muhlenbergia torreyana* (Schult.) Hitchc. – Rare, Caroline Co. G3.


OPLISTENUS P. Beauv.

ORYZOPSIS Michx.
Oryzopsis asperifolia Michx. – Rare, mountains (Frey).
Oryzopsis racemosa (Sm.) Ricker = *Piptatherum racemosum*

PANICUM L.
Some subspecies were treated as varieties in Brown and Brown 1984. M. Lelong determined certain collections. *Panicum agrostoides* Spreng. = *P. rigidulum* subsp. *rigidulum*


Panicum anceps Michx. – beaked panicgrass. subsp. anceps – frequent. subsp. rhizomatum (Hitchc. & Chase) Freckmann & Lelong – Reported from MD.

Panicum capillare L. subsp. capillare – witch grass. Frequent throughout.
**Panicum dichotomiflorum** Michx. – fall panicum. Common weed.

**Panicum flexile** (Gatt.) Scribn. – wiry witchgrass. Rare in piedmont.

**Panicum gattingeri** = *P. philadelphicum* subsp. *gattingeri*

**Panicum hemitomon** Schult. – maidencane. Infrequent in coastal plain (Frye).

**Panicum longifolium** Torr. = *P. rigidulum* subsp. *pubescens*

*Paniceum milaceum* L. – broom-corn millet, proso millet. Occasionally cultivated and escaped.

*Paniceum paludosum* Roxb. – Baltimore, chrome ore piles (Reed 1964).

**Panicum philadelphicum** Bernh. ex Trin. – Philadelphia witchgrass.


**Panicum psilotopum** Trin. – Baltimore, chrome ore piles (Reed 1964).

**Panicum rigidulum** Bosc ex Nees – redtop panicum. subsp. *combsii* (Scribn. & C.R. Ball) Freckmann & Lelong – No data on distribution.


subsp. *rigidulum* (*P. agrostoides*) – Common in piedmont and coastal plain.

**Panicum stipitatum** Nash = *P. rigidulum* subsp. *elongatum*

*Paniceum sumatrense* Roth ex Roem & Schult. – Baltimore, chrome ore piles (Reed 1964).

**Panicum tuckermanii** Fernald = *P. philadelphicum* subsp. *tuckermanii* (Scribn. & C.R. Ball) Freckmann & Lelong


**PAPPAROLIS** C.E. Hubb.


**PASPALUM** L.


*Paspalum convexum* Humb. & Bonpl. ex Flüggé – Baltimore, chrome ore piles (Reed 1964).


*Paspalum dissectionum* (L.) L. – Infrequent in coastal plain.


*Paspalum floridanum* Michx. – Florida paspalum. Frequent near and in coastal plain.

*Paspalum fluitans* (Ell) Kunth = *P. repens*


*Paspalum orbiculatum* Poir. – Baltimore, chrome ore piles (Reed 1964).

*Paspalum pubiflorum* Rupr. ex E. Fourn. – Reported from Anne Arundel Co.


*Paspalum scrobiculatum* L. – Baltimore, chrome ore piles (Reed 1964).


var. *ciliatifolium* (Michx.) Vasey

var. *muhlenbergii* (Nash) D.J. Banks

var. *psammophilum* (Nash) D.J. Banks – Occurs in DC.

var. *setaceum* – Frequent.

var. *stramineum* (Nash) D.J. Banks

**PENNISETUM** Rich.


**PHALARIS** L.

*Phalaris arundinacea* L. – reed canary grass. Common in coastal plain and frequent in piedmont and elsewhere.

*Phalaris canariensis* L. – canary grass. Baltimore, chrome ore piles (Reed 1964).


*Phalaris paradoxa* L. – Baltimore, chrome ore piles (Reed 1964).

**PHLEUM** L.


*Phleum subulatum* (Savi) Asch. & Graebn. – Baltimore, chrome ore piles (Reed 1964).

**PHRAGMITES** Adans. Reed.

Phragmites australis (Cav.) Trin. ex Steud. – common reed. Common and widespread. Two lineages are recognized in Maryland by Saltonstall et al. (2004), *P. australis* subsp. americanus Saltonstall, P.M. Peterson, & Soreng, the native lineage and an unnamed introduced lineage.

Phragmites communis Trin. = *P. australis*

**PHYLLOSTACHYS** Siebold & Zucc.

*Phyllostachys aurea* Siebold & Zucc. – Cultivated and sometimes spreading. Hyattsville, Prince George’s Co.

*Phyllostachys flexuosa* Rivière & C. Rivière – Cultivated and sometimes spreading. Frederick Co.

**PIPTATHERUM** P. Beauv.

*Piptatherum millaceum* (L.) Coss. – Baltimore, pumice piles (Reed 1964).
Piptatherum racemosum (Sm.) Eaton – mountain ricegrass. 

(2) *Oryzopsis racemosa* (Sm.) Ricker. Rare, mountain zone and Washington Co. Three MD collections at MARY.

PIPTOCHAETIUM J. Presl

Piptochaetium avenaceum (L.) Parl. – blackseed spear-grass. 

(2) *Sisyrinchium avenaceum* (L.) Coastal plain. Montgomery Co. (seen by Terrell along C & O canal). MARY has vouchers from Anne Arundel, Caroline, Howard, and Prince George’s cos.

**POA** L. Bluegrass.


*Poa annuula* L. – annual bluegrass. Common and widespread.


*Poa chapmaniana* Scribn. – Montgomery Co., see by P. Peterson.

*Poa compressa* L. – Canada bluegrass. Common and widespread.

*Poa cuspidata* Nutt. – short-leaved bluegrass. Common throughout (Frye).

*Poa nemoralis* L. – woods bluegrass. Prince George’s (Shetler & Stone Orli 2002) and Montgomery cos. (R.J. Soreng, pers. comm.).

*Poa palustris* L. – fowl meadow grass. Infrequent in Howard and Washington cos. and DC area.

*Poa pratensis* L. – short-leaved bluegrass. Common throughout (Frye).


*Poa sylvestris* A. Gray – sylvan bluegrass. Frequent in piedmont and mountains, rare on coastal plain.


POLYPOGON Desf.


PEUDOSASA Makino ex Nakai

*Pseudosasa japonica* (Siebold & Zucc.) Makino – cultivated and sometimes spreading. DC area.

PUCCINELLAIA Parl. Alkali Grass.


*Puccinellia fasciculata* (Torr.) Bickn. – Coastal plain.

*Puccinellia pallida* (Torr.) Clausen = *Torreyochloa pallida*

(RHYNCHELTRUM Nees)

*Rhynecholtrum repens* (Wild.) C.E. Hubb. = *Melinus repens*

ROSTRARIA Trin.


SACCHARUM L. Plumegrass. (These species formerly in *Erianthus*).

Saccharum alopecuroides (L.) Nutt. – silver plumegrass. Rare in coastal plain. Calvert Co., Cove Point (Steuery 2002).

Saccharum baldwinii Spreng. – Rare. Reported by Kartesz & Meacham (2008).


Saccharum ravennae (L.) L. – ravenna grass. Cultivated and sometimes escaped to roadsides.

SACCIOLEPIS Nash


SCHEDONORUS P. Beauv.

*Schedonorus arundinaceus* (Schreb.) Dumort. – tall fescue (*Festuca arundinacea* Schreb.). Planted on roadsides and elsewhere; an abundant weed.

*Schedonorus pratensis* (Huds.) P. Beauv. – meadow fescue (*Festuca pratensis* Huds.). Occasional weed and presumably planted. Believed to be much less frequent than formerly.

SCHIZACHYRUM Nees


SCHIZACHYNE Hack.


SCHIZOCHYTRIUM Nees


Schizachyrium scoparium (Michx.) Nash – little bluestem. *(Andropogon scoparius* Michx.). Throughout MD, common in coastal plain.

SCLEROCLOA P. Beauv.

SECALE L. Rye.

*Scelex cereale* L. – rye. Cultivated and occasionally escaped.

SETARIA P. Beauv. Foxtail, Bristlegrass.


*Setaria geniculata* (Lam.) P. Beauv. = *S. parviflora*

*Setaria glauca* (L.) P. Beauv. = *Pennisetum glaucum*. Yellow foxtail was formerly widely known as *Setaria glauca*; see *S. pumila*.

*Setaria grisebachii* E. Fourn. – Baltimore, chrome ore piles (Reed 1964).

*Setaria italica* (L.) P. Beauv. – foxtail millet. Cultivated and escaped to roadsides.


*Setaria verticillata* (L.) P. Beauv. – hooked bristlegrass. Infrequent throughout.

*Setaria verticilliformis* Dumort. – Reported by Kartesz & Meacham (2008).

*Setaria viridis* (L.) P. Beauv. – green foxtail, green bristlegrass. Common throughout MD.

SORGHAGASTRUM Nash. Indian Grass.


*Sorghastrum nutans* (L.) Nash – Indian grass. Common throughout MD.

SORGHUM Adans. Sorghum.

*Sorghum bicolor* (L.) Moench – sorghum. Cultivated and occasionally escaped.


*Spartina cynosuroides* (L.) Roth – big cordgrass. Common on coastal plain.


*Spartina pectinata* Link – prairie cordgrass. Infrequent in a variety of habitats.

SPHENOPHOLIS Scribn. Wedgegrass.

*Sphenopholis intermedia* (Rydb.) Rydb. – slender wedgegrass. Rather widespread.

*Sphenopholis nitida* (Biehler) Scribn. – Frequent throughout.

*Sphenopholis obtusata* (Michx) Scribn. – prairie wedgegrass. Rather widespread.

*Sphenopholis ×pallens* (Biehler) Scribn. = *S. obtusata × S. pensylvanica* as reported from MARY by Kartesz & Meacham (2008).


SPOROBOLUS R. Br. Dropseed.

*Sporobolus asper* (P. Beauv.) Kunth = *S. compositus*.

*Sporobolus clandestinus* (Biehler) Hitchc. – Rare, eastern MD.


*Sporobolus coromandelianus* (Retz.) Kunth – Baltimore: chrome ore piles (Reed 1964).


*Sporobolus indicus* (L.) R. Br. – smut grass. Calvert Co., Cove Point Park, Steury (2000); Worcester Co., two collections as roadside weed, 7 mi ENE of Pocomoke City and Assateague Island, Terrell 6309 and 6314 (MARY). Probably frequent on coastal plain.

*Sporobolus neglectus* Nash – Reported as extirpated from MD (Peterson et al. 2003: 121). Frye reports a collection in Baltimore County.

*Sporobolus pyramidatus* (Lam.) Hitchc. – Baltimore, chrome ore piles (Reed 1964). Prince George’s Co., near Laurel, as an abundant roadside weed, Terrell 6286, in 2005; det. by P. M. Peterson). A southern and southwestern species.


STIPA L. Needle grass.

*Stipa avinacea* L. = *Piptochaetium avinaceum*.

THEMEDA Forssk.

*Themeda arguens* (L.) Hack. – Baltimore, chrome ore piles (Reed 1964).

TORYTOCHLOA G.L. Church

*Torreyochloa pallida* (Torr.) G.L.Church – Frequent in coastal plain. [*Puccinellia pallida* (Torr.) Clausen].

TRAGUS Haller

*Tragus racemosus* (L.) All. – Baltimore, chrome ore piles (Reed 1964).

TRIDENS Roem. & Schult.

*Tridens flavus* (L.) Hitchc. – purpletop. See key to separate the vars. in Valdés Reyna (2003:39).


var. *flavus* – Common and widespread.

(TRIODIA R. Br.) = *Tridens*.

TRIPLASIS P. Beauv. Sand Grass.

TRIPSACUM L. Gama Grass.
Trisetum dactyloides (L.) L. – eastern gama grass. Frequent.

TRISETUM L.
Trisetum pensylvanicum (L.) P. Beauv. = Sphenopholis pensylvanica (L.) Hitchc.

TRITICUM L. Wheat.

UNIOLA L.
Uniola latifolia Michx. = Chasmanthium latifolium
Uniola laxa (L.) BSP = Chasmanthium laxum

UROCHLOA P. Beauv.
*Urochloa mutica (Forssk.) T.Q. Nguyen – (Brachiaria mutica (Forssk.) Stapf). Baltimore, chrome ore piles, reported as Panicum purpurascens (Reed 1964; Shetler & Stone Orli 2002).
*Urochloa platyphylla (Munro ex C. Wright) R.D. Webster – broadleaf signalgrass. (Brachiaria platyphylla Munro ex C. Wright). Wicomico and Somerset cos. (Terrell & Reveal 1996).
*Urochloa ramosa (L.) T.Q. Nguyen – Baltimore, chrome ore piles, reported as Panicum ramosum (Reed 1964; Shetler & Stone Orli 2002).
*Urochloa reptans (L.) Stapf – Baltimore, chrome ore piles, reported as Panicum reptans (Reed 1964; Shetler & Stone Orli 2002).
*Urochloa texana (Buckley) R.D. Webster – Texas signalgrass. (Brachiaria texana (Buckley) S.T. Blake). Dorchester and Wicomico cos. (Terrell & Reveal 1996).

VULPIA C.C.Gmel.
Vulpia elliotea (Raf.) Fernald = V. sciuera
Vulpia sciuera (Nutt.) Henrard – squirrel-tail fescue. Frequent on coastal plain. Montgomery and Prince George’s cos. (Shetler & Stone Orli 2002); Calvert Co., Cove Point (Steuery 1997).

ZEA L.
*Zea mays L. – corn, maize. Rarely escapes from cultivation.

ZIZANIA L. Wild-rice.
Zizania aquatica L. – southern wild-rice. Frequent in coastal plain.

ZIZANIOPSIS Doell & Aschers.
Zizaniopsis miliacea (Michx.) Doell. & Aschers. – giant cutgrass. Rare in coastal plain. Calvert Co., Cove Point (Steuery 1997).

ZOYSIA Willd.
*Zoysia japonica Steud. – zoysia. Lawn grass, sometimes spreading.

ACKNOWLEDGMENTS

We are grateful to Christopher Frye for his review which added a number of additional records based on his extensive knowledge of the Maryland flora. We thank Robert J. Soreng for information on Diarrhena and Poa, and for suggestions regarding the format of the list. An anonymous reviewer contributed helpful suggestions.

REFERENCES


MARYLAND DEPARTMENT OF NATURAL RESOURCES. 2007. Rare, threatened, and endangered plants of Maryland. 13 November. Annapolis, Maryland.


Part II. Monocotyledons. Botany Section, Department of Systematic Biology, National Museum of Natural History, Smithsonian Institution, Washington, D.C.


