

MARYLAND REGISTER

Proposed Action on Regulations

Transmittal Sheet PROPOSED OR REPROPOSED Actions on Regulations	Date Filed with AELR Committee	TO BE COMPLETED BY DSD
	12/04/2015	Date Filed with Division of State Documents
		Document Number
		Date of Publication in MD Register

1. Desired date of publication in Maryland Register: 1/22/2016

2. COMAR Codification

Title Subtitle Chapter Regulation
08 03 08 01, .04-.09, .15

3. Name of Promulgating Authority

Department of Natural Resources

4. Name of Regulations Coordinator Telephone Number
Tamara L O'Connell 410-260-8271

Mailing Address

Fisheries Service B-2, 580 Taylor Avenue

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5. Name of Person to Call About this Document Telephone No.
Glenn D. Therres 410-260-8572

Email Address
glenn.therres@maryland.gov

6. Check applicable items:

- New Regulations

- Amendments to Existing Regulations

Date when existing text was downloaded from COMAR online: 10/23/2015.

- Repeal of Existing Regulations

Recodification

Incorporation by Reference of Documents Requiring DSD Approval

Reproposal of Substantively Different Text:

: Md. R

(vol.) (issue) (page nos) (date)

Under Maryland Register docket no.: --P.

7. Is there emergency text which is identical to this proposal:

Yes - No

8. Incorporation by Reference

Check if applicable: Incorporation by Reference (IBR) approval form(s) attached and 18 copies of documents proposed for incorporation submitted to DSD. (Submit 18 paper copies of IBR document to DSD and one copy to AELR.)

9. Public Body - Open Meeting

OPTIONAL - If promulgating authority is a public body, check to include a sentence in the Notice of Proposed Action that proposed action was considered at an open meeting held pursuant to State Government Article, §10-506(c), Annotated Code of Maryland.

OPTIONAL - If promulgating authority is a public body, check to include a paragraph that final action will be considered at an open meeting.

10. Children's Environmental Health and Protection

Check if the system should send a copy of the proposal to the Children's Environmental Health and Protection Advisory Council.

11. Certificate of Authorized Officer

I certify that the attached document is in compliance with the Administrative Procedure Act. I also certify that the attached text has been approved for legality by Shara Mervis Alpert, Assistant Attorney General, (telephone #410-260-8358) on 12/2/2015. A written copy of the approval is on file at this agency.

Name of Authorized Officer

Mark J. Belton

Title

Secretary

Telephone No.

410-260-8100

Date

12/2/2015

Title 08
DEPARTMENT OF NATURAL RESOURCES
Subtitle 03 WILDLIFE

08.03.08 Threatened and Endangered Species

Authority: Natural Resources Article, §§4-2A-03, 4-2A-04, 4-2A-05, 10-2A-03, 10-2A-04, and 10-2A-05, Annotated Code of Maryland

Notice of Proposed Action

[]

The Secretary of Natural Resources proposes to revise seven current regulations and add one new regulation to COMAR 08.03.08 by amending Regulations .01, .04, .07, and .09, repealing and replacing Regulations .05, .06, and .08, and adding new Regulation .15.

Statement of Purpose

The purpose of this action is to list 23 new species of animals and plants in need of conservation, or which are endangered, threatened or endangered extirpated, and reclassify 31 species which are currently listed as in need of conservation, threatened, endangered or endangered extirpated, by changing the status of 13 species and removing 18 listed species. Regulations .05, .06, and .08 are proposed to be repealed and replaced due to the large number of plant species common name changes proposed. Regulation .15 is proposed to provide protection for 10 nongame mammal species that are not currently listed as in need of conservation, threatened, or endangered and for one mammal species that is proposed to be delisted.

A proposal to list a species may occur if it is determined that the species meets the criteria for endangered species, threatened species, or species in need of conservation, as stated in Regulation .01 under COMAR 08.03.08. Legal protection may be warranted due to any of the following factors: present or threatened alterations of the species' habitat or range; overutilization; disease or predation; inadequacy of existing regulatory mechanisms; or other natural or manmade factors affecting its continued existence in the State.

Eight crustaceans, one fish, one bird, and two plant species are proposed to be added to the list as endangered. One bird species and one bat species are proposed to be added to the list as threatened. One crustacean and six bird species are proposed to be added to the list as in need of conservation. Increased legal protection for these species is warranted because populations are isolated, limited in number, and may be habitat specific; population declines have been documented; and/or habitat loss threaten the species' continued existence in the State. The completion of field inventories for species known to be rare, some of which have been discovered recently in the state, support the proposed listing of two plant species at this time. Atlantic sturgeon (*Acipenser oxyrinchus*) was recently listed as endangered and a subspecies of the red knot (*Calidris canutus rufa*) and

northern long-eared bat (*Myotis septentrionalis*) were recently listed as threatened by the U.S. Fish and Wildlife Service and their state statuses are proposed to conform with the federal list. The Delmarva fox squirrel (*Sciurus niger cinereus*) was recently removed from the federal list of threatened and endangered species. We propose to reclassify this species to in need of conservation.

A change in status may occur if there is an increase in the population of a listed species or additional populations are found in the State for a given species. Conversely, a change in status may also occur if there is a decrease in the population of a listed species or known populations have gone extinct locally.

Recent declines in the State and increased threats support the listing of two in need of conservation bird species as threatened. Survey work confirms that populations of one threatened plant species have declined and that addition to the State's endangered species list is warranted. Intensive field inventories have documented enough new populations for one threatened bird species to be proposed as in need of conservation and for one endangered plant species to be proposed as threatened. One fish species and one bird species have been found to be more widespread and less habitat restricted than was previously thought and are proposed to be removed from the State's threatened species list. One mammal species is proposed to be removed from the in need of conservation list because it has become more common and widespread in Maryland and surrounding states. Recent survey work confirms that additional populations of five endangered and four threatened plant species are present in the State such that these species no longer warrant endangered or threatened species protection. One endangered plant species is proposed to be removed from the State's endangered list because the reported population has never been substantiated.

Endangered extirpated species are those species that were once a viable component of the flora and fauna of the State but for which no naturally occurring populations were known since 1950. One crustacean species known from a single location is proposed to be listed as endangered extirpated because it has not been relocated after repeated attempts. One bird species is proposed to be listed as endangered extirpated as it has not been documented as breeding in the State for over 90 years and its breeding habitat has been severely reduced. Two endangered bird species are proposed to be listed as endangered extirpated because of habitat loss and range-wide declines. Four endangered plant species are proposed to be listed as endangered extirpated as populations have not been relocated. Upon the discovery of a viable, naturally occurring population or populations of a listed endangered extirpated species, the status of the species is reevaluated. One plant species has been rediscovered in the State at a single location and it is being proposed as endangered. Five plant species are proposed to be removed from the endangered extirpated list due to additional field inventories.

The scientific community has changed the scientific names of one planarian, one butterfly, one fish, one reptile, four bird, two mammal, and twelve plant species. The common names of five mollusk, four crustacean, six insect, two butterfly, one amphibian, six mammal, and 192 plant species have been changed by the scientific community, and

these names are proposed to be changed to conform.

Regulation .15 is proposed to provide protection from take for 10 species of nongame mammals by requiring permits to allow take. Permits to allow take are limited to scientific research and educational purposes. Take would also be allowed to address damage to property. Incidental taking permits are not proposed to be required for protected nongame mammals. One species, porcupine, warrants monitoring and some level of protection even though it is proposed to be delisted from in need of conservation status due to recent population increases. Eastern spotted skunk is rare in the region and needs protection from take in Maryland while its conservation status is determined. The remainder of the proposed nongame mammal species are bats, several of which have declined dramatically in recent years due to disease and others that have suffered mortality from regional threats, but population impacts are not yet understood.

Comparison to Federal Standards

There is no corresponding federal standard to this proposed action.

Estimate of Economic Impact

I. Summary of Economic Impact.

The administrative costs to the Department will be neutral. More staff time will be needed to address the species being added to the list, but this increase will be offset by staff time reductions for those species being removed from the list.

Revenue (R+/R-)

II. Types of Economic Impact. Expenditure (E+/E-) Magnitude

A. On issuing agency:	NONE	
B. On other State agencies:	NONE	
C. On local governments:	NONE	

	Benefit (+)	
	Cost (-)	Magnitude

D. On regulated industries or trade groups:	NONE	UNDETERMINABLE
E. On other industries or trade groups:	NONE	UNDETERMINABLE
F. Direct and indirect effects on public:	(+)	UNDETERMINABLE

III. Assumptions. (Identified by Impact Letter and Number from Section II.)

- A. The Department of Natural Resources will experience a neutral economic impact since the increase in staff time devoted to those species being added to the list will be balanced by the reduction in staff time devoted to those species being removed from threatened or endangered species protection.
- B. State agencies currently review projects for impacts on listed species; therefore, the economic impact of the proposed changes will be insignificant.
- C. Local agencies currently review projects for impacts on listed species; therefore, the economic impact of the proposed changes will be insignificant.
- D. Some development projects may be modified to mitigate impact to listed species. Adding to or upgrading the species on the list may increase the number of instances when projects are modified to accommodate the listed species. Some development projects that would have required modification for those species being proposed for delisting will not be subject to mitigation once the currently listed species are removed. The magnitude of the economic impact is undeterminable.
- E. Some development projects will be modified to mitigate impact to listed species. Adding to or upgrading the species on the list may increase the number of instances when projects are modified to accommodate the listed species. Some development projects that would have required modification for those species being proposed for delisting will not be subject to mitigation once the currently listed species are removed. The magnitude of the economic impact is undeterminable.
- F. There will be a long-term, positive, but incalculable benefit to the people of Maryland by protecting the diversity of native species of the State.

Economic Impact on Small Businesses

The proposed action has minimal or no economic impact on small businesses.

Impact on Individuals with Disabilities

The proposed action has no impact on individuals with disabilities.

Opportunity for Public Comment

Comments may be sent to Gwenda Brewer, Science Program Manager, Wildlife and Heritage Service, Department of Natural Resources, 580 Taylor Avenue, Annapolis, MD 21401, or call 410-260-8558, or email to gwenda.brewer@maryland.gov, or fax to 410-260-8596. Comments will be accepted through February 22, 2016. A public hearing has not been scheduled.

Economic Impact Statement Part C

- A. Fiscal Year in which regulations will become effective: FY 16

B. Does the budget for the fiscal year in which regulations become effective contain funds to implement the regulations?

Yes

C. If 'yes', state whether general, special (exact name), or federal funds will be used:
Special (Chesapeake Bay and Endangered Species Fund)

D. If 'no', identify the source(s) of funds necessary for implementation of these regulations:

E. If these regulations have no economic impact under Part A, indicate reason briefly:

F. If these regulations have minimal or no economic impact on small businesses under Part B, indicate the reason and attach small business worksheet.

Some small business development projects may be modified to mitigate impact to listed species. Adding to or upgrading the species on the list may increase the number of instances when projects are modified to accommodate the listed species. Some development projects that would have required modification for those species being proposed for delisting will not be subject to modification once the currently listed species are removed.

G. Small Business Worksheet:

Attached Document:

Title 08 DEPARTMENT OF NATURAL RESOURCES

Subtitle 03 WILDLIFE

.08 Threatened and Endangered Species.

Authority: Natural Resources Article, §§4-2A-03, 4-2A-04, 4-2A-05, 10-2A-03, 10-2A-04, and 10-2A-05, Annotated Code of Maryland

.01 Definitions.

A. (text unchanged)

B. Terms Defined.

(1)—(12) (text unchanged)

(13) "Species" means any species of wildlife or plant and reptiles, amphibians, crustaceans, mollusks, and the following finfish: *Acantharchus pomotis*, *Acipenser brevirostrum*, *Acipenser oxyrinchus*, *Catostomus catostomus*, *Centrarchus macropterus*, *Enneacanthus chaetodon*, *Etheostoma fusiforme*, *Etheostoma sellare*, *Etheostoma vitreum*, [*Lampetra*] *Lethenteron* appendix, *Luxilus chrysocephalus*, *Margariscus margarita*, [*Notropis amoenus*,] *Notropis bifrenatus*, *Notropis chalybaeus*, *Noturus flavus*, *Pararhinichthys bowersi*, *Percina* [caprodes] *bimaculata*, *Percina notogramma*, *Percopsis omiscomaycus*, or any part, egg, offspring, or dead body of any of them.

(14)—(16) (text unchanged)

.04 Endangered Species of Wildlife, Reptiles, Amphibians, Mollusks, Crustaceans, and Finfish.

A.—B. (text unchanged)

C. Except for the smaller range which is indicated in §C(7)(e)(d) and (8)(a) of this regulation, the following wildlife, reptile, amphibian, mollusk, crustacean, and finfish species are considered endangered throughout Maryland:

(1) Platyhelminthes:

[(a) Hoffmaster's cave planarian (*Macrocotyla hoffmasteri*); and]

[(b)](a) A planarian (*Procotyla typhlops*); and

(b) Hoffmaster's cave planarian (*Sphalloplana hoffmasteri*);

- (2) (text unchanged)
- (3) Crustaceans:
- (a) *Allegheny spring isopod (Caecidotea alleghenyensis)*;
 - [(a)](b) (text unchanged)
 - (c) *Holsinger's cave isopod (Caecidotea holsingeri)*;
 - [(b)](d) *Maus' cave isopod (Caecidotea mausi)*;
 - (e) *Vandel's cave isopod (Caecidotea vandeli)*;
 - [(c)](f) [Dearolf's] *Pennsylvania cave [isopod] crangonyctid (Crangonyx dearolfi)*;
 - (g) *Friendly cave amphipod (Stygobromus amicus)*;
 - [(d)](h) (text unchanged)
 - (i) *Cecil groundwater amphipod (Stygobromus cecilius)*;
 - [(e)](j) (text unchanged)
 - (k) *Feller's groundwater amphipod (Stygobromus felleri)*;
 - (l) *Rappahannock spring amphipod (Stygobromus foliatus)*;
 - [(f)](m) *Shenandoah Valley cave amphipod (Stygobromus gracilipes)*;
 - [(g)](n) *Rock Creek groundwater amphipod (Stygobromus kenki)*; [and]
 - (o) *Prettyboy groundwater amphipod (Stygobromus paxillus)*; and
 - [(h)](p) [A] *Capital Area groundwater amphipod (Stygobromus sextarius)*;
- (4) Insects:
- (a)—(b) (text unchanged)
 - (c) [A] *Eastern pinebarrens tiger beetle (Cicindela abdominalis)*;
 - (d) [A] *Appalachian tiger beetle (Cicindela ancocisconensis)*;
 - (e) (text unchanged)
 - (f) [Little white] *Ghost tiger beetle (Cicindela lepida)*;
 - (g) [Green-patterned] *Northern barrens tiger beetle (Cicindela patruela)*;
 - (h)—(o) (text unchanged)
 - (p) *Eastern sedge barrens [planthopper] leafhopper (Limotettix minuendus)*;
 - (q)—(r) (text unchanged)
 - (s) *Compton tortoiseshell (Nymphalis [vau-album] vaualbum)*;
 - (t)—(dd) (text unchanged)
- (5) Finfish:
- (a) (text unchanged)
 - (b) *Atlantic sturgeon (Acipenser oxyrinchus)*;
 - [(b)](c)—[(f)](g) (text unchanged)
 - (6) (text unchanged)
- (7) Reptiles:
- (a)—(b) (text unchanged)
 - [(c) *Northern coal skink (Eumeces anthracinus)*];
 - [(d)](c)—[(e)](d) (text unchanged)
 - [(f)](e) *Kemp's ridley sea turtle (Lepidochelys kempii)*; [and]
 - (f) *Northern coal skink (Plestiodon anthracinus)*; and
 - (g) (text unchanged)
- (8) Birds:
- (a)—(f) (text unchanged)
 - [(g) *Olive-sided flycatcher (Contopus cooperi)*];
 - [(h)](g) (text unchanged)
 - (h) *Mourning warbler (Geothlypis philadelphia)*;
 - (i)—(k) (text unchanged)
 - [(l) *Mourning warbler (Oporornis philadelphia)*];
 - [(m)](l) (text unchanged)
 - (m) *Common tern (Sterna hirundo)*; and
 - (n) *Royal tern (Thalasseus maximus)*; [and]
 - [(o) *Bewick's wren (Thryomanes bewickii)*];
- (9) Mammals:
- (a)—(b) (text unchanged)
 - (c) [Finback] *Fin whale (Balaenoptera physalus)*;
 - (d) [Black] *North Atlantic right whale (Eubalaena glacialis)*;
 - (e)—(g) (text unchanged)
 - (h) *Indiana [bat] myotis (Myotis sodalis)*;
 - (i) (text unchanged)
 - (j) *Sperm whale (Physeter [macrocephalus] catodon)*; and
 - [(k) *Delmarva fox squirrel (Sciurus niger cinereus)*; and]

[1](k) (text unchanged)

.05 Endangered Species of Plants.

A. *Listing Criteria. The following factors shall be considered for listing a plant species as endangered:*

- (1) *Whether only a few populations are known in Maryland and they cover only a small portion of land;*
- (2) *Whether the species is restricted to a minimal geographic area;*
- (3) *Whether the species has experienced a substantial decline in Maryland, and if the decline continues, the species' extirpation from Maryland is imminent;*
- (4) *Whether the species' essential habitat has been rapidly lost and that loss is likely to continue;*
- (5) *Whether the species' biology makes it highly susceptible to changes in its environment; or*
- (6) *Whether the species' essential habitat is easily altered by even relatively minor activities.*

B. *Permits. The permit procedures to be followed are set forth in Regulation .03. The following apply:*

- (1) *Permits shall be issued only for scientific research designed to enhance the recovery of the species or population;*
- (2) *A person may not:*
 - (a) *Export, possess, process, sell, offer for sale, deliver, carry, transport, or ship by any means any endangered plant species without a special permit from the Director, the federal government, or another state government;*
 - (b) *Take any endangered plant species from State property except by special permit from the Director; and*
 - (c) *Take any endangered plant species from private property without the written permission of the landowner.*

C. *The following plant species are considered endangered throughout Maryland unless a smaller range is indicated:*

- (1) *Blue monkshood (Aconitum uncinatum);*
- (2) *Sensitive joint vetch (Aeschynomene virginica);*
- (3) *Sandplain gerardia (Agalinis acuta);*
- (4) *Earleaf false foxglove (Agalinis auriculata);*
- (5) *Thread-leaved gerardia (Agalinis setacea);*
- (6) *Pale false foxglove (Agalinis skinneriana);*
- (7) *Woodland agrimony (Agrimonia striata);*
- (8) *Seabeach amaranth (Amaranthus pumilus);*
- (9) *Roundleaf shadbush (Amelanchier sanguinea);*
- (10) *Filmy angelica (Angelica triquinata);*
- (11) *Vanilla grass (Anthoxanthum hirtum);*
- (12) *Missouri rock cress (Arabis missouriensis);*
- (13) *Bristly sarsaparilla (Aralia hispida);*
- (14) *Bearberry (Arctostaphylos uva-ursi);*
- (15) *Woolly three-awn (Aristida lanosa);*
- (16) *Wand-like three-awn grass (Aristida virgata);*
- (17) *Lake-cress (Armoracia lacustris);*
- (18) *Leopard's-bane (Arnica acaulis);*
- (19) *Red milkweed (Asclepias rubra);*
- (20) *Lobed spleenwort (Asplenium pinnatifidum);*
- (21) *Black-stem spleenwort (Asplenium resiliens);*
- (22) *Canadian milkvetch (Astragalus canadensis);*
- (23) *Small-fruit beggarticks (Bidens mitis);*
- (24) *Aster-like boltonia (Boltonia asteroides var. glastifolia);*
- (25) *Broad-glumed brome (Bromus latiglumis);*
- (26) *Wild calla (Calla palustris);*
- (27) *Tuberous grass-pink (Calopogon tuberosus);*
- (28) *Long's bitter cress (Cardamine longii);*
- (29) *Summer sedge (Carex aestivalis);*
- (30) *Carey's sedge (Carex careyana);*
- (31) *Field sedge (Carex conoidea);*
- (32) *Davis' sedge (Carex davisii);*
- (33) *Cypress-knee sedge (Carex decomposita);*
- (34) *Lesser panicled sedge (Carex diandra);*
- (35) *Ebony sedge (Carex eburnea);*
- (36) *Coast sedge (Carex exilis);*
- (37) *Fraser's sedge (Carex fraserianus);*
- (38) *Southern waxy sedge (Carex glaucescens);*
- (39) *Cloud sedge (Carex haydenii);*
- (40) *Hitchcock's sedge (Carex hitchcockiana);*
- (41) *Porcupine sedge (Carex hystericina);*

- (42) Slender sedge (*Carex lasiocarpa*);
- (43) Mead's sedge (*Carex meadii*);
- (44) Longstalk sedge (*Carex pedunculata*);
- (45) Richardson's sedge (*Carex richardsonii*);
- (46) Short's sedge (*Carex shortiana*);
- (47) Sea-beach sedge (*Carex silicea*);
- (48) Slender sedge (*Carex tetanica*);
- (49) Tuckerman's sedge (*Carex tuckermanii*);
- (50) Big shellbark hickory (*Carya laciniosa*);
- (51) Scarlet Indian-paintbrush (*Castilleja coccinea*);
- (52) Prickly hornwort (*Ceratophyllum echinatum*);
- (53) Sleepingplant (*Chamaecrista fasciculata* var. *macrosperma*);
- (54) Giant-seed goosefoot (*Chenopodium simplex*);
- (55) Standley's goosefoot (*Chenopodium standleyanum*);
- (56) Bulb-bearing water-hemlock (*Cicuta bulbifera*);
- (57) Spreading pogonia (*Cleistesiosis divaricata*);
- (58) Purple clematis (*Clematis occidentalis*);
- (59) Long-bract green orchis (*Coeloglossum viride*);
- (60) Wrinkled joint grass (*Coelorachis rugosa*);
- (61) Goldthread (*Coptis trifolia*);
- (62) Early coralroot (*Corallorhiza trifida*);
- (63) Spring coralroot (*Corallorhiza wisteriana*);
- (64) Rose coreopsis (*Coreopsis rosea*);
- (65) Tall tickseed (*Coreopsis tripteris*);
- (66) Dwarf dogwood (*Cornus canadensis*);
- (67) Roundleaf dogwood (*Cornus rugosa*);
- (68) Plains frostweed (*Crocianthemum bicknellii*);
- (69) Smartweed dodder (*Cuscuta polygonorum*);
- (70) Beaked dodder (*Cuscuta rostrata*);
- (71) Small white lady's-slipper (*Cypripedium candidum*);
- (72) Tall larkspur (*Delphinium exaltatum*);
- (73) Tufted hair grass (*Deschampsia caespitosa*);
- (74) Stiff tick-trefoil (*Desmodium obtusum*);
- (75) Cream tick-trefoil (*Desmodium ochroleucum*);
- (76) Pineland tick-trefoil (*Desmodium strictum*);
- (77) Woolly witchgrass (*Dicanthelium scabriusculum*);
- (78) Wright's witchgrass (*Dicanthelium wrightianum*);
- (79) Pink sundew (*Drosera capillaris*);
- (80) Mountain woodfern (*Dryopteris campyloptera*);
- (81) Clinton's woodfern (*Dryopteris clintoniana*);
- (82) Upright burhead (*Echinodorus cordifolius*);
- (83) Small waterwort (*Elatine minima*);
- (84) Flat-stem spikerush (*Eleocharis compressa*);
- (85) Horsetail spikerush (*Eleocharis equisetoides*);
- (86) Saltmarsh spikerush (*Eleocharis halophila*);
- (87) Matted spikerush (*Eleocharis intermedia*);
- (88) Black-fruit spikerush (*Eleocharis melanocarpa*);
- (89) Robbins' spikerush (*Eleocharis robbinsii*);
- (90) Three-angle spikerush (*Eleocharis tricostata*);
- (91) Tobaccoweed (*Elephantopus tomentosus*);
- (92) Hairy willowherb (*Epilobium ciliatum*);
- (93) Downy willowherb (*Epilobium strictum*);
- (94) Water horsetail (*Equisetum fluviatile*);
- (95) Woodland horsetail (*Equisetum sylvaticum*);
- (96) Seven-angle pipewort (*Eriocaulon aquaticum*);
- (97) Slender cotton-grass (*Eriophorum gracile*);
- (98) Glade spurge (*Euphorbia purpurea*);
- (99) Bluntleaf spurge (*Euphorbia spathulata*);
- (100) Rough wood-aster (*Eurybia radula*);
- (101) Showy aster (*Eurybia spectabilis*);
- (102) Queen of the prairie (*Filipendula rubra*);
- (103) Harper's fimbriatylis (*Fimbristylis perpusilla*);

- (104) Northern bedstraw (*Galium boreale*);
- (105) Coast bedstraw (*Galium hispidulum*);
- (106) Creeping snowberry (*Gaultheria hispidula*);
- (107) Box huckleberry (*Gaylussacia brachycera*);
- (108) Dwarf huckleberry (*Gaylussacia dumosa*);
- (109) Striped gentian (*Gentiana villosa*);
- (110) Stiff gentian (*Gentianella quinquefolia*);
- (111) Fringed gentian (*Gentianopsis crinita*);
- (112) Yellow avens (*Geum aleppicum*);
- (113) Sharp-scaled manna grass (*Glyceria acutiflora*);
- (114) American manna grass (*Glyceria grandis*);
- (115) Short's hedge hyssop (*Gratiola viscidula*);
- (116) Northern oak fern (*Gymnocarpium dryopteris*);
- (117) Broad-leaved beard grass (*Gymnopogon brevifolius*);
- (118) Smooth sunflower (*Helianthus laevigatus*);
- (119) Small woodland sunflower (*Helianthus microcephalus*);
- (120) Swamp-pink (*Helonias bullata*);
- (121) Virginia heartleaf (*Hexastylis virginica*);
- (122) Seabeach sandwort (*Honckenya peploides*);
- (123) Featherfoil (*Hottonia inflata*);
- (124) Golden-heather (*Hudsonia ericoides*);
- (125) Few-flower tick-trefoil (*Hylodesmum pauciflorum*);
- (126) Creeping St. John's-wort (*Hypericum adpressum*);
- (127) Eastern bloodleaf (*Iresine rhizomatosa*);
- (128) Crested dwarf iris (*Iris cristata*);
- (129) Slender blue flag (*Iris prismatica*);
- (130) Dwarf iris (*Iris verna*);
- (131) New Jersey rush (*Juncus caesariensis*);
- (132) Long's rush (*Juncus longii*);
- (133) Brown-fruit rush (*Juncus pelocarpus*);
- (134) Torrey's rush (*Juncus torreyi*);
- (135) Highland rush (*Juncus trifidus*);
- (136) Carolina redroot (*Lachnanthes caroliniana*);
- (137) Larch (*Larix laricina*);
- (138) Vetchling peavine (*Lathyrus palustris*);
- (139) Club-head cutgrass (*Leersia hexandra*);
- (140) Catchfly-grass (*Leersia lenticularis*);
- (141) Star duckweed (*Lemna trisulca*);
- (142) Scaly gayfeather (*Liatris squarrosa*);
- (143) American frog's-bit (*Limnium spongia*);
- (144) Mudwort (*Limosella australis*);
- (145) Grooved yellow flax (*Linum sulcatum*);
- (146) Dwarf bulrush (*Lipocarpa micrantha*);
- (147) Kidneyleaf twayblade (*Listera smallii*);
- (148) American gromwell (*Lithospermum latifolium*);
- (149) Soft-hairy false gromwell (*Lithospermum molle*);
- (150) Virginia false gromwell (*Lithospermum virginianum*);
- (151) Pond spice (*Litsea aestivalis*);
- (152) Canby's lobelia (*Lobelia canbyi*);
- (153) American fly-honeysuckle (*Lonicera canadensis*);
- (154) Cylindric-fruit seedbox (*Ludwigia glandulosa*);
- (155) Hairy ludwigia (*Ludwigia hirtella*);
- (156) Sessile-leaved bugleweed (*Lycopus amplexans*);
- (157) Water loosestrife (*Lysimachia thyrsiflora*);
- (158) Winged-loosestrife (*Lythrum alatum*);
- (159) Starflower Solomon's-plume (*Maianthemum stellatum*);
- (160) Carolina anglepod (*Matelea carolinensis*);
- (161) Climbing milkweed (*Matelea obliqua*);
- (162) Purple mecardonia (*Mecardonia acuminata*);
- (163) Creeping cucumber (*Melothria pendula*);
- (164) Bog buckbean (*Menyanthes trifoliata*);
- (165) Pinebarren sandwort (*Minuartia caroliniana*);

- (166) *Appalachian sandwort (Minuartia glabra);*
- (167) *Grove sandwort (Moehringia lateriflora);*
- (168) *Sweet pinesap (Monotropsis odorata);*
- (169) *Evergreen bayberry (Morella carolinensis);*
- (170) *Long-awn hairgrass (Muhlenbergia capillaris);*
- (171) *Torrey's dropseed (Muhlenbergia torreyana);*
- (172) *Slender rattlesnake root (Nabalus autumnalis);*
- (173) *Glade mallow (Napaea dioica);*
- (174) *Big floatingheart (Nymphoides aquatica);*
- (175) *Little floatingheart (Nymphoides cordata);*
- (176) *Sourwood (Oxydendrum arboreum);*
- (177) *Wiry witch grass (Panicum flexile);*
- (178) *Kidneyleaf grass-of-Parnassus (Parnassia asarifolia);*
- (179) *Yellow nailwort (Paronychia virginica);*
- (180) *American feverfew (Parthenium integrifolium);*
- (181) *Horse-tail paspalum (Paspalum fluitans);*
- (182) *Canby's mountain-lover (Paxistima canbyi);*
- (183) *Swamp lousewort (Pedicularis lanceolata);*
- (184) *Smooth cliffbrake (Pellaea glabella);*
- (185) *Red bay (Persea palustris);*
- (186) *Buttercup scorpionweed (Phacelia covillei);*
- (187) *Smooth phlox (Phlox glaberrima);*
- (188) *Downy phlox (Phlox pilosa);*
- (189) *Marsh fleabane (Pluchea camphorata);*
- (190) *Drooping bluegrass (Poa saltuensis);*
- (191) *Common clammyweed (Polanisia dodecandra);*
- (192) *Seabeach knotweed (Polygonum glaucum);*
- (193) *Leafy pondweed (Potamogeton foliosus);*
- (194) *Flatstem pondweed (Potamogeton zosteriformis);*
- (195) *Beach plum (Prunus maritima);*
- (196) *Carolina clubmoss (Pseudolycopodiella caroliniana);*
- (197) *Harperella (Ptilimnium nodosum);*
- (198) *Torrey's mountainmint (Pycnanthemum torreyi);*
- (199) *Whorled mountainmint (Pycnanthemum verticillatum);*
- (200) *Early buttercup (Ranunculus fascicularis);*
- (201) *Yellow water crowfoot (Ranunculus flabellaris);*
- (202) *Long-stalked crowfoot (Ranunculus hederaceus);*
- (203) *Northeastern white water crowfoot (Ranunculus trichophyllus);*
- (204) *Capitate beakrush (Rhynchospora cephalantha);*
- (205) *Globe beaksedge (Rhynchospora globularis);*
- (206) *Harper beakrush (Rhynchospora harperi);*
- (207) *Drowned hornedrush (Rhynchospora inundata);*
- (208) *Short-beaked baldrush (Rhynchospora nitens);*
- (209) *Smooth rose (Rosa blanda);*
- (210) *Hairy wild petunia (Ruellia humilis);*
- (211) *Pursh's wild petunia (Ruellia purshiana);*
- (212) *Tall dock (Rumex altissimus);*
- (213) *Slender marsh pink (Sabatia campanulata);*
- (214) *Two-formed pink (Sabatia difformis);*
- (215) *Slender plumegrass (Saccharum baldwinii);*
- (216) *Gibbous panic-grass (Sacciolepis striata);*
- (217) *Sessile-fruit arrowhead (Sagittaria rigida);*
- (218) *Narrowleaf willow (Salix exigua);*
- (219) *Blunt-lobe grapefern (Sceptridium oneidense);*
- (220) *Purple oat (Schizachne purpurascens);*
- (221) *Water bulrush (Schoenoplectus subterminalis);*
- (222) *Northeastern bulrush (Scirpus ancistrochaetus);*
- (223) *Slender nutrush (Scleria minor);*
- (224) *Shining nutrush (Scleria nitida);*
- (225) *Low nutrush (Scleria verticillata);*
- (226) *Veined skullcap (Scutellaria nervosa);*
- (227) *Rock skullcap (Scutellaria saxatilis);*

- (228) *Sweet-scented Indian-plantain (Senecio suaveolens)*;
- (229) *Puerto Rico sea-purslane (Sesuvium maritimum)*;
- (230) *Virginia mallow (Sida hermaphrodita)*;
- (231) *Snowy campion (Silene nivea)*;
- (232) *Sandyland blue-eyed grass (Sisyrinchium arenicola)*;
- (233) *Roan Mountain goldenrod (Solidago roanensis)*;
- (234) *Long-bristle Indiangrass (Sorghastrum elliottii)*;
- (235) *Smooth false buttonweed (Spermacoce glabra)*;
- (236) *Shining ladies'-tresses (Spiranthes lucida)*;
- (237) *Yellow nodding ladies'-tresses (Spiranthes ochroleuca)*;
- (238) *Northern dropseed (Sporobolus heterolepis)*;
- (239) *Gritty hedge-nettle (Stachys aspera)*;
- (240) *Trailing stitchwort (Stellaria alsine)*;
- (241) *Death-camus (Stenanthium leimanthoides)*;
- (242) *Eastern silvery aster (Symphyotrichum concolor)*;
- (243) *Serpentine aster (Symphyotrichum depauperatum)*;
- (244) *Spiked hoary-pea (Tephrosia spicata)*;
- (245) *Purple meadow parsnip (Thaspium trifoliatum)*;
- (246) *Climbing dogbane (Thrysanthella difformis)*;
- (247) *Canby's dropwort (Tiedmannia canbyi)*;
- (248) *Three-ribbed arrow grass (Triglochin striata)*;
- (249) *Nodding trillium (Trillium flexipes)*;
- (250) *Snow trillium (Trillium nivale)*;
- (251) *Yellowleaf tinker's-weed (Triosteum angustifolium)*;
- (252) *Nodding pogonia (Triphora trianthophora)*;
- (253) *Swollen bladderwort (Utricularia inflata)*;
- (254) *Northeastern bladderwort (Utricularia resupinata)*;
- (255) *Fibrous bladderwort (Utricularia striata)*;
- (256) *Valerian (Valeriana pauciflora)*;
- (257) *Goose-foot corn-salad (Valerianella chenopodiifolia)*;
- (258) *Broadleaf bunchflower (Veratrum hybridum)*;
- (259) *Marsh-speedwell (Veronica scutellata)*;
- (260) *Fringed yellow-eyed-grass (Xyris fimbriata)*;
- (261) *Small's yellow-eyed-grass (Xyris smalliana)*;
- (262) *Northern prickly ash (Zanthoxylum americanum)*;
- (263) *Atamasco lily (Zephyranthes atamasca)*; and
- (264) *Southern wild rice (Zizaniopsis miliacea)*.

.06 Endangered Extirpated Species.

A. *Listing Criteria.* The following factors shall be considered for listing a species as endangered extirpated:

- (1) *The species was once a viable component of the State's flora and fauna and there are no records of it naturally occurring in Maryland after 1950; or*
- (2) *The species was once a viable component of the State's flora and fauna and recent scientific investigations have documented the loss of its habitat or disappearance of its population in Maryland.*

B. *Permits.* Upon the discovery of a viable, naturally occurring population of any species in §§C—J of this regulation, that species shall be considered an endangered species and shall require the permits and conditions afforded to that status.

C. *The following plant species are considered endangered extirpated throughout Maryland:*

- (1) *Ten-lobe false foxglove (Agalinis obtusifolia)*;
- (2) *Golden colicroot (Aletris aurea)*;
- (3) *Chaffweed (Anagallis minima)*;
- (4) *Canada anemone (Anemone canadensis)*;
- (5) *Great angelica (Angelica atropurpurea)*;
- (6) *Swamp-pink (Arethusa bulbosa)*;
- (7) *Great Indian-plantain (Arnoglossum reniforme)*;
- (8) *Bradley's spleenwort (Asplenium bradleyi)*;
- (9) *Tropical water-hyssop (Bacopa innominata)*;
- (10) *American barberry (Berberis canadensis)*;
- (11) *Sea oxeye (Borrchia frutescens)*;
- (12) *Lanceleaf grapefern (Botrychium lanceolatum var. angustisegmentum)*;
- (13) *Least grapefern (Botrychium simplex)*;
- (14) *Wild chess (Bromus kalmii)*;

- (15) *Bluehearts (Buchnera americana)*;
- (16) *French mulberry (Callicarpa americana)*;
- (17) *Southern harebell (Campanula divaricata)*;
- (18) *Variable sedge (Carex polymorpha)*;
- (19) *Slender sedge (Carex tenera)*;
- (20) *Curlyheads (Clematis ochroleuca)*;
- (21) *Water pygmyweed (Crassula aquatica)*;
- (22) *Hazel dodder (Cuscuta coryli)*;
- (23) *Toothed sedge (Cyperus dentatus)*;
- (24) *Plukenet's sedge (Cyperus plukenetii)*;
- (25) *Showy lady's-slipper (Cypripedium reginae)*;
- (26) *Trailing tick-trefoil (Desmodium humifusum)*;
- (27) *Lined tick-trefoil (Desmodium lineatum)*;
- (28) *Sessileleaf tick-trefoil (Desmodium sessilifolium)*;
- (29) *Northern witchgrass (Dicanthelium boreale)*;
- (30) *Shaggy crabgrass (Digitaria villosa)*;
- (31) *Rattlesnake-master (Eryngium yuccifolium)*;
- (32) *Spotted joe-pyeweed (Eutrochium maculatum)*;
- (33) *Downy gentian (Gentiana puberulenta)*;
- (34) *Dwarf rattlesnake-plantain (Goodyera repens)*;
- (35) *Checkered rattlesnake-plantain (Goodyera tessellata)*;
- (36) *Branched hedge-hyssop (Gratiola ramosa)*;
- (37) *Nuttall's micranthemum (Hemianthus micranthemoides)*;
- (38) *Hairy alumroot (Heuchera villosa)*;
- (39) *Crested coralroot (Hexalectris spicata)*;
- (40) *Great St. John's-wort (Hypericum ascyron)*;
- (41) *Drummond's St. John's-wort (Hypericum drummondii)*;
- (42) *Small whorled pogonia (Isotria medeoloides)*;
- (43) *Baltic rush (Juncus balticus)*;
- (44) *Small-head rush (Juncus brachycephalus)*;
- (45) *Bayonet rush (Juncus militaris)*;
- (46) *Ground juniper (Juniperus communis)*;
- (47) *Hairy lettuce (Lactuca hirsuta)*;
- (48) *Slender pinweed (Lechea tenuifolia)*;
- (49) *Turgid gayfeather (Liatris helleri)*;
- (50) *Nondo lovage (Ligusticum canadense)*;
- (51) *Wood lily (Lilium philadelphicum)*;
- (52) *Twinflower (Linnaea borealis)*;
- (53) *Florida yellow flax (Linum floridanum)*;
- (54) *Heartleaf twayblade (Listera cordata)*;
- (55) *Sea milkwort (Lysimachia maritima)*;
- (56) *Large-flowered Barbara's-buttons (Marshallia grandiflora)*;
- (57) *Old-field milkvine (Matelea decipiens)*;
- (58) *Slender water milfoil (Myriophyllum tenellum)*;
- (59) *Thread-like naiad (Najas gracillima)*;
- (60) *One-side wintergreen (Orthilia secunda)*;
- (61) *Stout smartweed (Persicaria robustior)*;
- (62) *May grass (Phalaris caroliniana)*;
- (63) *Mountain phlox (Phlox ovata)*;
- (64) *Heartleaf plantain (Plantago cordata)*;
- (65) *Dwarf plantain (Plantago pusilla)*;
- (66) *Small purple-fringe orchis (Platanthera psychodes)*;
- (67) *Bushy knotweed (Polygonum ramosissimum)*;
- (68) *American ipecac (Porteranthus stipulatus)*;
- (69) *Richardson's pondweed (Potamogeton richardsonii)*;
- (70) *Flatleaf pondweed (Potamogeton robbinsii)*;
- (71) *Southern mountainmint (Pycnanthemum pycnanthemoides)*;
- (72) *Green-flower wintergreen (Pyrola chlorantha)*;
- (73) *Water-plantain spearwort (Ranunculus ambigens)*;
- (74) *Carolina buttercup (Ranunculus carolinianus)*;
- (75) *Bristly crowfoot (Ranunculus pensylvanicus)*;
- (76) *Few-flowered beakrush (Rhynchospora oligantha)*;

- (77) *Pale beakrush (Rhynchospora pallida)*;
- (78) *Few-flowered beakrush (Rhynchospora rariflora)*;
- (79) *Wild black currant (Ribes americanum)*;
- (80) *Bebb's willow (Salix bebbiana)*;
- (81) *Shining willow (Salix lucida)*;
- (82) *Nettleleaf sage (Salvia urticifolia)*;
- (83) *Leathery grapefern (Sceptridium multifidum)*;
- (84) *Canby's bulrush (Schoenoplectus etuberculatus)*;
- (85) *Smith's bulrush (Schoenoplectus smithii)*;
- (86) *Chaffseed (Schwalbea americana)*;
- (87) *Small skullcap (Scutellaria parvula)*;
- (88) *Prairie goldenrod (Solidago rigida)*;
- (89) *Rock goldenrod (Solidago rupestris)*;
- (90) *Sweetscent ladies'-tresses (Spiranthes odorata)*;
- (91) *Smooth blue aster (Symphyotrichum laeve var. concinnum)*;
- (92) *Coastal false asphodel (Triantha racemosa)*;
- (93) *Buffalo clover (Trifolium reflexum)*;
- (94) *Navel-shape corn-salad (Valerianella umbilicata)*;
- (95) *American purple vetch (Vicia americana)*;
- (96) *New England grape (Vitis novae-angliae)*; and
- (97) *Sword bogmat (Wolffiella gladiata)*.

D. The following mollusk species is considered endangered extirpated throughout Maryland: *Maryland glyph (Glyphyalinia raderi)*.

E. The following crustacean species is considered endangered extirpated throughout Maryland: *Norden's groundwater amphipod (Caecidotea nordeni)*.

F. The following insect species are considered endangered extirpated throughout Maryland:

- (1) *Golden banded-skipper (Autochton cellus)*;
- (2) *Hessel's hairstreak (Callophrys hesseli)*;
- (3) *Dusky azure (Celestrina nigra)*;
- (4) *Piedmont clubtail (Gomphus parvidens)*;
- (5) *Skillet clubtail (Gomphus ventricosus)*;
- (6) *American burying beetle (Nicrophorus americanus)*;
- (7) *Tawny crescent spot (Phyciodes batesii)*;
- (8) *Regal fritillary (Speyeria idalia)*; and
- (9) *Riverine clubtail (Stylurus amnicola)*.

G. The following finfish species are considered endangered extirpated throughout Maryland:

- (1) *Longnose sucker (Catostomus catostomus)*;
- (2) *Bridle shiner (Notropis bifrenatus)*;
- (3) *Cheat minnow (Pararhinichthys bowersi)*; and
- (4) *Trout-perch (Percopsis omiscomaycus)*.

H. The following amphibian species is considered endangered extirpated throughout Maryland: *Common mudpuppy (Necturus maculosus)*.

I. The following bird species are considered endangered extirpated throughout Maryland:

- (1) *Ivory-billed woodpecker (Campephilus principalis)*;
- (2) *Swainson's thrush (Catharus ustulatus)*;
- (3) *Lark sparrow (Chondestes grammacus)*;
- (4) *Olive-sided flycatcher (Contopus cooperi)*;
- (5) *Eskimo curlew (Numenius borealis)*;
- (6) *Bachman's sparrow (Peucaea aestivalis)*;
- (7) *Red-cockaded woodpecker (Picoides borealis)*;
- (8) *Roseate tern (Sterna dougallii)*;
- (9) *Appalachian Bewick's wren (Thryomanes bewickii altus)*; and
- (10) *Greater prairie chicken (Tympanuchus cupido)*.

J. The following mammal species are considered endangered extirpated throughout Maryland:

- (1) *Gray wolf (Canis lupus)*;
- (2) *Elk (Cervus elaphus)*;
- (3) *Eastern cougar (Puma concolor cougar)*;
- (4) *Snowshoe hare (Lepus americanus)*;
- (5) *American marten (Martes americana)*; and
- (6) *Eastern harvest mouse (Reithrodontomys humulis)*.

.07 Threatened Species of Wildlife, Reptiles, Amphibians, Mollusks, Crustaceans, and Finfish.

A.—B. (text unchanged)

C. The following species are considered to be threatened throughout Maryland unless a smaller range is indicated:

(1) Insects:

- (a)—(d) (text unchanged)
- (e) Selys' [sunfly] *sundragon* (*Helocordulia selysii*);
- (f)—(g) (text unchanged)

(2) Finfish:

- (a)—(b) (text unchanged)
- (c) American brook lamprey ([*Lampetra*] *Lethenteron* appendix);
- (d) Pearl dace (*Margariscus margarita*); and
- (e) [Comely shiner (*Notropis amoenus*); and] *Chesapeake logperch* (*Percina bimaculata*);
- [f] Logperch (*Percina caprodes*);]

(3) (text unchanged)

(4) Birds:

- [(a) Henslow's sparrow (*Ammodramus henslowii*);
- (b) Blackburnian warbler (*Dendroica fusca*); and]
- (a) *American bittern* (*Botaurus lentiginosus*);
- (b) *Nashville warbler* (*Oreothlypis ruficapilla*); and
- (c) (text unchanged)

(5) *Mammals: Northern long-eared bat* (*Myotis septentrionalis*).

.08 Threatened Species of Plants.

A. *Listing Criteria.* The following factors shall be considered for listing a plant species as threatened:

- (1) Whether the species has experienced a substantial decline in Maryland, and if the decline continues, the species is likely to become endangered;
- (2) Whether there has been a steady widespread loss of the species' essential habitat; or
- (3) Whether the species has been listed as endangered but it has been shown that protection measures taken have significantly reduced the chances of the species becoming extirpated from Maryland.

B. *Permits.* The permit procedures to be followed are set forth in Regulation .03 of this chapter. The following apply:

- (1) Permits shall be issued only for scientific research designed to enhance the recovery of the species or population;
- (2) A person may not:
 - (a) Export, possess, process, sell, offer for sale, deliver, carry, transport, or ship by any means any threatened plant species except by a special permit from the Director;
 - (b) Take any threatened plant species from State property except by special permit from the Director; or
 - (c) Take any threatened plant species from private property without the written permission of the landowner.

C. The following plant species are considered threatened throughout Maryland unless a smaller range is indicated:

- (1) *Climbing fumitory* (*Adlumia fungosa*);
- (2) *Purple giant-hyssop* (*Agastache scrophulariifolia*);
- (3) *Running serviceberry* (*Amelanchier humilis*);
- (4) *Nantucket shadbush* (*Amelanchier nantucketensis*);
- (5) *Single-head pussytoes* (*Antennaria solitaria*);
- (6) *Ozark milkvetch* (*Astragalus distortus*);
- (7) *Wild false indigo* (*Baptisia australis*);
- (8) *Buxbaum's sedge* (*Carex buxbaumii*);
- (9) *Inflated sedge* (*Carex vesicaria*);
- (10) *Velvety sedge* (*Carex vestita*);
- (11) *Leatherleaf* (*Chamaedaphne calyculata*);
- (12) *Red turtlehead* (*Chelone obliqua*);
- (13) *Clinton lily* (*Clintonia borealis*);
- (14) *Wild bleedinghearts* (*Dicentra eximia*);
- (15) *Eastern leatherwood* (*Dirca palustris*);
- (16) *Parker's pipewort* (*Eriocaulon parkeri*);
- (17) *White trout-lily* (*Erythronium albidum*);
- (18) *White-bract thoroughwort* (*Eupatorium leucolepis*);
- (19) *Fringe-top bottle gentian* (*Gentiana andrewsii*);
- (20) *McDowell's sunflower* (*Helianthus occidentalis*);
- (21) *Glade fern* (*Homalosorus pycnocarpus*);
- (22) *Goldenseal* (*Hydrastis canadensis*);
- (23) *Largeleaf waterleaf* (*Hydrophyllum macrophyllum*);
- (24) *Coppery St. John's-wort* (*Hypericum denticulatum*);

- (25) Pipe vine (*Isotrema macrophyllum*);
- (26) Sandplain flax (*Linum intercursum*);
- (27) Sundial lupine (*Lupinus perennis*);
- (28) Climbing fern (*Lygodium palmatum*);
- (29) Lance-leaf loosestrife (*Lysimachia hybrida*);
- (30) Three-flower melicgrass (*Melica nitens*);
- (31) Michaux's stitchwort (*Minuartia michauxii*);
- (32) White-grained mountain-ricegrass (*Oryzopsis asperifolia*);
- (33) Walter's paspalum (*Paspalum dissectum*);
- (34) Roundleaf fameflower (*Phemeranthus teretifolius*);
- (35) Black-fruit mountain-ricegrass (*Piptatherum racemosum*);
- (36) White-fringe orchid (*Platanthera blephariglottis*);
- (37) Yellow-fringe orchid (*Platanthera ciliaris*);
- (38) Large purple-fringe orchid (*Platanthera grandiflora*);
- (39) Purple fringeless orchid (*Platanthera peramoena*);
- (40) Bog Jacob's-ladder (*Polemonium vanbruntiae*);
- (41) Crossleaf milkwort (*Polygala cruciata*);
- (42) Racemed milkwort (*Polygala polygama*);
- (43) Seneca snakeroot (*Polygala senega*);
- (44) Allegheny plum (*Prunus alleghaniensis*);
- (45) Shumard oak (*Quercus shumardii*);
- (46) Hairy snoutbean (*Rhynchosia tomentosa*);
- (47) Long-beaked bald rush (*Rhynchospora scirpoides*);
- (48) Torrey's beakrush (*Rhynchospora torreyana*);
- (49) Engelmann's arrowhead (*Sagittaria engelmanniana*);
- (50) Canada burnet (*Sanguisorba canadensis*);
- (51) Northern pitcherplant (*Sarracenia purpurea*);
- (52) One-flower sclerolepis (*Sclerolepis uniflora*);
- (53) Shale barren skullcap (*Scutellaria leonardii*);
- (54) Cliff stonecrop (*Sedum glaucophyllum*);
- (55) Long-stalk greenbrier (*Smilax pseudochina*);
- (56) Lake Ontario goldenrod (*Solidago racemosa*);
- (57) Showy goldenrod (*Solidago speciosa*);
- (58) Swamp wedgescale (*Sphenopholis pennsylvanica*);
- (59) Eastern featherbells (*Stenanthium gramineum*);
- (60) Rosy twisted-stalk (*Streptopus lanceolatus*);
- (61) Snowberry (*Symphoricarpos albus*);
- (62) Mountain parsley (*Taenidia montana*);
- (63) Canadian yew (*Taxus canadensis*);
- (64) Bog fern (*Thelypteris simulata*);
- (65) Northern white cedar (*Thuja occidentalis*);
- (66) Kate's Mountain clover (*Trifolium virginicum*);
- (67) Virginia least trillium (*Trillium pusillum* var. *virginianum*);
- (68) Purple bladderwort (*Utricularia purpurea*);
- (69) Small cranberry (*Vaccinium oxycoccos*); and
- (70) Rusty woodsia (*Woodsia ilvensis*).

.09 Species in Need of Conservation.

A.—B. (text unchanged)

C. The following species are considered to be in need of conservation throughout Maryland unless a smaller range is indicated:

- (1) Mollusks:
 - (a) (text unchanged)
 - (b) [Cherrydrop snail] *Cherrystone drop* (*Hendersonia occulta*); and
 - (c) [Squawfoot] *Creeper* (*Strophitus undulatus*);
- (2) Crustaceans:
 - (a) *Acuminate crayfish* (*Cambarus acuminatus*);
 - [(a)](b)—[(b)](c) (text unchanged)
- (3) Insects:
 - (a)—(f) (text unchanged)
- (4)—(6) (text unchanged)
- (7) Birds:

- [(a) American bittern (*Botaurus lentiginosus*);]
- (a) Saltmarsh sparrow (*Ammodramus caudacutus*);
- (b) Henslow's sparrow (*Ammodramus henslowii*);
- (c) Northern harrier (*Circus cyaneus*);
- [(b)](d)—[(c)](e) (text unchanged)
- [(d)](f) Common [moorhen] gallinule (*Gallinula [chloropus] galeata*);
- [(e)](g) (text unchanged)
- [(f)](h) Coastal Plain swamp sparrow (*Melospiza georgiana nigrescens*); [and]
- [(g)] Nashville warbler (*Vermivora ruficapilla*);]
- (i) Northern waterthrush (*Parkesia noveboracensis*);
- (j) Forster's tern (*Sterna forsteri*);
- (k) Barn owl (*Tyto alba*); and
- (l) Golden-winged warbler (*Vermivora chrysoptera*);
- (8) Mammals:
 - [(a) Porcupine (*Erethizon dorsatum*);]
 - [(b)](a)—[(c)](b) (text unchanged)
 - (c) Delmarva fox squirrel (*Sciurus niger cinereus*);
 - (d)—(f) (text unchanged)

.15 Protected Nongame Mammals.

A. A person may not take, export, possess, process, sell, offer for sale, deliver, carry, transport, or ship by any means, except by special permit issued by the Department, nongame mammals listed in §C of this regulation.

B. Permits.

- (1) Permits to take protected nongame mammals may only be issued for:
 - (a) Scientific research;
 - (b) Educational purposes designed to further public awareness regarding the species;
 - (c) Protection of human health and safety; or
 - (d) To address damage to property.
- (2) Incidental taking permits are not required for protected nongame mammals.

C. The following species are considered to be protected nongame mammals:

- (1) Little brown myotis (*Myotis lucifugus*);
- (2) Silver-haired bat (*Lasionycteris noctivagans*);
- (3) Tricolored bat (*Perimyotis subflavus*);
- (4) Big brown bat (*Eptesicus fuscus*);
- (5) Eastern red bat (*Lasiurus borealis*);
- (6) Hoary bat (*Lasiurus cinereus*);
- (7) Evening bat (*Nycticeius humeralis*);
- (8) Seminole bat (*Lasiurus seminolus*);
- (9) North American porcupine (*Erethizon dorsata*); and
- (10) Eastern spotted skunk (*Spilogale putorius*).