

SPECIAL LAND USES

Management Situation

As of September 30, 1990, approximately 7,578 acres were under special use authorization. More than half the acreage is for roads and utility lines. About 1,074 acres are water impoundments for public water systems and for flood prevention purposes. About 493 acres are in agricultural uses which are prescribed for the benefit of recreation and wildlife resources. Special uses serving individuals rather than public needs amount to about 50 acres.

The number and acreage of special use authorizations for individual use do not increase rapidly; terminated uses tend to offset new uses. The number and acreage of special uses serving public needs such as roads, utilities, water supplies, power and flood control maintain a steady increase. As adjoining private land use changes from agriculture to homesites, demands for individual special uses of adjacent Forest land increases. Most requests for individual uses are denied, but permits for access and utility corridors are usually granted, when these uses cannot be reasonably accommodated on private lands. There are no recreation residence special use permits on the Forest. There are no areas where this type of activity will be allowed.

Planning Assumptions

There will continue to be a demand on the Forest for special uses, both public and private.

Any right-of-way request for public use must be considered.

The number of uses will gradually increase as new uses are added; others will be terminated, but not at a rate equal to the permit increase. The rate of increase is projected at 3% per year.

Objectives

Minimize dedication of public land to single use.

Establish utility corridors within the Forest where there is an anticipated need.

Management Direction

Authorizations will not be granted until an environmental analysis is conducted.

Additional uses for private purposes will not be granted unless unavoidable, or there are no reasonable alternatives.

Authorizations for public benefit will be granted when the use cannot be reasonably accommodated on lands other than National Forest lands.

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APPALACHIAN NATIONAL SCENIC TRAIL

Management Situation

The National Trails System Act (PL 90-546, as Amended) authorizes acquisition of lands or interest in lands along the Trail to ensure that the Trail has legal access and is sufficiently protected from developments which would detract from the Trail experience. All of the Trail across the Forest, located on the Pedlar Ranger District, has at least the minimum needed tread protection. Consistent with the current regional policy statement for Appalachian Trail acquisition, the Forest has inventoried Priority II and III private tracts along the Trail that are needed to ensure an adequate corridor or enhance the hiker experience.

Planning Assumptions

Subject to availability, the Forest will acquire adequate interest in Priority II and III tracts by the end of FY 94.

Objective

Contact owners of each identified tract and either acquire or acquire protective interest so as to meet the regional time frames.

Management Direction

Complete acquisition of at least protective interest in Priority II tracts by the end of FY 94 subject to funding and availability.

RIGHT-OF-WAY GRANTS FOR ROADS (EASEMENTS)

Management Situation

There are currently 50 special use authorizations for State roads. These authorizations will eventually be converted to easements. No construction of new State roads across the Forest is anticipated or planned. Activities requiring additional easements will be for road improvement.

Planning Assumptions

There will continue to be a demand from State agencies for road easements to cover highway improvement projects.

Objective

Provide an efficient and timely granting of easements for State projects that provide public benefits.

Management Direction

Process applications promptly.

Work with State agencies to assure adequate mitigation of environmental disturbance.

FEDERAL ENERGY REGULATION COMMISSION (FERC) LICENSES AND PERMITS

Management Situation

The Virginia Power Bath County Pumped Storage Project has been constructed on the Forest under FERC license.

Planning Assumptions

This project will remain operational.

Other projects may be proposed.

Objective

Ensure early Forest Service involvement in licensing procedures and license administration to adequately mitigate environmental disturbance.

Management Direction

Administration of licensed projects will be on a continuing basis.

LAND STATUS MAINTENANCE

Management Situation

The Forest ownership pattern results in a high demand for status information from adjoining landowners.

Planning Assumptions

Need for status information on Forest land will increase as adjoining land values increase.

Management Direction

Maintain land status systems.

Utilize new technology such as LOMS, automated mapping, and GIS, to improve flow of information.

LANDLINE LOCATION

Management Situation

→On October 1, 1992, there were 2,923 miles of boundary lines on the Forest and 15,050 property corners. 1,623 miles of these landlines and 7,660 property corners are considered to be established to Forest Service standards. Approximately 55% of the property lines and corners are in a desirable condition. The condition of the balance ranges from barely discernible to fairly obvious. As use of the Forest and adjoining private land increases, the demand for well established landlines escalates.

Planning Assumptions

Elimination of the backlog of landlines in this 10 year planning period will continue to be the Forest goal.

The current landline location program (83 miles/year average) will not meet the year 2000 goal.

Objective

→Establish 130 miles of landlines per year. This is considered the minimum acceptable level to complete the remaining 1,300 miles. Share the cost of establishment with adjoining owners where possible.

Management Direction

Establish all landlines to Forest Service standard within the first plan period.

BOUNDARY MAINTENANCE

Planning Assumptions

Maintenance is required to protect the investment in landline location.

Objective

Maintenance will be required on the existing 1598 miles of boundary line once every 10 years (160 miles annually).

Maintenance of the 2,923 miles of boundary line, once established, will be at the same rate and schedule, every 10 years.

Management Direction

Maintain established boundary lines on a 10-year frequency.

APPENDIX F PROGRAM BUDGET DEVELOPMENT

INTRODUCTION

The Forest will budget to implement the Plan. The following table displays the estimates of resource outputs and finances needed yearly to achieve the Plan goals and objectives during the first decade of Plan implementation.

Unless major changes are made in the Plan, this information should not change during the life of the Plan. However, Plan outputs and cost estimates are just that - estimates. Flexibility to adjust these estimates in the budget requests is necessary as we move through Plan implementation. For example, new initiatives and other requirements unknown at the time of Plan development may change the estimates presented.

Inflation also needs to be taken into account. The budget presented will be adjusted for inflation using GNP Implicit Price Deflators. All costs have been converted to 1993 dollars.

CAPITAL INVESTMENTS

Capital investments represent large expenditures in funds within a given year. Examples include campground expansions or new facility construction. These investments are displayed in the Recreation Facility Construction information that follows. Information on the Capital Investment program is also located in Plan Appendix B.

COLUMN HEADINGS

Definitions for the column headings used in the table are provided below:

Activity Name - Action taken to manage natural resources.

Activity Code - An alpha-numeric label for an activity or grouping of activities.

Fund Name - Major Resource Program Areas used by Congress in funding the Budget.

Fund Code - An alpha-numeric label for the major resource programs.

Unit of Measure - A quantity descriptor of a yearly activity, used when applicable.

Cost - Average annual estimated costs in 1993 dollars.

Fund Code	Fund Name	Activity Code	Activity Name	Unit of Measure	Number of Units	Cost (Dollars)
CNRF	Fire, Administration, and Other Construction	LF	Facility Improvements	----	----	350,000
		AN22	Rec. Resource Improvement Construction	PAOTS	1,590	<u>1,500,000</u>
			CNFC Subtotal			1,850,000
CNGP	General Purpose Construction	JL25	Rights of Way	Cases	1	18,800
		ML	Land Management Planning Activities	----	----	30,800
		LT222	Road Construction	Miles	0	0
		LT223	Road Reconstruction	Miles	7	310,800
		LT224	Bridge Construction	Bridges	0	0
		LT225	Bridge Reconstruction	Bridges	1	<u>60,000</u>
		LT-CONT	Road Contracts - Subtotal	----	----	370,800
		LT122	Road and Bridge Administration	----	----	16,500
		LT123	Road and Bridge Administration Support	----	----	49,000
		LT2141	Road Construct. Preconst. Engineering	Miles	0	0
		LT2142	Road Reconstruct. Preconstruct. Eng.	Miles	0	50,000
		LT2211	Road and Bridge Construction Eng.	Miles	0	0
		LT2212	Road and Bridge Reconstruction Eng.	Miles	0	<u>27,000</u>
		LT-SUPP	Road Support - Subtotal	----	----	<u>142,500</u>
			CNGP Subtotal			562,900
CNRN	Recreation Road Construction	JL25	Rights of Way	Cases	1	7,100
		ML	Land Management Planning Activities	----	----	4,700
		LT222	Road Construction	Miles	0.7	342,900
		LT223	Road Reconstruction	Miles	5.0	300,000
		LT224	Bridge Construction	Bridges	0	0
		LT225	Bridge Reconstruction	Bridges	0	0
		LT-CONT	Road Contracts - Subtotal	----	----	642,900
		LT122	Road and Bridge Administration	----	----	16,500
		LT123	Road and Bridge Administration Support	----	----	33,000
		LT2141	Road Construct. Preconstruct. Eng.	Miles	0.7	53,000
		LT2142	Road Reconstruct. Preconstruct. Eng.	Miles	5.0	30,000
		LT2211	Road and Bridge Construction Eng.	Miles	0.7	35,000
		LT2212	Road and Bridge Reconstruction Eng.	Miles	5.0	<u>20,000</u>
		LT-SUPP	Road Support - Subtotal	----	----	<u>187,500</u>
			CNRN Subtotal			842,200

Fund Code	Fund Name	Activity Code	Activity Name	Unit of Measure	Number of Units	Cost (Dollars)
CNTM	Timber Road Construction	JL25	Rights of Way	Cases	1	5,000
		LT222	Road Construction	Miles	2	35,000
		LT223	Road Reconstruction	Miles	1	5,000
		LT224	Bridge Construction	Bridges	0	0
		LT225	Bridge Reconstruction	Bridges	0	0
		LT-CONT	Road Contracts - Subtotal	----	----	40,000
		LT122	Road and Bridge Administration	----	----	16,400
		LT123	Road and Bridge Administration Support	----	----	23,600
		LT2141	Road Construct. Preconstruct. Eng.	----	----	58,300
		LT2142	Road Reconstruct. Preconstruct. Eng.	----	----	58,300
		LT2211	Road and Bridge Construction Eng.	----	----	24,000
		LT2212	Road and Bridge Reconstruction Eng.	----	----	24,000
		LT-SUPP	Road Support - Subtotal	----	----	204,600
			CNTM Subtotal			249,600
		CNTR	Trail Construction/Reconstruction	AT22	Trail Construction/Reconstruction	Miles
ML	Land Management Planning Activities			----	----	1,800
	CNTR Subtotal					200,000
CWFS	Cooperative Work - Other	AN	Recreation Management	MPAOT Days	0	0
		CI1	Inland Fish Operations	----	----	5,000
		CI221	Inland Fish Habitat Struct. Impr.	Structures	5	2,700
		CI222	Inland Fish Habitat Non-struct Impr.	Acres	0	0
		CT1	T&E Operations	----	----	0
		CT221	T&E Structural Habitat Improvement	Structures	0	0
		CT222	T&E Non-struct Habitat Improvement	Acres	0	0
		CW1	Wildlife Operations	----	----	10,000
		CW221	Wildlife Habitat Structural Impr.	Structures	0	0
		CW222	Wildlife Habitat Non-struct. Impr.	Acres	0	0
		FW22	Erosion Control	Acres	10	12,000
		LT23	Road Maintenance	Miles	100	44,300
		PF2	Fuels Improvements	Acres	0	0
		PL132	Law Enforcement Activities	----	----	0
		TG3	Line Management	----	----	0
TG4	Program Support	----	----	13,000		
TG5	Common Services	----	----	0		
	CWFS Subtotal			87,000		

Fund Code	Fund Name	Activity Code	Activity Name	Unit of Measure	Number of Units	Cost (Dollars)
CWKV	Cooperative Work - KV	AT23	Forest Trail Maintenance	Miles	0	0
		CI221	Inland Fish Habitat Struct. Improve.	Structures	15	6,500
		CI222	Inland Fish Habitat Non-struct Impr.	Acres	0	0
		CT221	T&E Structural Habitat Improvement	Structures	0	0
		CT222	T&E Non-struct Habitat Improvement	Acres	0	0
		CW221	Wildlife Habitat Struct. Improvement	Structures	15	13,500
		CW222	Wildlife Habitat Non-struct. Improve.	Acres	120	30,000
		DN221	Range Resource Struct. Improvement	Structures	0	0
		DN221-1	Structural Range Improvement	Structures	0	0
		DN222	Range Res. Non-struct. Improvement	Acres	0	0
		DN222-1	Non-structural Range Improvement	Acres	0	0
		ET24	Reforestation	Acres	1,178	210,000
		ET25	Timber Stand Improvement	Acres	0	0
		ET26	Nursery Activities	----	----	0
		FW22	Watershed Res. Impr. Construction	Acres	8	10,000
		PF2	Fuels Improvements	Acres	0	0
		TG3	Line Management	----	----	0
TG4	Program Support	----	----	90,000		
TG5	Common Services	----	----	0		
			CWKV Subtotal			360,000
EXEX	Acquisition of Lands for Exchange	JL263	Land Exchange	Acres	0	0
FFFP	Forest Fire Protection	ET113	Timber Res. Coordination	----	----	0
		ML	Land Management Planning Activities	----	----	10,000
		PF11	Fire Management Preparation	% Efficacy.	100	665,000
		PF2	Fuels Improvements	Acres	0	0
		PL132	Law Enforcement Activities	----	----	35,000
			FFFP Subtotal			710,000
LALW	Land Acquisition - L&WCF	JL123	Land Ownership Administration	Cases	0	10,000
		JL261	Land Purchase	Acres	200	150,000
			LALW Subtotal			160,000
NFCL	Cooperative Law Enforcement	PL121	Law Enforcement Act.-Coop Law Regular	----	----	100,000

Fund Code	Fund Name	Activity Code	Activity Name	Unit of Measure	Number of Units	Cost (Dollars)
NFHR	Heritage Resource Management	AC	Heritage Resource Activities	Acres	2,750	461,800
		AC121	Heritage Resource Monitoring	---	---	4,000
		ET113	Timber Res. Coordination	Acres	2,355	73,300
		ML	Land Management Planning Activities	---	---	4,100
		PL132	Law Enforcement Activities	---	---	<u>6,800</u>
			NFCR Subtotal			
NFDE	NFS Drug Control	PL122	Law Enforcement Act.-Coop Law Cannabis	---	---	25,000
		PL131	Law Enforcement Act Coop Law Anti-Drug	---	---	<u>35,000</u>
			NFDE Subtotal			
NFFA	Maintenance of Facilities	LF1	Facility Operations	---	---	69,000
		LF121	Facility Monitoring	---	---	1,000
		LF2	Facility Improvements	---	---	40,000
		LF23	Facility Maintenance	---	---	<u>40,000</u>
			NFFA Subtotal			
NFGA	General Administration	PL132	Law Enforcement Activities	---	---	33,000
		TG3	Line Management	---	---	496,000
		TG4	Program Support	---	---	847,000
		TG5	Common Services	---	---	<u>374,000</u>
			NFGA Subtotal			
NFGT	Nursery & Genetic Tree Improvement	ET26	Nursery Activities	---	---	0
		ET27	Genetic Tree Activities	---	---	<u>15,000</u>
			NFGT Subtotal			
NFHA	Harvest Administration	ET12	Timber Harvest Administration	MCF	4,728	199,300
		ML	Land Management Planning Activities	---	---	6,500
		PL132	Law Enforcement Activities	---	---	<u>55,500</u>
			NFHA Subtotal			
NFIF	Inland Fish Operations & Improvement	CI1	Inland Fish Operations	---	---	80,000
		CI111	Inland Fish Stream and Lake Inventory	Miles	20	25,000
		CI121	Fish Habitat Monitoring	---	---	45,000
		CI221	Inland Fish Habitat Struct. Impr.	Structures	150	155,000
		CI222	Inland Fish Habitat Non-struct Impr.	Acres	200	95,000
		ET113	Timber Res. Coordination	---	---	30,000
		ML	Land Management Planning Activities	---	---	10,000
		PL132	Law Enforcement Activities	---	---	<u>10,000</u>
			NFIF Subtotal			

Fund Code	Fund Name	Activity Code	Activity Name	Unit of Measure	Number of Units	Cost (Dollars)
NFIP	Range Improvements	DN221	Range Resource Structural Improve.	Structures	0	0
		DN222	Range Res. Non-struct. Improvement	Acres	0	0
		DN23	Range Res. Maintenance	---	---	<u>2,000</u>
			NFIP Subtotal			<u>2,000</u>
NFLA	Lands	JL11	Lands Status	---	---	60,000
		JL122	Special Use Admin. (Non-Rec)	Cases	400	140,000
		JL123	Land Ownership Administration	Cases	5	50,000
		JL25	Rights of Way	Cases	5	50,000
		JL26	Land Ownership Adjustment	Acres	0	21,100
		JL263	Land Exchange	Acres	100	100,000
		LG	Geometronics	---	---	5,000
		PL132	Law Enforcement Activities	---	---	<u>23,900</u>
	NFLA Subtotal			<u>450,000</u>		
NFLL	Land Line Location	JL23	Land Line Maintenance	Miles	147	90,000
		JL24	Landline Location	Miles	145	528,000
		PL132	Law Enforcement Activities	---	---	<u>7,000</u>
			NFLL Subtotal			<u>625,000</u>
NFMG	Minerals & Geology Management	ET113	Timber Res. Coordination	---	---	0
		GC1	Mineral Materials Resource Operations	Cases	30	30,000
		GE1	Leasable Mineral Resource Operations	Cases	30	40,000
		GE121	Oil and Gas Monitoring	---	---	15,000
		GG1	Geology Operations	Cases	0	30,000
		GL1	Locatable Minerals Resource Operations	Cases	0	0
		GR1	Reserved and Outstanding Operations	Cases	3	15,000
		ML	Land Management Planning Activities	---	---	20,000
		PL132	Law Enforcement Activities	---	---	0
	NFMG Subtotal			<u>150,000</u>		
NFNW	Noxious Weed Control	DN24	Noxious Farm Weeds	Acres	0	0
NFRD	Road Maintenance	LT121	Transportation Monitoring	---	---	2,000
		LT12	Transportation Administration	---	---	95,000
		LT23	Road Maintenance	Miles	1,800	1,267,000
		PL132	Law Enforcement Activities	---	---	<u>36,000</u>
			NFRD Subtotal			<u>1,400,000</u>

**Appendix L - The Revised Plan
THREATENED, ENDANGERED, AND SENSITIVE SPECIES**

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VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Aconitum reclinatum</i> - white monkshood	G3	S3/S2S3				X							MT MW	4
<i>Agropyron trachycaulum</i> - slender wheatgrass	G5	S1/S4				X	X						RO DW	4
<i>Allium oxiphilum</i> - nodding onion	G3Q	S1?/S1	3C			X	X	X	X			X	SB	4
<i>Alnus rugosa</i> - speckled alder	G5	S2/S4			X								WL RI	
<i>Anemone canadensis</i> - Canada anemone	G5	S1/S1			X								MW	
<i>Arabis hirsuta</i> - hairy rockcress	G5	S1/S2									X		SB DW	4
<i>Arabis serotina</i> - smooth rockcress	G2	S2/S1	E	E		X	X	X	X			X	SB	4
<i>Aralia hispida</i> - bristly sasparilla	G5	S2/S4							X			X	MT RO	7, 20, 21
<i>Arethusa bulbosa</i> - bog rose	G4	S1/NA										X	WL	4
<i>Aster radula</i> - rough-leaved aster	G5	S1/S4			X								WL RI	
<i>Aster schistosus</i> - shale barren aster	G4Q	SU/NA		C2								X	SB	4
<i>Astragalus distortus</i> - bent milkvetch	G5	S1/S2							X				SB	4
<i>Baptisia australis</i> - blue false indigo	G5?	S2/S4							X				RO RI	10
<i>Betula papyrifera</i> - paper birch	G5	S2/S2					X						MT MW	4
<i>Blephilia hirsuta</i> - hairy woodmint	G4?	S2										X	RI MW	21
<i>Boltonia asteroides</i> - aster-like boltonia	G5	S2/NA									X		SP	4
<i>Bouteloua curtipendula</i> - side-oats grama	G5	S4/S3					X						GL	4
<i>Bromus ciliatus</i> - fringed brome	G5	S1/S5			X								WL	
<i>Bromus kalmii</i> - wild chess	G5	S1/NA				X							SB DW	4
<i>Camassia scilloides</i> - wild hyacinth	G4G5	S2S3/S3S4			X								RI	

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			STATE/ FEDERAL		VA	FED	LTO*	DF	DR	JR	LE			PD
<i>Campanula rotundifolia</i> - American harebell	G5	S1/S2						X					RO	4
<i>Carex arctata</i> - black sedge	G5?	S1/NA										X	MW	21
<i>Carex barrattii</i> - Barratt's sedge	G3	S1S2/NA		3C							X		SP	4
<i>Carex buxbaumii</i> - brown bog sedge	G5	S2/S2			X								WL SP	
<i>Carex conoidea</i> - field sedge	G4	S1S2/S1			X								WL	
<i>Carex eburnea</i> - ebony sedge	G5	S4/S3S4			X								RO	
<i>Carex hirtifolia</i> - pubescent sedge	G5	S2/S1?						X					MW	4
<i>Carex hitchcockiana</i> - Hitchcock's sedge	G5	S2/S?			X								DW MW	
<i>Carex interior</i> - inland sedge	G5	S1/S4								X			WL	9
<i>Carex leptoneuria</i> - finely-nerved sedge	G4	S2/S1										X	MW	21
<i>Carex ormostachya</i> - stiff broad-leaved sedge	G5	S1/NA			X								MT MW	
<i>Carex pedunculata</i> - longstalk sedge	G5	S2/S1			X								DW	
<i>Carex polymorpha</i> - variable sedge	G2	S2/S1	E	C2			X	X		X			MT DW	4
<i>Carex tetanica</i> - rigid sedge	G4G5	S2/S1?			X								WL	
<i>Carex trisperma</i> - three seeded sedge	G5	S2/S4					X					X	WL	4,21
<i>Carex vesicaria</i> - inflated sedge	G5	S1S2/S1										X	WL	4
<i>Cheilanthes castanea</i> - chestnut lipfern	G3G4	S2/S1					X			X			SB	4
<i>Cinna latifolia</i> - slender wood reedgrass	G5	S2/S4								X		X	MT MW	4
<i>Clematis albicoma</i> - whitehaired leatherflower	G4	S2/S3S4		3C		X		X				X	SB	4
<i>Clematis coactilis</i> - Va whitehaired leatherflower	G3	S2S3/NA						X					SB RO	4

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNH	STATUS		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS		
			STATE/ FEDERAL		VA	FED	LTO*	DF	DR	JR	LE			PD	WS
<i>Clematis verticillaris</i> - purple virgin's bower	G4G5	S3/S1					X							MT MW	
<i>Clematis viticaulis</i> - grape-stem leatherflower	G2	S2/NA		C2				X	X	X	X		X	SB	4
<i>Coreopsis verticillata</i> - whorled tickseed	G5	S4/S2					X							DW	
<i>Cornus canadensis</i> - bunchberry	G5	S1/S3							X					MT MW	4
<i>Cornus obliqua</i> - silky dogwood	G5?	S1/S4							X					WL RI	9
<i>Cornus rugosa</i> - roundleaf dogwood	G5	S2/S1								X				MW	9
<i>Crataegus pruinosa</i> - prunose hawthorn	G5	S1/SU					X							DW RO	
<i>Cuscuta rostrata</i> - beaked dodder	G4	S2										X	X	MW	21
<i>Cyperus dentatus</i> - toothed sedge	G4	S1/NA									X			SP WL	4
<i>Cypripedium reginae</i> - showy lady's slipper	G4	S1/S1								X				WL	4
<i>Desmodium sessilifolium</i> - sessile tick-trefoil	G5	S2/NA					X							DW	
<i>Diarrhena americana</i> - American beakgrain	G5	S2S3/SU										X		RO DW	8
<i>Eleocharis elliptica</i> - slender spikerush	G5	S1S2/NA					X							WL	
<i>Eleocharis melanocarpa</i> - black-fruited spikerush	G4	S2/NA									X			SP	4
<i>Eleocharis robbinsii</i> - Robbins spikerush	G4G5	S1/NA									X			SP	4
<i>Eleocharis smallii</i> - creeping spikerush	G5?	S1S2/S4					X							WL	

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Epilobium leptophyllum</i> - linear-leaf willow-herb	G5	S2/S4										X	WL	21
<i>Equisetum sylvaticum</i> - woodland horsetail	G5	S1/S1										X	WL	4
<i>Eriocaulon septangulare</i> - white buttons	G5	S1/NA										X	SP	4
<i>Erysimum capitatum</i> - western wallflower	G5	S1/NA										X	SB DW	8
<i>Euphorbia purpurea</i> - glade spurge	G2	S2/S2		C2	X								MW	
<i>Galium boreale</i> - northern bedstraw	G5	S2S3/S4										X	DW RO	4
<i>Gaylussacia brachycera</i> - box huckleberry	G2	S1S2/S2		3C							X	X	DW	4
<i>Geranium robertianum</i> - herb-robert	G5	S1/S4?			X								MW	
<i>Geum aleppicum</i> - yellow avens	G5	SH/S1			X								WL	
<i>Glyceria acutiflora</i> - sharp scaled manna-grass	G5	S3/S1			X								WL	
<i>Gnaphalium uliginosum</i> - low cudweed	G5	S1						X				X	MT OF	?, 21
<i>Gnaphalium viscosum</i> - winged cudweed	G5	S1										X	MT OF	21
<i>Glyceria grandis</i> - American manna-grass	G5	S1/S1										X	WL	21
<i>Habenaria fimbriata</i> - large purple-fringe orchid	G5	S1/S4			X								MW WL	
<i>Habenaria viridis</i> var. <i>bracteata</i> - long-bracted green orchid	G5T5	S4/S2			X								WL RI	
<i>Helenium virginicum</i> - Virginia sneezeweed	G2	S2/NA	E	C1								X	SP	4

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Helianthemum bicknellii</i> - plains frostweed	G5	S1/S1			X								DW RO	
<i>Helianthemum propinquum</i> - low frostweed	G5	S1/NA			X								DW RO	
<i>Helianthus laevigatus</i> - smooth sunflower	G3G4	S3/S2			X								SB DW	
<i>Helonias bullata</i> - swamp pink	G2	S2/NA	E	T						X			WL	4,8,18
<i>Heuchera alba</i> - white-flowered heuchera	G2Q	S2?/S2				X	X	X	X	X	X		MT MW	4
<i>Hexalectris spicata</i> - crested coral-root	G3G4	S3/S1			X								DW RO	
<i>Hieracium traillii</i> - Maryland hawkweed	G4?	S2S3/S4				X	X	X	X			X	SB DW	4
<i>Hypericum mitchellianum</i> - Blue Ridge St. John's-Wort	G3	S2										X	MT MW	21
<i>Iliamna remota</i> - Kankakee globe-mallow	G5	S1/NA			X								RI	
<i>Iris versicolor</i> - blueflag	G5	S2/NA			X								WL	
<i>Isoetes lacustris</i> - lake quillwort	G5	S1?/NA								X			RI	18
<i>Isoetes virginica</i> - Virginia quillwort	G1G2Q	S1?/NA		C2	X								SP	
<i>Juglans cinerea</i> - butternut	G4	S3?		C2		X	X	X	X	X		X	DW RO	Stds
<i>Juncus brevicaudatus</i> - narrow-panicled rush	G5	S2										X	WL	21
<i>Juniperus communis</i> - ground juniper	G5	S1/S?						X					DW RO	4
<i>Lachnanthes carolina</i> - Carolina redroot	G4	SH/NA			X								SP WL	

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Linum lewisii</i> - prairie flax	G4G5	NA/S2					X						GL	4
<i>Linum sulcatum</i> - grooved yellowflax	G5	S2/S1			X			X					DW GL	
<i>Liparis loeselii</i> - fen orchid	G5	S2/S2						X		X			WL	4
<i>Lonicera canadensis</i> - American fly-honeysuckle	G5	S2/S3S4										X	MT MW	21
<i>Lycopodium inundatum</i> - northern bog clubmoss	G5	S1/S3S4									X		WL	4
<i>Lycopodium selago</i> - fir clubmoss	G5	S2/NA			X								MT RO	
<i>Lysimachia radicans</i> - trailing loose-estribe	G4G5	S1/NA									X		WL MW	4
<i>Lythrum alatum</i> - winged-loosestrife	G5	S2/S1			X								WL	
<i>Melica nitens</i> - tall melic grass	G5	S1/S1								X			SB DW	4
<i>Milium effusum</i> - tall millet-grass	G5	S1/S4				X	X	X	X			X	MT MW	4,21
<i>Muhlenbergia glomerata</i> - marsh muhly	G5	S2/NA			X								WL	
<i>Oenothera argillicola</i> - shale barren evening primrose	G3	S3/S3				X	X	X	X			X	SB	4
<i>Oryzopsis asperifolia</i> - rough-leaved ricegrass	G5	S1/S1						X					DW	4
<i>Oryzopsis racemosa</i> - mountain ricegrass	G5	S4/S1			X								DW	
<i>Panax quinquefolius</i> - American ginseng	G4	S4/S4	T			X	X	X	X	X	X	X	MW	Stds
<i>Panicum hemitomon</i> - maidencane	G5?	S1/NA									X		SP	4
<i>Panicum xanthophysum</i> - a panic grass	G5	NA/SH			X								GL DW	
<i>Paronychia argyrocoma</i> - silvery nailwort	G4	S3/S3				X	X	X	X	X	X	X	SB RO	4

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Paronychia virginica</i> var. <i>virginica</i> - yellow nailwort	G4T1Q	S2/S1		C2	X								SB RO	
<i>Paxistima canbyi</i> - Canby's mountain-lover	G2	S2/S2		C2						X			RO	10
<i>Phlox buckleyi</i> - swordleaf phlox	G2G3	S2/S1		3C		X	X	X	X			X	SB DW	4
<i>Picea rubens</i> - red spruce	G5	S3S4/S4S5					X					X	MW	4,21
<i>Pieris floribunda</i> - mountain fetter-bush	G4	S4/S2				X	X	X			X	X	MT DW	4
<i>Poa languida</i> - drooping bluegrass	G3G4	S2/NA				X	X						MT DW	4
<i>Poa paludigena</i> - bog bluegrass	G3	S2/NA		C2	X								WL	
<i>Poa palaustris</i> - fowl bluegrass	G5	S1S2/S4										X	WL	21
<i>Poa saltuensis</i> - a bluegrass	G5?	S1/S2S3				X							DW	4
<i>Poa wolfii</i> - wolf bluegrass	G3G4	S1/NA			X								MW	
<i>Potamogeton oakesianus</i> - Oakes' pondweed	G4	S1/NA									X		SP	4
<i>Potamogeton tennesseensis</i> - Tennessee pondweed	G3	S1/S3?					X						MP	4
<i>Potentilla tridentata</i> - three-toothed cinquefoil	G5	S2/S2			X								MT RO	
<i>Prunus allegheniensis</i> - Allegheny sloe	G3	S2S3/S2S3		3C				X			X	X	SB DW	4
<i>Prunus nigra</i> - Canada plum	G4G5	S1/NA			X								MW RI	
<i>Pyrola chlorantha</i> - green flowered wintergreen	G5	SH/NA			X								DW	
<i>Pyrola elliptica</i> - elliptical shineleaf	G5	S2/S3S4										X	DW	21
<i>Quercus macrocarpa</i> - bur oak	G5	S1/S3S4			X								RI WL	
<i>Quercus prinoides</i> - dwarf chinquapin oak	G5	S2/S?			X								DW	

*Likely To Occur

VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Ranunculus trichophyllus</i> - whitewater crowfoot	G5?	S1/SH								X			RI	18
<i>Ribes lacustre</i> - bristly black currant	G5	S1/S1						X					RI MW	18
<i>Rosa setigera</i> - prairie rose	G5	S1/S4			X								RI RO	
<i>Rubus idaeus</i> - common red raspberry	G5	S2/NA			X								MT	
<i>Sagittaria rigida</i> - sessile-fruited arrowhead	G5	S1/S2			X								SP WL	
<i>Saxifraga pensylvanica</i> - swamp saxifrage	G5	S3/S2			X								WL	
<i>Schizachne purpurascens</i> - purple oat-grass	G5	S1/S1									X		MW	21
<i>Scirpus ancistrochaetus</i> - northeastern bulrush	G1	S1/S1	E	E			X	X					MP	4
<i>Scirpus subterminalis</i> - water bullrush	G4G5	S1/NA									X		MP	4
<i>Scirpus torreyi</i> - Torrey bullrush	G5?	S1/S?									X		SP	4
<i>Scutellaria ovata</i> - var. <i>pseudoarguta</i> - heart leaved skullcap	G5T1Q	S7/S1Q			X								DW SB	
<i>Scutellaria parvula</i> var. <i>parvula</i> - small skullcap	G4T?	S2/NA			X								SB	
<i>Sida hermaphrodita</i> - Virginia mallow	G3	S1/S3		3C	X								RI	
<i>Smilacina stellata</i> - false starflower	G5	S2/S1								X			RI	10
<i>Solidago randii</i> - Randy's goldenrod	G2G4	S2/SH			X								MT RO	
<i>Solidago harrisii</i> - shale barren goldenrod	G3Q	S3S4/S3S4				X	X	X	X		X		SB	4
<i>Solidago rupestris</i> - rock goldenrod	G2?Q	S1/NA								X			RI RO	10

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VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Solidago uliginosa</i> var. <i>uliginosa</i> - bog goldenrod	G4G5	S2/S4										X	WL	21
<i>Sparganium chlorocarpum</i> - narrow-leaft burreed	G5	S1										X	WL	21
<i>Spartina pectinata</i> - fresh water cordgrass	G5	S2/S4			X								WL RI	
<i>Spiranthes ochroleuca</i> - yellow nodding ladies tresses	G4	S2/NA					X						MW	4
<i>Sporobolus neglectus</i> - small dropseed	G5	S2/NA			X								DW RO	
<i>Trichostema setaceum</i> - narrow-leaved blue curls	G5	S2/S1			X								DW SB	
<i>Trifolium virginicum</i> - Kate's mountain clover	G2G3	S3/S2S3		3C		X	X	X	X			X	SB	4
<i>Trillium pusillum</i> var. <i>monticulum</i> - mountain leas trillium	G3T1?	S2/S1		C2		X	X						MT DW	4
<i>Triphora trianthophora</i> - nodding pogonia	G4	S1/S3S4			X								MW	
<i>Vaccinium macrocarpon</i> - large cranberry	G4	S2/S3										X	WL	4
<i>Vaccinium myrtilloides</i> - velvetleaf blueberry	G5	S2/S4			X								MT RO	
<i>Veronica scutellata</i> - marsh-speedwell	G5	S2/S1			X								WL RI	
<i>Viburnum lentago</i> - nannyberry	G5	S1/NA										X	WL	4
<i>Viola walteri</i> - prostrate blue violet	G4G5	S2/NA			X								DW RO	
<i>Woodwardia virginica</i> - Virginia chain-fern	G5	S5/NA										X	SP	4

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VASCULAR PLANTS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS		
<i>Xerophyllum asphodeloides</i> - turkey beard	G3	S3/S1				X	X	X	X	X	X	DW	4
<i>Zanthoxylum americanum</i> - northern prickley ash	G5	S2S3/S4				X						SB DW	4
<i>Zigadenus elegans</i> ssp. <i>glaucus</i> - white camass	G5T4?	S2/S?			X							RO DW	

ANIMALS
INVERTEBRATES

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS		
<i>Aeshna canadensis</i> - Canada darner	G5	S1									X	WL	21
<i>Aeshna mutata</i> - spring blue darner	G3G4	S1/SU									X	WL RI	21
<i>Aeshna tuberculifera</i> - Black-tipped darner	G4	S2									X	WL	21
<i>Aeshna verticalis</i> - Green-striped darner	G5	S1									X	WL	21
<i>Arigomphus furcifer</i> - Lilypad clubtail	G5	S1									X	WL	21
<i>Boloria selene myrina</i> - silver bordered fritillary	G5T5	S2/SU									X	WL	4, 21

ANIMALS

INVERTEBRATES

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Calephelis borealis</i> - northern metal-mark butterfly	G3G4	S3/S3				X	X	X	X			X	SB DW	4
<i>Calopterix amata</i> - Superb jewelwing	G3G4	S1										X	MW	21
<i>Catocala pretiosa pretiosa</i> - precious underwing moth	G4	SH/NA		C2	X								DW	
<i>Colias interior</i> - pink-edged sulphur	G5	S1/S3										X	WL GL	21
<i>Cordulegaster diastatops</i> - Delta-spotted spiketail	G5	S1										X	WL MW	21
<i>Cordulia shurtleffi</i> - American emerald	G5	S2										X	WL	21
<i>Enallagma cyathigerum</i> - Northern bluet	G5	S1										X	WL	21
<i>Enallagma hageni</i> - Hagen's bluet	G5	S2										X	WL	21
<i>Epitheca canis</i> - Beaverpond basket-tail	G5	S1										X	WL	21
<i>Erynnis persius</i> - Persius dusky wing skipper	G4	SU/SU			X								MW WL	
<i>Erythroecia hebari</i> - Hebard's noctuid moth	GU	SH/NA		C2	X								MW GL	
<i>Euchlaena milnei</i> - looper moth	GU	SH/NA		C2	X								MW	
<i>Euchloe olympia</i> - grizzled skipper	G3	S3/S4				X	X	X	X			X	SB DW	4
<i>Euphyes bimaculata</i> - two-spotted skipper	G4	S2/SU			X								WL	
<i>Gomphus borealis</i> - Beaverpond clubtail	G4	S1										X	WL	21

*Likely To Occur

ANIMALS

INVERTEBRATES

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Gomphus viridifrons</i> - blue faced clubtail	G2G3	S1/SU			X								WL RI	
<i>Hydraena maureenae</i> - Maureen's minute moss beetle	G1G3	S1S3/SU		C2	X								RI WL	
<i>Incisalia polios</i> - hoary elfin butterfly	G5	S1/S1				X	X	X	X			X	SB DW	4
<i>Lanthis parvulus</i> - speckled trout clubtail	G3G4	S2/SU										X	WL MW	21
<i>Lestes disjunctus disjunctus</i> - Northern common spreadwing	G5T5	S1										X	WL	21
<i>Lestes eurinus</i> - amber-wing spreadwing damselfly	G1	S2/SU						X					MP	4
<i>Leucorrhinia frigida</i> - Frosted whiteface	G5	S1										X	WL	21
<i>Leucorrhinia hudsonica</i> - Hudsonian whiteface	G5	S1										X	WL	21
<i>Leucorrhinia intacta</i> - Dot-tailed whiteface	G5	S2S3										X	WL	21
<i>Libellula julia</i> - Chalk-fronted skimmer	G5	S1										X	WL	21
<i>Nannaria shenandoeensis</i> - Shenandoah Mountain millipede	G1	S1/SU						X					MT MW	4
<i>Nehalennia irene</i> - Sedge sprite	G5	S1										X	WL	21
<i>Nemotaulius hostilis</i> - a caddisfly	G5	S1										X	WL	21
<i>Phyciodes batesii</i> - tawny crescent butterfly	G3G4	SH/S1		C2	X								DW	
<i>Phyciodes pascoensis</i> - northern pearly crescent	G5	S1/S3										X	SB RI	4

ANIMALS

INVERTEBRATES

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Pseudanophthalmus avernus</i> - Avernus cave beetle	G1	S1/NA		C2	X								CV	
<i>Pyrgus wyandot</i> - grizzly skipper	G3Q	S3/S1			X								SB DW	
<i>Somatochlora elongata</i> - Slender emerald	G5	S1S2									X		WL	21
<i>Somatochlora williamsonia</i> - Williamson's emerald	G5	S1									X		WL	21
<i>Speyeria atlantis</i> - atlantis fritillary	G5	S2									X		GL	21
<i>Speyeria diana</i> - Diana	G3	S3/S2			X								MW RI	
<i>Speyeria idalia</i> - regal fritillary	G3	SH/S1		C2	X								OF	
<i>Stygobromus morrisoni</i> - Morrison's cave amphipod	G3	S1S2/S1	SC	C2	X								CV	
<i>Stygobromus mundus</i> - Bath County cave amphipod	G2	S1S2/S?	SC	C2	X								CV	
<i>Sympetrum obtrusum</i> - White-faced meadowfly	G5	S1									X		WL	21
<i>Synanthedon castaneae</i> - chestnut clearwing moth	GH	SX/SX		C2	X								MW DW	
<i>Pseudanophthalmus intersectus</i> - x-roads cave beetle	G1	S1/NA		C2	X								CV	
<i>Pseudanophthalmus limicola</i> - mud cave beetle	G1	S1/NA		C2	X								CV	
<i>Pseudanophthalmus nelsoni</i> - Nelson's cave beetle	G1	S1/NA		C2	X								CV	
<i>Pseudanophthalmus petrunkevitchi</i> - Petrunkevitchi's cave beetle	G1	S1/NA		C2	X								CV	

MOLLUSKS (MUSSELS AND SNAILS)

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS		
<i>Alasmidonta varicosa</i> - brook floater	G3	S1/S2S3	E	C2				X				AQ	18
<i>Elliptio lanceolata</i> - yellow lance	G4	S2S3/NA	SC	C2				X				AQ	18
<i>Fusconaia masoni</i> - Atlantic pigtoe	G2	S2/NA	T	C2				X				AQ	18
<i>Heliodiscus diadema</i> - shaggy coil snail	G1	S1/NA	E	C2	X							RO	
<i>Lampsilis cariosa</i> - yellow lampmussel	G4	S2/S?	SC	C2				X	X			AQ	18
<i>Lasmigona subviridis</i> - green floater	G4	S2/S1	SC	C2				X	X			AQ	18
<i>Pleuroberma collina</i> - James spiny-mussel	G1	S1/NA	E	E				X				AQ	18

FISH

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS		
<i>Cottus girardi</i> - Potomac sculpin	G4	S3/S2	SC				X	X	X			AQ	18
<i>Notropis semperasper</i> - roughhead shiner	G3	S3/NA	SC			X		X			X	AQ	18
<i>Noturus gilberti</i> - orangefin madtom	G2	S1/NA	T	C2				X				AQ	18

*Likely To Occur

AMPHIBIANS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS		KNOWN OCCURRENCES BY							HABITAT	MGMT. AREAS		
			STATE/ FEDERAL		DISTRICT	LOCATION(S)	VA	FED	LTO*	DF	DR			JR	LE
<i>Ambystoma tigrinum tigrinum</i> - eastern tiger salamander	G5T?	S1/NA	E									X		SP	4
<i>Plethodon punctatus</i> - Cow Knob salamander	G3	S2/S1	SC	C2				X						MW	4

REPTILES

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS		KNOWN OCCURRENCES BY							HABITAT	MGMT. AREAS		
			STATE/ FEDERAL		DISTRICT	LOCATION(S)	VA	FED	LTO*	DF	DR			JR	LE
<i>Clemmys guttata</i> - spotted turtle	G5	S4/S1										X		SP WL	4
<i>Clemmys insculpta</i> - wood turtle	G5	S2/S3	T					X		X				WL RI	4,18
<i>Eumeces anthracinus</i> - coal skink	G5	S2/S2						X						SB DW	15
<i>Opheodrys vernalis vernalis</i> - smooth green snake	G5T?	S3/S4						X					X	MT GL	4
<i>Pituophis melanoleucus melanoleucus</i> - northern pine snake	G5T?	SU/SU	SC	C2						X		X		DW	4
<i>Virginia valeriae pulchra</i> - mountain earth snake	G5T?	SU/S3	SC			X								MW WL	

*Likely To Occur

BIRDS¹

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS STATE/ FEDERAL		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS	
			VA	FED	LTO*	DF	DR	JR	LE	PD	WS			
<i>Melospiza georgiana</i> - swamp sparrow	G5	S1/S4										X	WL	21
<i>Oporornis philadelphia</i> - mourning warbler	G5	S1/S3	SC									X	WL MW	4,21
<i>Regulus satrapa</i> - golden-crowned kinglet	G5	S2/S4	SC					X				X	MW	4,21
<i>Seiurus noveboracensis</i> - northern waterthrush	G5	S1/S4										X	WL RI	21
<i>Sitta canadensis</i> - red-breasted nuthatch	G5	S2/S4	SC					X				X	MW	4,21
<i>Sphyrapicus varius</i> - yellow-bellied sapsucker	G5	S1/S1S2										X	MW	4,21
<i>Thryomanes bewickii altus</i> - Appalachian Bewick's wren	G5T?	S1/S1	E	C2	X								OF	
<i>Vermivora ruficapilla</i> - Nashville warbler	G5	S1/S1										X	MW WL	4

¹ Species with known or likely nesting sites on Forest

*Likely To Occur

MAMMALS

SCIENTIFIC NAME - COMMON NAME	RANK: GLOBAL	RANK: VANHP/ WVNHP	STATUS		KNOWN OCCURRENCES BY DISTRICT LOCATION(S)							HABITAT	MGMT. AREAS		
			STATE/ FEDERAL		VA	FED	LTO*	DF	DR	JR	LE			PD	WS
<i>Condylura cristata cristata</i> - star nosed mole	G5T5	S3/S4	SC	3C		X								GL WL	
<i>Felis concolor cougar</i> - eastern cougar	G4TH	SX/SX	E	E		X								All habitats	
<i>Glaucomys sabrinus fuscus</i> - Va. n. flying squirrel	G5T2	S1/S2	E	E								X		MW	21
<i>Lepus americanus virginianus</i> - snowshoe hare	G5	S1/S4	E									X		MW	21
<i>Lutra canadensis lataxina</i> - river otter	G5T4	S4/SH	SC						X					RI	18
<i>Martes pennanti</i> - fisher	G5	S1/S3										X		MW	21
<i>Microsorex hoyi winnemana</i> - southern pigmy shrew	G5T5	SU/S2S3	SC	3C				X						MW DW	4
<i>Microtus chrotorrhinus carolinensis</i> - southern rock vole	G5T3	S1/S3	E	C2								X		MW	4
<i>Myotis keenii</i> - Keen's long-eared bat	G4	S3/S2						X		X	X	X		CV	Stds
<i>Myotis subulatus leibii</i> - eastern small-footed bat	G3T3	S1/S2S3	SC	C2				X						CV	4,Stds
<i>Myotis sodalis</i> - Indiana bat	G2	S1/S1	E	E								X		CV	4,Stds
<i>Neotoma floridana magister</i> - eastern woodrat	G5T3	S3/S4	SC	C2		X	X	X	X	X	X	X		RO CV	4,Stds
<i>Plecotus townsendii virginianus</i> - Va. big-eared bat	G5T2	S1/S2	E	E		X								CV	
<i>Sorex dispar</i> - long-tailed shrew	G4	S3/S2S3	SC	C2				X						RO RW	4
<i>Sorex palustris punctulatus</i> - southern water shrew	G5T3	S1/S2	E	C2								X		MT WL	18 (4,21)
<i>Sylvilagus transitionalis</i> - New England cottontail	G4	S4/S3	SC	C2		X	X	X			X	X		MT GL	4,9

DEFINITIONS OF ABBREVIATIONS USED

RANGER DISTRICTS

DF = DEERFIELD
DR = DRY RIVER
JR = JAMES RIVER

LE = LEE
PD = PEDLAR
WS = WARM SPRINGS

VANHP/WVNHP = VIRGINIA/WEST VIRGINIA NATURAL HERITAGE PROGRAM RANKINGS G = GLOBAL RANKING, AND S = STATE RANKING

G1 = EXTREMELY RARE THROUGHOUT ENTIRE RANGE OF SPECIES (OCCURRENCES 1-5)
S1 = EXTREMELY RARE THROUGHOUT THE STATE (OCCURRENCES 1-5)
G2 = VERY RARE THROUGHOUT ENTIRE RANGE OF SPECIES (OCCURRENCES 6-20)
S2 = VERY RARE THROUGHOUT THE STATE (OCCURRENCES 6-20)
G3 = RARE OR UNCOMMON THROUGHOUT THE ENTIRE RANGE OF SPECIES (OCCURRENCES 21-100)
S3 = RARE OR UNCOMMON IN THE STATE (OCCURRENCES 21-100)
G4 = COMMON AND APPARENTLY SECURE THROUGHOUT RANGE
S4 = COMMON AND APPARENTLY SECURE THROUGHOUT STATE
G5 = VERY COMMON AND DEMONSTRABLY SECURE THROUGHOUT RANGE
S5 = VERY COMMON AND DEMONSTRABLY SECURE THROUGHOUT STATE
GX = BELIEVED EXTINCT WITH NO LIKELIHOOD OF REDISCOVERY
SX = BELIEVED EXTRIPATED FROM STATE
GH = HISTORICALLY KNOWN GLOBALLY, NOT RECENTLY VERIFIED (WITHIN PAST 15 YEARS)
SH = HISTORICALLY KNOWN FROM STATE, NOT RECENTLY VERIFIED (WITHIN PAST 15 YEARS)
GU = POSSIBLY RARE, STATUS UNCERTAIN, MORE DATA NEEDED
SU = POSSIBLY RARE, STATUS UNCERTAIN, MORE DATA NEEDED
Q = TAXANOMIC QUESTION
T = SIGNIFIES THE RANK OF A SUBSPECIES OR VARIETY
? = RANK UNCERTAIN
NA = NOT KNOWN TO OCCUR IN STATE

STATE STATUS (LEGAL)

E = LISTED ENDANGERED IN VIRGINIA
T = LISTED THREATENED IN VIRGINIA
SC = SPECIAL CONCERN IN VIRGINIA

FEDERAL STATUS (LEGAL)

C1 = CATEGORY 1 = CANDIDATE FOR LISTING AS THREATENED OR ENDANGERED BY THE USFWS-(ENOUGH INFORMATION AVAILABLE TO LIST AS T OR E)
C2 = CATEGORY 2 = CANDIDATE FOR LISTING AS THREATENED OR ENDANGERED BY THE USFWS-(SEEKING MORE INFORMATION ON THE SPECIES)
3C = FORMER CANDIDATE, BUT MORE COMMON THAN ORIGINALLY THOUGHT
E = LISTED ENDANGERED
T = LISTED THREATENED
PE = PROPOSED ENDANGERED
PT = PROPOSED THREATENED

HABITAT ABBREVIATIONS

AQ = AQUATIC
CV = CAVE
DW = DRY WOODLANDS
MP = MOUNTAIN PONDS
GL = GRASSLANDS (INCLUDES PRAIRIE-LIKE
OPENINGS AND GLADES)

MT = MOUNTAIN TOP, HIGH ELEVATION AREAS
MW = MESIC WOODLANDS
OF = OLD FIELD, SHRUBBY VEGETATION
RO = ROCK OUTCROPS (ACIDIC & CALCAREOUS)

SB = SHALE BARRENS
SP = SEASONALLY DRY SINKHOLE PONDS
RI = RIPARIAN AREAS
WL = WETLANDS (INCLUDES: BOGS, SEEPS, WET MEADOWS)

LEGALITIES OF RANKINGS

Global and state rankings (G/S) of the Natural Heritage Programs have no direct ties to a specific law governing the management of national forests.

However, it is an extremely effective method of tracking rare species, and these rankings are often the basis for listing a species as SENSITIVE.

SENSITIVE is a listing assigned by the Regional Forester that affords protection to a species on the national forest where listed.

The Forest goal is to protect and/or improve habitat for the species to ensure that it does not become Threatened or Endangered.

THREATENED/ENDANGERED (listing by state) affords legal state protection to a species.

THREATENED/ENDANGERED (listing by USFWS) affords legal federal protection to a species.

LAWS, POLICIES, AND PROPER PROCEDURES ARE DETAILED IN FSM 2670