

**Appendix A. Overview of Invasive Species Control Methods
Mount Rose Preserve Stewardship Plan**

Method Type(s)	Method Name	Method Code	Typical Herbicide Concentrations	Target Type(s)	Basic Technique	Pros	Cons	Notes
Biological Control	biological control	BC	N/A	few selected species	Release of approved biological control agents that attack only target species	Method can provide effective control and is cost effective	Only mile-a-minute and purple loosestrife have an available biological control agent	A biological control agent for garlic mustard is under development and may be ready for release in the near future.
Chemical Control	basal bark	BB	20 - 25%	woody species	Application of herbicide within a 6-12 inch band around entire stem approximately 12 inches above base of plant	Method provides effective control and is cost effective	Some suggested oil diluents are not environmentally friendly, but mineral, vegetable or citrus oils with triclopyr can be effective (Rathfon 2006)	Herbicide application is performed using a backpack sprayer. Method used for woody stems ≤ 6" in diameter. This method should be considered an important control technique.
Chemical Control	foliar spray	FS	1-3%	Any plant less than 4 feet tall	Application of herbicide using a backpack sprayer to wet all leaves	Method provides effective control and is cost effective	Method has potential to injure non-target species and cannot be used on taller plants due to increased risk to applicator and non-target species (i.e., spraying upward increases risk of drift); Method can be sensitive to weather conditions (e.g., heat may dry spray before effective absorption)	Foliar applications generally include use of a backpack sprayer (Recommend use of Thinvert system ¹). Some foliar application methods include wipe-on applications (e.g., "bloody glove"), but these methods are not recommended because they are extremely time consuming and increase likelihood of exposure to the applicator. The use of boom applications is not recommended, but may be useful in the establishment of native warm season grasses where all existing vegetation must be removed prior to seeding.
Chemical Control	pre-emergent spray	PS	1-3%	herbaceous species	Application of herbicide to prevent seed germination	Method can provide effective control	Requires a broad application in areas known or suspected to contain invasive species; Timing of application can vary between years for targeted species; Suppresses germination of all species	This method may be most beneficial for Japanese stiltgrass infestations on trails.
Chemical & Mechanical Control	hack-and-squirt	HS	20 - 25%	woody species	Make downward cuts with a hand axe (one cut per inch of diameter) and apply herbicide to cuts	Method provides effective control and is cost effective; Volunteers can assist with stem cutting	Stem cutting may be difficult for thick-barked plants	Herbicide applied with squirt bottle or paint brush. Herbicide should be applied immediately after cutting.

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Chemical & Mechanical Control	stem injection	SI	20 - 25%	woody species	E-Z-Ject Lance loaded with herbicide pellets	Method provides effective control	Equipment is difficult to operate under field conditions; Injection for thick-barked trees requires significant force; Equipment is expensive	A modified approach using a drill and manual insertion of herbicide may be more practical. This method is generally not practical.
Chemical & Mechanical Control	cut stump	CS	20 - 25%	woody species	Cutting stems just above ground level followed by targeted application of herbicide to cut stems	Method provides effective control; Volunteers can assist with stem cutting	Mechanical removal of stems is very time consuming	Cutting is performed by loppers, handsaws or chainsaws depending upon size of stems. Herbicide applied with a squirt bottle, paint brush or backpack sprayer. Herbicide should be applied immediately after cutting.
Cultural Control	prescribed fire	PF	N/A	many species	Should follow a site-specific Prescribed Burning Plan that is part of a comprehensive Grassland Management Plan	Method provides effective control and is cost effective	Requires highly trained personnel; Insurance requirements may restrict application to an outside contractor; Requires public outreach to neighbors and public officials	Prescribed fire is most effective for grasslands with dense stands of native warm season grasses that provide ample fuel to eliminate woody seedlings; Prescribed fire may be utilized to remove dense thatch before application of herbicides (e.g., common reed, reed canary grass) in wetland habitats. The effectiveness of prescribed fire to control invasive species in forest habitats is currently uncertain.
Cultural Control	prescribed grazing	PG	N/A	many species	Rotational system using multiple livestock species; Should follow a site-specific Prescribed Grazing Plan that is part of a comprehensive Grassland Management Plan	Method may be effective; Method can be assisted by volunteers	Method requires significant expertise in selection of livestock species, density of animals per unit area and timing of grazing; Method requires installation of fencing; Method may spread some invasive species through feces; Trampling of vegetation may encourage invasive species	Implementation will require consultation with experts in the use of livestock for the purpose of eliminating invasive species; Method may be considered for shrub control in forest settings if native species are currently absent

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Cultural Control	soil tilling	ST	N/A	herbaceous species and woody seedlings	Turning of soil using typical farm equipment	Method may provide effective control and is cost effective	Method destroys native species along with invasive species; Method may increase invasive species through extensive soil disturbance	This is an extreme method with limited use in natural areas. Successive tilling events may be used to exhaust weed seed bank prior to re-planting meadows.
Cultural Control	mulching	MU	N/A	herbaceous species	Application of a thick layer (3-4 inches) of organic materials	Method is effective for herbaceous species within cultivated garden beds or roadsides; Method can be assisted by volunteers	Method is not practical in natural areas where vehicle access is limited	Only effective on species with small seeds or weakly growing plants that cannot germinate/grow through the mulch. Japanese stiltgrass and garlic mustard are sensitive to heavy mulching.
Cultural Control	solarization	SO	N/A	herbaceous species	Application of plastic sheeting over infested areas	Method may be effective in some situations; Method can be assisted by volunteers	Method may alter soil chemistry and biology more significantly than herbicides	Plastic sheeting increases soil temperature to kill seeds and plants. This method is generally not practical in natural areas.
Mechanical Control (may be combined with Chemical Control)	girdling	GI	N/A	woody species	Cutting and removing a ≥ 3 inch band of bark from a trunk	Method can provide effective control; Method can be assisted by volunteers	Method may be ineffective on species with re-sprouting ability; Method is time consuming and difficult for thick-barked species; Method cannot be utilized where the risk of standing dead trees is unacceptable	Method may be combined with chemical control (i.e., apply herbicide to girdled area); Do not attempt on species such as black locust, tree-of-heaven or Japanese angelica tree, which will vigorously re-sprout multiple stems in response to girdling (hack-and-squirt may be effective on these species).
Mechanical Control	mowing	MO	N/A	many species	Cutting tops of plants using a mower, brush cutter or weed whacker	Method may be used as a pre-treatment for herbicide application to cut stumps or foliar applications to re-sprouts using a backpack sprayer	Method is ineffective for most species because of re-sprouting ability	Japanese stiltgrass can sustain itself as a "lawn" by producing seeds on plants that are two inches or smaller.

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Mechanical Control	pulling	PU	N/A	small woody plants and herbaceous species	Removal of entire plant by hand or use of specialized tools such as a "Weed Wrench"	Method can provide effective control; Method can be performed by volunteers	Method is extremely time consuming and ineffective when root system cannot be completely removed; Method creates soil disturbance that stimulates germination of invasive species such as garlic mustard and Japanese stiltgrass	This method should only be considered on a limited basis.
Mechanical Control	hot foam spray	HF	N/A	herbaceous species	Rental of Waipuna Hot Foam System	No herbicides are required	System rental cost is \$700/month with a two-year lease commitment and there are other related equipment costs; system can only be used within 200 feet of a vehicle that carries the specialized hot foam generator, many herbaceous plants require multiple treatments	This is an innovative system, but has significant financial and practical limitations.

¹Thinvert system involves use of specialized spray nozzles combined with a thin invert emulsion spray fluid (instead of using water to mix with herbicides). The primary advantage is less herbicide drift to non-target plants and an overall lower volume of spray required to treat a given area. Although the system is more expensive than typical spray systems, it is ultimately cost effective because of labor-savings generated through reduction of re-filling of sprayers and reduction of herbicide use by minimizing drift.

**Appendix B. Summary of Herbicide Characteristics
Mount Rose Preserve Stewardship Plan
Sources: Tu et al. 2001, CDMS 2007**

Herbicide Common Name ¹	Recommended Use Grouping ²	Examples of Trade Names	Target Species	Half-life in Soil (days)	Half-life in Water (days)	Wildlife Risk Category		Human Risk	
						Birds and Mammals	Aquatic Species	Signal Word ³	Notes
2,4-D ¹	Infrequent	Navigate, 2,4-D L.V.4 Ester, 2,4-D Amine 4, Aqua-kleen, Barrage	herbaceous broadleaf plants	10	hours to months	Moderately toxic	Not reported, but may bioaccumulate	Caution or Danger	Inconclusive evidence implicates 2,4-D as a potential endocrine disrupter; Eye and skin irritant
Clopyralid	Infrequent	Reclaim, Curtail, Transline, Stinger, Lontrel	herbaceous broadleaf plants	40	8-40	Practically non-toxic	Low toxicity	Caution or Danger	May cause serious eye damage
Fluazifop-p-Butyl	Limited	Fusilade DX, Fusion, Ornamec, Horizon 2000	grasses	15	stable	Slight toxicity to practically non-toxic	High toxicity	Caution	Eye and nasal irritant - toxic if inhaled
Fosamine	Limited	Krenite S	woody plants, some herbaceous broadleaf plants	8	stable	Very slight toxicity	Low toxicity	Caution	Eye and skin irritant
Glyphosate ¹	Typical	Round-Up, Rodeo, Accord, Glypro, Glyphomax, Touchdown	any plant	47	12 days to 10 weeks	Low toxicity	Moderate toxicity ⁴	Caution	Eye and skin irritant
Hexazinone	Infrequent	Velpar L	herbaceous broadleaf plants, some grasses & some woody plants	90	3 days to 9 months	Low toxicity	Slight toxicity	Danger	May cause serious eye damage
Imazapic	Infrequent	Plateau, Cadre	some grasses, some herbaceous broadleaf plants	120-140	< 8 hours	Low toxicity	Moderate toxicity	Caution	Eye and skin irritant
Imazapyr ¹	Limited	Arsenal, Chopper, Stalker, Habitat	any plant	24-141	2 days	Low toxicity	Low toxicity	Caution	Eye and skin irritant

**Appendix B. Summary of Herbicide Characteristics
Mount Rose Preserve Stewardship Plan**

Sources: Tu et al. 2001, CDMS 2007

Herbicide Common Name ¹	Recommended Use Grouping ²	Examples of Trade Names	Target Species	Half-life in Soil (days)	Half-life in Water (days)	Wildlife Risk Category		Human Risk	
						Birds and Mammals	Aquatic Species	Signal Word ³	Notes
Picloram	Typical	Tordon K, Tordon 22K, Grazon PC	herbaceous broadleaf plants, woody plants	90	2-3 days	Slight toxicity to practically non-toxic	Slight to moderate toxicity	Caution	Eye and skin irritant
Sethoxydim	Limited	Poast, Torpedo, Ultima, Vantage, Conclude	grasses	5	hours in sunlight	Slight toxicity	Slight toxicity	Warning	Eye and skin irritant
Triclopyr	Typical	Garlon 3A, Garlon 4, Remedy, Pathfinder II, Crossbow	herbaceous broadleaf plants, woody plants	30	4 days	Slight toxicity	Slight toxicity	Caution or Danger	Garlon 3A can cause severe eye damage and is labeled "Danger"; Most other formulations are labeled "Caution"

¹ Denotes that some formulations of this herbicide are registered for aquatic applications.

² Groupings were based upon risks to humans or wildlife, relative cost compared to other similarly effective products and frequency of use by natural area managers.

³ Signal Words include "Danger" (highly toxic or highly corrosive), "Warning" (moderately toxic) and "Caution" (slightly toxic or relatively non-toxic). Please note that signal words are assigned to specific formulations and may vary within particular herbicide common names (CDMS 2007).

⁴ Glyphosate is essentially non-toxic when using aquatic formulations (e.g., Rodeo with a surfactant registered for aquatic applications).

Appendix C. Invasive Plant Species Phenology¹ and Treatment Recommendations
 Mount Rose Preserve Stewardship Plan

period of flowering
 period of flowering and fruiting
 period of ripe fruit availability

Utilize phenology for control guidance timelines - this is particularly critical for annual and biennial plants.

Scientific Name	Common Name	Current Abundance / Distribution Code	Treatment Options - See NJISST Herbicide Use Suggestions and Mixing Guide for details	January	February	March	April	May	June	July	August	September	October	November	December
<i>Ailanthus altissima</i>	tree-of-heaven	Widespread	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
<i>Alliaria petiolata</i>	garlic mustard	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); BIENNIAL SPECIES - Must treat before fruit/seed maturation (See phenology guidelines); Treatment recommended from Mid Fall through Late Winter to avoid damaging most native species												
<i>Aralia elata</i>	Japanese angelica tree	Stage 3	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
<i>Artemisia vulgaris</i>	mugwort	Widespread	Foliar Spray: FS-7 (Aminopyralid 0.27%); Apply in early summer; mowing may be utilized as a pre-treatment, but allow 4-8 weeks for re-growth before utilizing FS												
<i>Arthraxon hispidus</i>	small carpetgrass	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Foliar Spray: FS-8 (Quizalofop 0.38%); Pre-Emergent Spray: PE-1 (Proflaminate - See Label Instructions); ANNUAL SPECIES - Must treat before fruit/seed maturation (See phenology guidelines).												
<i>Berberis thunbergii</i>	Japanese barberry	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Cut Stump: CS-1 (Glyphosate 50%)												
<i>Catalpa bignonioides</i>	Southern Catalpa	NA	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												

Appendix C. Invasive Plant Species Phenology¹ and Treatment Recommendations
 Mount Rose Preserve Stewardship Plan

period of flowering
 period of flowering and fruiting
 period of ripe fruit availability

Utilize phenology for control guidance timelines - this is particularly critical for annual and biennial plants.

Scientific Name	Common Name	Current Abundance / Distribution Code	Treatment Options - See NJISST Herbicide Use Suggestions and Mixing Guide for details	January	February	March	April	May	June	July	August	September	October	November	December
Celastrus orbiculatus	Oriental bittersweet	Widespread	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); VINE SPECIES; Pre-treatment cutting recommended when tall/dense/multi-stem tangles prohibit safe application via FS.												
Cirsium arvense	Canada thistle	Widespread	Foliar Spray: FS-6 (Clopyralid 0.63%)												
Elaeagnus angustifolia	Russian olive	Stage 0	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
Euonymus alatus	winged burning bush	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Cut Stump: CS-1 (Glyphosate 50%)												
Hedera helix	English ivy	Stage 3	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Pre-treatment cutting recommended when tall/dense/multi-stem tangles prohibit safe application via FS; Species has thick/waxy leaves, utilize Clean Cut surfactant or equivalent												
Hosta ventricosa	blue plantain lily	Stage 1	Foliar Spray: FS-2 (Glyphosate 3.00%)												
Lespedeza cuneata	sericea lespedeza	Stage 3	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Metsulfuron (0.25%) should be considered an alternate method that is effective on species of the bean family.												
Ligustrum obtusifolium	border privet	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Cut Stump: CS-1 (Glyphosate 50%)												
Lonicera japonica	Japanese honeysuckle	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Cut Stump: CS-1 (Glyphosate 50%)												
Lonicera maackii	Amur honeysuckle	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Cut Stump: CS-1 (Glyphosate 50%)												
Lonicera morrowii	Morrow's honeysuckle	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Cut Stump: CS-1 (Glyphosate 50%)												

Appendix C. Invasive Plant Species Phenology¹ and Treatment Recommendations
 Mount Rose Preserve Stewardship Plan

period of flowering
 period of flowering and fruiting
 period of ripe fruit availability

Utilize phenology for control guidance timelines - this is particularly critical for annual and biennial plants.

Scientific Name	Common Name	Current Abundance / Distribution Code	Treatment Options - See NJISST Herbicide Use Suggestions and Mixing Guide for details	January	February	March	April	May	June	July	August	September	October	November	December
<i>Malus toringo</i>	Japanese crabapple	Stage 3	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
<i>Microstegium vimineum</i>	Japanese stiltgrass	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Foliar Spray: FS-8 (Quizalofop 0.38%); Pre-Emergent Spray: PE-1 (Prodiamine - See Label Instructions); ANNUAL SPECIES - Must treat before fruit/seed maturation (See phenology guidelines).												
<i>Phalaris arundinacea</i>	reed canarygrass	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Seek aquatic application permit and use wetlands appropriate herbicides and surfactants; mowing or grazing may be considered as a pre-treatment												
<i>Photinia villosa</i>	Oriental photinia	Stage 3	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
<i>Phragmites australis</i>	common reed	Widespread	Foliar Spray: FS-3 (Glyphosate 5.00%); Seek aquatic application permit and use wetlands appropriate herbicides and surfactants.												
<i>Picea abies</i>	Norway spruce	NA	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture)												
<i>Polygonum perfoliata</i>	mile-a-minute vine	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%); Pre-Emergent Spray: PE-1 (Prodiamine - See Label Instructions); NJDA has released biological control agents that may ultimately provide effective control - additional control measures recommended for new, small populations only; ANNUAL SPECIES - Must treat before fruit/seed maturation (See phenology guidelines).												

Appendix C. Invasive Plant Species Phenology¹ and Treatment Recommendations
 Mount Rose Preserve Stewardship Plan

period of flowering
 period of flowering and fruiting
 period of ripe fruit availability

Utilize phenology for control guidance timelines - this is particularly critical for annual and biennial plants.

Scientific Name	Common Name	Current Abundance / Distribution Code	Treatment Options - See NJISST Herbicide Use Suggestions and Mixing Guide for details	January	February	March	April	May	June	July	August	September	October	November	December
<i>Pyrus calleryana</i>	Callery pear (Bradford pear)	Stage 3	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
<i>Robinia pseudoacacia</i>	black locust	Widespread	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												
<i>Rosa multiflora</i>	multiflora rose	Widespread	Foliar Spray: FS-2 (Glyphosate 3.00%), Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); Cut Stump: CS-1 (Glyphosate 50%)												
<i>Rubus phoenicolasius</i>	wine raspberry	Widespread	Foliar Spray: FS-3 (Glyphosate 5.00%)												
Various	Cool Season Grasses	NA	Foliar Spray: FS-3 (Glyphosate 5.00%)												
<i>Viburnum dilatatum</i>	linden viburnum	Widespread	Triclopyr Amine 2.50%; Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-												
<i>Zelkova serrata</i>	Japanese zelkova	Stage 0	Foliar Spray: FS-1 (Glyphosate 3.75%, Triclopyr Amine 2.50%); Basal Bark: BB-1 (Triclopyr Ester 25% OR Pathfinder II ready-to-use mixture); STRONGLY RE-SPROUTING SPECIES (CUTTING NOT RECOMMENDED); For BB, apply from July through September to enhance effectiveness												

Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

Question #1.

Mount Rose Preserve Public Survey

Please provide the zip code where you live (required to continue with Answer Options	Response Count
	186
<i>answered question</i>	186
<i>skipped question</i>	0

Town	Zip Code	Number of Responses	Percentage of Responses
Berkeley Heights	07922	1	0.5
Bethlehem, PA	18017	1	0.5
Brick	08723	1	0.5
Colts Neck	07722	1	0.5
Far Hills	07931	1	0.5
Flemington	08822	1	0.5
Frenchtown	08825	1	0.5
Highland Park	08904	2	1.1
Hillsborough	08844	2	1.1
Hopewell	08525	47	25.3
Lambertville	08530	4	2.2
Oaks, PA	19456	1	0.5
Pennington	08534	62	33.3
Princeton	08540	26	14.0
Ringoes	08551	1	0.5
Skillman	08558	1	0.5
Three Bridges	08887	1	0.5
Titusville	08560	13	7.0
Trenton	08618	1	0.5
Trenton	08619	3	1.6
Trenton	08638	1	0.5
Trenton	08648	10	5.4
Trenton	08690	1	0.5
West Chester, PA	13980	1	0.5
N/A	Invalid Response	2	1.1
	Totals	186	100.0

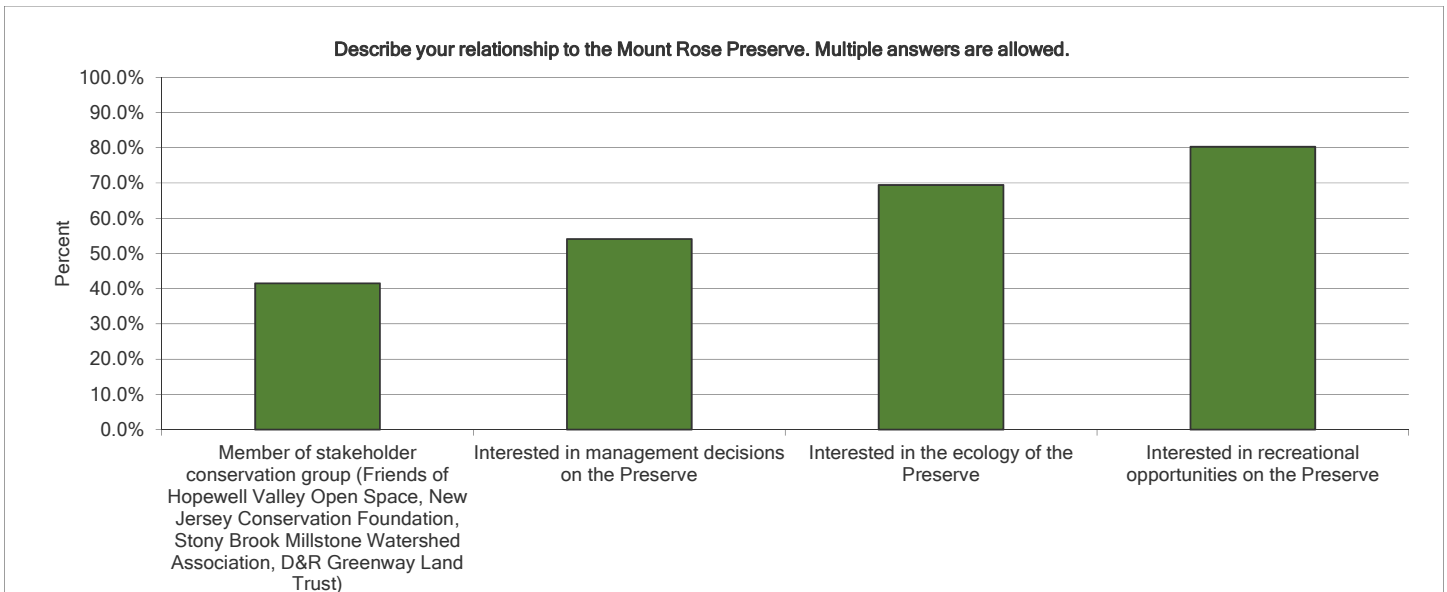
Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

Question #2.

Mount Rose Preserve Public Survey

Describe your relationship to the Mount Rose Preserve. Multiple answers are allowed.

Answer Options	Response Percent	Response Count
Member of stakeholder conservation group (Friends of Hopewell Valley Open Space, New Jersey Conservation Foundation, Stony Brook Millstone Watershed Association, D&R Greenway Land Trust)	41.5%	76
Interested in management decisions on the Preserve	54.1%	99
Interested in the ecology of the Preserve	69.4%	127
Interested in recreational opportunities on the	80.3%	147
<i>answered question</i>		183
<i>skipped question</i>		3



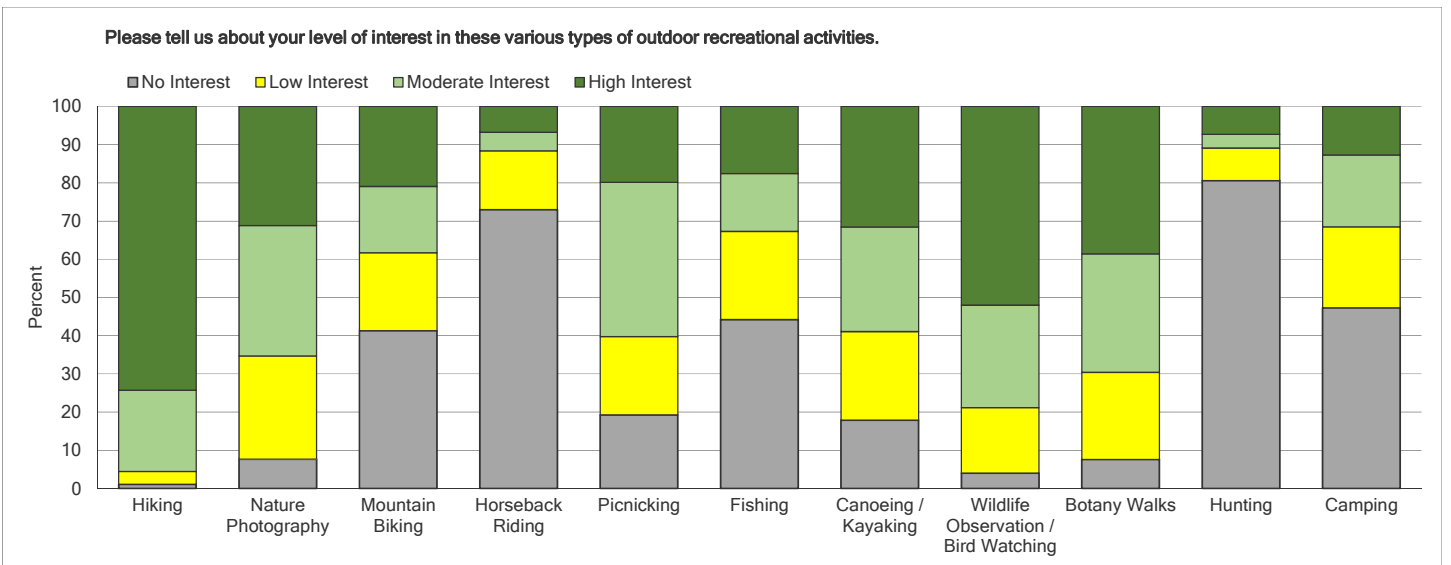
Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

Question #3.

Mount Rose Preserve Public Survey

Please tell us about your level of interest in these various types of outdoor recreational activities. This question is not specified

Answer Options	No Interest	Low Interest	Moderate Interest	High Interest	Rating Average	Response Count
Hiking	1	3	21	74	3.69	179
Nature Photography	8	27	34	31	2.89	170
Mountain Biking	41	20	17	21	2.18	167
Horseback Riding	73	15	5	7	1.45	163
Picnicking	19	20	40	20	2.61	166
Fishing	44	23	15	18	2.06	165
Canoeing / Kayaking	18	23	27	32	2.73	168
Wildlife Observation / Bird Watching	4	17	27	52	3.27	175
Botany Walks	8	23	31	39	3.01	171
Hunting	81	8	4	7	1.38	165
Camping	47	21	19	13	1.97	165
<i>answered question</i>						181
<i>skipped question</i>						5

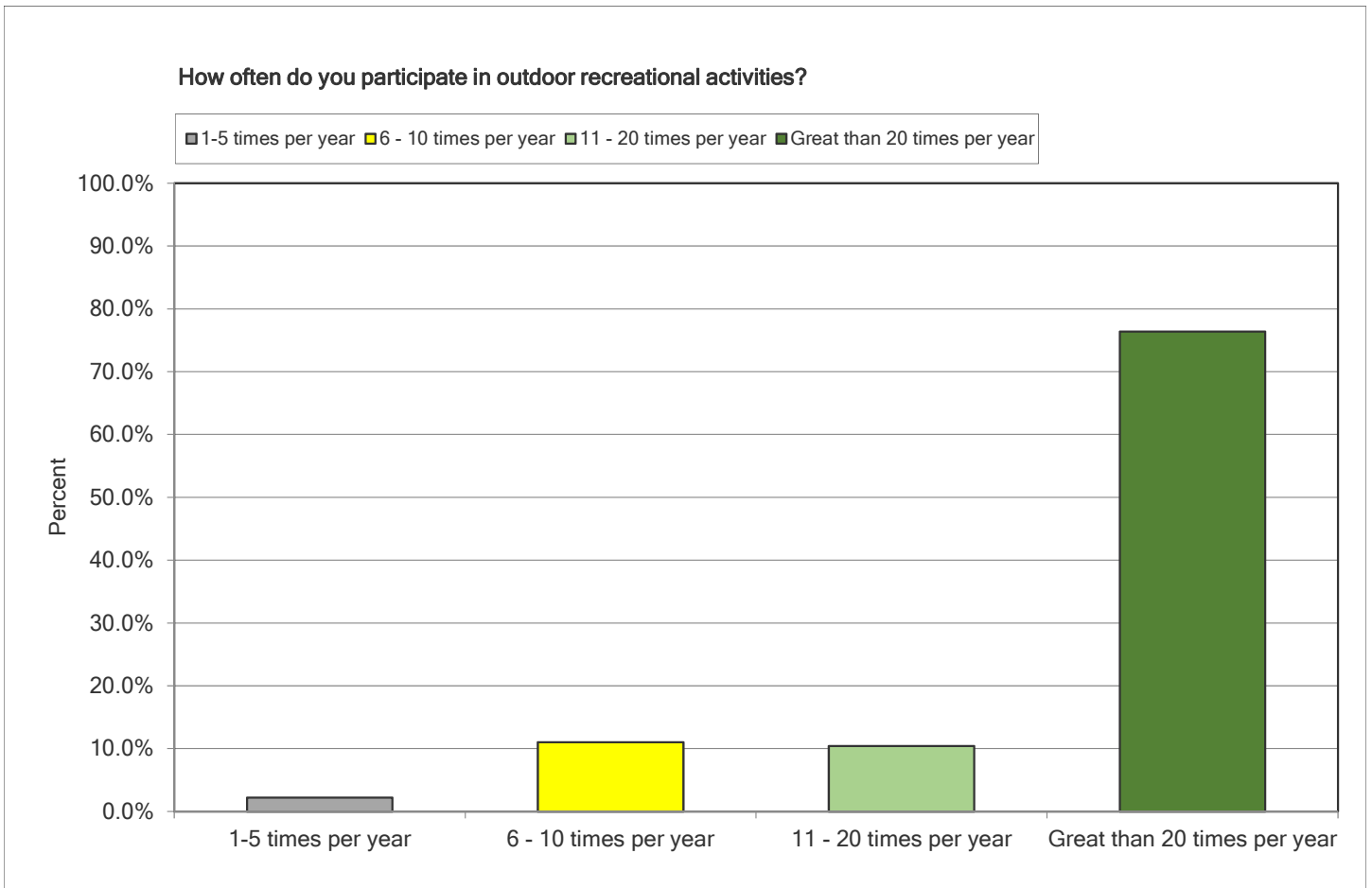


Appendix D. Public Survey
 Mount Rose Preserve Stewardship Plan

Question #4.

Mount Rose Preserve Public Survey

How often do you participate in outdoor recreational activities?		
Answer Options	Response Percent	Response Count
1-5 times per year	2.2%	4
6 - 10 times per year	11.0%	20
11 - 20 times per year	10.4%	19
Great than 20 times per year	76.4%	139
<i>answered question</i>		182
<i>skipped question</i>		4



Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

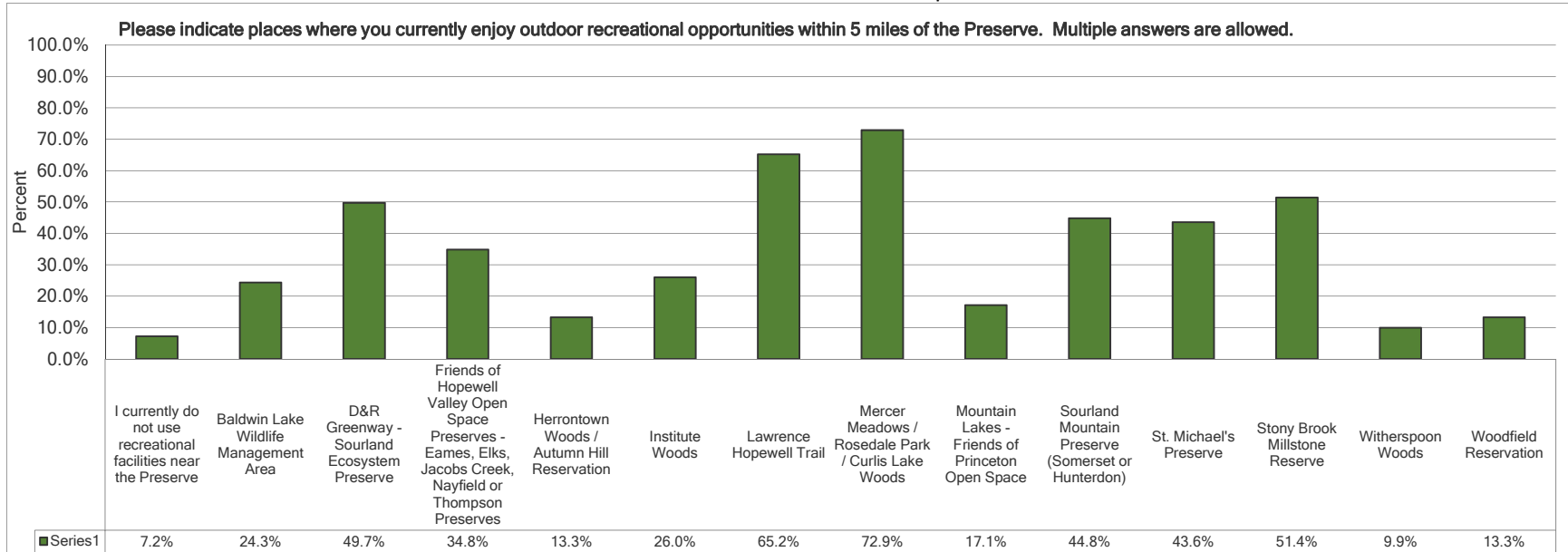
Question #5.

Mount Rose Preserve Public Survey

Please indicate places where you currently enjoy outdoor recreational opportunities within 5 miles of the Preserve. Multiple answers are allowed.

Answer Options	Response Percent	Response Count
I currently do not use recreational facilities near the Preserve	7.2%	13
Baldwin Lake Wildlife Management Area	24.3%	44
D&R Greenway - Sourland Ecosystem Preserve	49.7%	90
Friends of Hopewell Valley Open Space Preserves - Eames, Elks, Jacobs Creek, Nayfield or Thompson Preserves	34.8%	63
Herrontown Woods / Autumn Hill Reservation	13.3%	24
Institute Woods	26.0%	47
Lawrence Hopewell Trail	65.2%	118
Mercer Meadows / Rosedale Park / Curlis Lake Woods	72.9%	132
Mountain Lakes - Friends of Princeton Open Space	17.1%	31
Sourland Mountain Preserve (Somerset or Hunterdon)	44.8%	81
St. Michael's Preserve	43.6%	79
Stony Brook Millstone Reserve	51.4%	93
Witherspoon Woods	9.9%	18
Woodfield Reservation	13.3%	24
<i>answered question</i>		181
<i>skipped question</i>		5

Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan



Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

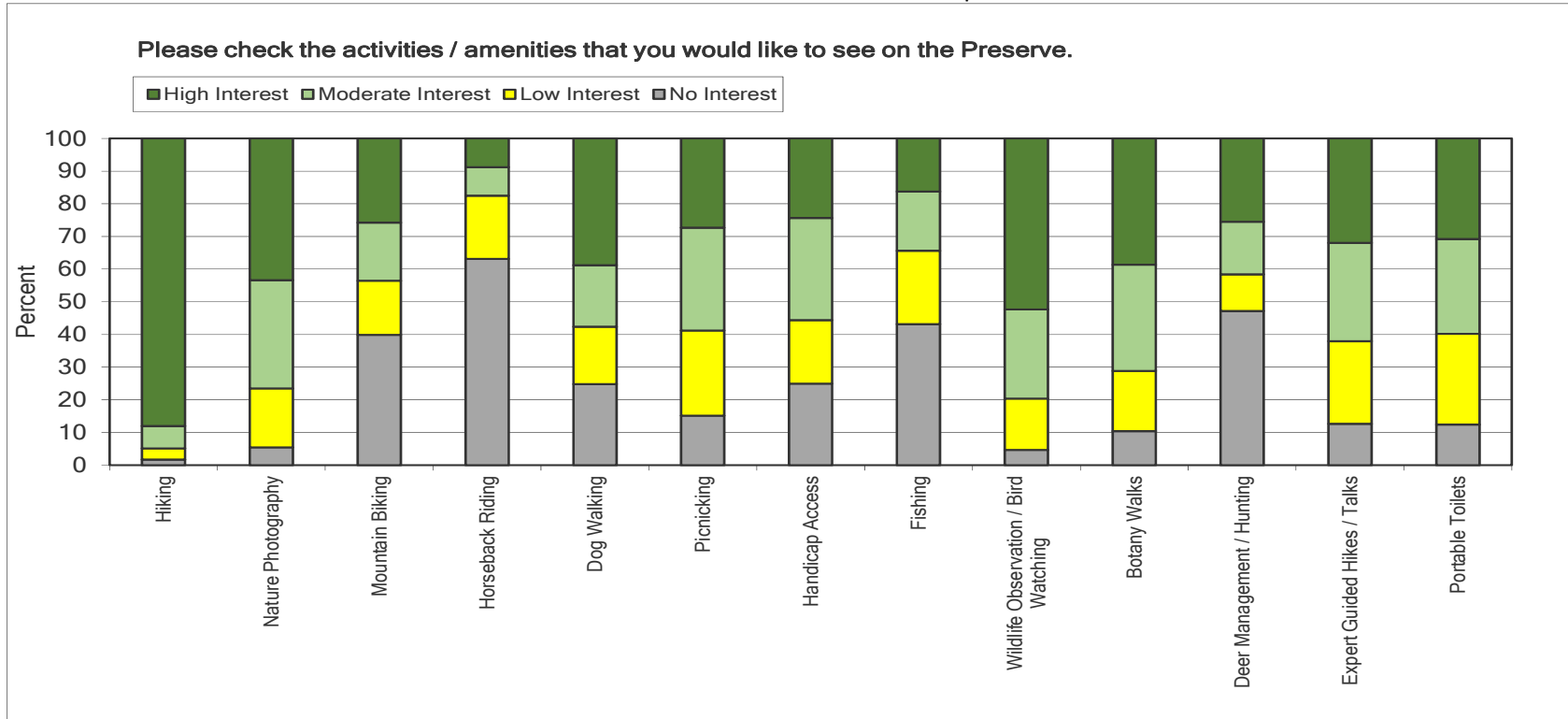
Question #6.

Mount Rose Preserve Public Survey

Please check the activities / amenities that you would like to see on the Preserve. Please feel free to list additional items under general comments later in this survey.

Answer Options	No Interest	Low Interest	Moderate Interest	High Interest	Response Count
Hiking	2	3	7	88	175
Nature Photography	5	18	33	43	166
Mountain Biking	40	17	18	26	163
Horseback Riding	63	19	9	9	160
Dog Walking	25	18	19	39	165
Picnicking	15	26	32	27	165
Handicap Access	25	19	31	24	160
Fishing	43	23	18	16	160
Wildlife Observation / Bird Watching	5	16	27	52	172
Botany Walks	10	18	33	39	163
Deer Management / Hunting	47	11	16	25	161
Expert Guided Hikes / Talks	13	25	30	32	166
Portable Toilets	12	28	29	31	169
			<i>answered question</i>		176
			<i>skipped question</i>		10

Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan



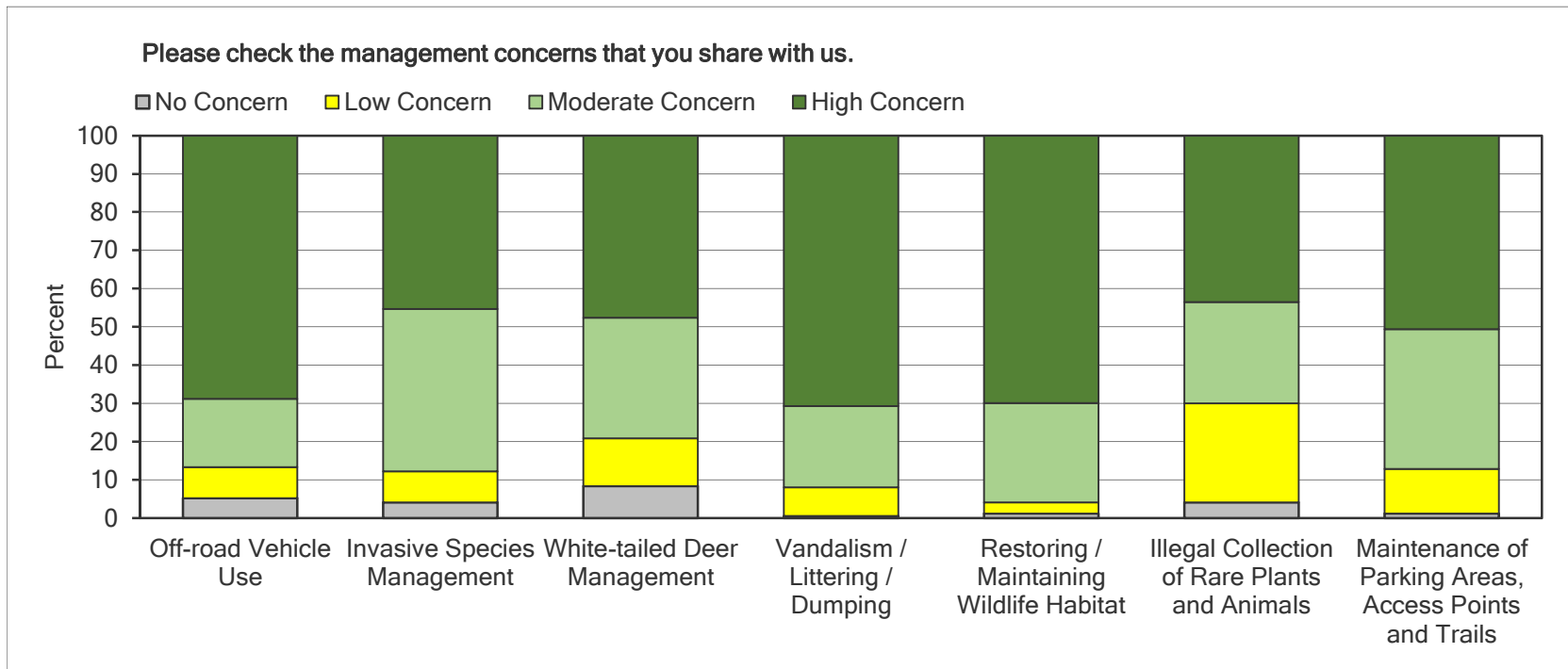
Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

Question #7.

Mount Rose Preserve Public Survey

Please check the management concerns that you share with us.

Answer Options	No Concern	Low Concern	Moderate Concern	High Concern	Rating Average	Response Count
Off-road Vehicle Use	5	8	18	69	3.50	173
Invasive Species Management	4	8	42	45	3.29	172
White-tailed Deer Management	8	13	32	48	3.18	168
Vandalism / Littering / Dumping	1	7	21	71	3.62	174
Restoring / Maintaining Wildlife Habitat	1	3	26	70	3.65	173
Illegal Collection of Rare Plants and Animals	4	26	26	44	3.09	170
Maintenance of Parking Areas, Access Points and Trail	1	12	37	51	3.37	172
<i>answered question</i>						176
<i>skipped question</i>						10



Appendix D. Public Survey
Mount Rose Preserve Stewardship Plan

Question #8.

Mount Rose Preserve Public Survey

Please use this space to make any additional comments about past, present, or future management of the Preserve.

Answer Options	Response Count
	69
<i>answered question</i>	69
<i>skipped question</i>	117

Question #9.

Mount Rose Preserve Public Survey

Are you interested in volunteering to help us at the Preserve? If so, please supply your contact information below. Volunteer opportunities are

Answer Options	Response Percent	Response Count
Name	100.0%	34
Address	94.1%	32
City	94.1%	32
State	94.1%	32
Zip Code	94.1%	32
Email Address	91.2%	31
Phone Number	73.5%	25
<i>answered question</i>		34
<i>skipped question</i>		152

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

* denotes cover categories where Trace= < 1%, 1=1-10%, 2=11-25%, 3=26-50%, 4=51-75%, 5= > 75%

Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
1	3.1	Low	Wet-Moist	Forest	Red Maple	1	1	No	Yes	4	5	13	
2	0.7	Low	Wet-Moist	Meadow	NA	0	2	No	No	2	5	7	
3	0.6	Low	Wet-Moist	Forest	Red Maple	1	1	No	Yes	4	5	12	
4	1.0	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	6	5	8	
5	0.9	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	3	5	9	
6	0.5	Low	Wet-Moist	Meadow	NA	0	0	No	No	1	5	5	
7	0.9	Low	Wet-Moist	Forest	Red Maple	1	1	No	Yes	4	5	12	
8	5.7	Low	Wet-Moist	Forest	Red Maple	1	1	No	Yes	4	5	11	
9	0.4	Low	Wet-Moist	Shrubland - Woodland	Red Cedar	4	3	No	No	4	2	7	
10	1.4	Low	Wet-Moist	Woodland	Red Maple	1	1	No	No	3	4	10	
11	6.1	Low	Wet-Moist	Forest	Red Maple	0	0	No	No	4	5	8	
12	5.4	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	2	5	6	
13	1.7	Low	Wet-Moist	Forest	Red Cedar	1	1	No	No	6	3	11	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
14	1.1	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	2	5	6	
15	0.4	Low	Wet-Moist	Shrubland - Woodland	Red Cedar	4	3	No	No	4	2	7	
16	1.8	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	6	3	11	
17	4.5	Low	Wet-Moist	Forest	Red Cedar	1	1	No	No	12	4	17	
18	0.6	Moderate	Wet-Moist	Meadow	NA	0	4	No	No	1	4	4	
19	3.3	Low	Wet-Moist	Forest	Red Cedar	1	1	No	No	4	5	11	
20	2.0	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	6	4	10	
21	1.2	Moderate	Wet-Moist	Meadow	NA	0	4	No	No	1	4	4	Shrubland Restoration
22	2.8	Low	Wet-Moist	Shrubland - Woodland	Red Maple	1	1	No	No	3	4	10	Shrubland Restoration
23	1.3	Low	Wet-Moist	Shrubland - Woodland	Ash	1	3	No	No	6	3	10	Shrubland Restoration
24	6.6	Low	Wet-Moist	Shrubland - Woodland	Ash	1	3	No	No	7	5	13	Shrubland Restoration
25	3.5	Low	Wet-Moist	Meadow	NA	Trace	2	No	No	9	5	14	Meadow Restoration
26	0.3	Low	Upland	Woodland	Ash	2	1	No	No	6	2	10	
27	1.7	Low	NA	Paved	NA	0	NA	No	No	NA	NA	NA	
28	0.6	Low	NA	Paved	NA	0	NA	No	No	NA	NA	NA	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
29	2.0	Low	Upland	Shrubland	NA	2	1	No	No	7	4	14	Meadow Restoration
30	1.0	Low	Wet-Moist	Meadow	NA	0	2	No	No	9	5	14	Meadow Restoration
31	3.0	Low	Wet-Moist	Meadow	NA	0	2	No	No	9	5	14	Meadow Restoration
32	0.5	Moderate	Wet-Moist	Meadow	NA	0	4	No	No	1	5	5	Meadow Restoration
33	1.5	Low	Upland	Shrubland	NA	0	2	No	No	5	5	12	
34	1.7	Low	Upland	Forest	Ash	1	1	No	Yes	6	5	13	
35	2.7	Low	Wet-Moist	Woodland	Red Maple	1	2	No	No	10	5	18	
36	1.1	Low	Upland	Forest	Ash	1	1	No	No	8	3	15	
37	1.0	Moderate	Wet-Moist	Meadow	NA	0	4	No	No	6	2	7	
38	1.0	Low	Wet-Moist	Meadow	NA	0	4	No	No	6	5	12	Meadow Restoration
39	2.8	Low	Wet-Moist	Forest	Ash	2	2	No	No	7	4	16	
40	2.5	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	4	4	8	
41	2.4	Low	Wet-Moist	Forest	Red Cedar	1	1	No	No	4	5	9	
42	0.1	Low	Upland	Woodland	Red Cedar	0	1	No	No	4	4	10	
43	1.1	Low	Wet-Moist	Forest	Shagbark Hickory	2	1	No	No	5	3	10	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
44	2.8	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	4	5	9	
45	0.3	Low	Wet-Moist	Meadow	NA	0	1	No	No	1	5	5	
46	5.3	Low	Wet-Moist	Forest	Ash	0	0	No	No	1	5	5	
47	5.4	Low	Wet-Moist	Forest	Red Cedar	0	1	No	No	8	5	17	
48	1.8	Low	Wet-Moist	Forest	Ash	1	1	No	No	10	3	14	
49	0.6	Low	Upland	Meadow	NA	1	1	No	No	5	5	10	
50	2.1	Low	Wet-Moist	Forest	Pin Oak	0	1	No	No	7	5	14	
51	2.5	Low	Upland	Forest	Red Cedar	1	1	No	No	5	5	7	
52	2.8	Low	Upland	Forest	Red Cedar	1	1	No	No	7	5	8	
53	0.0	Low	Upland	Meadow	NA	0	1	No	No	2	5	7	
54	6.5	Low	Upland	Forest	Ash	1	1	No	No	7	5	14	
55	0.5	Low	Wet-Moist	Forest	Pin Oak	0	1	No	No	7	5	14	
56	0.2	Low	Wet-Moist	Shrubland	NA	0	0	No	No	6	4	12	
57	0.9	Low	Upland	Forest	Sweet Birch	0	Trace	No	No	5	4	15	
58	3.0	Low	Upland	Forest	Ash	1	1	No	No	3	5	8	
59	3.2	Low	Upland	Shrubland - Woodland	Red Cedar	2	1	No	No	4	5	10	
60	1.5	Moderate	Upland	Shrubland - Woodland	Red Cedar	1	4	No	No	2	4	6	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
61	0.8	Low	Wet-Moist	Meadow	NA	0	2	No	No	9	5	14	Meadow Restoration
62	1.0	Moderate	Upland	Shrubland	NA	4	2	No	No	4	5	9	Meadow Restoration
63	11.4	Low	NA	Disturbed Area	NA	NA	NA	No	No	NA	NA	NA	Meadow Restoration
64	0.4	Low	Wet-Moist	Shrubland	NA	1	1	No	No	5	4	10	Shrubland Restoration
65	0.3	Moderate	Wet-Moist	Meadow	NA	2	4	No	No	3	2	4	Shrubland Restoration
66	1.8	Low	Upland	Shrubland	NA	3	3	No	No	7	4	17	Shrubland Restoration
67	0.8	Low	Wet-Moist	Woodland	Red Cedar	1	3	No	No	4	5	10	
68	8.6	Low	Upland	Woodland	Ash	2	1	No	No	7	5	13	
69	0.7	High	Wet-Moist	Meadow	NA	2	5	No	No	1	3	3	
70	30.8	High	Wet-Moist	Forest	White Oak	1	4	No	No	3	2	4	Forest Maintenance and Restoration
71	0.4	Moderate	Upland	Shrubland	NA	2	1	No	No	4	3	6	Forest Maintenance and Restoration
72	12.7	Low	Wet-Moist	Shrubland	NA	1	3	No	No	6	4	14	Shrubland Restoration
73	0.1	Low	NA	Pond	NA	0	NA	No	No	NA	NA	NA	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
74	0.1	Low	Wet-Moist	Meadow	NA	0	1	No	No	3	5	9	
75	1.8	Moderate	Wet-Moist	Forest	White Oak	1	4	No	No	3	2	4	
76	3.2	Low	Wet-Moist	Forest	Ash	1	1	No	No	7	3	11	
77	10.9	High	Upland	Forest	Sugar Maple	2	0	No	No	2	3	4	Forest Maintenance and Restoration
78	14.3	High	Upland	Forest	Beech	2	1	No	No	3	1	1	Forest Maintenance and Restoration
79	1.0	Moderate	Wet-Moist	Forest	Sugar Maple	0	0	No	No	4	5	8	
80	4.2	Moderate	Upland	Forest	Sugar Maple	1	1	No	No	3	5	6	
81	8.8	Low	Wet-Moist	Forest	Ash	1	1	No	No	6	5	13	
82	0.4	Low	Upland	Forest	Red Cedar	1	1	No	No	6	5	16	
83	0.1	Low	Wet-Moist	Meadow	NA	0	0	No	No	2	5	8	
84	0.0	Low	Wet-Moist	Meadow	NA	0	0	No	No	2	5	8	
85	2.0	Low	Wet-Moist	Woodland	NA	0	Trace	No	No	3	5	6	
86	10.7	Low	Upland	Forest	Red Cedar	1	1	No	No	5	5	7	
87	1.6	Low	Upland	Forest	Red Cedar	Trace	1	No	No	5	5	11	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
88	10.9	Low	Upland	Forest	Red Cedar	1	1	No	No	7	5	8	
89	1.8	Low	Wet-Moist	Woodland	Red Cedar	1	3	No	No	5	5	9	
90	7.3	Low	Wet-Moist	Woodland	Red Maple	1	1	No	No	5	5	9	
91	0.2	Low	Upland	Shrubland	NA	1	1	No	No	2	5	7	
92	0.1	Low	Upland	Meadow	NA	0	1	No	No	3	5	8	
93	0.1	Low	Upland	Woodland	Red Cedar	2	2	No	No	1	5	5	
94	1.1	Low	Upland	Woodland	NA	0	1	No	No	4	5	9	
95	0.4	Low	Wet-Moist	Meadow	NA	0	1	No	No	1	5	5	
96	1.4	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	7	5	8	
97	2.1	Low	Upland	Forest	Ash	1	1	No	No	6	4	15	
98	1.3	Low	Upland	Forest	Red Maple	0	0	No	Yes	5	4	11	
99	1.8	Low	Upland	Shrubland	NA	4	0	No	No	5	2	10	
100	1.5	Low	Upland	Forest	Ash	1	1	No	No	6	4	15	
101	0.5	Low	Wet-Moist	Shrubland	NA	2	2	No	No	7	4	13	
102	0.4	Moderate	Upland	Shrubland	NA	3	3	No	No	5	4	9	
103	0.2	Low	Wet-Moist	Meadow	NA	1	1	No	No	4	5	10	
104	1.8	Low	Upland	Forest	Ash	1	1	No	No	6	4	15	
105	1.9	Low	Wet-Moist	Forest	Red Maple	Trace	2	No	No	2	4	7	
106	1.4	Low	Upland	Forest	Ash	1	1	No	No	6	4	15	

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Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
107	0.4	Low	Wet-Moist	Meadow	NA	1	1	No	No	2	5	7	
108	0.4	Low	Wet-Moist	Forest	Red Maple	0	0	No	No	2	5	7	
109	0.4	Low	Wet-Moist	Meadow	NA	0	1	No	No	2	5	6	
110	0.6	Low	Wet-Moist	Forest	Red Maple	1	3	No	No	4	5	11	
111	0.7	Low	Wet-Moist	Shrubland	NA	2	2	No	No	7	5	19	
112	2.6	Low	Wet-Moist	Forest	Red Maple	0	0	No	No	3	5	11	
113	2.9	Low	Upland	Forest	Tulip Poplar	1	2	No	No	6	4	10	
114	0.5	Low	Upland	Forest	Ash	2	1	No	No	6	4	12	
115	0.9	Moderate	Upland	Forest	Beech	2	1	No	No	6	3	8	
116	0.9	Moderate	Upland	Forest	Tulip Poplar	1	1	No	No	5	3	9	
117	1.4	Low	Upland	Forest	Tulip Poplar	0	2	No	No	4	5	8	
118	0.9	Low	Upland	Forest	Tulip Poplar	0	0	No	No	6	5	13	
119	0.5	Low	Wet-Moist	Shrubland	NA	1	1	No	No	8	5	17	
120	0.6	Low	Upland	Meadow	NA	0	0	No	No	1	5	5	

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
121	2.3	Moderate	Upland	Forest	Beech	1	1	No	No	6	2	5	Forest Maintenance and Restoration
122	0.1	Moderate	Upland	Shrubland	NA	1	Trace	No	No	4	2	8	
123	0.4	Moderate	Wet-Moist	Shrubland	NA	3	4	No	No	3	5	8	
124	0.5	Low	Wet-Moist	Forest	Tulip Poplar	0	2	No	No	3	5	7	
125	0.6	High	Upland	Forest	Beech	2	0	No	No	1	0	0	Forest Maintenance and Restoration
126	0.2	Low	Upland	Forest	Ash	1	0	No	No	3	5	7	
127	1.4	High	Upland	Forest	Beech	0	Trace	No	No	1	0	0	Forest Maintenance and Restoration
128	0.4	High	Upland	Forest	Beech	2	0	No	No	1	0	0	Forest Maintenance and Restoration
129	0.7	Moderate	Upland	Forest	Beech	1	1	No	No	6	2	5	Forest Maintenance and Restoration
130	1.3	Low	Upland	Forest	Ash	1	0	No	No	3	5	7	
131	0.9	Low	Upland	Forest	Ash	1	0	No	Yes	6	5	12	
132	0.8	Low	Upland	Forest	Shagbark Hickory	0	1	No	No	3	3	7	
133	1.4	Low	Upland	Forest	Ash	1	0	No	Yes	6	5	12	
134	0.5	Low	Upland	Forest	Ash	1	0	No	No	3	5	7	

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Mount Rose Preserve Stewardship Plan

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Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
135	2.1	Low	Wet-Moist	Shrubland	NA	2	2	No	No	7	5	19	
136	2.0	Low	Upland	Forest	Ash	1	1	No	No	9	5	15	
137	3.6	Low	Upland	Woodland	Ash	1	1	No	No	8	5	15	
138	0.5	Low	Wet-Moist	Meadow	NA	2	2	No	No	5	5	11	
139	0.3	Low	Wet-Moist	Meadow	NA	1	3	No	No	5	4	9	
140	1.2	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	3	5	8	
141	0.2	Low	Upland	Forest	Tulip Poplar	0	0	No	No	5	4	6	
142	2.3	Low	Wet-Moist	Forest	Red Maple	0	0	No	No	6	5	11	
143	1.9	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	4	5	11	
144	1.4	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	4	5	11	
145	1.2	Low	Upland	Forest	Norway Spruce	1	1	No	No	6	4	8	
146	4.1	Low	Wet-Moist	Woodland	Black Locust	1	1	No	No	6	5	15	
147	0.6	Low	Upland	Lawn	NA	0	0	No	No	1	5	5	
148	2.2	Low	Wet-Moist	Forest	Red Maple	1	0	No	No	3	5	7	
149	0.4	Low	Wet-Moist	Forest	Red Maple	2	0	No	No	4	5	13	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

* denotes cover categories where Trace= < 1%, 1=1-10%, 2=11-25%, 3=26-50%, 4=51-75%, 5= > 75%

Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
150	1.8	Low	Upland	Woodland	Ash	2	1	No	Yes	5	4	13	
151	0.2	Low	Wet-Moist	Meadow	NA	0	2	No	No	2	5	7	
152	0.8	Low	Wet-Moist	Shrubland	NA	2	1	No	No	3	5	8	
153	1.5	Low	Wet-Moist	Forest	Red Maple	1	0	No	No	6	5	14	
154	0.9	Low	Upland	Woodland	Ash	2	1	No	Yes	5	4	13	
155	0.2	Low	Wet-Moist	Meadow	NA	1	2	No	No	3	3	5	
156	0.6	Low	Wet-Moist	Woodland	Pin Oak	1	0	No	No	4	5	10	
157	0.6	Low	Upland	Forest	Red Cedar	0	0	No	No	4	5	10	
158	2.8	Low	Wet-Moist	Forest	Red Maple	1	0	No	No	6	5	12	
159	9.6	Low	Wet-Moist	Meadow	NA	0	2	No	No	4	5	9	Meadow Restoration
160	2.4	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	2	5	7	
161	3.5	High	Upland	Forest	Beech	1	1	No	No	2	0	0	Forest Maintenance and Restoration
162	1.8	Low	Wet-Moist	Shrubland	NA	1	2	No	No	9	4	15	
163	1.2	High	Upland	Forest	Beech	2	0	No	No	1	0	0	Forest Maintenance and Restoration

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

* denotes cover categories where Trace= < 1%, 1=1-10%, 2=11-25%, 3=26-50%, 4=51-75%, 5= > 75%

Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
164	1.6	High	Upland	Forest	Beech	1	1	No	No	3	1	1	
165	0.5	Low	Wet-Moist	Meadow	NA	0	0	No	No	3	5	7	
166	0.1	Low	Upland	Forest	Beech	0	0	No	No	2	4	5	
167	0.9	Low	Wet-Moist	Forest	Red Maple	0	1	No	No	2	5	6	
168	0.6	Low	Wet-Moist	Woodland	Tulip Poplar	0	0	No	No	1	5	5	
169	0.4	High	Upland	Forest	Beech	1	1	No	No	2	0	0	
170	0.1	Low	Upland	Meadow	NA	0	0	No	No	1	5	5	
171	0.5	Low	Wet-Moist	Shrubland	NA	1	1	No	No	5	5	10	
172	0.3	Low	Wet-Moist	Forest	Red Maple	1	1	No	No	5	5	9	
173	5.6	Moderate	Wet-Moist	Meadow	NA	Trace	5	No	No	7	4	10	Shrubland Guided
174	0.7	Moderate	Wet-Moist	Woodland	Red Maple	3	3	No	No	3	2	4	
175	3.7	Low	Upland	Meadow	NA	0	2	No	No	2	5	7	Shrubland Guided
176	1.3	Low	Upland	Meadow	NA	0	2	No	No	1	5	5	Shrubland Guided
177	0.9	Low	Wet-Moist	Meadow	NA	1	3	No	No	8	3	12	Shrubland Guided
178	3.2	Low	Upland	Woodland	White Pine	1	1	No	No	6	4	13	
179	1.2	Moderate	Wet-Moist	Meadow	NA	1	5	No	No	6	4	10	
180	1.8	Low	Wet-Moist	Meadow	NA	1	1	No	No	6	4	11	

Appendix E. Ecological Community Patch Information
Mount Rose Preserve Stewardship Plan

* denotes cover categories where Trace= < 1%, 1=1-10%, 2=11-25%, 3=26-50%, 4=51-75%, 5= > 75%

Patch ID	Patch Acres	Relative Quality Category	Soil Moisture Category	Broad Community Type	Dominant Tree Species	Native Shrub Cover*	Native Herb Cover*	Native Tree Regeneration Present	Ash Decline Present	Invasive Species - # of Species	Invasive Species - Maxium Cover of Single Species*	Invasive Species - Sum of Cover Classes	Restoration Type
181	1.1	Low	Upland	Shrubland	NA	1	1	No	No	5	5	12	Shrubland Guided
182	2.5	Low	Upland	Woodland	Black Cherry	1	1	No	No	7	5	15	
183	0.6	Low	Wet-Moist	Forest	Red Maple	1	2	No	No	5	4	12	
184	3.4	Low	Wet-Moist	Forest	Red Maple	0	0	No	No	6	4	11	

Appendix F. Plant Species List		
Mount Rose Preserve Stewardship Plan		
Compiled by Washington Crossing Audubon Society		
Growth Form	Scientific Name	Common Name
Fern	<i>Asplenium platyneuron</i>	Ebony Spleenwort
Fern	<i>Dryopteris spinulosa</i>	Spinulose Wood Fern
Fern	<i>Onoclea sensibilis</i>	Sensitive Fern
Fern	<i>Polystichum acrostichoides</i>	Christmas Fern
Fern	<i>Thelypteris noveboracensis</i>	New York Fern
Graminoid	<i>Andropogon virginicus</i>	Broom Sedge
Graminoid	<i>Anthoxanthum odoratum</i>	Sweet Vernal Grass
Graminoid	<i>Anthraxon hispidus</i>	Carp Grass*
Graminoid	<i>Carex pensylvanica</i>	Pennsylvania Sedge
Graminoid	<i>Erogrostis spectabilis</i>	Purple Love Grass
Graminoid	<i>Festuca sp.</i>	lawn grass, Fescue
Graminoid	<i>Microstegium vinimum</i>	Stilt Grass*
Graminoid	<i>Panicum lanuginosum</i>	Deer Tongue Grass
Graminoid	<i>Phalaris arundinacea</i>	Reed Canary Grass
Graminoid	<i>Setaria geniculatum</i>	Bristly Foxtail*
Graminoid	<i>Setaria glauca</i>	Yellow Foxtail
Graminoid	<i>Sorghastrum nutans</i>	Indian Grass
Graminoid	<i>Typha latifolia</i>	Common Cattail
Herb	<i>Agrimony parviflora</i>	Small-flowered Agrimony
Herb	<i>Alliaria officinalis</i>	Garlic Mustard* INVASIVE
Herb	<i>Ambrosia artemisiifolia</i>	Common Ragweed
Herb	<i>Apocynum androsaemifolium</i>	Spreading Dogbane
Herb	<i>Archillea millefolium</i>	Yarrow*
Herb	<i>Artemisia vulgaris</i>	Common Mugwort
Herb	<i>Asclepias incarnata</i>	Swamp Milkweed
Herb	<i>Asclepias syriac</i>	Common Milkweed
Herb	<i>Barbarea Vulgaris</i>	Wintercress*
Herb	<i>Bidens laevis</i>	Larger Bur Marigold
Herb	<i>Cardamine parviflora</i>	Small-flowered Bittercress
Herb	<i>Cirsium arvense</i>	Canada Thistle*
Herb	<i>Cirsium discolor</i>	Field Thistle
Herb	<i>Cirsium pumilum</i>	Pasture Thistle
Herb	<i>Cirsium vulgare</i>	Bull Thistle*
Herb	<i>Claytonia virginica</i>	Spring Beauty
Herb	<i>Dacnis carota</i>	Queen Anne's Lace*
Herb	<i>Epifagus virginiana</i>	Beechdrops
Herb	<i>Erechtites hieracifolia</i>	Pilewort
Herb	<i>Erigeron annuus</i>	Daisy Fleabane
Herb	<i>Erigeron canadensis</i>	Horseweed
Herb	<i>Erythronium americanum</i>	Trout Lily
Herb	<i>Eupatorium rugosum</i>	White Snakeroot
Herb	<i>Euthamia graminifolia</i>	Grass-leaved Goldenrod
Herb	<i>Galium aparine</i>	Cleavers
Herb	<i>Gonaphalium obtusifolium</i>	Sweet Everlasting
Herb	<i>Impatiens capensis</i>	Spotted Jewelweed

Appendix F. Plant Species List		
Mount Rose Preserve Stewardship Plan		
Compiled by Washington Crossing Audubon Society		
Growth Form	Scientific Name	Common Name
Herb	<i>Linaria vulgaris</i>	Butter and Eggs*
Herb	<i>Lotus corniculatus</i>	Birdsfoot trefoil
Herb	<i>Oxalis europaea</i>	European Sorrel*
Herb	<i>Phytolacca americana</i>	Pokeweed
Herb	<i>Phytolacca americana</i>	Pokeweed
Herb	<i>Pilea pumila</i>	Clearweed
Herb	<i>Plantago lanceolata</i>	English Plantain
Herb	<i>Podophyllum peltatum</i>	May-apple
Herb	<i>Polygonum aviculare</i>	Doorweed*, Common Knotgrass
Herb	<i>Polygonum hydropiper</i>	Common Smartweed
Herb	<i>Polygonum pensylvanicum</i>	Pinkweed
Herb	<i>Polygonum sagittatum</i>	Arrow-leaved Tearthumb
Herb	<i>Potentilla canadensis</i>	Dwarf Cinquefoil
Herb	<i>Pycnanthemum tenuifolium</i>	Narrow-leaved Mountain Mint
Herb	<i>Ranunculus abortivus</i>	Small-flowered Crowfoot
Herb	<i>Ranunculus ficaria</i>	Lesser Celandine* INVASIVE
Herb	<i>Rubus allegheniensis</i>	Common Blackberry
Herb	<i>Rubus sp.</i>	Blackberry, prostrate, creeping
Herb	<i>Senecio vulgaris</i>	Common Groundsel*
Herb	<i>Simplocarpus foetidis</i>	Skunk Cabbage (in leaf)
Herb	<i>Smilacina racemosa</i>	False Solomon's Seal
Herb	<i>Solanum carolinense</i>	Horse Nettle
Herb	<i>Solidago altissima</i>	Tall Goldenrod
Herb	<i>Solidago canadensis</i>	Canada Goldenrod
Herb	<i>Solidago patula</i>	Rough-leaved Goldenrod
Herb	<i>Solidago rugosa</i>	Rough-stemmed Goldenrod
Herb	<i>Stellaria media</i>	Common Chickweed*
Herb	<i>Symphiotrichum divaricatus</i>	White Wood Aster
Herb	<i>Symphiotrichum lateriflorus</i>	Calico Aster
Herb	<i>Symphiotrichum novae-angliae</i>	New-England Aster
Herb	<i>Symphiotrichum pilosus</i>	Heath Aster
Herb	<i>Symphiotrichum viminalis</i>	Small White Aster
Herb	<i>Taraxacum erythrospermum</i>	Red-seeded Dandelion
Herb	<i>Verbascum thapsus</i>	Common Mullein*
Herb	<i>Viola affinis</i>	Pale Early Violet
Shrub	<i>Amelanchier Sp.</i>	Shadbush
Shrub	<i>Berberis thunbergii</i>	Japanese Barberry*
Shrub	<i>Elaeagnus umbellatum</i>	Autumn Olive*
Shrub	<i>Hamamelis virginiana</i>	Witch Hazel
Shrub	<i>Ligustrum spp.</i>	Privet*
Shrub	<i>Malus sp.</i>	Crabapple
Shrub	<i>Myrica Sp.</i>	Bayberry
Shrub	<i>Rosa multiflora</i>	Multiflora Rose*
Shrub	<i>Rubus phoenicolasius</i>	Wineberry*
Shrub	<i>Vaccinium sp.</i>	Low Blueberry

**Appendix G. Woody Plants of Mercer County
Mount Rose Preserve Stewardship Plan
Source: Brooklyn Botanic Garden**

Scientific Name	Common Name	Growth Type	Nativity	Invasive Status	Frequency
<i>Acer negundo</i>	boxelder	Tree	Native	N/A	Common
<i>Acer nigrum</i>	black maple	Tree	Native	N/A	Not Recorded
<i>Acer platanoides</i>	Norway maple	Tree	Non-Native	Yes	Common
<i>Acer pseudoplatanus</i>	sycamore maple	Tree	Non-Native	Yes	Frequent
<i>Acer rubrum</i>	red maple	Tree	Native	N/A	Common
<i>Acer saccharinum</i>	silver maple	Tree	Native	N/A	Frequent
<i>Acer saccharum</i>	sugar maple	Tree	Native	N/A	Common
<i>Aesculus hippocastanum</i>	horse chestnut	Tree	Non-Native	No	Not Recorded
<i>Ailanthus altissima</i>	tree-of-heaven	Tree	Non-Native	Yes	Common
<i>Albizia julibrissin</i>	mimosa	Tree	Non-Native	No	Frequent
<i>Alnus glutinosa</i>	black alder	Tree	Non-Native	Yes	Occassional
<i>Alnus incana</i>	speckled alder	Shrub	Native	N/A	Occassional
<i>Alnus serrulata</i>	smooth alder	Shrub	Native	N/A	Common
<i>Amelanchier arborea</i>	shadbush	Shrub	Native	N/A	Common
<i>Amelanchier canadensis</i>	serviceberry	Shrub	Native	N/A	Common
<i>Amelanchier stolonifera</i>	running juneberry	Shrub	Native	N/A	Not Recorded
<i>Amorpha fruticosa</i>	false indigo	Shrub	Non-Native	Yes	Frequent
<i>Ampelopsis brevipedunculata</i>	porcelainberry	Vine	Non-Native	Yes	Common
<i>Aralia spinosa</i>	Chinese angelica-tree	Tree	Non-Native	Yes	Frequent
<i>Aronia arbutifolia</i>	red chokeberry	Shrub	Native	N/A	Common
<i>Aronia melanocarpa</i>	black chokeberry	Shrub	Native	N/A	Common
<i>Aronia x prunifolia</i>	purple chokeberry	Shrub	Native	N/A	Not Recorded
<i>Asimina triloba</i>	pawpaw	Tree	Native	N/A	Rare
<i>Berberis thunbergii</i>	Japanese barberry	Shrub	Non-Native	Yes	Common
<i>Berberis vulgaris</i>	common barberry	Shrub	Non-Native	Yes	Occassional
<i>Betula lenta</i>	sweet birch	Tree	Native	N/A	Common
<i>Betula nigra</i>	river birch	Tree	Native	N/A	Occassional
<i>Betula populifolia</i>	gray birch	Tree	Native	N/A	Common
<i>Broussonetia papyrifera</i>	paper birch	Tree	Non-Native	No	Occassional
<i>Campsis radicans</i>	trumpet creeper	Vine	Native	N/A	Occassional
<i>Carpinus caroliniana</i>	ironwood	Tree	Native	N/A	Common
<i>Carya cordiformis</i>	bitternut hickory	Tree	Native	N/A	Common
<i>Carya glabra</i>	pignut hickory	Tree	Native	N/A	Common
<i>Carya ovalis</i>	sweet pignut hickory	Tree	Native	N/A	Not Recorded
<i>Carya ovata</i>	shagbark hickory	Tree	Native	N/A	Common
<i>Carya tomentosa</i>	mockernut hickory	Tree	Native	N/A	Common
<i>Castanea dentata</i>	American chestnut	Tree	Native	N/A	Frequent
<i>Castanea pumila</i>	chinquapin	Shrub	Native	N/A	Rare
<i>Catalpa bignonioides</i>	catalpa	Tree	Non-Native	No	Frequent
<i>Ceanothus americanus</i>	New Jersey tea	Shrub	Native	N/A	Not Recorded
<i>Celastrus orbiculata</i>	Asiatic bittersweet	Vine	Non-Native	Yes	Common
<i>Celastrus scandens</i>	American bittersweet	Vine	Native	N/A	Rare
<i>Celtis occidentalis</i>	hackberry	Tree	Native	N/A	Common
<i>Cephalanthus occidentalis</i>	buttonbush	Tree	Native	N/A	Frequent
<i>Cercis canadensis</i>	redbud	Tree	Native	N/A	Rare
<i>Chamaedaphne calyculata</i>	leatherleaf	Shrub	Native	N/A	Common
<i>Chimaphila maculata</i>	striped wintergreen	Sub-shrub	Native	N/A	Common
<i>Chimaphila umbellata</i>	pipessiwa	Sub-shrub	Native	N/A	Occassional
<i>Clematis terniflora</i>	Virgin's bower	Vine	Non-Native	Yes	Not Recorded
<i>Clematis virginiana</i>	Virgin's bower	Vine	Native	N/A	Frequent
<i>Clethra alnifolia</i>	sweet pepperbush	Shrub	Native	N/A	Common
<i>Comptonia peregrina</i>	sweetfern	Shrub	Native	N/A	Common

**Appendix G. Woody Plants of Mercer County
Mount Rose Preserve Stewardship Plan
Source: Brooklyn Botanic Garden**

Scientific Name	Common Name	Growth Type	Nativity	Invasive Status	Frequency
<i>Cornus alternifolia</i>	pagoda dogwood	Tree	Native	N/A	Frequent
<i>Cornus amomum</i>	silky dogwood	Shrub	Native	N/A	Common
<i>Cornus canadensis</i>	bunchberry	Sub-shrub	Native	N/A	Rare
<i>Cornus florida</i>	flowering dogwood	Tree	Native	N/A	Common
<i>Cornus foemina</i>	gray dogwood	Shrub	Native	N/A	Common
<i>Cornus sericea</i>	red-osier dogwood	Shrub	Native	N/A	Occasional
<i>Corylus americana</i>	American hazelnut	Shrub	Native	N/A	Common
<i>Corylus cornuta</i>	beaked hazelnut	Shrub	Native	N/A	Frequent
<i>Crataegus crusgalli</i>	cockspur hawthorn	Tree	Native	N/A	Common
<i>Crataegus intricata</i>	Biltmore hawthorn	Tree	Native	N/A	Common
<i>Crataegus pruinosa</i>	frosted hawthorn	Tree	Native	N/A	Rare
<i>Crataegus uniflora</i>	oneflower hawthorn	Tree	Native	N/A	Rare
<i>Deutzia scabra</i>	duetzia	Shrub	Non-Native	No	Not Recorded
<i>Diospyros virginiana</i>	persimmon	Tree	Native	N/A	Frequent
<i>Dirca palustris</i>	leatherwood	Shrub	Native	N/A	Rare
<i>Elaeagnus umbellata</i>	autumn olive	Shrub	Non-Native	Yes	Common
<i>Epigaea repens</i>	trailing arbutus	Sub-shrub	Native	N/A	Occasional
<i>Euonymus alata</i>	winged burning bush	Shrub	Non-Native	Yes	Common
<i>Euonymus americana</i>	strawberry bush	Shrub	Native	N/A	Rare
<i>Euonymus atropurpurea</i>	wahoo	Shrub	Native	N/A	Rare
<i>Euonymus europaea</i>	European spindle tree	Shrub	Non-Native	Yes	Occasional
<i>Fagus grandifolia</i>	American beech	Tree	Native	N/A	Common
<i>Fraxinus americana</i>	white ash	Tree	Native	N/A	Common
<i>Fraxinus nigra</i>	black ash	Tree	Native	N/A	Occasional
<i>Fraxinus pennsylvanica</i>	green ash	Tree	Native	N/A	Common
<i>Gaultheria procumbens</i>	wintergreen	Sub-shrub	Native	N/A	Common
<i>Gaylussacia baccata</i>	black huckleberry	Shrub	Native	N/A	Common
<i>Gaylussacia dumosa</i>	dwarf huckleberry	Shrub	Native	N/A	Rare
<i>Gaylussacia frondosa</i>	dangleberry	Shrub	Native	N/A	Common
<i>Gleditsia triacanthos</i>	honeylocust	Tree	Native	N/A	Frequent
<i>Hamamelis virginiana</i>	witchhazel	Shrub	Native	N/A	Common
<i>Hedera helix</i>	English ivy	Vine	Non-Native	Yes	Occasional
<i>Hibiscus syriacus</i>	rose-of-sharon	Shrub	Non-Native	No	Not Recorded
<i>Hydrangea arborescens</i>	wild hydrangea	Shrub	Native	N/A	Not Recorded
<i>Hypericum hypericoides</i>	St. Andrew's cross	Shrub	Native	N/A	Rare
<i>Ilex crenata</i>	Japanese holly	Shrub	Non-Native	No	Occasional
<i>Ilex glabra</i>	inkberry	Shrub	Native	N/A	Occasional
<i>Ilex laevigata</i>	smooth winterberry	Shrub	Native	N/A	Occasional
<i>Ilex opaca</i>	American holly	Tree	Native	N/A	Frequent
<i>Ilex verticillata</i>	winterberry	Shrub	Native	N/A	Common
<i>Juglans cinerea</i>	butternut	Tree	Native	N/A	Occasional
<i>Juglans nigra</i>	black walnut	Tree	Native	N/A	Common
<i>Juniperus communis</i>	common juniper	Shrub	Native	N/A	Rare
<i>Juniperus virginiana</i>	red cedar	Tree	Native	N/A	Common
<i>Kalmia angustifolia</i>	sheep laurel	Shrub	Native	N/A	Frequent
<i>Kalmia latifolia</i>	mountain laurel	Shrub	Native	N/A	Frequent
<i>Leucothoe racemosa</i>	sweet bells	Shrub	Native	N/A	Common
<i>Ligustrum obtusifolium</i>	regal privet	Shrub	Non-Native	Yes	Common
<i>Ligustrum vulgare</i>	privet	Shrub	Non-Native	Yes	Not Recorded
<i>Lindera benzoin</i>	spicebush	Shrub	Native	N/A	Common
<i>Liquidambar styraciflua</i>	sweet gum	Tree	Native	N/A	Frequent
<i>Liriodendron tulipifera</i>	tulip poplar	Tree	Native	N/A	Common

**Appendix G. Woody Plants of Mercer County
Mount Rose Preserve Stewardship Plan**
Source: Brooklyn Botanic Garden

Scientific Name	Common Name	Growth Type	Nativity	Invasive Status	Frequency
<i>Lonicera fragrantissima</i>	fragrant honeysuckle	Shrub	Non-Native	Yes	Rare
<i>Lonicera japonica</i>	Japanese honeysuckle	Vine	Non-Native	Yes	Common
<i>Lonicera maackii</i>	Amur honeysuckle	Shrub	Non-Native	Yes	Frequent
<i>Lonicera morrowii</i>	Morrow's honeysuckle	Shrub	Non-Native	Yes	Common
<i>Lonicera sempervirens</i>	trumpet honeysuckle	Vine	Native	N/A	Occasional
<i>Lonicera tatarica</i>	Tatarian Honeysuckle	Shrub	Non-Native	Yes	Occasional
<i>Lyonia ligustrina</i>	maleberry	Shrub	Native	N/A	Common
<i>Lyonia mariana</i>	staggerbush	Shrub	Native	N/A	Common
<i>Magnolia acuminata</i>	cucumber magnolia	Tree	Non-Native	No	Rare
<i>Magnolia tripetala</i>	umbrella magnolia	Tree	Non-Native	No	Occasional
<i>Magnolia virginiana</i>	sweetbay magnolia	Tree	Native	N/A	Occasional
<i>Malus coronaria</i>	sweet crab	Tree	Native	N/A	Rare
<i>Malus sieboldii</i>	toringo crab apple	Tree	Non-Native	Yes	Rare
<i>Malus sylvestris</i>	European crab apple	Tree	Non-Native	No	Occasional
<i>Menispermum canadense</i>	moonseed	Vine	Native	N/A	Occasional
<i>Morus alba</i>	white mulberry	Tree	Non-Native	No	Common
<i>Morus rubra</i>	red mulberry	Tree	Native	N/A	Occasional
<i>Myrica pensylvanica</i>	bayberry	Shrub	Native	N/A	Common
<i>Nemopanthus mucronatus</i>	mountain holly	Shrub	Native	N/A	Rare
<i>Nyssa sylvatica</i>	black tupelo	Tree	Native	N/A	Not Recorded
<i>Ostrya virginiana</i>	hop hornbeam	Tree	Native	N/A	Frequent
<i>Parthenocissus quinquefolia</i>	Virginia creeper	Vine	Native	N/A	Common
<i>Paulownia tomentosa</i>	paulonia	Tree	Non-Native	Yes	Occasional
<i>Philadelphus coronarius</i>	mock orange	Shrub	Non-Native	No	Occasional
<i>Physocarpus opulifolius</i>	ninebark	Tree	Native	N/A	Occasional
<i>Picea abies</i>	Norway spruce	Tree	Non-Native	No	Occasional
<i>Pinus echinata</i>	short leaf pine	Tree	Native	N/A	Occasional
<i>Pinus rigida</i>	pitch pine	Tree	Native	N/A	Common
<i>Pinus strobus</i>	white pine	Tree	Native	N/A	Frequent
<i>Pinus virginiana</i>	Virginia pine	Tree	Native	N/A	Rare
<i>Platanus occidentalis</i>	American sycamore	Tree	Native	N/A	Common
<i>Populus alba</i>	white poplar	Tree	Non-Native	No	Occasional
<i>Populus deltoides</i>	cottonwood	Tree	Native	N/A	Common
<i>Populus grandidentata</i>	big tooth aspen	Tree	Native	N/A	Common
<i>Populus heterophylla</i>	swamp cottonwood	Tree	Native	N/A	Rare
<i>Populus nigra</i>	black cottonwood	Tree	Non-Native	No	Rare
<i>Populus tremuloides</i>	quaking aspen	Tree	Native	N/A	Common
<i>Prunus americana</i>	hedge plum	Tree	Native	N/A	Occasional
<i>Prunus avium</i>	sweet cherry	Tree	Non-Native	No	Frequent
<i>Prunus domestica</i>	plum	Tree	Non-Native	No	Rare
<i>Prunus serotina</i>	black cherry	Tree	Native	N/A	Common
<i>Prunus virginiana</i>	fire cherry	Tree	Native	N/A	Frequent
<i>Ptelea trifoliata</i>	hop tree	Tree	Native	N/A	Rare
<i>Quercus alba</i>	white oak	Tree	Native	N/A	Common
<i>Quercus bicolor</i>	swamp white oak	Tree	Native	N/A	Not Recorded
<i>Quercus coccinea</i>	scarlet oak	Tree	Native	N/A	Common
<i>Quercus ilicifolia</i>	scrub oak	Shrub	Native	N/A	Common
<i>Quercus marilandica</i>	blackjack oak	Tree	Native	N/A	Occasional
<i>Quercus montana</i>	chestnut oak	Tree	Native	N/A	Common
<i>Quercus palustris</i>	pin oak	Tree	Native	N/A	Common
<i>Quercus phellos</i>	willow oak	Tree	Native	N/A	Occasional
<i>Quercus prinoides</i>	dwarf chestnut oak	Shrub	Native	N/A	Occasional

**Appendix G. Woody Plants of Mercer County
Mount Rose Preserve Stewardship Plan
Source: Brooklyn Botanic Garden**

Scientific Name	Common Name	Growth Type	Nativity	Invasive Status	Frequency
<i>Quercus rubra</i>	red oak	Tree	Native	N/A	Common
<i>Quercus stellata</i>	post oak	Tree	Native	N/A	Occasional
<i>Quercus velutina</i>	black oak	Tree	Native	N/A	Common
<i>Rhamnus cathartica</i>	common buckthorn	Shrub	Non-Native	Yes	Frequent
<i>Rhamnus frangula</i>	smooth buckthorn	Shrub	Non-Native	Yes	Frequent
<i>Rhododendron maximum</i>	great laurel	Shrub	Native	N/A	Not Recorded
<i>Rhododendron periclymenoides</i>	pinkster azalea	Shrub	Native	N/A	Frequent
<i>Rhododendron prinophyllum</i>	early azalea	Shrub	Native	N/A	Rare
<i>Rhododendron viscosum</i>	swamp azalea	Shrub	Native	N/A	Frequent
<i>Rhus aromatica</i>	fragrant sumac	Shrub	Native	N/A	Occasional
<i>Rhus copallinum</i>	winged sumac	Shrub	Native	N/A	Common
<i>Rhus glabra</i>	smooth sumac	Shrub	Native	N/A	Common
<i>Rhus hirta</i>	staghorn sumac	Shrub	Native	N/A	Common
<i>Ribes americanum</i>	Eastern black currant	Shrub	Native	N/A	Occasional
<i>Robinia hispida</i>	bristly locust	Shrub	Non-Native	No	Occasional
<i>Robinia pseudo-acacia</i>	black locust	Tree	Non-Native	Yes	Common
<i>Robinia viscosa</i>	clammy locust	Shrub	Non-Native	No	Occasional
<i>Rosa carolina</i>	Carolina rose	Shrub	Native	N/A	Common
<i>Rosa multiflora</i>	multiflora rose	Shrub	Non-Native	Yes	Common
<i>Rosa palustris</i>	swamp rose	Shrub	Native	N/A	Common
<i>Rosa virginiana</i>	Virginia rose	Shrub	Native	N/A	Frequent
<i>Rubus allegheniensis</i>	common blackberry	Shrub	Native	N/A	Common
<i>Rubus canadensis</i>	smooth blackberry	Shrub	Native	N/A	Occasional
<i>Rubus flagellaris</i>	Northern dewberry	Shrub	Native	N/A	Common
<i>Rubus hispidus</i>	swamp dewberry	Shrub	Native	N/A	Common
<i>Rubus occidentalis</i>	black raspberry	Shrub	Native	N/A	Common
<i>Rubus odoratus</i>	flowering raspberry	Shrub	Native	N/A	Frequent
<i>Rubus phoenicolasius</i>	wineberry	Shrub	Non-Native	Yes	Common
<i>Salix babylonica</i>	weeping willow	Tree	Non-Native	No	Occasional
<i>Salix bebbiana</i>	beaked willow	Tree	Native	N/A	Occasional
<i>Salix discolor</i>	pussy willow	Tree	Native	N/A	Common
<i>Salix eriocephala</i>	diamond willow	Tree	Native	N/A	Frequent
<i>Salix exigua</i>	sandbar willow	Tree	Native	N/A	Occasional
<i>Salix fragilis</i>	crack willow	Tree	Non-Native	No	Not Recorded
<i>Salix humilis</i>	upland willow	Tree	Native	N/A	Occasional
<i>Salix nigra Marsh.</i>	black willow	Tree	Native	N/A	Common
<i>Salix petiolaris</i>	meadow willow	Tree	Native	N/A	Occasional
<i>Salix purpurea</i>	basket willow	Tree	Non-Native	No	Occasional
<i>Salix sericea</i>	silky willow	Shrub	Native	N/A	Frequent
<i>Sambucus canadensis</i>	common elderberry	Shrub	Native	N/A	Common
<i>Sassafras albidum</i>	sassafras	Tree	Native	N/A	Common
<i>Smilax glauca</i>	catbrier	Vine	Native	N/A	Common
<i>Smilax rotundifolia</i>	greenbrier	Vine	Native	N/A	Common
<i>Sorbus americana</i>	American mountain-ash	Tree	Native	N/A	Rare
<i>Spiraea alba</i>	meadowsweet	Shrub	Native	N/A	Frequent
<i>Spiraea tomentosa</i>	steeplebush	Shrub	Native	N/A	Not Recorded
<i>Staphylea trifolia</i>	bladdernut	Tree	Native	N/A	Frequent
<i>Symphoricarpos orbiculatus</i>	coralberry	Shrub	Native	N/A	Occasional
<i>Tilia americana</i>	American basswood	Tree	Native	N/A	Frequent
<i>Toxicodendron radicans</i>	poison ivy	Vine	Native	N/A	Common
<i>Toxicodendron vernix</i>	poison sumac	Shrub	Native	N/A	Occasional
<i>Tsuga canadensis</i>	Eastern hemlock	Tree	Native	N/A	Frequent

**Appendix G. Woody Plants of Mercer County
Mount Rose Preserve Stewardship Plan
Source: Brooklyn Botanic Garden**

Scientific Name	Common Name	Growth Type	Nativity	Invasive Status	Frequency
<i>Ulmus americana</i>	American elm	Tree	Native	N/A	Common
<i>Ulmus rubra</i>	slippery elm	Tree	Native	N/A	Frequent
<i>Vaccinium angustifolium</i>	lowbush blueberry	Shrub	Native	N/A	Common
<i>Vaccinium corymbosum</i>	highbush blueberry	Shrub	Native	N/A	Common
<i>Vaccinium macrocarpon</i>	large cranberry	Sub-shrub	Native	N/A	Occasional
<i>Vaccinium pallidum</i>	hillside blueberry	Shrub	Native	N/A	Common
<i>Vaccinium stamineum</i>	deerberry	Shrub	Native	N/A	Frequent
<i>Viburnum acerifolium</i>	maple-leaved viburnum	Shrub	Native	N/A	Common
<i>Viburnum dentatum</i>	arrowwood	Shrub	Native	N/A	Common
<i>Viburnum dilatatum</i>	linden viburnum	Shrub	Non-Native	Yes	Not Recorded
<i>Viburnum lentago</i>	nannyberry	Shrub	Native	N/A	Frequent
<i>Viburnum nudum</i>	naked witherod	Shrub	Native	N/A	Not Recorded
<i>Viburnum opulus</i>	cranberry viburnum	Shrub	Native	N/A	Occasional
<i>Viburnum prunifolium</i>	blackhaw	Shrub	Native	N/A	Frequent
<i>Viburnum rafinesquianum</i>	downy arrowwood	Shrub	Native	N/A	Occasional
<i>Viburnum sieboldii</i>	Siebold viburnum	Shrub	Non-Native	Yes	Not Recorded
<i>Vitis aestivalis</i>	summer grape	Vine	Native	N/A	Common
<i>Vitis labrusca</i>	fox grape	Vine	Native	N/A	Common
<i>Vitis riparia</i>	frost grape	Vine	Native	N/A	Common
<i>Wisteria sinensis</i>	Chinese wisteria	Vine	Non-Native	Yes	Frequent
<i>Yucca filamentosa</i>	yucca	Shrub	Native	N/A	Occasional

Nativity: Native to Metropolitan area or not

Frequency Notes: Common > Frequent > Occasional > Rare

Invasive Status: Yes = Widespread or Emerging Invasive Species

Appendix H. Amphibians of Mercer County Mount Rose Preserve Stewardship Plan

Source: Field Guide to Reptiles and Amphibians of New Jersey
Schwartz and Golden 2002

Common Name	Scientific Name	Status	Nativity
American Toad	<i>Bufo americanus</i>	S	Native
Blue-spotted Salamander	<i>Ambystoma laterale</i>	E	Native
Bullfrog	<i>Rana catesbeiana</i>	S	Native
Four-toed Salamander	<i>Hemidactylium scutatum</i>	D	Native
Fowler's Toad	<i>Bufo woodhousii fowleri</i>	SC	Native
Green Frog	<i>Rana clamitans melanota</i>	S	Native
Long-tailed Salamander	<i>Eurycea l. longicauda</i>	T	Native
Marbled Salamander	<i>Ambystoma opacum</i>	SC	Native
New Jersey Chorus Frog	<i>Pseudacris triseriata kalmi</i>	S	Native
Northern Cricket Frog	<i>Acris c. crepitans</i>	U	Native
Northern Dusky Salamander	<i>Desmognathus f. fuscus</i>	S	Native
Northern Gray Treefrog	<i>Hyla versicolor</i>	S	Native
Northern Red Salamander	<i>Pseudotriton r. ruber</i>	D	Native
Northern Spring Peeper	<i>Hyla c. crucifer</i>	S	Native
Northern Spring Salamander	<i>Gyrinophilus p. porphyriticus</i>	SC	Native
Northern Two-lined Salamander	<i>Eurycea b. bislineata</i>	S	Native
Pickerel Frog	<i>Rana palustris</i>	S	Native
Red-backed Salamander	<i>Plethodon c. cinereus</i>	S	Native
Red-spotted Newt	<i>Notophthalmus v. viridescens</i>	S	Native
Slimy Salamander	<i>Plethodon g. glutinosus</i>	S	Native
Southern Leopard Frog	<i>Rana spenocephala</i>	S	Native
Spotted Salamander	<i>Ambystoma maculatum</i>	D	Native
Wood Frog	<i>Rana sylvatica</i>	S	Native

Wildlife Action Plan priority species are highlighted.

Species Status:

E - Endangered	S - Stable
T - Threatened	U - Undertermined
D - Decreasing	I - Introduced
SC - Special Concern	GS - Game Species

**Appendix I. Reptiles of Mercer County
Mount Rose Preserve Stewardship Plan**

Source: Field Guide to Reptiles and Amphibians of New Jersey
Schwartz and Golden 2002

Common Name	Scientific Name	Status	Nativity
Black Rat Snake	<i>Elaphe o. obsoleta</i>	U	Native
Bog Turtle	<i>Clemmys muhlenbergi</i>	Federally Threatened, State Endangered	Native
Common Snapping Turtle	<i>Chelydra s. serpentina</i>	S	Native
Eastern Box Turtle	<i>Terrapene c. carolina</i>	S - SC	Native
Eastern Garter Snake	<i>Thamnophis s. sirtalis</i>	S	Native
Eastern Hognose Snake	<i>Heterodon platyrhinos</i>	D	Native
Eastern Milk Snake	<i>Lampropeltis t. triangulum</i>	S	Native
Eastern Mud Turtle	<i>Kinosternon s. subrubrum</i>	U	Native
Eastern Painted Turtle	<i>Chrysemys p. picta</i>	S	Native
Eastern Ribbon Snake	<i>Thamnophis s. sauritus</i>	S	Native
Eastern Smooth Earth Snake	<i>Virginia v. valeriae</i>	U	Native
Eastern Worm Snake	<i>Carphophis a. amoenus</i>	U	Native
Five-lined Skink	<i>Eumeces fasciatus</i>	U	Native
Map Turtle	<i>Graptemys geographica</i>	U	Native
Northern Black Racer	<i>Coluber c. constrictor</i>	U	Native
Northern Brown Snake	<i>Storeria d. dekayi</i>	S	Native
Northern Copperhead	<i>Agkistrodon contortrix mokasen</i>	U - SC	Native
Northern Fence Lizard	<i>Sceloporus undulatus hyacinthinus</i>	S	Native
Northern Red-bellied Snake	<i>Storeria o. occipitamaculata</i>	S	Native
Northern Ringneck Snake	<i>Diadophis punctatus edwardsi</i>	S	Native
Northern Scarlet Snake	<i>Cemophora coccinea copei</i>	U	Native
Northern Water Snake	<i>Nerodia s. sipedon</i>	S	Native
Red-bellied Turtle	<i>Pseudemys rubriventris</i>	U	Native
Red-eared Turtle	<i>Pseudemys scripta elegans</i>	I	Non-Native
Spotted Turtle	<i>Clemmys guttata</i>	U - SC	Native
Stinkpot	<i>Sternotherus odoratus</i>	S	Native
Wood Turtle	<i>Clemmys insculpta</i>	T	Native

*Wildlife Action Plan priority species are highlighted

Species Status:

- | | |
|----------------------|-------------------|
| E - Endangered | S - Stable |
| T - Threatened | U - Undertermined |
| D - Decreasing | I - Introduced |
| SC - Special Concern | GS - Game Species |

**Appendix J. Preserve Bird List
Mount Rose Stewardship Plan**

Source: Washington Crossing Audubon Society
and Mark Manning

Common Name
American Crow
American Goldfinch
American Redstart
American Robin
American Tree Sparrow
American Woodcock
Bald Eagle
Black Vulture
Black-and-white Warbler
Black-billed Cuckoo
Black-capped Chickadee
Black-throated Blue Warbler
Blue Jay
Blue-gray Gnatcatcher
Blue-winged Warbler
Brown Creeper
Brown Thrasher
Brown-headed Cowbird
Canada Goose
Carolina Chickadee
Carolina Wren
Cedar Waxwing
Chestnut-sided Warbler
Chimney Swift
Chipping Sparrow
Common Raven
Common Yellowthroat
Cooper's Hawk
Dark-eyed Junco
Downy Woodpecker
Eastern Bluebird
Eastern Phoebe
Eastern Towhee
Eastern Wild Turkey
Field Sparrow
Fish Crow
Fox Sparrow
Golden-crowned Kinglet
Gray Catbird
Great Crested Flycatcher
Great Horned Owl
Hermit Thrush
House Wren
Indigo Bunting
Kentucky Warbler
Killdeer
Least Flycatcher
Lincoln's Sparrow

**Appendix J. Preserve Bird List
Mount Rose Stewardship Plan**

Source: Washington Crossing Audubon Society
and Mark Manning

Common Name
Magnolia Warbler
Mourning Dove
Northern Cardinal
Northern Flicker
Northern Harrier
Northern Harrier
Northern Mockingbird
Ovenbird
Palm Warbler
Pine Warbler
Prairie Warbler
Purple Finch
Red-bellied Woodpecker
Red-eyed Vireo
Red-shouldered Hawk
Red-tailed Hawk
Red-winged Blackbird
Ring-necked Pheasant
Rose-breasted Grosbeak
Ruby-crowned Kinglet
Ruffed Grouse
Scarlet Tanager
Sharp-shinned Hawk
Song Sparrow
Swainson's Thrush
Swamp Sparrow
Tree Swallow
Tufted Titmouse
Turkey Vulture
Veery
White-breasted Nuthatch
White-crowned Sparrow
White-eyed Vireo
White-throated Sparrow
Winter Wren
Wood Thrush
Worm-eating Warbler
Yellow Warbler
Yellow-bellied Sapsucker
Yellow-billed Cuckoo
Yellow-rumped Warbler
Yellow-throated Vireo

**Appendix K. Mammals of Mercer County
Mount Rose Preserve Stewardship Plan**

(Source: The Mammals of the State of New Jersey,
A Preliminary Annotated List,
Richard Van Gelder, 1984)

COMMON NAME	SCIENTIFIC NAME	STATUS
Beaver	Castor canadensis	INC
Big Brown Bat	Eptesicus fuscus	S
Black Bear	Ursus americanus	INC
Bobcat	Felis rufus	E
Brown Rat	Rattus norvegicus	I
Eastern Chipmunk	Tamias striatus	S
Eastern Cottontail	Sylvilagus floridanus	S
Eastern Coyote	Canis latrans, var.	INC
Eastern Mole	Scalopus aquaticus	S
Eastern Pipistrel	Pipistrellus subflavus	U
Gray Fox	Urocyon cinereoargenteus	S
Gray Squirrel	Sciurus carolinensis	S
House mouse	Mus musculus	I
Little Brown Bat	Myotis lucifugus	S
Long-tailed Weasel	Mustela frenata	S
Masked Shrew	Sorex cinereus	S
Meadow Jumping Mouse	Zapus hudsonius	U
Meadow Vole	Microtus pennsylvanicus	S
Mink	Mustela vison	S
Muskrat	Ondatra zibethicus	S
Opossum	Didelphis marsupialis	S
Pine Vole	Microtus pinetorum	S
Raccoon	Procyon lotor	S
Red Bat	Lasiurus borealis	S - SC
Red Fox	Vulpes vulpes	S
Red Squirrel	Tamiasciurus hudsonicus	S
River Otter	Lutra canadensis	S - GS
Short-tailed Shrew	Blarina brevicauda	S
Silver-haired Bat	Lasionycteris noctivagans	U - SC
Southern Flying Squirrel	Glaucomys volans	U
Star-nosed Mole	Condylura cristata	U
Striped Skunk	Mephitis mephitis	S
White-footed Mouse	Peromyscus leucopus	S
White-tailed Deer	Odocoileus virginianus	D
Woodchuck	Marmota monax	S

*Wildlife Action Plan priority species are highlighted

Species Status:

E - Endangered	S - Stable
T - Threatened	U - Undertermined
D - Decreasing	I - Introduced
INC - Increasing	P - Peripheral
SC - Special Concern	GS - Game Species

**Appendix L. Freshwater Fish of New Jersey
Mount Rose Preserve Stewardship Plan**

Common Name	Scientific Name	Family Name	State Status	Nativity
Alewife	<i>Alosa pseudoharengus</i>	Clupeidae	None	Native
American Brook Lamprey	<i>Lampetra appendix</i>	Petromyzontidae	SC	Native
American Eel	<i>Anguilla rostrata</i>	Anguillidae	None	Native
American Shad	<i>Alosa sapidissima</i>	Clupeidae	None	Native
Atlantic Sturgeon	<i>Acipenser oxyrinchus</i>	Acipenseridae	SC	Native
Banded Killifish	<i>Fundulus diaphanus</i>	Cyprinodontidae	None	Native
Banded Sunfish	<i>Eleacanthus obesus</i>	Centrarchidae	None	Native
Black Bullhead	<i>Ameiurus melas</i>	Ictaluridae	None	Non-Native
Black Crappie	<i>Pomoxis nigromaculatus</i>	Centrarchidae	None	Non-Native
Blackbanded Sunfish	<i>Eleacanthus chaetodon</i>	Centrarchidae	None	Native
Blacknose Dace	<i>Rhinichthys atratulus</i>	Cyprinidae	None	Native
Blueback Herring	<i>Alosa aestivalis</i>	Clupeidae	None	Native
Bluegill	<i>Lepomis macrochirus</i>	Centrarchidae	None	Non-Native
Bluespotted Sunfish	<i>Eleacanthus gloriosus</i>	Centrarchidae	None	Native
Bluntnose Minnow	<i>Pimephales notatus</i>	Cyprinidae	None	Non-Native
Bowfin	<i>Amia calva</i>	Amiidae	None	Non-Native
Bridle Shiner	<i>Notropis bifrenatus</i>	Cyprinidae	SC	Native
Brook Trout	<i>Salvelinus fontinalis</i>	Salmonidae	None	Native
Brown Bullhead	<i>Ameiurus nebulosus</i>	Ictaluridae	None	Native
Brown Trout	<i>Salmo trutta</i>	Salmonidae	None	Non-native
Chain Pickerel	<i>Esox niger</i>	Esocidae	None	Native
Channel Catfish	<i>Ictalurus punctatus</i>	Ictaluridae	None	Non-Native
Comely Shiner	<i>Notropis amoenus</i>	Cyprinidae	None	Native
Common Carp	<i>Cyprinus carpio</i>	Cyprinidae	None	Non-Native
Common Shiner	<i>Luxilus cornutus</i>	Cyprinidae	None	Native
Creek Chub	<i>Semotilus atromaculatus</i>	Cyprinidae	None	Native
Creek Chubsucker	<i>Erimyzon oblongus</i>	Catostomidae	None	Native
Cutlips Minnow	<i>Exoglossum maxillingua</i>	Cyprinidae	None	Native
Eastern Mosquitofish	<i>Gambusia holbrooki</i>	Poeciliidae	None	Native
Eastern Mudminnow	<i>Umbra pygmaea</i>	Umbridae	None	Native
Eastern Silvery Minnow	<i>Hybognathus regius</i>	Cyprinidae	None	Native
Fallfish	<i>Semotilus corporalis</i>	Cyprinidae	None	Native
Fathead Minnow	<i>Pimephales promelas</i>	Cyprinidae	None	Non-Native
Fourspine Stickleback	<i>Apletes quadracus</i>	Gasterosteidae	None	Native
Gizzard Shad	<i>Drosoma cepedianum</i>	Clupeidae	None	Native
Golden Shiner	<i>Notemigonus crysoleucas</i>	Cyprinidae	None	Native
Goldfish	<i>Carassius auratus</i>	Cyprinidae	None	Non-Native
Grass Carp	<i>Ctenopharyngodon idella</i>	Cyprinidae	None	Non-Native
Green Sunfish	<i>Lepomis cyanellus</i>	Centrarchidae	None	Non-Native
Hickory Shad	<i>Alosa mediocris</i>	Clupeidae	WAP Priority	Native
Hogchoker	<i>Trinectes maculatus</i>	Soleidae	None	Native
Ironcolor Shiner	<i>Notropis chalybaeus</i>	Cyprinidae	None	Native
Lake Trout	<i>Salvelinus namaycush</i>	Salmonidae	None	Non-Native
Largemouth Bass	<i>Micropterus salmoides</i>	Centrarchidae	None	Non-Native
Longnose Dace	<i>Rhinichthys cataractae</i>	Cyprinidae	None	Native
Longnose Gar	<i>Lepisosteus osseus</i>	Lepisosteidae	None	Native - Extirpated
Margined Madtom	<i>Noturus insignis</i>	Ictaluridae	WAP Priority	Native
Mosquitofish	<i>Gambusia affinis</i>	Poeciliidae	None	Non-Native
Mud Sunfish	<i>Acantharchus pomotis</i>	Centrarchidae	None	Native
Mummichog	<i>Fundulus heteroclitus</i>	Cyprinodontidae	None	Native
Muskellunge	<i>Esox masquinongy</i>	Esocidae	None	Non-Native
Ninespine Stickleback	<i>Pungitius pungitius</i>	Gasterosteidae	None	Native
Northern Hog Sucker	<i>Hypentelium nigricans</i>	Catostomidae	None	Native
Northern Pike	<i>Esox lucius</i>	Esocidae	None	Non-Native
Oriental Weatherfish	<i>Misgurnus anguillicaudatus</i>	Cobitidae	None	Non-Native
Pirate Perch	<i>Aphredoderus sayanus</i>	Aphredoderidae	None	Native
Pumpkinseed	<i>Lepomis gibbosus</i>	Centrarchidae	None	Native
Quillback	<i>Carpiodes cyprinus</i>	Cyprinidae	None	Native
Rainbow Smelt	<i>Osmerus mordax</i>	Osmeridae	None	Native
Rainbow Trout	<i>Oncorhynchus mykiss</i>	Salmonidae	None	Non-Native
Redbreasted Sunfish	<i>Lepomis auritus</i>	Centrarchidae	None	Native
Redfin Pickerel	<i>Esox americanus</i>	Esocidae	None	Native
Rock Bass	<i>Ambloplites rupestris</i>	Centrarchidae	None	Non-Native
Satinfin Shiner	<i>Cyprinella analostana</i>	Cyprinidae	None	Native
Sea Lamprey	<i>Petromyzon marinus</i>	Petromyzontidae	None	Native
Shield Darter	<i>Percina peltata</i>	Percidae	WAP Priority	Native
Shortnose Sturgeon	<i>Acipenser brevirostrum</i>	Acipenseridae	Federally and State Endangered	Native

**Appendix L. Freshwater Fish of New Jersey
Mount Rose Preserve Stewardship Plan**

Common Name	Scientific Name	Family Name	State Status	Nativity
Slimy Sculpin	<i>Cottus cognatus</i>	Cottidae	None	Native
Smallmouth Bass	<i>Micropterus dolomieu</i>	Centrarchidae	None	Non-Native
Spotfin Shiner	<i>Cyprinella spiloptera</i>	Cyprinidae	None	Native
Spottail Shiner	<i>Notropis husdonius</i>	Cyprinidae	None	Native
Striped Bass	<i>Morone saxatilis</i>	Moronidae	None	Native
Swallowtail Shiner	<i>Notropis procne</i>	Cyprinidae	None	Native
Swamp Darter	<i>Etheostoma fusiforme</i>	Percidae	None	Native
Tadpole Madtom	<i>Noturus gyrinus</i>	Ictaluridae	None	Native
Tessellated Darter	<i>Etheostoma olmstedii</i>	Percidae	None	Native
Threespine Stickleback	<i>Gasterosteus aculeatus</i>	Gasterosteidae	None	Native
Walleye	<i>Sander vitreus</i>	Percidae	None	Non-Native
Warmouth	<i>Lepomis gulosus</i>	Centrarchidae	None	Non-Native
White Catfish	<i>Ameiurus catus</i>	Ictaluridae	None	Native
White Crappie	<i>Pomoxis alularis</i>	Centrarchidae	None	Non-Native
White Perch	<i>Morone americana</i>	Moronidae	None	Native
White Sucker	<i>Catostomus commersoni</i>	Catostomidae	None	Native
Yellow Bullhead	<i>Ameiurus natalis</i>	Ictaluridae	None	Native
Yellow Perch	<i>Perca flavescens</i>	Percidae	None	Native

*Wildlife Action Plan priority species are highlighted

Species Status:

E - Endangered	S - Stable
T - Threatened	U - Undertermined
D - Decreasing	I - Introduced
SC - Special Concern	GS - Game Species

**Appendix M. Freshwater Mussels of Mercer County
Mount Rose Preserve Stewardship Plan**

Source: Center for Biodiversity and Conservation at the
American Museum of Natural History
<http://cbc.amnh.org/mussel/index.html>

Scientific Name	Common Name	AMNH Abundance	State Status	Nativity
<i>Alasmidonta varicosa</i>	brook floater	rare	None	Native
<i>Alasmidonta undulata</i>	triangle floater	rare	T	Native
<i>Elliptio complanata</i>	Eastern elliptio	abundant	None	Native
<i>Lampsilis cariosa</i>	yellow lampmuseel	rare	T	Native
<i>Lampsilis radiata</i>	Eastern lampmussel	rare	None	Native
<i>Lasmigona subviridis</i>	green floater	rare - Mercer County only	None	Native
<i>Leptodea ochracea</i>	tidewater mucket	rare	T	Native
<i>Ligumia nasuta</i>	Eastern pondmussel	rare	None	Native
<i>Pyganodon cataracta</i>	Eastern floater	abundant	None	Native
<i>Strophitus undulatus</i>	creeper	common to abundant	SC	Native

*Wildlife Action Plan priority species are highlighted

Species Status:

E - Endangered	S - Stable
T - Threatened	U - Undertermined
D - Decreasing	I - Introduced
SC - Special Concern	GS - Game Species

**Appendix N. Butterflies of Mercer County
Mount Rose Preserve Stewardship Plan**

Source: National Biological Information Infrastructure and Montana State University
www.butterfliesandmoths.org

Note: Each species has a link to its own webpage.

Common Name (Scientific Name) and Family and Sub-Family Name	Status
Brush-footed Butterflies (<i>Nymphalidae</i>)	N/A
Admirals and Relatives (<i>Limenitidinae</i>)	N/A
'Astyanax' Red-spotted Purple (<i>Limenitis arthemis astyanax</i>)	None
Red-spotted Purple or White Admiral (<i>Limenitis arthemis</i>)	None
Viceroy (<i>Limenitis archippus</i>)	None
Emperors (<i>Apaturinae</i>)	N/A
Hackberry Emperor (<i>Asterocampa celtis</i>)	None
Tawny Emperor (<i>Asterocampa clyton</i>)	None
Longwings (<i>Heliconiinae</i>)	N/A
Aphrodite Fritillary (<i>Speyeria aphrodite</i>)	None
Great Spangled Fritillary (<i>Speyeria cybele</i>)	None
Meadow Fritillary (<i>Boloria bellona</i>)	None
Regal Fritillary (<i>Speyeria idalia</i>)	None
Silver-bordered Fritillary (<i>Boloria selene</i>)	T
Variegated Fritillary (<i>Euptoieta claudia</i>)	None
Milkweed Butterflies (<i>Danainae</i>)	N/A
Monarch (<i>Danaus plexippus</i>)	None
Satyr and Wood-Nymphs (<i>Satyrinae</i>)	N/A
Appalachian Brown (<i>Satyrodes appalachia</i>)	None
Common Wood Nymph (<i>Cercyonis pegala</i>)	None
Eyed Brown (<i>Satyrodes eurydice</i>)	None
Little Wood Satyr (<i>Megisto cymela</i>)	None
Snouts (<i>Libytheinae</i>)	N/A
American Snout (<i>Libytheana carinenta</i>)	None
True Brushfoots (<i>Nymphalinae</i>)	N/A
Baltimore (<i>Euphydryas phaeton</i>)	None
Common Buckeye (<i>Junonia coenia</i>)	None
Eastern Comma (<i>Polygonia comma</i>)	None
Gray Comma (<i>Polygonia progne</i>)	None
Green Comma (<i>Polygonia faunus</i>)	None
Milbert's Tortoiseshell (<i>Aglais milberti</i>)	None
Pearl Crescent (<i>Phyciodes tharos</i>)	None
Question Mark (<i>Polygonia interrogationis</i>)	None
Red Admiral (<i>Vanessa atalanta</i>)	None
Silvery Checkerspot (<i>Chlosyne nycteis</i>)	None
Gossamer-wing Butterflies (<i>Lycaenidae</i>)	N/A
Blues (<i>Polyommatainae</i>)	None
Appalachian Azure (<i>Celastrina neglecta-major</i>)	None
Eastern Tailed-Blue (<i>Cupido comyntas</i>)	None
Spring Azure (<i>Celastrina "ladon"</i>)	None
Coppers (<i>Lycaeninae</i>)	N/A
American Copper (<i>Lycaena phlaeas</i>)	None
Hairstreaks (<i>Theclinae</i>)	N/A
Banded Hairstreak (<i>Satyrium calanus</i>)	None
Brown Elfin (<i>Callophrys augustinus</i>)	None
Coral Hairstreak (<i>Satyrium titus</i>)	None
Eastern Pine Elfin (<i>Callophrys niphon</i>)	None
Edwards' Hairstreak (<i>Satyrium edwardsii</i>)	None
Frosted Elfin (<i>Callophrys irus</i>)	T

**Appendix N. Butterflies of Mercer County
Mount Rose Preserve Stewardship Plan**

Source: National Biological Information Infrastructure and Montana State University
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Note: Each species has a link to its own webpage.

Common Name (Scientific Name) and Family and Sub-Family Name	Status
Gray Hairstreak (<i>Strymon melinus</i>)	None
Henry's Elfin (<i>Callophrys henrici</i>)	None
Hickory Hairstreak (<i>Satyrrium caryaevorum</i>)	None
Juniper Hairstreak (<i>Callophrys gryneus</i>)	None
Red-banded Hairstreak (<i>Calycopsis cecrops</i>)	None
Striped Hairstreak (<i>Satyrrium liparops</i>)	None
White M Hairstreak (<i>Parrhasius m-album</i>)	None
Harvesters (<i>Miletinae</i>)	N/A
Harvester (<i>Feniseca tarquinius</i>)	None
Parnassians and Swallowtails (<i>Papilionidae</i>)	N/A
Swallowtails (<i>Papilioninae</i>)	N/A
Eastern Tiger Swallowtail (<i>Papilio glaucus</i>)	None
Giant Swallowtail (<i>Papilio cresphontes</i>)	None
Pipevine Swallowtail (<i>Battus philenor</i>)	None
Spicebush Swallowtail (<i>Papilio troilus</i>)	None
Skippers (<i>Hesperiidae</i>)	N/A
Grass Skippers (<i>Hesperiinae</i>)	N/A
Black Dash (<i>Euphyes conspicua</i>)	None
Broad-winged Skipper (<i>Poanes viator</i>)	None
Cobweb Skipper (<i>Hesperia metea</i>)	None
Common Roadside-Skipper (<i>Amblyscirtes vialis</i>)	None
Crossline Skipper (<i>Polites origenes</i>)	None
Delaware Skipper (<i>Anatrytone logan</i>)	None
Dusted Skipper (<i>Atrytonopsis hianna</i>)	None
European Skipper (<i>Thymelicus lineola</i>)	None
Fiery Skipper (<i>Hylephila phyleus</i>)	None
Indian Skipper (<i>Hesperia sassacus</i>)	None
Least Skipper (<i>Ancyloxypha numitor</i>)	None
Leonard's Skipper (<i>Hesperia leonardus</i>)	None
Little Glassywing (<i>Pompeius verna</i>)	None
Long Dash (<i>Polites mystic</i>)	None
Mulberry Wing (<i>Poanes massasoit</i>)	None
Swarthy Skipper (<i>Nastra lherminier</i>)	None
Tawny-edged Skipper (<i>Polites themistocles</i>)	None
Two-spotted Skipper (<i>Euphyes bimacula</i>)	None
Zabulon Skipper (<i>Poanes zabulon</i>)	None
Spread-wing Skippers (<i>Pyrginae</i>)	N/A
Columbine Duskywing (<i>Erynnis lucilius</i>)	None
Common Checkered-Skipper (<i>Pyrgus communis</i>)	None
Dreamy Duskywing (<i>Erynnis icelus</i>)	None
Hoary Edge (<i>Achalarus lyciades</i>)	None
Horace's Duskywing (<i>Erynnis horatius</i>)	None
Juvenal's Duskywing (<i>Erynnis juvenalis</i>)	None
Long-tailed Skipper (<i>Urbanus proteus</i>)	None
Mottled Duskywing (<i>Erynnis martialis</i>)	None
Northern Cloudywing (<i>Thorybes pylades</i>)	None
Silver-spotted Skipper (<i>Epargyreus clarus</i>)	None
Sleepy Duskywing (<i>Erynnis brizo</i>)	None

**Appendix N. Butterflies of Mercer County
Mount Rose Preserve Stewardship Plan**

Source: National Biological Information Infrastructure and Montana State University
www.butterfliesandmoths.org

Note: Each species has a link to its own webpage.

Common Name (Scientific Name) and Family and Sub-Family Name	Status
Southern Cloudywing (<i>Thorybes bathyllus</i>)	None
Wild Indigo Duskywing (<i>Erynnis baptisiae</i>)	None
Sphinx Moths, Hawkmoths (<i>Sphingidae</i>)	
Macroglossinae (<i>Macroglossinae</i>)	N/A
Pandorus sphinx (<i>Eumorpha pandorus</i>)	None
Tiger Moths and Lichen Moths (<i>Arctiidae</i>)	
Tiger Moths (<i>Arctiinae</i>)	N/A
Bella Moth (<i>Utetheisa ornatix</i>)	None
Confused Haploa (<i>Haploa confusa</i>)	None
Isabella Tiger Moth or Banded Woollybear (<i>Pyrrharctia isabella</i>)	None
Whites and Sulphurs (<i>Pieridae</i>)	
Sulphurs (<i>Coliadinae</i>)	N/A
Clouded Sulphur (<i>Colias philodice</i>)	None
Cloudless Sulphur (<i>Phoebis sennae</i>)	None
Little Yellow (<i>Pyrisitia lisa</i>)	None
Orange Sulphur (<i>Colias eurytheme</i>)	None
Whites (<i>Pierinae</i>)	N/A
Cabbage White (<i>Pieris rapae</i>)	None
Falcate Orangetip (<i>Anthocharis midea</i>)	None
Wild Silk Moths (<i>Saturniidae</i>)	
Giant Silkworm Moths (<i>Saturniinae</i>)	N/A
Ailanthus silkworm (<i>Samia cynthia</i>)	None
Royal Moths (<i>Citheroniinae</i>)	N/A
Imperial moth (<i>Eacles imperialis</i>)	None
Pink-striped oakworm moth (<i>Anisota virginiensis</i>)	None

*Wildlife Action Plan priority species are highlighted

Species Status:

E - Endangered, S - Stable

T - Threatened, U - Undetermined

D - Decreasing, I - Introduced

SC - Special Concern, GS - Game Species

**Appendix O. Dragonflies & Damselflies of Mercer County
Mount Rose Stewardship Plan**

Source: www.njodes.com

Note: Each species has a link to its own webpage.

Common Name	Scientific Name	Status
BROAD-WINGED DAMSELS	CALOPTERYGIDAE	N/A
Sparkling Jewelwing	<i>Calopteryx dimidiata</i>	None
Ebony Jewelwing	<i>Calopteryx maculata</i>	None
American Rubyspot	<i>Hetaerina americana</i>	None
SPREADWINGS	LESTIDAE	N/A
Great Spreadwing	<i>Archilestes grandis</i>	None
Slender Spreadwing	<i>Lestes rectangularis</i>	None
Swamp Spreadwing	<i>Lestes vigilax</i>	None
POND DAMSELS	COENAGRIONIDAE	N/A
Blue-fronted Dancer	<i>Argia apicalis</i>	None
Violet Dancer	<i>Argia fumipennis violacea</i>	None
Powdered Dancer	<i>Argia moesta</i>	None
Blue-ringed Dancer	<i>Argia sedula</i>	None
Blue-tipped Dancer	<i>Argia tibialis</i>	None
Dusky Dancer	<i>Argia translata</i>	None
Azure Bluet	<i>Enallagma aspersum</i>	None
Familiar Bluet	<i>Enallagma civile</i>	None
Stream Bluet	<i>Enallagma exsulans</i>	None
Skimming Bluet	<i>Enallagma geminatum</i>	None
Orange Bluet	<i>Enallagma signatum</i>	None
Slender Bluet	<i>Enallagma traviatum</i>	None
Blackwater Bluet	<i>Enallagma weewa</i>	None
Fragile Forktail	<i>Ischnura posita</i>	None
Eastern Forktail	<i>Ischnura verticalis</i>	None
DARNERS	AESHNIDAE	N/A
Shadow Darner	<i>Aeshna umbrosa</i>	None
Common Green Darner	<i>Anax junius</i>	None
Springtime Darner	<i>Basiaeschna janata</i>	None
Fawn Darner	<i>Boyeria vinosa</i>	None
Swamp Darner	<i>Epiaeschna heros</i>	None
CLUBTAILS	GOMPHIDAE	N/A
Black-shouldered Spinyleg	<i>Dromogomphus spinosus</i>	None
Septima's Clubtail	<i>Gomphus (Gomphurus) septima</i>	SC
Cobra Clubtail	<i>Gomphus (Gomphurus) vastus</i>	None
Lancet Clubtail	<i>Gomphus (Gomphurus) exilis</i>	None
Ashy Clubtail	<i>Gomphus (Gomphurus) lividus</i>	None
Spine-crowned Clubtail	<i>Gomphus (Hylogomphus) abbreviatus</i>	None
Eastern Least Clubtail	<i>Stylogomphus albistylus</i>	None
Russet-tipped Clubtail	<i>Stylurus plagiatus</i>	None
Arrow Clubtail	<i>Stylurus spiniceps</i>	None
CRUISERS	MACROMIIDAE	N/A
Stream Cruiser	<i>Didymops transversa</i>	None
"Georgia" Swift River Cruiser	<i>Macromia illinoiensis georgina</i>	None
EMERALDS	FAMILY CORDULIIDAE	N/A

Appendix O. Dragonflies & Damselflies of Mercer County Mount Rose Stewardship Plan

Source: www.njodes.com

Note: Each species has a link to its own webpage.

Common Name	Scientific Name	Status
Prince Baskettail	<i>Epitheca (Epicordulia) princeps</i>	None
Common Baskettail	<i>Epitheca (Tetragoneuria) cynosura</i>	None
SKIMMERS	LIBELLULIDAE	N/A
Calico Pennant	<i>Celithemis elisa</i>	None
Halloween Pennant	<i>Celithemis eponina</i>	None
Eastern Pondhawk	<i>Erythemis simplicicollis</i>	None
Bar-winged Skimmer	<i>Libellula axilena</i>	None
Slaty Skimmer	<i>Libellula incesta</i>	None
Widow Skimmer	<i>Libellula luctuosa</i>	None
Twelve-spotted Skimmer	<i>Libellula pulchella</i>	None
Painted Skimmer	<i>Libellula semifasciata</i>	None
Great Blue Skimmer	<i>Libellula vibrans</i>	None
Blue Dasher	<i>Pachydiplax longipennis</i>	None
Wandering Glider	<i>Pantala flavescens</i>	None
Eastern Amberwing	<i>Perithemis tenera</i>	None
Common Whitetail	<i>Plathemis lydia</i>	None
"Western" Cherry-faced Meadowhawk	<i>Sympetrum internum</i>	None
"Eastern" Cherry-faced Meadowhawk	<i>Sympetrum internum(janae?)</i>	None
Band-winged Meadowhawk	<i>Sympetrum semicinctum</i>	None
Autumn Meadowhawk	<i>Sympetrum vicinum</i>	None
Black Saddlebags	<i>Tramea lacerata</i>	None

*Wildlife Action Plan priority species are highlighted

Species Status:

E - Endangered
T - Threatened
D - Decreasing
SC - Special Concern

S - Stable
U - Undertermined
I - Introduced
GS - Game Species