

GLOSSARY

Access trails - may be permanent, unpaved and do not provide all-weather access within the Unit. These trails are originally designed for wood product removal and may be used to meet other management objectives such as recreational trails. These trails are constructed according to Best Management Practices.

Age class - trees of a similar size such as seedling/sapling, pole timber, small saw timber, etc.

Apple tree release - the act of removing an overstory of trees that are shading and potentially killing the apple tree below.

Basal area - the cross sectional area of a tree at breast height, measured in square feet.

Basal area/acre - the sum total of the cross sections of all trees on one acre.

Best management practices - appropriate land management techniques that serve to protect the soil and water and residual forest stands.

Cavity trees - trees containing an excavation sufficiently large for nesting, dens or shelter; tree may be alive or dead.

Clear cut - the removal of a forest overstory. This practice is done in preparation of the re-establishment of a new forest through reforestation, stump sprouting, or changing habitats, i.e., from forest to brush or grass cover.

Climax forest - the culminating stage in forest succession, where the vegetation has reached a highly stable condition. It is self perpetuating and in equilibrium with the environment. A climax forest will persist until a disturbance upsets the equilibrium.

Conifer - needle bearing trees; also called softwood.

Corridor - a linear strip of land identified for the present or future location of a designed use within its boundaries. For this plan, corridors include hiking trails, comparable habitat types or similar management acreage.

Coarse filter approach - a strategy for conserving biodiversity that involves maintaining a variety of native ecosystems within a landscape context. This approach assumes that a representative array of native ecosystems will contain the vast majority of species in a region. The problem with the coarse filter approach is that some species are almost certain to be neglected because no ecosystem classification scheme could be comprehensive enough to capture every species. A coarse filter approach would ensure the availability of grasslands, shrublands, open wetlands, forest wetlands, riparian zones, northern hardwood forest and mixed northern hardwood/conifer forest in

various stages of successional development.

Coarse woody debris - any piece(s) of dead woody material on the ground in forest stands or in streams. (The Dictionary of Forestry)

Cultural resources - significant historical or archaeological assets on sites as a result of past human activity which are distinguishable from natural resources.

Cutting interval - the number of years between harvest-regeneration cuts in a stand using the uneven-aged system.

Early successional wildlife species - animal species which require early vegetative stages such as grass, brush or aspen.

Ecosystem - all the interacting populations of people, plants, animals and microorganisms occupying an area, plus their physical environment. The living organisms in an ecosystem are collectively called a community, sometimes natural community or biotic community.

Esker - a long, narrow ridge of sand, gravel and boulders deposited by a stream flowing on or beneath a stagnant glacier. (Websters)

Even-aged system - a program of forest management directed to the establishment and maintenance of stands of trees having relatively little (10-15 years) variation in ages. The guidelines to be applied in using this system at all stages of tree development are uniquely different from the uneven-aged system.

Fine filter approach - a strategy for conserving biodiversity directed toward the habitat requirements of individual species known to be endangered or of special concern. This approach considers those species that "pass through" the coarse filter. For example spreading globeflower, grasshopper sparrow and red shouldered hawk are three species of special concern in New York State. A coarse filter approach would ensure the availability of forest wetlands, grasslands and late successional forest but not necessarily the specific habitat needs of these three species. A fine filter approach would ensure that the structure, composition and distribution of native habitats are linked directly with species of special concern.

Flag parcel - an area of a given property that extends away from the main parcel of ownership but remains physically connected by a narrow strip of land, giving the parcel the look of a flag on a flagpole.

Forest development stages - the various stages of forest stand growth and development ranging from seedling/sapling to mature trees.

Green tree retention - the practice of retaining live trees on a release cut. This practice creates higher levels of structural diversity providing varied wildlife habitat and future downed wood. The residual overstory trees also moderate the microclimate of the site and provide continuity of habitat for plant and animal species between uncut forest areas. These residual trees are left through the next rotation.

Hardwoods - broad-leaved deciduous trees.

Hardwood forest - a forest stand in which each of the two predominant species by percent is a hardwood.

Haul roads - permanent, unpaved roads but are not designed for all-weather travel. They are constructed primarily for the removal of wood products and provide only limited access within the Unit. As such, these roads may or may not be open for public use. The standards for these roads are those of Class C roads as provided for in the Forest Road Handbook.

Interior species - species, vegetative and animal, whose habitat dependence requires significant tracts of unbroken forest types, often sensitive to fragmentation and to varying degrees of disturbances, i.e. northern red-shouldered hawk, black bear.

Kame - a short ridge or hill of stratified drift deposited by glacial meltwater. (Websters)

Large poles - trees 9-11" diameter at breast height.

Large sawtimber - trees 18"+ diameter at breast height.

Lean-to - a small, open fronted log shelter used for overnight camping.

Mast - the fruit of trees (fruits, nuts berries or acorns) considered as food for wildlife. (The Dictionary of Forestry)

Medium sawtimber - trees 15-17" diameter at breast height.

Minerotrophic - pertaining to a wetland receiving water and minerals from surrounding regions, not just for precipitation. (The Dictionary of Forestry)

Moraine - an accumulation of earth and stones carried and deposited by a glacier. (Websters)

Multiple use - a strategy of deliberate land management for two or more purposes which utilizes, without impairment, the capabilities of the land to meet different demands simultaneously.

Mychorrhizae - the usually symbiotic (beneficial) association between higher plant roots and mycelia (threads) of specific fungi that aid plants in the uptake of water and nutrients. (The Dictionary of Forestry)

Natural area - areas permitted to attain and sustain a climax condition, the final stage of succession. These areas are not managed for the production of wood products.

Natural forest - a forest established by natural regeneration.

Natural regeneration - the regrowth of a forest stand by natural means.

Plantation - a forest established by planting.

Pothole - also called dug-out. A one half acre or less ponded water area constructed of earth with no obvious inlet or outlet.

Protection forest - forestland excluded from active wood product management and some recreational practices to protect sensitive sites. These sites most often include steep slopes, wet woodlands and riparian zones along stream corridors.

Public Forest Access Roads - permanent, unpaved roads marked for motor vehicle use. They may be designed for all-weather use depending on their location and surfacing. These roads provide primary access within the Unit. The standards for these roads are those of the Class A and Class B access roads as provided for in the Forest Road Handbook.

Regeneration - to reestablish a forest stand.

Rejuvenate - the act of stimulating plant species to resprout and develop at a more vigorous growth rate by severing or crushing the above ground stem portions of shrub or tree species. (R. Off)

Release - the act of removing an overstory of trees to release an understory of established seedlings or saplings.

Rotation - the period of years required to establish and grow timber crops to a specified maturity. Rotation being the predetermined time frame between successive harvest/regeneration cuts in a given stand under even-aged management.

Seedling/sapling - trees less than 6" diameter at breast height.

Small poles - trees 6-8" diameter at breast height.

Small sawtimber - trees 12-14" diameter at breast height.

Snags - dead trees with or without cavities; function as perches, foraging sites and/or a source of cavities for dens, roosting and/or nesting.

Softwoods - needle bearing trees, conifers.

Species - individuals having common attributes and designated by a common name.

Stand - any area of vegetation with site conditions, past history and current species composition and age sufficiently uniform to distinguish it from adjacent areas.

Stand analysis - a systematic method of evaluating stands to determine the need for treatment.

Stand treatment - work done in a stand which is directed towards the management of the stand.

State forest - lands owned by the State of New York and administered by the Department of Environmental Conservation which are managed for the establishment and maintenance of forests for watershed protection, the production of timber and recreation and kindred purposes.

Temporary revocable permit - a permit to use State land for a specific purpose for a prescribed length of time.

Timber stand improvement (TSI) - pre-commercial silvicultural treatments, typically thinning intended to regulate stand density and species composition while improving wood product quality and fostering individual tree health and vigor.

Uneven-aged system - a program of forest management directed to the establishment and maintenance of stands of trees having several or perhaps all potential ages. The guidelines and methods employed for this system differ greatly from the even-aged system.

Watershed - the land area from which a stream receives its water.

Water quality classes - a system of classification in ECL Article 17 which presents a ranked listing of the State's surface waters by the letters AA, A, B, C or D according to certain quality standards and specifications. AA is the highest quality rank and has the greatest suitability for human usage.

Wetland - transition areas between upland and aquatic habitat. In New York State, wetlands are described by the presence of certain species of water loving plants.

Wetland classes - a system of classification set forth in ECL Article 24, section 664.5

which ranks wetland I through IV based upon wetland functions and benefits, I being the highest rank.

Wildlife management areas - lands owned by the State of New York and administered by the Department of Environmental Conservation which are managed for the production and perpetuation of wildlife species and the subsequent public uses thereof.

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**APPENDIX I
Wetlands on the Unit**

Protected Wetland

<u>State Land</u>	<u>Stand</u>	<u>Acres</u>	<u>Catalog #</u>	<u>Class</u>
Madison #13	B-12	77	MO14	II

Unprotected Wetlands

<u>State Land</u>	<u>Stand</u>	<u>Acres</u>	<u>Cover type</u>
Madison #10	A-12	4	Spruce
	A-29	2	Spruce
	A-30	7	Open
	A-59	3	Open
	B-19	3	Open
	B-35	2	Hardwood
	B-37	1	Alder
Madison #13	A-5	5	NH-Hem
	A-6	2	Open
	A-14	2	Hardwood
	B-6	9	NH-Hem
	B-8	5	Open
	B-16	2	NH-Hem
	B-27	1	Open
	B-29	9	Open
	B-32	2	Open
	B-46	4	Hardwoods
TWMA	A-17	7	Open
	A-21	3	Alder

<u>State Land</u>	<u>Stand</u>	<u>Acres</u>	<u>Cover type</u>
	A-35	3	NH-Hem
	B-48	5	Open
	B-61	7	Open
	C-21	3	Open
	C-25	6	Alder
	C-48	9	Alder
	D-13	3	Open
	D-15	2	Alder
	D-23	3	Alder
	D-67	3	NH-Hem
	D-89	1	Open
	D-91	2	Alder
	E-10	1	Alder
	E-17	4	NH-Hem
	E-44	8	Alder
	E-48	3	Open
	E-54	10	Hardwoods
	E-64	2	Open
	F-16	3	NH-Hem
	F-20	1	Alder
TWMA	F-29	4	NH-Hem
	F-35	4	Hardwoods

**APPENDIX II
Ponds on the Unit**

<u>State Land</u>	<u>Stand</u>	<u>Acres</u>	<u>Common Name</u>
Madison #10	A-9	1	
Madison #13	B-33	5	Little Stoney Pond
	B-34	44	Stoney Pond
TWMA	A-19	1	
	A-23	2	
	C-11	1	
	C-20	5	
	E-11	5	
	E-65	3	
	F-45	1	

APPENDIX III
Watercourses On The Unit

Water Index Number, stream length, date of last survey and Article 15 protection status of the 12 streams within the Tioughnioga Wildlife Management Area.

<u>Water Index Number</u>	<u>Length Within Unit (miles)</u>	<u>Date of Last Survey</u>	<u>Article 15 Status</u>
Ont-66-11-P26-37-42	0.6	1927	unprotected
Ont-66-11-P26-37-6-2 (Limestone Cr. E. Br.)	3.8	1997	protected
Ont-66-11-P26-37-6-2-41c	0.4	1927	unprotected
Ont-66-11-P26-37-6-2-42	0.9	1927	unprotected
Ont-66-11-P26-37-47-4	0.6	1972	protected
Ont-66-11-P26-37-47-4-1	0.2	1927	protected
SR-44-14-59-37	0.8	1954	protected
SR-44-14-59-37-5	0.2	uncertain	protected
SR-44-14-59-37-3	0.8	uncertain	protected
SR-44-14-59-37-3-2	0.6	uncertain	protected
SR-44-14-59-40	0.4	uncertain	unprotected
SR-44-14-27-63	0.7	1964	protected

APPENDIX IV Local Laws and Ordinances

Town of DeRuyter - Local ordinances include: Development (1970), Code of Ethics (1970), Sanitary Regulations (1975), Snow Removal From Highway (1987) and Indiscriminate Parking on Highways (1987)

Local laws include: Consumption of Alcoholic Beverages in Public Places (1989), Appointment of Sole Assessor (1989), Dog Control (1987), Administration of Fire and Building Code (1985) and Flood Damage Prevention (1983)

Town of Cazenovia - Local ordinances were first adopted in 1964 and consolidated with amendments in 1991. Basic ordinances include: Establishment of Use Districts, Parking, Signs and Billboards, Traffic Safety, Public Utilities, Top Soil Stripping and regulations for the Hamlet of New Woodstock.

Local laws include: Private waste disposal (1990), Regulation of Land Disturbances (1990), Protection of Wetlands within the town (1990) and designation of Cazenovia Lake and certain surrounding property as Critical Environmental Areas (CEA) in 1990.

Town of Georgetown - Local ordinances have been enacted pursuant to the requirements of the Flood Disaster Protection Act of 1973. Development permits are required or the establishment of any principal building, dwelling, septic system, water system, mobile dwelling park, recreation vehicle park or camp ground within the town.

Town of Nelson - There are no specific regulations for Stoney Pond State Forest or the Tioughnioga Wildlife Management Area and all private property adjacent to these lands are zoned Residential (RB). The following uses are permitted within Zone RB: agriculture, one and two family residential use, home occupation, seasonal residential use, one accessory building, farm use, if larger than 5 acres, manufactured homes in the area south of Damon Rd., and Tuscarora Rd. except within 2000' of either Tuscarora or Eatonbrook Lake, manufactured homes in the area of Willowvale Road.

The following uses are permitted within RB upon review by the Planning Board and after issuance of a Special Use permit: business, social and commercial unnamed uses other than those considered Hazardous and/or those exceeding 3,500 GSF, which directly related to Residential and Farm Occupancies and do not adversely affect the general scale, environment or character of the area or resultant vistas to or from the site. These uses in addition to the following uses may be permitted by the Planning Board for RB: home occupation special, wildlife refuge, stable, additional accessory building, religious institution, school, community center, hospital, private club, membership club house, membership club house, recreation area, cemetery, quarry, kennels, veterinary hospitals, campgrounds, grade improvement, height exception for towers (except within lake and swamp overlay districts) temporary cellar occupancy, temporary use manufactured housing, retail sales, farm use under 5 acres, utility electric substation, bed & breakfast, sawmills as a home occupation special, private energy facility and aircraft landing strip.

APPENDIX V
Fish Stocking History of Stoney Pond (P5725)

<u>Year</u>	<u>Number</u>	<u>Species</u>	<u>Size (inches)</u>
1960	1,100	Rainbow trout (wild from Grout Brook)	3" - 7"
1961	1,000	Brook trout	7.25
	2,000	Brook trout	7.5
1962	962	Brown trout	14.0
	2,000	Brook trout	7.0
1963	2,060	Brook trout	7.0
	1,600	Rainbow trout	9.25
	500	Rainbow trout	7.0
	2,025	Rainbow trout	4.0
	608	Brown trout	16.0
	4,000	Brown trout	4.25
1964	3,000	Brook trout	7.5
	800	Brook trout	10.0
	2,000	Rainbow trout	8.0
	2,000	Brook trout	7.5
1965	1,600	Rainbow trout	7.5
	1,700	Brook trout	7.0
1966	1,680	Rainbow trout	7.25
	1,700	Brook trout	7.5
1967	1,850	Rainbow trout	7.0
	127	Brook trout	11.0
1968	1,610	Brook trout	8.0
	1,605	Brook trout	8.25
1969	1,220	Rainbow trout	8.75
	1,350	Brook trout	8.5
1970	1,500	Rainbow trout	7.75
	1,295	Rainbow trout	7.25
1971	1,400	Brook trout	8.0
	2,000	Rainbow trout	7.75
1972	1,640	Rainbow trout	7.5
	1,400	Brook trout	8.0
1973	5,000	Largemouth bass	2.5
1974	3,500	Smallmouth bass	3.5
	300	Largemouth bass	3.5

**APPENDIX VI
Roads on the Unit**

Public Forest Access Roads

<u>State Land</u>	<u># of Roads</u>	<u>Mileage</u>
Madison #9	1	0.9
Madison #10	1	1.5
Madison #13	1-portion of Stoney Pond Rd.	0.3
Tioughnioga W.M.A.	1	1.0
<u>Haul Road</u>		
Madison #13	1	0.2

Qualified Abandoned Roads

Madison #10	Mack Road	0.4	
Madison #13	Green Road	0.4	
	Captain Jenks Road		1.5
Tioughnioga W.M.A.	Peterson Hollow Road	0.9	
	Holmes Road	0.7	
	Mayerle Road	0.8	

APPENDIX VII
Breeding Species of Birds In The Vicinity of The Tioughnioga Unit

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
Great Blue Heron	<i>Ardea herodias</i>	CO	Protected
Green Heron	<i>Butorides virescens</i>	CO	Protected
Turkey Vulture	<i>Cathartes aura</i>	PO	Protected
Mallard	<i>Anas platyrhynchos</i>	CO	Game Species
Canada Goose	<i>Branta canadensis</i>	CO	Game Species
Hooded Merganser	<i>Lophodytes cuoullatus</i>	CO	Game Species
Wood duck	<i>Aix sponsa</i>	CO	Game Species
Northern Harrier	<i>Circus cyaneus</i>	PO	Protected
Northern Goshawk	<i>Accipiter gentilis</i>	CO	Protected
Sharp-shinned Hawk	<i>Accipiter straitus</i>	CO	Protected
Red-tailed Hawk	<i>Buteo jamaicensis</i>	CO	Protected
American Kestrel	<i>Falco sparverius</i>	CO	Protected
Ringneck Pheasant	<i>Phasianus colchicus</i>	CO	Game Species

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
Ruffed Grouse	<i>Bonasa umbellus</i>	CO	Game Species
Wild Turkey	<i>Meleagris gallopavo</i>	CO	Game Species
Killdeer	<i>Charadrius vociferus</i>	CO	Protected
Spotted Sandpiper	<i>Actitis macularia</i>	CO	Protected
Rock Dove	<i>Columba livia</i>	CO	Unprotected
American Woodcock	<i>Scolopax minor</i>	CO	Game Species
Mourning Dove	<i>Zenaidura macroura</i>	CO	Protected
Great Horned Owl	<i>Bubo virginianus</i>	CO	Protected
Barred Owl	<i>Strix varia</i>	CO	Protected
Screech Owl	<i>Otus asio</i>	CO	Protected
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	PO	Protected
Chimney Swift	<i>Chaetura pelagica</i>	CO	Protected
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>	PO	Protected
Yellow-bellied Sapsucker	<i>Sphyrapicus varius</i>	CO	Protected
Ruby throated Hummingbird	<i>Archilochus colubris</i>	CO	Protected
Belted Kingfisher	<i>Ceryle alcyon</i>	CO	Protected

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
Redheaded Woodpecker	<i>Melanerpes erythrocephalus</i>	PO	Protected
Downy Woodpecker	<i>Picoides pubescens</i>	CO	Protected
Hairy Woodpecker	<i>Picoides villosus</i>	CO	Protected
Northern Flicker	<i>Colaptes auratus</i>	CO	Protected
Pileated Woodpecker	<i>Dryocopus pileatus</i>	PR	Protected
Eastern Wood-Pewee	<i>Contopus virens</i>	CO	Protected
Alder-Flycatcher	<i>Empidonax alnorum</i>	PR	Protected
Willow Flycatcher	<i>Empidonax traillii</i>	PR	Protected
Least Flycatcher	<i>Empidonax minimus</i>	PR	Protected
Eastern Phoebe	<i>Sayornis phoebe</i>	CO	Protected
Great Crested Flycatcher	<i>Myiarchus crinitus</i>	PR	Protected
Eastern Kingbird	<i>Tyrannus tyrannus</i>	CO	Protected
Yellow-throated Vireo	<i>Vireo gilvus</i>	CO	Protected
Blue-headed Vireo	<i>Vireo solitarius</i>	CO	Protected
Warbling Vireo	<i>Vireo gilvus</i>	CO	Protected

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
Red-eyed Vireo	<i>Vireo olivaceus</i>	CO	Protected
Blue Jay	<i>Cyanocitta cristata</i>	CO	Protected
American Crow	<i>Corvus brachyrhynchos</i>	CO	Game Species
Tree Swallow	<i>Hirundo rustica</i>	CO	Protected
Purple Martin	<i>Progne subis</i>	CO	Protected
Horned Lark	<i>Eremophila alpestris</i>	PR	Protected
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>	CO	Protected
Barn Swallow	<i>Hirundo rustica</i>	CO	Protected
Bank Swallow	<i>Riparia riparia</i>	CO	Protected
Cliff Swallow	<i>Petrochelidon pyrrhonota</i>	PR	Protected
Black-capped Chickadee	<i>Poecile atricapillus</i>	CO	Protected
White-breasted Nuthatch	<i>Sitta carolinensis</i>	CO	Protected
Red-breasted Nuthatch	<i>Sitta canadensis</i>	CO	Protected
House Wren	<i>Troglodytes aedon</i>	CO	Protected
Veery	<i>Catharus fuscescens</i>	CO	Protected
Eastern Bluebird	<i>Sialia sialis</i>	CO	Protected

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
Wood Thrush	<i>Hylocichla mustelina</i>	PR	Protected
Hermit Thrush	<i>Catharus guttatus</i>	PO	Protected
American Robin	<i>Turdus migratorius</i>	CO	Protected
Gray Catbird	<i>Dumetella carolinensis</i>	CO	Protected
Northern Mockingbird	<i>Mimus polyglottos</i>	PO	Protected
Brown Thrasher	<i>Toxostoma rufum</i>	CO	Protected
European Starling	<i>Sturnus vulgaris</i>	CO	Unprotected
Cedar Waxwing	<i>Bombycilla cedrorum</i>	CO	Protected
Blue-winged Warbler	<i>Vermivora pinus</i>	PR	Protected
Golden-winged Warbler	<i>Vermivora chrysoptera</i>	PO	Protected-Special Concern
Nashville Warbler	<i>Vermivora ruficapilla</i>	PR	Protected
Yellow Warbler	<i>Dendroica petechia</i>	CO	Protected
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>	CO	Protected
Magnolia Warbler	<i>Dendroica magnolia</i>	CO	Protected
Yellow-rumped Warbler	<i>Dendroica coronata</i>	CO	Protected
Black-throated Green Warbler	<i>Dendroica virens</i>	CO	Protected

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
American Redstart	<i>Setophaga ruticilla</i>	PR	Protected
Pine Warbler	<i>Dendroica pinus</i>	PO	Protected
Prairie Warbler	<i>Dendroica discolor</i>	PR	Protected
Black-and-white Warbler	<i>Mniotilta varia</i>	PR	Protected
Ovenbird	<i>Seiurus aurocapillus</i>	CO	Protected
Mourning Warbler	<i>Oporornis philadelphia</i>	PR	Protected
Common Yellowthroat	<i>Geothlypis trichas</i>	CO	Protected
Northern Waterthrush	<i>Seiurus noveboracensis</i>	PR	Protected
Canada Warbler	<i>Wilsonia canadensis</i>	PR	Protected
Scarlet Tanager	<i>Piranga olivacea</i>	CO	Protected
Eastern Towhee	<i>Pipilo erythrophthalmus</i>	CO	Protected
Chipping Sparrow	<i>Spizella passerina</i>	CO	Protected
Field Sparrow	<i>Spizella pusilla</i>	CO	Protected
Savannah Sparrow	<i>Passerculus sandwichensis</i>	CO	Protected
Vesper Sparrow	<i>Pooecetes gramineus</i>	PR	Protected
Song Sparrow	<i>Melospiza melodia</i>	CO	Protected

Common Name	Scientific Name	Behavior Code PO = possible breeding PR = probable breeding CO = confirmed breeding	Legal Status - New York
Swamp Sparrow	<i>Melospiza georgiana</i>	CO	Protected
White-throated Sparrow	<i>Zonotrichia albicollis</i>	CO	Protected
Dark-eyed Junco	<i>Junco hyemalis</i>	CO	Protected
Northern Cardinal	<i>Cardinalis cardinalis</i>	CO	Protected
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>	CO	Protected
Indigo Bunting	<i>Passerina cyanea</i>	CO	Protected
Bobolink	<i>Dolichonyx oryzivorus</i>	CO	Protected
Red-winged Blackbird	<i>Agelaius phoeniceus</i>	CO	Protected
Eastern Meadowlark	<i>Sturnella magna</i>	CO	Protected
Common Grackle	<i>Quiscalus quiscula</i>	CO	Protected
Brown-headed Cowbird	<i>Molothrus alter</i>	CO	Protected
Baltimore Oriole	<i>Icterus galbula</i>	CO	Protected
Purple Finch	<i>Carpodacus mexicanus</i>	CO	Protected
House Finch	<i>Carpodacus mexicanus</i>	CO	Protected
American Goldfinch	<i>Carduelis tristis</i>	CO	Protected
House Sparrow	<i>Passer domesticus</i>	CO	Unprotected

Key to APPENDIX VIII Occurrence and Protective Status of Wildlife on the Unit

The protective status of listed species is based on Federal and State regulations. Following column entries for common and scientific names, a "protective status" category of two entries for Federal protective status and for New York State protective status appear.

The following definitions apply to the abbreviations and terms used as defined in The Checklist of Amphibians, Reptiles, Birds and Mammals of New York State, Including Their Protective Status.

Federal Definitions

- Thr** - Threatened Species, determined by the U.S. Department of the Interior as likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, as defined in the Endangered Species Act of 1973, and as amended. All such species are fully protected.
- MBTA** - Migratory Bird Treaty Act of 1918, and as amended. The MBTA, including amendments, implements conventions between the United States, Great Britain (for Canada, etc.), Mexico and Japan for the protection of migratory birds.
- UN** - "Unprotected" under Federal law.

State Definitions

- End** - "Endangered Species" determined by the New York State Department of Environmental Conservation (DEC) to be in imminent danger of extinction or extirpation in New York State or Federally listed as endangered. All such species are fully protected under New York State's Environmental Conservation Law.
- Thr** - "Threatened Species" determined by the DEC as likely to become an endangered species within the foreseeable future in New York State, or federally listed as threatened. All such species are fully protected under New York State's Environmental Conservation Law.
- Spec Conc** - Special Concern Species are those native species which are not yet recognized as endangered or threatened but for which documented evidence exists relating to their continued welfare in New York State. The Special Concern category, while existing in DEC rules and regulations, does not in itself provide protection. Therefore, a species listed as Special Concern is accompanied by a second notation indicating whether or not such species is otherwise protected.
- Game Species** - Any of a variety of "big game" or "small game" species as stated in the Environmental Conservation Law; many normally have an open season for at least part of the year and are protected at other times. Others are protected year round.

- Prot** - “Protected Wildlife” means wild game, protected wild birds and endangered species of wildlife as defined in the Environmental Conservation Law.
- Un** - “Unprotected” means that the species may be taken at any time without limit; however, a license to take may be required.

APPENDIX VIII
Occurrence of Wildlife on the Unit

COMMON NAME	SCIENTIFIC NAME
Reptiles and Amphibians:	
Spotted salamander	<i>Amsytoma Maculatum</i>
Red spotted newt	<i>Notophthalmus viridescens</i>
Northern dusky salamander	<i>Desmognathus fuscus</i>
Allegheny dusky salamander	<i>Desmognathus ochrophaeus</i>
Northern redback salamander	<i>Plethodon cinereus</i>
Northern slimy salamander	<i>Plethodon glutinosus</i>
Northern spring salamander	<i>Gyrinophilus porphyriticus</i>
Northern two-lined salamander	<i>Eurycea bislineata</i>
Eastern American toad	<i>Bufo americanus</i>
Northern spring peeper	<i>Hyla crucifer</i>
Grey tree frog	<i>Hyla versicolor</i>
Bull frog	<i>Rana catesbeiana</i>
Green frog	<i>Rana clamitans</i>
Wood frog	<i>Rana sylvatica</i>
Northern Leopard frog	<i>Rana pipiens</i>
Pickerel frog	<i>Rana palustris</i>
Common snapping turtle	<i>Chelydra serpentina</i>
Spotted turtle	<i>Clemmys guttata</i>
Wood turtle	<i>Clemmys insculpta</i>
Eastern painted turtle	<i>Chrysemys picata</i>
Northern water snake	<i>Nerodia spidedon</i>
Northern brown snake	<i>Storeria dekay</i>
Northern redbelly snake	<i>Storeria occipitamaculata</i>
Common garter snake	<i>Thamnophis sirtalis</i>
Eastern ribbon snake	<i>Thamnophis sauritis</i>

COMMON NAME

Northern ringneck snake

Smooth green snake

Eastern milk snake

SCIENTIFIC NAME

Diadophis punctatus edwardsi

Ophreodryas vernalis

Lampropeltis triangulum

Mammals

<u>Common Name</u>	<u>Scientific Name</u>	<u>Protective Status</u>	
		<u>Federal</u>	<u>State</u>
Virginia Opossum	<i>Didelphis virginiana</i>	Un	Game Species
Masked Shrew	<i>Sorex cinereus</i>	Un	Un
Smokey Shrew	<i>Sorex fumeus</i>	Un	Un
Northern Water Shrew	<i>Sorex palustris</i>	Un	Un
Pygmy Shrew	<i>Microsorex hoyi</i>	Un	Un
Least Shrew	<i>Cryotis parva</i>	Un	Un
No. Shorttail Shrew	<i>Blarina brevicauda</i>	Un	Un
Star-nosed Mole	<i>Condylura cristata</i>	Un	Un
Hairy-tail Mole	<i>Parascalop breweri</i>	Un	Un
Little Brown Bat	<i>Myotis lucifugus</i>	Un	Un
Keen's Bat	<i>Myotis keenii</i>	Un	Un
Small-footed Bat	<i>Myotis leibii</i>	Un	Un - Spec Conc
Silver-haired Bat	<i>Lasionycteris noctivagans</i>	Un	Un
Eastern Pipistrelle	<i>Pipistrellus subflavus</i>	Un	Un
Big Brown Bat	<i>Eptesicus fuscus</i>	Un	Un
Red Bat	<i>Lasiurus borealis</i>	Un	Un
Hoary Bat	<i>Lasiurus cinereus</i>	Un	Un
Black Bear	<i>Ursus americanus</i>	Un	Game Species
Raccoon	<i>Procyon lotor</i>	Un	Game Species
Fisher	<i>Mustela pennanti</i>	Un	Game Species
Shorttail Weasel	<i>Mustela erminea</i>	Un	Game Species
Longtail Weasel	<i>Mustela frenata</i>	Un	Game Species
Mink	<i>Mustela vison</i>	Un	Game Species
River Otter	<i>Lutra canadensis</i>	Un	Game Species
Striped Skunk	<i>Mephitis mephitis</i>	Un	Game Species
Eastern Coyote	<i>Canis latrans</i>	Un	Game Species
Red Fox	<i>Vulpes vulpes</i>	Un	Game Species
Gray Fox	<i>Urocyon cinereoargenteus</i>	Un	Game Species
Bobcat	<i>Lynx rufus</i>	Un	Game Species

Woodchuck	<i>Marmota monax</i>	Un	Un
Eastern Chipmunk	<i>Tamias striatus</i>	Un	Un
Gray Squirrel	<i>Sciurus carolinensis</i>	Un	Game Species
Red Squirrel	<i>Tamisciurus hudsonicus</i>	Un	Un
So. Flying Squirrel	<i>Glaucomys volans</i>	Un	Un
Beaver	<i>Castor canadensis</i>	Un	Game Species
Deer Mouse	<i>Peromyscus maniculatus</i>	Un	Un
White-footed Mouse	<i>Peromyscus leucopus</i>	Un	Un
So. Bog Lemming	<i>Synaptomys cooperi</i>	Un	Un
So. Red-backed Vole	<i>Clethrionomys gapperi</i>	Un	Un
Meadow Vole	<i>Microtus pennsylvanicus</i>	Un	Un
Woodland Vole	<i>Microtus pinetorum</i>	Un	Un
Muskrat	<i>Ondotra zibethica</i>	Un	Game Species
Meadow Jumping Mouse	<i>Zapus hudsonicus</i>	Un	Un
Woodland Jumping Mouse	<i>Napaeozapus insignis</i>	Un	Un
Porcupine	<i>Erethizon dorsatum</i>	Un	Un
Varying Hare	<i>Lepus americanus</i>	Un	Game Species
Eastern Cottontail	<i>Sylvalagus floridanus</i>	Un	Game Species
White-tailed Deer	<i>Odocoileus virginianus</i>	Un	Game Species

Adapted from Gotie, R.F. 1983. Biological Reconnaissance of the Wildlife Management Areas in Region 7- Pharsalia WMA Fed. Aid. Perf. Report W-137-D. 1982-83, mimco; and Chambers, R.E.

APPENDIX IX Turkey Harvest Within The Unit

Reported Turkey Takes for spring 1996-99. The expansion rate is the Statewide rate from the Turkey Hunter Survey average over the last 5 years. For the last few years the survey has been questionable because of having a poor sampling frame due to the decentralized permit sales.

	1996	1997	1998	1999
Georgetown	27	15	26	22
DeRuyter	16	11	14	16
Nelson	16	18	13	13
Cazenovia	17	24	33	27
Total Reported	76	68	86	78
Rough Expansion Rate	3.5	3.5	3.5	3.5
Rough Estimated	270	240	300	270

TIOUGHNIOGA UMP-MADISON COUNTY-TURKEY HARVEST 1990-2000

Year	Spring	Fall
1990	105	64
1991	102	78
1992	156	40
1993	149	126
1994	192	115
1995	279	170
1996	352	112
1997	317	133
1998	315	162
1999	254	229
2000	225	

**APPENDIX X
Game Harvest Within The Unit**

Total Deer Harvest - Tioughnioga Unit - 10 Years

Towns	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	AVG.
Georgetown	243	259	221	267	109	110	145	145	161	213	187
DeRuyter	190	142	226	200	98	95	107	147	148	213	158
Nelson	353	411	383	418	216	229	226	300	295	354	318
Cazenovia	327	343	364	426	216	283	227	240	235	292	295
UMP AVG	278	289	298	328	160	179	176	208	210	270	240

Source: 1999 New York State 20 Yr. Deer Book

Adult Bucks/Sq. Mile - Tioughnioga UMP - 10 Years

Towns	1990	1991	1992	1992	1994	1995	1996	1997	1998	1999	AVG.
Georgetown	2.48	3.08	2.88	1.95	1.18	1.88	2.11	1.88	2.08	2.71	2.22
DeRuyter	2.91	2.59	4.14	2.56	1.94	2.14	2.33	3.30	2.56	3.04	2.75
Nelson	3.30	3.89	4.46	2.93	2.63	2.72	2.45	3.50	3.34	3.59	3.28
Cazenovia	3.01	2.90	3.85	3.03	2.34	3.18	2.38	2.69	2.59	2.91	2.89
UMP AVG	2.92	3.12	3.83	2.62	2.02	2.48	2.38	2.84	2.64	3.06	2.78

Source: 1999 New York State 20 Yr. Deer Book

Small Game Hunter Take/Year-Based on 1996-97 Statistics*

Wildlife Management Unit 25 - 4,125 Square Miles

Land Area	Sq. Miles	Rabbit	Squirrel	Hare	Raccoon	Red Fox	Gray Fox
Georgetown	39.9	408	691	12	86	2	23
DeRuyter	30.9	316	535	9	67	1	17
Nelson	43.7	447	756	12	94	2	25
Cazenovia	52.5	537	909	15	113	2	30

Land Area	Sq. Miles	Grouse	Pheasant	Woodcock	Ducks	Geese
Georgetown	39.9	296	69	29	122	8
DeRuyter	30.9	229	53	22	95	7
Nelson	43.7	324	76	32	134	10
Cazenovia	52.5	389	91	38	161	12

* NYSDEC 1996-1997 Small Game Hunter Survey

APPENDIX XI
Beaver Populations Within The Unit

Georgetown 39.9 square miles

DeRuyter - 30.9 square miles

Nelson - 43.7 square miles

Cazenovia - 52.5 square miles

Bureau of Wildlife

Objective: 0.32 Active Beaver Colonies/square mile

Potential Sites for Beaver Colonies: 1.07/square mile

Potential Sites:

Georgetown 43 sites

DeRuyter 33 sites

Nelson 47 sites

Cazenovia 56 sites

Active Beaver Colony Sites/square mile:

Georgetown 14 active colonies

DeRuyter 10 active colonies

Nelson 15 active colonies

Cazenovia 18 active colonies

Number of Beaver/Town:

Georgetown 14 colonies x 4/colony = 56

DeRuyter 10 colonies x 4/colony = 40

Nelson 15 colonies x 4/colony = 60

Cazenovia 18 colonies x 4/colony = 72

Estimate of Beaver Population in the UMP area: 228

**APPENDIX XII
Property Taxes**

The tax rolls indicate that 3,524 acres, or approximately 47% of the unit, had a total taxable assessed value of \$1,467,500 in 1999. The TWMA and a portion of DeRuyter and Morrow Mountain State Forest are in a public non-taxable status. For the remaining State land a total of \$26,436 in property tax was paid to local townships and school districts.

State Land	Acres	Acres Assessed	Assessment	C	D	G	N	Tax
DeRuyter SF	972	922	\$329,800	✓	✓			\$7,142
Morrow Mt. SF	1,290	1,133	\$549,300			✓		\$9,506
Stoney Pond SF	1,469	1,469	\$588,400				✓	\$9,788
TWMA	3,625	0	0					0
Total	7,356	3,524	\$1,467,500					\$26,436

C -Cazenovia, D-DeRuyter, G-Georgetown, N-Nelson

APPENDIX XIII
Abstracts of Codes, Rules and Regulations of New York State

Chapter I - Fish and Wildlife-Part 51 - Public Use of State Wildlife Management Areas

Section 51.1 - Hunting, trapping and fishing permitted except as restricted by public notice.

Section 51.2 - Boating, mechanical power prohibited, overnight mooring prohibited.

Section 51.3 - Camping prohibited except pursuant to written permission.

Section 51.4 - Roads and parking areas - vehicle use of roads posted against prohibited, off-road travel by motor vehicle prohibited except where specifically permitted; where posted, parking restricted to designated areas.

Section 51.5 - Structures - none allowed except by written permission.

Section 51.6 - General provisions

- no fires allowed except for cooking, warmth or smudge
- swimming is prohibited
- vegetation shall not be cut or removed except pursuant to written permission
- no person shall trespass into areas posted as restricted
- no placement of trash, waste, litter etc. except in receptacles provided
- grazing by domestic animals prohibited except by written permission

Section 51.7 - Waivers - may be granted against any prohibition except prohibitions involving open seasons for taking of fish and wildlife.

Chapter II - Lands and Forests - Part 190 - Use of State Forests

Section 190.1 - Fire - no fires permitted except for cooking, warmth or smudge. Also specifies depositing matches, etc. and using live trees for fuel prohibited.

Section 190.2 - Signs and structures - no person shall deface, mutilate or destroy, etc. This section also includes the prohibition of placing trash, garbage, etc.

Section 190.3 - Camping sites - sites must be kept neat, 150 feet from trail, road, stream, pond, spring, etc. and includes emergency closure times and elevation restrictions.

Section 190.4 - Camping permits - camping at one site for four nights or more without a permit is prohibited, length of stay specified, camping restricted to posted areas, group size specified and age of permittee.

Section 190.5 - Permissible structures - no permanent structures allowed, no transfer of existing structures, listing of reasons for cancellation of existing permits for lean-to (open camps).

Section 190.6 - Open camps - specifies number of days a lean-to may be occupied, what constitutes an enclosure, etc.

Section 190.7 - Public campgrounds - Lists of additional public use requirements when a public campground exists on State land.

Section 190.8 - General - a long list of prohibitions for the public use of State lands including gambling, use of snowmobiles, toboggans and sleds on ski trails, sale of alcohol, speed limit on truck trails, deface, remove, destroy vegetation without a permit, etc. This section allows the use of horses except on intensively developed facilities (listed).

Section 190.9 - Use of pesticides on State lands - none allowed except by written permission.

Section 190.10 - Unique Areas - special regulations listed by area.

Section 190.11 - Environmentally sensitive lands - lists the sections above that apply to

people using sensitive lands (Sections 190.0 - 190.9) seems redundant.

Section 190.12 - Conservation Easements - Applies to all easement lands that the public has a right to access. Goes on to list general prohibitions on use, then lists areas under easements.

Section 190.13 - 190.22 - Repealed or not in use.

Section 190.23 - Specific Areas - List of Ski Centers: Belleayre, Gore and Whiteface.

Section 190.24 - Boat launch sites - specific rules of public use of launch sites.

Section 190.25 - 190.33 - Regulations for specific areas such as Zoar Valley, Lake George, the Olympic Area, etc.

APPENDIX XIV

Comparisons and Contrasts Governing Wildlife Management Areas and State Forests

Chapter I - Part 51 - Fish & Wildlife
Chapter II - Part 190 - Lands & Forest

<u>Interest</u>	<u>Fish & Wildlife</u>	<u>Lands & Forests</u>
Hunting, Trapping, Fishing	Permitted except as specifically restricted by posted notice.	No specific mention.
Boating	Use of mechanical power prohibited, overnight mooring or storage of boats prohibited.	Under 190.8 general, no boat with living quarters shall be anchored to State land above water except by permit or to land underwater for longer than 24 hours. No boat shall be tied up or fastened to a State dock so as to prevent free access to such structure.
Camping	Prohibited except pursuant to written permission.	Temporary camping in one location for four nights or more is prohibited except under permit. Then there is a long list of dos and don't including time limits, garbage pick up and camping sites. No permit is required for camping 3 nights or less, with up to 10 people.
Roads and parking areas	Vehicle use of roads posted against use prohibited; off-road travel or use or motorcycles, motor scooters, mopeds, trail bikes, snowmobiles or any other motorized vehicle is prohibited except as specifically permitted by posted notice.	Use of motor vehicle on State land under the jurisdiction of DEC outside the forest preserve is prohibited except where specifically permitted by posted notice. Speed limit of 25 mph on truck trails or roads maintained by the Department. Snowmobiles are not included as a motor vehicle.

Interest

Fish & Wildlife

Lands & Forests

Structure

No permanent structures are allowed except by written permission.

Permits for the erection of permanent tent platforms and/or lean-to (open camps) will not be issued under any condition. The transfer of existing lean-tos will not be permitted. Current permits for lean-tos will be canceled upon the death of the permittee, no desire to maintain the structure or when the structure deteriorates below Department specifications. Temporary wooden platforms may be erected but must be taken down at the expiration of the permit. Open camps may not be occupied by the same person or persons for more than 3 consecutive nights.

Fires

No fires allowed except for cooking, warmth or smudge with safety precautions.

No fires allowed except for cooking, warmth or smudge. Also, site preparation is required, and no fires shall be left unattended until extinguished. In addition, no person may deposit lighted matches, cigars, cigarettes etc., where they will cause a fire; and no wood, except from dead and down trees or supplies furnished by the Department, shall be used for fuel.

Swimming

Swimming is prohibited.

No prohibition against swimming.

Interest

Fish & Wildlife

Lands & Forests

Official Signs and Structures

No mention in Part 51.

No person shall deface, mutilate or destroy any Department sign, structure or object.

Vegetation

No person shall remove, cut or willfully damage or destroy living vegetation of any kind, except pursuant to written permission.

No person shall deface, remove, destroy or otherwise injure any manner whatsoever any tree, flower, shrub, fern, moss or other plant, rock, fossil or mineral found or growing on State land, except under permit; nor, shall songbirds and their nests and other wildlife be molested or disturbed at any time, except during the open season therefor.

Trespassing

No person shall enter upon property posted with "no trespassing" signs, except pursuant to written permission.

No person shall fail to comply with instructions contained on a sign of the Department of Environmental Conservation.

Littering

No person shall discard or deposit any trash, waste or litter on lands or waters except in waste receptacles when provided.

No person shall throw, dump, deposit or place or cause to be thrown, dumped, deposited or placed on or in any Department lands or structures any refuse, trash, rubbish, litter or any nauseous or offensive matter.

Agriculture

Grazing by domestic animals prohibited except by written permission.

No person shall use any portion of State lands for agricultural purposes, including but not limited to the grazing of cattle or domestic animals of any kind thereon, unless they have obtained a permit from the Department.

APPENDIX XV
Stoney Pond Cross-Country Ski Trail Survey - Summary

The DEC is developing a management plan for Stoney Pond and the larger Tioughnioga Unit of State lands. We are interested in your thoughts about the Cross-Country ski trails and ask that you take a moment to answer the following questions:

How often do you ski at Stoney Pond?

20 weekly 13 monthly 0 once per year 9 other

How would you rate the trail system?

26 excellent 16 good 0 fair 0 poor

What improvements would you recommend to the trail system?

Improve map to include larger scale, more detail and distance of each trail; post signs at trail intersections; install bench or lean-to adjacent to pond; post signs to reduce conflict between skiers, snowshoe users and dogs; interpretive signage to describe terrain, no motorized vehicles, trail head parking at Hughes Road; more trails, more challenging trail and more trails in undeveloped areas; groom trails; improve drainage on some trails; no further development; trail map for summer use.

Please return this survey to the envelope in the registration box or mail to DEC. Thank you.

If you are interested in finding out more about the Tioughnioga Unit Management Plan, please include your name and address.

Forty-two people responded to the survey between February 15 and April 1, 2001. Twenty-five respondents requested additional information about the Tioughnioga UMP and provided their name and address.

APPENDIX XVI
Stoney Pond Camping Requirements

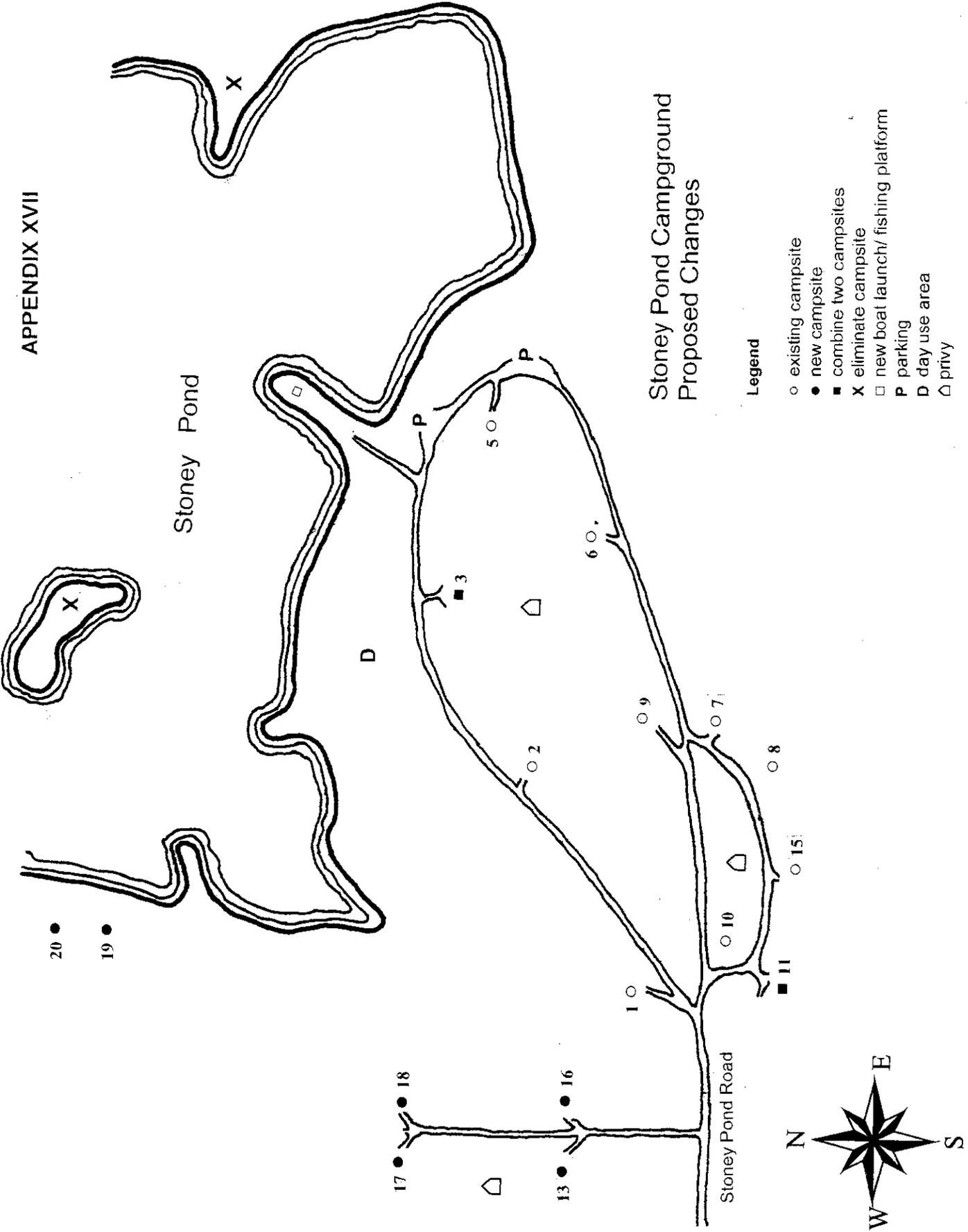
Dear Stoney Pond Visitor:

The Department welcomes you to Stoney Pond. We hope your visit will be a pleasurable experience. Please familiarize yourself with the following rules. These rules will be enforced to protect and preserve both the natural pond environment and the public recreationist. Enjoy your visit.

- (1) From May 1 through September 30, **CAMPING IS ALLOWED AT DESIGNATED SITES BY PERMIT ONLY**. Free permits may be obtained from the DEC Lands & Forests Office in Sherburne, in person or by calling 607-674-4036 between the hours of 8 am and 4 pm Monday through Friday. Or you may fax your request to 607-674-9034. Please provide the following: name, address, phone #, date of birth, # in party, camping dates, site #, license plate # and return fax #.
- (2) No person under 18 years of age shall apply for, or be issued, a camping permit.
- (3) The maximum length of stay on any one site or combination of sites is 14 days. A new permit will not be issued for the same address until an issued permit expires.
- (4) Arrival time on a campsite is after 1 pm the first camping date of the permit. Departure time from the campsite is before 11 am on the last camping date of the permit.
- (5) No more than 10 people are allowed per campsite.
- (6) Day users must leave by 10 pm. Quiet hours are 10 pm to 7 am.
- (7) Fires are allowed only in fire pits provided by DEC. Only dead and down wood may be used for campfires. No burning of scrap wood from construction or demolition is allowed. No fires are allowed on the boat launch site.
- (8) Cutting, defacing, injuring in any manner any live trees, shrubs or plants is prohibited.
- (9) **CARRY OUT ALL RUBBISH**. Throwing glass, cans, aluminum foil, food wastes and other unburnable rubbish into the fire pit is prohibited.
- (10) Dogs and other pets must be safely restrained.
- (11) Swimming and/or bathing in the pond is prohibited. Use of boats equipped with motors is prohibited.
- (12) ATVs are prohibited. Off-road operation of all vehicles is prohibited.
- (13) Horses are not permitted in the camping area.
- (14) Violation of any provision of this notice shall be grounds to revoke the permit and remove the violator from the camping area.

EMERGENCY NUMBERS: 911 or Madison Co. Emergency Services: (315)363-2090

Forest Ranger's Contact Numbers: (607)674-4017 Weekdays - 8 am to 4 pm
(315)655-5643 Nights & Weekends



APPENDIX XVIII
Present Facilities on the Unit

Boundary Lines

<u>State Forest</u>	<u>Miles</u>
Tioughnioga Wildlife Management Area	36.7
Madison #9	12.02
Madison #10	15.9
Madison #13	11.96

Water Impoundments

Appendix II lists the ponds found on the Unit.

Tioughnioga Wildlife Management Area

Identification Signs

Kiosk with ID sign - 2

Parking Areas

Damon Road - 3
 Tinsley Hill Road - 2
 Dugway Road - 1
 Peterson Hollow Road - 1

Shale Pits

2 located on Tinsley Hill Road

Barriers

Metal Gates - 6
 Large Boulders - 5 locations

Maintained Dikes - 7

Nest Boxes - 20
 Public Forest Access Road - 1.0 mile
 Culverts w/2 marking posts each

Madison #9

Public Forest Access Roads

1.5 miles with 15 culverts and pair of marking posts for each
 Turn-around at truck trail terminus

Parking Areas

Fairbanks Road - 4 pull-offs

Shale Pits

1-adjacent to PFAR

Madison #10

0.9 mile of ATV trail for the mobility impaired with appropriate permit.
 0.9 mile of State forest truck trail with 7 culverts and a pair of marking posts for each culvert.
 Turn-around at truck trail terminus

Parking Areas

Parker Hill Road - Stand B-15
 Mack Road - Stand A-53
 Pull offs - truck trail (Stand A-18, 28)
 Adjacent to communication towers at truck trail terminus
 Fire tower Road - Stand A-33

Communication Towers

112 ft. tower with 6 guide wires and 3 anchors - operated by DEC
 80 ft. tower with 6 guide wires and 3 anchors - operated by State Police
 support buildings
 Power line to tower site with 6 poles feeding the line

Pond

with maintained dike

Gas Line

Consolidated Gas Supply Corp.
 Buried line in compartment A

Madison #13

Two State forest identification signs on Jones Road

Cross-country Ski Trail System
 2 trail registers with map boards
 5 wooden trail bridges
 13 miles of ski trails (26 trails)

Stoney Pond Campsite

14 sites with numbered posts
Kiosk with register box, map board,
rules & regulations
Day-use picnic area with tables
Free-standing, single stall pit privies - 2
Barrier Posts within campground
day-use areas - 73
Car top boat launch site and ramp

Ponds

Stoney Pond - 44 acres
Little Stoney Pond - 4 acres
Earthen dike and concrete spill box/each

Parking Areas

Jones Road - 2 parking lots
Stoney Pond Road - 1

Metal Gates

Green Road - 1
Hughes Road - 2
Gate at Stoney Pond Dam - 1

Trails

0.5 miles of designated snowmobile trail

APPENDIX XIX
Property Use Agreements

Deeded Right-of-Way

TWMA

Pole #1056-1077 - A T & T.
Approximately three miles of underground cable.

Madison #10

A right-of-way grant from December 1949 exists over Proposal M, Stand A-5 to service a gas pipe line which dissects this parcel. The right-of-way belongs to the Consolidated Gas Supply Corporation of Westfield, PA, as successors in interest to the New York State Natural Gas Corporation.

Madison #13

A deeded right-of-way dated from September 1941 gives permission to Oneida Madison Electric Corporation, Inc. to operate and maintain an electric line through Proposal I, Stands B-11 and 12 of Madison R.A. #13, adjacent to Hughes Road.

Revocable Permits

A revocable permit dated October 1978 grants an easement to the Department of Environmental Conservation from S.U.N.Y. at Morrisville for access to State land south and west of their property inholding on Madison #10 along Mack Road.

Utility Rights-of-Way, Easements and Permits

Madison #9

Proposal A & G	Easement- NYSEG
Stand A-10,32,39,40,41	electric line

Madison #10

Proposal F	TRP-NYSEG
Stand A-40	electric line-supply power to communications towers

Proposal B, J	TRP-buried cable
Morrow Road	Chenango & Unadilla Telephone

Use of State lands without known permits or Easements

Madison #10

Morrow Road	NYSEG-power line
Firetower Road	Continental Telephone Co.-buried cable
Morrow Road	unknown utility line

Agricultural Agreements

An annual agreement with an adjacent private landowner to the Tioughnioga Wildlife Management Area in the Town of Cazenovia. The annual agricultural agreement allows for mowing of stand A-11, covering seven acres for hay removal. The agreement includes restricting the mowing to a set time period not to conflict with grassland bird nesting seasons.

APPENDIX XX

Additional Geologic Information on the Unit

Overlying the layers of igneous and metamorphic rocks under the Unit are sedimentary rocks deposited during the Cambrian Period over 500 million years ago and are comprised of primarily sandstones and shales.

Following the Cambrian Period was the Ordovician Period, and deposition of limestones, dolomites and shales in warm, shallow, and relatively open marine seas that occupied this region 435-500 million years ago.

Pre-Cambrian, Cambrian and Ordovician rocks are only located in the subsurface of Madison County; that is, they never intersect or are exposed at the ground's surface in the county. However, these rocks do come to the surface north of Madison County in adjacent Oneida County. This is due to the dip (or inclination) of rock units to the south at a rate of approximately 50 feet per mile.

There has been recent interest in the Ordovician limestones and dolomites, due to significant natural gas production from similar age rocks in various counties to the north and southwest of Madison County.

There has also been some interest in gas production from Ordovician and Silurian age rocks within Madison County, but has been limited.

Overlying the Ordovician age sedimentary rocks are sedimentary rocks deposited during the Silurian Period. The Silurian age rocks are comprised of primarily evaporites (gypsum, anhydrite and salt), shales with some limestones and dolomites, that were deposited in more restrictive marine seas than the overlying Ordovician age rocks. These rocks are considered to have been deposited 400 to 435 million years ago.

Following the Silurian Period, the Devonian Period (from 345 to 435 million years ago) resulted in the deposition of sedimentary rocks comprised primarily of shales with some limestones and dolomites interbedded. Devonian age rocks are the youngest bedrock located in Madison County. Younger rocks such as Mississippian and Pennsylvanian age rocks were either not deposited in the area or were subsequently eroded by other natural events such as glaciation and/or erosion.

Silurian and Devonian age rocks are the only bedrock that is exposed or outcrops within Madison County. These rocks outcrop in a general east-west trend across the county.

One can observe shale formations at exposed highway roadcuts and in areas dissected by streams. Evidence of the County's limestone formations are visible at various sites along the Helderberg Escarpment, an east-west trending feature that crosses the county eight to ten miles north of the hamlet of Nelson.

The land forms visible today are largely the result of glaciation. During the Pleistocene ice age, which lasted for approximately 1.25 million years, there were a series of glacial advances and retreats that occurred due to alternating global cooling and warming. Some of the inter-glacial intervals were times of warm and semi-tropical climate in regions that

are today temperate. As the glacial ice advanced it rose over hills and mountains and filled valley floors with vast sheets of ice. Embedded with rock and soil, these ice sheets scoured hilltops and gouged out valleys and lake bottoms. Approximately 12,000 years ago the receding Wisconsin glacier deposited a heterogeneous mixture of weathered rock and soil material known collectively as glacial till. Because of the diverse ways in which it was deposited and the chemical composition of parent material, glacial till and the soils that ultimately formed from them are extremely variable. Valley floors were the last to see the glaciers retreat and here meltwater deposited pockets of soils, sands and rocks known as outwash deposits. Kames, eskers and moraines are some of the formations resulting from these deposits. Today, commercial sand and gravel establishments throughout the region owe their existence to the glaciers work.