

APPENDIX E
TRAIL CLASSIFICATION SYSTEM AND MARKING STANDARDS

TRAIL CLASSIFICATION SYSTEM – SILVER LAKE WILDERNESS AREA

TITLE	EXAMPLE	MARKING	TREAD	BARRIERS	USE LEVEL	ACCEPTABLE MAINTENANCE
I Unmarked Route	Fisherman's Path/ Old Haul Road	None	Intermittently apparent, relatively undisturbed organic soil horizon	Natural obstructions present, logs and water courses	Occasional	None
II Path	None in SLWA	Intermittent	Intermittently apparent, compaction of duff, mineral soils occasionally exposed	Same as unmarked route	Low, varies by location	Intermittent marking with consideration given to appropriate layout based on drainage, occasional barrier removal only to define appropriate route.
III Primitive	Woods Lake Trail	Trail markers, sign at junction with secondary or other upper level trail	Apparent, soil compaction evident	Limited natural obstructions (logs and river fords)	Low	Drainage (native materials) where necessary to minimize erosion, blowdown removed 2-3 years, brushing as necessary to define trail (every 5-10 years). Bridges only to protect resource (max - 2 log width). Ladders only to protect exceptionally steep sections. Tread 14"-18" wide, clear: 3' wide, 3' high.
IV Secondary	Northville-Lake Placid Trail (NPT)	Markers, signs with basic information	Likely worn and possibly quite eroded. Rocks exposed, little or no duff remaining	Up to one year's accumulated blowdown, small streams.	Moderate	Drainage where needed to halt erosion and limit potential erosion (using native materials), tread hardening with native materials where drainage proves to be insufficient to control erosion. Remove blowdown annually. Brush to maintain trail corridor. Higher use may warrant greater use of bridges (2-3 logs wide) for resource protection. Ladders on exceptionally steep rock faces. Tread 18"-24" wide, clear: 4' wide, 3' high.

TRAIL CLASSIFICATION SYSTEM – SILVER LAKE WILDERNESS AREA

TITLE	EXAMPLE	MARKING	TREAD	BARRIERS	USE LEVEL	ACCEPTABLE MAINTENANCE
V Trunk or Primary Trail	None in SLW Cathead Mountain Trail in CMPA	Markers, signed with more information and warnings.	Wider tread, worn and very evident. Rock exposed, possibly very eroded.	Obstructions only rarely, small streams	High	Same as above; Plus: regular blowdown removal on designated ski trails, non-native materials as last resort. Extensive tread hardening when needed, bridge streams (2–4 logs wide) difficult to cross during high water, priority given to stream crossings below concentrations of designated camping. Tread 18"-26" wide, clear: 6' wide, 8' high, actual turn piking limited to 2% of trail length.
VI Front Country	None in SLWA	Heavily marked, detailed interpretive signing	Groomed	None	Very High	Extensive grooming, some paving, bark chips, handicapped accessible. This is to be implemented within 500' of wilderness boundary.
VII Horse Trail	None in SLWA	Marked as Trunk or Secondary	Wide tread, must be rather smooth.	Same as Trunk Trail.	Moderate to High	Same as trunk trail, except use techniques appropriate for horses. Bridges: 6' minimum width with kick rails, nonnative dimensional materials preferred. Tread: 2'-4' wide, clear: 8' wide, 10' high.
VIII Ski Trail	None in SLWA	Marked High. Special markers, sign at all junctions with hiking trails.	Duff remains. Discourage summer use	Practically none due to hazards.	High	Focus on removal of obstructions, maintenance should be low profile, tread determined by clearing 6' (Should be slightly wider at turns and steep sections. Provide drainage using native materials to protect resource.

TRAIL MARKING STANDARDS

On Forest Preserve and State Forest lands, all trails are marked with small, colored plastic disks nailed to trees or posts at regular intervals. In the past on hiking trails, blue markers were used for north-south trails, red markers for east-west trails and trails to fire towers, and yellow markers for connector trails.

The following markers are used today. All are available in blue, yellow, and red.

Foot Trail - Used on all trails where only foot traffic is permitted.

Trail - Used along multiple-use trails. Other markers appropriate on a given trail, such as foot, snowmobile, horse, and bicycle trail markers, are posted together at trailheads and intersections on guideboards. "Trail" markers are used along the trail to mark the trail route.

Canoe Carry - Used on designated canoe carry trails.

Cross-country Ski Trail - Used on trails considered suitable for cross-country skiing. Cross-country skiing is permitted anywhere on the Forest Preserve.

Snowmobile Trail - Used on trails where snowmobiles are permitted. Snowmobiles are only permitted on trails marked as snowmobile trails.

Horse Trail - Used on trails where horses are permitted. Horses may not be ridden on foot trails that are not also marked as horse trails, nor on snowmobile or cross-country ski trails when they are covered with ice and snow.

Bicycle Trail - Used on trails where bicycles are permitted. Bicycles are permitted in wild forest areas except where posted. In wild forest, it is not necessary for a trail to be marked as a bicycle trail for bicycles to be permitted. They may be used in primitive, and canoe areas only on designated roads. They are not permitted in wilderness.

Markers should be applied so that they appear on the right side of the trail to the traveler. They should be close enough that a person standing at one marker can see the next marker ahead clearly, but cannot see more than two markers ahead. Long straight trails or naturally well-defined trails should be marked less frequently (one every 100-200 feet). This guideline is especially applicable in wilderness areas where markers should be kept to a minimum.

Markers should be applied in **one direction at a time** to assure that they are located where appropriate for those traveling in that direction.

Appearance is extremely important. Old and damaged markers should be removed wherever it is possible to do so without further damage to the tree before posting the new marker. If the old marker can't be removed, cover it with a new marker, rather than setting the new marker in a different spot. Use **two** 1 ½-inch roofing nails, preferably aluminum (untreated steel nails rust and can stain markers), one near the top and one near the bottom of the marker. Unless vandalism is a problem, do not drive the nails home. Sinking the nails no more than one-half to two-thirds of the way into the wood allows the tree to grow for a few years without damaging the marker. Markers should be posted at or slightly above eye level except in areas of heavy snowfall where snow might obscure them. The markers then should be placed even higher on the tree.

A supply of markers and nails is available from Lands and Forest personnel.

APPENDIX F
INVASIVE PLANT SPECIES BEST MANAGEMENT PRACTICES

BEST MANAGEMENT PRACTICES FOR STATE LANDS UNDER MANAGEMENT OF THE DEC IN THE ADIRONDACK PARK

Applicability

These Best Management Practices (BMP's) are intended for use by those applying for and implementing terrestrial invasive plant species management activities on State Lands under an Adopt-A-Natural-Resource Agreement (AANR). The following document contains acceptable practices for control of the following four terrestrial invasive species: Purple loosestrife (*Lythrum salicaria*), Japanese knotweed (*Polygonum cuspidatum*), Common reed (*Phragmites australis*), Garlic mustard (*Alliaria petiolata*).

The following management options, should be selected with consideration for the location and size of the stands, the age of the plants, past methods used at the site, time of year, sensitive native flora within or adjacent to the target infestation, and adjoining and nearby land uses.

Other management approaches not identified here may be appropriate but must be approved by the Regional Land Manager of the NYS Department of Environmental Conservation in the region where the proposed invasive plant control activity will take place in consultation with the Adirondack Park Agency's Director of Planning.

Within the Park there are several geographic settings (at the location of the target plant(s)) that need to be considered when determining appropriate BMP's and the regulatory instruments needed prior to their implementation. These settings and relevant action are:

1. In or within 100' of a wetland on private or public lands -- requires a general permit from the Adirondack Park Agency.
2. Forest Preserve lands -- requires an AANR from the Department of Environmental Conservation and, if wetlands are involved, an Adirondack Park Agency permit.
3. If the standing water is greater than one acre in size and/or has an outlet to surface waters, an aquatic pesticides permit is required pursuant to ECL 15-0313(4) and 6 NYCRR 327.1 in which case application can only be made by a Certified Applicator or Technician or supervised Apprentice licensed in "Category 5 – Aquatic Vegetation Control".

GENERAL PRACTICES

1. **Minimum Tools Approach** - State land stewardship involving invasive plant species management practices should always incorporate the principles of the Minimum Tools Approach. Any group or individual implementing such practices on State land should only use the minimum tools, equipment, devices, force, actions or practices that will effectively reach the desired management goals. Implicit in this document is the stricture to implement a hierarchy of management practices based upon the target species and site conditions starting with the least intrusive and disruptive methods.

2. **Notification** - The following best management practices are intended to be used only when invasive terrestrial plant species are identified on Forest Preserve lands. These management techniques are temporary activities and are implemented with the ultimate goal being protection and restoration of native plant communities. Appropriate signage should be employed to explain the project. It may also be appropriate to issue press releases to explain the goals and techniques of the management activities.

3. **Motorized Equipment** - All use of motorized equipment on State lands under the jurisdiction of the DEC within the Adirondack Park shall be in compliance with Commissioner's Policy Number 17 (CP17), and other pertinent DEC policy regarding the use of motorized equipment on Forest Preserve Lands.

4. **Erosion Control** - Some of the methods described below require actual digging or pulling of plants from the soil. In all cases they require removal of vegetation whether or not there is actual soil disturbance. Each situation must be studied to determine if the proposed control method and extent of the action will destabilize soils to the point where erosion is threatened. Generally if more than 25 square feet of soil surface is cleared or plant removal occurs on steep slopes silt fence should be installed and maintained.

5. **Revegetation** - All of the control methods below are aimed at reducing or eliminating invasive species so that natives are encouraged to grow and re-establish stable conditions that are not conducive to invasive colonization. In most cases removal or reduction of invasive populations will be enough to release native species and re-establish their dominance on a site. However, replanting or reseedling with native species may be required.

6. **Herbicide Treatments** - The only herbicide application allowed is spot treatment to individual plants using a back pack or hand sprayer, wick applicator, cloth glove applicator, stem injection or herbicide clippers. **No broadcast herbicide applications using, for example a truck mounted sprayer, are allowed.** The only herbicides contemplated and approved for use are glyphosate and triclopyr. Glyphosate, in the correct formulation, may be used in situations where there is standing water including wetlands. Triclopyr is to be used only in upland situations. **In all cases all label restrictions must and shall be followed by a certified applicator in an appropriate category.** The certified applicator or technician must have copies of the appropriate labels at the treatment site. Glyphosate and triclopyr are non-selective herbicides that are applied to plant foliage or cut stems and are then translocated to the roots. The application methods described and allowed are designed to reduce or eliminate the possibility that non-target species will be impacted by the herbicide use. All herbicide spot treatments require follow-up inspection later in the growing season or the following year to re-treat any individuals that were missed. Stem injections may be implemented using a large gauge needle or a specialized injection tool such as the JK Injection System (www.jkinjectiontools.com).

All herbicide mixing will be done in accordance with the label precautions and take place at a staging area (typically at a marshalling yard or a vehicle). No mixing shall take place on State lands unless at an approved location constructed for such use. Unused chemical and mixes shall be disposed of in a legal manner. No chemical or mix shall be disposed of on State lands unless at an approved location constructed for such use.

7. **Sanitation** - Management personnel must attempt to prevent invasive plant propagules from entering a treatment site or from being exported from it. Therefore, personnel must insure that their clothing including boots do not carry seeds or other propagules or weed seed infected soil clods. At the beginning of the field day personnel should inspect their clothing and boots at the staging area. Prior to leaving the treatment site personnel should conduct another inspection and remove any propagules or soil clods from their clothing or boots. Personnel must insure that all equipment used for invasive species control whether it be hand or power driven is cleaned prior to entering onto a control site and prior to leaving the treatment site. Vehicles and equipment can be cleaned at a staging area that is distant from the control site after management activities if precautions are taken during transport to contain any propagules. This is an effort to reduce transport of plant propagules and reduce the potential for new invasive introductions. Use steam or hot water to clean equipment.

8. **Material Collection and Transportation** - While on the treatment site bag all cut material in heavy duty, 3 mil or thicker, black contractor quality plastic clean-up bags. Securely tie the bags and transport from the site in a truck with a topper or cap to securely fasten the load, in order to prevent spread of the plant material from the project work site. Transport the material to a legal disposal location.

9. **Composting** - Because of the extremely robust nature of invasive species, composting in a typical backyard compost pile or composting bin is not appropriate. However, methods can be used whereby sun-generated heat can be used to destroy the harvested plant materials. For instance, storage in a sealed 3 mil thickness (minimum) black plastic garbage bags on blacktop in the sun until the plant materials liquefy is effective. If a larger section of blacktop is available, make a black plastic (4 mil thickness minimum) envelope sealed on the edges with sand bags. The plant material left exposed to the sun will liquefy in the sealed envelope without danger of dispersal by wind.

The bags or envelopes must be monitored to make sure the plants do not escape through rips, tears or seams in the plastic. **When composting is suggested later in the text it is understood that liquefying the plant material in or under plastic is the desired action; not disposal in backyard composters or open landfill composting piles.**