

Stream improvements – The fisheries biologist may propose stream improvements.

Cultural site maintenance - Reasonable efforts to avoid damaging cultural sites will be made during forestry operations.

Recreation or scenic site work - The Gillette Castle Vista will be maintained, if manpower is available, by cutting additional trees that block the view during growing season. A sign is planned for the vista.

Improvement of critical habitat – An effort was made to perpetuate pitch pine by cutting out hardwood and scarifying soil in stand 9.6 on the southern end of Pine Ledge. The pitch pine seedlings resulted from the effort were heavily damaged by deer browse. Additional critical habitat improvement efforts may be tried during the management period.

Trail maintenance - Trail maintenance on the Weber parcel will be arranged by the park and recreation supervisor.

Upland wildlife opening work or leasing - None.

Wildlife habitat improvement - Habitat Improvement is accomplished with regeneration harvests (See Goals f and Forest stand regeneration below)

Wildlife population controls - Trapping would be sought if beaver damming imperils the Cedar Swamp or threatens roads or public safety. The expansion of deer hunting season would help sustain oak ecosystem by alleviating heavy deer browse on oak seedlings.

Invasive control – An attempt to treat invasives with herbicides, cutting and /or burning as soon as feasible after detection will be made.

Forest stand regeneration (even-aged management)

The manageable mixed hardwood forest (2190 acres) will have a rotation of 100 years (1/10th of the area regenerated during the 10 year plan). The stands to be regenerated are listed below:

	Stand	Acres
Cedar Swamp	1.6	15 (out of 25)
	2.3	72 (out of 81)
	4.2	10 (out of 19)
	7.2	10 (out of 22)
	10.1	20 (out of 37)

	10.2	10(out of 18)
Winthrop	5.1	37
	11.1	10(out of 16)
	16.8	18
	21.8	17(out of 104)
	Total	219

Forest stand rotational cutting for uneven-aged management - Uneven-age or selection management will maintain an older generation or two of conifers while nurturing a new one in the understory. The Uneven-age stand will have a 20 year cutting cycle.

	Stand	Acres
Cedar Swamp	1.2	21
	4.3	7
Winthrop	1.1	2
	4.5	1
	6.2	5
	8.2	3
	8.3	9
	10.3	8
	13.2	1
	13.3	5
	13.7	1
	14.5	6
	15.2	4
	19.1	35
	Total	108

Forest stand thinning -- Thinning will take a lower priority than regeneration harvests.

	Stand	Acres
Cedar Swamp	4.4	43
	4.5	32
	5.2	90
	10.5	13
	11.1	21

Winthrop	4.1	119
	4.4	17
	7.3	19
	7.4	29
	8.6	41
	13.1	30
	14.2	23
	15.1	16
	22.4	58
	26.1	43
	Total	594

Timber Stand Improvement / Prescribed Burning – Stands will be evaluated 2 to 5 years after regeneration harvest for TSI or prescribed burning. Because of heavy deer browse and slow initial growth, oak and pine are usually over-topped by red maple, birch, beech, and shrubs. Where this occurs, the stands will be treated with burns or TSI in order to promote oak and pine forests.



Figure 7 Overtopping red maple stump sprouts are cut in a TSI operation to release oak saplings (those with leaves still on) in a 6 year old clearcut off Pine Ledge Rd.

Pre-fire suppression work - None.

Management Caveat

Vegetation management of Cedar Swamp and Winthrop Block will follow an adaptive management approach that will allow for alternative management scenarios in case conditions change or new resource information becomes available. Unplanned regeneration harvests may be added if major natural disturbances such as a major hurricane or sudden oak death (Ramora blight) kills substantial amount of the forest.

VI. APPENDICES:

A. References

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B. Definitions

Forest Stand Size Classes

Stand: an area of tree growth that constitutes a practical working unit.

Mature Timber: timber that has reached the diameter specified for the site and rotation, as based on black oak site indices and modified as necessary for specific management situations.

Sawtimber: hardwood trees 12 inch diameter class and larger, and softwood trees 10 inch diameter class and larger, that contain at least one eight-foot sawlog.

1. **Acceptable growing stock (AGS)**---These are salable trees that are not large enough to be mature, but are of acceptable species, form, and quality and would be satisfactory as crop trees in a final stand on the site, or that have value as a potential product for an intermediate cut within 20 years.
2. **Undesirable growing stock (UGS)**---These are salable trees that are not mature for the site, but are undesirable because of species, defect, or form.

Poletimber: hardwood trees 5.0 inches to 10.9 inches at d.b.h., and softwood trees 5.0 inches to 8.9 inches at d.b.h. Consists of trees that are too small for sawlogs, but could be sold as pulpwood, fuelwood or other small products where such markets exist.

1. **Acceptable growing stock (AGS)**---Trees salable for small products, and of such species, form, and quality that they are suitable for crop trees if the size class is managed as the main stand, or that are suitable to leave as potential products for future intermediate cuts within the next 20 to 40 years.
2. **Undesirable growing stock (UGS)**---Trees salable for small products, but because of undesirable species or poor form, or quality, should be removed or deadened as soon as practical.

Saplings: trees of commercial species 1.0 inches to 4.9 inches at d.b.h. that are too small to be merchantable under normal conditions.

1. **Acceptable growing stock (AGS)**---Trees that are of acceptable species, form, and quality and could be selected as future crop trees if this size class were selected as the main stand, or that would be suitable to leave for 40 to 60 years as potential products for future intermediate cuts.
2. **Undesirable growing stock (UGS)**---Trees not acceptable on a site because of species, form, or condition. Should be removed or deadened as soon as practical.

Seedlings: trees of commercial species less than 0.9 inches at d.b.h. that are normally unmerchantable as forest products.

Cull Trees: live trees in any size class that are not now and never will be merchantable for the principal products to be harvested from the site.

Forest Type Description: In the description of the types mentioned above will be found percentage figures. These mean the percentage of trees 5" DBH and over, except in the first age class. In that class they mean the percentage of all trees found on the area, except as noted later in the discussion of age. It should be borne in mind that it is not the origin, but rather the composition and the future management which are important in determining any type.