AMP C3: VINES TANGLES & "LIVING" BRUSH PILES

The feasibility of implementing AMP C3 primarily relates to the prevalence of management opportunity category(s) FDCV12, 13, 14 and 16 **in MZ2 and MZ3.**

Primary objectives: to provide food and/or cover along opening perimeters and in tree canopy gaps in MZ2 and MZ3 through judicious cutting and slash-piling that will enhance or create vine tangles.

Virtually every habitat site has vines. Grape vines prevail; but Virginia creeper, poison ivy and greenbrier are also common. These vines provide food (soft mast, seeds) and cover for numerous species including our most popular forest game species and over 50 kinds of birds. Grape bark is used for nesting material and vine tangles are good nesting cover.

These vine species fruit between August and November when rockrats are foraging extensively and adding to their middens. As an energy bonus for a species that does not hibernate, the fruits of these vines may persist through the winter.

The management challenge is to create vine tangles that provide readily accessible food and cover for rockrats. This may entail cutting to: 1) get more sun onto anemic, shaded surface vines; 2) drop a tree with a vine in its crown; and 3) create a brush pile for the purpose of creating and supporting a vine tangle. Creating brush piles and vine tangles is relatively easy and inexpensive. To start with, all of the mentioned vine species are more vigorous in partial shade or sunlight. In fact "shading" is a method of grapevine control. Most grapevine management in forests relates to control and elimination, but islands of exposed rock are classified as inoperable for forest management purposes.. Under these circumstances vines represent an opportunity, not a problem.

Grapevines establish primarily from seeds. Where vines touch the ground, roots may develop. Cut vines will also sprout prolifically. Compared to the slow growth of vine seedlings, unshaded sprouts grow rapidly.

Look for vines in tree canopies along the perimeters of rock covered openings. If a vine is competing with the canopy of an oak or hickory, cut the vine. Common, non hard-mast producing trees with vines in their canopies are candidates for cutting, but do not cut the vine.

For example, a grape vine is in the canopy of a black birch tree that just happens to be shading rocks and competing with an oak. Decide where you want the canopy and vine to fall and cut the birch tree being careful not to cut the vine. The subsequent growth response of the vine will depend on the amount of sunlight on the downed tree, which in turn depends on the size, slope, and aspect of the opening. This will provide both summer and winter cover and will put grapes within reach of foraging rockrats.

Given they are present to start with, grapevines and sprouts grow quickly after an opening is created (usually in conjunction with a regeneration cut) in the buffer zone (see AMP C2). Where vines are present, pile slash in a manner that will encourage the vines to arbor over the pile. During the early years after any tree regeneration harvest, including a group selection cut, grapevines may be the most dependable source of mast on the site.

Locate brush piles along the perimeters of openings. A good guideline-size is 6' high by 16' wide; it can be dense in the middle and loose outside; the big material is on the bottom and the small on top. Avoid creating a pile under a snag as this will promote predation. Also keep in mind that the north end of a small, largely level (• 10% slope) opening gets more sunlight than the shaded south end. For the most part we are considering a "living" brush pile in MZ3 that will provide food, escape cover, bird nesting sites, and protection for new stump sprouts and advance tree reproduction. A "living" brush pile is loosely organized brush with 1) a perimeter of herbaceous plants and tree seedlings; 2) a covering of vines, 3 a framework of hinge-cut small trees; or 4) a combination of this living material.

Even if vines are not present, a living brush pile can be created by cutting partially through the trunks of a few sapling up to 10' tall and leaving as much of the bark intact as possible. Push the trees over into a "pile or teepee." Birch and maple saplings are good choices. These hinge-cut trees will live for a few years and they will form the loose base for a larger brush tangle.

Brush piles atop exposed rocks (MZ2) will last for a long time. The combination of brush and vine atop rockrat accessible crevices may be an exceptionally value management practice.

MORE INFORMATION

Grapevine Biology in http://www.forestencyclopedia.net/p/p2158
Virginia creeper in http://www.fs.fed.us/global/iitf/pdf/shrubs/Parthenocissus%20quinquefolia.pdf
Greenbrier in http://www.fs.fed.us/database/feis/plants/vine/smirot/all.html
Brush Piles in http://extension.umd.edu/publications/PDFs/FS599.pdf
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