**Protecting regeneration from herbivory practice manual**

**Draft 4/26/2020**

1. **ELIGIBILITY CONDITIONS**
   1. The property is within the eligible geography (see map below)
   2. Eligible land tenure and ownership type: Forest stands on private ownerships of greater than or equal to 30 acres and less than or equal to 2,400 acres
   3. Forests originating from natural regeneration (e.g. plantations are ineligible).
   4. Eligible condition status at the time of contract signing:
      1. Land not subject to any existing legal encumbrance (e.g. conservation easement or state/local restrictions) that excludes forest harvest activity (e.g. riparian buffers, designated reserves or no harvest areas) or the actions described in this practice
      2. The project area shall score 5, 6, or 7 indicating significant damage from deer or moose browse, as measured using Massachusetts Deer Browse Impact survey (attached, and damage attributable to moose should also be included).
      3. Landowner must allow hunting on the project area (following all local requirements for written landowner permission, posting/signage, hunter licensing, and safe exclusions around homes and buildings).
      4. If project area has greater than 30% cover of competing vegetation, this practice must be combined with pre-treatment to remove competing vegetation.
2. **PRACTICE DESCRIPTION AND SPECIFICATIONS**
   1. General Description – This practice produces carbon benefits through improved forest productivity from enhanced regeneration in stands impacted by herbivory from deer and/or moose. Actions under this practice aim to reduce over-browsing and protect regeneration from herbivore damage. Future-adapted tree species should be targeted for protection.
   2. Specifications
      1. Landowners, with their forester/harvester teams, may choose whether to apply fencing or tree shelters, with several successful projects listed as references below to help make this decision. Fences or shelters must be maintained for at least ten years, with payments for this practice based on successful performance.
         1. For fencing, either perimeter fencing or small-scale (<50m2) exclusions1 that protect a minimum of 100 trees per acre are recommended. Fencing is also recommended when high canopy cover produces low-light condition, since shelters will not provide adequate sunlight for seedling growth.
         2. Tree shelters are recommended for areas of more than 5 acres and less than 400 trees per acre2. Barriers must be maintained, including sealing removable shelters and tree tubes to the ground, for a minimum of five growing seasons.
      2. Payments are based on a performance standard of 350 stems per acre, well-distributed across the stand (taken from VT Use Value Appraisal Program), after 5 years.
      3. A final payment will be paid in year 10 if the site has at least 350 stems per acre of native tree species greater than 6 feet in height. This performance standard may not be met in all cases, and landowners should consider this final payment as a possibility, not as a given.
3. **CONTRACT PERIOD AND PAYMENT SCHEDULE**
   1. Timeline to implement practice and commitment period to maintain practice: 1-2 years to apply treatment, 10-year contract term.

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| **Payment Schedule – Removing Competing Vegetation** | |
| Time | Amount |
| No more than 60 days after contract signing | 15% |
| Following application of fencing/shelters | 35% |
| Year 5, upon verification of conformance with contract terms. | 15% |
| Year 10, upon verification of conformance with contract terms and verification of maintenance of target post-treatment conditions | 35% |

1. **MONITORING AND VERIFICATION**
   1. Landowner will ensure specific monitoring actions:
      1. Initial (prior to contract signing) attestation that all eligibility criteria are met, including field assessment browse severity (submitted as part of Project Planning by FFCP-Approved Natural Resources Professional)
      2. Receipts for any fencing and tree shelter materials purchased.
      3. Year-5 submission of attestation that all practice requirements were met, including intact fencing or shelters and at least 350 living stems of appropriate species (native, commercially viable tree species found in the surrounding forest type) per acre.
      4. Year-10 submission of attestation that all practice requirements were met, including presence of 350 stems per acre of appropriate species at least 6-8 feet in height.
      5. Potential site-level verification by FFCP representatives (at any time during the contract period)
   2. Commitment to ongoing program level validation: The landowner will reserve to FFCP staff and representatives the right to access the property to carry out the site level monitoring actions specified above, and to establish long-term monitoring plots on enrolled stands to directly measure and monitor the impacts of the practice to improve FFCP program-level reporting.

References:

1Martin, K. 2006. Can small deer exclosures work? Woodland Management [[http://www.deerandforests.org/ resources/Can%20small%20deer%20enclosures%20work.pdf](http://www.deerandforests.org/%20resources/Can%20small%20deer%20enclosures%20work.pdf)]

2Jacobson, M. 2006.Fencing for Forest Regeneration: Does it Pay? Penn State Extension [https://extension. psu.edu/forest-finance-2-fencing-for-forest-regeneration-does-it-pay]

1. **Eligible Project Areas**

A close up of a map

Description automatically generated

1. **Deer/moose browse impact survey**



