

TOWNSHIP OF BASS RIVER
Ordinance 2013-06

AN ORDINANCE AMENDING TITLE 12, STREETS, SIDEWALKS AND PUBLIC PLACES, CHAPTER 12.08, TREES, OF THE TOWNSHIP OF BASS RIVER

BE IT ORDAINED by the Board of Commissioners of the Township of Bass River, County of Burlington, State of New Jersey, as follows:

I. PURPOSE: The purpose of this Ordinance is to amend Chapter 12.08, Trees, of the Township of Bass River in response to amendments to the Pinelands Comprehensive Management Plan related to forestry, March 1, 2010.

II. Section 12.08.020 Definitions, is hereby amended by replacing or adding the following definitions:

Artificial Regeneration - The establishment of tree cover through direct or supplemental seeding or planting.

Bedding – A silvicultural practice involving the preparation of land before planting in the form of small mounds so as to concentrate topsoil and elevate the root zone of seedlings above temporary standing water.

Broadcast Scarification - A silvicultural practice involving the dragging of cut trees or other objects across a parcel to remove or reduce above-ground shrub cover, debris, leaf litter and humus without disturbance to mineral soil horizons and associated roots.

Clearcutting - A silvicultural practice involving removal of an entire forest stand in one cutting for purposes of regeneration either obtained artificially, by natural seed or from advanced regeneration. Clearcutting typically results in the removal of all woody vegetation from a parcel in preparation for the establishment of new trees; however, some trees may be left on the parcel.

Coppicing - A silvicultural practice involving the production of forest stands from vegetative sprouting by the trees that are harvested (stump sprouts, root suckers, and naturally rooted layers). Coppicing typically involves short rotations with dense stands of short trees.

Disking - A silvicultural practice involving the drawing of one or more heavy, round, concave, sharpened, freely rotating steel disks across a site for the purposes of cutting through soil and roots or cutting and turning a furrow over an area

Drum Chopping - A silvicultural practice involving the drawing of a large cylindrical drum with cutting blades mounted parallel to its axis across a site to break up slash, crush scrubby vegetation prior to burning or planting or to chop up and disturb the organic turf and roots in the upper foot of soil.

Forestry - The planting, cultivating and harvesting of trees for the production of wood products, including firewood or for forest health. It includes such practices as reforestation, site preparation and other silvicultural practices, including but not limited to artificial regeneration, bedding, broadcast scarification, clearcutting, coppicing, disking, drum chopping, group selection, individual selection, natural regeneration, root raking, seed tree cut, shelterwood cut and thinning. For purposes of this chapter, the following activities shall not be defined as forestry:

- A. Removal of trees located on a parcel of land one acre or less on which a dwelling has been constructed;
- B. Horticultural activities involving the planting, cultivating or harvesting of nursery stock or Christmas trees;
- C. Removal of trees necessitated by the development of the parcel as otherwise authorized by this Chapter;
- D. Removal of trees necessary for the maintenance of utility or public rights-of-way;
- E. Removal or planting of trees for the personal use of the parcel owner; and
- F. Removal of trees for public safety.

Forest Stand - A uniform group of trees of similar species, composition, size, age and similar forest structure.

Group Selection - A silvicultural practice whereby a group of trees is periodically selected to be removed from a large area so that age and size classes of the reproduction are mixed.

Individual Selection - A silvicultural practice whereby single trees are periodically selected to be removed from a large area so that age and size classes of the reproduction are mixed.

Natural Regeneration - The establishment of a plant or plant age class from natural seeding, sprouting, suckering or layering.

Pinelands Native Forest Type – See N.J.A.C. 7:50-6.43.

Root Raking - A silvicultural practice involving the drawing of a set of tines, mounted on the front or trailed behind a tractor, over an area to thoroughly disturb tree and vegetation roots and/or to collect stumps and slash.

Seed Tree Cut - A silvicultural practice involving the removal of old forest stand in one cutting, except for a small number of trees left singly, in small groups or narrow strips, as a source of seed for natural regeneration.

Shelterwood Cut - A silvicultural practice involving the establishment of a new, essentially

even-aged forest stand from release, typically in a series of cuttings, of new trees started under the old forest stand. A shelterwood cut involves the establishment of the new forest stand before the old forest stand is removed.

Thinning - A silvicultural practice involving the removal of competing trees to favor certain species, sizes and qualities of trees.

III. Section 12.08.040, Forestry Application Requirements, is hereby replaced in its entirety with the following:

The information in A or B below shall be submitted to the Township Zoning Officer prior to the issuance of any forestry permit:

- A. For forestry activities on a parcel of land enrolled in the New Jersey Forest Stewardship Program, a copy of the approved New Jersey Forest Stewardship Plan. This document shall serve as evidence of the completion of an application with the Pinelands Commission as well as evidence that the activities are consistent with the standards of the Pinelands Comprehensive Management Plan. No certificate of filing from the Pinelands Commission shall be required.

- B. For all other forestry applications:
 - 1. The applicant's name and address and his interest in the subject parcel;
 - 2. The owner's name and address, if different from the applicant's, and the owner's signed consent to the filing of the application;
 - 3. The description, including block and lot designation and street address, if any, of the subject parcel;
 - 4. A description of all existing uses of the subject parcel;
 - 5. A brief written statement generally describing the proposed forestry operation;
 - 6. A USGS Quadrangle map, or copy thereof, and a copy of the municipal tax map sheet on which the boundaries of the subject parcel, the Pinelands management area designation and the municipal zoning designation are shown;
 - 7. A forestry management plan that includes, as appropriate:
 - a. A cover page for the plan containing:
 - i. The name, mailing address and telephone number of the owner of the subject parcel;

- ii. The municipality and county in which the subject parcel is located;
 - iii. The block and lot designation and street address, if any, of the subject parcel;
 - iv. The name and address of the forester who prepared the plan, if not prepared by the owner of the subject parcel; and
 - v. The date the plan was prepared, subsequent revision dates and the period of time the plan is intended to cover;
- b. A clear and concise statement of the owner’s objectives for undertaking the proposed forestry activities, including a description of the short- (five years) and long-term (20 years) objectives for all proposed silvicultural techniques that will be used to manage the parcel;
- c. A description of the existing conditions of the subject parcel and of each forest stand in which a proposed activity, prescription or practice will occur. These stand descriptions shall include photographs of each stand taken at eye level showing the location of all Pinelands Native Forest Types, as identified at N.J.A.C. 7:50-6.43, and shall be keyed to an activity map that shall include, as appropriate, the following information:
- i. The number of acres;
 - ii. The general condition and quality of each stand;
 - iii. The overall site quality, relative to the management goals and objectives identified in subsection B.7.b. above;
 - iv. An inventory and map of Pinelands Native Forest Types with Native Forest Types broken into “stands,” including information on type, size and volume by species;
 - v. The age of representative trees;
 - vi. The species composition, including overstory, understory, ground layer structure and composition;
 - vii. The stand cohort composition;
 - viii. The percent cover;

- ix. The basal area;
- x. The structure, including age classes, diameter breast height (DBH) classes and crown classes;
- xi. The condition and species composition of advanced regeneration when applicable;
- xii. A stocking table showing the stocking levels, growth rates and volume;
- xiii. Projections of intended future stand characteristics at 10-, 20-, and 40-year intervals;
- xiv. A description of the forestry activities, silvicultural prescriptions, management activities and practices proposed during the permit period and the acreage proposed for each activity. These may include, but are not necessarily limited to, a description of:
 - [A] Stand improvement practices;
 - [B] Site preparation practices;
 - [C] Harvesting practices;
 - [D] Regeneration and reforestation practices;
 - [E] Improvements, including road construction, stream crossings, landings, loading areas and skid trails;
 - [F] Herbicide treatments;
 - [G] Silvicultural treatment alternatives;
 - [H] If planting will occur to accomplish reforestation, the application shall include seed sources records, if such records are available;
 - [I] Implementation instructions; and
 - [J] Measures that will be taken to prevent the potential spread of exotic plant species or Phragmites into wetlands; and

- xv. A description, if appropriate, of the forest products to be harvested, including volume expressed in cords and board feet; diameter breast height (DBH) classes and average diameter; age; heights; and number of trees per acre; and
- d. A map of the entire parcel which includes the following:
- i. The owner's name, address and the date the map was prepared;
 - ii. An arrow designating the north direction;
 - iii. A scale which is not smaller than one inch equals 2,000 feet or larger than one inch equals 400 feet;
 - iv. The location of all property lines;
 - v. A delineation of the physical features such as roads, streams and structures;
 - vi. The identification of soil types (a separate map may be used for this purpose);
 - vii. A map inset showing the location of the parcel in relation to the local area;
 - viii. Clear location of the area and acreage in which each proposed activity, prescription or practice will occur. If shown on other than the property map, the map or maps shall note the scale, which shall not be smaller than one inch equals 2,000 feet or larger than one inch equals 400 feet, and shall be appropriately keyed to the property map; and
 - ix. A legend defining the symbols appearing on the map.
8. A letter from the Office of Natural Lands Management identifying any threatened or endangered plants or animals reported on or in the immediate vicinity of the parcel and a detailed description by the applicant of the measures proposed to meet the standards set forth in N.J.A.C. 7:50-6.27 and 6.33;
9. A cultural resource survey documenting cultural resources on those portions of the parcel where ground disturbance due to site preparation or road construction will occur and a detailed description of the measures proposed by the applicant to treat those cultural resources in accordance

with N.J.A.C. 7:50-6.156;

10. A statement identifying the type, location and frequency of any proposed herbicide treatments and how such treatments will comply with the standards set forth in Section 12.08.050.I.2;
11. A statement identifying the specific steps to be taken to ensure that trees or areas to be harvested are properly identified so as to ensure that only those trees intended for harvesting are harvested;
12. Written comments from the New Jersey State Forester concerning the extent to which the proposed forestry activities are consistent with the guidelines provided in the New Jersey Forestry and Wetlands Best Management Practices Manual developed by the New Jersey Department of Environmental Protection, dated October 1995, as amended. Any such comments which indicate that the proposed activities are not consistent with said Manual must be addressed by the applicant in terms of their potential impact on the standards set forth in Section 12.08.050 below;
13. A Certificate of Filing from the Pinelands Commission issued pursuant to N.J.A.C. 7:50-4.34; and
14. When prior approval for the forestry activities has been granted by the Zoning Officer or other Township approval agency, a letter from the Pinelands Commission indicating that the prior approval has been reviewed pursuant to Section 17.32.110 through 130 of the Zoning Ordinance.

IV. Section 12.08.050, Forestry Standards, is hereby replaced in its entirety with the following:

Forestry operations shall be approved only if the applicant can demonstrate that the standards set forth below are met:

- A. All forestry activities shall serve to maintain Pinelands native forest types, including those which are locally characteristic, except in those stands where other forest types exist;
- B. Any newly developed access to lands proposed for harvesting shall avoid wetland areas except as absolutely necessary to harvest wetlands species or to otherwise gain access to a harvesting site;
- C. The following actions shall be required to encourage the establishment, restoration or regeneration of Atlantic White Cedar in cedar and hardwood swamps:
 1. Clearcutting cedar and managing slash;
 2. Controlling competition by other plant species;

3. Utilizing fencing and other retardants, where necessary, to protect cedar from overbrowsing;
 4. Utilizing existing streams as cutting boundaries, where practical;
 5. Harvesting during dry periods or when the ground is frozen; and
 6. Utilizing the least intrusive harvesting techniques, including the use of winches, corduroy roads and helicopters, where practical.
- D. All forestry activities and practices shall be designed and carried out so as to comply with the standards set forth at N.J.A.C. 7:50-6.27 and 6.33. The species accounts provided in the “Recommended Forestry Management Practices Report,” Appendix I - Endangered Animals, dated March 2006, as amended and supplemented and available at the principal office of the Commission or at www.nj.gov/pinelands, may be utilized as a guide for meeting these standards;
- E. All forestry activities and practices shall be designed and carried out so as to comply with the standards for the land application of waste set forth in N.J.A.C. 7:50-6.79, except as expressly authorized in this section;
- F. All forestry activities and practices shall be designed and carried out so as to comply with the standards for the protection of historic, archaeological and cultural resources set forth in N.J.A.C. 7:50-6.156;
- G. A vegetated streamside management zone shall be maintained or established adjacent to streams, ponds, lakes and marshes, except that no streamside management zone shall be required when Atlantic White Cedar is proposed to be harvested, established, restored or regenerated. The streamside management zone shall be at least 25 feet in width. Where soils are severely erodible, slopes exceed 10 percent or streamside vegetation is not vigorous, the streamside management zone shall be increased up to a maximum of 70 feet to buffer the water body from adjacent forestry activities;
- H. Stream crossings, access roads, timber harvesting, skid trails, log decks, portable sawmill sites, site preparation, and reforestation shall be designed and carried out so as to:
1. Minimize changes to surface and ground water hydrology;
 2. Minimize changes to temperature and other existing surface water quality and conditions;
 3. Prevent unnecessary soil erosion, siltation and sedimentation; and
 4. Minimize unnecessary disturbances to aquatic and forest habitats.

- I. The following standards shall apply to silvicultural practices for site preparation, either before or after harvesting:
 1. In areas with slopes of greater than 10 percent, an undisturbed buffer strip of at least 25 feet in width shall be maintained along roads during site preparation to catch soil particles;
 2. Herbicide treatments shall be permitted, provided that:
 - a. The proposed treatment is identified in the forestry application submitted pursuant to Section 12.08.040.B.10 above;
 - b. Control of competitive plant species is clearly necessary;
 - c. Control of competitive plant species by other, non-chemical means is not practical;
 - d. All chemicals shall be expressly labeled for forestry use and shall be used and mixed in a manner that is consistent with relevant State and Federal requirements; and
 - e. In Pine-Shrub Oak Native Forest Types, herbicide treatments shall only be permitted as a method to temporarily suppress shrub-oak understory in order to facilitate pine regeneration. All such herbicide treatments shall be applied in a targeted manner so that there will be no significant reduction in tree or shrub-oak re-sprouting outside those areas subject to the herbicide treatment;
 3. Broadcast scarification and mechanical weeding shall be permitted in all Pinelands Native Forest Types;
 4. Disking shall be permitted, provided that:
 - a. It shall not be permitted in Pine Plains Native Forest Types;
 - b. Disking shall only be permitted in Pine-Shrub Oak Native Forest Types as a method to temporarily suppress shrub-oak understory in order to facilitate pine regeneration, and shall be limited as follows:
 - i. Disking may occur one time during the first year of the establishment of a stand to assure the successful growth of pine seedlings and may be repeated one time during the second year of the growth of the stand only in areas where pine seedling establishment has not successfully occurred; and
 - ii. Only single-pass disking, which penetrates the soil no deeper than

six inches, shall be permitted.

- c. It shall not occur in wetlands, except as may be necessary to establish, restore or regenerate Atlantic White Cedar. When so used, disking shall be limited to shrub-dominated parcels and recently abandoned agricultural lands; and
- d. It shall follow land contours when slopes are discernible;
- .) Root raking shall be permitted, provided that:
 - a. It shall not be permitted in Pine-Shrub Oak Native Forest Types or Pine Plains Native Forest Types;
 - b. When used to establish, restore or regenerate Atlantic White Cedar, root raking shall be limited to shrub-dominated parcels and recently abandoned agricultural lands; and
 - c. Root raking debris shall not be piled in wetlands;
- 6. Bedding shall be permitted only in recently abandoned, cultivated wetlands where there are no established Pinelands Native Forest Types; and
- 7. Drum chopping shall be permitted, provided that:
 - a. It shall not be permitted in Pine Plains Native Forest Types except to create road shoulder fuelbreaks, which shall be limited to 25 feet in width, or to create scattered early successional habitats under two acres in size;
 - .) It shall not be permitted in wetlands, except as may be necessary to establish, restore or regenerate Atlantic White Cedar. When so used, drum chopping shall be limited to shrub-dominated parcels and recently abandoned agricultural lands; and
 - c. It shall adhere to the following procedures:
 - i. No more than two passes shall be permitted except to create scattered early successional habitats under two acres in size;
 - ii. Drums shall remain unfilled when used during the dormant season;
 - iii. Chop up and down the slope on a parcel so the depressions made by the cleats and chopper blades run parallel to the contour of the land to help reduce the occurrence of channeled surface erosion;
 - iv. Chop so the depressions made by the cleats and chopper blades run

parallel to a wetland or water body; and

- vi. Avoid short-radius, 180-degree turns at the end of each straight pass.

J. The following standards shall apply to silvicultural practices for harvesting:

1. Clearcutting shall be permitted, provided that:
 - a. It shall not be permitted in Pine Plains Native Forest Types;
 - b. It shall be limited to 300 acres or five percent of a parcel, whichever is greater, during any permit period;
 - c. A 50-foot-wide buffer strip, in which only periodic pruning and thinning may occur, shall be maintained between any clearcut and the parcel boundaries;
 - d. A buffer strip, in which only periodic pruning and thinning may occur, shall also be maintained to separate each 25-acre or larger clearcut from other 25-acre or larger clearcuts, coppice cuts and seed tree cuts that occur within a 15-year period. The buffer strip separating two 25-acre harvests shall be 50 feet in width and, for a larger harvest, shall increase in width by one foot for each acre of that harvest above 25, to a maximum of 300 feet in width;
 - e. Where present on a parcel, a minimum of 18 dead snags per acre of at least 10 inches diameter breast height (DBH) and six feet in height shall be left on the parcel for a minimum of five years; and
 - f. The area of the parcel subject to the clearcut shall have contoured edges unless the boundary of the clearcut serves as a firebreak in which case straight edges may be used;
2. Coppicing shall be permitted in all Pinelands Native Forest Types, provided that:
 - a. It shall be limited to 500 acres in size or 10 percent of a parcel, whichever is greater, during any permit period;
 - b. A 50-foot-wide buffer strip, in which only periodic pruning and thinning may occur, shall be maintained between any coppice cut and the parcel boundaries;
 - c. A buffer strip, in which only periodic pruning and thinning may occur, shall also be maintained to separate each 25-acre or larger coppice cut from other 25-acre or larger clearcuts, coppice cuts and seed tree cuts that

occur within a 15-year period. The buffer strip separating two 25-acre harvests shall be 50 feet in width and, for a larger harvest, shall increase in width by one foot for each acre of that harvest above 25, to a maximum of 300 feet in width;

- d. Where present on a parcel, a minimum of 18 dead snags per acre of at least 10 inches DBH and six feet in height shall be left on the parcel for a minimum of five years; and
 - e. The area of the parcel subject to the coppice cut shall have contoured edges unless the boundary of the coppice cut serves as a firebreak in which case straight edges may be used;
3. Seed tree cutting shall be permitted in all Pinelands Native Forest Types, provided that:
- a. It shall be limited to 500 acres in size or 10 percent of a parcel, whichever is greater, during any permit period;
 - b. A 50-foot-wide buffer strip, in which only periodic pruning and thinning may occur, shall be maintained between any seed tree cut and the parcel boundaries;
 - c. A buffer strip, in which only periodic pruning and thinning may occur, shall also be maintained to separate each 25-acre or larger seed tree cut from other 25-acre or larger clearcuts, coppice cuts and seed tree cuts that occur within a 15-year period. The buffer strip separating two 25-acre harvests shall be 50 feet in width and, for a larger harvest, shall increase in width by one foot for each acre of that harvest above 25, to a maximum of 300 feet in width;
 - d. Where present on a parcel, a minimum of 18 dead snags per acre of at least 10 inches DBH and six feet in height shall be left on the parcel for a minimum of five years;
 - e. The area of the parcel subject to the seed tree cut shall have contoured edges unless the boundary of the seed tree cut serves as a firebreak in which case straight edges may be used;
 - f. Dominant residual seed trees shall be retained at a distribution of at least seven trees per acre; and
 - g. Residual seed trees shall be distributed evenly throughout the parcel; and
4. Shelterwood cutting, group selection and individual selection shall be permitted in all Pinelands Native Forest Types.

- K. The following standards shall apply to silvicultural practices for forest regeneration:
1. Natural regeneration shall be permitted in all Pinelands Native Forest Types and shall be required in the Pine Plains Native Forest Type, except as provided in subsection K(2) below; and
 2. Artificial regeneration shall be permitted in all Pinelands Native Forest Types provided that:
 - a. The use of non-native cuttings, seedlings or seeds shall not be permitted;
 - b. The use of hybrid cuttings, seedlings or seeds shall be permitted if it can be demonstrated that the cutting is from a locally native, naturally occurring hybrid which will be planted within its natural range and habitat;
 - c. Cuttings, seedlings or seeds shall be collected and utilized so as to ensure genetic diversity; and
 - d. When used in Pine Plains Native Forest Types, artificial regeneration shall only be permitted to restore drastically disturbed sites if seeds or seedlings from the immediate vicinity have been collected from local, genetically similar sources.
- L. Following site preparation and harvesting activities, slash shall either be retained in piles on the parcel, distributed throughout the parcel, removed from the parcel or burned.
- M. Thinning shall be permitted in all Pinelands Native Forest Types, including that which serves to maintain an understory of native plants and/or manage stand composition, density, growth and spatial heterogeneity.
- N. A copy of the approved municipal forestry permit shall be conspicuously posted on the parcel which is the site of the forestry activity.

BE IT FURTHER ORDAINED that this ordinance shall take effect upon proper passage and in accordance with the law.

ALL OF WHICH IS ADOPTED this _____ day of _____, 2013, by the Bass River Township Board of Commissioners.

Amanda Somes, RMC/CMR

Deborah Buzby-Cope, Mayor

