

APPENDIX A: FOREST TYPES

- AF** Abandoned Field - Any abandoned field reverting to forest. No longer in active agriculture.
- AL** Alder - An early successional stand dominated by alder, often in a shrubby form.
- AO** Abandoned Orchards - Usually apple orchards abandoned around former farms. Use only where more than 10 trees are observed.
- BB** Beech / Birch / Maple - The true northern hardwood forest type - sugar maple, yellow birch, and beech are the predominant species, with many associated species and variation in proportion. Climax type throughout western Massachusetts.
- BC** Black Cherry - A stand in which northern hardwoods predominate, where black cherry is the most common species. Due to its intolerance to shade, this stand only follows heavy cutting or other disturbances.
- BE** Beech - Stands predominantly beech with some sugar maple. Due to past cuttings, stands may be predominantly beech.
- BF** Basins and Flats
- BG** Bogs - An acidic body of water with no inflow or outflow of water. Species along the shoreline are often black spruce, sheep laurel, etc. Occasionally a floating mat of sphagnum moss is present.
- BL** Black Locust - Black locust is pure or predominant. Often, the result of artificial reforestation with many associated species. Common on Cape Cod and on former agricultural lands statewide.
- BM** Gray Birch / Red Maple - Gray birch and red maple predominant. Generally, a pioneer type found on abandoned fields; tends to establish on dry sites but found in some moist areas.
- BP** Beaver Pond - A pond, usually shallow, created when beavers dammed the outflow. These ponds are important wildlife habitat features where dead standing trees are often present.
- BR** Upland Brush
- BW** White Birch - White birch is pure or predominant. This is a pioneer species/ type that is often succeeded by spruce-fir, white pine, or northern hardwoods.
- CD** Cedar - Either Atlantic white cedar or eastern red cedar are predominant over any other associate.
- CT** Christmas Trees - Christmas tree plantation.

- DF** Duff and Leaf Litter - Soil covered with leaf or needle litter layer with little or no other reproduction. Common under pure softwood stands and mature hardwoods.
- FN** Fern - Any species of fern.
- GF** Grass and Forbs - An area covered with a variety of herbaceous grass and forb species. May have an occasional tree seedling present.
- HH** Hemlock / Hardwoods - Hemlock and yellow birch dominates the mixture with sugar maple, beech, and red oak as associates. Found on moist sites.
- HK** Hemlock - Eastern hemlock is pure or predominant over its many associates. Found throughout Massachusetts, but more prevalent west of the Connecticut River. This type is often the result of cutting pine in a WK stand. Uncommon as a natural pure stand.
- JN** Juniper - May be a mixture of juniper species, but most likely red cedar. Often found in abandoned pastures.
- LA** Laurel - Stands that are dominated by mountain laurel. This type occurs where the trees were harvested without sufficient regeneration and the existing mountain laurel was not removed.
- MA** Sweet Fern
- MD** Deep Marsh - Water depth ranges from six inches to three feet. Fairly large open water areas are bordered by, or interspersed with, emergent vegetation like that found in shallow marshes. Floating and submergent plants such as water lilies, duckweed, watershield, and pondweeds are also present.
- MS** Shallow Marsh - This type is wetter than meadow. The soil is completely water-logged and often covered with up to six inches of water during the growing season. There is usually some open water, and the predominant vegetation is emergent. Common plants include cattails, bulrushes, burreed, pickerelweed, and arrowhead with some grasses and sedges.
- MT** Salt Marsh - Areas that are dominated by a variety of salt-tolerant grasses.
- MW** Meadow - Standing water is present only for short periods during the spring. Soil is waterlogged during the growing season. Vegetation is predominantly grasses, rushes, and sedges.
- NV** No Vegetation - Rock or gravel banks, or open administrative land, roads, etc.
- OC** Chestnut Oak – Occurs on dry ridgetops with shallow to bedrock soils, with south and west slopes, and a laurel understory.
- OH** Oak / Hardwoods - Stands predominantly black, white, and red oak with associates of maple and birch. If treated, these stands usually become either red oak or northern hardwood.
- OM** Mixed Oak - Stands contain mixtures of red, white, black, and scarlet oak, hickories, and other associated hardwoods. Oaks predominate.

- OP** Open - Reserved for either bare land just prepared for tree planting or as the understory type for ground cover overstory types.
- OR** Northern Red Oak - Northern red oak is predominant with other hardwoods being the chief associates.
- OT** Scarlet Oak – Found on dry sites. Black oak and white pine as common associates.
- OW** White Oak - Uncommon as a pure type.
- PA** Poplar, Aspen, or Willow - Stands dominated by quaking aspen, bigtooth aspen, or willow. Paper birch, pin cherry, and red maple are common associates within this pioneer forest type.
- PC** Pin Cherry - This is a temporary type usually found for a few years after a clearing operation (e.g., clear cut or post-fire). Common associates are mixtures of many hardwoods.
- PO** Pitch Pine / Oak - Pitch pine predominates with scarlet or black oak. In Massachusetts it is found intermixed with the pure pitch pine type. It is usually the result of fire or cutting.
- PP** Pitch Pine - Pitch pine is pure or predominant. Chief associates are eastern white pine, scarlet oak, and black oak. Typically found on dry soils near the coast, Cape Cod, and Plymouth County. Also found on scattered outwash sites in Worcester, Franklin, and Hampden Counties.
- PS** Pitch Pine / Scrub Oak - Scrub oak (*Quercus ilicifolia*) has a shrub-like form. It is primarily found on the Cape, the Islands, and Plymouth County.
- RM** Red Maple / Swamp Hardwoods - These stands are pure or contain mixtures of red maple, silver maple, black and green ash, American elm, river birch, and sycamore. Many associated species are found in these rich forested wetlands.
- RP** Red Pine - Although able to reproduce naturally, red pine is typically found in plantations.
- RU** Rubus Species - Areas dominated by a variety of species from the *Rubus* genus (i.e., black raspberries, red raspberries, bristly dewberry).
- RZ** Riparian Zone
- SF** Spruce / Fir - Stands consist predominantly of red or black spruce and balsam fir. Common associates are red maple, paper birch, aspen, and tamarack. Found only as a natural stand in Berkshire County and northern Franklin County, predominantly on wetter sites.
- SM** Sugar Maple - Sugar maple is either pure or predominant. Small proportions of other northern hardwoods are found. Often the results of sugarbush management.
- SN** Norway Spruce - Norway spruce is either pure or predominant and is the result of artificial reforestation.
- SP** Scotch Pine - Scotch pine is pure or predominant. Usually found in abandoned Christmas tree plantations or where it has naturally spread from these areas.

- SR** Spruce (Red) - Stand dominated by red spruce and associated hardwoods such as yellow birch, sugar maple, red maple, and beech. Natural stands are found predominantly in Berkshire, northern Franklin, and northern Hampshire Counties at high elevations.
- SS** Shrub Swamp - The soil is waterlogged during the growing season and is often covered with as much as six inches of water. Common woody species are alder, buttonbush, dogwood, and willow. Sedges are usually found on tussocks.
- TK** Tamarack (Larch) - Tamarack is pure or predominant in the stand. Always associated with moist or wet sites. Uncommon but when found, they occur as very scattered stands.
- VA** Vaccinium species - Areas dominated by any number of *Vaccinium* species (i.e., blueberry, huckleberry).
- VI** Viburnum species - Areas dominated by *Viburnum* species (i.e., hobblebush, nannyberry, wild-raisin, arrowwood).
- VP** Vernal Pool - An area that collects water during the fall or spring and retains the water until June or July. Often there is no inflow or outflow. These are important breeding grounds for numerous amphibian and invertebrate species because fish are not present.
- WA** Open Water - Lakes, rivers, and large streams. Water depth is greater than three feet during the growing season. The boundary of coastal water is located by drawing a line at the river mouth to connect the edges of the coastline, or man-made features (e.g., roads, railroads, bridges crossing rivers, inlets).
- WH** White Pine / Hardwoods - Eastern white pine, northern red oak, and other hardwoods with red maple as the chief associate. Rarely a permanent type that tends to develop into WK or HH.
- WK** Eastern White Pine and Eastern Hemlock - A large assortment of hardwoods found with these conifers. Pine usually predominates. Although this type is found in all counties, it is more common in Plymouth County, Worcester County, and counties west.
- WO** White Pine / Oak - Eastern white pine and northern red oak or black oak predominate. Black, red, or scarlet oak are also associates. An assortment of hardwoods is associated.
- WP** White Pine - Eastern White Pine is pure or predominant. This type is self-sustaining on drier, sandier soils.