

Natural Plant Community Criteria Publication **Version 1-October 31, 2007**

This publication is referenced in the Native and High Quality Successional Forest definitions in the Leon County Code of Laws. These criteria must be used to identify and delineate Native and High Quality Successional Forests.

The following are general guidelines for evaluating and delineating the natural plant community:

- **Reasonable scientific judgment shall be used in determining the delineated area.**
- **Forests will be evaluated as a whole; gaps within the forest will not be excluded from the delineated area.**
- **Percent plant cover will be determined using visual means.**
- **Minimum area required shall include adjacent wetlands, floodplains, canopy road protection zones, and slopes.**
- **Recent logging of forest canopy may not preclude sites from meeting the criteria.**

The following are specific criteria for identifying and delineating the forest types:

Native Forest

Upland Pine Forest –Required 5 acre minimum area (Includes Sandhill, Clayhill, & Flatwood Forests) - This community type is generally characterized by widely-spaced pines, few understory trees and shrubs, and a diverse groundcover layer. Delineation of the community is primarily based on characteristics of the groundcover layer of the community, given that this layer contains the greatest species richness, is most characteristic of the native community, and is most vulnerable to permanent degradation. The area to be delineated must have a 50 percent plant cover of any of the following indicator species: wiregrass (*Aristida stricta* var. *beyrichiana*), running oak (*Quercus pumila*), goat's rue (*Tephrosia* spp.), twinflower (*Dyschoriste oblongifolia*), slender bluestem (*Schizachyrium tenerum*), bracken fern (*Pteridium aquilinum*), scale-leaf aster (*Aster adnatus*), golden aster (*Chrysopsis mariana*), switchgrass (*Panicum virgatum*), sand beans (*Strophostyles umbellate*), white-topped aster (*Aster tortifolius*), pineywoods dropseed (*Sporobolus junceus*), muhly grass (*Muhlenbergia capillaris*), black-eyed susan (*Rudbeckia hirta*), and huckleberry (*Gaylussacia* sp.). Upland Pine Forests will have an open canopy (generally <50% cover) of pines of any of the following species: longleaf pine (*Pinus palustris*), slash pine (*Pinus elliottii*), short-leaf pine (*Pinus echinata*), or loblolly pine (*Pinus taeda*). Hardwoods may be present in the canopy, but will not be dominant.

Upland Hardwood Forest-Required 3 acre minimum area (Includes Bottomland Hardwood, Slope, and Beech-Magnolia Forests) - These community types are hardwood-dominated forests occurring on mesic slopes, upland ridges, tops of slopes, and portions of wetlands that are rarely flooded. Areas to be delineated will either have a nearly continuous cover of canopy trees that have obtained full height, or else they will be contiguous to such areas. Approximately 50 percent or more of the canopy trees will be made up of any the following species: American beech (*Fagus grandifolia*), southern magnolia (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), spruce pine (*Pinus glabra*), white oak (*Quercus alba*), swamp chestnut oak (*Quercus michauxii*), hickory (*Carya* spp.), black gum (*Nyssa sylvatica*), and tulip poplar (*Liriodendron tulipifera*). The delineated area must also have an understory tree/shrub layer containing 50 percent or more of any of the canopy species or any of the following: American hornbeam (*Carpinus caroliniana*), eastern hophornbeam (*Ostrya virginiana*), dogwood (*Cornus florida*), American holly (*Ilex opaca*), and horse sugar (*Symplocos tinctoria*).

Upland Mixed Forest – 3 acre required minimum area (Includes Pine-Oak-Hickory) This community type is characterized by a moderately closed or open stand of hardwood and pine trees with a relatively open understory. The herbaceous layer may be sparse to dense and may carry fire when stands are open. These variations are related to position within the landscape and fire frequency and intensity. Some stands may occur along ridges while others may occur along slopes.

The delineation of the community is primarily based on characteristics of the groundcover layer of the community, given that this layer contains the greatest species richness, is most characteristic of the native community, and is most vulnerable to permanent degradation. The area to be delineated must have a 50 percent or more plant cover of any of the following indicator species: wiregrass (*Aristida stricta* var. *beyrichiana*), running oak (*Quercus pumila*), goat's rue (*Tephrosia* spp.), twinflower (*Dyschoriste oblongifolia*), slender bluestem (*Schizachyrium tenerum*), bracken fern (*Pteridium aquilinum*), scale-leaf aster (*Aster adnatus*), golden aster (*Chrysopsis mariana*), switchgrass (*Panicum virgatum*), sand beans (*Strophostyles umbellate*), white-topped aster (*Aster tortifolius*), pineywoods dropseed (*Sporobolus junceus*), muhly grass (*Muhlenbergia capillaris*), black-eyed susan (*Rudbeckia hirta*), huckleberry (*Gaylussacia* sp.).

The area to be delineated must also have a canopy made up of approximately 50 percent of any of the following species: shortleaf pine (*Pinus echinata*), longleaf pine (*Pinus palustris*), slash pine (*Quercus elliotii*), southern red oak (*Quercus falcata*), post oak (*Quercus stellata*), blackjack oak (*Quercus marilandica*), pignut hickory (*Carya glabra*), mockernut hickory (*Carya tomentosa*), and white oak (*Quercus alba*). Canopy trees will consist of no more than 75 percent pine species. The delineated area must also have an understory tree/shrub layer containing 50 percent or more of any of the canopy species or any of the following: dogwood (*Cornus florida*), hawthorn (*Crataegus* spp.), and sassafras (*Sassafras albidum*).

High Quality Successional Forest

Upland Pine Forest –Required 5 acre minimum area (Includes Sandhill, Clayhill, & Flatwood Forests) - This community type is generally characterized by widely-spaced pines, few understory trees and shrubs, and a diverse groundcover layer. Delineation of the community is primarily based on characteristics of the groundcover layer of the community, given that this layer contains the greatest species richness, is most characteristic of the native community, and is most vulnerable to permanent degradation. The area to be delineated must have at least 25 percent plant cover of any of the following indicator species: wiregrass (*Aristida stricta* var. *beyrichiana*); running oak (*Quercus pumila*); goat's rue (*Tephrosia* spp.), twinflower (*Dyschoriste oblongifolia*), slender bluestem (*Schizachyrium tenerum*), bracken fern (*Pteridium aquilinum*), scale-leaf aster (*Aster adnatus*), golden aster (*Chrysopsis mariana*), switchgrass (*Panicum virgatum*), sand beans (*Strophostyles umbellate*), white-topped aster (*Aster tortifolius*), pineywoods dropseed (*Sporobolus junceus*), muhly grass (*Muhlenbergia capillaris*), black-eyed susan (*Rudbeckia hirta*), huckleberry (*Gaylussacia* spp.). Upland Pine Forests may have an open or moderately closed canopy (generally <80% cover) of pines of any of the following species: longleaf pine (*Pinus palustris*), slash pine (*Pinus elliottii*), short-leaf pine (*Pinus echinata*), or loblolly pine (*Pinus taeda*). Hardwoods may be present and co-dominant with the pines.

Upland Hardwood Forest-Required 3 acre minimum area (Includes Bottomland Hardwood, Slope, and Beech-Magnolia Forests) - These community types are hardwood-dominated forests occurring on mesic slopes or in portions of wetlands that are rarely flooded. Areas to be delineated will either have a nearly continuous cover of canopy trees that have obtained full height, or else they will be contiguous to such areas. Approximately 50 percent or more of the canopy trees will be made up of any the following species: Laurel oak (*Quercus hemisphaerica*), water oak (*Quercus nigra*), loblolly pine (*Pinus taeda*), and shortleaf pine (*Pinus echinata*). The delineation of the area will primarily be based on the understory species. The delineated area must have an understory tree/shrub layer containing 50 percent or more of any of the canopy species or any of the following: American beech (*Fagus grandifolia*), southern magnolia (*Magnolia virginiana*), sweetgum (*Liquidambar styraciflua*), spruce pine (*Pinus glabra*), white oak (*Quercus alba*), swamp chestnut oak (*Quercus michauxii*), hickory (*Carya* spp.), black gum (*Nyssa sylvatica*), and tulip poplar (*Liriodendron tulipifera*).

Upland Mixed Forest – 3 acre required minimum area (Includes Pine-Oak-Hickory) This community type is characterized by a moderately closed or open stand of hardwood and pine trees with a relatively open understory. The groundcover layer may be sparse to dense and may carry fire when stands are open. These variations are related to position within the landscape and fire frequency and intensity. Some stands may occur along ridges while others may occur along slopes.

The delineation of the community is primarily based on characteristics of the herbaceous layer of the community, given that this layer contains the greatest species richness, is most characteristic of the native community, and is most vulnerable to permanent

degradation. The area to be delineated must have a 10-40 percent plant cover of any of the following indicator species: wiregrass (*Aristida stricta*), running oak (*Quercus pumila*), goat's rue (*Tephrosia* spp.), twinflower (*Dyschoriste oblongifolia*), slender bluestem (*Schizachyrium tenerum*), bracken fern (*Pteridium aquilinum*), scale-leaf aster (*Aster adnatus*), golden aster (*Chrysopsis mariana*), switchgrass (*Panicum virgatum*), sand beans (*Strophostyles umbellata*), white-topped aster (*Aster tortifolius*), pineywoods dropseed (*Sporobolus junceus*), muhly grass (*Muhlenbergia capillaris*), black-eyed susan (*Rudbeckia hirta*), and huckleberry (*Gaylussacia* sp.).

The area to be delineated must also have a canopy made up of approximately 50 percent of any of the following species: shortleaf pine (*Pinus echinata*), longleaf pine (*Pinus palustris*), slash pine (*Quercus elliotii*), southern red oak (*Quercus falcata*), post oak (*Quercus stellata*), blackjack oak (*Quercus marilandica*), pignut hickory (*Carya glabra*), mockernut hickory (*Carya tomentosa*), and white oak (*Quercus alba*). Canopy trees will consist of no more than 75 percent pine species. The delineated area must also have an understory tree/shrub layer containing 50 percent or more of any of the canopy species or any of the following: dogwood (*Cornus florida*), hawthorn (*Crataegus* spp.), and sassafras (*Sassafras albidum*).

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