Hillside Compartment 4. Desired stand conditions indicating where habitat and wildlife variables warrant management. (309 acres dry forest much of which is inaccessible, 872 acres in wet forest/dying timber, 36 acres in reforestation, and 36 acres in levee totaling 1,253 acres)

Forest Variables[1]	Desired Stand Condition (LMVJV 2007)	Conditions that May Warrant Management (LMVJV 2007)	Existing Refuge Stand Condition	Existing Conditions meet or exceed 'May Warrant Management' levels
Overstory canopy cover	60 – 70 %	>80%	57% of plots are greater than 80 %	
Midstory cover	25 – 40 %	<20% or >50%	21% of plots meet this condition 79% of plots >60%	X
Basal area (BA)	60 – 70 ft^2 / acre with ≥25% in older age classes[2]	>90ft^2 / acre or ≥60% in older age classes	104 BA	X
Tree stocking	60 – 70 %	<50% or >90%	93 %	X
Dominant trees[3]	>2 / acre	<1 / acre	1 / acre	
Understory cover	25 – 40%	<20%	36% of plots meet this condition 64 % is less than 25%	X
Regeneration[4]	30 – 40% of area	<20% of area	334/acre of shade intolerant regeneration across entire area 663 total regen/ac.	
Coarse woody debris (>10 inch diameter)	≥200 ft^3 / acres	<100ft^3 / acre	81 cu.ft./acre 4.4 logs/acre ave. 12.5" dbh	X
Small cavities (<10 inch diameter)	>4 visible holes / acre **or** >4 "snag" stems ≥4 inch dbh **or** ≥2 stems >20 inch dbh	<2 visible holes / acre **or** <2 snags ≥4 inch dbh **or** <1 stem ≥20 inch dbh	4.1 snags / acre ave.13.2" dbh 4 tpa > 20"	
Den trees/large cavities[5] (>10 inch diameter)	1 visible hole / 10 acres **or** ≥2 stems ≥26 inch dbh (≥8 ft^2 BA ≥26 inch dbh)	0 visible holes / 10 acres **or** <1 stem ≥26 inch dbh (<4 ft^2 BA ≥ 26 inch dbh)	0 large cavities noted 1.3 culls/acre ave. 20.5" dbh	X
Standing dead and/or stressed trees[5]	>6 stems / acre ≥10 inch dbh **or** ≥2 stems ≥20 inch dbh (>4 ft^2 BA ≥ 10 inch dbh)	<4 stems ≥10 inch dbh / acre **or** <1 stem ≥20 inch dbh inch dbh) (<2 ft^2 BA ≥ 10)	4.1snags/acre ave. 13.2" dbh	X

[1] Promotion of species and structural diversity within stands is the underlying principle of management. Management should promote vines, cane, and Spanish moss within site limitations.

[2] "Older age class" stems are those approaching biological maturity, (i.e., senescence). We do not advocate aging individual trees but use of species-site-size relationships as a practical surrogate to discern age.

[3] Dominants (a.k.a. emergents) should have stronger consideration on more diverse sites, such as ridges and first bottoms.

[4] Advanced regeneration of shade-intolerant trees in sufficient numbers (circa 400/acre) to ensure their succession to forest canopy. Areas lacking canopy (i.e., group cuts) should be restricted to <20% of stand area.

[5] Utilizing BA parameters allows the forest manager to maintain this variable in size classes that are most suitable for the stand instead of using specific size classes noted.

Percent of Overstory, Midstory, Understory and presence of Vines and Cane, Hillside Compartment 4.

Overstory Canopy	Midstory Canopy	Understory Canopy	Vine Coverage	Cane
57 % > 80	79 % > 60	0 % > 60	35 % sparse	79 % none
43 % 50-80	21 % 25-60	36 % 25-60	29 % moderate	21 % sparse
0 % <50	0 % < 25	64 % < 25	36 % heavy	0 % heavy
Target 60-70	Target 25-40	Target 25-40		

Trees Per Acre:	Sawtimber	20
	Pulpwood	141
	Cull	1.3
	Total	**162**
	Snags	4.1
	Logs	4.4
Basal Area:	Sawtimber	33
	Pulpwood	68
	Cull	3
	Total	**104**

Ave. dbh of sawtimber 17.5", ave. dbh of pulpwood 9.4"

Volume: 2,098 bd. ft. volume of sawtimber/acre
21 cords of pulpwood/acre

HLD_C4_S8_2013 Desired stand conditions indicating where habitat and wildlife variables warrant management. (reforestation area-17 acres seedling planted 03/81)

Forest Variables[1]	Desired Stand Condition (LMVJV 2007)	Conditions that May Warrant Management (LMVJV 2007)	Existing Refuge Stand Condition	Existing Conditions meet or exceed 'May Warrant Management' levels
Overstory canopy cover	60 – 70 %	>80%	0 % of plots are greater than 80 % 67 % is < 50	
Midstory cover	25 – 40 %	<20% or >50%	100 % of plots were greater than 60%	X
Basal area (BA)	60 – 70 ft^2 / acre with ≥25% in older age classes[2]	>90ft^2 / acre or ≥60% in older age classes	33 BA	
Tree stocking	60 – 70 %	<50% or >90%	< 50 %	X
Dominant trees[3]	>2 / acre	<1 / acre	< 1/acre	X
Understory cover	25 – 40%	<20%	100 % of plots meet this condition	
Regeneration[4]	30 – 40% of area	<20% of area	500 total regen. 167/acre of shade intolerant regeneration	
Coarse woody debris (>10 inch diameter)	≥200 ft^3 / acres	<100ft^3 / acre	0 cu.ft./acre	X
Small cavities (<10 inch diameter)	>4 visible holes / acre **or** >4 "snag" stems ≥4 inch dbh **or** ≥2 stems >20 inch dbh	<2 visible holes / acre **or** <2 snags ≥4 inch dbh **or** <1 stem ≥20 inch dbh	N/A	
Den trees/large cavities[5] (>10 inch diameter)	1 visible hole / 10 acres **or** ≥2 stems ≥26 inch dbh (≥8 ft^2 BA ≥26 inch dbh)	0 visible holes / 10 acres **or** <1 stem ≥26 inch dbh (<4 ft^2 BA ≥ 26 inch dbh)	N/A	
Standing dead and/or stressed trees[5]	>6 stems / acre ≥10 inch dbh **or** ≥2 stems ≥20 inch dbh (>4 ft^2 BA ≥ 10 inch dbh)	<4 stems ≥10 inch dbh / acre **or** <1 stem ≥20 inch dbh inch dbh) (<2 ft^2 BA ≥ 10)	N/A	

[1] Promotion of species and structural diversity within stands is the underlying principle of management. Management should promote vines, cane, and Spanish moss within site limitations.

[2] "Older age class" stems are those approaching biological maturity, (i.e., senescence). We do not advocate aging individual trees but use of species-site-size relationships as a practical surrogate to discern age.

[3] Dominants (a.k.a. emergents) should have stronger consideration on more diverse sites, such as ridges and first bottoms.

[4] Advanced regeneration of shade-intolerant trees in sufficient numbers (circa 400/acre) to ensure their succession to forest canopy. Areas lacking canopy (i.e., group cuts) should be restricted to <20% of stand area.

[5] Utilizing BA parameters allows the forest manager to maintain this variable in size classes that are most suitable for the stand instead of using specific size classes noted.

Percent of Overstory, Midstory, Understory and presence of Vines and Cane, HLD_C4_S8_2013.

Overstory Canopy	Midstory Canopy	Understory Canopy	Vine Coverage	Cane
0 % > 80	100 % > 60	0 % > 60	0 % sparse	67 % none
33 % 50-80	0 % 25-60	100 % 25-60	0 % moderate	33 % sparse
67 % <50	0 % < 25	0 % < 25	100 % heavy	0 % heavy
Target 60-70	Target 25-40	Target 25-40		

Trees Per Acre:	Sawtimber	7
	Pulpwood	80
	Cull	0
	Total	**87**
	Snags	1.7
	Logs	0
Basal Area:	Sawtimber	8
	Pulpwood	25
	Cull	0
	Total	**33**

Ave. dbh sawtimber 14.5" and ave. dbh of pulpwood 7.6"

Volume: 332 bd. Ft. / acre of sawtimber
4.9 cords / acre of pulpwood

HLD_C4_S62_2013 Desired stand conditions indicating where habitat and wildlife variables warrant management. (reforestation area-19 acres seedling planted 02/92) Water is encroaching from the west and has devastated all but approx. 6 acres of the stand.

Forest Variables[1]	Desired Stand Condition (LMVJV 2007)	Conditions that May Warrant Management (LMVJV 2007)	Existing Refuge Stand Condition	Existing Conditions meet or exceed 'May Warrant Management' levels
Overstory canopy cover	60 – 70 %	>80%	100 % of plots are greater than 80 % in thriving part of stand	X
Midstory cover	25 – 40 %	<20% or >50%	100 % of plots are greater than 60%	X
Basal area (BA)	60 – 70 ft^2 / acre with ≥25% in older age classes[2]	>90ft^2 / acre or ≥60% in older age classes	100 BA	X
Tree stocking	60 – 70 %	<50% or >90%	91%	X
Dominant trees[3]	>2 / acre	<1 / acre	< 1/acre	X
Understory cover	25 – 40%	<20%	100% of plots less than 25%	X
Regeneration[4]	30 – 40% of area	<20% of area	800 total regen. 0/acre of shade intolerant regeneration	X
Coarse woody debris (>10 inch diameter)	≥200 ft^3 / acres	<100ft^3 / acre	0 cu.ft./acre	X
Small cavities (<10 inch diameter)	>4 visible holes / acre **or** >4 "snag" stems ≥4 inch dbh **or** ≥2 stems >20 inch dbh	<2 visible holes / acre **or** <2 snags ≥4 inch dbh **or** <1 stem ≥20 inch dbh	N/A	
Den trees/large cavities[5] (>10 inch diameter)	1 visible hole / 10 acres **or** ≥2 stems ≥26 inch dbh (≥8 ft^2 BA ≥26 inch dbh)	0 visible holes / 10 acres **or** <1 stem ≥26 inch dbh (<4 ft^2 BA ≥ 26 inch dbh)	N/A	
Standing dead and/or stressed trees[5]	>6 stems / acre ≥10 inch dbh **or** ≥2 stems ≥20 inch dbh (>4 ft^2 BA ≥ 10 inch dbh)	<4 stems ≥10 inch dbh / acre **or** <1 stem ≥20 inch dbh inch dbh) (<2 ft^2 BA ≥ 10)	N/A	

[1] Promotion of species and structural diversity within stands is the underlying principle of management. Management should promote vines, cane, and Spanish moss within site limitations.

[2] "Older age class" stems are those approaching biological maturity, (i.e., senescence). We do not advocate aging individual trees but use of species-site-size relationships as a practical surrogate to discern age.

[3] Dominants (a.k.a. emergents) should have stronger consideration on more diverse sites, such as ridges and first bottoms.

[4] Advanced regeneration of shade-intolerant trees in sufficient numbers (circa 400/acre) to ensure their succession to forest canopy. Areas lacking canopy (i.e., group cuts) should be restricted to <20% of stand area.

[5] Utilizing BA parameters allows the forest manager to maintain this variable in size classes that are most suitable for the stand instead of using specific size classes noted.

Percent of Overstory, Midstory, Understory and presence of Vines and Cane, HLD_C4_S62_2013.

Overstory Canopy	Midstory Canopy	Understory Canopy	Vine Coverage	Cane
100 % > 80	100 % > 60	0 % > 60	100 % sparse	100 % none
0 % 50-80	0 % 25-60	0 % 25-60	0 % moderate	0 % sparse
0 % <50	0 % < 25	100 % < 25	0 % heavy	0 % heavy
Target 60-70	Target 25-40	Target 25-40		

Trees Per Acre:	Sawtimber	10
	Pulpwood	200
	Cull	0
	Total	**210**
	Snags	0
	Logs	0
Basal Area:	Sawtimber	12
	Pulpwood	88
	Cull	0
	Total	**100**

Ave. dbh of sawtimber 15", ave. dbh of pulpwood 9"

Volume: 555 bd. ft. volume of sawtimber/acre
23.2 cords of pulpwood/acre