

Appendix K. Crosswalk between ecological zones and BpS ecological systems and FS Veg forest type

Table 1. Summary of Crosswalk between Ecological Zones, BpS, and U.S. Forest Service Forest Types.

Ecological Zone	BpS /NatureServe Ecological System	Code#	U.S. Forest Type # and Rules
Grassy Balds	Southern Appalachian Shrub and Grass Bald (in part)	27	No crosswalk
Spruce	Central and Southern Appalachian Spruce-Fir Forest	1	7, 17
Northern Hardwood Slope	Southern Appalachian Northern Hardwood	2	81, (42, 10 when intersects with BpS 2), (48 when intersects with BpS 2 = 12 ac)
Northern Hardwood Cove			
Acidic Cove	Southern and Central Appalachian Cove Forest	4	56, 41, 50, 8, 9, 83, 4, 5, (42, 10, 48 when intersects with BpS 4)
Mixed Oak / Rhododendron			
Rich Cove			
Riparian Alluvial Forest	Central Interior and Appalachian Riparian Systems	6	72, 76, 58, (42, 10 when intersects with BpS 6) (48 when intersects w/ BpS 6,23 = 4 ac)
Riparian Streamside			
Large Floodplain	Central Interior and Appalachian Floodplain Systems	23	Not on USFS
High Elevation Red Oak	Central and Southern Appalachian Montane Oak	8	53, 55, (42, 10 when intersects with BpS 8, 9), (48 when intersects with BpS 8, 9 = 370 ac)
Montane Oak-Hickory (Rich)	Southern and Central Appalachian Northern Red Oak- Chestnut Oak (provisional type)	9	
Montane Oak-Hickory (Cove)			
Montane Oak-Hickory (Slope)			
Dry Mesic Oak	Southern Appalachian Oak Forest	13	52, 47, 54, 46, 13, (42, 10 when intersects with BpS 13), (48 when intersects with BpS 13 = 193 ac)
Dry Oak Evergreen Heath	Allegheny-Cumberland Dry Oak Forest & Woodland	10	45, 60, 59, 88, (42, 10, when intersects with BpS 10), (48 when intersects with Bps 10 = 519 ac)
Dry Oak Deciduous Heath			
Low Elevation Pine	Southern Appalachian Low-Elevation Pine	16	33, 16, 32, 44, 12, 31, (42, 10 when intersects with BpS 16), (48 when intersects with BpS 16 = 156 ac)
Pine-Oak Heath	Southern Appalachian Montane Pine Forest and Woodland	18	15, 20, 39, 38, (48, 42, 10 when intersects with BpS 18)

Table 2. Details of Crosswalk between Ecological Zones, BpS, and U.S. Forest Service Forest Types, sorted by Forest Type acreage (January 7, 2011 collaboration meeting between USFS and TNC)

FT#	FT NAME	acres	(Bps Code), Ecological System name	Reasoning ("TYPES" = BpS types)
53	White Oak-Red Oak-Hickory	71,415	(9) Southern and Central Appalachian Red Oak-Chestnut Oak	logical, local knowledge, agrees with BpS but 1/4 is within Cove "TYPES"
56	Yellow Poplar-White Oak-Red Oak	60,369	(4) Southern and Central Appalachian Cove Forest	logical, local knowledge, agrees with BpS but > 1/3 in Oak "TYPES"
45	Chestnut Oak-Scarlet Oak-Yellow Pine	25,579	(10) Allegheny-Cumberland Dry Oak Forest and Woodland	logical, local knowledge, mostly agrees with BpS
60	Chestnut Oak-Scarlet Oak	23,467	(10) Allegheny-Cumberland Dry Oak Forest and Woodland	logical, local knowledge, mostly agrees with BpS
	unknown	23,194	DOES NOT CROSSWALK, INSUFFICIENT DATA, DROP FROM ANALYSIS	newer acquisitions that have not had field evaluation
52	Chestnut Oak	20,689	(13) Southern Appalachian Oak Forest	local knowledge USFS, but 30% in Cove "TYPES"
81	Sugar Maple-Beech-Yellow Birch	12,665	(2) Northern Appalachian Northern Hardwood	logical, local knowledge
41	Cove Hardwoods-White Pine-Hemlock	11,789	(4) Southern and Central Appalachian Cove Forest	logical, local knowledge, but 20% in Oak "TYPES"
3	White Pine	10,032	UNCHARACTERISTIC except in BpS (16) and BpS (18)	stand replacement from crown fire only in pine types would allow WP dominance (> 70% cover)
42	Upland Hardwoods-White Pine	9,227	(4) Southern and Central Appalachian Cove Forest, and (13) Southern Appalachian Oak Forest mostly	variable sites represented by FT, use BpS to separate this FT in TNC Ecological Systems, i.e., BpS
50	Yellow Poplar	8,944	UNCHARACTERISTIC except in BpS (4) = Southern and Central Appalachian Cove Forest	Tulip Poplar dominance probably not in historic landscape except for Coves
15	Pitch Pine-Oak	7,765	(18) Southern Appalachian Montane Pine Forest and Woodlands	logical, local knowledge, mostly agrees with BpS
39	Table Mountain Pine	6,284	(18) Southern Appalachian Montane Pine Forest and Woodlands	logical, but most in Oak "TYPES"
59	Scarlet Oak	6,036	(10) Allegheny-Cumberland Dry Oak Forest and Woodland	logical, local knowledge, but 25% in Cove "TYPES"
38	Pitch Pine	5,463	(18) Southern Appalachian Montane Pine Forest and Woodlands	logical, but most in Oak "TYPES"
55	Northern Red Oak	4,274	(9) Southern and Central Appalachian Red Oak-Chestnut Oak & (8) Central and Southern App. Montane Oak	This FT should be "lumped" into one Bps = (9) for Bps successional model purposes
33	Virginia Pine	3,989	(16) Southern Appalachian Low-Elevation Pine	logical, but most in Oak "TYPES" due to past disturbance
16	Virginia Pine-Oak	3,921	(16) Southern Appalachian Low-Elevation Pine	local knowledge, logical, but much overlap with Oak "TYPES", as a result of past disturbance influence
10	White Pine-Upland Hardwood	3,830	(4) Southern and Central Appalachian Cove Forest, and (13) Southern Appalachian Oak Forest mostly	variable sites represented by FT, use BpS to separate this FT in TNC Ecological Systems, i.e., BpS
20	Table Mountain Pine-Hardwoods	3,243	(18) Southern Appalachian Montane Pine Forest and Woodlands	logical, but much in Cove and Oak "TYPES" due to past disturbance, and map resolution differences
48	Northern Red Oak-Hickory-Yellow Pine	2,040	use BpS to separate this type into TNC Ecological Systems	stands occur in variable landscape positions, i.e. coves and exposed slopes
8	Hemlock-Hardwood	2,021	(4) Southern and Central Appalachian Cove Forest	logical, local knowledge
9	White Pine-Cove Hardwood	1,864	(4) Southern and Central Appalachian Cove Forest	logical, local knowledge, most agree with BpS, but 1/3 with Oak "TYPES"
32	Shortleaf Pine	1,705	(16) Southern Appalachian Low-Elevation Pine	logical, local knowledge, but 1/2 in Oak "TYPES", likely as a result of past disturbance
99	Brush, kallat, rhodo	1,656	UNCHARACTERISTIC except in BpS (27) = Southern Appalachian Grass and Shrub Balds	likely the result of stand replacement fire due to 80+ years of fire suppression, except on true balds
83	Black Birch	1,565	(4) Southern and Central Appalachian Cove Forest	60% in Cove "TYPES", which could include Oak / Rhododendron Ecological Zones
44	Southern Red Oak-Yellow Pine	1,018	(16) Southern Appalachian Low-Elevation Pine	logical, local knowledge, Southern Red Oak is the major indicator of this BpS in adjacent NC areas
7	Red Spruce-Fraser Fir	641	(1) Central and Southern Appalachian Spruce-Fir Forest	logical
12	Shortleaf Pine-Oak	529	(16) Southern Appalachian Low-Elevation Pine	logical, local knowledge, mostly agrees with BpS
4	White Pine-Hemlock	454	(4) Southern and Central Appalachian Cove Forest	logical, and match to BpS mostly
47	White Oak-Black Oak-Yellow Pine	376	(13) Southern Appalachian Oak Forest	logical, most in Oak "TYPES"
5	Hemlock	301	(4) Southern and Central Appalachian Cove Forest	logical, small acreage
54	White Oak	207	(13) Southern Appalachian Oak Forest	logical, local knowledge, small acreage
58	Sweetgum-Yellow Poplar	153	(23)&(6) = Floodplain and Riparian	logical, local knowledge, SUGGEST "LUMPING" Floodplain and Riparian.
90	no matching FT	89	DROP FROM ANALYSIS	small acreage, unclear designation
72	River Birch-Sycamore	73	(6) Central Interior and Appalachian Riparian Systems	logical, majority in Riparian "TYPES"
31	Loblolly Pine	62	(16) Southern Appalachian Low-Elevation Pine	logical, small acreage, likely error in pine spp recognition
76	Silver Maple-American Elm	61	(6) Central Interior and Appalachian Riparian Systems	logical, majority of "TYPE" in Cove that would include these smaller Riparian inclusions
13	Loblolly Pine-Hardwood	28	(13) Southern Appalachian Oak Forest	based upon Bps intersection, small acreage
98	Undrained Flatwoods-Savannas	27	DROP FROM ANALYSIS	small acreage, unclear designation
17	Red Spruce-Northern Hardwood	23	(1) Central and Southern Appalachian Spruce-Fir Forest	logical, match to BbS Spruce and Nhwod
46	Bottomland Hwoods-Yellow Pine	13	(13) Southern Appalachian Oak Forest	based on intersection with BpS = 70% Southern Appalachian Oak based mainly on the intersection with BpS, i.e., 70% in Dry Oak "TYPE"
88	Black Locust	7	(10) Allegheny-Cumberland Dry Oak Forest and Woodland	
	TOTAL	337,088		