



# Species Modeling Report

## **Broad-winged Hawk**

Buteo platypterus

Taxa: Avian

Order: Falconiformes

Family: Accipitridae

# SE-GAP Spp Code: **bBWHA**

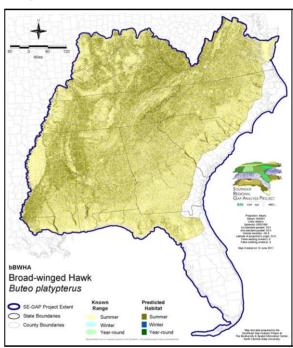
ITIS Species Code: 175365

NatureServe Element Code: ABNKC19050

### **KNOWN RANGE:**

# Broad-winged Hawk Buteo platypterus

### PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE Range bBWHA.pdf

Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE Dist bBWHA.pdf GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=bBWHA

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBWHA se00.zip

### **PROTECTION STATUS:**

Reported on March 14, 2011

Federal Status: ---

State Status: CT (SC), CT (SC), ID (P), IN (SSC), KY (N), NJ (SC/RP), NV (YES), NY (PB), RI (Not Listed), UT (None), BC (2

(2005)), QC (Non suivie) NS Global Rank: G5

NS State Rank: AL (S4B), AR (S4B), AZ (S2M), CA (SNA), CO (S5B), CO (S5B), CT (S5B), CT (S5B), DC (S1B,S4N), DE (S1B), FL (SNRB,SNRN), GA (S4), IA (S3B), IA (S3B), ID (SNA), IL (S3), IN (S3B), KS (S1B), KS (S1B), KY (S4B), LA (S4B), MA (S5B,S5N), MD (S4B), ME (S5B), MI (S5), MN (SNRB), MO (S3), MS (S4S5B), MS (S4S5B), MT (SNA), NC (S4B), NC (S4B), ND (SNRB), NE (SU), NH (S5B), NJ (S3B), NM (S4N), NV (SNA), NY (S5), OH (S4), OK (S4B), OR (SNA), PA (S5B), RI (S4B), SC (S4), SD (S2B), SD (S2B), TN (S4B), TX (S3B), UT (SNA), VA (S4), VT (S5B), VT (S5B), WA (SNA), WI (S5B), WI (S5B), WV (S4B), WY (SNA), AB (S3), BC (S3B), MB (S4S5B), MB (S4S5B), NB (S5B), NS (S4B), ON (S5B), PE (S1?B), QC (S5B), SK (S4B,S3M), YT (SU)

**bBWHA** Page 1 of 5

### SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	ι	JS FWS	US Forest	US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%	
Status 1	24,240.2	< 1	19,377.5	< 1	0.0	0	0.0	0	
Status 2	48,365.6	< 1	215,121.4	< 1	0.0	0	3,158.0	< 1	
Status 3	1,955.4	< 1	1,313,330.9	4	46,162.6	< 1	189,447.1	< 1	
Status 4	33.5	< 1	0.0	0	0.0	0	0.0	0	
Total	74,594.8	< 1	1,547,829.9	5	46,162.6	< 1	192,605.1	< 1	
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	185,554.0	< 1	0.0	0	0.0	0	
Status 2	0.0	0	7,434.4	< 1	765.1	< 1	0.0	0	
Status 3	21,788.0	< 1	74,126.3	< 1	0.0	0	966.4	< 1	
Status 4	0.0	0	0.0	0	0.0	0	0.0	0	
Total	21,788.0	< 1	267,114.7	< 1	765.1	< 1	966.4	< 1	
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest		
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	823.3	< 1	59.0	< 1	0.0	0	
Status 2	0.0	0	10,991.6	< 1	352,543.9	1	808.1	< 1	
Status 3	17,992.4	< 1	152,844.2	< 1	121,609.3	< 1	59,759.5	< 1	
Status 4	0.0	0	0.0	0	52,874.5	< 1	7.7	< 1	
Total	17,992.4	< 1	164,659.1	< 1	527,086.6	2	60,575.2	< 1	
	State Coastal F	Reserve	ST Nat.Area/Pi	reserve	Other State	e Lands	Private Cons. E	asemt.	
	ha	%	ha	%	ha	%	ha	%	
Status 1	0.0	0	8,923.1	< 1	0.0	0	0.0	0	
Status 2	665.1	< 1	41,155.8	< 1	4.1	< 1	1,033.9	< 1	
Status 3	0.0	0	4,217.9	< 1	8,234.1	< 1	19,234.9	< 1	
Status 4	0.0	0	0.7	< 1	1,794.5	< 1	0.0	0	
Total	665.1	< 1	54,297.5	< 1	10,032.8	< 1	20,268.8	< 1	
	Private Land - No Res.		Water				Overa	ıll Total	
	ha	%	ha	%			ha	%	
Status 1	0.0	0	0.0	0			238,977.2	< 1	
Status 2	0.0	0	0.0	0			682,047.1	2	
Status 3	359.6	< 1	0.0	0			2,032,028.8	10	
Status 4	28,822,440.7	87	7,620.1	< 1			28,937,612.6	87	
Total	28,822,800.3	87	7,620.1	< 1			31,890,665.7	100	

GAP Status 1: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a natural state within which disturbance events (of natural type, frequency, and intensity) are allowed to proceed without interference or are mimicked through management.

GAP Status 2: An area having permanent protection from conversion of natural land cover and a mandated management plan in operation to maintain a primarily natural state, but which may receive use or management practices that degrade the quality of existing natural communities.

GAP Status 3: An area having permanent protection from conversion of natural land cover for the majority of the area, but subject to extractive uses of either a broad, low-intensity type or localized intense type. It also confers protection to federally listed endangered and threatened species throughout the area.

GAP Status 4: Lack of irrevocable easement or mandate to prevent conversion of natural habitat types to anthropogenic habitat types. Allows for intensive use throughout the tract. Also includes those tracts for which the existence of such restrictions or sufficient information to establish a higher status is unknown.

bBWHA Page 2 of 5

### PREDICTED HABITAT MODEL(S):

### **Summer Model:**

Habitat Description: Broad-winged hawks breed in continuous deciduous or mixed forests often near water and forest openings (Goodrich et al 1996, Kaufman 1996, Stevenson and Anderson 1994). Hamel (1992) states they 'prefer upland often hilly woods, as opposed to bottomlands.' Broad-winged hawks forage often from perches located along woodland edges or near water (Kaufman 1996). They use broadleaf and mixed forest, preferring denser situations, and are less frequently in open woodland. They generally perch under or in tree canopy, forage in forest openings, edges, and wet areas (Palmer 1988). They do uses utility poles for hunting perches (Stevenson and Anderson 1994). They may select pine stands (Imhoff 1976).

> As summarized by Palmer (1988), the nest is generally located 25 to 40 ft. above the ground, 'primarily in the first main crotch of a moderate- to large-sized tree and in the bottom 1/3 of the forest canopy.

Broad winged hawks are common in the mountains of South Carolina, and uncommon to absent in the rest of the state (Hamel 1992, Potter et al 1980).

Quoted directly from existing state habitat notes - K. Cook, 13Feb05

Additional information:

Titus and Mosher (1981) found that broad-winged hawks nested within 211m of water and 292 m from forest openings.

Mask of Forest Interior Utilization: Include all forest interiors and 120m buffer from them.

Hydrography Mask:

Freshwater Only

Utilizes flowing water features with buffer of 250m from selected water features.

Utilizes open water features with buffer of 250m from selected water features.

Utilizes wet vegetation features with buffers of 250m from and unlimited into selected vegetation features.

Functional Group	Map Unit Name				
Anthropogenic	Deciduous Plantations				
Anthropogenic	Developed Open Space				
Anthropogenic	Successional Grassland/Herbaceous				
Anthropogenic	Successional Grassland/Herbaceous (Other)				
Anthropogenic	Successional Grassland/Herbaceous (Utility Swath)				
Anthropogenic	Successional Shrub/Scrub (Clear Cut)				
Anthropogenic	Successional Shrub/Scrub (Other)				
Anthropogenic	Successional Shrub/Scrub (Utility Swath)				
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland				
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier				
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier				
Forest/Woodland	Appalachian Hemlock-Hardwood Forest				
Forest/Woodland	Atlantic Coastal Plain Dry and Dry-Mesic Oak Forest				
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier				
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest				
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest				
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest				
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest				
Forest/Woodland	Central Appalachian Oak and Pine Forest				
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Hardwood Modifier				
Forest/Woodland	East Gulf Coastal Plain Interior Shortleaf Pine-Oak Forest - Mixed Modifier				
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier				
Forest/Woodland	East Gulf Coastal Plain Limestone Forest				
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest				

**bBWHA** Page 3 of 5 Forest/Woodland East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier Forest/Woodland East Gulf Coastal Plain Northern Mesic Hardwood Forest East Gulf Coastal Plain Southern Loess Bluff Forest Forest/Woodland Forest/Woodland East Gulf Coastal Plain Southern Mesic Slope Forest Northeastern Interior Dry Oak Forest - Mixed Modifier Forest/Woodland Forest/Woodland Northeastern Interior Dry Oak Forest-Hardwood Modifier Forest/Woodland Northern Atlantic Coastal Plain Dry Hardwood Forest Forest/Woodland South-Central Interior Mesophytic Forest Forest/Woodland Southern and Central Appalachian Cove Forest Forest/Woodland Southern and Central Appalachian Oak Forest Forest/Woodland Southern and Central Appalachian Oak Forest - Xeric Forest/Woodland Southern Appalachian Montane Pine Forest and Woodland Forest/Woodland Southern Coastal Plain Dry Upland Hardwood Forest Forest/Woodland Southern Interior Low Plateau Dry-Mesic Oak Forest Forest/Woodland Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier Forest/Woodland Southern Piedmont Dry Oak-(Pine) Forest - Hardwood Modifier Forest/Woodland Southern Piedmont Dry Oak-(Pine) Forest - Mixed Modifier Forest/Woodland Southern Piedmont Dry Oak-Heath Forest - Hardwood Modifier Forest/Woodland Southern Piedmont Dry Oak-Heath Forest - Mixed Modifier Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier Forest/Woodland Forest/Woodland Southern Piedmont Mesic Forest Forest/Woodland Southern Ridge and Valley Dry Calcareous Forest Forest/Woodland Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier Forest/Woodland Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier Wetlands Atlantic Coastal Plain Small Blackwater River Floodplain Forest Wetlands Atlantic Coastal Plain Small Brownwater River Floodplain Forest Wetlands Central Appalachian Riparian - Forest Modifier Wetlands **Cumberland Riverscour** Wetlands East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier Wetlands East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier Wetlands East Gulf Coastal Plain Small Stream and River Floodplain Forest Wetlands East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods Wetlands Mississippi River Riparian Forest Wetlands South-Central Interior Small Stream and Riparian Wetlands Southern Coastal Plain Spring-run Stream Aquatic Vegetation

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bBWHA Page 4 of 5

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This data was compiled and/or developed by the Southeast GAP Analysis Project at The Biodiversity and Spatial Information Center, North Carolina State University

**bBWHA** Page 5 of 5