



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Barred Owl

Strix varia

Taxa: Avian

Order: Strigiformes

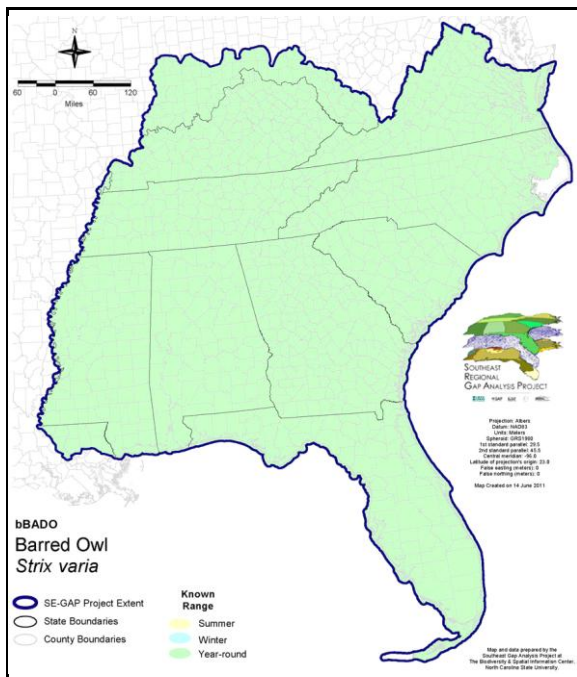
Family: Strigidae

SE-GAP Spp Code: **bBADO**

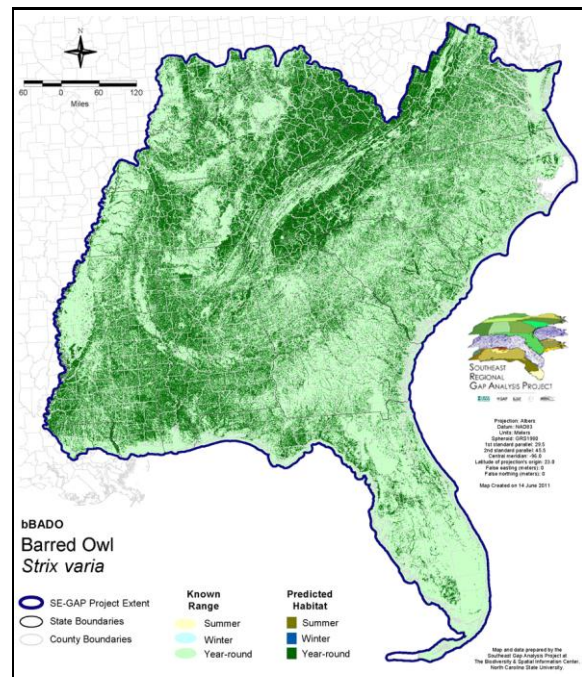
ITIS Species Code: 177921

NatureServe Element Code: ABNSB12020

KNOWN RANGE:



PREDICTED HABITAT:



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

Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_bBADO.pdf

GAP Online Tool Link: <http://www.gapservice.ncsu.edu/segap/segap/index2.php?species=bBADO>

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBADO_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: ID (P), KY (N), NJ (T/T), NY (PB), RI (Not Listed), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (S3S4), AL (S5), AR (S4), CT (S5), DC (S2), DE (S2), FL (SNR), GA (S5), IA (S5B), ID (S4), IL (S5), IN (S4), KS (S4), KY (S5), LA (S5), MA (S5), MD (S5), ME (S5), MI (S5), MN (SNR), MO (SNR), MS (S5), MT (S4), NC (S4), ND (SU), NE (S2), NH (S5), NJ (S2B,S2N), NM (SNA), NY (S5), OH (S5), OK (S4S5), OR (SU), PA (S5), RI (S4B,S4N), SC (SNR), SD (SU), TN (S5), TX (S5B), VA (S5), VT (S5B,S5N), WA (S5), WI (S4B), WV (S5B,S5N), WY (SNA), AB (S3S4), BC (S5B), LB (SNA), MB (S4), NB (S5), NS (S5), ON (S5), PE (S5), QC (S5B), SK (S3B,S3N)

SUMMARY OF PREDICTED HABITAT BY MANAGMENT AND GAP PROTECTION STATUS:

	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	80,900.9	< 1	37,703.2	< 1	0.0	0	0.0	0
Status 2	144,135.8	< 1	407,405.9	< 1	0.0	0	4,365.6	< 1
Status 3	3,164.0	< 1	2,512,239.9	6	42,992.7	< 1	395,592.7	< 1
Status 4	38.9	< 1	< 0.1	< 1	0.0	0	0.0	0
Total	228,239.6	< 1	2,957,349.1	7	42,992.7	< 1	399,958.3	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	289,814.1	< 1	0.0	0	4,102.9	< 1
Status 2	0.0	0	13,178.7	< 1	1,998.9	< 1	0.0	0
Status 3	55,847.2	< 1	215,568.6	< 1	0.0	0	1,382.1	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	55,847.2	< 1	518,561.5	1	1,998.9	< 1	5,485.1	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1,521.3	< 1	72.0	< 1	0.0	0
Status 2	0.0	0	19,178.9	< 1	598,219.8	1	1,411.8	< 1
Status 3	23,351.3	< 1	404,214.8	< 1	185,815.9	< 1	216,718.9	< 1
Status 4	0.0	0	< 0.1	< 1	94,164.0	< 1	44.0	< 1
Total	23,351.3	< 1	424,915.1	< 1	878,271.8	2	218,174.8	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	14,189.0	< 1	0.0	0	0.0	0
Status 2	6,518.3	< 1	81,797.3	< 1	5.0	< 1	2,510.5	< 1
Status 3	0.0	0	15,286.1	< 1	9,866.7	< 1	63,096.8	< 1
Status 4	0.0	0	2.1	< 1	2,162.1	< 1	0.0	0
Total	6,518.3	< 1	111,274.5	< 1	12,033.7	< 1	65,607.2	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	428,303.3	< 1		
Status 2	0.0	0	0.0	0	1,280,726.6	3		
Status 3	520.2	< 1	0.0	0	4,145,657.9	15		
Status 4	36,482,794.7	81	25,396.5	< 1	36,698,727.6	81		
Total	36,483,314.9	81	25,396.5	< 1	42,553,415.4	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.

PREDICTED HABITAT MODEL(S):

Year-round Model:

Habitat Description: Typically inhabits either upland or lowland, densely forested mature coniferous and deciduous woods that are often near water. Requires areas that contain nesting cavities and roost trees, with fairly open areas nearby for foraging (Johnsgard 1988) including meadows and marshes (Eckert and Karalus 1987). While hunting, perches on isolated trees overlooking open areas; also hunts by flying through the woods (Eckert and Karalus 1987). They are also common along lakeshores and especially in cypress swamps (Wolfe and de la Torre 1990). In the mountains, they may be found in uplands, hemlocks, coves, and along wooded streams (GA). They are found throughout the mountains from the spruce-fir zone down to the southern hardwoods (Alsop 1991). Barred owls do not occur on the barrier islands (Fussell and Lyons 1990). Permanent resident of Florida. In Florida they use mixed hardwood swamps, cypress swamps, and live oak - cabbage palm hammocks (Layne et al. 1977). Rare in fragmented woodlots (Fussell 1994), although may use them if the trees are sufficiently large (Eckert and Karalus 1987). Presence of large trees may be key factor in each habitat type (Wolfe and de la Torre 1990). Appears to prefer older stands but uses earlier stages of forest succession if enough large trees or snags (or nest boxes) are present. Often in forests with relatively open understory. Prefers canopy closure of 60% or greater. They are often replaced by the great horned owl in fragmented open forests (Allen 1987). Cover types in order of preference were: oak woodland, mixed deciduous/coniferous woodland, white cedar swamps, oak savanna, alder swamps, marshes, and old fields (Allen 1987).

Nest trees are generally large (at least 50 cm breast-height diameter) (Johnsgard 1988). Generally nests in cavities, but also abandoned nests of squirrels (Ehrlich et al. 1988), corvids and hawks, especially Red-shouldered Hawk, rarely hollow stumps (Wolfe and de la Torre 1990). Uses both living and dead trees. Trees with cavity suitable for nesting generally at least 51 cm DBH; habitat suitability index model assumes that a density of at least 2 stems of this diameter per 0.4 ha represents high quality habitat for reproduction; high quality reproductive habitat also indicated by canopy cover of overstory trees of 60% or more (Allen 1987). However, a pair was found nesting on the ground at Seven-Mile Fire Tower, Everglades National Park. The nest was placed within the base of the tower behind a concrete block that forms the bottom step of the first flight of stairs.

Quoted directly from existing state habitat notes - K. Cook, 17Feb05

Additional information:

There is not a lot of information on elevation limits, but studies of the birds of the Smoky Mountains National Park cite that they are common below 5,000 ft. or 1,500 m (Stupka 1963, Alsop 1991). K. Cook, 17Feb05

Elevation Mask: < 1500m

Mask of Forest Interior Utilization: Include all forest interiors and 60m buffer from them.

Contiguous Patch Minimum Size (hectares): 50

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Low Intensity Developed
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 - Loblolly Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Fall-line Sandhills Longleaf Pine Woodland - Scrub/Shrub Understory Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Atlantic Coastal Plain Upland Longleaf Pine Woodland
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 Shortleaf Pine-Oak Forest - Pine Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Loblolly Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Offsite Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Open Understory Modifier
Forest/Woodland	East Gulf Coastal Plain Interior Upland Longleaf Pine Woodland - Scrub/Shrub Modifier
Forest/Woodland	East Gulf Coastal Plain Limestone Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Hardwood Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland - Juniper Modifier
Forest/Woodland	East Gulf Coastal Plain Northern Mesic Hardwood Forest
Forest/Woodland	East Gulf Coastal Plain Southern Loess Bluff Forest
Forest/Woodland	East Gulf Coastal Plain Southern Mesic Slope Forest
Forest/Woodland	Florida Longleaf Pine Sandhill - Open Understory Modifier
Forest/Woodland	Florida Longleaf Pine Sandhill - Scrub/Shrub Understory Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
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	Southeastern Interior Longleaf Pine Woodland
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 Low Mountain Pine Forest
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 - Loblolly Pine 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
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
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 Blackwater Stream Floodplain Forest - Forest Modifier
Wetlands	Atlantic Coastal Plain Blackwater Stream Floodplain Forest - Herbaceous Modifier
Wetlands	Atlantic Coastal Plain Brownwater Stream Floodplain Forest
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Forested Wetland
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Taxodium/Nyssa Modifier
Wetlands	Atlantic Coastal Plain Nonriverine Swamp and Wet Hardwood Forest - Oak Dominated Modifier
Wetlands	Atlantic Coastal Plain Northern Basin Peat Swamp
Wetlands	Atlantic Coastal Plain Northern Basin Swamp and Wet Hardwood Forest
Wetlands	Atlantic Coastal Plain Northern Wet Longleaf Pine Savanna and Flatwoods
Wetlands	Atlantic Coastal Plain Peatland Pocosin
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Southern Wet Pine Savanna and Flatwoods

Wetlands	Atlantic Coastal Plain Streamhead Seepage Swamp, Pocosin, and Baygall
Wetlands	Atlantic Coastal Plain Xeric River Dune
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Florida Pine Flatwoods
Wetlands	Cumberland Riverscour
Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Jackson Plain Dry Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Forest Modifier
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Offsite Hardwood Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Open Understory Modifier
Wetlands	East Gulf Coastal Plain Near-Coast Pine Flatwoods - Scrub/Shrub Understory Modifier
Wetlands	East Gulf Coastal Plain Northern Seepage Swamp
Wetlands	East Gulf Coastal Plain Small Stream and River Floodplain Forest
Wetlands	East Gulf Coastal Plain Southern Loblolly-Hardwood Flatwoods
Wetlands	Lower Mississippi River Bottomland and Floodplain Forest
Wetlands	Lower Mississippi River Bottomland Depressions - Forest Modifier
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier
Wetlands	Mississippi River Low Floodplain (Bottomland) Forest
Wetlands	Mississippi River Riparian Forest
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Hardwood Hammock
Wetlands	South Florida Pine Flatwoods
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	South Florida Willow Head
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Wetlands	Southern Coastal Plain Blackwater River Floodplain Forest
Wetlands	Southern Coastal Plain Hydric Hammock
Wetlands	Southern Coastal Plain Nonriverine Basin Swamp
Wetlands	Southern Coastal Plain Nonriverine Cypress Dome
Wetlands	Southern Coastal Plain Seepage Swamp and Baygall
Wetlands	Southern Piedmont Large Floodplain Forest - Forest Modifier
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier
Wetlands	Southern Piedmont Seepage Wetland
Wetlands	Southern Piedmont Small Floodplain and Riparian Forest
Wetlands	Southern Piedmont/Ridge and Valley Upland Depression Swamp

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Compiled: 15 September 2011

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