



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Long-eared Owl

*Asio otus*

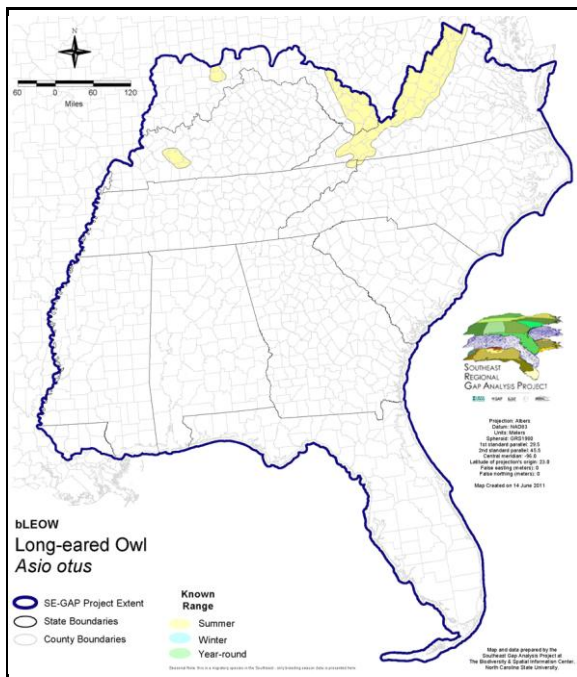
Taxa: Avian  
 Order: Strigiformes  
 Family: Strigidae

SE-GAP Spp Code: **bLEOW**

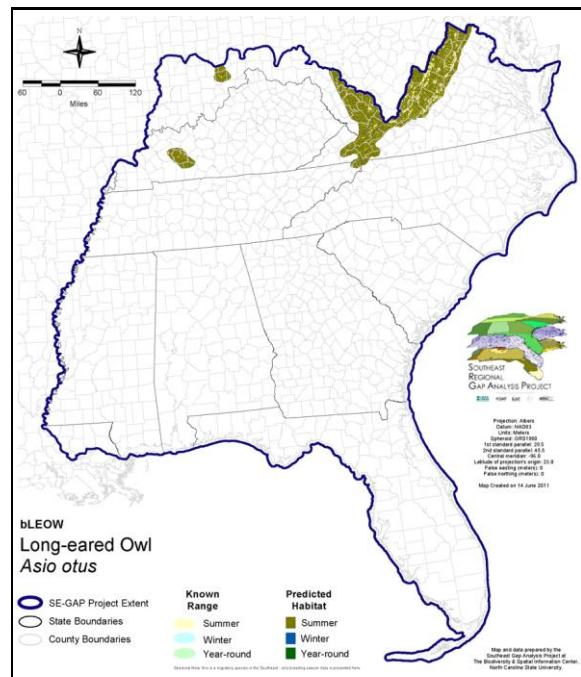
ITIS Species Code: 177932

NatureServe Element Code: ABNSB13010

#### KNOWN RANGE:



#### PREDICTED HABITAT:



Range Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Range\\_bLEOW.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_bLEOW.pdf)

Predicted Habitat Map Link: [http://www.basic.ncsu.edu/segap/datazip/maps/SE\\_Dist\\_bLEOW.pdf](http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_bLEOW.pdf)

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bLEOW\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bLEOW_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: CA (None), CT (E), CT (E), IA (T), ID (P), IL (RE), KY (E), MA (SC), MI (T), NC (W3), NC (W3), NJ (T/T), NV (YES), NY (PB), OH (SI), RI (Concern), RI (Concern), UT (None), VA (SC), WI (SC/M), WI (SC/M), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (SNA), AL (SNA), AR (S3N), AZ (S2B,S3S4N), CA (S3), CO (S3S4B), CO (S3S4B), CT (S1B), CT (S1B), DC (SH), DE (SHB,S1N), DE (SHB,S1N), FL (SNA), GA (S4), IA (S2B,S3N), ID (S5), IL (S1B,S2N), IN (S2), KS (S2B,S3N), KY (S1B,S1S2N), LA (SNA), MA (S1B,S2N), MD (SHB,S1N), MD (SHB,S1N), ME (S1S3B), ME (S1S3B), MI (S2), MN (SNRB), MN (SNRB), MO (SU), MS (SNA), MT (S5), NC (SUB), NC (SUB), ND (SU), NE (S4), NH (SU), NJ (S2B,S2N), NM (S4B,S4N), NV (S4), NY (S2S3B,SNRN), OH (S1S2), OK (S1), OR (S4?), PA (S2B,S2S3N), RI (SHB,S1N), RI (SHB,S1N), SC (SNA), SD (S3B,S3N), TN (S2N), TX (S2B,S3N), UT (S3S4), VA (S1), VT (S2B,S2N), WA (S3B,S4N), WI (S2B), WI (S2B), WV (S1B,S1N), WY (S4), AB (S4), BC (S4B), LB (SNA), MB (S4B), MB (S4B), NB (S2S3), NF (SNA), NS (S1S2), NT (SNA), ON (S4), PE (S1S2)

QC (S4B), SK (S5B,S2N), YT (SNA)



**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	0.0	0	519.6	< 1	0.0	0	0.0	0
Status 2	0.0	0	99,269.7	4	0.0	0	0.0	0
Status 3	0.0	0	313,954.3	11	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	413,743.6	15	0.0	0	0.0	0
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	43,990.7	2	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	0.0	0	0.0	0
Status 3	0.0	0	4,606.3	< 1	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	48,597.0	2	0.0	0	0.0	0
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	0.0	0	51,586.2	2	0.0	0
Status 3	0.0	0	4,898.8	< 1	136.4	< 1	385.0	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	4,898.8	< 1	51,722.6	2	385.0	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	0.0	0	0.0	0
Status 2	0.0	0	1,921.2	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	2,725.0	< 1	0.0	0
Status 4	0.0	0	0.0	0	291.0	< 1	0.0	0
Total	0.0	0	1,921.2	< 1	3,016.0	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	44,510.3	2		
Status 2	0.0	0	0.0	0	152,777.2	5		
Status 3	0.0	0	0.0	0	326,705.8	23		
Status 4	1,953,802.7	70	211.5	< 1	1,954,305.2	70		
Total	1,953,802.7	70	211.5	< 1	2,478,298.4	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):**

**Summer Model:**

Habitat Description: Long-eared owls are found in deciduous and evergreen forests, orchards, wooded parks, farm woodlots, and river woods. Wooded areas with dense vegetation are needed for roosting and nesting, with open areas for hunting. They are often associated with conifers in eastern North America and with deciduous woods near water in the West.

Nests in tree usually in old nest of crow, squirrel, hawk, magpie, or heron; sometimes in tree cavity; rarely on ground (e.g., Maples et al. 1995, Wilson Bull. 107:563-565). In northeastern Oregon, nested in dwarf-mistletoe brooms in Douglas-fir in extensive conifer (grand fir) forest (Bull et al. 1989).

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

**Additional information:**

Henrioux (2002) found that long-eared owls occupied nest sites, and fledged more young, in areas with denser forest edges, greater canopy cover, and with more conifers than random sites in Switzerland. K. Cook, 17Feb05

Avoidance Mask: Medium - moderately intolerant of human disturbance.

**Selected Map Units:**

Functional Group	Map Unit Name
Anthropogenic	Pasture/Hay
Anthropogenic	Row Crop
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	Appalachian Shale Barrens
Forest/Woodland	Central Appalachian Alkaline Glade and Woodland
Forest/Woodland	Central Interior Highlands Calcareous Glade and Barrens
Forest/Woodland	Central Interior Highlands Dry Acidic Glade and Barrens
Forest/Woodland	Cumberland Sandstone Glade and Barrens
Forest/Woodland	Nashville Basin Limestone Glade
Forest/Woodland	Ridge and Valley Calcareous Valley Bottom Glade and Woodland
Forest/Woodland	Southern and Central Appalachian Mafic Glade and Barrens
Prairie	Pennyroyal Karst Plain Prairie and Barrens
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Western Highland Rim Seepage Fen

**Selected Secondary Map Units within 1000m of Primary Map Units:**

Functional Group	Map Unit Name
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Rock Outcrop	Southern Interior Acid Cliff
Forest/Woodland	Southern Appalachian Montane Pine Forest and Woodland
Forest/Woodland	Southern Appalachian Low Mountain Pine Forest
Forest/Woodland	Appalachian Serpentine Woodland
Rock Outcrop	Allegheny-Cumberland Sandstone Box Canyon and Rockhouse
Prairie	Western Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier

Rock Outcrop	Southern Interior Calcareous Cliff
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Pine Modifier
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Southern and Central Appalachian Cove Forest
Prairie	Southern Ridge and Valley Patch Prairie
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Pine Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Northeastern Interior Dry Oak Forest-Hardwood Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Rock Outcrop	North-Central Appalachian Acidic Cliff and Talus
Rock Outcrop	North-Central Appalachian Circumneutral Cliff and Talus
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Rock Outcrop	Central Interior Acidic Cliff and Talus
Rock Outcrop	Central Interior Calcareous Cliff and Talus
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Forest/Woodland	Southern and Central Appalachian Oak Forest
Forest/Woodland	Southern and Central Appalachian Oak Forest - Xeric
Forest/Woodland	South-Central Interior Mesophytic Forest
Prairie	Bluegrass Basin Savanna and Woodland
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Wetlands	South-Central Interior/Upper Coastal Plain Wet Flatwoods
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine Modifier
Anthropogenic	Deciduous Plantations
Anthropogenic	Evergreen Plantations

- CITATIONS:** American Ornithologists' Union (AOU), Committee on Classification and Nomenclature. 1983. Check-list of North American Birds. Sixth Edition. American Ornithologists' Union, Allen Press, Inc., Lawrence, Kansas.
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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.