

# SOUTHEAST GAP ANALYSIS PROJECT

### Species Modeling Report

### Least Bittern

Ixobrychus exilis

Taxa: Avian

Order: Ciconiiformes

Family: Ardeidae

**KNOWN RANGE:** 

**bLEB** 

Least Bittern

State Boun

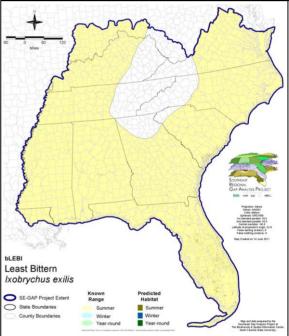
SE-GAP Project Extent

County Boundarie

### ITIS Species Code: 174846 NatureServe Element Code: ABNGA02010

SE-GAP Spp Code: **bLEBI** 

## PREDICTED HABITAT:



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

 Predicted Habitat Map Link:
 http://www.basic.ncsu.edu/segap/datazip/maps/SE\_Dist\_bLEBI.pdf

 GAP Online Tool Link:
 http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=bLEBI

 Data Download:
 http://www.basic.ncsu.edu/segap/datazip/region/vert/bLEBI\_se00.zip

Map and data prep Southeast Cap Analy Blockwersity & Spatial I

#### **PROTECTION STATUS:**

Reported on March 14, 2011

#### Federal Status: ---

State Status: AR (W), AZ (WSC), CA (None), CT (T), CT (T), ID (P), IL (LT), IN (SE), KY (T), MA (E), MD (I), ME (E), MI (T), NC (SC), NC (SC), NH (SC), NJ (SC/sC), NV (YES), NY (T), OH (T), PA (PE), RI (State Threatened), TN (D), UT (None), WI (SC/M), WI (SC/M), BC (8 (2005)), ON (THR), QC (Susceptible)

#### NS Global Rank: G5

NS State Rank: AL (S2N,S4B), AR (S2B,S2N), AZ (S3), CA (S1), CO (S2B), CO (S2B), CT (S2B), CT (S2B), DC (S1B,S2N), DE (S1B), FL (S4), GA (S4), IA (S3B,S2N), ID (SNA), IL (S2), IN (S3B), KS (S2B), KY (S1S2B), LA (S5B), MA (S1S2B), MD (S2S3B), ME (S2B), MI (S2), MN (SNRB), MO (S3), MS (S3B), MT (SNA), NC (S3B), NC (S3B), ND (SNRB), NE (S4), NH (S1B), NJ (S3B,S3N), NM (S3B,S3N), NV (S2B), NY (S3B,S1N), OH (S2), OK (S4?), OR (S1B), PA (S1B), RI (S2B,S2N), SC (SNRB,SNRN), SD (S2B), SD (S2B), TN (S2B), TX (S4B), UT (SHB), VA (S3B,S3N), VT (S2B,S2N), WI (S3B), WV (S1B), WY (SNA), BC (SNA), MB (S2S3B), MB (S2S3B), NB (S2B), NF (SNA), NS (S1B), ON (S4B), PE (SNA), QC (S2S3B), SK (SNA)

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

1	US FWS		US Forest Service		Tenn. Valley Author.		US DOD/ACOE	
	ha	%	ha	%	ha	%	ha	%
Status 1	20,332.8	3	0.0	0	0.0	0	0.0	0
Status 2	13,687.3	2	335.2	< 1	0.0	0	22.3	< 1
Status 3	399.2	< 1	1,833.0	< 1	0.0	0	12,644.6	2
Status 4	1.9	< 1	0.0	0	0.0	0	10.4	< 1
Total	34,421.2	4	2,168.2	< 1	0.0	0	12,677.3	2
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	5,939.5	< 1	363.2	< 1	3,431.5	< 1
Status 2	0.0	0	16,711.6	2	12,212.6	2	14.7	< 1
Status 3	0.0	0	19,275.3	3	0.0	0	7.3	< 1
Status 4	0.0	0	1.0	0	0.0	0	0.0	0
Total	0.0	0	41,928.2	5	12,575.7	2	3,453.5	< 1
	Native Am. Reserv.		State Park/Hist. Park		State WMA/Gameland		State Forest	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	1.6	< 1	0.0	0	0.0	0
Status 2	0.0	0	69.7	< 1	37,157.8	5	0.0	0
Status 3	0.0	0	39,553.7	5	3,748.1	< 1	5,289.8	< 1
Status 4	0.0	0	0.0	0	351.7	< 1	0.0	0
Total	0.0	0	39,625.0	5	41,257.6	5	5,289.8	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	229.6	< 1	0.0	0	0.0	0
Status 2	10,405.0	1	8,652.9	1	0.0	0	243.3	< 1
Status 3	0.0	0	1,006.3	< 1	949.4	< 1	7,923.9	1
Status 4	0.0	0	0.0	0	7.7	< 1	0.0	0
Total	10,405.0	1	9,888.8	1	957.1	< 1	8,167.1	1
1	Private Land - I	No Res.		Water			Overa	II Total
	ha	%	ha	%			ha	%
Status 1	0.0	2	0.0	0			30,298.3	4
Status 2	0.8	< 1	0.0	< 1			99,513.0	13
Status 3	36.1	< 1	< 0.1	< 1			92,666.9	12
Status 4	523,495.9	68	21,509.8	3			545,729.1	71
Total	523,533.0	68	21,510.0	3			768,207.3	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.

#### Summer Model:

Habitat Description: Breed in freshwater and brackish marshes with dense, tall growths of aquatic or semi-aquatic emergent vegetation interspersed with clumps of woody vegetation and open water. Occasionally in salt marshes and mangrove swamps. Forage in thick vegetation of freshwater wetlands and adjacent open water. In Everglades, especially found in dense stands of mixed sawgrass/cattail and homogenous cattail (Gibbs et al. 1992). M. Rubino, 10nov04.

#### Hydrography Mask:

Utilizes flowing water features with buffers of 500m from and 30m into selected water features. Utilizes open water features with buffers of 500m from and 30m into selected water features. Utilizes wet vegetation features with buffers of 500m from and 120m into selected vegetation features.

#### Selected Map Units:

Functional Group	Map Unit Name				
Beach	Unconsolidated Shore (Beach/Dune)				
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Central Salt and Brackish Tidal Marsh				
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Salt and Brackish Marsh				
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Indian River Lagoon Tidal Marsh				
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Salt Marsh				
Brackish Tidal Marsh & Wetland	Florida Big Bend Salt-Brackish Tidal Marsh				
Brackish Tidal Marsh & Wetland	Mississippi Sound Salt and Brackish Tidal Marsh				
Brackish Tidal Marsh & Wetland	South Florida Everglades Sawgrass Marsh				
Brackish Tidal Marsh & Wetland	Southwest Florida Perched Barriers Salt Swamp and Lagoon - Marsh Modifier				
Coastal Dune & Freshwater Wetland	Atlantic and Gulf Coastal Plain Interdunal Wetland				
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Central Fresh-Oligohaline Tidal Marsh				
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Embayed Region Tidal Freshwater Marsh				
Freshwater Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Fresh and Oligohaline Tidal Marsh				
Freshwater Tidal Marsh & Wetland	Florida Big Bend Fresh-Oligohaline Tidal Marsh				
Water	Open Water (Brackish/Salt)				
Water	Open Water (Fresh)				
Wetlands	Atlantic Coastal Plain Clay-Based Carolina Bay Herbaceous Wetland				
Wetlands	Atlantic Coastal Plain Depression Pondshore				
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore				
Wetlands	Atlantic Coastal Plain Northern Pondshore				
Wetlands	Atlantic Coastal Plain Sandhill Seep				
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier				
Wetlands	Central Appalachian Riparian - Herbaceous Modifier				
Wetlands	Central Florida Herbaceous Pondshore				
Wetlands	Central Florida Herbaceous Seep				
Wetlands	East Gulf Coastal Plain Large River Floodplain Forest - Herbaceous Modifier				
Wetlands	East Gulf Coastal Plain Northern Depression Pondshore				
Wetlands	East Gulf Coastal Plain Southern Depression Pondshore				
Wetlands	Floridian Highlands Freshwater Marsh				
Wetlands	Lower Mississippi River Bottomland Depressions - Herbaceous Modifier				
Wetlands	South Florida Freshwater Slough and Gator Hole				
Wetlands	South Florida Pond-Apple/Popash Slough				
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier				
Wetlands	Southern Appalachian Seepage Wetland				
Wetlands	Southern Coastal Plain Herbaceous Seepage Bog				
Wetlands	Southern Coastal Plain Spring-run Stream Aquatic Vegetation				
Wetlands	Southern Piedmont Large Floodplain Forest - Herbaceous Modifier				
Wetlands	Unconsolidated Shore (Lake/River/Pond)				
Wetlands	Western Highland Rim Seepage Fen				

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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Compiled: 15 September 2011

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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.