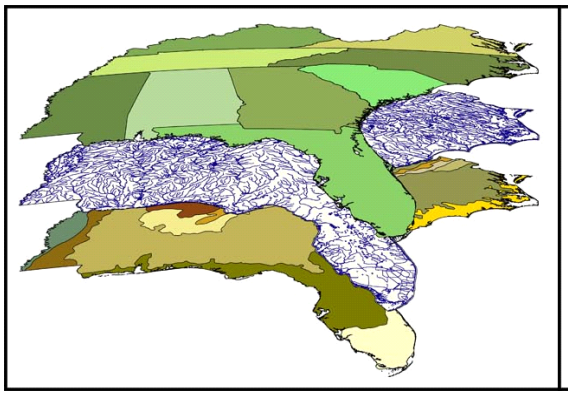


SOUTHEAST GAP ANALYSIS PROJECT

USGS science for a changing world | gap | BaSIC Biodiversity and Spatial Information Center | NARSAL

Species Modeling Report

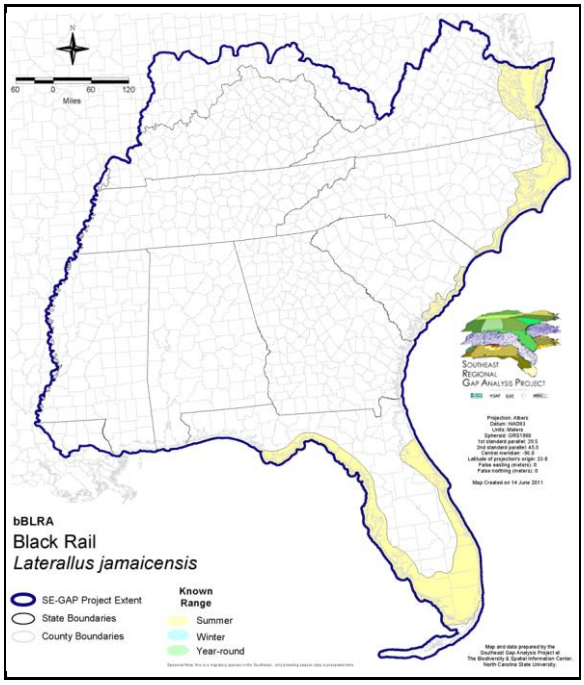
Black Rail

Laterallus jamaicensis

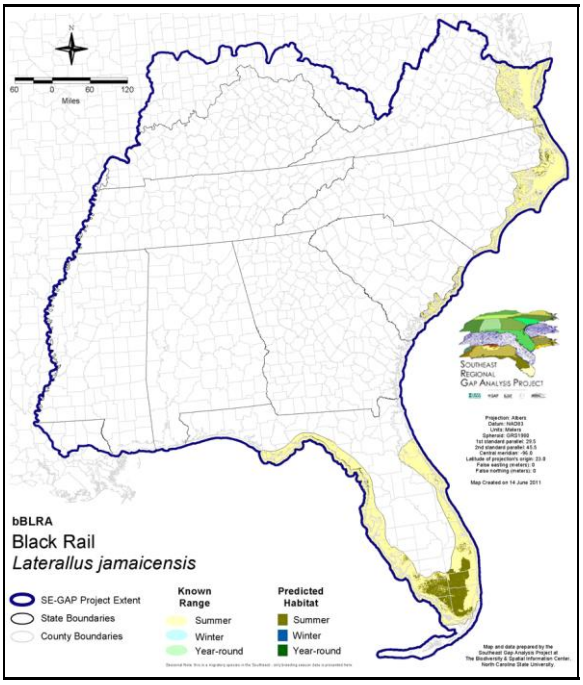
Taxa: Avian
Order: Gruiformes
Family: Rallidae

SE-GAP Spp Code: **bBLRA**
ITIS Species Code: 176263
NatureServe Element Code: ABNME03040

KNOWN RANGE:



PREDICTED HABITAT:



Range Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Range_bBLRA.pdf
Predicted Habitat Map Link: http://www.basic.ncsu.edu/segap/datazip/maps/SE_Dist_bBLRA.pdf
GAP Online Tool Link: http://www.gapserve.ncsu.edu/segap/segap/index2.php?species=bBLRA
Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBLRA_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AL (GB), AZ (WSC), CT (E), CT (E), DE (E), IL (LE), IN (SE), KS (C), MD (E), NC (SC), NJ (T/T), NY (E), NY (E), RI (Not Listed), QC (Non suivie)

NS Global Rank: G4

NS State Rank: AL (S2N), AR (SU), AZ (S1), CA (S1), CO (SNA), CT (S1B), CT (S1B), DC (SHB,SHN), DE (S1B), FL (S2), GA (S2?), IA (SNA), IL (S1), IN (SHB), KS (S1B,S1N), LA (S1S2N), MD (S1), MI (SNA), MO (S1), MS (S2N), NC (S3B,S2N), NE (S1), NJ (S2B,S2N), NM (SNA), NY (S1B), NY (S1B), OH (SNA), OK (S1B), PA (SNA), RI (SNA), SC (SNRB,SNRN), TN (S1), TX (S2B), VA (S2B,S2N), WV (SNA), NS (SNA), ON (SNA), QC (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	43,253.2	3	0.0	0	0.0	0	0.0	0
Status 2	45,324.3	3	80.4	< 1	0.0	0	0.0	0
Status 3	1,036.4	< 1	6,919.1	< 1	0.0	0	13,405.2	< 1
Status 4	12.0	< 1	0.0	0	0.0	0	5.7	< 1
Total	89,625.8	6	6,999.5	< 1	0.0	0	13,410.9	< 1

	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	206,037.8	13	137.5	< 1	4,200.4	< 1
Status 2	0.0	0	7,787.3	< 1	11,320.7	< 1	2.7	< 1
Status 3	0.0	0	251,115.1	16	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	464,940.3	30	11,458.2	< 1	4,203.1	< 1

	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	83.4	< 1	328,763.7	21	0.0	0
Status 3	0.0	0	75,523.0	5	15,593.4	< 1	15,437.8	< 1
Status 4	0.0	0	0.0	0	321.0	< 1	0.0	0
Total	0.0	0	75,606.4	5	344,678.1	22	15,437.8	< 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	13,902.7	< 1	10,794.6	< 1	0.0	0	16.6	< 1
Status 3	0.0	0	700.6	< 1	0.0	0	573.2	< 1
Status 4	0.0	0	0.0	0	1.3	< 1	0.0	0
Total	13,902.7	< 1	11,495.2	< 1	1.3	< 1	589.8	< 1

	Private Land - No Res.		Water		Overall Total	
	ha	%	ha	%	ha	%
Status 1	0.0	0	0.0	0	253,628.9	16
Status 2	0.0	0	0.0	0	418,076.3	27
Status 3	0.0	0	0.0	0	380,303.7	25
Status 4	495,267.2	32	7,742.5	< 1	503,658.7	32
Total	495,267.2	32	7,742.5	< 1	1,555,667.6	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: Black rails occur in salt, brackish, and freshwater marshes, pond borders, wet meadows, and grassy 'swamps.' Cover of vegetation peripheral to marshes may possibly be important in reducing predation on rails flushed from marsh by high tide (Evens and Page 1986). In northeastern North America breed primarily in salt and brackish marshes (Davidson 1992). However, wet meadows and freshwater areas of narrow-leaved cattail (TYPHA ANGUSTIFOLIA) and river bulrush (SCIRPUS FLUVIATILIS) have also been documented (Griscom 1923, Proctor 1981, Armistead 1990). In salt or brackish marshes, home ranges generally include dense stands of cordgrass, spikegrass, and rushes (Kerlinger and Wiedner 1990). Black rails also occur in the dryer, upland edges of these marshes where saltmeadow cordgrass mixes with marsh elder, the saltbush community and with common reeds (PHRAGMITES AUSTRALIS) in disturbed areas (Kerlinger and Wiedner 1990). Research in wetlands along the lower Colorado River has revealed that water depth is an important and perhaps key habitat component. Black rails there are found typically where the water depth is less than two to four cm (R. Flores, pers. comm.). Other significant habitat factors may include vegetation density, distance to open water, and water regime stability (R. Flores, pers. comm.). Nesting takes place in the highest sections of the marsh, which have mesic to hydric soils and are flooded by only the highest tides (Todd 1977, Andrle and Carroll 1987). The area around the nest also typically includes lower wet areas, such as shallow pools and potholes (Andrle and Carroll 1987; W. Burt, W. R. Eddleman, and H. Wierenga, pers. comms.).

Nests are built in or along edge of marsh, in area with saturated or shallowly flooded soils and dense vegetation, usually in site hidden in marsh grass or at base of Salicornia; on damp ground, on mat of previous year's dead grasses, or over very shallow water (Terres 1980). High tides may destroy nests (see Evens and Page 1986).

Quoted directly from existing state habitat notes - K. Cook, 15Feb05

Hydrography Mask:

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.

Selected Map Units:

Functional Group	Map Unit Name
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 Sea-Level Fen
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Salt Marsh
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Northern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	Atlantic Coastal Plain Southern Tidal Wooded Swamp
Brackish Tidal Marsh & Wetland	East Gulf Coastal Plain Tidal Wooded Swamp
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
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 Herbaceous Wetland
Wetlands	Atlantic Coastal Plain Depression Pondshore
Wetlands	Atlantic Coastal Plain Large Natural Lakeshore
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 Pondshore
Wetlands	Atlantic Coastal Plain Sandhill Seep
Wetlands	Atlantic Coastal Plain Small Blackwater River Floodplain Forest
Wetlands	Atlantic Coastal Plain Small Brownwater River Floodplain Forest
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	East Gulf Coastal Plain Treeless Savanna and Wet Prairie
Wetlands	South Florida Bayhead Swamp
Wetlands	South Florida Cypress Dome
Wetlands	South Florida Dwarf Cypress Savanna
Wetlands	South Florida Freshwater Slough and Gator Hole
Wetlands	South Florida Pond-Apple/Popash Slough
Wetlands	South Florida Wet Marl Prairie
Wetlands	South Florida Willow Head

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.

Andrle, R. F. and J. R. Carroll, Eds. 1987. The Atlas of Breeding Birds in New York state, Cornell Univ. Press, Ithaca, NY.

Armistead, H. T. 1990. Notes on black rails on the Delmarva Peninsula, especially in Dorchester County. Unpublished report. Maryland. Maryland Department of Natural Resources, Annapolis, Maryland. 6 pp.

Bent, A. C. 1926. Life histories of North American marsh birds. U.S. National Museum Bulletin No. 135. [reprint. 1963. Dover Publications, Inc., New York, New York].

California Department of Fish and Game. 1990. 1989 annual report on the status of California's state listed threatened and endangered plants and animals. 188 pp.

Carter, M., G. Fenwick, C. Hunter, D. Pashley, D. Petit, J. Price, and J. Trapp. 1996. Watchlist 1996:For the future. Field Notes 50(3):238-240.

Davidson, L. M. 1992. Black rail, LATERALLUS JAMAICENSIS. Pages 119-134 in K. J. Schneider and D. M. Pence, editors. Migratory nongame birds of management concern in the Northeast. U.S. Fish and Wildlife Service, Newton Corner, Massachusetts. 400 pp.

Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1992. Birds in jeopardy:the imperiled and extinct birds of the United States and Canada, including Hawaii and Puerto Rico. Stanford University Press, Stanford, California. 259 pp.

Evens, J. G., et al. 1991. Distribution, relative abundance and status of the California black rail in western North America. Condor 93:952-966.

Evens, J., and G. W. Page. 1986. Predation on black rails during high tides in salt marshes. Condor 88:107-109.

Griscom, L. 1923. Birds of the New York City region. American Museum of Natural History, Handbook Series No. 9, New York, New York. 400 pp.

Hands, H.M., R.D. Drobney, and M.R. Ryan. 1989. Status of the black rail in the northcentral United States. Missouri Coop. Fish Wildl. Res. Unit Rep. 11 pp.

Harrison, C. 1978. A field guide to the nests, eggs and nestlings of North American birds. Collins, Cleveland, Ohio.

Harrison, H.H. 1979. A field guide to western birds' nests. Houghton Mifflin Company, Boston. 279 pp.

Herkert, J. R., editor. 1992. Endangered and threatened species of Illinois:status and distribution. Vol. 2:Animals. Illinois Endangered Species Protection Board. iv + 142 pp.

Kerlinger, P., and D. S. Wiedner. 1990. Habitat use and vocal behavior of black rails in South Jersey. Unpublished draft report. New Jersey Department of Environmental Protection, Endangered and Nongame Species Program. 18 pp.

National Geographic Society (NGS). 1983. Field guide to the birds of North America. National Geographic Society, Washington, D.C.

Proctor, N. 1981. The black rail:mystery bird of the marsh. Connecticut Warbler 1(2):15-16.

Raffaele, H.A. 1983. A guide to the birds of Puerto Rico and the Virgin Islands. Fondo Educativo Interamericano, San Juan, Puerto Rico. 255 pp.

Ripley, S.D. 1977. Rails of the world. M.F. Feheley Publishers, Ltd., Toronto. 406 pp.

Stiles, F.G., and A.F. Skutch. 1989. A guide to the birds of Costa Rica. Comstock Publ. Associates, Cornell University Press, Ithaca, New York. 511 pp.

Terres, J.K. 1980. The Audubon Society encyclopedia of North American birds. Alfred A. Knopf, New York.

Todd, R. L. 1977. Black rail, little black rail, black crake and farallon rail (LATERALLUS JAMAICENSIS). Pages 71-83 in G. C. Sanderson, editor. Management of migratory shore and upland game birds in North America. Int. Assoc. Fish and Wildl. Agencies, Wa

For more information:: SE-GAP Analysis Project / BaSIC
127 David Clark Labs
Dept. of Biology, NCSU
Raleigh, NC 27695-7617
(919) 513-2853
www.basic.ncsu.edu/segap

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.