



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

Bobolink

Dolichonyx oryzivorus

Taxa: Avian

Order: Passeriformes

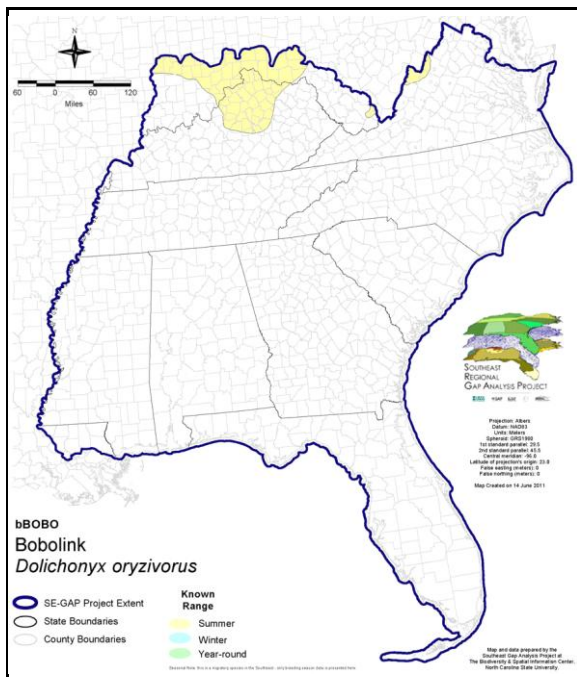
Family: Icteridae

SE-GAP Spp Code: **bBOBO**

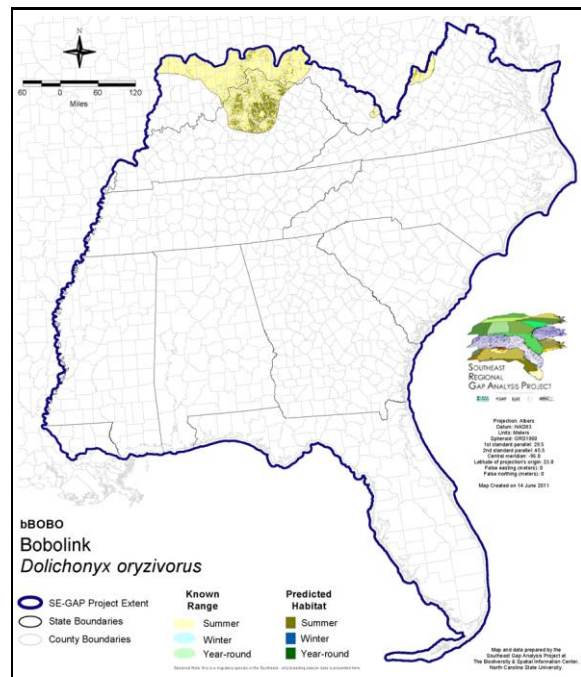
ITIS Species Code: 179032

NatureServe Element Code: ABPBXA9010

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBOBO_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: AR (W), AZ (WSC), CT (SC), CT (SC), ID (P), ID (P), KS (C), KS (C), KY (S), NC (SR), NC (SR), ND (Level II), NJ (T/SC), NV (YES), NY (PB), OH (SC), OR (SV), RI (Not Listed), UT (SPC), WA (M), WA (M), WI (SC/M), WI (SC/M), BC (3 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (SNA), AL (SNR), AR (S3N), AZ (S1), CA (SNA), CO (S3B), CO (S3B), CT (S4B), CT (S4B), DC (S3S4N), DE (SU), FL (SNA), GA (SNRN), IA (S4B), ID (S4B), ID (S4B), IL (S4), IN (S4B), KS (S1B), KS (S1B), KY (S2S3B), LA (SNA), MA (S3S4B), MD (S3S4B), ME (S4B), MI (S5), MN (SNRB), MO (S3), MS (SNA), MT (S2B), NC (S1B), NC (S1B), ND (SNRB), NE (S4), NH (S4B), NJ (S2B,S3N), NM (S1B,S3N), NV (S3B), NY (S5), OH (S4), OK (S2N), OR (S2B), PA (S4B), RI (S3B), SC (SNA), SD (S4B), SD (S4B), TN (SHB,S4N), TN (SHB,S4N), TX (S3), UT (S2B), VA (S1B), VA (S1B), VT (S5B), VT (S5B), WA (S2S3B), WA (S2S3B), WI (S4B), WI (S4B), WV (S3B), WY (S2), WY (S2), AB (S2S3), BC (S3B), LB (SNA), MB (S4B), MB (S4B), NB (S3S4B), NF (S2B), NS (S3B), ON (S4B), PE (S3B), QC (S4B), SK (S5B)

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	0.0	0	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	0.3	< 1	0.0	0	574.7	< 1
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	0.3	< 1	0.0	0	574.7	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	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	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	0.0	0	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	159.0	< 1	0.0	0
Status 3	0.0	0	534.7	< 1	4.5	< 1	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	534.7	< 1	163.5	< 1	0.0	0
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	23.1	< 1	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	0.0	0	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	23.1	< 1	0.0	0	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	23.1	< 1		
Status 2	0.0	0	0.0	0	159.0	< 1		
Status 3	0.0	0	0.0	0	1,114.2	< 1		
Status 4	631,858.1	100	34.5	< 1	631,892.5	100		
Total	631,858.1	100	34.5	< 1	633,188.9	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: Bobolinks prefer mesic weedy meadows, tall grass prairie and hayfields avoiding dry fields (Jaramillo and Burke 1999) and marshes (Skutch 1996).

They nest in a depression on the ground among tall grasses, sing from elevated perches such as weeds, telephone wires, or treetops and forage on the ground for insects and seeds (Skutch 1996).

Quoted from state habitat notes - K. Cook 5-13-05

Additional information:

Bollinger and Gavin (2004) found that Bobolink nest success was significantly lower within grassland 50m from a forested edge. Fletcher et. Al (2002) found that bobolink density was lower along woodland edges.

Kobal et. Al (1999) found bobolinks occurred in grasslands of >25 ha. Herkert (1994) recommends that grasslands should be >50 ha. To be considered source habitat for bobolinks. Grasslands that were ≤ 10 ha had less than half the abundance of calling male bobolinks than fields of ≥ 30 ha (Bollinger and Gavin 1992). K. Cook 5-13-05

Customized Model: Omit grassland edge 30m from forest (maybe just buffer forest classes by 30m).

I removed hand modeling for this species when I adjusted the model to include a 30m interior buffer on the 25 ha patches. MJR 2 October 2007.

The automated modeling process limited the predicted distribution to ONLY THE AREA WITHIN THE BUFFER. The model intent for this species was to REMOVE the 30m edge from the final output. I modeled this by hand. MJR 3 October 2007.

Elevation Mask: > 18m and < 2500m

Contiguous Patch Minimum Size (hectares): 25

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Pasture/Hay
Bald	Central Appalachian Montane Rocky Bald - Herbaceous Modifier
Bald	Southern Appalachian Grass and Shrub Bald - Herbaceous Modifier
Prairie	Bluegrass Basin Savanna and Woodland
Prairie	Eastern Highland Rim Prairie and Barrens
Prairie	Eastern Highland Rim Prairie and Barrens - Dry Modifier
Prairie	Southern Ridge and Valley Patch Prairie
Prairie	Western Highland Rim Prairie and Barrens

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.