



SOUTHEAST GAP ANALYSIS PROJECT



Species Modeling Report

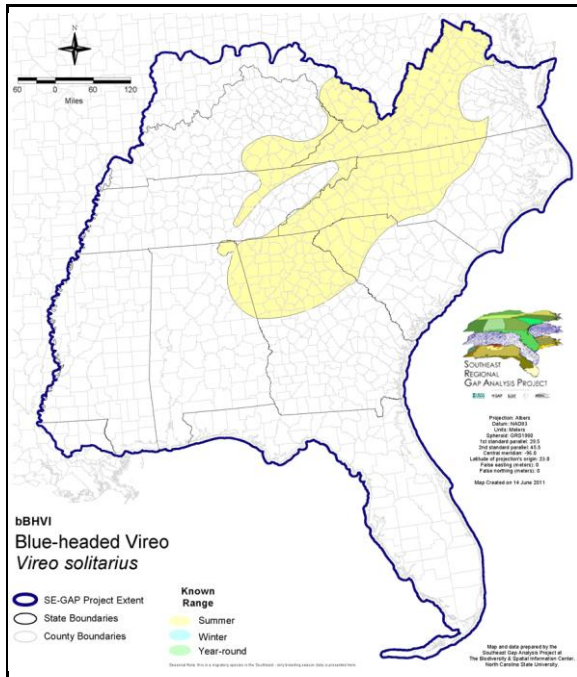
Blue-headed Vireo

Vireo solitarius

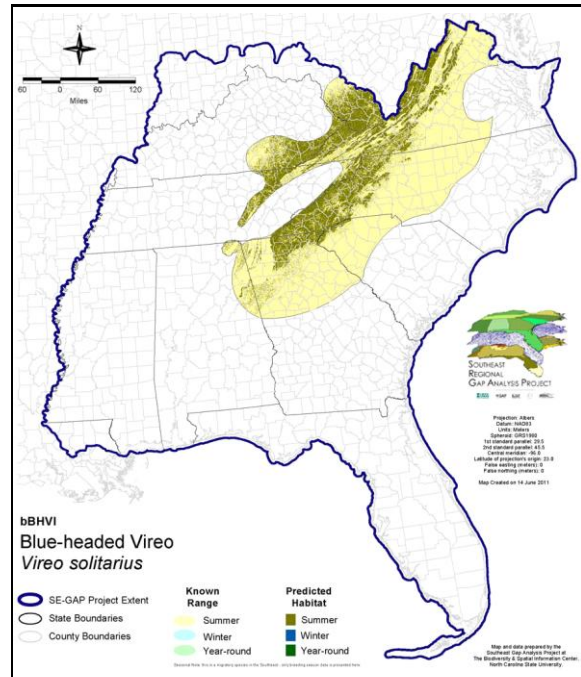
Taxa: Avian
 Order: Passeriformes
 Family: Vireonidae

SE-GAP Spp Code: **bBHVI**
 ITIS Species Code: 179010
 NatureServe Element Code: ABPBW01160

KNOWN RANGE:



PREDICTED HABITAT:



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

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

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

Data Download: http://www.basic.ncsu.edu/segap/datazip/region/vert/bBHVI_se00.zip

PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

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

NS Global Rank: G5

NS State Rank: AL (S2B,S4N), AR (S4N), AZ (SNA), CO (SNA), CT (S5B), CT (S5B), DC (S2N), DE (SNA), FL (SNRN), GA (S5), IA (S3N), ID (SNA), IL (S1), IN (SNA), KS (SNA), KY (S3S4B), LA (S4N), MA (S4B,S5N), MD (S3S4B), ME (S5B), MI (S5), MN (SNRB), MO (SNA), MS (S5N), MT (SNA), NC (S5B,S3N), ND (SNA), NH (S5B), NJ (S3B), NM (SNA), NY (S5), OH (S2), OK (S2N), OR (SNA), PA (S5B), RI (S3B), SC (SNRB,SNRN), TN (S4), TX (SNA), VA (S4), VT (S5B), VT (S5B), WI (S3B), WI (S3B), WV (S5B), AB (S5), BC (S4S5B), MB (S5B), MB (S5B), NB (S5B), NF (S3B), NS (S5B), NT (SNRB), ON (S5B), PE (S5B), QC (S5B), SK (S5B), SK (S5B), YT (S3B)

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	1,750.6	< 1	20,591.1	< 1	0.0	0	0.0	0
Status 2	1,303.7	< 1	282,980.5	4	0.0	0	0.0	0
Status 3	0.0	0	1,286,615.0	16	1,924.2	< 1	736.9	< 1
Status 4	50.0	< 1	0.0	0	0.0	0	0.0	0
Total	3,104.3	< 1	1,590,186.6	20	1,924.2	< 1	736.9	< 1
	US Dept. of Energy		US Nat. Park Service		NOAA		Other Federal Lands	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	183,424.5	2	0.0	0	0.0	0
Status 2	0.0	0	10,852.4	< 1	0.0	0	0.0	0
Status 3	0.0	0	53,192.3	< 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	247,469.2	3	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	248.9	< 1	0.4	< 1	0.0	0
Status 2	0.0	0	15,321.1	< 1	155,970.9	2	1,313.8	< 1
Status 3	17,011.6	< 1	36,227.7	< 1	38,886.8	< 1	12,952.8	< 1
Status 4	0.0	0	0.0	0	9,415.3	< 1	0.0	0
Total	17,011.6	< 1	51,797.7	< 1	204,273.4	3	14,266.6	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	4,547.3	< 1	0.0	0	0.0	0
Status 2	0.0	0	22,063.7	< 1	0.0	0	0.0	0
Status 3	0.0	0	180.4	< 1	334.4	< 1	0.5	< 1
Status 4	0.0	0	0.0	0	210.8	< 1	0.0	0
Total	0.0	0	26,791.3	< 1	545.2	< 1	0.5	< 1
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	210,562.7	3		
Status 2	0.0	0	0.0	0	489,806.0	6		
Status 3	0.0	0	0.0	0	1,448,062.7	34		
Status 4	4,550,257.7	57	877.9	< 1	4,570,176.9	57		
Total	4,550,257.7	57	877.9	< 1	6,718,608.4	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: Throughout the southeastern portion of its breeding range the blue-headed vireo exhibits a broader habitat tolerance occupying areas from pure hardwood forests of beech, maple, oak, and hickory, through mixed mesophytic forests, pure white pine or hemlock stands, to spruce-fir on mountaintops (AOU 1998). They prefer mixed coniferous-hardwood forests and deciduous forests at higher elevations whereas, in the Piedmont and mountain foothills they favor loblolly pine but will also inhabit mature pine forests of many types (Hamel 1992). Breeds primarily above 3500 feet (Hamel 1992) in middle to mature spruce-fir (Alsop 1991), white pine, or coniferous mixed forests (Hamel 1992), below 2000 feet in the mountain region, the species is associated with hemlock stands (Alsop 1991). Nest built in twig fork of shrub or conifer, 1-6 m (often less than 3 m) above ground. Clutch size is 3-5 (usually 4) and incubation, by both sexes, lasts a little less than two weeks (NatureServe 2004). Amy Silvano 11apr05

Ecosystem Classifiers: Evergreen (Pine/Oak Systems only), Mixed, Hardwood forest, Mesic Cove & Montane Forest. Amy Silvano 11apr05

****I think we should include pine plantations also. This species will be found in loblolly stands. Don't have much literature to back up except AOU 1998, identifying that it will be found in pure pine stands. Amy Silvano 11apr05. ???Any opposition???

Elevation Mask: > 300m and < 2500m

Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Anthropogenic	Evergreen Plantations
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 - Offsite Hardwood Modifier
Forest/Woodland	Atlantic Coastal Plain Mesic Hardwood and Mixed Forest
Forest/Woodland	Atlantic Coastal Plain Northern Mixed Oak-Heath Forest
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central and Southern Appalachian Spruce-Fir Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	East Gulf Coastal Plain Northern Dry Upland Hardwood Forest - Offsite Pine 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	South-Central Interior Mesophytic Forest
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 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 Ridge and Valley Dry Calcareous Forest - Pine Modifier

CITATIONS: Alsop FJ III. 1991. Birds of the Smokies. Gatlinburg: Great Smoky Mountains Natural History Association.

- 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.
- Barlow, J. C. 1980. Patterns of ecological interactions among migrant and resident vireos on the wintering grounds. Pages 79-107 in B80KEA02NA.
- Bent, A.C. 1950. Life histories of North American wagtails, shrikes, vireos, and their allies. U.S. Natl. Mus. Bull. 197. Washington, D.C.
- Droege, S., and J.R. Sauer. 1990. North American Breeding Bird Survey, annual summary, 1989. U.S. Fish and Wildlife Service, Biological Report 90(8). 22 pp.
- Ehrlich, P.R., D.S. Dobkin, and D. Wheye. 1988. The birder's handbook: a field guide to the natural history of North American birds. Simon and Shuster, Inc., New York. xxx + 785 pp.
- Hagan, J.M., III, and D.W. Johnston, editors. 1992. Ecology and conservation of neotropical migrant landbirds. Smithsonian Institution Press, Washington, D.C. xiii + 609 pp.
- Hamel, P. B. 1992. The land manager's guide to the birds of the south. The Nature Conservancy, Chapel Hill, North Carolina. 367 pp + several appendices.
- 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.
- Heindel, M.T. 1996. Field identification of the solitary vireo complex. *Birding* 28(6):458-471.
- Johnson, N. K., R. M. Zink, and J. A. Marten. 1988. Genetic evidence for relationships in the avian family Vireonidae. *Condor* 90:428-445.
- Keast, A., and E. S. Morton. 1980. Migrant birds in the Neotropics; ecology, distribution, and conservation. Smithsonian Inst. Press, Washington, D.C.
- Murray, B. W., et al. 1994. The use of cytochrome B sequence variation in estimation of phylogeny in the Vireonidae. *Condor* 96:1037-1054.
- Sauer, J.R., and S. Droege. 1992. Geographical patterns in population trends of neotropical migrants in North America. Pages 26-42 in J.M. Hagan III and D.W. Johnston, editors. Ecology and conservation of neotropical migrant landbirds. Smithsonian Institution Press, Washington, D.C.
- Sibley, C.G., and B.L. Monroe. 1990. Distribution and taxonomy of birds of the world. Yale University Press, New Haven, Connecticut. xxiv + 1111 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.

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.