



# SOUTHEAST GAP ANALYSIS PROJECT



## Species Modeling Report

### Least Flycatcher

*Empidonax minimus*

Taxa: Avian

Order: Passeriformes

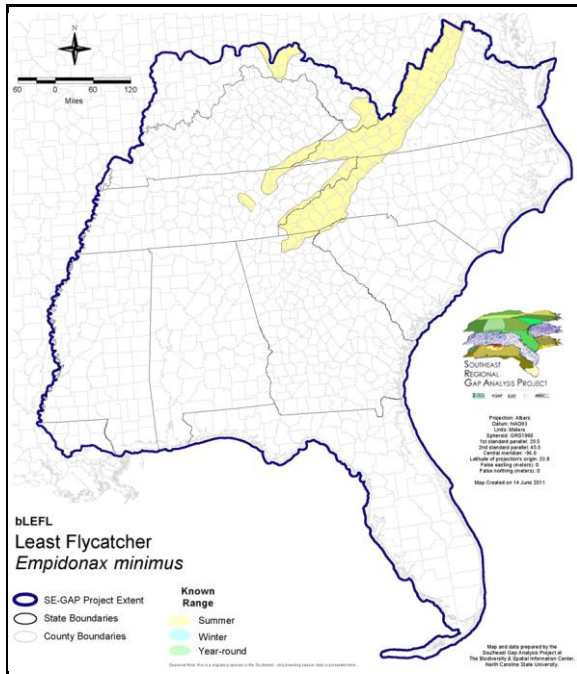
Family: Tyrannidae

SE-GAP Spp Code: **bLEFL**

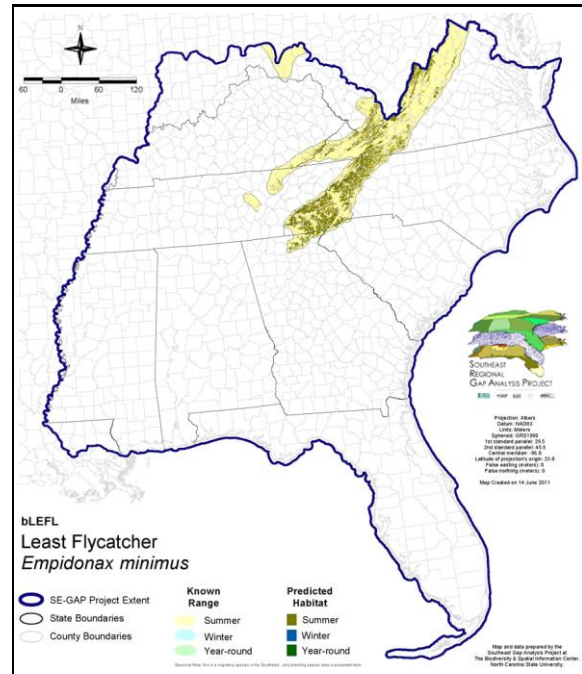
ITIS Species Code: 178344

NatureServe Element Code: ABPAE33070

#### KNOWN RANGE:



#### PREDICTED HABITAT:



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

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

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

Data Download: [http://www.basic.ncsu.edu/segap/datazip/region/vert/bLEFL\\_se00.zip](http://www.basic.ncsu.edu/segap/datazip/region/vert/bLEFL_se00.zip)

#### PROTECTION STATUS:

Reported on March 14, 2011

Federal Status: ---

State Status: ID (P), KY (E), ME (SC), NC (W2), NC (W2), NJ (S/S), NY (PB), OH (T), RI (Not Listed), UT (None), WI (SC/M), WI (SC/M), BC (4 (2005)), QC (Non suivie)

NS Global Rank: G5

NS State Rank: AK (SNA), AL (SNA), AR (SNA), AZ (SNA), CA (SNA), CO (SNA), CO (SNA), CT (S5B), CT (S5B), DC (S2S3N), DE (SHB), DE (SHB), FL (SNA), GA (S3), IA (S1B,S4N), ID (SNA), IL (S3), IN (S3B), KS (SNA), KY (S1B), LA (SNA), MA (S5B), MD (S3S4B), ME (S4B), MI (S5), MN (SNRB), MO (SU), MO (SU), MS (SNA), MT (S5B), MT (S5B), NC (S3B), NC (S3B), ND (SNRB), NE (SU), NH (S5B), NJ (S3B), NM (S4N), NY (S5), OH (S3), OK (S5N), OR (SU), PA (S4B), RI (S3B), SC (S3?), SD (S4B), SD (S4B), TN (S3), TX (S5), UT (SNA), VA (S3S4B), VT (S5B), VT (S5B), WA (SNA), WA (SNA), WI (S4B), WI (S4B), WV (S4B), WY (S4B,S4N), AB (S5), BC (S5B), LB (S2B), MB (S5B), MB (S5B), NB (S5B), NF (S1), NS (S5B), NT (SNRB), ON (S4B), PE (S5B), QC (S5B), SK (S5B,S5M), YT (S4B)

**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	15,770.3	< 1	0.0	0	0.0	0
Status 2	0.0	0	148,863.0	6	0.0	0	0.0	0
Status 3	0.0	0	572,090.6	22	0.0	0	0.0	0
Status 4	0.0	0	0.0	0	0.0	0	0.0	0
Total	0.0	0	736,723.8	28	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	127,517.9	5	0.0	0	0.0	0
Status 2	0.0	0	2,627.6	< 1	0.0	0	0.0	0
Status 3	0.0	0	17,293.1	< 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	147,438.5	6	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	3,461.2	< 1	31,607.5	1	0.0	0
Status 3	12,940.4	< 1	5,945.0	< 1	4,527.5	< 1	3,898.3	< 1
Status 4	0.0	0	0.0	0	16.2	< 1	0.0	0
Total	12,940.4	< 1	9,406.3	< 1	36,151.2	1	3,898.3	< 1
	State Coastal Reserve		ST Nat.Area/Preserve		Other State Lands		Private Cons. Easemt.	
	ha	%	ha	%	ha	%	ha	%
Status 1	0.0	0	833.7	< 1	0.0	0	0.0	0
Status 2	0.0	0	4,395.7	< 1	0.0	0	0.0	0
Status 3	0.0	0	0.0	0	25.7	< 1	0.0	0
Status 4	0.0	0	0.0	0	34.0	< 1	0.0	0
Total	0.0	0	5,229.4	< 1	59.8	< 1	0.0	0
	Private Land - No Res.		Water		Overall Total			
	ha	%	ha	%	ha	%		
Status 1	0.0	0	0.0	0	144,121.8	5		
Status 2	0.0	0	0.0	0	190,954.9	7		
Status 3	0.0	0	0.0	0	616,720.6	45		
Status 4	1,120,011.3	42	3.8	< 1	1,120,081.5	42		
Total	1,120,011.3	42	3.8	< 1	2,071,878.8	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: Found in open woodlands, such as old orchards or groves, also in woodland strips bordering streams or fields, generally avoiding deep woods (Hamel 1992, Potter et al 1980). In addition, Briske (1994) describes this flycatcher as preferring drier habitat in 'semi-open, secondary growth, and mature deciduous and mixed woods.' Found in the mountains (Potter et al 1980, Simpson 1992). Common in open woodland and brushy areas, forest borders, thinned woodland, tall second growth. In maple forests in Quebec, occurred where trees were the tallest, sugar maple was in nearly pure stand, and subcanopy was sparse (Darveau 1992). The least flycatcher breeds in the Blue Ridge province of Georgia, and even there it is extremely rare. It is usually found at higher elevations in open woodlands and the edges of forests, especially hardwoods. It has also known to inhabit streamside areas, wooded residential sites, groves of trees within open areas and golf courses.

The Least Flycatcher hunts insects by hawking or gleaning 'from top of shrub stratum up to leafy canopy of forest overstory,' according to Briske (1994).

Nest usually in 'deciduous sapling or small tree, such as maple, birch, and ash (Kaufman 1996). Generally it is built in the lower to middle part of the canopy (Briske 1994), with an averaging height of 12 to 25 feet (Kaufman 1996). Nests in poplar woodland, deciduous scrub, forest edge, parks, old orchards, roadside shade trees, and gardens; in crotch or on limb of tree (often deciduous) or shrub, often 3-6 m above ground (NATURE SERVE).

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

#### Additional information:

DellaSala and Rabe (1987) demonstrate that distance to forest edge from least fly catcher aggregations increases with forest opening size. For forest Opening sizes of > 4 ha. Birds are found at a threshold distance of 200 m from the forest edge in the interior. This suggests they actually avoid edge that borders large open areas.

In contrast to the information from Hamel (1992) and Potter et al (1980), the least flycatcher does inhabit continuous forest interior, but for semi-open hardwood and mixed hardwood-pine woodlands (DellaSala and Rabe 1987, Martin 1994). It is also found along edges, however, see ccomments in the preceeding paragraph.

Upland maple dominated hardwood forest represented 25% of 984 observations in Wisconsin from 1995-2000 and 17 % of observations were in mixed forest (Wisconsin Ornithological Society 2002). Most observations of singing males occurred in mesic deciduous forest followed by dry deciduous forest and dry mixed forest in Michigan (Brewer et al. 1991, <http://www.uwgb.edu/birds/wbba/>). Least Flycatchers do use forest patches within clearcuts (Merrill et al. 1998). K. Cook, 17Feb05

Elevation Mask: > 762m and < 1371m

#### Selected Map Units:

Functional Group	Map Unit Name
Anthropogenic	Deciduous Plantations
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland
Forest/Woodland	Allegheny-Cumberland Dry Oak Forest and Woodland - Hardwood Modifier
Forest/Woodland	Appalachian Hemlock-Hardwood Forest
Forest/Woodland	Appalachian Serpentine Woodland
Forest/Woodland	Central and Southern Appalachian Montane Oak Forest
Forest/Woodland	Central and Southern Appalachian Northern Hardwood Forest
Forest/Woodland	Central Appalachian Oak and Pine Forest
Forest/Woodland	Central Appalachian Pine-Oak Rocky Woodland
Forest/Woodland	Northeastern Interior Dry Oak Forest - Mixed 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 Interior Low Plateau Dry-Mesic Oak Forest
Forest/Woodland	Southern Interior Low Plateau Dry-Mesic Oak Forest - Evergreen Modifier
Forest/Woodland	Southern Piedmont Dry Oak-Heath Forest - Virginia/Pitch Pine Modifier
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest
Forest/Woodland	Southern Ridge and Valley Dry Calcareous Forest - Hardwood Modifier
Wetlands	Central Appalachian Floodplain - Forest Modifier
Wetlands	Central Appalachian Floodplain - Herbaceous Modifier
Wetlands	Central Appalachian Riparian - Forest Modifier
Wetlands	Central Appalachian Riparian - Herbaceous Modifier
Wetlands	Central Interior Highlands and Appalachian Sinkhole and Depression Pond
Wetlands	North-Central Appalachian Acidic Swamp
Wetlands	North-Central Appalachian Seepage Fen
Wetlands	North-Central Interior and Appalachian Rich Swamp
Wetlands	South-Central Interior Large Floodplain - Forest Modifier
Wetlands	South-Central Interior Large Floodplain - Herbaceous Modifier
Wetlands	South-Central Interior Small Stream and Riparian
Wetlands	Southern and Central Appalachian Bog and Fen
Wetlands	Western Highland Rim Seepage Fen

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