

In the preparation of camera copy for GTR SRS-1, Proceedings of the Eighth Biennial Southern Silvicultural Research Conference, an error occurred in the paper by Parresol and others (page 24 ff.). The last paragraph in the section "Population Trends" was incorrectly inserted in the middle of the third paragraph under "Effects of Forest Management Practices." A corrected copy of pages 25 and 26 is provided herewith. —SRS, January 1996.

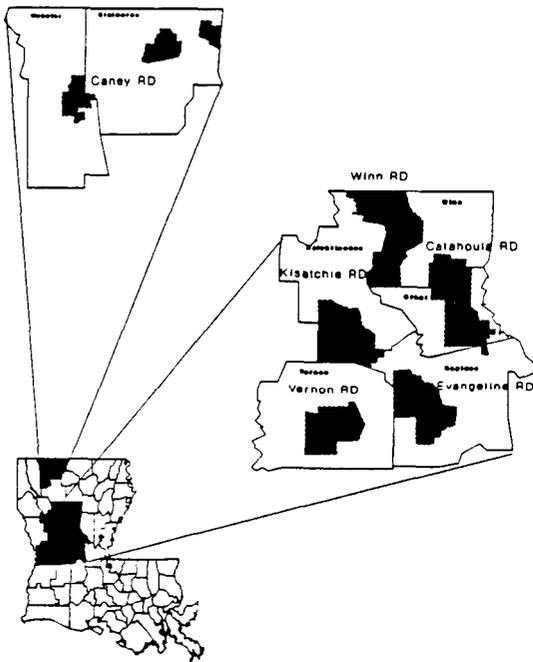


Figure I-Location of six ranger districts of the Kisatchie National Forest RD=Ranger District. Parish names are given in small type.

Southeast based on the Partners in Flight species prioritization scheme. Of these 46 species, 28 occur on the KNF and are listed in table 2, along with their seasonal status. About 113 of the species in need of increased conservation attention (table 2) are not declining, however, all suffer from one or more of the following 3 problems (Hunter and others 1993): (1.) limited distribution and a high degree of threat during breeding and/or non-breeding seasons, (2) widespread signs of recent or long-term decline, and/or (3) use of habitats within the Southeast Region that are essential for conservation of the full variation inherent within the species.

Two species in table 2 occur as accidentals, but one, Bachman's warbler, *Vermivora bachmanii*, may be extinct. A number of species, 25 percent, are transients. Several species listed in table 2 are worthy of mention because their rangewide population trends over the period 1966-89 were significantly negative. The eastern kingbird, *Tyrannus tyrannus*, cerulean warbler, *Dendroica cerulea*, prothonotary warbler, *Protonotana citrea*, and orchard oriole, *Icterus spurius*, are generally known to be common summer residents in Louisiana and throughout their range. Not only have population trends for these passerines declined over their entire range during this period, but declines have been apparent for Louisiana as well.

The reasons for the decline of these and other species may be difficult to ascertain because there is usually no common thread to follow. For instance, the eastern kingbird and orchard oriole prefer fairly open habits

Table I-Species on the Kisatchie National Forest, LA which show a significant population trend in Louisiana based on breeding bird survey data for 1966-89

Species	Population trend'	Species abundance ^b
Osprey		
<i>Pandion haliaetus</i>	↑	UC
Yellow-bellied sapsucker		
<i>Sphyrapicus varius</i>	↓	A
Yellow-bellied flycatcher		
<i>Empidonax flaviventris</i>	↑	UC
Eastern kingbird		
<i>Tyrannus tyrannus</i>	↓	C
Tree swallow		
<i>Tachycineta bicolor</i>	↑	C
Barn swallow		
<i>Hirundo rustica</i>	↑	C
Ruby-crowned kinglet		
<i>Regulus calendula</i>	↓	A
Cedar waxwing		
<i>Bombycilla cedrorum</i>	↑	C
Golden-winged warbler		
<i>Vermivora chrysoptera</i>	↓	UC
Yellow warbler		
<i>Dendroica petechia</i>	↑	C
Magnolia warbler		
<i>Dendroica magnolia</i>	↑	C
Yellow-throated warbler		
<i>Dendroica dominica</i>	↑	C
Cerulean warbler		
<i>Dendroica cerulea</i>	↓	R
American Redstart		
<i>Setophaga ruticilla</i>	↑	C
Prothonotary warbler		
<i>Protonotana citrea</i>	↓	C
Worm-eating warbler		
<i>Helmitheros vermivorous</i>	↑	UC
Swainson's warbler		
<i>Limnithlypis swainsonii</i>	↑	R
Blue grosbeak		
<i>Guiraca caerulea</i>	↑	C
Vesper sparrow		
<i>Poocetes gramineus</i>	↓	UC
Savannah sparrow		
<i>Passerculus sandwichensis</i>	↓	C
Grasshopper sparrow		
<i>Ammodramus savannarum</i>	↓	UC
Orchard Oriole		
<i>Icterus spurius</i>	↓	C

^a Key to symbols: ↑=significant increase, ↓=significant decrease.

^b Key to symbols: A=abundant, C=common, R=rare, UC=uncommon.

with scattered hardwoods and nest within the canopy, but the cerulean warbler prefers mature hardwood stands with an open understory and the prothonotary warbler nests in cavities over water in wooded swamps.

EFFECTS OF FOREST MANAGEMENT PRACTICES

Any species of wildlife is undeniably a product of its **habitat** and the juxtaposition of these habitats with the edaphic features in which they occur, hence alteration of the mosaic of habitat types on a forest will produce changes in the associated fauna. This section summarizes some of the published studies on the effects of **silvicultural** practices on the avifauna of forest ecosystems. This has direct bearing on management considerations for the KNF.

Two broad categories of timber stand management determine the way in which forest vegetation **changes**—even-aged and uneven-aged harvests. Under **even-aged** management, the main techniques are shelterwood, seed tree, and clearcutting. Even-aged management favors early seral stages and is most suitable for producing monotypic stands of timber. In a seed tree or shelterwood cut, all standing timber is not removed as in clearcutting, but these techniques produce essentially the same conditions. Uneven-aged management is basically accomplished through selective removal of single trees or groups of trees with as **little** disturbance to the surrounding timber as possible. Under this type of management, all seral stages are maintained at all times, but this technique is used almost exclusively on relatively small private holdings.

Succession of bird communities generally follows forest succession from early seral stages, produced through even-aged management, toward climax communities (Crawford and others 1981; Dickson and others 1984; **Hodorff** and others 1988; Johnston and Odum 1956; Meyers and Johnson 1978; Noon and others 1979). Clearcutting followed by sitepreparation burning can eliminate habitats for most birds for a short period of time (Wood and Niles 1978). Forest-interior birds may be excluded for many years while the stand regenerates; however, most of these species do not make extensive use of pine-dominated, **Pinus** sp., stands. Conner and Adkisson (1975) found that after 1 year, a regeneration stand in a mixed oak, **Quercus** sp., woodland in southwestern Virginia had the lowest diversity of breeding birds among six stands in later successional stages. These authors also found that species diversity was highest in the regeneration stand 7 years after cutting and that forest-interior birds (wood thrushes, **Hylocichla mustelina**) were first recorded in a regeneration stand 12 years after cutting. Similarly, Conner and others (1979) found that species diversity

Table 2-Species on the Kisatchie National Forest, LA which need increased conservation attention

Order Species	Louisiana population trend 1966-89'	Seasonal status^b
Falconiformes		
Amer. swallow-tailed kite <i>Elanoides forficatus</i>	+	SR
Mississippi kite <i>Ictinia mississippiensis</i>	-	SR
Cuculiformes		
Black-billed cuckoo <i>Coccyzus erythrophthalmus</i>	+	T
Yellow-billed cuckoo <i>Coccyzus americanus</i>	-	SR
Passeriformes		
Eastern wood pewee <i>Contopus virens</i>		SR
Acadian flycatcher <i>Empidonax virescens</i>	+	SR
Great crested flycatcher <i>Myiarchus crinitus</i>	-	SR
Wood thrush <i>Hylocichla mustelina</i>	-	SR
White-eyed vireo <i>Vireo griseus</i>		SR
Bell's vireo <i>Vireo belliiperipheral</i>	-	A
Yellow-throated vireo <i>Vireo flavifrons</i>	+	SR
Bachman's warbler <i>Vermivora bachmanii</i>	o	. A
Blue-winged warbler <i>Vermivora pinus</i>		T
Golden-winged warbler <i>Vermivora chrysoptera</i>	↓	T
Chestnut-sided warbler <i>Dendroica pensylvanica</i>	-	T
Black-throated blue warbler <i>Dendroica caerulescens</i>	o	T
Blackburnian warbler <i>Dendroica fusca</i>	+	T
Prairie warbler <i>Dendroica discolor</i>	-	SR
Cerulean warbler <i>Dendroica cerulea</i>	↓	SR
Prothonotary warbler <i>Protonotana citrea</i>	↓	SR
Worm-eating warbler <i>Helmitheros vermivorous</i>	↑	SR
Swainson's warbler <i>Limnothlypis swainsonii</i>	↑	SR
Louisiana waterthrush <i>Seiurus motacilla</i>	+	SR
Kentucky warbler <i>Oporonis formosus</i>	+	SR
Hooded warbler <i>Wilsonia citrina</i>	+	SR