

TEXAS PARKS AND WILDLIFE

ON THE WARBLERS OF TEXAS

FOURTH EDITION



ON THE WARBLERS OF TEXAS

by Clifford E. Shackelford
Texas Parks and Wildlife Department

PREFACE

Warblers are typically bright and colorful birds yet are small in size and often go unnoticed. There are 46 species of warblers that regularly occur in Texas. An additional eight species have been documented in Texas, but are considered vagrants. The total, therefore, is 54 species of warblers that have been discovered within one state; that's greater than any other state in the U.S.

Each spring and fall migration, countless numbers of warblers pass through Texas on their way to or from the wintering or nesting areas. A total of 25 species of these warblers have been documented as nesting in Texas; that's over 50% of the warblers that regularly occur in Texas. The other half are either transients or vagrants.

Enjoy observing these warblers and hopefully this outreach pamphlet will assist you in seeing more than just the beautiful colors. This booklet is intended to be a more detailed companion to your standard field guide to the birds.



Golden-cheeked Warbler

THE WARBLERS OF TEXAS

Arranged in phylogenetic order like all other lists in this booklet (with the exception of the last list on pg. 7)

Blue-winged Warbler
Golden-winged Warbler
Tennessee Warbler
Orange-crowned Warbler
Nashville Warbler
Virginia's Warbler
Colima Warbler
Lucy's Warbler
Northern Parula
Tropical Parula
Crescent-chested Warbler
Yellow Warbler
Chestnut-sided Warbler
Magnolia Warbler
Cape May Warbler
Black-throated Blue Warbler
Yellow-rumped Warbler
Black-throated Gray Warbler
Townsend's Warbler
Hermit Warbler
Black-throated Green Warbler
Golden-cheeked Warbler
Blackburnian Warbler
Yellow-throated Warbler
Grace's Warbler
Pine Warbler
Prairie Warbler

Palm Warbler
Bay-breasted Warbler
Blackpoll Warbler
Cerulean Warbler
Black-and-white Warbler
American Redstart
Prothonotary Warbler
Worm-eating Warbler
Swainson's Warbler
Ovenbird
Northern Waterthrush
Louisiana Waterthrush
Kentucky Warbler
Connecticut Warbler
Mourning Warbler
MacGillivray's Warbler
Common Yellowthroat
Gray-crowned Yellowthroat
Hooded Warbler
Wilson's Warbler
Canada Warbler
Red-faced Warbler
Painted Redstart
Slate-throated Redstart
Golden-crowned Warbler
Rufous-capped Warbler
Yellow-breasted Chat

Olive Warbler - recent genetic studies have revealed that this species belongs in its own family, so it is no longer a member of the warbler family; there are only six accepted records in Texas of this accidental species.

WHAT TEXAS HABITAT DO THEY NEED FOR NESTING?

	<p>Abbreviations: E = eastern portion of Texas C = central W = western S = southern BBNP = Big Bend National Park NWR = National Wildlife Refuge</p>
Orange-crowned Warbler	(W) nests in the high coniferous forests of the Guadalupe and Davis mountains (very rare nester in the latter mountain range).
Virginia's Warbler	(W) nests in wooded canyons above roughly 6,500' in the Guadalupe and Davis mountains.
Colima Warbler	(W) nests in wooded canyons above roughly 5,000' in the Chisos Mts. of Big Bend National Park; this is the only place in the entire U.S. where they occur; however, this species is abundant as a breeder south of BBNP in various mountains of Mexico – BBNP is merely the northern edge (periphery) of their breeding range.
Lucy's Warbler	(W) cavity-nesting species; nests in arid areas mainly in the more mature woodlands containing snags in the Trans-Pecos at very low elevations (i.e., along the Rio Grande from Cottonwood Campground in BBNP north to southern Hudspeth Co.); uses cavities created by either Ladder-backed Woodpeckers or normal wood rot.
Northern Parula	(E, C) nests in wooded riparian areas or bottomland hardwood forests; nest usually placed in a hanging bundle of Spanish moss.
Tropical Parula	(S) nests in mature live oak mottes in South Texas mostly on privately-owned ranches, but has nested in mature woodlands along the Lower Rio Grande Valley (e.g., Santa Ana NWR, Anzalduas County Park, etc.).
Yellow Warbler	(currently nesting in Texas?) – once nested along rivers that flooded periodically and created “new land” – a woodland condition usually consisting of cottonwood-willow-sycamore trees on sandbars.

Yellow-rumped (“Audubon’s”) Warbler	(W) nests in coniferous highlands above roughly 6,500' in the Guadalupe and Davis mountains.
Black-throated Gray Warbler	(W) nest reported only once (or more?) in a Gambel’s Oak-Douglas Fir forest in the Guadalupe Mountains.
Golden-cheeked Warbler	(C) nests in mixed Ashe juniper-oak woodlands in ravines and canyons of the Balcones Canyonlands subsection of the Edwards Plateau; they also breed locally north to Palo Pinto Co.; one of the most restricted breeding ranges of any bird in the U.S.; a true specialist that constructs a nest made from the bark of the shaggier, older junipers (junipers are commonly called “cedar” in Texas; however, this is not the correct name for the species).
Yellow-throated Warbler	(E, C) nests in wooded riparian areas or bottomland hardwood forests; prefers sites with mature bald cypress or mature loblolly pines (depending on the location in Texas).
Pine Warbler	(E) nests in mature pine forests that can have hardwoods mixed in, but does prefer pure pine stands.
Prairie Warbler	(E) nests in regenerating pine forests (plantations); a bird of disturbed areas. These regenerating sites are only used for a few years, then they become unsuitable as they grow too tall.
Cerulean Warbler	(currently nesting in Texas?) – once was a rare and local nester in northeast Texas in the tops of mature trees lining rivers (i.e., the Red River Valley of NE Texas).
Black-and-white Warbler	(E, C) nests in hardwood forests or woodlands; nest placed directly on the ground.
American Redstart	(E) nests in large tracts of mature bottomland hardwood forests mainly in deep southeast Texas; formerly a more widespread nester in East Texas, but doesn’t seem to tolerate forest fragmentation (larger blocks cut into smaller blocks are not preferred).

Prothonotary Warbler	(E) a cavity-nesting species that prefers swampy areas with snags; will use man-made nest boxes, but relies on cavities created by woodpeckers or normal wood rot.
Worm-eating Warbler	(E) nests in either beech-magnolia forests or pure pine stands with a slope; trees are usually small diameter and well-spaced; these forests are usually void of understory, but a gentle slope seems to be important.
Swainson's Warbler	(E) nests in the thick understory of bottomland hardwood forests east of I-35 or wet thickets of the Central Coast (i.e., Matagorda Island area).
Louisiana Waterthrush	(E, C) nests along creeks usually with a current; nest placed usually in a vertical depression on the creek bank.
Kentucky Warbler	(E) nests in the thick understory of upland pine-hardwood forests in the eastern part of Texas.
Common Yellowthroat	nests in much of the state, but in disjunct areas out west; nests in moist-to-wet grassy areas; a true wetland inhabitant.
Gray-crowned Yellowthroat	(currently nesting in Texas?) – once nested in brushy areas near the Lower Rio Grande Valley; preferred grassy openings in thorn-brush forest of the Rio Grande delta.
Hooded Warbler	(E) nests in the thick understory of upland to lowland pine-hardwood forests in the eastern part of Texas.
Painted Redstart	(W) nests rarely in canyon bottoms of mixed oak and maple forests of the Chisos Mountains in Big Bend; sporadic breeder (not annual in Texas).
Yellow-breasted Chat	nests in brushy thickets; a bird of disturbed areas in much of Texas.

SOME BASIC FACTS

Regular Wintering Species (Statewide)

Orange-crowned
Yellow-rumped
Common Yellowthroat

Cavity-nesting Species

Lucy's
Prothonotary

"Hill Country" Nesting Species

Northern Parula	Black-and-white
Golden-cheeked	Louisiana Waterthrush
Yellow-throated	Yellow-breasted Chat

East Texas Nesting Species (east of the Trinity River)

Northern Parula	Worm-eating
Yellow-throated	Swainson's
Pine	Louisiana Waterthrush
Prairie	Kentucky
Black-and-white	Common Yellowthroat
American Redstart	Hooded
Prothonotary	Yellow-breasted Chat

Additional Breeding Species in Arkansas (very close to the previous category for East Texas)

Blue-winged	Black-throated Green
Yellow (formerly nested in various parts Texas - extirpated as a nester?)	Cerulean (formerly nested in NE Texas - extirpated?)
	Ovenbird

West Texas Nesting Species (west of the Pecos River)

Orange-crowned	Grace's
Virginia's	Common Yellowthroat
Colima	Painted Redstart
Lucy's	Yellow-breasted Chat
Yellow-rumped	
Black-throated Gray (only one known record)	

Very Local Texas Nesters

Tropical Parula - South Texas
Colima - Big Bend National Park

Migrants in Texas (not nesting in Texas)

Blue-winged	Blackburnian
Golden-winged	Palm
Tennessee	Bay-breasted
Nashville	Blackpoll
Yellow (currently nesting in Texas?)	Cerulean (currently nesting in Texas?)
Chestnut-sided	Ovenbird
Magnolia	Northern Waterthrush
Cape May	Mourning
Black-throated Blue	MacGillivray's
Townsend's	Wilson's
Hermit	Canada
Black-throated Green	

Vagrants that have been found in Texas (number in parentheses denotes "accepted records" as of early 2004)

Crescent-chested (1) - presumptive in Texas	Golden-crowned (16)
Slate-throated Redstart (6)	Rufous-capped (20)
Olive (6) - see pg. 2 for taxonomic status	Red-faced (28)
Connecticut (8)	Gray-crowned Yellowthroat (40)
	Bachman's - <i>no documented records in Texas</i>

WHAT DO THEY SOUND LIKE?

Selected warbler song mnemonics, phonetics or helpful hints

Blue-winged Warbler	“bee buzz”
Golden-winged Warbler	“bee buzz-buzz” or “bee buzz-buzz-buzz”
Tennessee Warbler	“tika tika tika-swee swee swee-chay chay chay”; reminiscent of the chattering of a chimney swift, but from a fixed spot in the canopy
Nashville Warbler	“see-bit see-bit see-bit, see-see-see-see”
Northern Parula	“zeeeeee-up”; sounds like someone running a finger nail up a hair comb (“up” implies ascending)
Yellow Warbler	“sweet sweet sweet, I’m so sweet”
Chestnut-sided Warbler	“please please pleased to meet’cha”
Black-throated Green Warbler	“trees trees murmuring trees” or “zayzay zay zoo zee”



Cerulean Warbler

Golden-cheeked Warbler	mostly sings “zee, lazy, dayzee”, but other song-types as well
Yellow-throated Warbler	descending clear whistles; the pattern sounds like the bird is smoothly walking down a flight of stairs, but stumbles and falls at the end
Pine Warbler	a long, monotonous rattle
Prairie Warbler	repeats many “zees” in an ascending fashion
Black-and-white Warbler	“wheezy wheezy wheezy”; sounds like a high-pitched, squeaky wagon wheel that needs grease or WD40.
American Redstart	“tzee tzee tzee tzeo”; extremely variable songster; apply caution when listening for this one
Prothonotary Warbler	“zweet zweet zweet”
Swainson’s Warbler	“deeta deeta whip-poor-will” or “ooh, ooh, stepped in pooh” (latter from Bob Behrstock and the late David Markley)
Ovenbird	“teacher teacher teacher teacher”
Louisiana Waterthrush	like Swainson’s, but with a slurred, cajun (“Louisiana”) ending
Kentucky Warbler	“chur-ry chur-ry chur-ry”; caution – sounds very similar to the Carolina Wren, but the Kentucky has only two syllables per word instead of three like in the wren’s “tea kettle, tea kettle, tea kettle” song
Common Yellowthroat	“witchety, witchety, witchety”
Hooded Warbler	“wheeta wheeta wheet’eo”; “dweat, dweat, dweat-e-o”; the pattern sounds like someone sneezing “hu, hu, chew”
Yellow-breasted Chat	highly variable and diverse repertoire; usually a loud cluck, squeak or whistle followed by a series of different notes

WHERE DO THEY FEED?

Strata levels where eastern migrants and breeders tend to forage Canopy (upper strata level)

Tennessee	Black-throated Green
Nashville	Blackburnian
Northern Parula	Yellow-throated
Yellow	Blackpoll
Cape May	Cerulean
Yellow-rumped	American Redstart

Midstory (middle strata level; usually at or above eye level)

Blue-winged	Bay-breasted
Golden-winged	Prothonotary
Chestnut-sided	Worm-eating (forages usually by probing dead leaves)
Magnolia	Wilson's
Black-throated Blue	Canada
Prairie	
Palm	

Understory (low strata level; usually below eye level)

Kentucky	Hooded
Mourning	Yellow-breasted Chat
Common Yellowthroat	

Ground level

Swainson's	Ovenbird
Louisiana Waterthrush (on water's edge)	Northern Waterthrush (on water's edge)

Bark-gleaner (all heights)

Black-and-white

WHEN DO MIGRANTS FIRST ARRIVE IN SPRING?

These are peaks for the “windows of passage” for most of the eastern warblers in Texas.

NOTE: These are general rules; however, in the biological world there are always exceptions to the rules. Migration and the timing of migrants are not black or white – there are lots of variations. A trickle of individuals of a given species can occur at any time, but listed below are the peaks of passage.

Early-season Arrivals/Migrants

Northern Parula	Yellow-throated
Nashville	Black-and-white
Black-throated Green	Louisiana Waterthrush
Golden-cheeked	Hooded

Mid-season Arrivals/Migrants

Blue-winged	Worm-eating*
Golden-winged	Swainson's*
Tennessee	Ovenbird
Yellow	Northern Waterthrush
Chestnut-sided	Kentucky
American Redstart	Yellow-breasted Chat
Prothonotary*	

Late-season Arrivals/Migrants

Magnolia	Cerulean
Blackburnian	Mourning
Bay-breasted	Wilson's
Blackpoll	Canada

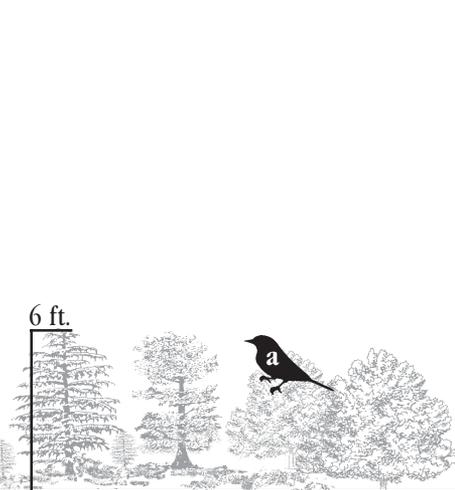
*typically on the “early side” within this category

SELECTED BREEDING SPECIES OF WARBLERS

The following pictures show their preferred microhabitat within typical forest-types of eastern Texas. Note: These are general rules; exceptions do occur. Bird icons show typical location of selected species (i.e., canopy-dwelling, thicket-dwelling).

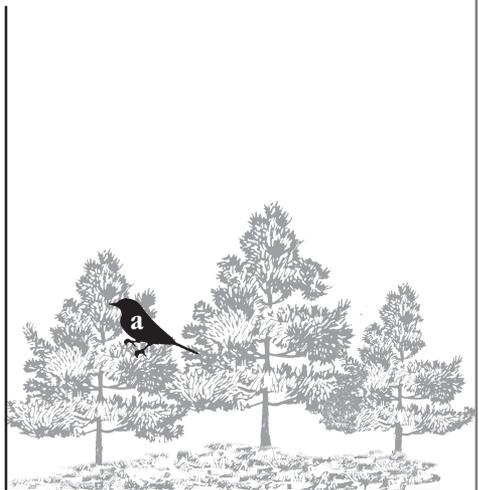
a. Prairie, Chat, Yellowthroat ¹

a. Swainson's, Hooded, Worm-eating ²



Regenerating clearcuts, fallow fields and dense thickets.

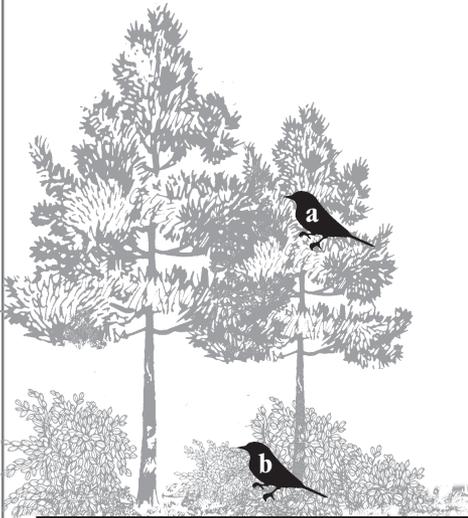
¹ moist/wet sites



Dense pine plantation; too thick to walk through.

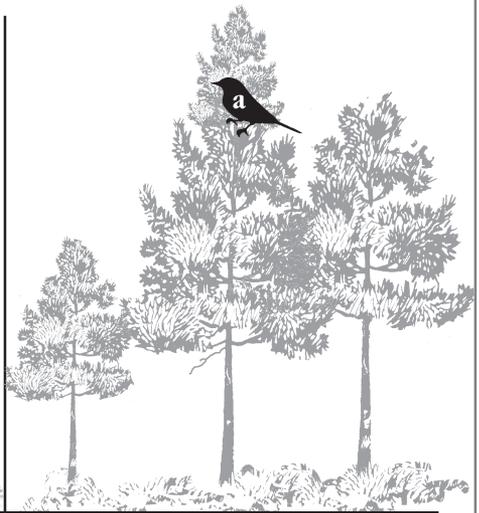
² usually requires a sloped landscape, not level ground

- a. Pine
- b. Hooded, Kentucky, Chat



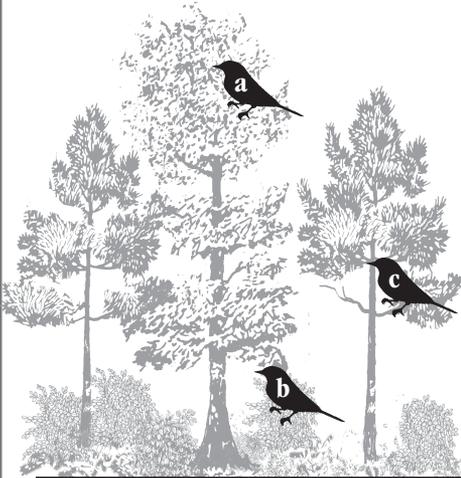
Mature pine forests with thick, shrubby understory.

- a. Pine



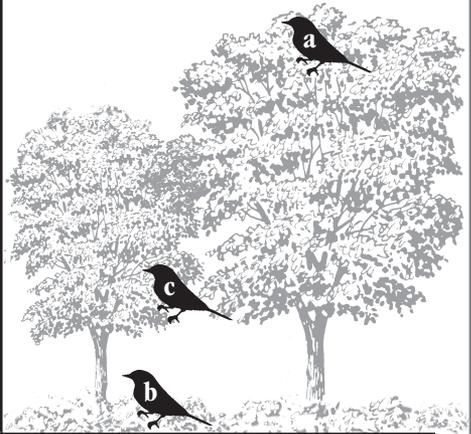
Mature pine forests with no woody understory but a grassy one (maintained by frequent fires which are essential in Longleaf Pine forests).

- a. Parula, Yellow-throated
- b. Hooded, Kentucky
- c. Black-and-white



Mature mixed pine-hardwood forest with dense understory.

- a. Parula, Redstart
- b. Prothonotary
- c. Black-and-white



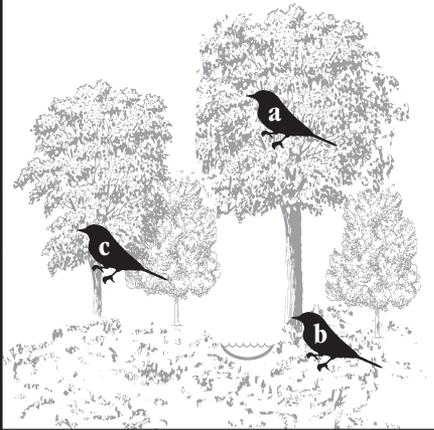
Mature hardwood forest (with or without a slow-moving creek/slough/river).

- a. Yellow-throated, Parula
- b. Prothonotary



Mature cypress forest closely associated with water.

- a. Yellow-throated¹, Parula
- b. Louisiana Waterthrush
- c. Black-and-white



Riparian areas with clear, swift-moving creeks (usually in deep sandy sites).

¹ usually if cypress or mature loblolly pines are present

FURTHER READING

This is certainly not an inclusive list

- Bent, A.C. 1953. Life histories of North American wood warblers. Bull. U.S. National Museum. 203:1-734.
- Curson, J., D. Quinn and D. Beadle. 1994. *Warblers of the Americas*. Boston: Houghton Mifflin Co.
- Dunn, J. and K. Garrett. 1997. *A field guide to Warblers of North America*. Boston: Houghton Mifflin Co.
- Getty, S. 1993. Call notes of North American wood warblers. *Birding* 25:159-168.
- Morse, D.H. 1989. *American Warblers*. Cambridge, Mass: Harvard Univ. Press.
- Thornton, V. and B. Thornton. 1999. *Chasing Warblers*. Austin: UT Press.
- Search for Species Accounts by the Birds of North America Project at <http://birds.cornell.edu/birdsofna/>

SOUNDS AND VIDEOS

- Borror, D.J. and W.W.H. Gunn. 1985. *Songs of the Warblers of North America*. Ithaca, NY: Cornell Lab. of Ornith., Library of Natural Sounds.
- Hardy, J.W., B.B. Coffey, Jr. and G.B. Reynard. 1994. *Voices of Neotropical Wood Warblers*. ARA Records #21.
- Male, M. and J. Fieth. 1996. *Watching warblers*. (video) Blue Earth Films.

For more information on birds and birding,
try Texas Parks and Wildlife Department's nature web site at:
<http://www.tpwd.state.tx.us/nature/birding/>

NOTES

Cover illustration of Magnolia Warbler by Jeremy Boehm. Illustrations of Golden-cheeked Warbler and Cerulean Warbler also by Jeremy Boehm. Thanks to Mark Lockwood, Natural Resource Program at Texas Parks and Wildlife Department, for assistance on much of this booklet.



Texas Partners in Flight is a program
of the Wildlife Division of
Texas Parks and Wildlife Department.



Wildlife Division
4200 Smith School Road • Austin, Texas 78744
1-800-792-1112
www.tpwd.state.tx.us