

Wintering ranges of migrant warblers of eastern North America

*A useful summary of our present,
as yet incomplete, knowledge*

Michael Gochfeld

THE IMPACT OF MIGRANT birds upon resident tropical birds, and the role of migrants in tropical bird communities, have been interesting topics for avian ecologists. For most groups of birds we are plagued by incomplete knowledge about their migration routes and winter distribution, for until recently few biologists have focused attention specifically on migrants. Moreover there is evidence that populations of certain migrant species fluctuate markedly from year to year.

In the Greater Antilles the migrant *Parulidae* are numerous and are important birds of avian communities, particularly at low elevations (Gochfeld, Ms.). I have attempted to summarize the currently known winter ranges for the warblers which breed in the eastern half of North America (Table 1). Several interesting patterns have been clarified by this analysis. For example, 30 species of migrant Parulids are noted by Meyer de Schauensee (1970). Of these only 18 are at all regular in two or more countries. Several have been noted only on Tobago or on Curacao and adjacent islands, without yet being known from mainland South America.

Although some excellent publications have been consulted in compiling this list, I consider it only preliminary and expect that bird watchers in the neotropics will soon contribute many changes to the status indicated on this list.

Table 1 lists the approximate winter distribution of 39 species of Parulids from eastern North America. Two spe-

cies, Bachman's Warbler, *Vermivora bachmanii*, and Kirtland's Warbler, *Dendroica kirtlandii*, now very rare, winter almost exclusively in Cuba and the Bahamas. Four species: Northern Parula, *Parula americana*, Cape May Warbler, *Dendroica tigrina*; Black-throated Blue Warbler, *D. caerulescens*; and Prairie Warbler, *D. discolor*, winter mainly in the Greater Antilles. Of these species only two have reached Trinidad (single sight records for *tigrina* and *caerulescens* — French 1973).

There are records for *caerulescens* from Santa Marta and northern Venezuela (de Schauensee 1970), while it is very rare south of Honduras on the mainland (no Costa Rican records — Slud 1974; one Panama record — Ridgely 1976). Other species recorded sporadically from northeastern Columbia or Venezuela, which are rare in Central America include: *Parula americana* (Curacao); Yellow-rumped Warbler, *Dendroica coronata* (<5 records); Yellow-throated Warbler, *D. dominica* (Columbia once); *D. discolor* (Aruba once); Palm Warbler, *D. palmarum* (Aruba, Curacao); Common Yellowthroat, *Geothlypis trichas* (<5 records). Of these, only the last has been recorded from Trinidad (Gochfeld 1973). The implication seems to be that these birds were vagrants, perhaps overshooting their Greater Antillean wintering grounds and making landfalls on the coast of South America. The disproportionate number of records from the offshore islands, supports this notion, particularly since these species are essentially absent from the Lesser Antilles.

ELSEWHERE (GOCHFELD 1974) I discuss the distribution of the genus *Vermivora* in the Caribbean. Suffice it to say at present that two species, Golden-winged Warbler, *V. chrysoptera*, and Blue-winged Warbler, *V. pinus*, which winter predominantly in Central and South America, have been encountered sporadically in winter on the Greater Antilles. It is possible that some of these birds were migrants, and there is indeed a single record of *V. pinus* from Santa Marta, Columbia — a bird which could have arrived across the Caribbean. For *V. chrysoptera*, however, there are many records from Central America, and I suspect that it reaches Colombia and Venezuela, mainly overland rather than across the Caribbean. Those individuals in the West Indies should be viewed as casual winter residents.

One species, the Yellow Warbler, *Dendroica petechia*, winters from Mexico to South America, and is known as a migrant through Central America and western Cuba. It occurs over much of northern South America (migrant individuals as opposed to resident subspecies), and apparently reaches Trinidad and the southern Lesser Antilles, by moving north-eastward from the mainland. More information on its migration route through the Antilles would be available if field observers were careful to distinguish North American migrant Yellow Warblers from resident subspecies which occur on many of the islands.

Two species, Northern Waterthrush, *Seiurus noveboracensis*, and American Redstart, *Setophaga ruticilla*, are common winter residents both in the West Indies and in Central and northern South America. Both are common on Trinidad, for example, and both could be species which reach South America along a broad front, including perhaps, regular trans-Caribbean movements. One species, Blackpoll Warbler, *D. striata*, winters mainly in South America and has even been recorded in Chile and Argentina. It occurs as a transient in the West Indies, and apparently migrates irregularly through Trinidad (French 1973) being common in some years and rare in others. It is common near Rancho Grande, Aragua, Venezuela, for example, (Schaeffer and Phelps 1954), but is not common in Surinam (Haver-

schmidt 1968) Much has been written about the migration of this species in North America (e.g., Murray 1965) and one wonders whether there are peculiar features, yet unknown, concerning its migration route to South America. It apparently progresses rapidly, "stepping stone" fashion, along the Antillean chain, being common on some islands some years and rare on others (e.g., French 1973). It seems also likely that it relies on extensive trans-Caribbean migration.

This calls to mind the stormy debate of the 1940s concerning the magnitude and importance of trans-Gulf migration (e.g., Williams 1954, Lowery 1946). At present, there is little information on the movement of warblers across the Carib-

bean and it is difficult to guess the destiny and destination of birds which appear on the Greater Antilles only during migration.

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Table 1. Winter Distribution of Migrant Wood Warblers of Eastern North America

SPECIES	All Wintering Areas (A.O.U. 1957)		West Indies (Bond 1971)	Trinidad & Tobago (French 1976)	Panama (Ridgely 1976)	Rancho Grande (Schaeffer 1964)	Surinam (Haverschmidt 1968)	South Am (de Schaunsee 1970)
	Mex-E-V GC-Ba WI	GA = com LA = rare	7x±	TV = fc WR = fc	com	1 *	rare 1 *	V,C rare in Guyanas
<i>Mniotilta varia</i> (Black-and-white)	Mex-E-V GC-Ba WI	GA = com LA = rare	7x±	TV = fc WR = fc	com	1 *	rare 1 *	V,C rare in Guyanas
<i>Protonotaria citrea</i> (Prothonotary)	YP-CA-V WI = TV	transient thruout WR in GA & LA	6x±	com	1 *	rare 1 *	V,C rare in Guyanas	
<i>Limnothlypis swainsonii</i> (Swainson's)	Cuba, Jamaica YP, Belize GC	winters	0	0	0	0	0	0
<i>Helmitheros vermivorus</i> (Worm-eating)	Mex & CA GA & Ba	mainly CA WR = rare in GA	0	TV = unc WR = rare	0	0	0	0
<i>Vermivora chrysoptera</i> (Golden-winged)	Guatemala-CA C-V	mainly CA WR,TV = rare on GA	0	TV = fc WR = unc	unc	0	0	C,V
<i>Vermivora pinus</i> (Blue-winged)	Mex-Pan C = 1x Cuba = casual	WR and TV rare	0	WR = rare	0	0	0	1x = Santa Marta
<i>Vermivora bachmanii</i> (Bachman's)	Cuba	winters near Cuba	0	0	0	0	0	0
<i>Vermivora peregrina</i> (Tennessee)	Mex-C-V	mainly a transient few winter	0	vc	com	0	0	C,V
<i>Vermivora celata</i> (Orange-crowned)	Guatemala-CA Florida	vagrant: Ba 6x±	0	0	0	0	0	0
<i>Vermivora ruficapilla</i> (Nashville)	Mex-CA Florida = rare	vagrant: Ba = 4x western Cuba	0	0	0	0	0	0
<i>Parula americana</i> (Northern Parula)	Mex-CR Ba GA-LA	winters mainly in WI; rare south of Guadeloupe	1x	0	0	0	0	Curacao 2x Los Roques
<i>Dendroica pestiva</i> = <i>D. petechia</i> (Yellow)	Mex-P-B V-Cayenne	few migrants Cuba rare southern LA winter mainly in Trinidad and South America	com	TV = vc WR = vc	vc	only com winter Parulid	0	C,V,P,E Guyanas
<i>Dendroica magnolia</i> (Magnolia)	Mex-Pan GA	WR = unc in GA	2x	WR = unc	0	0	0	Tobago only

Table 1. Winter Distribution of Migrant Wood Warblers of Eastern North America (continued)

lx = one record from region * = 1 specimen com = "common" vc = "very common" fc = "fairly common" unc = "uncommon" TV = Transient C = Colombia V = Venezuela E = Ecuador B = Brazil P = Peru GA = Greater Antilles LA = Lesser Antilles Mex = Mexico Pan = Panama CR = Costa Rica Ba = Bahamas Bo = Bolivia GC = Gulf Coast WI = West Indies CA = Central America YP = Yucatan Peninsula WR = winter resident							
SPECIES	All Wintering Areas (A.O.U. 1957)	West Indies (Bond 1971)	Trinidad & Tobago (French 1976)	Panama (Ridgely 1976)	Rancho Grande (Schaeffer 1964)	Surinam (Haverschmidt 1968)	South Am (de Schaunsee 1970)
<i>Dendroica tigrina</i> (Cape May)	YP = casual Honduras = casual; GA, LA, Tobago	winters mainly in GA & Ba	rare Trin = 1x 1*	5x	0	0	Tobago only
<i>Denroidea caerulescens</i> (Black-throated Blue)	GA-Ba Cozumel = casual	winters mainly in GA & Ba LA = casual CA & C = rare	1x	1x	1x	0	C = 1x V = 1x
<i>Dendroica coronata</i> (Myrtle = Yellow-rumped)	US-Pan GA-Antigua	WR, casual in LA also C	1x	unc	0	0	C = 1x V = 1x Curacao Bonaire
<i>Dendroica virens</i> (Black-throated Green)	GC-Pan GA-Ba LA C = 1x	some winter in WI	2x	com	0	0	Santa Marta V = rare
<i>Dendroica cerulea</i> (Cerulean)	C-E-P-Bo	rare transient in Jamaica & Cuba	0	TV = unc WR = 1x	unc	0	C,V,P,E,Bo
<i>Dendroica fusca</i> (Blackburnian)	Guatemala-P TV in Cuba, Ba TV in Mexico	rare transient in Cuba & Jamaica	1x	TV = fc WR = unc	unc	0	V,C,P,E, ? on Tobago
<i>Dendroica dominica</i> (Yellow-throated)	US-GA-LA Mex-CR	some winter on GA	0	2x	0	0	C = 1x Barranquilla
<i>Dendroica pensylvanica</i> (Chestnut-sided)	Nicaragua-Pan	mainly in CA	3x	WR = vc	0	0	C,V
<i>Dendroica castanea</i> (Bay-breasted)	Pan-C-V	TV = rare Cuba, Jamaica	4x	WR = fc TV = fc	1x	0	C,V Curacao
<i>Dendroica striata</i> (Blackpoll)	C-V-Guyanas E-P-B Chile casual Argentina casual	transient only	TV = unc WR = rare 2*	1 or 2 x	com	unc	widespread
<i>Dendroica pinus</i> (Pine)	SE US, GS	rare on Cuba	0	0	0	0	0
<i>Dendroica kirtlandii</i> (Kirtland's)	Ba	Ba	0	0	0	0	0
<i>Dendroica discolor</i> (Prairie)	Florida-GA-LA Cozumel Nicaragua	mainly in WI to northern LA	0	0	0	0	Aruba only
<i>Dendroica palmarum</i> (Palm)	GS-YP-GA	GA & Ba rare on Puerto Rico	0	WR = rare	0	0	Aruba & Curacao (casual)
<i>Seiurus aurocapillus</i> (Ovenbird)	Mex-Pan-V GA-GA-LA-Ba	GA, Bahamas LA = unc	3x 1*	TV = fc WR = fc	1x	0	C,V Curacao
<i>Seiurus noveboracensis</i> (Northern Waterthrush)	Mex-CA-C-E-P V-GA-LA Guyanas	winters thruout	common	TV = vc WR = vc	unc	com	C,V,E,P Guyanas
<i>Seiurus motacilla</i> (Louisiana Waterthrush)	Mex-Pan-V GA-LA	GA-LA-Ba rare east of Puerto Rico	0	TV = unc	0	0	C,V
<i>Oporornis formosa</i> (Kentucky)	Mex-C-V	mainly CA TV = rare WR = very rare	0	TV = fc WR = fc	0	0	C,V
<i>Oporornis agilis</i> (Connecticut)	V-B	probable migrant casual	0	TV = rare	1x	0	C,V,B

Table 1. Winter Distribution of Migrant Wood Warblers of Eastern North America (continued)

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<i>Oporornis philadelphia</i> (Mourning)	Nicaragua-C-V accidental on Puerto Rico	vagrant Puerto Rico = 1x New Providence = 1x	0	TV = fc WR = unc	1x	0	C,V,E
<i>Geothlypis trichas</i> (Common Yellowthroat)	GS-Pan GA-LA Tobago = casual	WR = com LA = casual	2x 1*	WR = rare	0	0	V = 1x C = 2x Tobago = 1x
<i>Icteria virens</i> (Yellow-breasted Chat)	Mex-Pan	vagrant Grand Bahama, Cuba; Bimini	0	WR = unc	0	0	0
<i>Wilsonia citrinia</i> (Hooded)	Mex-CR	TV = unc WR = rare LA = casual	1x	WR = rare	0	0	V = casual Trinidad
<i>Wilsonia pusilla</i> (Wilson's)	GS-Mex-CA-C	vagrant on Cuba Grand Bahama New Providence	0	abundant	0	0	0
<i>Wilsonia canadensis</i> (Canada)	C-V-P	vagrant on Cuba Puerto Rico-Ba Virgin Islands	0	TV = fc WR = rare	0	0	C,V,E,P,B
<i>Setophaga ruticilla</i> (American Redstart)	Mex-E-B-V Surinam GA-LA	winters thruout mainly in GA	com	TV = fc WR = unc	com	rare	C,V,E,B Guyana Surinam

DISTRIBUTION

Prairie Warbler at Trinidad

Allan R. Keith

AT APPROXIMATELY 7:00 a.m. on March 21, 1978, the writer was birding along the dike bordering the Black River in the Laventille Marsh section of Caroni Swamp, just south of Port of Spain, Trinidad. The principal object of the visit to this locality was to look for Masked Yellowthroat (*Geothlypis aequinoctialis*) which had been present there the previous spring. Aside from the latter species, the only other warblers seen in the area were a Northern Waterthrush (*Seiurus noveboracensis*) and what appeared to be a group of three Yellow Warblers (*Dendroica petechia*). With the sun at my back, I observed this group foraging in low trees at eye level approximately 15 m in front of me. On closer inspection, one of these birds proved to be a Prairie

Warbler (*Dendroica discolor*). It was not a strongly-marked individual, leading to the suspicion that it was a female, and possibly a first-year bird. It exhibited typical behavior, characteristically wagging its tail; it was not heard to sing. It remained in view affording a leisurely study for at least five minutes before moving off.

Unfortunately, there were no other observers who could be contacted in time to confirm the observation, which appears to be the first for Trinidad, according to Richard P. ffrench (*pers. comm.*). James Bond (*Birds of the West Indies*, 1961, p. 199) writes of an occurrence of Prairie Warbler as close as Martinique, approximately 250 miles to the

north. R. M. de Schauensee (*A Guide to the Birds of South America*, 1970, p. 433) indicates that it has occurred casually at Aruba.

In the second edition of his "Guide to the Birds of Trinidad and Tobago" (1976), ffrench lists nine species of wood warblers that breed in North America that have been added to the list of Trinidad birds on the basis of sight records since 1957, mostly since 1966. In addition two other species have been recorded at Tobago; and at least one more, the Golden-winged Warbler (*Vermivora chrysoptera*), has been recorded at Trinidad since 1976 ("Living World", 1977-78, p. 11). Given the recent increase in field work in Trinidad and the number of other species of vagrant warblers found there, it is no real surprise to discover a species such as the Prairie Warbler there which winters routinely in the West Indies.

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