

Supplementary information-

Table S1. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Anchorage County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Year vs. arrival date	Harlequin Duck	0.0082	Later	Summer	Short distance
	Least Sandpiper	0.0063	Later	Summer	Long distance
	Savannah Sparrow	0.0026	Later	Summer	Short distance
	Semipalmated Plover	0.0008	Later	Summer	Long distance
	Trumpeter Swan	0.0015	Later	Summer	Short distance
Year vs. departure date	Northern Flicker	0.0073	Earlier	Summer	Short distance
	Northern Wheatear	0.0080	Earlier	Summer	Long distance
	Western Wood-Pewee	0.0053	Earlier	Summer	Long distance
Year vs. number of days in Anchorage county	Blackpoll Warbler	0.0024	Fewer	Summer	Long distance

	Golden-crowned Sparrow	0.0050	Fewer	Summer	Long distance
	Savannah Sparrow	0.0036	Fewer	Summer	Short distance
	Western Wood-Pewee	0.0049	Fewer	Summer	Long distance
Number of days in Anchorage county vs. mean temperature during stopover	Western Wood-Pewee	0.0006	Colder	Summer	Long distance
	White-winged Scoter	0.0063	Colder	Summer	Short distance
Number of days in Anchorage county vs. maximum temperature during stopover	Northern Flicker	0.0066	Colder	Summer	Short distance
	Rusty Blackbird	0.0054	Colder	Summer	Short distance
	Western Wood-Pewee	0.0001	Colder	Summer	Long distance
	White-winged Scoter	0.0065	Colder	Summer	Short distance

Number of days in Anchorage county vs. minimum temperature during stopover	Harlequin Duck	0.0031	Warmer	Summer	Short distance
	Varied Thrush	0.0030	Warmer	Summer	Short distance
Year vs. arrival date	Harlequin Duck	0.0082	Later	Summer	Short distance
	Least Sandpiper	0.0063	Later	Summer	Long distance
	Savannah Sparrow	0.0026	Later	Summer	Short distance
	Semipalmated Plover	0.0008	Later	Summer	Long distance
	Trumpeter Swan	0.0015	Later	Summer	Short distance
Year vs. departure date	Northern Flicker	0.0073	Earlier	Summer	Short distance
	Northern Wheatear	0.0080	Earlier	Summer	Long distance
	Western Wood-Pewee	0.0053	Earlier	Summer	Long distance
Year vs. number of days in Anchorage county	Blackpoll Warbler	0.0024	Fewer	Summer	Long distance

	Golden-crowned Sparrow	0.0050	Fewer	Summer	Long distance
	Savannah Sparrow	0.0036	Fewer	Summer	Short distance
	Western Wood-Pewee	0.0049	Fewer	Summer	Long distance
Number of days in Anchorage county vs. mean temperature during stopover	Western Wood-Pewee	0.0006	Colder	Summer	Long distance
	White-winged Scoter	0.0063	Colder	Summer	Short distance
Number of days in Anchorage county vs. maximum temperature during stopover	Northern Flicker	0.0066	Colder	Summer	Short distance
	Rusty Blackbird	0.0054	Colder	Summer	Short distance
	Western Wood-Pewee	0.0001	Colder	Summer	Long distance
	White-winged Scoter	0.0065	Colder	Summer	Short distance

Number of days in Anchorage county vs. minimum temperature during stopover	Harlequin Duck	0.0031	Warmer	Summer	Short distance
	Varied Thrush	0.0030	Warmer	Summer	Short distance

Table S2. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Anchorage County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Departure date during spring vs. maximum temperature on day of departure	Bufflehead	0.0034	Colder	Short distance
	Pectoral Sandpiper	0.0040	Colder	Long distance
Departure date during spring vs. minimum temperature on day of departure	Baird's Sandpiper	0.0019	Colder	Long distance
Arrival date during fall vs. maximum temperature on day of arrival	American Golden-Plover	0.0013	Colder	Long distance

Year vs. departure date during fall	Greater White-fronted Goose	0.0030	Earlier	Long distance
Departure date during fall vs. mean temperature on day of departure	Greater White-fronted Goose	0.0009	Colder	Long distance
Departure date during fall vs. maximum temperature on day of departure	Greater White fronted Goose	0.0005	Colder	Long distance
	Redhead	0.0042	Warmer	Short distance
Year vs. number of days in Anchorage county during stopover in fall	Greater White-fronted Goose	0.0025	Fewer	Long distance

Table S3. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Fairbanks County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Year vs. arrival date	Bufflehead	0.0009	Later	Summer	Short distance

	Townsend's Warbler	0.0054	Later	Summer	Long distance
Year vs. departure date	Bufflehead	0.0043	Earlier	Summer	Short distance
Year vs. number of days in Fairbanks county	Bufflehead	0.0008	Fewer	Summer	Short distance
Number of days in Fairbanks county vs. mean temperature during stopover	Dark-eyed Junco	0.0049	Warmer	Summer	Short distance
	Hammond's Flycatcher	0.0063	Colder	Summer	Long distance
Number of days in Fairbanks county vs. maximum temperature during stopover	Fox Sparrow	0.0021	Colder	Summer	Long distance
Number of days in Fairbanks county vs. minimum temperature during stopover	Alder Flycatcher	0.0065	Warmer	Summer	Long distance

Table S4. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Fairbanks County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Year vs. number of days in Fairbanks county during stopover in spring	Greater Scaup	0.0025	Fewer	Short distance
Departure date during fall vs. minimum temperature on day of departure	Gray-cheeked Thrush	0.0006	Warmer	Long distance
Number of days in Fairbanks county during fall vs. mean temperature during stopover in fall	Common Loon	0.0028	Warmer	Short distance
	Trumpeter Swan	0.0028	Warmer	Short distance
Number of days in Fairbanks county during fall vs. maximum temperature during stopover in fall	Trumpeter Swan	0.0003	Warmer	Short distance

Number of days in Fairbanks county during fall vs. minimum temperature during stopover in fall	Trumpeter Swan	0.0006	Warmer	Short distance
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Table S5. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter migration strategy through Aroostook County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Arrival date vs. mean temperature on day of arrival	Ovenbird	0.0076	Colder	Summer	Short distance
Departure date vs. mean temperature on day of departure	American Tree Sparrow	0.0062	Warmer	Winter	Short distance
Year vs. number of days in Aroostook county	Alder Flycatcher	0.0010	More	Summer	Long distance

Number of days in Aroostook county vs. mean temperature during stopover

American Redstart	0.0044	Colder	Summer	Long distance
Bonaparte's Gull	0.0046	Warmer	Summer	Long distance
Chipping Sparrow	0.0011	Warmer	Summer	Short distance
Common Loon	0.0003	Warmer	Summer	Short distance
Double-crested Cormorant	0.0054	Warmer	Summer	Long distance
Gadwall	0.0060	Warmer	Summer	Short distance
Least Flycatcher	0.0003	Warmer	Summer	Long distance
Merlin	0.0005	Warmer	Summer	Long distance
Northern Harrier	0.0022	Warmer	Summer	Long distance
Northern Shoveler	<0.0001	Warmer	Summer	Short distance
Pied-billed Grebe	0.0069	Colder	Summer	Short distance

	Red-winged Blackbird	0.0001	Warmer	Summer	Short distance
	Ring-necked Duck	<0.0001	Warmer	Summer	Long distance
	Ruddy Duck	0.0009	Warmer	Summer	Short distance
	Savannah Sparrow	0.0045	Warmer	Summer	Short distance
	Wilson's Snipe	<0.0001	Warmer	Summer	Short distance
	Wood Duck	0.0006	Warmer	Summer	Short distance
Number of days in Aroostook county vs. maximum temperature during stopover	Black-and-white Warbler	0.0055	Colder	Summer	Long distance
Number of days in Aroostook county vs. minimum temperature during stopover	Bonaparte's Gull	0.0005	Warmer	Summer	Long distance
	Eastern Kingbird	0.0012	Warmer	Summer	Long distance
	Ruddy Duck	0.0026	Warmer	Summer	Short distance

Spotted Sandpiper	0.0036	Warmer	Summer	Long distance
Yellow Warbler	0.0078	Warmer	Summer	Long distance

Table S6. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Aroostook County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Number of days in Aroostook county during spring vs. maximum temperature during stopover in spring	Greater Yellowlegs	0.0029	Colder	Long distance
Number of days in Aroostook county during spring vs. minimum temperature during stopover in spring	Lesser Black-backed Gull	0.0030	Warmer	Long distance
Departure date during fall vs. maximum temperature on day of departure	Snow Goose	0.0008	Colder	Short distance

Table S7. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Cumberland County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Year vs. arrival date	American Golden-Plover	0.0008	Later	Summer	Long distance
Arrival date vs. mean temperature on day of arrival	Barn Swallow	0.0063	Colder	Summer	Long distance
	Veery	0.0065	Warmer	Summer	Long distance
Arrival date vs. maximum temperature on day of arrival	Barn Swallow	0.0019	Colder	Summer	Long distance
Departure date vs. mean temperature on day of arrival	Fish Crow	0.0070	Warmer	Summer	Short distance
Departure date vs. maximum temperature on day of departure	Fish Crow	0.0017	Warmer	Summer	Short distance
Number of days in Cumberland county vs. mean temperature during stopover	American Kestrel	0.0008	Warmer	Summer	Short distance
	Barn Swallow	0.0015	Warmer	Summer	Long distance

Black-and-white Warbler	0.0048	Warmer	Summer	Long distance
Blue-gray Gnatcatcher	0.0010	Colder	Summer	Short distance
Canada Warbler	0.0002	Colder	Summer	Long distance
Chipping Sparrow	0.0001	Warmer	Summer	Short distance
Eastern Phoebe	0.0019	Warmer	Summer	Short distance
Eastern Towhee	0.0040	Warmer	Summer	Short distance
Field Sparrow	0.0068	Warmer	Summer	Short distance
Gray Catbird	0.0035	Warmer	Summer	Long distance
Green Heron	0.0046	Warmer	Summer	Long distance
Indigo Bunting	0.0025	Warmer	Summer	Long distance
Killdeer	0.0009	Warmer	Summer	Short distance
Laughing Gull	0.0009	Warmer	Summer	Long distance

	Lesser Yellowlegs	0.0018	Warmer	Summer	Long distance
	Pied-billed Grebe	0.0004	Warmer	Summer	Short distance
	Snowy Egret	0.0055	Warmer	Summer	Short distance
	Swamp Sparrow	0.0001	Warmer	Summer	Short distance
	Yellow-rumped Warbler	0.0001	Warmer	Summer	Long distance
Number of days in Cumberland county vs. maximum temperature during stopover	Brown Thrasher	0.0028	Warmer	Summer	Short distance
Number of days in Cumberland county vs. minimum temperature during stopover	Chipping Sparrow	0.0007	Warmer	Summer	Short distance
	Ruddy Duck	0.0055	Warmer	Summer	Short distance
	Snow Bunting	0.0001	Warmer	Winter	Long Distance
	Swamp Sparrow	0.0006	Warmer	Summer	Short distance

Table S8. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Cumberland County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Year vs. departure date during spring	Blue-winged Teal	0.0023	Earlier	Long Distance
Number of days in Cumberland county during spring vs. mean temperature during stopover in spring	Short-billed Dowitcher	0.0007	Warmer	Long Distance
	White-rumped Sandpiper	0.0031	Warmer	Long Distance

Number of days in Cumberland county during spring vs. minimum temperature during stopover in spring	Bay-breasted Warbler	0.0038	Warmer	Long Distance
Year vs. arrival date during fall	Blackpoll Warbler	0.0021	Earlier	Long Distance
Departure date during fall vs. mean temperature on day of departure	Bay-breasted Warbler	0.0012	Colder	Long Distance
Number of days in Cumberland county during fall vs. maximum temperature during stopover in fall	Blue-winged Teal	0.0037	Warmer	Long Distance
	Sandhill Crane	0.0024	Warmer	Long Distance

Table S9. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Hancock County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Arrival date vs. mean temperature on day of arrival	Swamp Sparrow	0.0057	Warmer	Summer	Short Distance
Arrival date vs. maximum temperature on day of arrival	Barn Swallow	0.0066	Warmer	Summer	Long Distance
Arrival date vs. minimum temperature on day of arrival	Black-and-white Warbler	0.0002	Warmer	Summer	Long Distance
	Swamp Sparrow	0.0078	Warmer	Summer	Short Distance
Year vs. departure date	Great Crested Flycatcher	0.0039	Earlier	Summer	Long Distance
Departure date vs. minimum temperature on day of departure	Black-and-white Warbler	0.0075	Later	Summer	Long Distance
	Common Yellowthroat	0.0020	Later	Summer	Long Distance
	Red-eyed Vireo	0.0082	Later	Summer	Long Distance

Year vs. number of days in Hancock county	Great Crested Flycatcher	0.0020	Fewer	Summer	Long Distance
Number of days in Hancock county vs. mean temperature during stopover	American Kestrel	0.0039	Warmer	Summer	Short Distance
	Atlantic Puffin	0.0010	Warmer	Summer	Long Distance
	Blackpoll Warbler	0.0008	Warmer	Summer	Long Distance
	Bobolink	0.0031	Colder	Summer	Long Distance
	Chipping Sparrow	0.0056	Warmer	Summer	Short Distance
	Double-crested Cormorant	0.0055	Warmer	Summer	Long Distance
	Great Shearwater	0.0005	Warmer	Summer	Long Distance
	Greater Yellowlegs	0.0010	Warmer	Summer	Long Distance
	Hermit Thrush	0.0048	Warmer	Summer	Short Distance
	Laughing Gull	0.0014	Warmer	Summer	Long Distance

Lincoln's Sparrow	0.0002	Warmer	Summer	Long Distance
Northern Fulmar	0.0005	Warmer	Summer	Long Distance
Palm Warbler	0.0000	Warmer	Summer	Long Distance
Ruby-crowned Kinglet	0.0008	Warmer	Summer	Short Distance
Savannah Sparrow	0.0015	Warmer	Summer	Short Distance
Turkey Vulture	0.0005	Warmer	Summer	Short Distance
Wilson's Warbler	0.0000	Colder	Summer	Long Distance

Table S10. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Hancock County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Arrival date during spring vs. minimum temperature on day of arrival	Brown Thrasher	0.0026	Warmer	Short Distance
Departure date during spring vs. mean temperature on day of departure	Wilson's Snipe	0.0021	Warmer	Short Distance
Departure date during spring vs. minimum temperature on day of departure	Wilson's Snipe	0.0030	Warmer	Short Distance
Number of days in Hancock county during spring vs. minimum temperature during stopover in spring	Black-bellied Plover	0.0006	Warmer	Long Distance
	Fox Sparrow	0.0028	Warmer	Long Distance

	Great Egret	0.0007	Warmer	Long Distance
	Semipalmated Sandpiper	0.0034	Warmer	Long Distance
	White-crowned Sparrow	0.0000	Warmer	Short Distance
Year vs. departure date during fall	Vesper Sparrow	0.0020	Earlier	Short Distance
Departure date during fall vs. mean temperature on day of departure	Nelson's Sparrow	0.0009	Warmer	Short Distance
Number of days in Hancock county during fall vs. mean temperature during stopover in fall	Vesper Sparrow	0.0004	Warmer	Short Distance
Number of days in Hancock county during fall vs. maximum temperature during stopover in fall	Vesper Sparrow	0.0011	Warmer	Short Distance
Number of days in Hancock county during fall vs. minimum temperature during stopover in fall	Vesper Sparrow	0.0004	Warmer	Short Distance

Table S11. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Charleston County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Arrival date vs. maximum temperature on day of arrival	Palm Warbler	0.0069	Warmer	Winter	Long distance
	Blue Grosbeak	0.0043	Earlier	Summer	Short distance
Year vs. departure date	Bonaparte's Gull	0.0082	Earlier	Winter	Long distance
	Hermit Thrush	0.0031	Earlier	Winter	Short distance
	Mississippi Kite	0.0055	Earlier	Summer	Long distance
	Black-necked Stilt	0.0058	Warmer	Summer	Short distance
Departure date vs. maximum temperature on day of arrival	Least Bittern	0.0013	Colder	Summer	Short distance
	Blue Grosbeak	0.0061	Fewer	Summer	Short distance
Year vs. number of days in Charleston county	Lesser Black-backed Gull	0.0052	Fewer	Winter	Long distance

	Mississippi Kite	0.0033	Fewer	Summer	Long distance
	Orchard Oriole	0.0072	Fewer	Summer	Long distance
	Sora	0.0071	Fewer	Winter	Long distance
Number of days in Charleston county vs. mean temperature during stopover	Blue Grosbeak	0.0019	Warmer	Summer	Short distance
	Cattle Egret	0.0031	Warmer	Summer	Short distance
	Chuck-will's-widow	0.0077	Colder	Summer	Long distance
	Common Loon	0.0069	Colder	Winter	Short distance
	Eastern Wood-Pewee	0.0019	Warmer	Summer	Short distance
	Hooded Warbler	0.0070	Warmer	Summer	Short distance
	Least Bittern	0.0026	Warmer	Summer	Long distance
	Mississippi Kite	0.0037	Warmer	Summer	Long distance

	Red-eyed Vireo	0.0043	Warmer	Summer	Long distance
	Roseate Spoonbill	0.0012	Warmer	Summer	Short distance
	Sandwich Tern	0.0000	Warmer	Summer	Short distance
	Summer Tanager	0.0001	Warmer	Summer	Long distance
Number of days in Charleston county vs. maximum temperature during stopover	Chimney Swift	0.0055	Colder	Summer	Long distance
	Eastern Wood-Pewee	0.0052	Warmer	Summer	Long distance
	Prothonotary Warbler	0.0040	Colder	Summer	Long distance
Number of days in Charleston county vs. minimum temperature during stopover	Blue Grosbeak	0.0081	Warmer	Summer	Short distance
	Cattle Egret	0.0007	Warmer	Summer	Short distance
	Gull-billed Tern	0.0032	Warmer	Summer	Long distance

Hooded Warbler	0.0036	Warmer	Summer	Short distance
Louisiana Waterthrush	0.0017	Warmer	Summer	Long distance
Red-eyed Vireo	0.0000	Warmer	Summer	Long distance

Table S12. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Charleston County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Number of days in Charleston county during spring vs. mean temperature during stopover in spring	Ovenbird	0.0025	Colder	Long distance

Number of days in Charleston county during spring vs. maximum temperature during stopover in spring	Swainson's Thrush	0.0012	Colder	Long distance
Number of days in Charleston county during spring vs. minimum temperature during stopover in spring	Magnolia Warbler	0.0001	Warmer	Long distance
	Stilt Sandpiper	0.0025	Warmer	Long distance
	Swainson's Thrush	0.0012	Warmer	Long distance
Arrival date during fall vs. minimum temperature on day of arrival	Scarlet Tanager	0.0038	Colder	Long distance
Year vs. number of days in Charleston county during stopover in fall	Yellow Warbler	0.0027	Fewer	Long distance

Table S13. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Georgetown County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Year vs. arrival date	Swallow-tailed Kite	0.0046	Later	Summer	Long distance
	White-throated Sparrow	0.0067	Earlier	Winter	Short Distance
Arrival date vs. mean temperature on day of arrival	Summer Tanager	0.0030	Warmer	Summer	Long distance
Arrival date vs. minimum temperature on day of arrival	Summer Tanager	0.0001	Warmer	Summer	Long distance
Departure date vs. mean temperature on day of arrival	Blue Grosbeak	0.0043	Warmer	Summer	Short Distance
Year vs. number of days in Georgetown county	Swallow-tailed Kite	0.0034	Fewer	Summer	Long distance
	Blue-headed Vireo	0.0063	Fewer	Winter	Short Distance

Number of days in Georgetown county vs. mean temperature during stopover	Barn Swallow	0.0005	Warmer	Summer	Long distance
	Common Tern	0.0020	Warmer	Summer	Long distance
	Painted Bunting	0.0051	Warmer	Summer	Short Distance
	Ruby-throated Hummingbird	0.0021	Warmer	Summer	Long distance
	Cedar Waxwing	0.0081	Colder	Winter	Short Distance
	Tree Swallow	0.0028	Colder	Winter	Long distance
Number of days in Georgetown county vs. maximum temperature during stopover	American Kestrel	0.0010	Colder	Winter	Short Distance
	Black Scoter	0.0014	Colder	Winter	Short Distance
	Northern Pintail	0.0004	Colder	Winter	Long distance
	Orange-crowned Warbler	0.0043	Colder	Winter	Long distance

Number of days in Georgetown county vs. minimum temperature during stopover	Pied-billed Grebe	0.0023	Colder	Winter	Short Distance
	Ruddy Duck	0.0042	Colder	Winter	Short Distance
	Barn Swallow	0.0019	Warmer	Summer	Long distance
	Common Tern	0.0040	Warmer	Summer	Long distance
	Eastern Kingbird	0.0048	Warmer	Summer	Long distance
	Ruby-throated Hummingbird	0.0009	Warmer	Summer	Long distance
	Sandwich Tern	0.0055	Warmer	Summer	Short distance

Table S14. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Georgetown County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
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Number of days in Georgetown county during spring vs. minimum temperature during stopover in spring	American Redstart	0.0040	Warmer	Long Distance
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Table S15. Migration pattern changes and significant environmental temperature changes experienced by species showing a summer or winter resident migration strategy through Oconee County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerberg et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Category	Migration Pattern
Arrival date vs. mean temperature on day of arrival	Scarlet Tanager	0.0054	Colder	Summer	Long distance
Year vs. departure date	Hooded Warbler	0.0010	Later	Summer	Short distance
	Yellow-bellied Sapsucker	0.0036	Later	Winter	Short distance
Departure date vs. mean temperature on day of arrival	Broad-winged Hawk	0.0016	Colder	Summer	Long distance

Number of days in Oconee county vs. maximum temperature during stopover	Cedar Waxwing	0.0078	Colder	Winter	Short distance
Arrival date vs. mean temperature on day of arrival	Scarlet Tanager	0.0054	Colder	Summer	Long distance
Year vs. departure date	Hooded Warbler	0.0010	Later	Summer	Short distance
	Yellow-bellied Sapsucker	0.0036	Later	Winter	Short distance
Departure date vs. mean temperature on day of arrival	Broad-winged Hawk	0.0016	Colder	Summer	Long distance
Number of days in Oconee county vs. maximum temperature during stopover	Cedar Waxwing	0.0078	Colder	Winter	Short distance
Arrival date vs. mean temperature on day of arrival	Scarlet Tanager	0.0054	Colder	Summer	Long distance
Year vs. departure date	Hooded Warbler	0.0010	Later	Summer	Short distance
	Yellow-bellied Sapsucker	0.0036	Later	Winter	Short distance

Departure date vs. mean temperature on day of arrival	Broad-winged Hawk	0.0016	Colder	Summer	Long distance
Number of days in Oconee county vs. maximum temperature during stopover	Cedar Waxwing	0.0078	Colder	Winter	Short distance

Table S16. Migration pattern changes and significant environmental temperature changes experienced by species showing a transient migration strategy through Oconee County. Migration patterns were determined using data from the Cornell lab of ornithology and Zuckerman et al. (2009).

Correlation	Species Common Name	P-Value	Trend	Migration Pattern
Departure date during fall vs. mean temperature on day of departure	Magnolia Warbler	0.0009	Colder	Long distance
Number of days in Oconee county during fall vs. mean temperature during stopover in fall	Tennessee Warbler	0.0032	Warmer	Long distance

Table S17. Feature selection rankings for one-stopover summer migrants using three different feature selection methods.

	Feature	Feature Selection Method		
		Chi Squared	Information Gain	Symmetrical Uncertainty
AD	Mean Temperature	5	5	5
	Max Temperature	4	4	4
	Min Temperature	2	2	2
	State	1	1	1
	Migration Distance	3	3	3
DD	Mean Temperature	1	1	1
	Max Temperature	3	3	3
	Min Temperature	2	2	2
	State	4	4	4
	Migration Distance	5	5	5
ND	Mean Temperature	4	4	4
	Max Temperature	2	2	2
	Min Temperature	3	3	3
	State	1	1	1
	Migration Distance	5	5	5

Table S18. Feature selection rankings for one-stopover winter migrants using three different feature selection methods.

	Feature	Feature Selection Method		
		Chi Squared	Information Gain	Symmetrical Uncertainty
AD	Mean Temperature	2	2	2
	Max Temperature	3	3	3
	Min Temperature	1	1	1
	State	4	4	4
	Migration Distance	5	5	5
DD	Mean Temperature	3	3	3
	Max Temperature	1	1	1
	Min Temperature	2	2	2
	State	4	4	4
	Migration Distance	5	5	5
ND	Mean Temperature	5	5	5
	Max Temperature	1	1	1
	Min Temperature	4	4	4
	State	2	2	2
	Migration Distance	3	3	3

Table S19. Feature selection rankings for two-stopover spring migrants using three different feature selection methods.

Feature	Feature Selection Method		
	Chi Squared	Information Gain	Symmetrical Uncertainty

AD	Mean Temperature	5	5	5
	Max Temperature	4	4	4
	Min Temperature	3	3	3
	State	1	1	1
	Migration Distance	2	2	2
DD	Mean Temperature	5	5	5
	Max Temperature	4	4	4
	Min Temperature	3	3	3
	State	1	1	1
	Migration Distance	2	2	2
ND	Mean Temperature	3	2	3
	Max Temperature	1	2	1
	Min Temperature	2	1	2
	State	4	4	4
	Migration Distance	5	5	5

Table S20 Feature selection rankings for two-stopover fall migrants using three different feature selection methods.

		Feature Selection Method		
	Feature	Chi Squared	Information Gain	Symmetrical Uncertainty
AD	Mean Temperature	5	5	5
	Max Temperature	4	4	4
	Min Temperature	3	3	3
	State	1	1	1
	Migration Distance	2	2	2
DD	Mean Temperature	5	5	5

	Max Temperature	1	1	1
	Min Temperature	4	4	4
	State	2	2	2
	Migration Distance	3	3	3
ND	Mean Temperature	2	2	2
	Max Temperature	1	1	1
	Min Temperature	3	3	3
	State	4	4	4
	Migration Distance	5	5	5