

Appendix 4. Relative fit of models of the different functional forms of linear feature width, for species analyzed in this paper. Linear = linear function ($y \sim x$). Inverse = inverse function ($y \sim x^{-1}$). Square-root = square-root function of distance ($y \sim x^{0.5}$). Piecewise = threshold function of distance. AIC = Akaike's Information Criterion, in which models with lower AIC values have better model fit. Δ AIC = difference between specific model's AIC and the lowest AIC value among models for a particular species, in which models with Δ AIC < 2.0 have comparable explanatory power. Akaike weight = probability that a specific model for a species is the top model.

Species	Model	Number of Parameters	Log-likelihood	AIC	Δ AIC	Akaike weight
Alder Flycatcher <i>Empidonax alnorum</i>	Square-root	2	-88.06	180.13	0.00	0.37
	Piecewise	3	-87.45	180.91	0.78	0.25
	Linear	2	-88.47	180.94	0.82	0.25
	Inverse	2	-89.12	182.24	2.12	0.13
American Robin <i>Turdus migratorius</i>	Piecewise	3	-131.04	268.08	0.00	0.32
	Linear	2	-132.12	268.23	0.15	0.29
	Square-root	2	-132.37	268.73	0.65	0.23
	Inverse	2	-132.69	269.38	1.30	0.16
Chipping Sparrow <i>Spizella passerine</i>	Linear	2	-139.76	283.51	0.00	0.32
	Square-root	2	-139.94	283.89	0.37	0.27
	Piecewise	3	-139.18	284.36	0.85	0.21
	Inverse	2	-140.26	284.51	1.00	0.20
Clay-coloured Sparrow <i>Spizella pallida</i>	Linear	2	-75.71	155.41	0.00	0.48
	Square-root	2	-76.13	156.26	0.85	0.32
	Piecewise	3	-75.64	157.28	1.87	0.19
	Inverse	2	-79.76	163.52	8.11	0.01

Common Yellowthroat <i>Geothlypis trichas</i>	Piecewise	3	-102.25	210.50	0.00	0.98
	Linear	2	-107.44	218.89	8.38	0.01
	Square-root	2	-108.26	220.52	10.02	0.01
	Inverse	2	-109.05	222.11	11.61	0.00
Dark-eyed Junco <i>Junco hyemalis</i>	Piecewise	3	-115.86	237.72	0.00	0.47
	Inverse	2	-116.93	237.86	0.14	0.44
	Square-root	2	-118.91	241.81	4.09	0.06
	Linear	2	-119.54	243.08	5.35	0.03
Hermit Thrush <i>Catharus guttatus</i>	Piecewise	3	-96.92	199.85	0.00	0.67
	Inverse	2	-99.66	203.33	3.48	0.12
	Linear	2	-99.70	203.41	3.56	0.11
	Square-root	2	-99.76	203.52	3.68	0.11
Lincoln's Sparrow <i>Melospiza lincolnii</i>	Piecewise	3	-122.12	250.24	0.00	0.48
	Inverse	2	-123.61	251.22	0.98	0.29
	Square-root	2	-124.08	252.15	1.91	0.18
	Linear	2	-125.43	254.86	4.62	0.05
Ovenbird <i>Seiurus aurocapilla</i>	Inverse	2	-135.09	274.18	0.00	0.62
	Piecewise	3	-134.58	275.16	0.98	0.38
	Square-root	2	-140.04	284.07	9.89	0.00
	Linear	2	-142.90	289.79	15.61	0.00
Red-breasted Nuthatch <i>Sitta canadensis</i>	Piecewise	3	-76.04	158.07	0.00	0.44
	Square-root	2	-77.58	159.17	1.10	0.25
	Linear	2	-77.78	159.57	1.50	0.21
	Inverse	2	-78.47	160.94	2.87	0.10

Red-eyed Vireo <i>Vireo olivaceus</i>	Inverse	2	-124.78	253.57	0.00	0.39
	Piecewise	3	-123.88	253.76	0.19	0.35
	Square-root	2	-125.56	255.12	1.55	0.18
	Linear	2	-126.36	256.71	3.14	0.08
Ruby-crowned Kinglet <i>Regulus calendula</i>	Piecewise	3	-80.44	166.88	0.00	0.39
	Inverse	2	-81.64	167.28	0.40	0.32
	Square-root	2	-82.29	168.58	1.70	0.17
	Linear	2	-82.59	169.18	2.31	0.12
Swainson's Thrush <i>Catharus ustulatus</i>	Inverse	2	-184.60	373.19	0.00	0.30
	Square-root	2	-184.67	373.34	0.14	0.28
	Linear	2	-184.72	373.45	0.25	0.27
	Piecewise	3	-184.27	374.54	1.34	0.15
Tennessee Warbler <i>Leiothlypis peregrina</i>	Inverse	2	-260.16	524.31	0.00	0.33
	Square-root	2	-260.39	524.78	0.46	0.26
	Linear	2	-260.44	524.88	0.56	0.25
	Piecewise	3	-259.92	525.85	1.53	0.15
White-throated Sparrow <i>Zonotrichia albicollis</i>	Piecewise	3	-261.95	529.89	0.00	0.52
	Square-root	2	-263.92	531.83	1.94	0.20
	Inverse	2	-264.01	532.03	2.13	0.18
	Linear	2	-264.47	532.95	3.06	0.11
Yellow Warbler <i>Setophaga petechia</i>	Linear	2	-82.57	169.14	0.00	0.30
	Square-root	2	-82.60	169.20	0.06	0.29
	Inverse	2	-82.67	169.34	0.20	0.27
	Piecewise	3	-82.31	170.63	1.48	0.14

Yellow-rumped Warbler <i>Setophaga coronata</i>	Inverse	2	-133.19	270.38	0.00	0.31
	Piecewise	3	-132.42	270.84	0.46	0.25
	Square- root	2	-133.51	271.03	0.64	0.22
	Linear	2	-133.53	271.06	0.67	0.22