WETLAND WILDLIFE POPULATIONS

Wetland Wildlife Populations and Research

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2020 WATERFOWL BREEDING POPULATION SURVEY MINNESOTA

Due to Covid-19 restrictions this survey was not conducted.

WATERFOWL POPULATION STATUS, 2020.

Waterfowl information is taken from the U.S. Fish and Wildlife Service report Waterfowl Population Status, 2020 by Joshua Dooley and Nathan Zimpfer. The entire report is available on the Division of Migratory Bird Management website https://www.fws.gov/birds/surveys-and-data/reports-and-publiccations.php

Note: Due to the COVID-19 (SARS-CoV-2) pandemic, most migratory breeding surveys (e.g., the Breeding Waterfowl Population and Habitat Survey, Breeding Bird Survey, and others) conducted by the U.S. Fish and Wildlife Service, Canadian Wildlife Service, US Geological Survey, as well as state and provincial agencies were canceled in spring 2020. We therefore present no status information on any duck species as all the estimates or indices for ducks rely on these surveys. We refer the reader to the 2019 Waterfowl Status report for more detailed historical data.

MOURNING DOVE POPULATION STATUS, 2020

Mourning dove information is taken from the U.S. Fish and Wildlife Service report by Seamans, M.E. 2020. Mourning dove population status, 2020. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C. 23 pp. The entire report is available on the Division of Migratory Bird Management web site

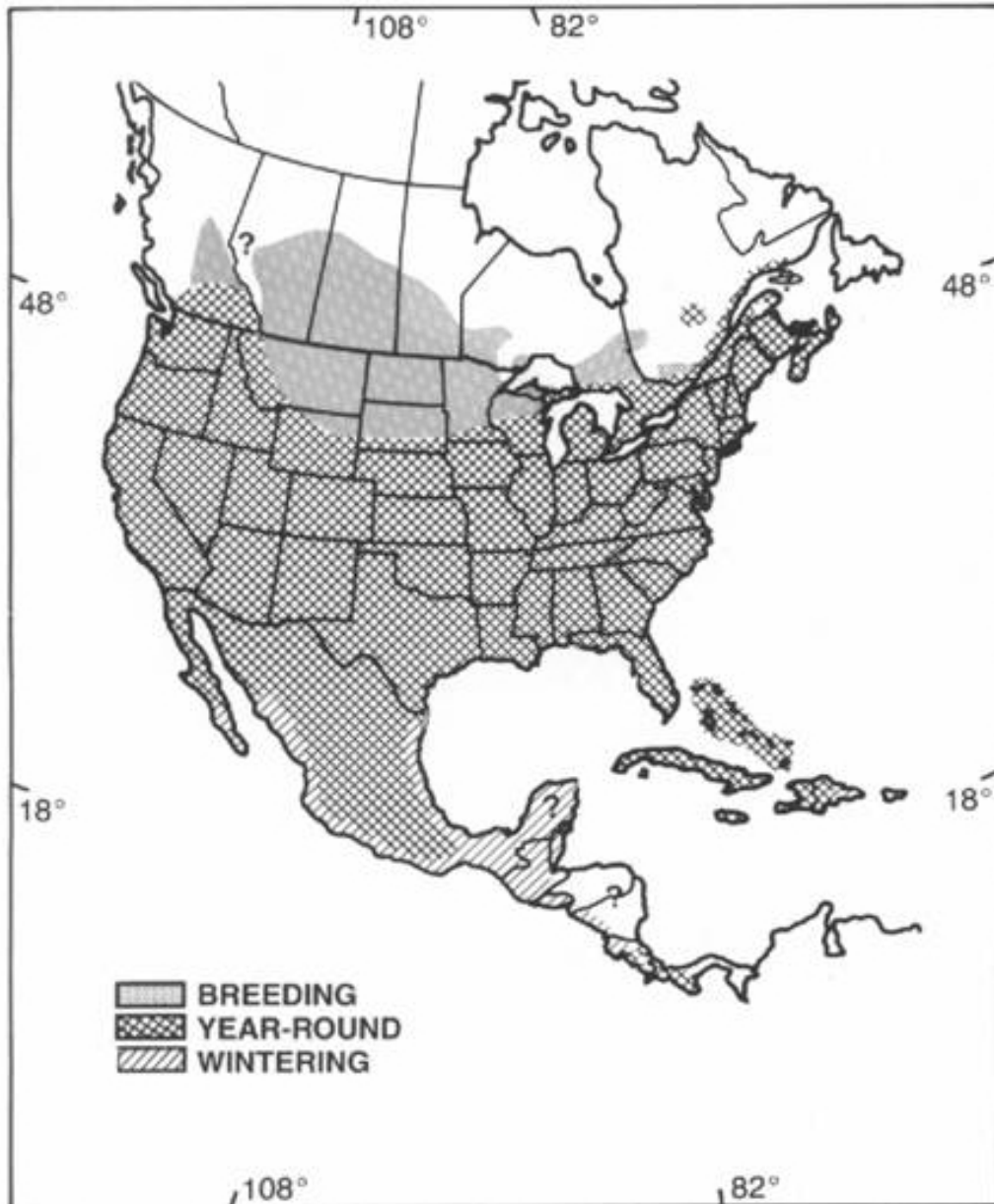([Mourning Dove Population Status 2020 (fws.gov)](#)).

Figure 1. Breeding and wintering ranges of the mourning dove (adapted from Mirarchi and Baskett 1994). (From: Seamans, M.E. 2020. Mourning dove population status, 2020. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C. 23 pp.)
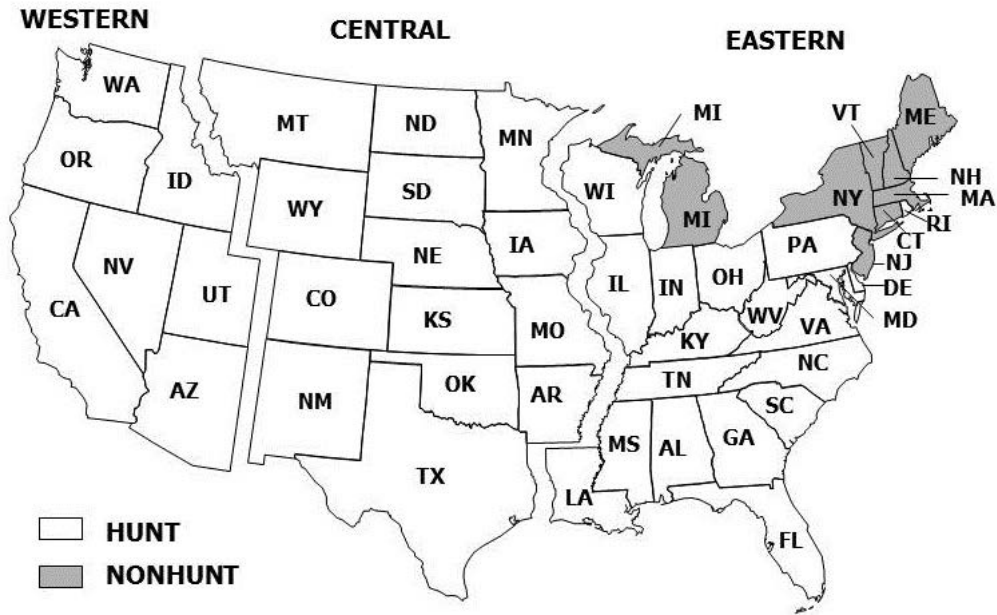
Figure 2. Mourning dove management units with 2019 -20 hunting and non-hunting states. (From: Seamans, M.E. 2020. Mourning dove population status, 2020. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C. 23 pp.)
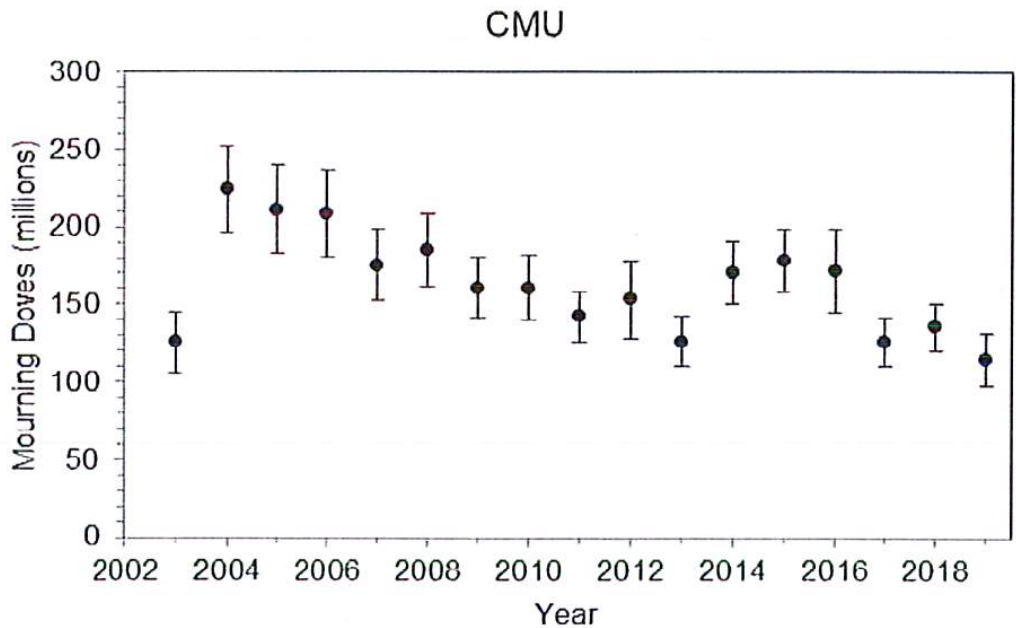

Figure 3. Estimates and 95% confidence intervals of mourning dove absolute abundance by in the Central Management Unit (CMU), 2003-19. Estimates based on band recovery and harvest data. (From: Seamans, M.E. 2020. Mourning dove population status, 2020. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C. 23 pp.)

Table 1. Preliminary estimates and 95% confidence intervals (CI, expressed as the interval half width in percent) of mourning dove harvest and hunter activity for the Central management unit during the 2017, 2018 and 2019 seasons [a]. (From: Seamans, M.E. 2020. Mourning dove population status, 2020. U.S. Department of the Interior, Fish and Wildlife Service, Division of Migratory Bird Management, Washington, D.C. 23 pp.)

Management unit / State	Active Hunters			Hunter Days Afield			Total Harvest		
	2017	2018	2019	2017	2018	2019	2017	2018	2019
CENTRAL	332,200 [a]	332,900	337,700[a]	1,058,800 ±11	852,100 ±53,100	986,800 ±50,800	5,462,800 ±10	4,749,100 ±283,900	5,266,400 ±335,500
AR	16,200 ±29	12,400 ±2,700	14,200 ±2,200	35,500 ±30	24,500 ±5,200	37,500 ±7,100	287,100 ±35	170,600 ±44,700	328,100 ±74,800
CO	11,300 ±19	10,000 ±1,200	10,700 ±800	24,100 ±20	20,200 ±2,700	22,800 ±2,000	117,600 ±25	121,500 ±17,300	106,300 ±9,50
IA	11,200 ±13	9,000 ±1,000	3,600 ±400	28,300 ±17	23,500 ±3,100	11,000 ±1,800	134,900 ±16	107,800 ±12,300	29,900 ±4,700
KS	21,800 ±24	22,900 ±4,100	22,300 ±1,900	58,300 ±35	44,300 ±7,800	64,800 ±8,500	290,600 ±34	337,600 ±75,000	389,800 ±64,200
MN	6,800 ±63	7,100 ±2,500	3,900 ±1,400	16,200 ±45	16,900 ±5,500	9,400 ±2,300	39,100 ±30	55,300 ±14,000	40,200 ±11,800
MO	27,400 ±13	26,000 ±2,300	21,100 ±1,500	65,700 ±16	48,300 ±4,400	47,100 ±3,800	367,200 ±18	309,400 ±37,800	268,000 ±28,400
MT	1,300 ±57	1,200 ±400	1,600 ±400	2,200 ±63	3,500 ±1,100	3,600 ±800	8,900 ±45	9,800 ±2,200	16,600 ±4,600
NE	12,300 ±16	11,600 ±1,300	10,700 ±1,000	31,000 ±15	33,700 ±4,900	24,500 ±2,500	177,900 ±16	189,100 ±33,800	137,700 ±14,100
NM	5,500 ±57	9,900 ±1,000	8,300 ±700	16,800 ±70	28,200 ±3,400	28,800 ±4,100	73,900 ±51	126,900 ±20,100	125,400 ±22,000
ND	4,100 ±26	3,900 ±600	4,100 ±500	11,400 ±31	11,800 ±2,800	11,900 ±2,000	59,400 ±26	65,200 ±15,100	75,000 ±19,500
OK	17,500 ±16	13,600 ±2,100	14,800 ±1,200	45,600 ±24	29,200 ±4,600	38,000 ±4,200	315,600 ±29	181,300 ±30,500	247,900 ±26,700
SD	5,700 ±22	4,900 ±600	4,700 ±600	18,400 ±26	11,500 ±1,600	15,500 ±2,700	111,600 ±31	69,400 ±10,600	103,300 ±19,100
TX	190,500 ±13	199,100 ±18,100	216,300 ±13,100	703,300 ±17	553,200 ±51,000	669,000 ±48,800	3,469,500 ±14	2,990,400 ±260,900	3,385,000 ±315,600
WY	700 ±42	1,400 ±300	1,300 ±200	2,200 ±84	3,200 ±700	2,800 ±500	9,400 ±57	14,800 ±3,100	13,200 ±2,200

[a] Hunter number estimates at the Management Unit and national levels may be biased high, because the HIP sample frames are state specific; therefore hunters are counted more than once if they hunt in >1 state. Variance is inestimable.

[b] No estimate available.

AMERICAN WOODCOCK POPULATION STATUS, 2020

American Woodcock information is taken from the U.S. Fish and Wildlife Service report American Woodcock Population Status, 2020. Seamans, M.E. and R.D. Rau. U.S. Fish and Wildlife Service, Laurel, MD. 8 pp.

Note: Due to SARS-CoV-2 (i.e., coronavirus) related restrictions in Canada and the U.S. only a small portion of Singing-ground Survey routes were surveyed in 2020. The small and spatially uneven sample was not thought to be a representative sample, therefore no results from the 2020 survey are presented in this report.

The entire report is available on the Division of Migratory Bird Management home page U.S. Fish & Wildlife Service - Migratory Bird Program | Conserving America's Birds (fws.gov)
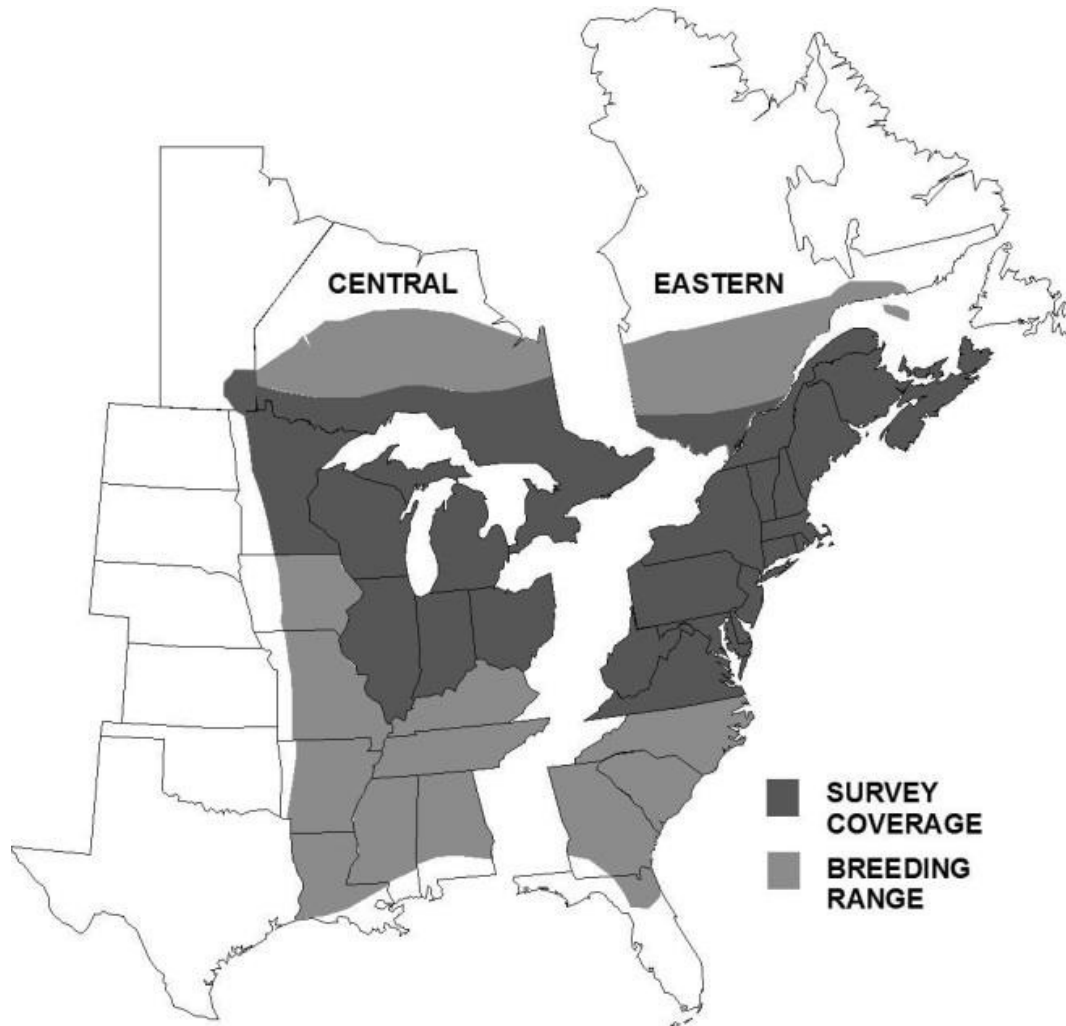

Figure 1. Woodcock management regions, breeding range, singing-ground survey coverage. (from: Seamans, M.E. and R.D. Rau. 2020. American woodcock population status, 2020. U.S. Fish and Wildlife Service, Laurel, MD. 8 pp.).

Table 1. Short term (2018–19), 10 –year (2009-2019), and long-term (1968-2019) trends (% change per year [a]) in the number of American woodcock heard during the Singing-ground Survey as determined by using the hierarchical log-linear modeling technique (Sauer et al. 2008) (from: Seamans, M.E. and R.D. Rau. 2019. American woodcock population status, 2019. U.S. Fish and Wildlife Service, Laurel, MD. 20 pp.).

Management Unit/State	Number of Routes[b]	n[c]	2018-19			2009-19			1968-19		
			% Change	95% CI[d]		% Change	95% CI[d]		% Change	95% CI[d]	
				lower	upper		lower	upper		lower	upper
CENTRAL	481	758	3.43	-3.70	11.14	-0.78	-1.62	0.02	-0.89	-1.12	-0.68
IL	27	47	-1.65	-67.59	203.75	-1.51	-11.05	9.26	-1.09	-3.69	1.66
IN	15	62	-13.99	-52.05	36.86	-3.96	-9.08	1.16	-4.10	-5.34	-3.02
MB[e]	19	30	5.33	-21.14	43.99	0.65	-2.56	4.18	0.18	-1.35	1.65
MI	114	158	12.23	-1.26	27.79	-0.67	-2.03	0.69	-1.01	-1.36	-0.67
MN	87	124	-6.43	-20.03	9.72	0.43	-1.22	2.15	0.49	-0.06	1.07
OH	35	73	6.44	-14.14	39.11	-1.65	-4.21	0.84	-1.45	-2.16	-0.74
ON	87	166	-3.32	-17.62	12.65	-2.24	-4.17	-0.37	-1.32	-1.77	-0.88
WI	97	128	11.76	-5.08	31.76	-0.21	-1.61	2.08	-0.26	-0.72	0.20

[a] Median of route trends estimated used hierarchical modeling. To estimate the total percent change over several years, use: $100(\% change/100+1)^y)-100$ where y is the number of years. Note: extrapolating the estimated trend statistic (% change per year) over time (e.g., 30 years) may exaggerate the total change over the period.

[b] Total number of routes surveyed in 2019 for which data were received by 10 July, 2019.

[c] Number of routes with at least one year of non-zero data between 1968 and 2019.

[d] 95% credible interval, if the interval overlaps zero, the trend is considered non-significant.

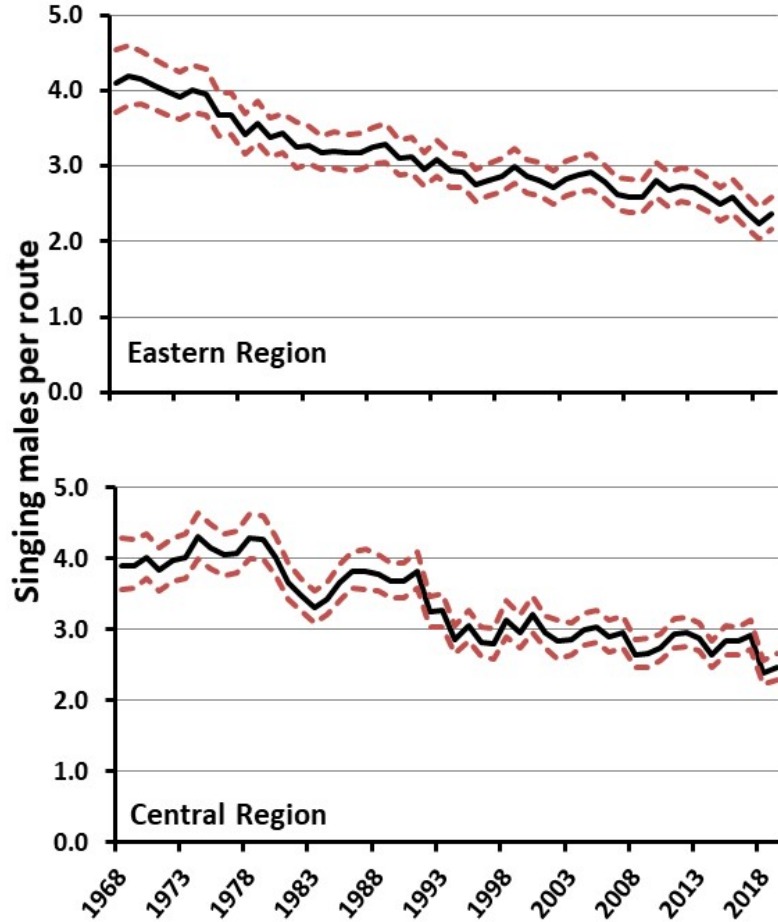[e] Manitoba began participating in the Singing-ground survey in 1992.

Figure 2. Annual indices of the number of woodcock heard on the Singing-ground Survey, 1968-2019. The dashed lines represent the 95 % credible interval. (from: Seamans, M.E. and R.D. Rau. 2019. American woodcock population status, 2019. U.S. Fish and Wildlife Service, Laurel, MD. 20 pp.).
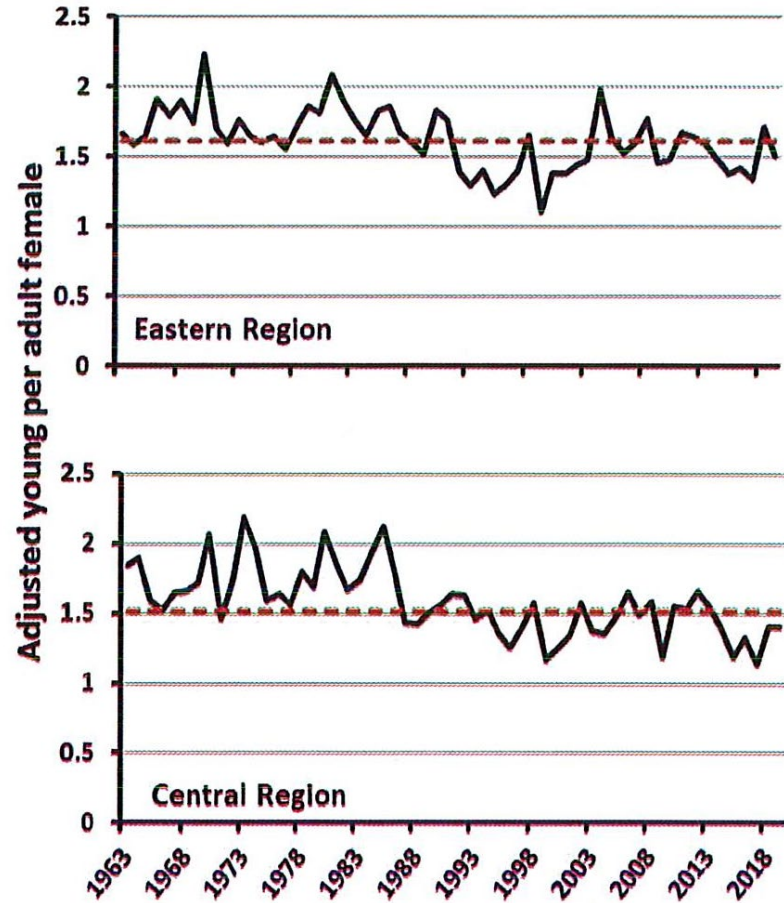
Figure 3. Weighted annual indices of American woodcock recruitment, 1963-2018. Dashed line is the 1963-2018 average. (from: Seamans, M.E. and R.D. Rau. 2020. American woodcock population status, 2020. U.S. Fish and Wildlife Service, Laurel, MD. 8 pp.).

Table 2. Preliminary estimates of woodcock hunter numbers, days afield, and harvest for selected states, from the 2016-17, 2017-18, 2018-19 and 2019-20 Harvest Information Program surveys. (from: Seamans, M.E. and R.D. Rau. 2020. American woodcock population status, 2020. U.S. Fish and Wildlife Service, Laurel, MD. 8 pp.).

Management Unit / State	Active woodcock hunters [a]				Days afield [a, c]				Harvest [a, c]			
	2016-17	2017-18	2018-19	2019-20	2016-17	2017-18	2018-19	2019-20	2016-17	2017-18	2018-19	2019-20
Central Region	n.a. [b]	n.a. [b]	n.a. [b]	n.a. [b]	300,200 ±32,500	272,400 ±22,800	246,000 ±35,800	216,600 ±24,500	158,000 ±16,300	140,900 ±15,500	130,600 ±16,400	136,000 ±18,900
IL	1,500 ±1,000	100 <100	<100 <100	2,300 ±1,600	13,200 ±11,000	300 ±100	100 ±100	11,300 ±9,300	1,600 ±1,400	400 ±300	0 0	3,400 ±3,400
IN	300 ±200	1,100 ±400	100 <100	500 ±300	1,300 ±500	2,900 ±1,000	200 ±100	1,100 ±500	900 ±200	1,500 ±1,100	200 ±100	400 ±100
MI	24,100 ±2,300	24,100 ±2,300	29,300 ±3,700	19,100 ±2,400	107,100 ±11,600	122,800 ±15,200	135,800 ±31,900	86,100 ±12,600	64,900 ±8,600	66,100 ±10,300	59,600 ±10,400	64,500 ±15,200
MN	13,500 ±2,300	11,900 ±2,100	10,400 ±2,100	8,700 ±1,900	46,000 ±8,200	45,700 ±8,200	41,500 ±9,700	29,300 ±5,700	25,900 ±4,700	26,700 ±5,000	22,500 ±3,900	20,800 ±4,500
OH	2,600 ±900	1,900 ±800	500 ±100	1,100 ±900	8,200 ±3,700	5,000 ±1,800	800 ±300	2,400 ±1,000	3,200 ±1,300	400 ±200	600 ±400	700 ±300
WI	11,700 ±1700	11,700 ±1,800	10,800 ±2,100	9,500 ±1,700	55,100 ±8,900	52,400 ±7,700	45,900 ±9,300	47,000 ±9,400	35,100 ±4,400	31,100 ±4,600	25,500 ±4,300	26,800 ±5,300

[a] All 95% Confidence Intervals are expressed as a % of the point estimate.

[b]. Regional estimates of hunter numbers cannot be obtained due to the occurrence of individual hunters being registered in the Harvest Information Program in more than one state.

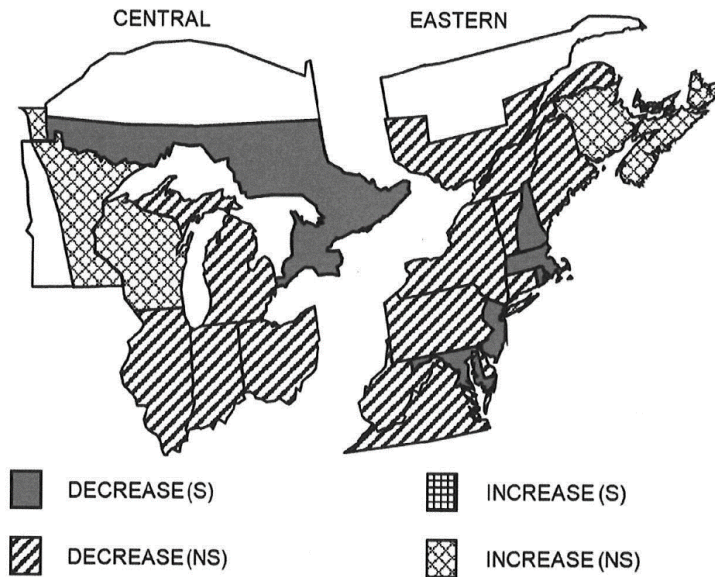[c]. Days afield and Harvest estimates are for the entire 18 state Central Region.

Figure 4. Ten-year trends in number of American woodcock heard on the Singing-ground Survey; 2009-19, as determined by the hierarchical modeling method. A significant trend (S) does not include zero in the 95% credible interval, while a non-significant (NS) trend does include zero. (from: Seamans, M.E. and R.D. Rau. 2019. American woodcock population status, 2019. U.S. Fish and Wildlife Service, Laurel, MD. 20 pp.).
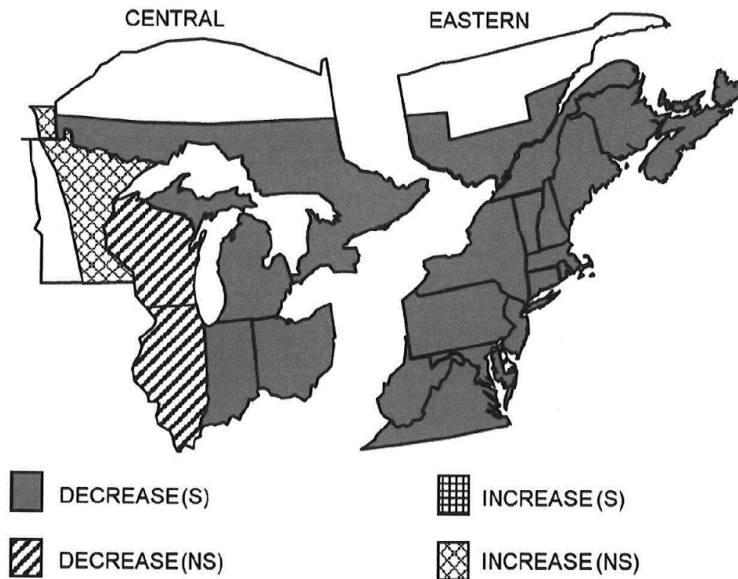

Figure 5. Long-term trends in number of American woodcock heard on the Singing-ground Survey; 1968-2019, as determined by the hierarchical modeling method. A significant trend (S) does not include zero in the 95% credible interval, while a non-significant (NS) trend does include zero. (from: Seamans, M.E. and R.D. Rau. 2019. American woodcock population status, 2019. U.S. Fish and Wildlife Service, Laurel, MD. 20 pp.).