

2023 August Quail and Pheasant Roadside Survey Results

Northern Bobwhite Abundance

Conservation Agents conducted roadside counts of bobwhite quail from August 1-15 in 108 of Missouri's 114 counties. Clay, Jackson, St. Louis counties are not included because they are high density urban areas near Kansas City and St. Louis. Surveyors count the number of quail observed while driving ≤ 20 miles per hour along permanent 30-mile gravel road routes. Participants are instructed to conduct counts beginning at sunrise on clear, dewy mornings with light winds to increase chances that bobwhite will be near roadsides. These observations are used to provide an index of quail abundance across the landscape. Because only a small portion of each county is sampled, the index best represents quail population trends at large scales, such as statewide and multi-county blocks such as the zoogeographic region. The statewide long-term trend of the index closely follows other large-scale indices of abundance, including the North American Breeding Bird Survey (BBS) and Missouri quail harvest estimates. The roadside survey routes are run almost entirely through private land, so the quail index is representative of conditions on Missouri's private lands.

This year's statewide index of 1.13 quail per 30-mile route is 29% higher than last year's index of 0.87. Mild winter weather and extremely dry conditions during the nesting season allowed quail to have better reproduction this year. In areas where habitat is good, quail production has been above normal.

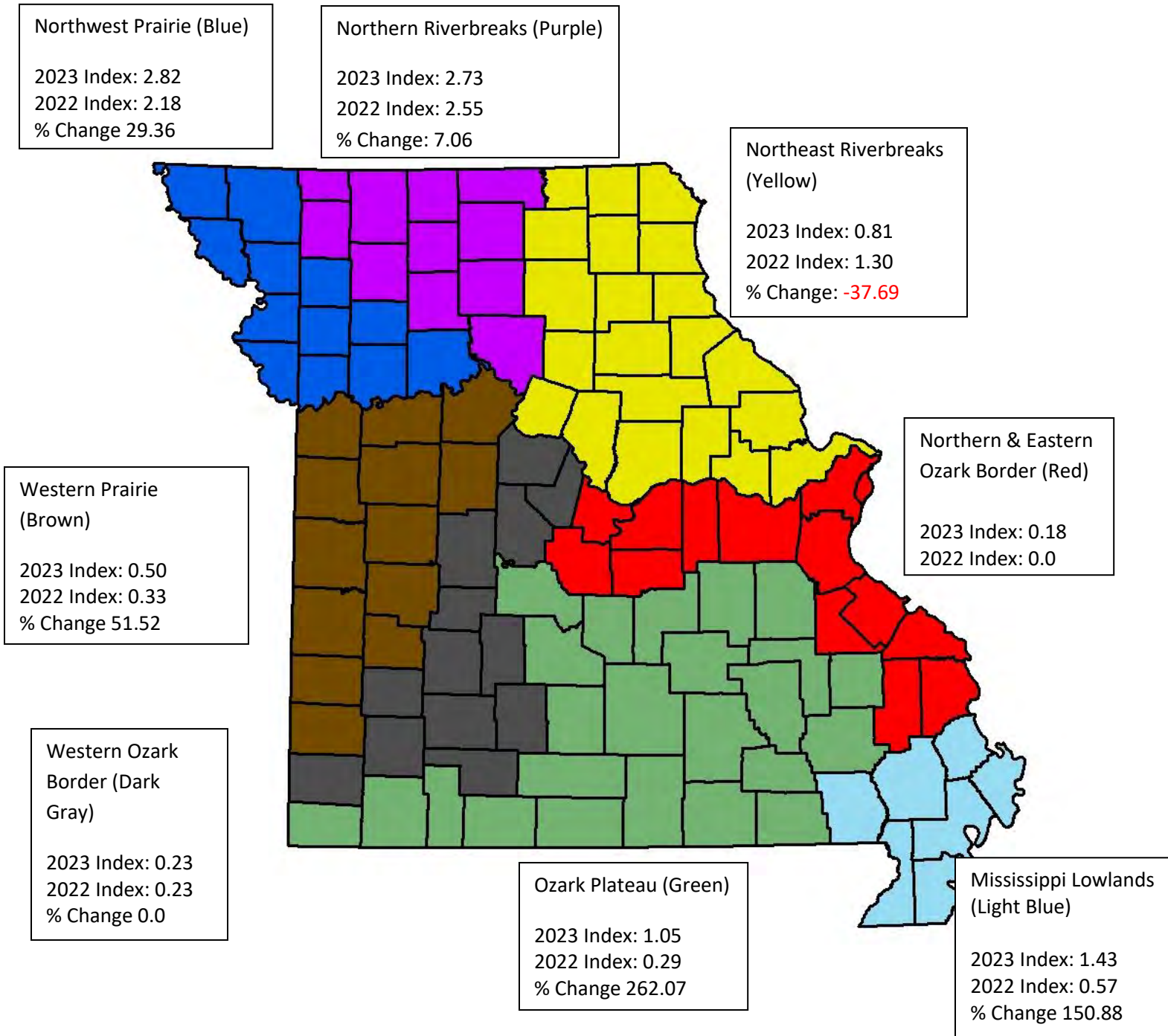
Ring-necked Pheasant Abundance

The Conservation Agents' Roadside Survey counts the number of pheasants observed along 72 standardized 30-mile routes (a subset of the routes sampled for bobwhites) during August 1-15. The 2023 survey showed slight decline in Missouri's pheasant population. The 2023 statewide count of 0.36 pheasants per 30-mile route was down 10% compared to 2022. The pheasant range in Missouri is limited to the northern third of the state. Pheasants should have had good overwinter survival and nesting conditions this year as well.

Average number of quail counted per 30-mile route by Conservation Agents in 108 counties during August 1-15, 2023.

Zoogeographic Region	# of counties run in 2023	# of Quail Counted 2023	# of Quail Counted 2022	% Change 2022-2023
Northwest Prairie	11	2.82	2.18	22.69
Northern Riverbreaks	11	2.73	2.55	7.06
Northeast Riverbreaks	21	0.81	1.30	-37.69
Western Prairie	12	0.50	0.33	51.52
Western Ozark Border	13	0.23	0.23	0.00
Ozark Plateau	22	1.05	0.29	262.07
Northern and Eastern Ozark Border	11	0.18	0.00	.
Mississippi Lowlands	7	1.43	0.57	150.88
Statewide	108	1.13	0.87	29.89

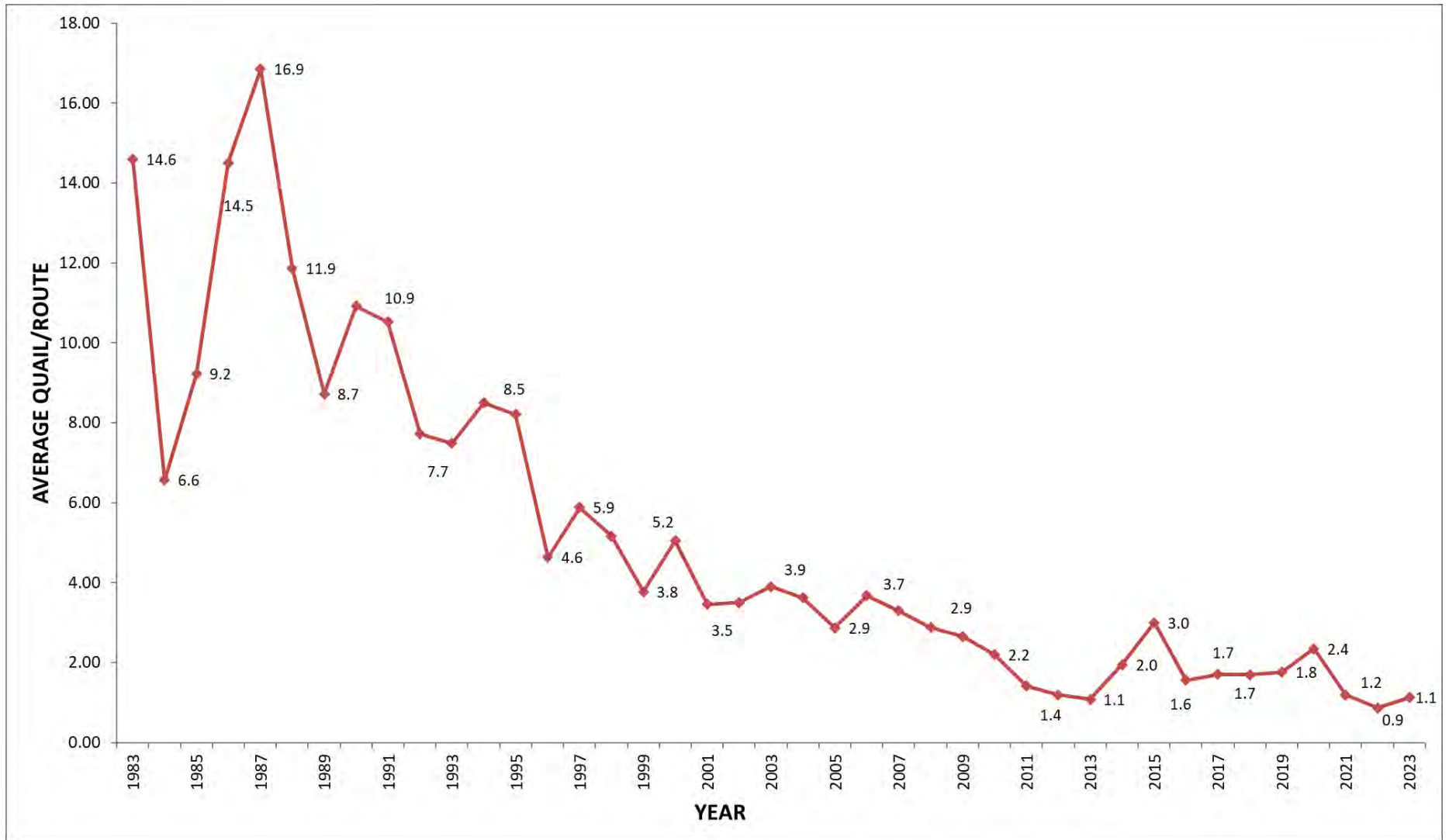
Map of zoogeographic regions in Missouri showing the 2023 and 2022 quail roadside index and the 2-year percent change.



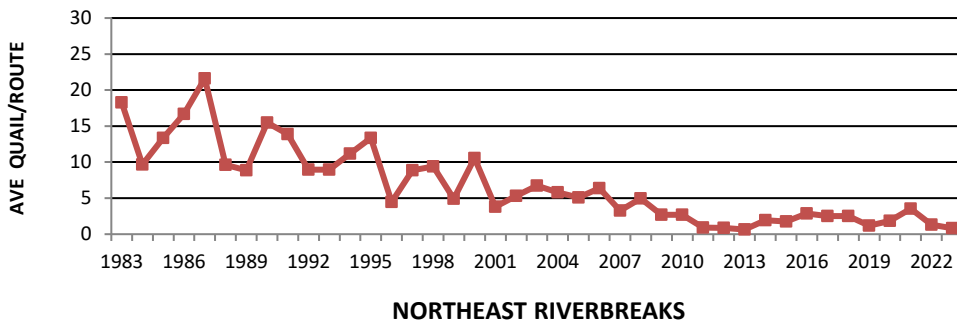
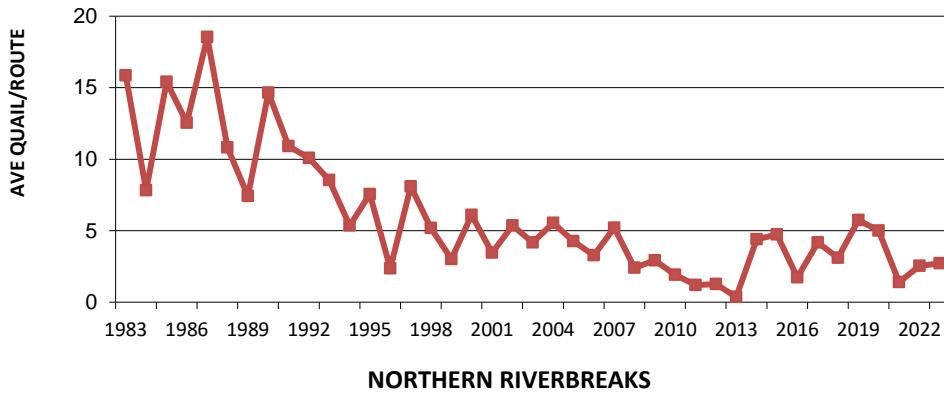
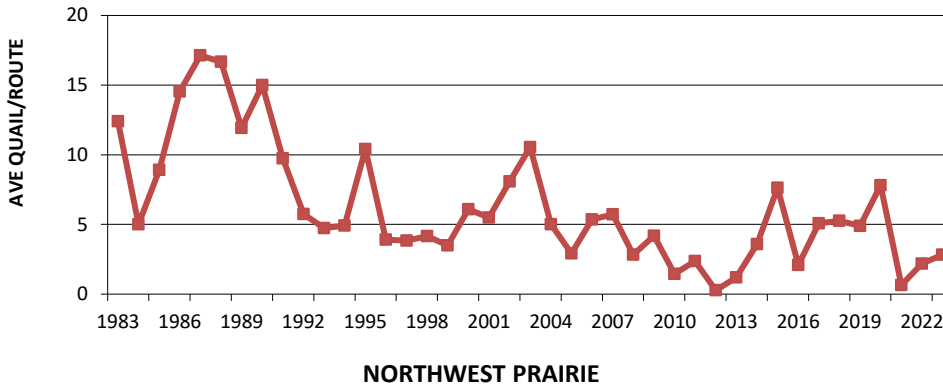
Average number of pheasants counted per 30-mile route by Conservation Agents along 72 routes during August 1-15, 2023.

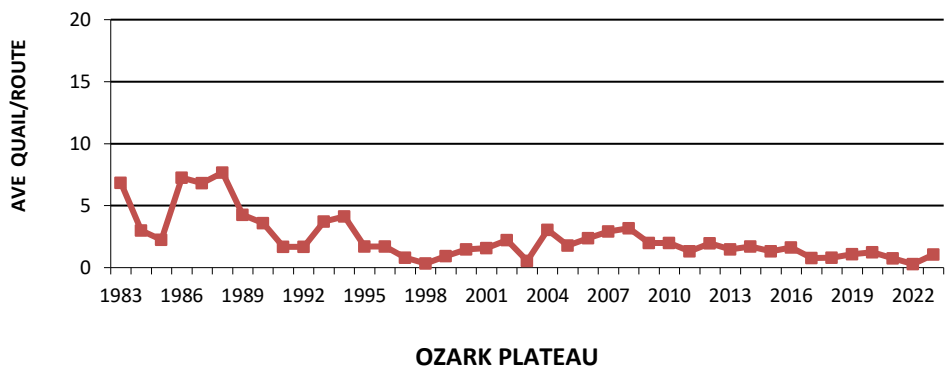
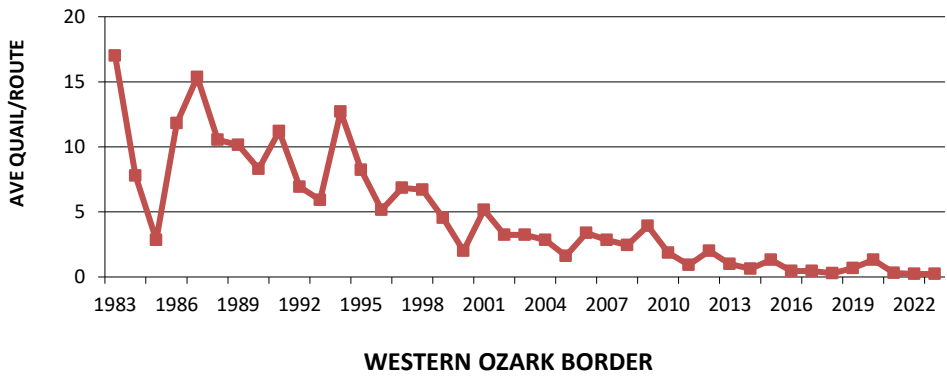
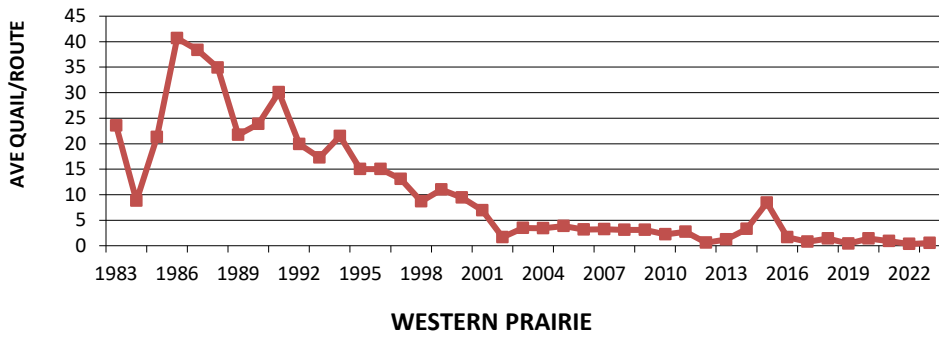
Zoogeographic Region	# of routes run in 2023	# of Pheasants Counted 2023	# of Pheasants Counted 2022	% Change 2022-2023
Northwest Prairie	18	0.00	1.11	-100.00
Northern Riverbreaks	21	0.52	0.33	57.58
Northeast Riverbreaks	24	0.63	0.04	1,475.00
Western Prairie	3	0	0	.
Mississippi Lowlands	6	0	0	.
Statewide	72	0.36	0.40	-10.00

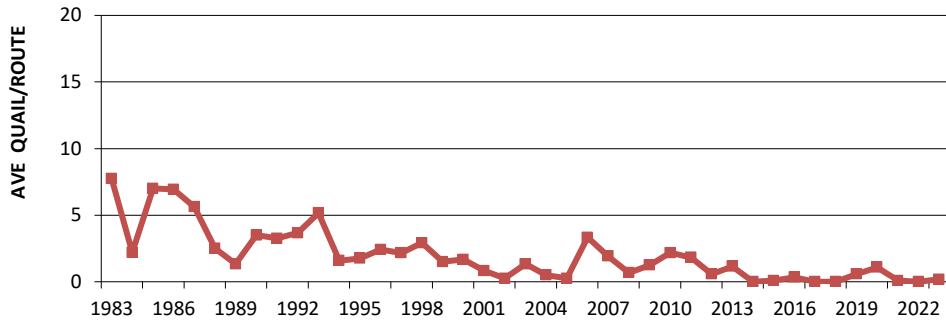
Average number of quail observed per route on the August Roadside Survey from 1983-2023.



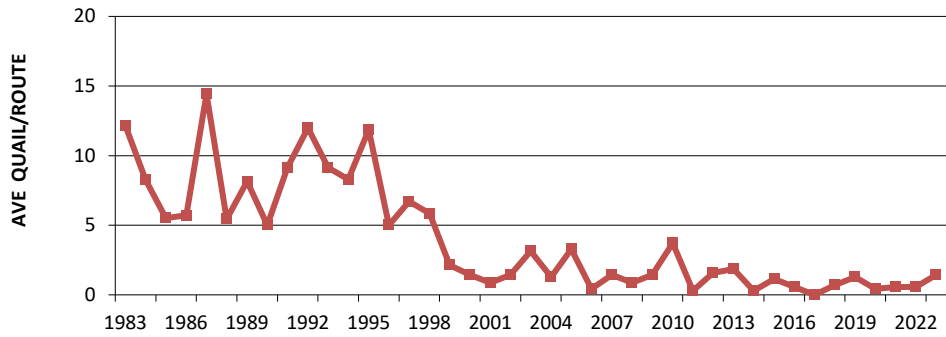
Average number of quail per route by zoogeographic region from 1983-2023.







NORTHERN AND EASTERN OZARK BORDER



MISSISSIPPI LOWLANDS