

THE RISE AND FALL OF THE MISSOURI WILD TURKEY

Missouri Wild Turkey Mecca Rest in Peace

THE STATE OF THE MISSOURI WILD TURKEY



By: Missouri Conservationist, Missouri Landowner, Missouri Wild Turkey Hunter

1988 - The major objective in Missouri's Turkey Season has been to provide maximum hunting opportunity commensurate with the population's ability to sustain harvest.

2001 - No.1 goal for Missouri Wild Turkey is Quality Turkey Hunting. - Lots of adult gobbling birds.

2021 – Goal is Maximum hunting opportunity and hunter retention.

April 28, 2021 - We recognize that turkey numbers are down in your area, as they are in much of the state. Turkey abundance appears to be driven primarily by production, and unfortunately, turkey production in Missouri has exhibited a declining trend over the past several decades and has been especially poor in recent years. Even though the turkey population in your area is lower than it once was, there are enough turkeys for the population to rebound given "SEVERAL YEARS" of good production.

MISSOURI WILD TURKEY WORKSHOP

February 2001 – Missouri Wild Turkey Management Workshop – Given by the Missouri Department of Conservation - Dr. Michael Hubbard – MDC Wild Turkey Biologist (Currently Deputy Director)

The Missouri Department of Conservation - No.1 goal for Missouri Wild Turkey is Quality Turkey Hunting. - Lots of adult gobbling birds.

The two biologists that can be recognized for Missouri great success in eastern wild turkey restoration are John B. Lewis and Dr. Larry Vangilder.

FY 2001 Missouri wild turkey population is estimated to be between 500,000 to 600,000 birds. Which could possibly be the largest population for any state.

An extensive survey that went out to turkey hunters several years ago came up with a few numbers you might find interesting.

- A. Only 4% of the hunter's question felt that check-in stations were a bad idea.
- B. 77% of the hunter's question felt that having no check in stations was a bad idea.
- C. 55% of the birds taken in 1995 had longer than 1" spurs.
- D. In 1994 over 15 million dollars was the spent by turkey hunters.
- E. The majority of hunter's want quality adult birds to hunt. Instead of a liberal season.

The season opens Monday closest to April 21st. This corresponds to the historical records of the second peak Missouri Ozark Gobbling. This is the biological reason for the opening day. Which may lead to the great successes in turkey population because the hens get to breed with the dominate birds with the first peak gobbling.

For winter survival a winter food source must be available, like hard mast - acorns. Which in the south most of the time does not have a problem with this.

It has also been found that not only the know predators take out nest like the fox, coyote, skunk, opossum, but snakes, ground squirrels, gray and red squirrels also contribute to the mortality rate.

HISTORY OF MISSOURI SEASON

Missouri was the TURKEY HUNTING MECCA in the early 2000's highlighted in every magazine, outdoor TV show and even in the Missouri Conservationist. Home of 500,000 to 600,000 Wild Turkeys

The biologists that can be recognized for Missouri great success in eastern wild turkey restoration are – A. Starker Leopold, John B. Lewis, and Dr. Larry Vangilder.

1952 - Peck Ranch still had wild turkeys on it, despite declines elsewhere. It was initially purchased because it was one of the few areas left with an eastern turkey population.” In 1952, the final tracts of what would become Peck Ranch CA were acquired for turkey restoration. These tracts included the fenced refuge, roughly 11,000 acres. From 1954 to 1979, turkeys trapped at Peck Ranch and other areas of the state were relocated to 142 sites in 87 counties. The area served white tailed deer repopulation efforts as well in those early years.

1960 First spring season; 3 days, 14 counties – Why because the Wild Turkey population was still in growth to have, had a 3-week season and early youth season, fall season and an archery season with crossbows! To be able to kill 6 wild turkeys a year!!! Could be 2 gobblers and 4 hens a year!

1960-72 Spring season expanded (4 times) to 14 days – As the wild turkey population grows the season expanded, but as population decline nothing allowed to change!

1974 - Bag limit reduced to 1 bird due to poor hatch in 1973. History shows 500-year flood in 73.

1975 First fall archery season - As the wild turkey population grows the added a season, but as population decline nothing allowed to change!

1978 First fall firearms season - As the wild turkey population grows the added a season, but as population decline nothing allowed to change!

1985 Spring season expanded to all 114 counties - As the wild turkey population grows the season expanded, but as population decline nothing allowed to change!

1998 Spring season extended from two to three weeks - As the wild turkey population grows the season expanded, but as population decline nothing allowed to change!

2001 First spring youth season - Research dictated that if we are to guard against overharvest of mature gobblers, the spring season must begin after the peak in breeding activity in early April.

MISSOURI YOUTH SEASON GOES AGAINST THE VERY BIOLOGICAL REASON FOR THE DAY THE SEASON OPENS - The season opens Monday closest to April 21st. This corresponds to the historical records of the second peak Missouri Ozark Gobbling. This is the biological reason for the opening day.

Which may lead to the great successes in turkey population because the hens get to breed with the dominate birds with the first peak gobbling.

So Biological Reason no longer exist - Why not open the season the SATURDAY AND SUNDAY before the Monday closets to April 21st for Biological Reason! (Example too early: April 4 and 5 – 2020 Youth Season)

As the wild turkey population grows the season expanded, but as population decline nothing allowed to change!

2021 – 20-year decline in Wild Turkey Population and Harvest - As the wild turkey population grows the season expanded, but as population decline nothing allowed to change! WHY?

MAINTAIN A BALANCE

BREAKING NEWS – Missouri will reduce bag limit of Spring Wild Turkey due to poor hatch.

Published in the Missouri Conservationist in April 1974

1974 - Bag limit reduced to 1 bird due to poor hatch in 1973 – History shows 500-year flood in 73.

1974 - The Department's major objective is the management of the wild turkey resource is to provide maximum hunting opportunity commensurate with the turkey population's ability to sustain harvest.

To maintain a balance approximately 2.5 poults per hen must be produce.

When this ratio drops below 2.5 a population is decline indicated and when it goes above 2.5 an increase occurs.

The Adult / Juvenile ratio dropped in 1973 to 1:1.9 and that is why two bird limit was dropped in 1974.

Did you know in 1974 the Missouri Department of Conservation thru a simple regulation change to the bag limit reduction of 1 bird, due to poor hatch in 1973 to protect Missouri Wild Turkey Population.

Here is what responsible Missouri Wild Turkey Management looks like this article is full of great information on every page. Should be republished today "AS IS"

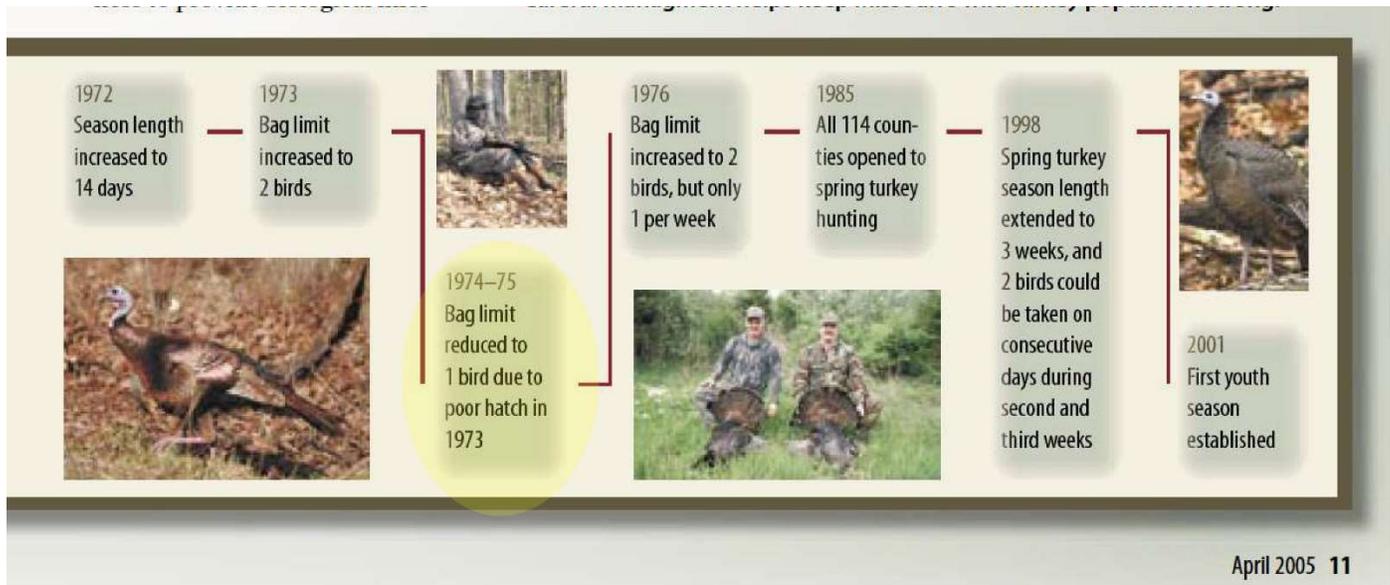
Missouri Formula for Wild Turkey – Why is hunting so good in Missouri?

Published in the Missouri Conservationist in April of 2005

"We have formulated regulations to provide ample hunting and viewing opportunities WITHOUT IMPACTING POPULATION GROWTH"

https://mdc.mo.gov/sites/default/files/mdcd7/magazine/2010/03/3279_digital.pdf

You will want to look at the Graphic on Page 11



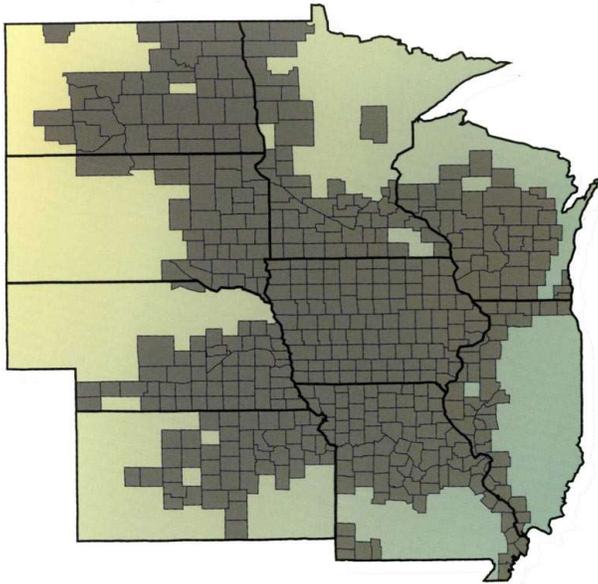
What's NOT in the article.

What happened in 1973 - 500-Year Flood - Missouri's final damage assessment was \$396 million.

In addition to figures for total damage, estimates for acreage damaged by this year's flooding were also reported. According to the Agricultural Stabilization and Conservation Service (ASCS) in Missouri, about 3 million acres were damaged by flooding Missouri Counties Declared Federal Disaster Areas.

Missouri's corn production in 1993 was projected to be 42 percent less than 1992's crop.

Missouri's soybeans production 1993 was projected to be 22 percent less than 1992's crop.



Since 1974 – Missouri ALL Poor Hatch/Wild Turkey Population Decline has been ignored by simple regulation changes over Hunting Opportunity and Hunter Recruitment.

THE WILD TURKEY IN MISSOURI

Published in 1988 revised in 1993 by the Missouri Department of Conservation

It is too bad that Wild Turkey Publication has been lost to history.

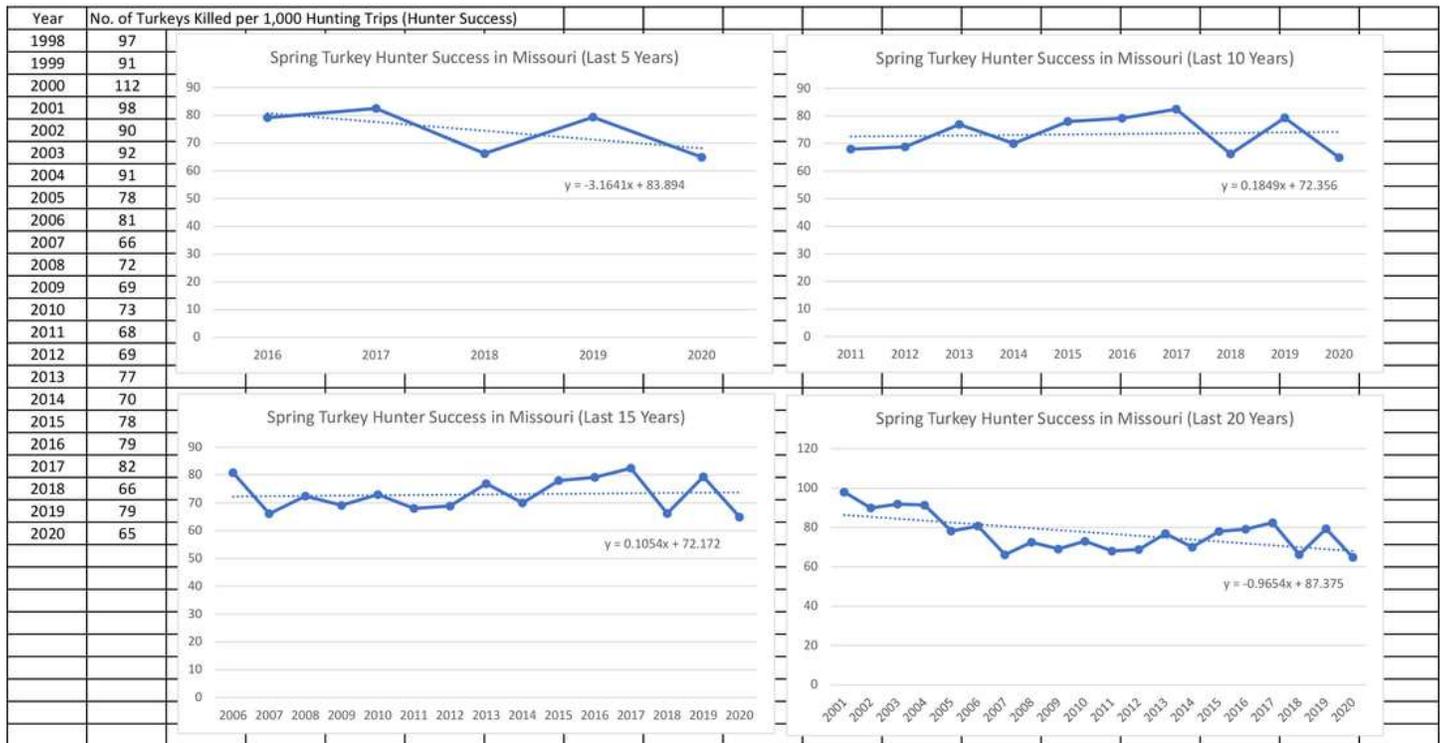
Highlights:

1. During the First 3 weeks of life, young turkeys (poults) are vulnerable to cold, rainy weather and must depend on the older hen for protection and warmth. In addition, young turkeys may be preyed on by foxes, coyotes, bobcats, or great horned owls.
2. Increase in season length occurred at the turkey population grew.
3. Acorns are the most important food for wild turkeys. In Missouri acorns are eaten by turkeys in every month of the year, and more than a third of their diet consist of acorns in the fall and winter.
4. The major objective in Missouri's Turkey Season has been to provide maximum hunting opportunity commensurate with the population's ability to sustain harvest.
5. Missouri also made important contributions to restoration programs of other states by swapping Missouri Wild Turkeys for other wildlife species. Since the early 1960s, Missouri has traded turkeys for ruffed grouse, otters, pheasants, prairie chickens and various fishes.

Missouri Wild Turkey Harvest Summary- 1841 thru 2021

Turkey Harvest	Youth Harvest	Year	Total Permits	Notes
34,593	2,771	2021	124,808	Lowest Harvest in History of 3-week Season
41,458	2,724	2020	135,263	Covid – Other States Closed hunting to Non-Residents - 20 Acres Req. Landowners
38,776	2,546	2019	129,348	3rd Lowest Harvest in History of the 3-week Season
35,787	1,729	2018	135,218	2nd Lowest Harvest in History of the 3-week Season - Lowest Youth Harvest
43,356	4,012	2017	142,596	
48,374	4,167	2016	150,102	
48,432	4,441	2015	154,251	Highest Youth Harvest
47,601	4,332	2014	153,665	
46,141	3,915	2013	160,656	
44,766	4,319	2012	142,637	
42,220	3,898	2011	143,263	
46,194	3,945	2010	148,101	
44,713	2,884	2009	156,654	
46,134	2,898	2008	160,340	
48,472	3,545	2007	161,640	
54,712	3,694	2006	158,877	
57,743	3,894	2005	161,031	Landowner permits required in 2005 - before resident landowners hunted without permit
60,744	3,258	2004	124,898	Most Turkeys ever killed
58,421	3,660	2003	130,215	
53,932	3,102	2002	125,542	
55,302	2,530	2001	117,888	2001 First Youth Season - Youth Harvest Totals Included in Turkey Harvest Numbers
56,841		2000	113,698	
50,299		1999	109,888	
48,462		1998	105,518	1998 Spring season extended from TWO to THREE weeks
33,216		1997	95,848	Two Week Season
37,708		1996	95,801	Two Week Season
37,472		1995	99,412	Two Week Season
37,721		1994	90,703	Two Week Season
34,342		1993	89,899	Two Week Season
33,035		1992	89,720	Two Week Season
32,237		1991	89,025	Two Week Season
30,056		1990	92,904	Two Week Season
35,618		1989	92,214	Two Week Season
33,187		1988		Two Week Season
35,951		1987	85,723	Two Week Season
30,965		1986	77,972	Two Week Season
24,770		1985	69,950	114 Counties - Two Week Season - 1985 Spring season expanded to all 114 counties
16,722		1980	55,565	Two Week Season - 93 Counties Open
		1979		Restoration of the Wild Turkey Ended in Missouri
		1978		89 counties for spring season - 1978 - 12 day - First fall firearms season for 40 Counties
9,966		1977		
7,851		1976		Two Week Season - 2 Bird Limit
5,546		1975	28,619	Two Week Season - 2 Bird Limit - 74 Counties - 1975 1st fall archery season for 74 Counties
		1974		Season Bag Limit Reduce to poor hatch in 1973 because of 500 year flood
5,739		1973		1973 - 13 Day Season - First Two Bag Limit - 63 Counties Open
4,400		1972		
2,864		1971		
1,607		1970	10,073	7 Day Season - 1 Bird Limit -32 Counties Open
		1967		7 Day Season - 1 Bird Limit -32 Counties Open
572		1966	4,275	5 Day Season - 1 Bird Limit - 29 Counties Open
476		1965	2,982	4 Day Season - 1 Bird Limit - 25 Counties Open
94		1960	779	3 Day Season - 1 Bird Limit - 1960 First spring season - 14 Counties Open
		1953		Restoration of the Wild Turkey Started in Missouri
		1940		12,000 Artificially reared Wild Turkey have been released.
		1938		Missouri Wild Turkey Season Closed State Wide - Steps to restore started
		1931		Wild Turkey Season reduced to the month of December - 1 bird limit
		1925		Artificially reared Wild Turkey started being released.
		1909		Wild Turkey Season was reduced to 2 months with 2 bird bag limits and 4 for season
		1907		Wild Turkey Season was increase to 3 months
		1895		Wild Turkey Season was reduced to 2 months
		1874		Wild Turkey season was reduced to 7 months no bag limit
		1841		Wild Turkey was worth 10 cents if it was dressed and ready to cook

MISSOURI WILD TURKEY HUNTER SUCCESS - 1998 THRU 2020



SPRING TURKEY HARVEST – WAKE UP PEOPLE

May 31st, 2018

Missouri the TURKEY HUNTING MECCA in the early 2000's highlighted in every magazine, outdoor TV show Missouri Spring Season Statewide – As of 2021 Missouri did not make it in the top 10 of Turkey Hunting States and now become a “POTHOLE” state – Some have good population, some in decline, some almost non-existence.

Dead Hen in the fall produces no eggs in the spring, those eggs never produce a hen that produces more eggs. But killing a hen in the fall makes no significant change to population as experts will tell you.

FAMED Tennessee biologist Jack Murray – “If you don't have hens, you won't have any gobblers and if you don't have gobblers, you don't have hunters.”

Deer management - Control the does, keep predators at bay, have good habitat. The past Quality Deer Management Association even gives a predator trapping class.

Duck and Pheasant management - Hen restrictions, keep predators from nesting areas, have good habitat.

Missouri Turkey management - Who cares about females and predators. Habitat is the only way.... We will prove it after 5 years from now in our Iowa Border Turkey Study. Where Elk, Black Bear, Wild Hogs, Mountain Lions, Armadillos don't exist, competing for food sources and are predators of Wild Turkeys and eggs, that the flawed Research Projects have not and will not address any of these issues in Southern Missouri.

The North American Wildlife Conservation Model - In cases where population REDUCTION is the management goal, managers must implement *FEMALE***** harvest beyond the level at which the population can replace itself in the short-term.

In the Meantime - Raccoons in 8 Years have gone from 158,000 sold to 22,000 sold - That means just in ONE year 136,000 Raccoons are left alive to REPLACE itself short term by the means of not being killed.

Having litters of 3 to 8 replacing its self multiple times. NOW times that by 8 years, now add in Bobcats, Coyotes, Opossum, Skunks, Foxes, Crows, Hawks, Owls, etc. etc. who population has only increased since any research was done that FALL SEASON DOES NOT MATTER TO POPULATION. OR DOES IT?

Even the Quail Biologist in 2019 said in commission meeting further away from tree line the higher the success rate was because Raccoons did not like go beyond 100 yards into fields or from fence rows.

Right NOW - HENS in MISSOURI cannot replace itself in the short or long term. That is FACT!
More efficient hunting methods (Ammo, Shotguns, Crossbows) in Missouri for the first season that included crossbows (2016-2017), of the 2,304 turkeys harvested under archery methods, 853 were with crossbows."
(2017-2018) of the 2,426 turkeys harvested under archery methods, 45% or 1,113 were with crossbows.

Missouri Department of Conservation (MDC) shows that hunters checked 2,170 turkeys during Missouri's 2018 fall firearms turkey season.

FALL TURKEY HARVEST – WAKE UP PEOPLE

Missouri Sets TWO season records in 2021.

2021 is Missouri Worst Fall Turkey Season in history total 1,836!

This after the 2021 Spring Missouri Wild Turkey Season which now holds the record of the worst season in 24-year history of a three-week season in Missouri.

2021 is Missouri Worst Fall Turkey Season in history total 1,836!

2020 fall firearms turkey harvest total was 2,125, which was 9% greater than the 2019 harvest total.

2019 fall firearms Wild Turkey harvest 1,952 - Worse fall Turkey season in history, not anymore!

2018 fall firearms turkey harvest total was 2,170, which was 25% less than the 2017 harvest total.

2018 Fall Firearm Turkey Season Summary

The 2018 fall firearms turkey harvest total was 2,170, which was 25% less than the 2017 harvest total.

Regional harvest totals were:

- Central (334; -17% from 2017)
- Kansas City (241; -19% from 2017)
- Northeast (251; -3% from 2017)
- Northwest (219; -13% from 2017)
- Ozark (242; -53% from 2017)
- Southeast (267; -27% from 2017)
- Southwest (394; -26% from 2017)
- St. Louis (222; -21% from 2017)

This year's low fall firearms turkey harvest total can be attributed to three years of record or near-record low turkey production.

At the statewide scale, the turkey hatches of 2016 and 2017 were tied for the lowest on record since our turkey brood surveys was initiated in 1959.

Production was slightly better last year but was still among the lowest recorded in Missouri.

2017 fall firearms turkey harvest total was 2,899.

MDC's turkey biologist says the low harvest total can be attributed to several years of poor hatches.

“We had really poor production in 2016 and 2017, which resulted in lower turkey numbers across the state,” said MDC Turkey Biologist Jason Isabelle.

This year's low fall firearms turkey harvest total can be attributed to three years of record or NEAR RECORD LOW TURKEY PRODUCTION.

At the statewide scale, the turkey hatches of 2016 and 2017 were tied for the lowest on record since our turkey brood surveys was initiated in 1959.

Production was slightly better last year but was still among the lowest recorded in Missouri

FY – 2020 - MDC Turkey Biologist Reina Tyl expects spring turkey hunting to be challenging. - “We are again in a period of poor production and lower turkey abundance,” said Tyl. “We can expect to see the effects on harvest for several years until production improves and turkey numbers rebound.”

PREDATOR HISTORY

1940 – 1941 – 834,935 pelts harvested (most pelts sold) (over 70% were opossum and skunk pelts) most pelts sold

1945 – 1946 – Missouri Fur Dealer Permits 1,192

1979 – 1980 – 634,338 (2nd highest pelts sold - when average raccoon pelt values were estimated at \$27.50.

1997 – 1998 – Over 200,000 Raccoons were trapped.

1980 – 1981 – 13,248 trapping permits sold in the state of Missouri

2004 – Most Wild Turkeys ever killed 60,744

2007 – Only 5,000 Wild Hogs in the Southern part of the State of Missouri

TODAY – PREDATOR & PREY HISTORY (That did not exist before or in the numbers.)

2014 – 2015 - The majority of Missourians (52 percent) agree that trapping is okay as long as it is regulated. – Missouri Department of Conservation Annual Report -

2017 – 2018 – Just Over 26,000 Raccoons were trapped.

2017 – 2018 – Only 7,189 trapping permits sold in the state of Missouri.

2018 - 2019 – 6,956 trapping permits sold in the state of Missouri

2018 – 35,787 – 2nd Lowest Harvest in History of the 3-week Season - Lowest Youth Harvest in History

2019 – 38,777 – 3rd Lowest Harvest in History of the 3-week Season

2017 – Estimated 20,000 - 30,000 Wild Hogs in the Southern part of the State of Missouri per MTNF 2017 Forest Report

2019 - Fall firearms Wild Turkey harvest 1,952 - Worse fall Turkey season in history.

2021 – Over 800 Black Bears in the state of Missouri

2018 - 2019 – Raccoon totaled 22,562 trapped

2018-19 season resulted in the lowest raccoon harvest since 1942 and the longest duration of decline in harvest numbers over the last 25 years with seven consecutive years of decline.

2018- 2019 – Opossum harvest totaled 593 lowest opossum harvests on record. – Missouri Department of Conservation has Published news on website, magazine, and video about a TICK GRAZING opossum.

Look at any opossums' ears, or body in summer. His body has 100+ more. You have all seen the opossum pic with the claim that they eat 5,000 to 10,000 ticks a year. It is a bogus claim made of a gal's master's thesis that made a non-scientific finding. It did not pass peer review.

1. Possums carry ticks and spread them.
2. If they do dig one off during grooming, they will eat that one tick.
3. Meanwhile the other 50 on them, suck up blood and then drop off the possum and create 10,000's more.
4. Because of the habitat possums live in, they collect a lot of ticks, and spread a lot of ticks and are the most numerous furbearers in the state of Missouri.
5. Opossums may also be infested with fleas, ticks, mites, and lice.
6. Opossums are notorious for egg eating. Up to 70% of the Bobwhite Quail nests are destroyed by opossums. Quail are decreasing in numbers throughout the country. Wild Turkeys also take a hit on their nests from opossums. Nothing like a WET hen smell to draw in an opossum nose.

2018- 2019 – Skunk also resulted in the lowest Skunk harvest since 2000-01 only 156.

2018 – 2019 - Coyote population appears to be on a slight increase since the 1970s.

2018 -2019 - Bobcat season was down 28.40% from 2017-18 The decline in harvest and in the number of bobcat pelts purchased by fur dealers also is likely attributed to a poor global fur market.

2019 – Mountain Lions 30 Confirmed sightings from photos, videos, tracks to DNA proof from deer and two elk calve carcasses. The six-county region of Shannon, Texas, Oregon, Carter, Ripley, and Reynolds counties continues to be a “hot-spot” for confirmations with one of the last two confirmations falling in Shannon County and the other in a Madison county.

2019 - 41 Fur Buyer Permits

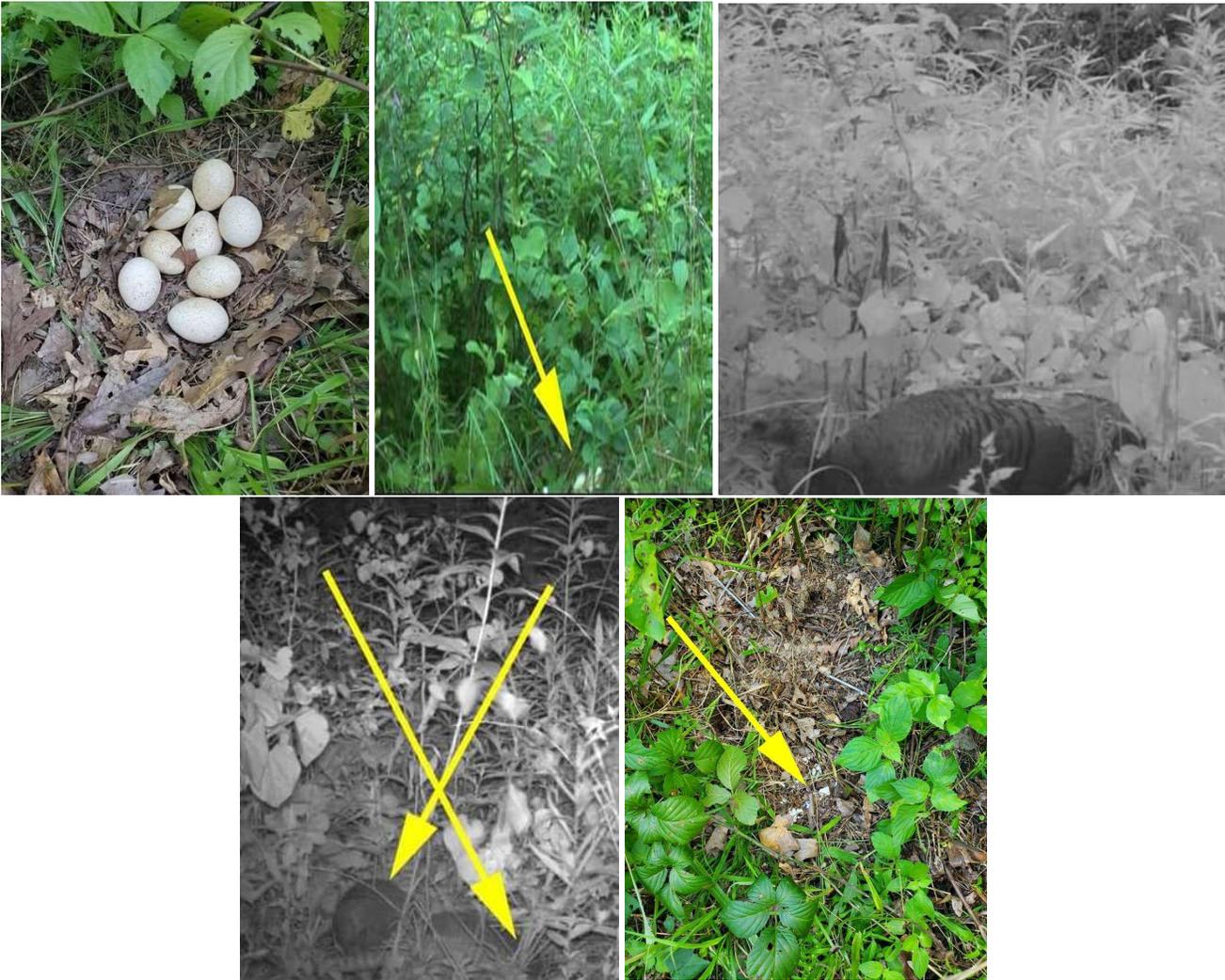
2019 - 2020 - Trapping numbers and prices this year still falling.

2020 - Around 700 +/- Individuals belong to the Missouri Trappers Association.

2020 – Up to 100,000 Wild Hogs in State of Missouri per the USDA-Aphis Chief – February 2020

2021 – Armadillo's common place in Southern Missouri - TWO – MISSOURI DEPARTMENT OF CONSERVATION BIOLOGIST in May of 2021 issue – Forgot to mention that Armadillos are destroying Turkey Nest. – Be glad to provide photo and evidence of them destroying a nest – Armadillo are now considered NATIVE and no hunting or trapping season.

No, they are not looking for the eggs, but he bugs under the nest, and they bulldoze the eggs and if they bust them, they will lick up the yokes. Sheer numbers make them an INVASIVE SPECIES to all ground nesting birds in Missouri. Even the Tennessee Game Warden Video in 2021 shows Armadillo harassing hen on nest.



2021 - The number of bald eagles in the lower 48 U.S. states — a population once on the brink of extinction, has quadrupled in the last dozen years to more than 316,000, federal wildlife officials – common sense tells you that Hawks and Owls must be at an all time high. Multiple videos exist showing eagle and hawks attacking turkey decoys.

2021 - Lowest Harvest in History of 3-week Season in 24 years

RACCOON HISTORY

Missouri Furbearer Report Pelts Sold Raccoon While Wild Turkey are producing 1 poults – Raccoons are producing 4 in a boom population.

Per Wild Turkey Biologist in various states including past publication in Missouri

To maintain a balance approximately 2.5 poults per hen must be produce.

When this ratio drops below 2.5 a population is decline indicated and when it goes above 2.5 an increase occurs.

NEST PREDATION IS A LIMITING FACTOR IN WILD TURKEY POPULATIONS – Every Study done Raccoons are the primary nest predator.

Missouri – Just one Example of the primary egg eater of Wild Turkeys

Poult: Hen Ratio - Year -Raccoon Pelts Sold/Registered

2.6	1998	200,000
2.3	1999	107,267
2.3	2000	55,254
2.1	2001	50,254
1.7	2002	110,603
1.6	2003	103,550
1.6	2004	102,448
1.2	2005	116,396
1.6	2006	84,654
1.0	2007	122,155
1.1	2008	118,166
1.2	2009	122,155
1.1	2010	49,290
1.7	2011	109,586
1.7	2012	158,356
1.3	2013	138,865
1.7	2014	134,715
1.5	2015	85,497
0.8	2016	34,758
0.8	2017	32,106
0.9	2018	26,340
0.9	2019	22,562
1.0	2020	24,652

Several other factors are the cause of decline in Missouri, this is just one. Comparison of average Missouri Trappers Association Fur Auction prices over the last five trapping seasons with a five-year average.

Just one example of one Predator - Raccoon

2016-17	\$2.77
2015-16	\$5.84
2014-15	\$7.75
2013-14	\$13.04
2012-13	\$20.79

Now add in Bobcats, Coyotes, Opossum, Skunks, Foxes, Crows, Hawks, Owls, etc. etc. who population has only increased since any research was done that FALL SEASON DOES NOT MATTER TO POPULATION

WINTER FOOD SOURCE COMPETITORS

HOME RANGES, MOVEMENTS, AND HABITAT USE OF WILD TURKEY HENS IN NORTHERN MISSOURI

ERIC W. KURZEJESKI, Missouri Department of Conservation, Fish and Wildlife Research Center, JOHN B. LEWIS, Missouri Department of Conservation, Fish and Wildlife Research Center

The first release of wild trapped eastern wild turkeys in agricultural portions of the midwestern United States occurred in Adair County, Missouri, in winter 1961.

In this paper we document habitat use, home ranges, and movements of wild turkey hens in northern Missouri during 1981-82.

STUDY AREA

The study area is on private lands about west of Kirksville in Adair County, Missouri.

45% of the study area is in woodland,

16% in row-crop agriculture, primarily soybeans and corn.

24% Pasture and hayland cover.

14% Open lands not used for pasture or hayland and dominated by herbaceous plants were classified as old fields.

The topography is rolling. Bottomlands adjacent to the Chariton River, which bisects the study area, are primarily used for row cropping.

Upland portions of the area are a mosaic of pasture and woodland. Most woodland is dominated by trees classified as large poles and small sawlogs. About 25% of the woodland is moderately grazed.

Mean distance of all brood locations to pasture during the summer was (130 yards) compared with (300 yards) for broodless hens.

A 50:50 mix of mast producing woodlands and open land appears to provide ideal turkey habitat. No less than 15% of the open land should be in row crops, and IT IS IMPORATANT THAT STANDS OF MAST PRODUCING TREES border some of the cropland.

WILD HOG, ELK AND BLACK BEAR HISTORY

2002 - Wild Hog Reports 21 counties in Missouri per MDC.

2007 – Only 10,000 Wild Hogs in the Southern part of the State of Missouri

2017 – Estimated 30,000 Wild Hogs in the Southern part of the State of Missouri per Mark Twain National Forest Report.

2020 – USDA Aphis experts testified in Jefferson City that 100,000 wild hogs in the state of Missouri.

70% of the population of feral hogs must be killed yearly to keep feral hog population from growing.

2019 – USDA Aphis maps show hogs in over 48 Southern Missouri Counties.

USDA Research - Experimental plots associated with high masting oak trees indicated that wild pigs significantly reduced acorn survival and, therefore, reduced the availability of acorns for germination and consumption by native wildlife.

2020 – Over 200 elk now in region in Southern Missouri – Shannon, Reynolds, and Carter Counties

Missouri Elk will eat acorns in the fall.

2021 – Black Bear Population at over 800 animals and growing 9% per year.

Acorns are a particular favorite for Black Bears, not counting the Black Bear can smell food from 1 mile away – Wet Hen may not be eaten by black bears, but a Nest of Eggs would.

Common Sense Example: POULTS do not eat acorns. Brood locations to pasture during the summer was (130 yards) compared with (300 yards) for broodless hens. –

But now just ONE wild hog destroys the ground or eats the acorns, bugs, etc. in 130 yards, 300 yards, 600 yards or 1000 yards.

Now the hen must travel further by herself or with poults over greater distances to find the food sources – With an historical increase in predators within that distance.

The Wild Turkey in Missouri - Published in 1988 revised in 1993 by the Missouri Department of Conservation - Acorns are the most important food for wild turkeys. In Missouri acorns are eaten by turkeys in every month of the year, and more than a third of their diet consist of acorns in the fall and winter.

ADDITIONAL FACTORS

a. Weather, has been blamed for years and years.

b. Increase of Habitat Loss from the urban expansion the older age of forest, etc. etc.

c. Regional differences

MDC treating the entire state as one and not as different regions. Missouri Citizens and Landowners should be able that to adapt quickly to each region changes, including successfully tackling the increasing natural-resource challenges that only exist in that region.

Northwest, Northeast, Kansas City, Central, Saint Louis, Southwest, Ozark, Southeast

NOT ONE STUDY OF WILD TURKEY IN MISSOURI – Has or will exist in 5 years of 100,000 Wild Hogs consuming food sources, 275 Elk Consuming food sources, 1,000 Black Bears Consuming Food Sources and predation of eggs, GOD only know the sheer number of Armadillos destroying turkey nest, the sheer number of predators on the modern landscape because of prices.

8 Regions are good enough to create 8 more jobs but not good enough reason for regional wildlife management?

2021 - The Missouri Department of Conservation (MDC) administers hundreds of parcels of land in all counties of the state. ... The department has divided the counties of the state into eight administrative regions for the purpose of managing these lands and providing conservation services to the citizens of the state.

MDC eight regions across the state and each region will be led by a regional administrator. All eight regional administrators directly report the assistant deputy of resource management in Jefferson City to ensure regional operations also remain coordinated at the statewide level.

These regional changes are part of the Department’s larger organizational roadmap for the future to build on the success we’ve had over the last 80 years in delivering on our conservation priorities and serving the citizens of Missouri,” says MDC Director Sara Parker Pauley. “We also need to be able to adapt as quickly as the world is changing around us, including successfully tackling increasing natural-resource challenges and a decreasing connection to nature by people of all ages.”

WORST SEASON IN 24 YEARS

2021 Spring Missouri Wild Turkey Season now holds the record of the worst season in 24-year history of a three-week season in Missouri.

Missouri Wild Turkey Hunters in three weeks are now barely killing more Turkeys than the two-week season in 1997.

1998 Spring season extended from two to three weeks - As the wild turkey population grows the season expanded, but as population decline nothing allowed to change!

Missouri Spring Season – History of totals

2021 – Turkeys 34,593 – Lowest Harvest in History of 3-week Season
2020 – Turkeys 41,458 – Covid – 9,000 more permits – Other States Closed hunting to Non-Residents.
2019 – Turkeys 38,776 – 3rd Lowest Harvest in History of the 3-week Season
2018 – Turkeys 35,787 – 2nd Lowest Harvest in History of the 3-week Season
2017 – Turkeys 43,356
2016 – Turkeys 48,374
2015 – Turkeys 48,432
2014 – Turkeys 47,601
2013 – Turkeys 46,141
2012 – Turkeys 44,766
2011 – Turkeys 42,220
2010 – Turkeys 46,194
2009 – Turkeys 44,713
2008 – Turkeys 46,134
2007 – Turkeys 48,472
2006 – Turkeys 54,712
2005 – Turkeys 57,743
2004 – Turkeys 60,744 - Most Turkeys ever killed
2003 – Turkeys 58,421
2002 - Turkeys 53,932
2001 - Turkeys 55,302
2000 - Turkeys 56,841
1999 - Turkeys 50,299
1998 - Turkeys 48,462
1997 - Turkeys 33,216 - Two Week Season

MISSOURI WILD TURKEY HARVEST BREAKDOWNS - 2016 THRU 2021

Year	Harvest			Permits		
	Youth	Regular	Total	Youth (R + NR - Landowner)	Regular (R + NR - Landowner)	Total (R + NR - Landowner)
2016	4147	44207	48354	19191	88291	107482
2017	4060	39283	43343	18133	83080	101213
2018	1723	34082	35805	14621	82430	97051
2019	2538	36265	38803	14609	78863	93472
2020	2724	38737	41461	18133	95516	113649
2021	2795	31800	34595	15985	86505	102490

MISSOURI WILD TURKEY PERCENTAGE OF TAGS 1 & 2 TAGS FILLED - 2015 THRU 2020

Year	% of Hunters Who Filled 1 Tag	% of Hunters Who Filled Both (2) Tags
2015	26.79%	5.48%
2016	27.32%	5.86%
2017	26.09%	5.43%
2018	22.73%	4.77%
2019	26.14%	5.24%
2020	25.74%	5.33%
	25.80%	5.35%

April 28, 2021

Dear Mr. Conservationist, Landowner and Turkey Hunter

Thank you for writing to express your concerns about the wild turkey population in your area. I would like to respond to your inquiry on behalf of Commissioner Don Bedell.

We recognize that turkey numbers are down in your area, as they are in much of the state. Turkey abundance appears to be driven primarily by production, and unfortunately, turkey production in Missouri has exhibited a declining trend over the past several decades and has been especially poor in recent years. Even though the turkey population in your area is lower than it once was, there are enough turkeys for the population to rebound given "SEVERAL YEARS" of good production.

I sincerely appreciate your interest in the well-being of your local turkey population. If I can be of further assistance, please let me know.

Best regards,

Reina M. Tyl
 Wild Turkey and Ruffed Grouse Biologist
 Missouri Department of Conservation
 Central Regional Office and Conservation Research Center
 3500 East Gans Road, Columbia, MO 65201

13 DAYS LATER

Missouri Department of Conservation – News Release - 05/10/2021

“Spring turkey harvest was down this year, which can partially be explained by a decline in hunting participation,” said MDC Turkey Biologist Reina Tyl. “Last year we saw a big increase in the number of permits sold and there was a subsequent increase in turkey harvest. This year, the permit sales total was closer

to what was observed before the 2020 season. When turkey hunting participation declines, we expect to see a subsequent decline in turkey harvest.”

MISSOURI WILD TURKEY RESEARCH – 2013 THRU 2019 – Not mentioned in above news release!

Missouri Researchers are trying to solve a mystery, to determine why turkey populations have been in decline statewide since 2016.

THE ENTIRE SOUTHERN PART OF MISSOURI WILD TURKEY MANAGEMENT IS BEING DECIDE OFF OF THIS!! "Science-based approach"

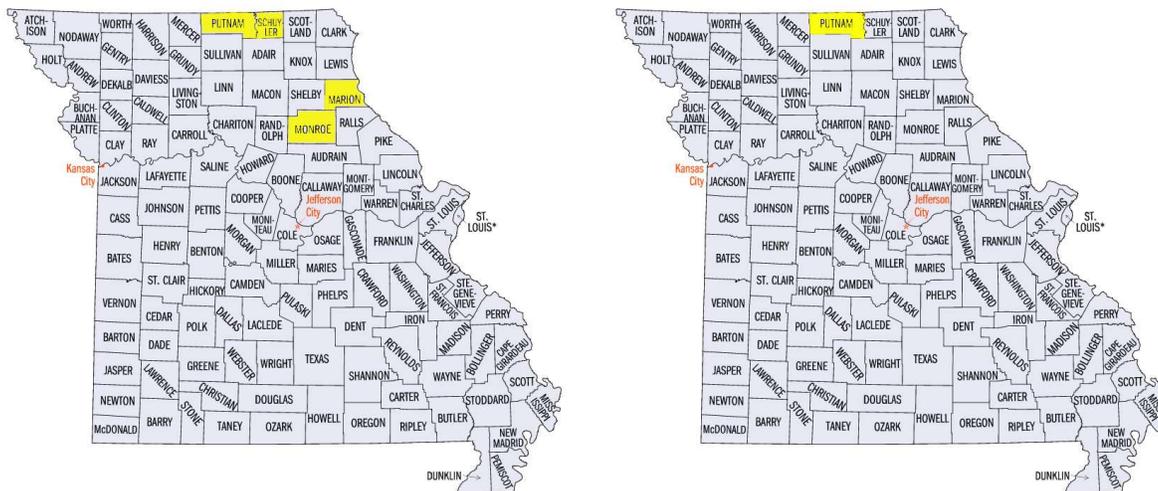
In 2013, the MDC began a five-year wild turkey research project in north Missouri in partnership with the University of Missouri, University of Washington, and the National Wild Turkey Federation (NWTf).

The study is being conducted in Putnam, Schuyler, Monroe, and Marion Counties.

Funding for the project is provided by the MDC and grants from the U.S. Fish and Wildlife Service’s Wildlife Restoration Program and the George Clark Missouri State Chapter of the NWTf.

The research project will provide information that will be used by the Conservation Department’s Wild Turkey Management Program to monitor the turkey population and assist with making decisions about hunting regulations.

The Conservation Department uses a science-based approach to manage the state’s wild turkey population and this research project is just one of the many ways that the Conservation Department obtains the information used in its program.



Missouri Wild Turkey Research – June 3, 2020 – Continued

Today a Noon is Missouri Wild Turkey Management video presentation - Missouri - Putnam, Schuyler, Monroe, and Marion Counties

FLAWED MISSOURI WILD TURKEY RESEARCH

Few Questions no one will answer.

How many Feral Hogs have these counties had in the last 5 years? How many will they have in the next 10 years?

How many Armadillos have these counties had in the last 5 years? How many will they have in the next 10 years?

How many Black Bears have these counties had in the last 5 years? How many will they have in the next 10 years?

How many Elk have these counties had in the last 5 years? How many will they have in the next 10 years?

How many of the 7,000 trappers in Missouri trap those counties? How many will they have in the next 10 years?

How many of the (200 trap sites and 491 bait sites in 2021) corn piles do the MDC and USDA Aphis put out that supplement feeds raccoons while trying to trap hogs in Southern Missouri just before Hen Nesting Season?

The research is on your typical Missouri Landowner - 2,800 acre Working ranch with frontage on Lake Thunderhead, in Putnam County, Missouri. It is currently used for recreational hunting and agriculture farmland. This ranch includes a 4,300 square foot lodge and multiple equipment barns. The property contains over 500 acres of CRP and 150 acres of year-round food plots. The rolling hills, timber and grassland intersected by a large network of gravel roads and is heavily trapped for predators, Raccoons, etc.

Missouri Wild Turkey Research - September 24, 2020 - Continued

4 years putting GPS back packs after they spent 5 years studying Turkeys in areas that do not have all the causes.

Quote from the experts “My speculation is that it’s multiple things causing it not just one and that’s about it. That’s all we can say.”

Over a 20-year period, turkey populations in the state have declined at a worrisome rate, and researchers want to know why.

<https://www.nwtf.org/conservation/article/in-search-of-answers>

Read the entire Article at link above: But none of this was part of the 2021 News Release on Spring Turkey Harvest or has ever been published by the MDC.

Highlight you should note:

NO. 1 - In just under two decades, however, the population has plummeted by more than a third of its former glory based upon harvest data. In north Missouri, the turkey harvest has declined by almost 50 percent compared to 2004, and harvest rates are closely correlated to population numbers.

NO. 2 - A five-year study that wrapped up in 2019 concluded that poult survival was far less than normal rates.

NO. 3 - John Burk, NWTF biologist for Missouri - But there is not a simple regulatory fix to the problem.

NO. 4 - Putnam County – Iowa Border

NO. 4 - While population trends have been dire for nearly 20 years.

Wild Turkey Hens in Missouri are no longer replacing itself short term or possibly in itself lifetime.

<https://sportsmensnation.com/podcasters/missouri-woods-water>

This is a great podcast and expose more of the truth.

Why did the MDC and Missouri NWTf ignore Southern Missouri in the Turkey Research on Pecks Ranch the home of the Modern Wild Turkey Restoration in Missouri!!!!!!!!!!!!!!

NOT ONE STUDY OF WILD TURKEY IN MISSOURI – Has or will exist in 10 years of 100,000 Wild Hogs consuming food sources, 275 Elk Consuming food sources, 1,000 Black Bears Consuming Food Sources and predation of eggs, GOD only know the sheer number of Armadillos destroying turkey nest, the sheer number of predators on the modern landscape because of prices.

Update. This the second study. 2014 to 2019 was first study. Found hens are not replacing itself in short term or long term.

Missouri Wild Turkey Research – Jan 7, 2021 – Continued

<https://www.monwtf.org/research>

Landowners in Putnam County—where field work will be taking place
Moved into field house east of Unionville in Putnam County

Missouri Wild Turkey Research - JAN 3, 2021 - Continued

https://www.voxmagazine.com/magazine/tracking-turkeys-missouri-conservation-hunting-research-mu-wild-poult-birds/article_4d285abc-3a33-11eb-bd7b-6b86ee68d771.html

Wild turkey populations are declining. MU researchers have a plan to find out why GPS backpacks and rocket nets are two tools' researchers plan to use to track turkey movements across the state.

Missouri Wild Turkey Research – March 5, 2021 - Continued - Department of Wildlife and Fisheries Sciences Job Board - Two openings \$2,000 a month in Putnam County, Missouri Studying the decline of the Missouri Wild Turkey - Shared housing will be provided in Unionville, Missouri. Work vehicles will also be provided.

Missouri Wild Turkey Research March 29, 2021 - Continued

<https://www.nwtf.org/conservation/article/in-search-of-answers>

Over a 20-year period, turkey populations in the state have declined at a worrisome rate, and researchers want to know why.

In just under two decades, however, the population has plummeted by more than a third of its former glory based upon harvest data. In north Missouri, the turkey harvest has declined by almost 50 percent compared to 2004, and harvest rates are closely correlated to population numbers.

While population trends have been dire for nearly 20 years

A five-year study (2014 to 2019) that wrapped up in 2019 concluded that poult survival was far less than normal rates - Missouri - Putnam, Schuyler, Monroe, and Marion Counties

The official field work is expected to begin in January 2021 on mostly private lands in Putnam County 150 turkey hens with GPS transmitters over the next four years. Research to spread over the course of 5 1/2 years.

Missouri Wild Turkey Research - APRIL 19, 2021 - Continued

www.stlmag.com/news/missouri-wild-turkey-population-decline-researchers-sensors-backpacks/

The mystery of Missouri's missing wild turkeys Researchers are attaching sensors to turkey chicks to find out what's killing them.

Missouri Wild Turkey Research - May 28, 2021 - Continued

The field research crew for the northeast Missouri turkey research project collecting data from the 50 hens that went on the air in March.

In addition to the turkeys, researchers are also doing mark recapture work with predators to assess densities in various habitat types and how they are arranged on the landscape.

Tagging skunks and raccoons, install an ear tag then release them back private ground in Putnam County, Missouri near Unionville, Mo.

When the research moves to the four-year field phase, it will allow them to answer those questions that could affect poult survival, such as how do changing weather patterns, habitat conditions, large-scale landscape changes, predator distribution and densities and declining insect abundance affect nesting success and poult mortality. They are also looking at habitat preferences for different behaviors such as nesting and brooding. Is there a nexus where these habitats and time periods overlap with higher predator use, making a predator/turkey interaction more likely?

That means the research will require tracking of a variety of predators to assess locations and densities.

“We’ll capture and tag nest predators, such as skunks and raccoons, install an ear tag then release them,” Tyl said. “By trapping over a period of time, we’ll be able estimate their densities based on captures and recaptures. For larger predators, such as bobcats and coyotes, we’ll use camera arrays and scent stations to estimate their population distribution and density.

“Once these questions are answered, we’ll be able to mitigate the challenges by manipulating habitat to improve nest success and poult survival. This information would inform habitat management efforts on public and private lands in Missouri to increase turkey recruitment and ultimately abundance.”

THE SOLUTION IN 2026 & BEYOND

Well sounds like they already know the solution and in 2026 – They will be telling MISSOURI LANDOWNER how to **manipulating habitat** to improve nest success and poult survival. This information would inform habitat management efforts on public and private lands in Missouri to increase turkey recruitment and ultimately abundance.”

The Solution in 2026 after 9 years of research is the same solution that has been given since the restoration of the wild turkey started in 1960’s. Habitat, Habitat and Habitat.

The Missouri Wild Turkey Publication in 1988 - Increase in season length occurred as the turkey population grew but as the turkey population declines –

Regulatory Changes to Turkey and Trappings Season to help the Wild Turkey Declining Population is out of the question.!!!

Missouri Department of Conservation Reply letter - May 20, 2021, letter to Missouri Citizens - Because turkey abundance is driven by production, the best way to increase turkey numbers in your area is by providing the habitat turkeys need to nest successfully and raise their young. There have been broad-scale changes in the landscape that have less to losses in quality nesting and brood-rearing habitat. Planting native warm-season grasses and wildflowers, prescribed burning edge feathering, timber stand improvement, creating forest openings, and woodland restoration are some of the best ways to improve nesting and brood-rearing habitat.

MISSOURI WILD TURKEY HEN TO POULT RATIO DECLINE - 1998 THRU 2021

Poult:Hen Ratio	Year	Raccoon Pelts Sold or Registered
2.6	1998	200,000
2.3	1999	107,267
2.3	2000	55,254
2.1	2001	50,254
1.7	2002	110,603
1.6	2003	103,550
1.6	2004	102,448
1.2	2005	116,396
1.6	2006	84,654
1.0	2007	122,155
1.1	2008	118,166
1.2	2009	122,155
1.1	2010	49,290
1.7	2011	109,586
1.7	2012	158,356
1.3	2013	138,865
1.7	2014	134,715
1.5	2015	85,497
0.8	2016	34,758
0.8	2017	32,106
0.9	2018	26,340
0.9	2019	22,562
1.0	2020	24,652
1.0	2021	TBD

I shared the Missouri Department of Conservation Press Release on 2021 Poult Survey with the top Wild Turkey Biologist in the county. Quote “Seeing numbers like this is simply depressing to me. Hovering around 1 poult per hen isn't where any state needs to be, yet many are there or slightly above that. Very frustrating and concerning.”

Maybe the 2022 MOTTO for Wild Turkey Management in Missouri can be BUILD BACK BETTER! Never mind I forget we are waiting on the 5-year study on Iowa Border. A county that has no bears, millions of acres of public land, no tracts of timber larger than 15,000 acres, no armadillos, no feral hogs, and no elk. Should be the model wild turkey study for every county south of the Missouri River.

All it takes is habitat - No matter that's all we spent money on and talked about for the past 20 years and you have entire staff of Private Land Conservationist for over 15 years.

I have ONE question - Why is nesting and brood habitat so important? Exactly what are you trying to prevent. Oh, that's right a predator might eat them. In the same breath predators have nothing to do with it.

You are keeping hearing 5% to 1% of the fall season, two turkeys, out state hunters. Bla, Bla, Bla

But in the same **** breath the Quail Biologist 6% Adult Survival during breeding season. – Just 6% does not sound like a lot!!!!

But if 6% of the quail are making thru the breeding season it just COMPOUNDS THE NUMBER OF NEST AND NEST SUCCESS.

Only Wild Turkeys this does not apply in Missouri.

Guess shooting all hens in waterfowl season or pheasant hens in Missouri wouldn't matter either, then. Guess that doesn't apply to Sow Bears or let's just get rid of the Antlerless Season killing doe has no effect on the population.

Killing Wild Turkey hens the only WILDLIFE that the North American Model for Wildlife Conservation does not apply on controlling the population by killing the female population -

1976 – April – Published in the Missouri Conservationist

The Department's major objective is the management of the wild turkey resource is to provide maximum hunting opportunity commensurate with the turkey population's ability to sustain harvest.

To maintain a balance approximately 2.5 poults per hen must be produce.

When this ratio drops below 2.5 a population is decline indicated and when it goes above 2.5 an increase occurs.

The Adult / Juvenile ratio dropped in 1973 to 1:1.9 and that is why two bird limit was dropped in 1974.

By the way 1973 was the 500-year flood in Missouri

1977 Production Rate of Turkey hens – 3.88 ratio of adults to juveniles – Highest on record - Broods increased 88.6 over 1976. – Published in the Missouri Conservationist April of 1978.

OUTSIDE OF MISSOURI

Biologists, researchers and land managers discuss turkey conservation in Little Rock.

2019 - LITTLE ROCK — The Arkansas Game and Fish Commission hosted biologists and land managers from Arkansas and neighboring states to collaborate on an apparent decline in eastern wild turkey numbers seen across the Southeast. The meeting was held at the AGFC's Little Rock headquarters and included presentations by biologists, researchers and conservation experts from Arkansas, Tennessee, Texas, Mississippi, Georgia, and Louisiana. Missouri was not listed.

2018 thru 2021 – Just the states I am aware of South Carolina, Alabama, Arkansas, Tennessee, Kansas, Kentucky, and Oklahoma have all made.

Regulatory Changes to Turkey and Trappings Season to help the Wild Turkey Population!!!

Arkansas Biologist and Arkansas Commission "To boost their quail and turkey numbers."

A new free Predator-Control Permit also will be available to private landowners, which will let permit holders shoot or trap bobcat, coyote, gray fox, red fox, opossum, raccoon and striped skunk day or night.

This permit will be available by late August to enable more opportunity to control these species on private land.

Commission Chair Ken Reeves of Harrison and Commissioner Stan Jones of Walnut Ridge explained that the goal of the regulations was not to eliminate any of these species on a statewide basis.

"I think everyone knows that the reason we're doing this is we simply don't have people trapping and hunting raccoons and opossums like we did many years ago because the pelts aren't worth much,"

Reeves said. "We're trying to fill that gap by letting private landowners reduce these predators on their property to try to boost their quail and turkey numbers."

South Dakota - Nest Predator Bounty Program Approved for 2021 and 2022 "This program enhances pheasant and duck nest success at localized levels and encourages families to get involved in wildlife management," said interim GFP department secretary Kevin Robling. "We have rich trapping traditions here in South Dakota and this program is designed to encourage youth and families to step outside and enjoy our incredible outdoor resources."

Pheasant and Duck Management includes predator management, but Wild Turkey Management does not.
WHY?

FALL SEASON

History from Sixth Annual National Wild Turkey Symposium

Here some history from Proceedings from The Sixth Annual National Wild Turkey Symposium - February 26 thru March 1, 1990

The first National Wild Turkey Symposium was held in Memphis, Tennessee in 1959, and the second was held in Columbia, Missouri in 1970.

Since then, Symposia have been held at 5-year intervals. Proceedings have been published for all of the Symposia, and except for the second, they are cited as a series. The second Symposium was published by the University of Missouri Press in

1973 and titled "Wild Turkey Management, Current Problems and Programs." Copies of all National Wild Turkey Symposia, including the second, can be obtained from the National Wild Turkey

Federation, Edgefield, South Carolina

EFFECTS OF FALL EITHER-SEX HUNTING ON SURVIVAL

Survival rates and patterns we observed before the initiation of fall hunting were not unusual.

Annual survival rates were >50% for adult turkeys. Spring hunting caused the greatest mortality in males, and a combination of illegal spring hunting and **PREDATION DURING NESTING/BROOD-REARING ACTIVITIES CAUSED THE MOST HENS DEATHS.**

Juveniles of both sexes were exposed to heavier predation during the fall than adults were, and to legal and illegal hunting-related mortality during the spring-hunting season, but annual survival rates were not greatly different for juveniles and adults of either sex.

Reported similar annual or seasonal mortality rates, patterns, or causes of death for radio-tagged eastern turkeys Missouri.

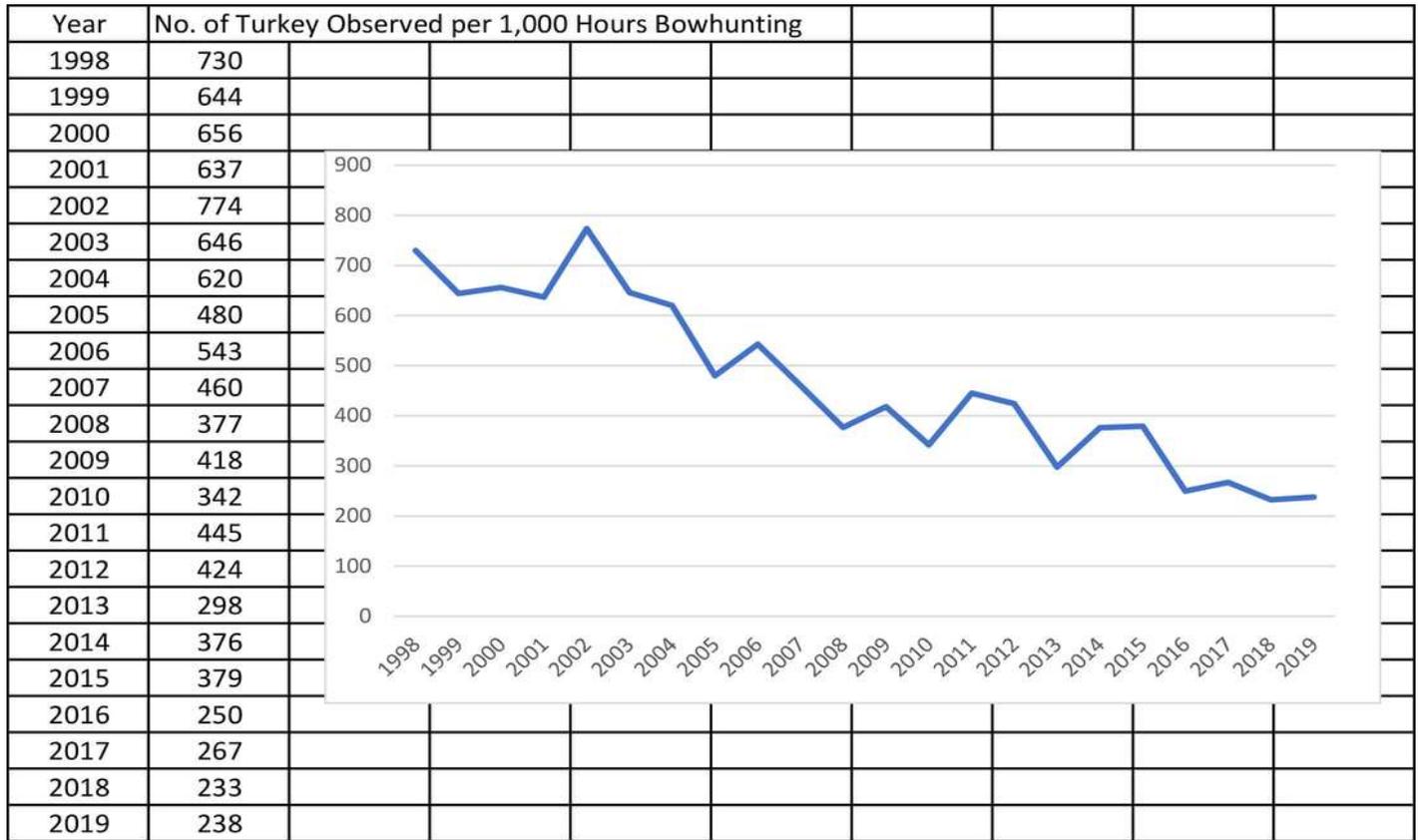
The fall-to-spring survival rates we observed for AM suggest that fall hunting may reduce the number of gobblers available to spring hunters, i.e., most AM shot in the fall would otherwise be alive the following spring.

Fall hunting would not affect turkey populations **IF FALL HUNTING MORTALITY IS COMPENSATORY** that is, if there is a compensating increase in survival during other periods of the year to offset fall hunting, or if birds shot by fall hunters would have died anyway to some other agent. **NEITHER OF**

THESE SITUATION EXISTED DURING THIS STUDY. AVERAGE ANNUAL SURVIVAL RATES OF ALL AGE-SEX CLASSES DECLINED AFTER FALL HUNTERS WAS INTRODUCED.

This implies that fall hunting may affect future turkey populations. **SHOOTING ADULT TURKEYS IN POOR PRODUCTION YEARS MAY REDUCE THE NUMBER OF HENS AVAILABLE TO NEST** as well as reduce gobbler numbers available to hunters. **A REDUCTION IN HENS COULD REDUCE RECRUITMENT AND TOTAL TURKEY NUMBERS FURTHER AND PROLONG THE RECOVER FROM POOR PRODUCTION THAN WOULD HAVE OCCURRED WITHOUT FALL HUNTING.**

MISSOURI WILD TURKEY BOW HUNTER OBSERVATION DECLINE - 1998 THRU 2019



WEATHER

Information can be found thru the Missouri Climate Center - <http://climate.missouri.edu/news/arc/>

Nesting in Missouri May - Total Precipitation - 2010 thru 2020

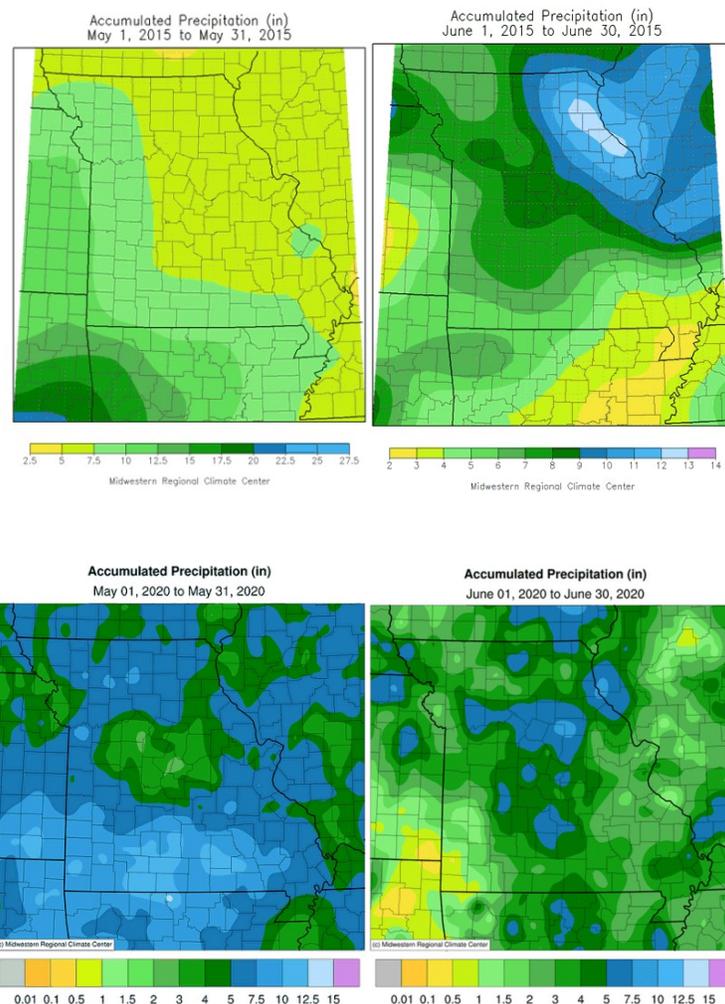
The survival rate of poults, or baby turkeys, is dangerously low, he says. On average, only 23% of poults survive the first month of their lives, according to preliminary data the Missouri Department of Conservation collected from 2014 to 2019.

“This past "2020" spring was the fifth year in a row of a poult to hen ratio of one or less,” per Missouri Biologist. -

Wild Turkey Hens in Missouri are no longer replacing itself short term or possibly in itself lifetime per Missouri Biologist.

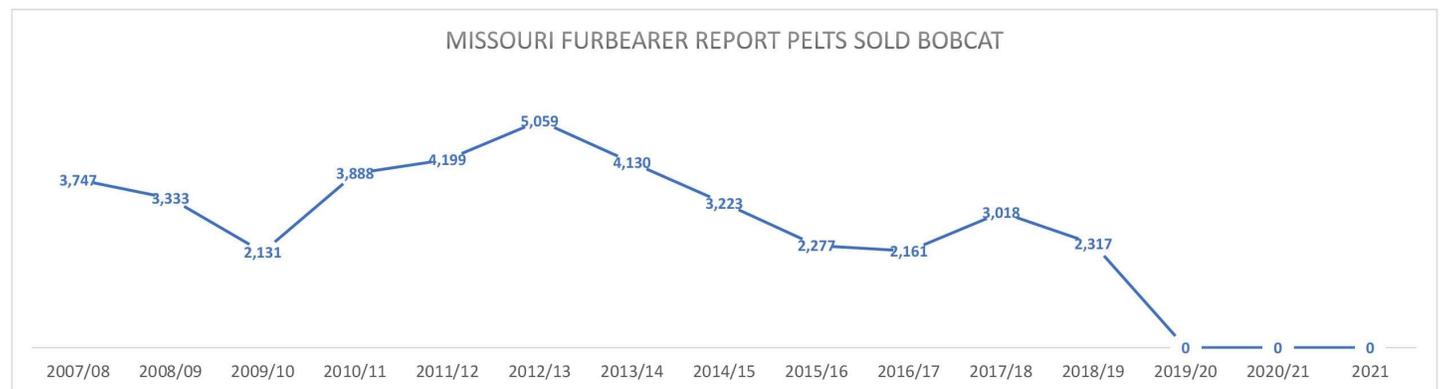
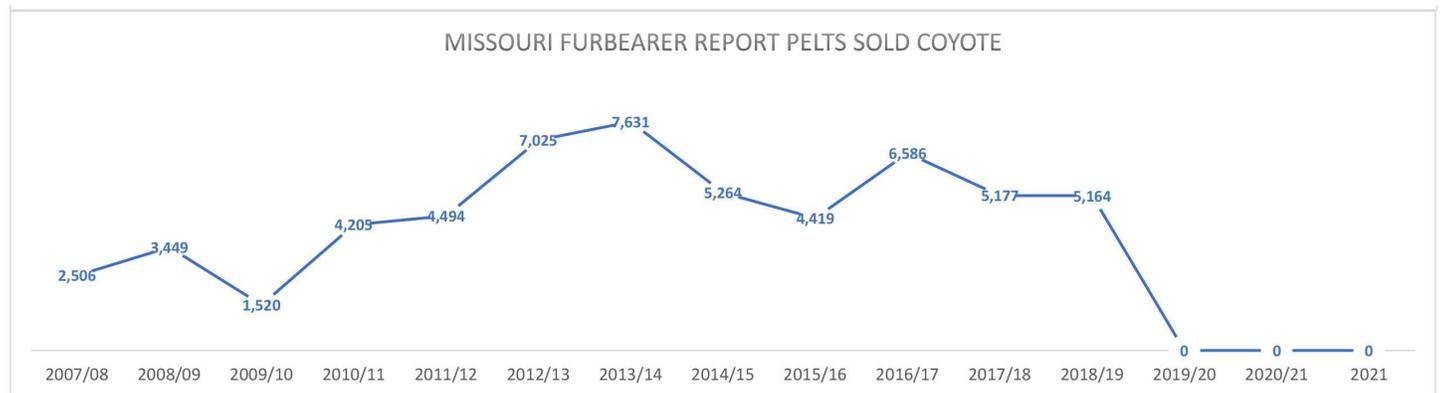
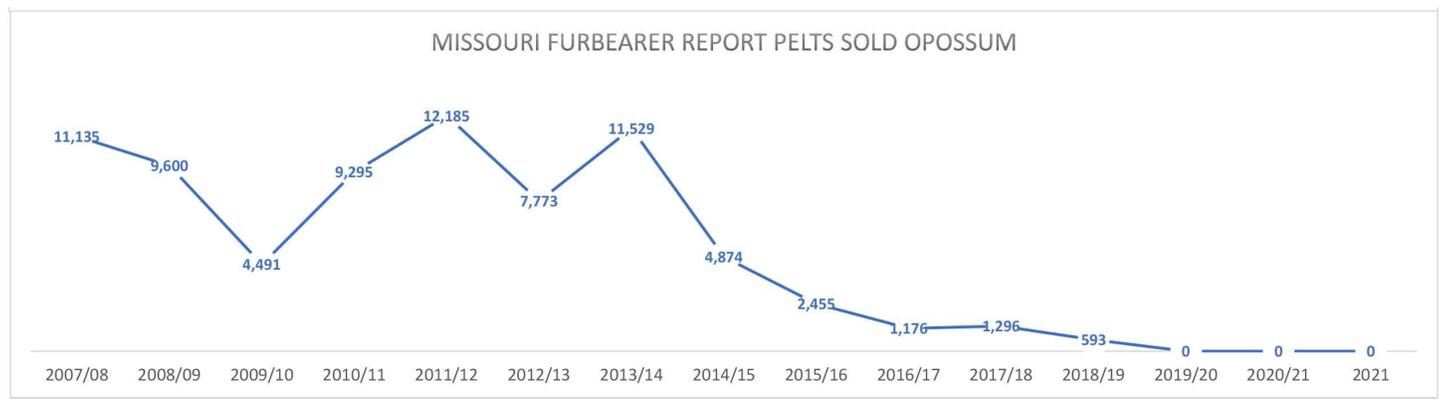
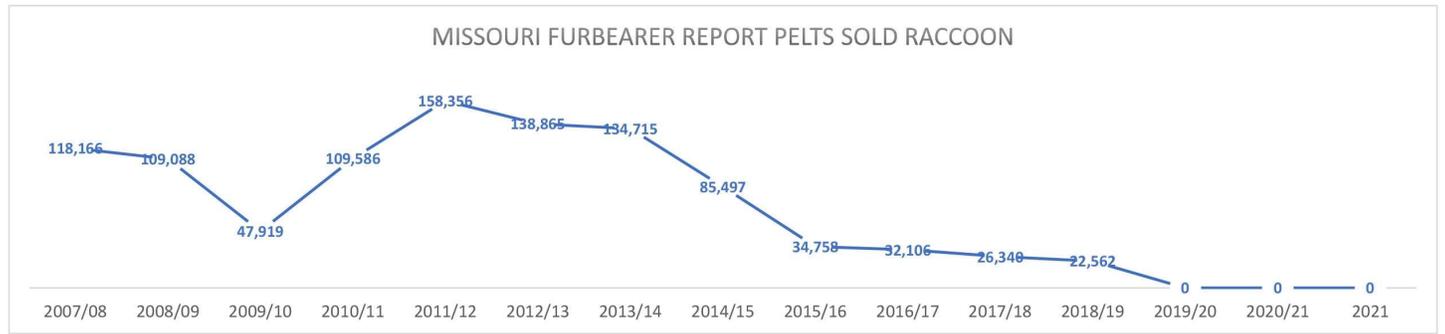
Article - March 29, 2021 - Good news has come for this year’s poult production. “Northern Missouri just experienced some of the best production that we’ve seen in the past five years,” Missouri Biologist. “People have reported seeing large flocks of young birds.”

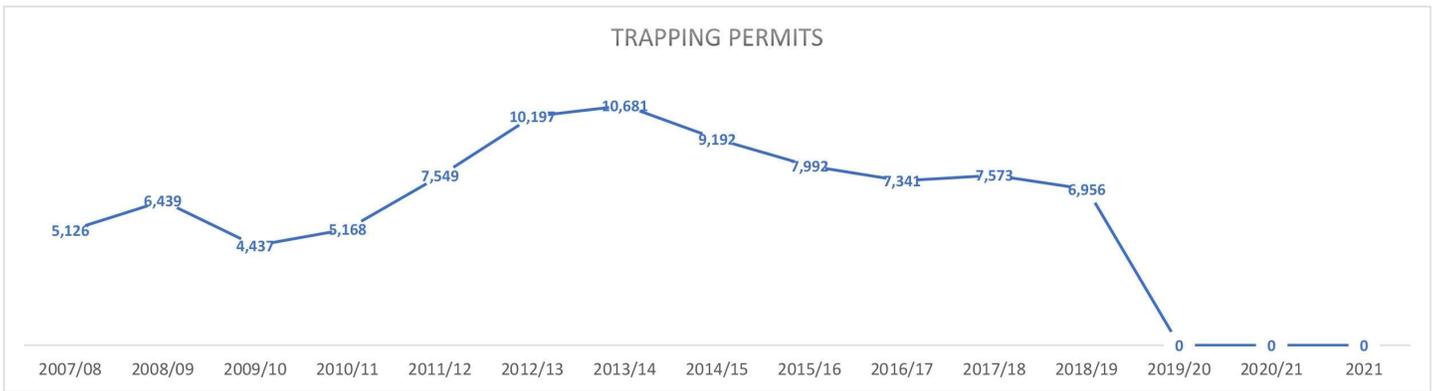
So, production would have been good in 2015 and in 2020 per statement.



Missouri Statewide Trapping Numbers for the Past 15 Years.

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21	2021
Missouri Furbearer Report Pelts Sold Raccoon	118,166	109,088	47,919	109,586	158,356	138,865	134,715	85,497	34,758	32,106	26,340	22,562	0	0	0
Missouri Furbearer Report Pelts Sold Opossum	11,135	9,600	4,491	9,295	12,185	7,773	11,529	4,874	2,455	1,176	1,296	593	0	0	0
Missouri Furbearer Report Pelts Sold Coyote	2,506	3,449	1,520	4,205	4,494	7,025	7,631	5,264	4,419	6,586	5,177	5,164	0	0	0
Missouri Furbearer Report Pelts Sold Bobcat	3,747	3,333	2,131	3,888	4,199	5,059	4,130	3,223	2,277	2,161	3,018	2,317	0	0	0
Trapping Permits	5,126	6,439	4,437	5,168	7,549	10,197	10,681	9,192	7,992	7,341	7,573	6,956	?	?	?





Missouri Wild Turkey Harvest Detail History. - 1960 thru 2021

FORM LETTERS

Just in case you do not get it.

2021 Letter from MDC to multiple Missouri Turkey Hunters, Landowners and Conservationist only thing different is change of name.

This is tip of the iceberg, response FORM letters from the Missouri Department of Conservation Leadership being shared by different Missouri Turkey Hunters across the state.

All have the common response.

1. MDC will change zero regulations for fall or spring and HUNTING OPPORTUNITY is now the No. 1 Goal.
2. Furbearers have little to no impact will make zero changes.
3. Missouri Landowners are to blame for the loss of Turkey Habitat. YOU need to learn how to provide nesting and brood Habitat.

Atten: Missouri Turkey Hunters and Missouri Landowners

The solution to the 20-year decline of Wild Turkeys on your property is spelled out in detail.

Really do not know why you Missouri Landowners let your Wild Turkey Habitat go to hell.

Missouri Department of Conservation response about the 2021 Missouri Wild Turkey Season - the 24-year historical low harvest record since the 3-week season was put into place, and the lowest population of Wild Turkeys in Missouri for the past 24 years.

This is a Missouri Citizens letter sent to me to share with Missouri Turkey Hunter and Landowners

Good Luck and Happy Turkey Hunting



MISSOURI DEPARTMENT OF CONSERVATION

Headquarters

2901 West Truman Boulevard, P.O. Box 180, Jefferson City, Missouri 65102-0180
Telephone: 573-751-4115 ▲ www.MissouriConservation.org

SARA PARKER PAULEY, Director

May 20, 2021



Thank you for writing the Conservation Commission to express your concerns about the wild turkey population in Missouri. Your message was forwarded to me, and as Deputy Director – Resource Management and Regulations Committee Chair, I am happy to respond on their behalf.

Turkey abundance is now lower in much of the state than it was a few decades ago. There are a few explanations for the decline in abundance, including where we are in turkey restoration history and poor productivity in recent years.

Following population restoration, we expect to see rapidly rising turkey numbers as turkeys move into unoccupied habitats. Eventually, the number of turkeys on the landscape will exceed the number of turkeys the landscape can sustain (Missouri hit this peak in the early-mid 2000s), and turkey numbers will decline. After a period of decline, we expect the number of turkeys on the landscape will fluctuate around a lower level of abundance (ecological carrying capacity) than what was observed right before the decline. Moving forward, fluctuations in turkey numbers of considerable magnitude will be normal and can be expected.

Using recently collected information on wild turkey survival, harvest, and reproductive rates, we estimated how the turkey population would respond to more conservative fall hunting regulations, including reduced bag limits, shorter fall seasons, prohibiting hen harvest in the fall, or if we closed the fall turkey seasons entirely. What we found is that even if we closed the fall seasons entirely, which was the most conservative scenario, the turkey population would not substantially increase in abundance and would continue to decline in some parts of the state. Therefore, more conservative fall regulations would contribute to fewer hunting opportunities without having the desired effect on turkey abundance.

Additionally, very few hunters harvest two turkeys during the spring season. Only about 5% of Missouri's spring harvest, on average, is attributed to hunters filling their second tag. Therefore, if we reduced the bag limit in the spring to one, it would take away considerable hunting opportunity and would have very little impact on the overall number of turkeys harvested.

Turkey abundance appears to be driven primarily by production, not survival or harvest of adult turkeys. This means when we see good turkey production, abundance tends to increase or stabilize, and when we see poor production, abundance tends to decrease. Unfortunately, turkey production across the state of Missouri has been declining over the last several decades and has been especially poor in recent years. This recent poor production has led to lower turkey abundance than we have seen in a long time across much of the state and is likely why you are noticing fewer turkeys in your area.

COMMISSION

DON C. BEDELL
Sikeston

STEVEN D. HARRISON
Rolla

MARK L. McHENRY
Kansas City

WM. L. (BARRY) ORSCHELN
Columbia

Ultimately, this declining trend in abundance—driven primarily by production—is not a Missouri-specific issue. This is happening in neighboring states, and most states across the range of the eastern turkey. There are several factors that have contributed to this long-term declining trend in production, including a loss of quality nesting and brood-rearing habitat, changing weather patterns, and increasing numbers of nest and poult predators. We are currently conducting research aimed at determining the best way to improve turkey hatches and poult survival, so we can see improved turkey production and abundance in Missouri in the future.

The Department recognizes many furbearer populations have increased over the years and there is a desire for additional opportunities related to these abundant furbearer populations. The Department strives to balance the needs of various user groups (e.g., trappers, fur buyers, hunters, etc.), including those interested in harvesting furbearers or those interested in other species, and tries to balance season timing by considering furbearer populations, opportunity, and pelt prime-ness.

The current furbearer season structure provides ample opportunity to harvest furbearers during a time when most furbearer pelts are of the most value. However, the Department continues to receive requests to make adjustments to both the timing and length of the furbearer hunting and trapping season. As a result of these requests from a diverse group of stakeholders and expanding furbearer populations, the Department plans to review furbearer seasons to determine if any adjustments should be made to season length, timing, or both. During this review, the Department will continue to take into account furbearer populations, opportunity, pelt prime-ness and the desire of multiple user groups, including the potential for conflict with other seasons.

Because turkey abundance is driven by production, the best way to increase turkey numbers in your area is by providing the habitat turkeys need to nest successfully and raise their young. There have been broad-scale changes in the landscape that have led to losses in quality nesting and brood-rearing habitat. Planting native warm-season grasses and wildflowers, prescribed burning, edge feathering, timber stand improvement, creating forest openings, and woodland restoration are some of the best ways to improve nesting and brood-rearing habitat.

I hope I was able to address your concerns. I sincerely appreciate your interest in the well-being of Missouri's turkey population. We recognize turkey numbers are down in your area, as they are in much of the Midwest. For additional information, please contact Wild Turkey Biologist Reina Tyl at 573-815-7901 ext. 2901 or Reina.Tyl@mdc.mo.gov.

Sincerely,



MIKE HUBBARD
DEPUTY DIRECTOR – RESOURCE MANAGEMENT
(CHAIR, REGULATIONS COMMITTEE)

c: Conservation Commission
Director Sara Parker Pauley
Regulations Committee
Wild Turkey Biologist Reina Tyl

HABITAT - HABITAT - HABITAT

Because turkey abundance is driven by production, the best way to increase turkey numbers in your area is by providing the habitat turkeys need to nest successfully and raise their young. There have been broad-scale changes in the landscape that have led to losses in quality nesting and brood-rearing habitat. Planting native warm-season grasses and wildflowers, prescribed burning edge feathering, timber stand improvement, creating forest openings, and woodland restoration are some of the best ways to improve nesting and brood-rearing habitat.



Results and Accomplishments

The Missouri Department of Conservation (MDC) has 32 private land conservationists (biologists) co-located and assisting NRCS field office staffs statewide. Missouri NRCS also has an MDC biologist in each of its five area offices, plus five wetland biologists who focus primarily on WRP activities.

In addition, there is one MDC employee in a joint venture between MDC and Pheasants Forever in Knox County, 10 soil conservationists with salary costs split between NRCS and MDC, and one biologist who monitors WRP wetland sites.

The MDC partners assist NRCS with the application of almost all current farm bill programs, including WRP, EQIP, CSP and WHIP.

A targeted effort to increase quail production is being made through the Missouri Department of Conservation's proposal titled "Northwest Missouri Bobwhite Buffers Enhancement," which is one of six projects selected by NRCS nationwide to receive grant funding through the Conservation Partnership Initiative.

The project will focus efforts on agricultural producers in northwestern Missouri who have lands eligible for EQIP, WHIP, Bobwhite Buffers and other CCRP buffer practices that are beneficial to bobwhite quail. When target areas are saturated, the project will move focus to adjoining counties and repeat the planning and implementation procedures. The project will conclude in June 2007.

Habitat as reason for turkey decline in Missouri!

How many people today practice habitat management for wildlife compared to 20 years ago? I knew no one, today a majority of landowner that hunt practice habitat management.

The Missouri Department of Conservation in May 2021 Commission Meeting stated they sell 10 to 12 million board feet of lumber from conservation lands yearly.

How can Kansas, Arkansas, Tennessee, Kentucky etc. etc. all these States have Habitat loss at the same time over entire states.

Is the Missouri Department of Conservation Private Land Conservation for the last 15 to 20 years a failure or it is a success?

The NWTf Missouri motto Save the Habitat - Save the Hunt and collect millions of Missouri Citizens dollars.

They even have food plot seed they sell to landowners.

Even had volunteers at one time providing Habitat information to landowner and Missouri had two of the top 5 in the nation. Missouri has its own NWTf Biologist.

Prescribed Fires are pushed by every Conservation Group and MDC provides classes.

Quail Conservation groups which push the same Habitat in Missouri

All these federal government programs for landowners.

A record year of restoration for Mark Twain National Forest and the Eastern Region - MTNF completed the eighth year.

A record year of restoration for Mark Twain National Forest and the Eastern Region ...

Dec 4, 2019 – The MTNF Fire program safely accomplished 55,709 acres of prescribed burning operations in Fiscal Year 2019 (FY19).
Firefighters with ...

Either all that is a failure, or it a success and they all exist in every state.

Why do the so-called experts and Biologist never mention the above list of items when they say it is landowner fault for habitat loss?

Missouri Wild Turkey Harvest Detail History. - 1960 thru 2021

Harvest rates are closely correlated to population numbers per Missouri Biologist

MISSOURI WILD TURKEY PERMIT SALES - 2016 THRU 2021

Year	Resident					Nonresident					Total	Total Youth (R + NR)	% Change in Youth	Total w/o Landowner	% Change w/o Landowners	Unique Hunters	% Change in Unique Hunters	% NR Permittees
	Res Permits	Res Youth	Res Landowner	Total Res	Total Res (w/o landowner)	NR Permits	NR Youth	NR Landowner	Total NR	Total NR Permits (w/o landowner)								
2016	80800	18360	42624	141784	99160	7491	831		8322	8322	150106	19191	-0.063762318	107482	-3.34%	144840	-2.95%	0.077426918
2017	75780	17283	41387	134450	93063	7300	850		8150	8150	142600	18133	-0.055130009	101213	-5.83%	137050	-5.38%	0.080523253
2018	74875	13899	38175	126949	88774	7555	722		8277	8277	135226	14621	-0.193680031	97051	-4.11%	129822	-5.27%	0.085285056
2019	71491	13879	35879	121249	85370	7372	730		8102	8102	129351	14609	-0.000820737	93472	-3.69%	123383	-4.96%	0.086678364
2020	89392	17172	21381	127945	106564	6124	961	233	7318	7085	135263	18133	0.241221165	113649	21.59%	130022	7.81%	0.062341068
2021	78603	15120	22001	115724	93723	7902	865	317	9084	8767	124808	15985	-0.11845806	102490	-9.82%	122182	-8.15%	0.085540053

*This is what we report as "permit sales total"

*This is the number of people who obtained at least 1 permit (regular, landowner, or both)

Year	Resident					Nonresident					Total
	Res Permits	Res Youth	Res Landowner	Total Res	Total Res (w/o landowner)	NR Permits	NR Youth	NR Landowner	Total NR	Total NR Permits (w/o landowner)	
2016	80800	18360	42624	141784	99160	7491	831		8322	8322	150106
2017	75780	17283	41387	134450	93063	7300	850		8150	8150	142600
2018	74875	13899	38175	126949	88774	7555	722		8277	8277	135226
2019	71491	13879	35879	121249	85370	7372	730		8102	8102	129351
2020	89392	17172	21381	127945	106564	6124	961	233	7318	7085	135263
2021	78603	15120	22001	115724	93723	7902	865	317	9084	8767	124808

Year	Total Youth (R + NR)	% Change in Youth	Total w/o Landowner	% Change w/o Landowners
2016	19191	-0.063762318	107482	-3.34%
2017	18133	-0.055130009	101213	-5.83%
2018	14621	-0.193680031	97051	-4.11%
2019	14609	-0.000820737	93472	-3.69%
2020	18133	0.241221165	113649	21.59%
2021	15985	-0.11845806	102490	-9.82%

^ This is what we report as "permit sales total"

Year	Unique Hunters	% Change in Unique Hunters	% NR Permittees
2016	144840	-2.95%	0.077426918
2017	137050	-5.38%	0.080523253
2018	129822	-5.27%	0.085285056
2019	123383	-4.96%	0.086678364
2020	133022	7.81%	0.062341068
2021	122182	-8.15%	0.085540053

^ This is the number of people who obtained at least 1 permit (regular, landowner, or both)

SIMPLE REGULATION CHANGES

2021 Spring Missouri Wild Turkey Season now holds the record of the worse season in 24-year history of a three-week season in Missouri.

Are you concerned with money and hunter recruitment over the wild turkey – I say if the wild turkey population and harvest is high you have more money and more hunters. The lack of fur prices no one seems concerned with trapper recruitment or opportunity.

MDC regulations move at a bureaucracy pace and will take over a year or two just to make a simple change.

Regulation Changes that CAN and WILL make a difference.

1. ALL hens are in every Season protected - No Archery, No Fall Hens, No Bearded Hens.

WILD TURKEY HENS Breakdown - STOP KILLING HEN IN MISSOURI – They keep saying number of hens killed do not matter to the population, I say – DEAD HENS DON'T LAY EGGS - If they cannot replace themselves in the short term or long term RIGHT NOW per MDC 5-year search - dead hen definably will not.

2. Furbearer Season Extend to February 29 - Stop letting 40 fur buyers, decide the season.

1979 – 1980 – 634,338 (2nd highest pelts sold - when average raccoon pelt values were estimated at \$27.50.

1997 – 1998 – Over 200,000 Raccoons trapped.

1980 – 1981 – 13,248 trapping permits sold in the state of Missouri (Highest Number)

1977 Production Rate of Turkey hens – 3.88 ratio of adults to juveniles – Highest on record

Broods increased 88.6 over 1976.

2019 - MDC issued 41 Fur Buyer Permits

2018 - 2019 – 6,956 trapping permits sold in the state of Missouri

2018 - 2019 – Raccoon totaled 22,562 trapped

2018-19 season resulted in the lowest raccoon “22,562” harvest since 1942 and the longest duration of decline in harvest numbers over the last 25 years with seven consecutive years of decline

2018- 2019 – Opossum harvest totaled 593 lowest opossum harvest on record.

2018- 2019 – Skunk also resulted in the lowest Skunk harvest since 2000-01 only 156.

2018 – 2019 - Coyote population appears to be on a slight increase since the 1970s

2018 -2019 Bobcat season was down 28.40% from 2017-18 The decline in harvest and in the number of bobcat pelts purchased by fur dealers also is likely attributed to a poor global fur market.

3. Landowner's furbearers are open year-round. WE own 93% of the land. Use the Arkansas Regulations

A new free Predator-Control Permit also will be available to private landowners, which will let permit holders shoot or trap bobcat, coyote, gray fox, red fox, opossum, raccoon and striped skunk day or night.

This permit will be available by late August to enable more opportunity to control these species on private land.

Commission Chair Ken Reeves of Harrison and Commissioner Stan Jones of Walnut Ridge explained that the goal of the regulations was not to eliminate any of these species on a statewide basis.

“I think everyone knows that the reason we're doing this is we simply don't have people trapping and hunting raccoons and opossums like we did many years ago because the pelts aren't worth much,”

Reeves said. “We're trying to fill that gap by letting private landowners reduce these predators on their property to try to boost their quail and turkey numbers.”

4. Youth Season move to weekend before regular season opens.

YOUTH SEASON Breakdown

You cannot kill 72,264 Gobblers and call it Biological Sound!! Cannot have it both ways.

MISSOURI YOUTH SEASON GOES AGAINST THE VERY BIOLOGICAL REASON FOR THE DAY THE SEASON OPENS - The season opens Monday closest to April 21st. This corresponds to the historical records of the second peak Missouri Ozark Gobbling. This is the biological reason for the opening day.

Which may lead to the great successes in turkey population because the hens get to breed with the dominate birds with the first peak gobbling.

So Biological Reason no longer exist - Why not open the season the SATURDAY AND SUNDAY before the Monday closes to April 21st for Biological Reason!

5. Flexible Three to Two-Week Season – Flexible 1 to 2 Gobbler Limit per poult hatch.

If Elk and Bear harvest can be decided each year and even closed during a season – in 1974 reduced the Spring Bag Limit to 1 bird, because of a bad hatch in 1973. Then when Missouri has a bad hatch. MDC should be flexible and change the season from three to two-Week Season and/or flexible 1 to 2 gobbler limit depending on poult hatch the year before.

6. ARMADILLO is not a Native or Non-Native

Take the Armadillo off the Native or Non-Native List and put them on Invasive Species list they are documented on camera destroying wild turkey nest while looking for bugs under the nest. They bulldoze thru and destroy eggs and lick up the yoke. The Armadillos are a threat to all ground nesting birds in Missouri – Wild Turkey, Quail, and Whip-poor-wills.

7. Wild Turkey Management per regions.

Missouri is divided by 8 Regions they are good enough for regional wildlife management. “Ability to adapt to regional rains, floods and droughts to be able to adapt as quickly as the world is changing around landowners in each of those regions.

Let me be perfectly clear – Lot more could be and should be done – This is the starter list – But NOT One by itself will matter this is going to be a complicated solution for a complicated problem – Doing nothing is not a solution – SEE past 5, 10, 20 years as proof of that!!!

YOU should make up your own mind!!

MISSOURI WILD TURKEY HUNTERS - LET YOUR VOICE BE HEARD

On Sept. 10, 1935, about 75 Missouri sportsmen met at a hotel in Columbia were disgusted with then the current state of the wildlife regulations controlled by the government and special interest groups.

Send Comments to - Mike Hubbard - Deputy Director for Missouri Department of Conservation - Regulation Committee Chairman

&

Missouri Conservation Commission - Don Bedell, Barry Orscheln, Mark McHenry, Steven Harrison

&

Reina M. Tyl - Wild Turkey and Ruffed Grouse Biologist - Missouri Department of Conservation

FLOOD THE COMMENTS - Commission Meetings

Title - Don C. Bedell, Sikeston, Chair

Title - Wm. L. (Barry) Orscheln, Columbia, Vice Chair

Title - Mark L. McHenry, Kansas City, Secretary

Title - Steven D. Harrison, Rolla, Member

Commissioner Contact Form - Link is below

<https://mdc.mo.gov/form/commissioner-contact-form?commissioner=db>

The Missouri Department of Conservation – 2001 - No.1 goal for Missouri Wild Turkey is Quality Turkey Hunting. - Lots of adult gobbling birds. – Last four years have failed at the goal and it has been a 24-year decline in harvest and population.

CONSERVATION GROUPS – Who is fighting for YOU the HUNTER or LANDOWNER? NO ONE IS!

Why does the Missouri Department of Conservation and Special Interest Groups year after year do not consider any changes to Spring Season, Fall Season, Trapping Season or Non-Native or Invasive Species regulations in Missouri to stop the 24-year decline in Wild Turkey Population and Harvest, but as the wild turkey population grows the season expanded, but as population decline nothing allowed to change! WHY!!!!

May of 2021 - 1000's of Missouri Sportsmen ARE disgusted with the MISSOURI WILD TURKEY and TRAPPING regulations are controlled by a different branch of government and now different special interest groups. MDC, NWTF and CFM.

Are you concerned with money and hunter recruitment over the wild turkey? – I say if the wild turkey population and harvest is high you have more money and more hunters.

Conservation of Wild the Wild Turkey in Missouri has Significantly Changed.

No. 1 - Hunting Opportunity is the NUMBER 1 GOAL for the State of Missouri Government Agency.

No. 2 – The Revenue from Permits Sales and 1/8 cents sales tax that Hunting Opportunity produces is the GOAL for the State of Missouri Government Agency.

No. 3 – The Millions of Taxpayers' Dollars given as Vendor Payments to Missouri Conservation Groups, Missouri Lobby Groups, and Missouri Watch Dog Groups to buy Silence, Support or a Politician is the GOAL for the State of Missouri Government Agency

Do YOUR Letters, Opinions, Data, Facts, Experiences, Truths from Missouri Hunters, Missouri Landowners, Missouri Conservationist or Missouri Citizens that want to protect, reduce harvest, and have the Missouri Wild Turkey thrive have ZERO VALUE outside of Agency and Lobbyists in Jefferson City Missouri?

Does it not matter that the Missouri Wild Turkey Population has decline from 50% to 60% of what it was?

Does it not matter that the Predator population is 10 times of what it was in Missouri 5, 10 or 20 years ago?

Does it not matter that additional wildlife and invasive species are consuming the food sources of the Missouri Wild Turkey?

Does it not matter that more Missouri Landowners in history practice wildlife management?

Does it not matter that in 1989 the major objective in Missouri's Turkey Season has been to provide maximum hunting opportunity commensurate with the population's ability to sustain harvest?

Does it not matter that in 2001 the Missouri Department of Conservation - No.1 goal for Missouri Wild Turkey is Quality Turkey Hunting. - Lots of adult gobbling birds?

Does it not matter what the today's data from Missouri shows?