DO BOUNTIES WORK? 2-16-2020
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People think you can kill one predator and get one more pheasant. Sorry, but it does not work that way. You have to understand predator/furbearer population dynamics.

Do bounties work? I refer you to "Extermination of Noxious Animal by Bounties" written by T. S. Pauvier in 1896. This was an analysis of bounties for two and one half centuries in the United States, so bounties are not anything new. Indeed, bounties were put on wolves in Mass. in 1630 and in Virginia in 1632. Most states did not do research on these programs but only experimented by themselves.

1.South Dakota bountied coyotes from 1971-1976 and some other years. I believe We have as many coyotes in South Dakota as we ever had and they apparently control their populations themselves some by mange and by territorial interactions. Many coyotes were turned in for bounty money on or near state lines. Coyotes can double their litter size when under harvest pressure and increase pregnancy rates and I believe survival as well. (I could not find data on survival). Our studies indicated nature abhors blank territories and predators soon fill in spaces where they are removed.

2. Pauvier concluded that bounties may have worked on coyotes, wolves and mountain lions only to stop the increases in their populations.

3. Bounties did not control rabbits, ground squirrels and gophers and the funds were soon exhausted from county treasuries.

I Believe the general public promotes bounties because they do not know anything about furbearer biology or their population dynamics. We did not have opossums when we did our studies and few people realize they can have three litters per year(10 to 20 per litter). Badger can maintain their populations easy since they can breed any month of the year because they have delayed implantation. Red fox and coyotes can double their litter size when under harvest pressure (fox-our data). People know little about compensating factors in furbearer populations.

Our predator prey studies (1965-early 70's)indicated that by intensive predator control on three 100 square mile study areas(using poison drop baits, den litter control, trapping, shooting, aerial gunning and other methods)that you had to remove 80 to 90 percent of the predator populations to even effect the brood stock(reproductive part)of the predator population. So it would be impossible to have much effect by only trapping them. I went on to do another study on trapping effect on furbearers and found some pheasant increase but was this not significantly different(so was probably only a random event).

Let's look at the 2019 SD tail bounty program. There are 51,156 square miles in the SD pheasant range (Trautman,1982). SDGFP payed for 54,470 total predator tails. This is only 1.07 total predators taken per square mile (all species) range wide, which would not be even one of each species taken. Raccoons:43,779 or 0.86 animals per square mile. Striped skunk 6001 or 0.12 per square mile, Opossum 3,706 or 0.07, Red fox 494 or .0097, and badger 490

or .0096. I do not believe that this would make any difference on predation in the pheasant population.
Another thing we noted in our Predator pheasant studies was that nature abhors a predator vaccumn. After many predators were killed in the interior of the predator control areas, the control agents spent most of their time killing predators coming into the study area from the outside.
They then spent most of their time working on the outside two square miles on the edges of the study areas.

The other thing to consider is the unknown effect of feral cats, hawks and owls on pheasant predation. You remove the other ones and these can still have some effect. Another subject that needs a research study.

South Dakota GF&P has not done pheasant research for several years. Many of our facts no longer apply because so many things have changed (farming practices, use of chemicals, etc.). We have no idea of the effects of releasing genetically and behavior inferior game farm released pheasants, and the effect of using Roundup on habitat and birds.

Another thing that needs to be considered is what people want. After we found that you could better than quadruple the pheasant population by very intensive predator control using poison and all other means on very small study areas we had public hearings and the general public did not want us to kill other predator species (even skunks) to benefit pheasants. The most important tool we had was the use of poison and this was banned in 1972.

It was economically not feasible to spend the money we did on these areas to benefit pheasants on the whole pheasant range.

When Govenor Deugaard’s pheasant group met they ruled against using bounties because it was impossible to tell where the animals came from (Pierre Capitol Journal). Tails can come from road kills as well as from out of state, and we think they do.

The state should have set up study areas to evaluate their program and it’s effect on pheasants to prevent continuing to waste thousands of the sportsmen’s dollars on this program.

Game, Fish and Parks did not document the loss of jackrabbits, Hungarian Partridge and Quail in South Dakota because of lack of funds. Without more research on Pheasants, they also will not document the loss of our pheasant resource. Without more research we will never know what happened if they disappear

We concluded that from all research available considering predator population dynamics and compensating factors that there is no way to now feasibly kill enough predators to even cut into the brood stock (the producers) and we are positive that trapping and shooting can never remove enough predators to increase pheasant populations and this program would not even remove the population reproductive surplus. Therefor the only management tool left is to use soil bank or CRP cover to increase pheasant [populations. The idea is that such large masses of cover will provide protection to some nests (they cannot find them all) and provide protection for broods as well (Predators cannot get them all).

Please spend the sportsmen’s money on habitat instead. This is proven by SD results during the Soil Bank program (1.8 million acres peak) and in 2008

with 1.4 million acres in the CRP program in 2007. SD had 8.6 pheasants per square mile in 2008 and we had only 2.04 pheasant per mile in 2019.

Several states get the federal funds from CRP and sometimes they cut the CRP budget so to get our 1.4 million acres we need a Game, Fish and Parks program of CRP to supplement the federal program to get to the 1.4 million acres. There were only 484,366 acres in CRP in South Dakota in 2019(USDA)so we are now about a million acres short.