

ARTICLE ON CWD UNETHICAL AND IRRESPONSIBLE SAYS DEER TRUSTEE

By Dr. James C. Kroll

If I wanted to kill deer hunting forever, the first thing I would do is to create the perception venison is an unwholesome food item! That is exactly what the recent article by John Fauber and Lee Bergquist (Paul Smith also contributed) seems to be trying to do; it is both unethical and irresponsible journalism in my opinion. In 2003 Wisconsin journalists and a prominent outdoor magazine published articles about three men in a Wisconsin hunting camp dying from eating CWD tainted venison, which turned out to be patently false! The impact of this misinformation was a loss of about 13% of deer hunters and an estimated \$1.5 billion to the Wisconsin hunting-related economy. Wisconsin never recouped these lost hunters, many of whom now are in their late twenties. The recent article, *"Can chronic wasting disease jump from deer to humans? Concerns keep rising,"* is unethical in that it is based on unsubstantiated or distorted "science;" and irresponsible in that the authors seem to be in league with anti-hunting forces.

Now I do not know why misinformation about CWD keeps surfacing in Wisconsin, or who is behind it. And, I am at a loss to figure out what the motivation is. Is it because some of these folks were responsible for the huge failure CWD "eradication" was in the early days of the response, a failure acknowledged by the legislature as "unsuccessful?" Is it that they want to win at all costs, no matter the damage to the hunting heritage of Wisconsin? Or, since federal funding has been drying up, are they after more research dollars?

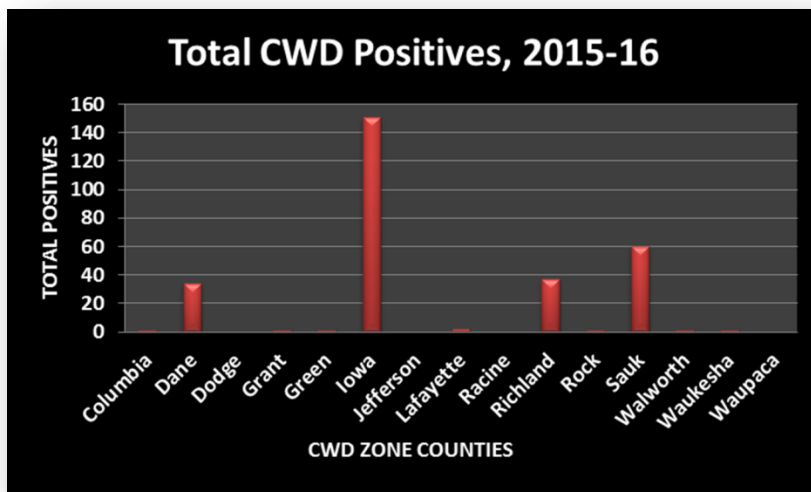
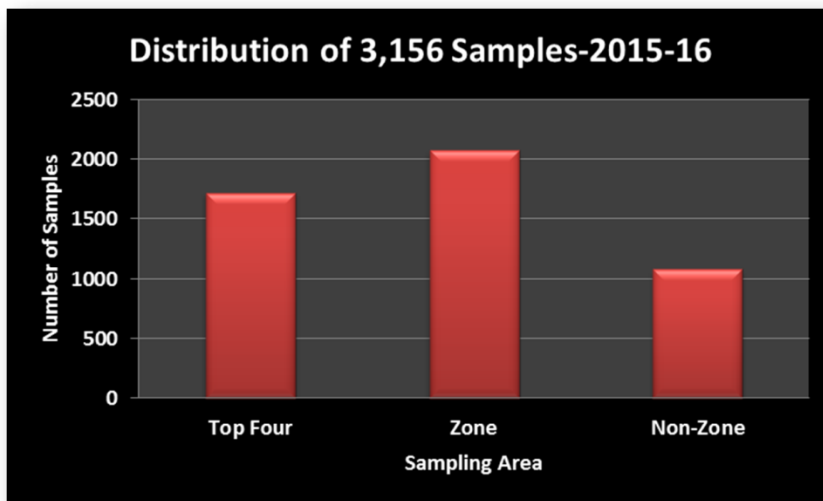
So, unlike the authors of the article, let me substantiate what I am saying with documented science, all of which I will proudly backup. There is so much misinformation in the article, I barely know where to start! So, let's begin with the biggest misconception of all: *"As chronic wasting disease has spread in Wisconsin, the commitment to testing for it has dropped off."* I am in possession of the Wisconsin CWD database, containing some 194,000 sample test results since 2003. Over that period of time, there were 3,135 CWD positive tests; 241.2 per year average. Since 2010, there have been 34,269 tests (up to 2016); 79.1% were from the original 15 county "CWD Zone." CWD is well-documented to occur in older age class animals; and, sampling in older age classes (3.5+) doubled! In 2015, there were 3,156 samples with 296 positives. The media and interest groups erroneously reported that CWD in the entire state had increased to 9.4%; again, an unethical act in my opinion. What these folks did was divide the 296 positives by the 3,156 samples over the entire state, which might have seemed a reasonable thing to do.

Unfortunately, however, 1,080 of these samples came from counties with no CWD positive deer; 2,075 came from the 15 CWD Zone counties; and, 1,722 (one not certain) of these were from the original four counties (Dane, Iowa, Richland and Sauk)! (see graph) When you look at the four main CWD counties, it is clear where CWD is most abundant. (see graph).

Now let's turn to the statement: *"As chronic wasting disease has spread in Wisconsin, the commitment to testing for it has dropped off."* As noted above CWD has NOT spread in Wisconsin! We often have seen a map displayed with CWD cases designated geographically. What you do not know, is that the map is cumulative and not on an annual basis. The fact is the number of counties with CWD in any one

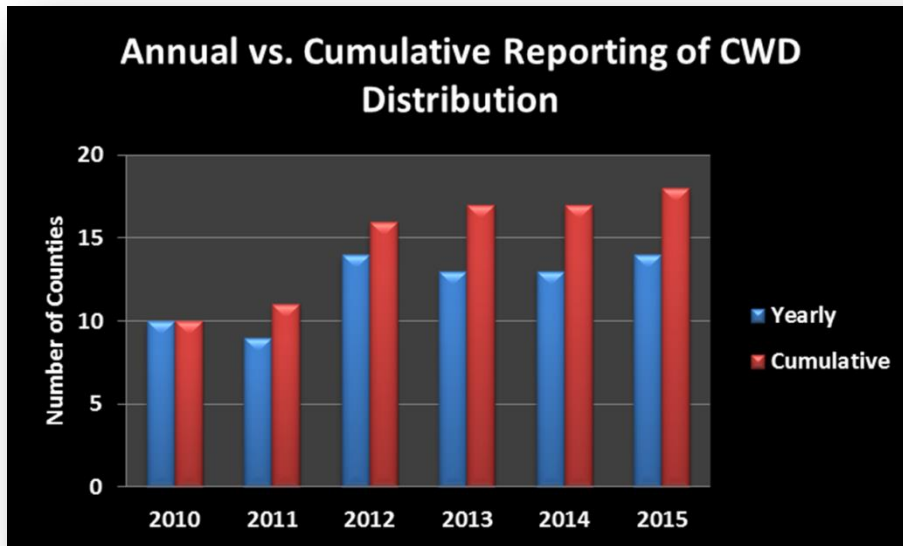
year has not risen above 14 since 2012. In contrast, Illinois often touted as the prime example of proper CWD management now has 16 infected counties cumulatively and 13 in 2016!

As to sampling, the number of samples has dropped off, but not from a lack of effort or dedication on the part of the DNR. Since 2012, the approach has been to contain CWD and sample for “spark-outs;” then moving rapidly to deal with the situation in a new area. Indeed, the Shell Lake case was an excellent example; and turned out to be a single individual, supporting a spontaneous nature to CWD.



Now we turn to testing intensity. In the 2013-15 budget, the state dedicated \$5 from each antlerless permit to CWD testing. In 2016, the DNR increased sampling to 6,000 deer, nearly double the 2015 level. For the 2016 season, it took an average of 9 days (fastest in the nation) to get results, compared to 14

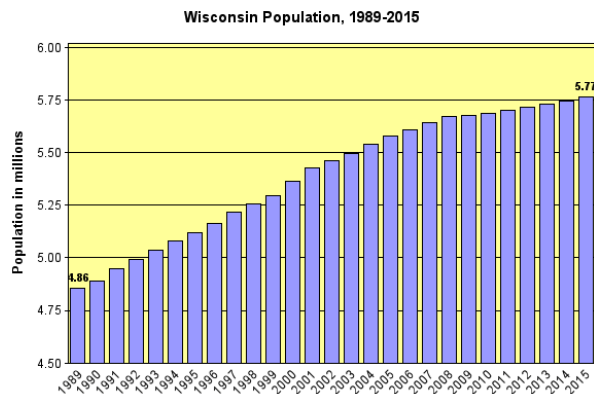
days in 2015. The current goal is to attain a 48-hour turnaround for hunters. I applaud not only these efforts, but also the more intensive sampling within the original area, since it will provide valuable information about the future.



Finally, I turn to the best example of misinterpretation and misrepresentation of “science” I have seen in years! The article claims: *“In 2002, the year CWD was discovered in Wisconsin, six cases of Creutzfeldt-Jakob disease were recorded, according to the state Department of Health Services. In two of the last four years, 13 cases have been recorded. That’s a 117% increase...That raises two questions: whether the rise in Creutzfeldt-Jakob cases is statistically significant, and whether it is linked to the spread of CWD.”* The authors throw in four ill-constructed graphs showing the number of CWD samples from 2002-2016; total positive deer (bogus 118% increase discussed earlier); then cleverly one with the number CJD deaths in Wisconsin from 1997-2016; and finally one showing a national increase in CJD from 305 to 481. I already have discussed the CWD sampling effort and sampling bias errors in the data. The Wisconsin CJD data seem to be correlated (if you squint your eyes a great deal), but here is the problem. There is a huge scientific difference between an apparent correlation and cause-and-effect! I can correlate the number of cigarettes smoked in Seattle with the number of divorces in Las Angeles, but that does not mean there is cause-and-effect between the two. Correlation is the most abused “statistical” technique in science today! First, do the data really show anything? The next graph is the number of cases of CJD in the US since 1997, again showing an increase. Below is the Wisconsin population from 1989-2015; look familiar?

From 2010 to 2015, the number and percentage of Wisconsin citizens 60+ years of age increased from 1,091,139 to 1,266,860; a 16% increase! It is projected that age group will increase another 17% by 2020. Nationally, we are seeing the same trends. So, is the increase in CJD (which is higher in older

individuals) caused by old age or CWD? This is a prime example of how data can be “tortured” to give up the desired result!



The only information resembling science in the article was information from Canadian researchers that preliminary results from a Canadian study appear to show that CWD might have been transmitted to two macaque monkeys fed CWD infected meat. These are preliminary results of an on-going study and have not been peer-reviewed to my knowledge. They reported that some macaque monkeys had contracted CWD orally. Wildlife disease expert, Dr. Don Davis (Texas A&M Veterinary College, retired), recently commented on this study: *“The remaining two infected macaques were fed meat (muscle tissue?) from CWD-infected deer and CWD-infected macaques as stated in the progress report on the same study reported at the Prion 2017 Conference. That’s right... CWD-infected macaque meat was fed to macaques. So then did the macaques become infected from consuming deer meat or meat from their fellow macaques? In the same abstract at the Prion 2017 Conference, it is reported that CWD-infected blood transfused into macaques **did not** reproduce any disease. Transmission also did not occur when scarified skin was exposed to CWD prions.”*

However, there are peer-reviewed published scientific papers on the subject. Race, et al. (2014) reported results of an assessment of susceptibility of squirrel and macaque monkeys to CWD; stating, *“We found that 100% of intracerebrally inoculated and 92% of orally inoculated squirrel monkeys were susceptible, but cynomolgus macaques were not, suggesting possible low risk for humans.”* Intracerebral injection is NOT a normal way for humans to be exposed. Waddell, et al. 2017 (Wiley online library review) conducted a review of 78 scientific papers on current evidence on transmissibility of CWD to humans; concluding, *“Five epidemiological studies, two studies on macaques and seven studies on humanized transgenic mice provided no evidence to support the possibility of transmission of CWD prions to humans.”* There is a huge difference between possibility and probability! How many million pounds of venison have been eaten since the late 1960s? Why has there not been a single case of human CWD documented?

For some time now, I have asked the same question of CWD scientists and state agencies: *“What is the end game?”* What I usually get is crickets! The article implies the problem would be solved if we returned to sharpshooters and a host of liberalized seasons and bag limits. Well, how did that work out for you? That is what was tried during the first half of the CWD response in Wisconsin. All we got in

return was angry hunters and landowners and we still have CWD! Sharpshooting has not stopped the spread in Illinois. In fact, not one agency in any state has been able to reduce or control the spread of CWD. Not one scientist has come forward with a workable solution. The vast majority of public money has been spent on studying and “eradicating” CWD; while virtually nothing has been spent on ways to manage the disease or the possible genetic resistance to it.

The greatest victim of CWD is the Wisconsin hunter! The last irresponsible journalism (2003) cost the state hunters and reduced the magnificent whitetail to “vermin” status. Now, what will be the impact of this latest article on the deer hunting heritage of Wisconsin? Caution is always prudent, but in this case it was downright irresponsible. The anti-hunters have new allies.