

The ECOReport



WIND PROBLEMS

EXPOSING THE WIND INDUSTRY GENOCIDE

APRIL 7, 2014 | JIM WIEGAND | 19 COMMENTS

By Jim Wiegand

For those that have the mistaken belief that wind is green, clean, or in some way a noble venture, reality couldn't be any further from the truth. There is nothing commendable about hiding the slaughter to millions of protected bird and bats each year.

Most of public is unaware of this because at industrial wind farms there is no transparency. With gag orders, high security, and studies being conducted by the industry's own biologists, the public has no

way of really knowing anything. Under these conditions information is filtered and the industry can report what they believe the public will accept.

Rigging Search Area Size

For decades I have been doing research and making astute wildlife observations. I have the expertise to see what others can not and when analyzing this industry's studies, I see one sided environmental documents.

From my research and analysis I now have several thousand carcass distance records from turbine blade strikes. These records are from the years 1990 -2010 and none were taken from industry studies conducted with grossly undersized search areas. Search areas for these studies ranged from 50-105 meters from towers. The wind turbines I looked at ranged in size from 65 kW up to 1.5 MW.

These carcass distance records are from the Altamont Pass Wind Resource Area, Montezuma Hills Wind Resource Area, Buena Vista wind project, Foote Rim Creek Rim Wind Project, Cedar Ridge Wind Farm, Forward Energy Center, and the Blue Sky Green Field wind project. From these carcass records it can be seen that most carcasses upon impact are launched beyond a turbines blade tip length away from towers. In fact this number is about 60% -70% depending on the study being looked at. This still does not take into consideration that search areas for most of these studies were too small for the size of turbine being studied. Several of the studies even mention this.

The average carcass distance from turbine towers recorded in these studies ranges from about 1 1/2 – 3 times the blade length of these turbines. Many of these turbines were only about 100 feet tall when including blades of about 8.5 meters in length. Hundreds of the other turbines I analyzed were about 300-400 feet at the tip of the rotor sweep.

But the industry has evolved and newer studies do not use larger search areas for their much larger turbines.

For the sake of comparison I will comment on some of the recent mortality studies that have been conducted by Stantec. The Stantec studies are important because in my opinion they represent the worst of the worst that this industry has to offer. In the last few years the average carcass distance reported by Stantec in their mortality studies at Wolfe Island, Kibby Mountain, Laurel Mountain, and Georgia Mountain in the Northeast, is about the same distance that was reported from the smallest

65-100 kw turbines at Altamont. But there are huge differences between the turbines studied by Stantec and these smallest turbines. The turbines they write reports for are 40-50 times larger. They reach 250-350 feet higher into the sky, they have blades that reach out 50 meters or more in all directions, and their deadly blade tip speeds are much faster.

All of these factors are important in mortality studies because they contribute to greater blade impact force, more carcass drift from the higher altitudes, and impact points much further out from turbine towers. In one case the blade tip impact points were as much as 47 meters further away (56 total) from turbine towers. Add into the equation that some of these the turbines are located on ridge lines and the carcasses thrown towards the downward slopes will to drift even further.



Part of a White Tailed Sea Eagle – Courtesy Save The Eagles

Yet every one of these Stantec's mortality studies defies the Laws of Motion and Gravity because the



White Tailed Sea Eagle Corpse stuck in a tree – Courtesy Save The Eagles

industry's own data proves that any carcass hit by a turbine blade has a much better than 50/50 odds or 1 out of 2 chance of this carcass landing at a distance beyond a turbines blade length.

For the hundreds of carcasses reported in the Stantec studies, only a handful have been reported past the turbine blade length and the average carcass distance disclosed is about half the distance of the turbine blade length. The odds of this reported carcass distribution to have actually occurred around these huge turbines is so high that it can not be calculated. In other words the numbers are impossible.

In years to come college math and physics classes will have fun analyzing all this. They can apply different wind speeds, acceleration, and points of impact to the wind turbine carcasses distance equation. The combinations are endless but one thing is certain they will understand that most of the car-

casses being smacked with 200 mph blade tip speed will fly beyond a turbine's blade length.

Below is an image of data taken from a 3 year study showing the carcasses distribution for 505 carcasses found in the Montezuma Wind Resource Area. The turbines are 1.5 MW and the search methodology used search areas of 105 meters from towers. The carcasses distance data was reliable for the point I am making but the study still had severe flaws that underreported mortality estimates. When looking at this data readers will see that I have added some notes.

1.5 MW wind turbines 340-390 feet tall

Mortality data from a 3 year study with undersized 105 meter search areas

Table 12. Number of incidents per size grouping versus distance from wind turbine tower (Shiloh I)

Range	# Incidents			Ring Area	Fall Density		
	Small & Medium	Large	Bats		Small & Medium	Large	Bats
0-10	23	4	6	314.29	0.07	0.01	0.02
11-20	12	1	8	942.86	0.01	0.0011	0.01
21-30	12	5	16	1571.43	0.01	0.0032	0.01
31-40	20	1	18	2200	0.01	0.0005	0.01
41-50	18	6	25	2828.57	0.01	0.0021	0.01
51-60	34	6	25	3457.14	0.01	0.0017	0.01
61-70	43	2	7	4085.71	0.01	0.0005	0.0017
71-80	54	6	16	4714.29	0.01	0.0013	0.0034
81-90	32	2	6	5342.86	0.01	0.0004	0.0011
91-100	63	4	4	5971.43	0.01	0.0007	0.0007
101-105	20	5	1	3221.43	0.01	0.0016	0.0003

387 of 505 found beyond 38 meters

Avian carcasses of all size groups tended to be located somewhat evenly over a larger distance range than bat carcasses, which tended to be located closer to the towers. The average distance to the tower for bat incidents was ~50m, while the average distance to tower base for bird incidents was ~65m.

Curry & Kerlinger, LLC
October 2009

46

100 turbines searched -76 with 80 meter towers and 24 with 65 meter towers

77 % of birds and bats were found beyond 38 meter turbine blade length.

Had a proper search areas been used and carcasses lost to crop production been accounted for, over 90% of the carcasses would have been found beyond the blade length.

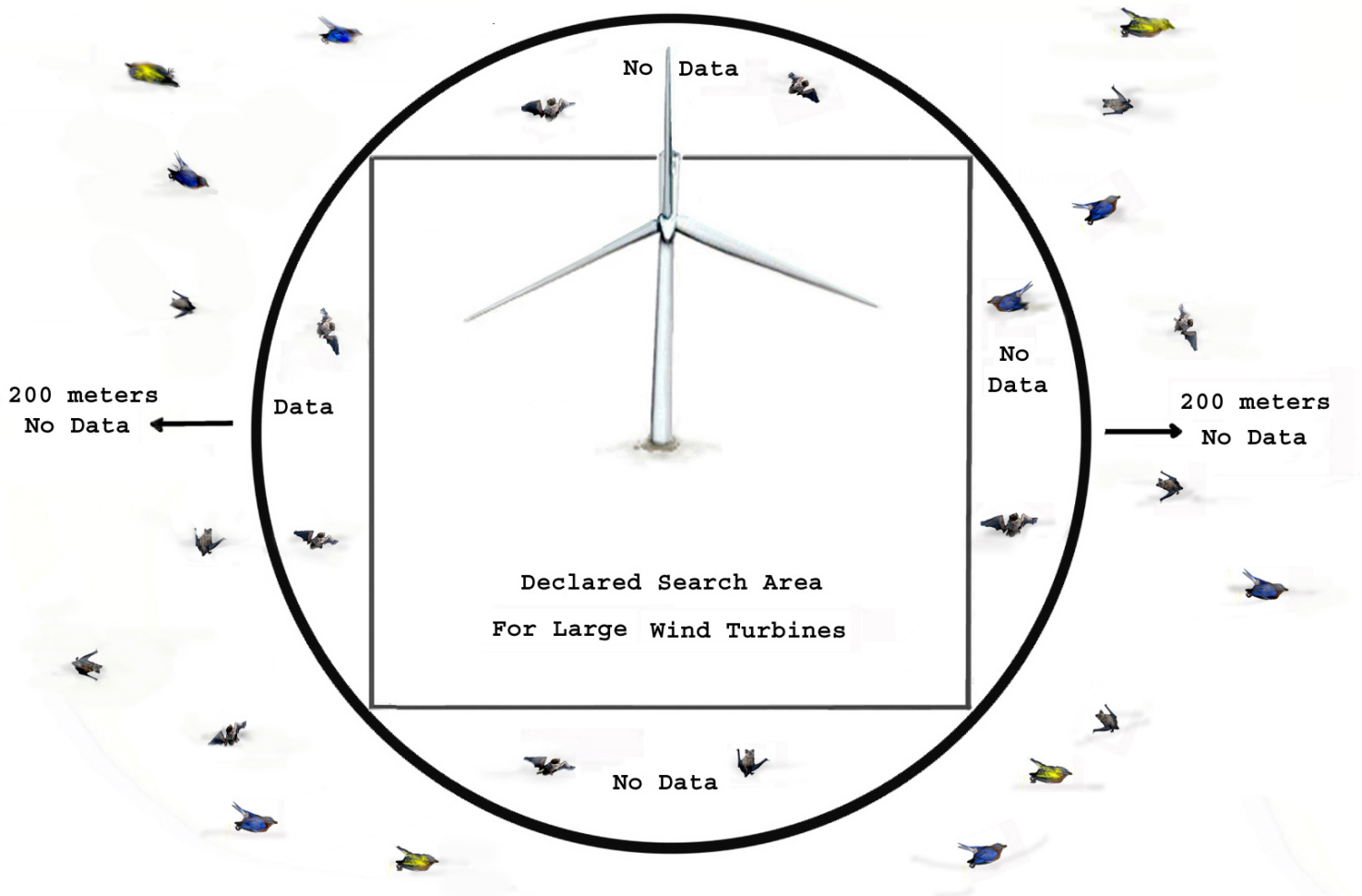
Rigging the Data

The industry is using many tricks and manipulations to make carcasses disappear from around their turbines. None of this is scientific and I see differences in nearly every study I look at. The changes in their studies are predicated on how much mortality needs to be hidden. The most recent wind industry studies are the most appalling and this is because with the industry's huge turbines they need far more carcasses to vanish.

From the previous information I have provided it should be quite obvious that the industry studies are unreliable because search areas are far too small. But there is much more. So much more that I can not put everything in this article or even ten articles. I have chosen to expose some of the manipulation of search plots and touch on the manipulation of carcass data.

In the image below it is fairly self-explanatory and easy to understand. The industry instead of using round search areas and thoroughly searching them has come up with a devious method to hide carcass data, the square search plot. It can be any size they choose but generally an area 120 – 160 meters on all sides. It may not even be square and the turbine may or may not be centered in the plot. The square search plot is used to give the illusion of a much bigger search area while avoiding the majority of carcasses expected to land within the designated searchable area around the turbine.

Using Square Search Plots to Produce Data from Undersized Search Areas



One wind industry trick is to declare square search plots and then give figures for circular search areas. They then claim to have searched out to the maximum distance. This eliminates 36% of the area out to this distance. An area where most of the carcasses will land. Square plots can also be rotated to avoid direction of carcasses throw.

Not only are these square plots far too small, the data collected from these plots is easily manipulat-

ed. These plots may be fully searched but in most cases they are not and “proportions of area searched” are developed for the wind industry’s contrived mortality formulas. I have seen proportion of area searched for the furthest point declared at 100 percent as in the Maple Ridge Wind Farm study. But what the report is not putting in the formulas is that they only searched 100 percent of the area out to the furthest corner of the plot, the carcasses, the data, and the mortality from the full the declared annulus was avoided.

In the calculation of the proportion area searched, carcasses found at the furthest points can boost the numbers dramatically. In the image below I show how these carcasses when found and properly calculated can really boost the reported mortality with very small overall search areas.

Making Carcasses Disappear

"Turbine and tower characteristics are as follows: 80-meter (m; 262.5 feet [ft]) hub height, 41-m (134.6 ft) blade length, 5,281-square meter (m²; 56,844 square feet [ft²]) rotor swept area, and 14.4-rotations per minute (rpm) rotor speed. The rotor swept area extends from 39 m (127.1 ft) above ground level (agl) to 121 m (396.1 ft) agl."

Table 9. Number of bird carcasses found at each range of distances from the turbine during the 2010 mortality surveys at the Cedar Ridge Wind Farm.

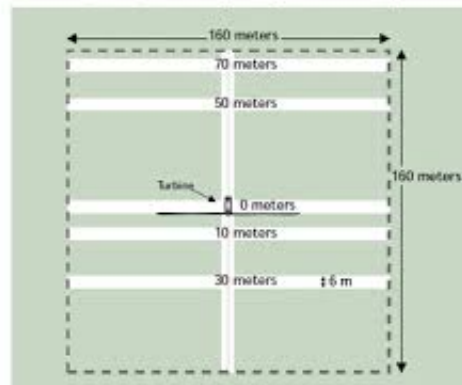
Distance to Turbine (m)	Number of Bird Carcasses	Proportion of Bird Carcasses (percent)	Adjusted for proportion area searched out to 110 meters
0 to 9	0	0.0	0
10 to 19	0	0.0	0
20 to 29	3	12.5	83
30 to 39	2	8.3	56
40 to 49	3	12.5	83
50 to 59	4	16.7	111
60 to 69	1	4.2	28
70 to 79	5	20.8	139
80 to 89	4	16.7	400
90 to 99	1	4.2	100
100 to 109	1	4.2	100

Estimated carcasses beyond 41 meter blade length

86% or 944

Total estimated carcasses with a proper 110 meter search area adjustment 1100

Total estimated carcasses per year by bogus study for these 18 turbines 216



"18 turbines (Turbines 1, 2, 7, 9, 10, 11, 15, 16, 18, 19, 21, 22, 24, 26, 28, 29, 38, and 41R) were sampled (sample plots) by searching six 6-m (19.7 ft) wide transects (Figure 3b). Two transects were centered on the turbine, perpendicular to each other."

Total area searched per turbine 910 square meters or 2.5%

Total area per 110 meter radius from turbine 37994 sq meters

This information was taken from a mortality study conducted in Wisconsin at the Cedar Ridge wind farm. I took the actual area searched and made corrections for the reported carcasses in relation to the proportion of the area actually searched.

From looking at just the search area data, 18 turbines are killing approximately 1100 birds per year

and this does not take into consideration that the search areas should have been 150-175 meters from towers. It also does not taken into consideration searcher efficiency and other factors that boost the mortality numbers. This project has 41 turbines and the actual yearly fatality to birds and bats is many thousands.

For these 18 turbines in 2010 they reported an estimate of 216 bird fatalities.

This study did show that the majority of carcasses land past the turbine blades but how the data collected was processed, hid thousands of birds and bats being killed at this site. They not only used the square search plot ploy but they barely even looked around these turbines. They also discarded important carcasses by labelling them as “incidental”.

In any wind industry study if carcasses are labeled “incidental” it is a major red flag that the study is critically flawed. The word “incidental” is trump card exclusion for wind industry studies. All the carcasses shown in the square plot image are considered incidentals by the industry even though they are finding them dead or crippled on a regular basis.

Honest studies would suggest moving the search areas out to locate and include them in the data.

A high percentage of the raptors found during wind industry studies are dismissed as being incidental. Even the study that produced the data in the first image dismissed golden eagles found as far away as 200 meters because they were found beyond the 105 meter search areas.

Since 2004 Altamont Pass has been excluding dozens of golden eagles from their mortality estimates killed by turbines because they have been placed in the incidental category. How do these most of these dead eagles get placed in the incidental category? Wind personnel go around and pick them up along with other dead raptors ahead of the people doing “standardized surveys”.

An honest survey would never allow any wind personnel to touch a carcass but this takes place at every wind farm.

What I have pointed out is just a taste of what it is like to read through a wind industry study. It is a dreadful journey, but it must be done to save species from what is coming from this industry. The tricks may change from study to study but the end product is still the same, most of the wind turbine mortality is being hidden. For the wind industry there is no standardized research methodology and

they make it up as they go along. The only thing I see in wind industry studies that is truly standardized is a very clear pattern of these studies being rigged to hide mortality.

All of this is allowed to take place because the industry has been handed voluntary regulations from the upper levels of our government agencies. It is time for everyone to take note and to start asking the hard questions because these turbines are contributing to species extinction faster than any other source of energy.



Remains of Two Peregrine Falcons killed by Spanish Wind - Courtesy Save the Eagles

Jim Wiegand is an independent wildlife expert with decades of field observations and analytical work. He is

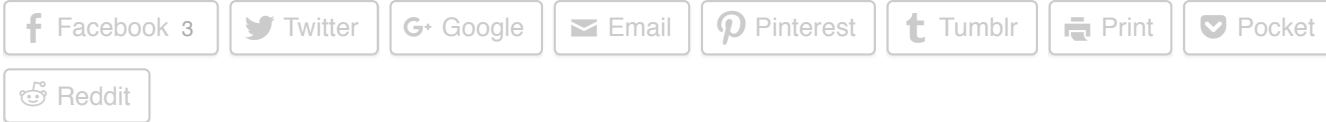


Immature Bald eagle – Courtesy Save the Eagles

vice president of the US region of Save the Eagles International, an organization devoted to researching, protecting and preserving avian species threatened by human encroachment and development.

(Image at top of Page: Golden eagle =Беркыт (Aquila chrysaetos) Source=<http://www.flickr.com/photos/chuckthephotographer/2391751046/>; Author=Chuck Abbe, cc-by-2.0, Courtesy Wikipedia)

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19 THOUGHTS ON “EXPOSING THE WIND INDUSTRY GENOCIDE”



American Woman

APRIL 6, 2014 AT 10:55 AM

As usual, Mr. Wiegand is spot on with the truth about bird mortalities.

Pingback: [Jim Wiegand: Exposing the wind industry genocide | Quixotes Last Stand](#)

Pingback: [The wind industry, and their dirty deeds....they harm with impunity! | Mothers Against Wind Turbines](#)



saveourskylineohio

APRIL 8, 2014 AT 4:57 AM

Thank you for the detailed investigation! I have read your work before and you are in the minority...keep up the great efforts!



Jim Wiegand

APRIL 8, 2014 AT 8:27 AM

I believe that one day the majority will despise this industry. But then than brings up another huge problem in our country, the Putin style politics.

Pingback: [April's Blogs & Articles.... | shelliecorreia](#)

Pingback: [Exposing the wind industry genocide | fisherynation.com](#)

**Carol A Overland**

APRIL 14, 2014 AT 7:25 AM

I strongly object to the use of the term “genocide” when considering what genocide is — consider Hitler, Pol Pot, Rwanda, etc. — that’s genocide. Use of “genocide” in this context is a gross overstatement, blows your credibility. It also harms those working so hard to address these important wind issues, myself and my clients included (permits revoked for Goodhue Wind, not renewed for Kenyon Wind). Here’s the wiki def: “Genocide is the systematic destruction of all or part of a racial, ethnic, religious or national group.”

**Jim Wiegand**

APRIL 15, 2014 AT 12:01 PM

Millions of birds, raptors, and bats are killed by the wind industry each year in North America. Most of this slaughter is deliberately hidden. When studies are conducted, they are rigged to conceal most of the mortality.

In time wind turbines will cause the extinction of dozens of species. The condors would have already been done in by turbines without intervention and feeding stations to keep them from the turbines. The whooping cranes would soon be but a memory without breeding in captivity to bolster their population. But even with captive breeding, I believe the migrating population of whooping cranes will be lost and they will be managed in special locations just like the condors. Many species will not receive this special treatment.

The organized hidden extermination of species involving our government and the wind industry does equal genocide. The propaganda machine for all this is bolstered by a steady stream of rigged research and then filtered through media outlets.

**Brian Loftes**

APRIL 14, 2014 AT 10:40 AM

This is all true but on top of that wind energy is a fraud with out government / taxpayer subsidies it cost 34 dollars and 70 cents per kilowatt hour and after twenty years and the subsidies end they walk away and once again we will have to clean up the mess.

**Brian Loftes**

APRIL 14, 2014 AT 2:39 PM

This wind farm fraud is all part of U.N. Agenda 21 its green energy is a way to get people off the land water ect. Cattle rancher Cliven Bundy and his family in Nevada have been grasing there cattle on state land as far back as the 1800s but in the last year he was told that his cattle were endangering the desert tortoise. When the dust settled it was found out to be Harry Reid and his son who with China want to build a solar panel farm there. Now lets look at south of Block Island and we have our own desert tortoise its the window pain flounder so we can make way for Sheldon Shithouse and his wifes wind farms the great green agenda. I will leave you with this The tree of liberty must be watered from time to time with the blood of patriots and tyrants alike. Thomas Jefferson

**Jim Wiegand**

APRIL 27, 2014 AT 9:32 AM

Just in, more proof of the wind industry rigging their mortality studies..... I just reviewed another recent mortality study released from Altamont on their 2.3 MW turbines. This study found a total of 84 fatalities, 65 birds and 19 bats.....53 (63%) of the carcasses were found beyond the 50.5 meter blade length with 105 meter search areas. A few fatalities were spotted out to 208 meters but primary searches were limited to 10 meter circles out to 105 meters.

Had they actually had formal searches out to 200-250 meters the number of 63% would have been far higher. One fatality was even listed as being "too far" to give the distance so it was probably found beyond 208 meters. Only 13 of the 84 carcasses were found at a distance from the tower base out to half the length of the blades (25.5 meters).

In contrast studies on similar and even the same turbines in the Eastern US list the average distance of carcasses found at less than 50% of the turbine blade length. With most carcasses reported being close to the turbine towers. These numbers are manufactured and unlike this Altamont study and many others I have, the industry is now reporting few carcasses that are past a turbine's blade length. In addition no adjustments are made for mortality estimates for carcasses that land beyond the industry's small search areas out to 200-250 meters.

Like I stated in this article, the information being put in the mortality studies from Canada and the Eastern US, defy the laws of gravity and are impossible.

Pingback: [April's Blogs & Articles....](#) | Mothers Against Wind Turbines



tehachapigal

MAY 6, 2014 AT 12:26 AM

According to the urban dictionary:

In modern society, genocide has come to apply to any planned mass slaughtering of a particular group of people, and to a lesser extent, any disaster that was brought about by artificial or human means and produced a large number of casualties. It's suffered the usual media sensationalism and over the years has lost much of its meaning. In the eyes of society these days, genocide is no longer the profound offense to all of civilization that it was taken to be in 1945, but just an obscure problem in an equally obscure nation by an equally obscure dictator.



Roy L Hales

MAY 6, 2014 AT 7:32 AM

The author, Jim Wiegand, is not "media" he is the Vice President of Save the Eagles and writing about the part wind turbines have in the eradication of the golden eagle population (human means). I suppose you could argue that the term genocide is not appropriate because these casualties are a byproduct rather than the goal of wind farms.

I find Jim's evidence that the numbers of fatalities is far greater than being reported conclusive. He is not the only one reporting that this species is going extinct because of human means.

I do wish he would tone his language down, but he is not being dramatic. He has been observing this situation for many years and believes this is genocide.



tehachapigal

MAY 6, 2014 AT 12:31 AM

Down here in the Tehachapi Pass, tortoises are removed and relocated all the time. This begins long before the wind farms and solar plants are approved. Unfortunately for the tortoises when moved, they appear to attempt to back to their original location. They're eaten by ravens and coyotes and hit by vehicles. Translocation is a failure.

Cattle do step on tortoises and kill them.



Jim Wiegand

MAY 21, 2014 AT 11:34 AM

Here is some very important information relating to wind industry mortality studies that are in no way scientific. It has to do with property owners and wind personnel having complete access to turbines during a mortality study.

By not having daily searches allows far too much time for carcasses to disappear from all forms of scavenging. Wind personnel are allowed to pick up carcasses.

I was told by an eyewitness (written statement) that he observed on two occasions wind personnel randomly picking up carcasses from around turbines that were at the time having formal mortality surveys. Two people were seen quickly picking up carcasses from the clear areas (roads and graveled areas) around the turbines. They were seen dumping carcasses in a bucket and driving off to the next turbine. They were not seen with a pen, no hand held devices, a computer, no notebooks, they did nothing but grab and drive off.

The man at one point even talked with them. They did not appear to be professional and barely spoke English. He also said he would be willing to testify. This reported activity could have been an organized pre-scan for carcasses ahead of formal searches.

This all took place at a wind project located in the habitat of an endangered species, the Indiana

bat.

Pingback: [Dead Eagle Data: What BigWind \(and Honda\) does NOT want you to know... | saveourskylineohio](#)



Jim Wiegand

DECEMBER 18, 2014 AT 8:33 AM

More on the wind industry genocide.....The information below was part of my comments sent in 9/22/14 regarding the proposed 30 year eagle killing permits for the wind industry. I made this information part of the record to expose some of the corruption taking place between the wind industry and the Interior Department . So far no investigations have taken place thing has taken place.

“Investigations for William C. Woody

As Chief, Office of Law Enforcement, William C. Woody directs the work of the Service’s special agents and wildlife inspectors in enforcing the Nation’s wildlife protection laws. He also oversees the National Fish and Wildlife Forensics Laboratory in Oregon and the National Wildlife Property and Eagle Repositories in Colorado.

In the information below is information of a great fraud taking place. If William C. Woody would like to investigate I will be happy to explain any of this information below in further detail.

Decades before wind turbines came on to the scene wildlife biologists used daily searches when looking for carcasses around communication towers. They did this because it was proven to be the most reliable methodology to get accurate mortality data. Periodic searches were also conducted far beyond standard search areas checking for missed carcasses. Generally these standard search areas were conducted as far out from towers as the tower was tall. Periodic expanded searches were conducted as far out as 1 1/2 times tower height.

Today with this fraudulent green industry, carcasses searches are not daily and for 400 -500 ft tall turbines, the industry doesn’t even fully search an area 150 feet out from turbines. Proper search areas for these turbines should be 600 feet out with periodic searches out even further. Anything found beyond their tiny standard search areas are generally dismissed as being incidental. I know of one study that dismissed several hundred carcasses as being incidental. Many of them were raptors.

Mortality numbers given out by this industry numbers are off by at least 90% and this estimate is based upon the industry's own data produced in their rigged studies. But since they are eliminating so much important data, with rigged methodology and employee interference, the true numbers they are covering up are probably closer to 95-98%.

There are also cases when the mortality numbers are even higher. For example with endangered species, if no fatalities are ever reported there is no data. This has been the case of the whooping cranes. The central flyway population was growing steadily each year until about 2006, the beginning of the turbine invasion in their habitat. Today there should be about 450 whooping cranes in this population but the true population numbers are no longer given and they are estimated by the FWS to be at around 175-350. This low number also includes dozens that have been dumped into the wild populations from breeding facilities.

The industry has hidden the slaughter of many millions of birds and bats. Currently the AWEA is claiming they are only killing about an average of 2.9 birds per MW and I expect this fake number will decline along with the increased rigging of wind industry studies taking place. From my research into this industry's bogus mortality studies, the real number is at least 10-50 times higher depending on locations. Below are some of the ways wind industry studies are being rigged to hide mortality:

(1) By searching turbines that are not operational, (2) by searching for bodies in grossly under-sized areas around wind turbines, (3) by not searching turbines daily which allows more time for bodies to be consumed by predators, hidden by employees, and picked up by leaseholders wanting to protect their income, (4) By not using trained dogs in searches which could quickly find virtually every carcasses in a large area around each turbine, (5) By avoiding turbines that are known to be killing the most birds at bats at a wind farms to be included in mortality studies, (6) By avoiding searches during periods of high usage by migrating birds, (7) By not counting mortality wounded birds that have wandered away from turbines, (8) By not counting birds taken to rehab centers which are later euthanized or permanently placed in captivity, (9) By hiring industry shills to make sure that wind industry protocol is followed, (10) by not conducting mortality searches the first year of wind farm operation, 11) By letting farming practices plow carcasses into the ground during mortality surveys, (12) By rigging data calculations and by discarding very important carcasses from the data and declaring them "incidental carcasses"(12) by outright lying about problematic data such as fatalities to endangered species, and most importantly (13) By restricting formal search areas to the roads and cleared areas around turbines which also happen to also be the easiest areas for wind personnel to pre-scan for carcasses ahead of formal searches, and (14) Pay very close attention to this one.....by not allowing 24 hour

camera surveillance on turbines that would expose the truth regarding mortality.

Camera surveillance on wind turbines was suggested by well meaning biologists over 25 years ago and to this day it has never happened. Besides exposing the horrific wind industry slaughter taking place these cameras would cost a small fraction of the many millions being given to shill biologists for rigging their studies.

If William C. Woody would like to investigate I will explain in great detail where these standardized tricks are showing up in the industry's "standardized studies".

The Settlement at Altamont between Audubon and the wind industry is also complete disgrace and should be investigated because the slaughter has not declined as it was agreed it would be. The industry studies have been rigged to make it appear that way. In the meantime the industry has continued to install far more deadly rotor sweep into to the Altamont Pass region.

In one 7 month wind industry study, I believe over 25,000 bat fatalities and about 7800 bird fatalities were concealed. This represents a death rate of 111 birds/MW and 357 bats per/MW or nearly 468 birds and bats killed per MW per year. This was the estimated mortality from just 28 2.5 MW turbines in Maryland. Their tiny search areas around the huge turbines amounted to about 68% of a 50 meter distance from towers. These turbines had blades 50 meters in length and search areas should have been at least 200 meters out from the turbines.

In the mortality report for these turbines it was claimed that searchers systematically searched along predetermined in transects.

I was told something completely different by an eyewitness (written statement) that he observed on two occasions wind personnel randomly picking up carcasses from around turbines that were at the time, having formal mortality surveys. Two people were seen quickly picking up carcasses from the clear areas (roads and graveled areas) around the turbines. They were seen dumping carcasses in a bucket and driving off to the next turbine. They were not seen with a pen, no hand held devices, a computer, no notebooks, they did nothing but grab bodies and drive off.

The man even talked with them. They did not appear to be professional and barely spoke English. He also said he would be willing to testify to what he saw. This reported activity could have actually been an organized pre-scan for carcasses ahead of formal searches.

This observed activity was nothing close to being scientific and took place when formal searches were being conducted on these turbines in Maryland. These turbines are also located in the known habitat of the endangered Indiana bat.

If William C. Woody would like to investigate, I will put him in contact with this eyewitness.

Lastly I have in my possession credible evidence that mortality searches written up in a mortality

study conducted at the Hatchet Ridge wind farm in CA, never took place.

If William C. Woody would like to investigate, I will be happy to show him this evidence.

Jim Wiegand Wildlife Biologist and raptor expert

COMMENTS ON “ICEBREAKER” PROJECT TITLE EA-2045

October 20, 2016

Attention Mr. Roak Parker,
DOE Golden Field Office
15013 Denver West Parkway
Golden CO 80401

Email: ProjectIcebreaker@ee.doe.gov

C.c. Mr. Matt Butler, OPSB
Email: ContactOPSB@puc.state.oh.us

C.c. Mr. Joseph Krawczyk
Joseph.w.krawczyk@usace.army.mil

Dear Mr. Parker, and the Officers of the DOE Golden Field Office,

The Icebreaker project is the first of what the wind industry hopes will be hundreds of turbines placed on Lake Erie. One of the primary obstacles to this plan is the impacts to birds and bats wind turbines will have when placed Lake Erie. As an expert on wildlife and wind turbine mortality impacts, I can safely say that **hundreds of massive wind turbines on Lake Erie will have a tremendous impact on these species, easily killing tens of thousands of birds annually.**

This estimate of mortality to birds is no stretch of the imagination when one considers that the poorly sited McCormick Convention Center located on Lake Michigan has been killing over 1000 birds annually for decades. Major contributing factors for this mortality are high concentrations of birds at this location and poor visibility causing birds to fly low into this building. Wind Turbines on Lake Erie will create far more carnage by actually attracting birds to these locations by putting low altitude flight patterns of birds in times of low visibility, right into the devastating rotor sweep of these spinning turbines.

I also find it odd that I am making these comments to the Department of Energy, an agency that does not normally deal with wind turbine wildlife impacts. As a result, I want to caution the Department of Energy about getting expert opinions from the Interior Department and wind industry research. The problem this poses is that neither of these entities are qualified to give

opinions because together they have been producing fraudulent wind industry research that has been used to hide the majority of wind turbine related mortality impacts since 1985.

Lake Erie is very special

According to the Nature Conservancy: “In Ohio, the western basin of Lake Erie is a hotbed of migratory bird activity, **supporting some of the largest numbers of land birds found during migration.**”



The Lake Erie Improvement Association with supporting opinions from 13 birding organizations, states the Lake Erie Marsh Region is recognized as **globally important for migratory birds as**

millions of migratory songbirds, shorebirds, and waterfowl stop here to feed and rest every spring and fall during their long-distance migrations. In addition, Lake Erie shorelines and attendant inland natural areas are also home to a large number of permanent residents. Nearly 400 bird species have been documented in this region. Visiting birders travel to this region of northwest Ohio. Lake Erie marshes make up the largest stopover habitats in the eastern United States between coastal habitats and northern breeding areas.

“On a single aerial survey done on November 16 of this year, **201,016** water birds were counted, including ducks, geese, swans, cormorants and eagles, all within the offshore waters of western Lake Erie.”

These high numbers are very significant, and create an entirely different scenario than those given in this projects contrived bird surveys.

This project's not so expert opinions

One of the experts quoted for this project made the following statement: “Biologically significant impacts to any bird or bat species, including those that are endangered and threatened, are highly unlikely”. Industry expert Dr. Kerlinger went on to say that this opinion drew upon survey data collected at the project location and impacts were reviewed on birds and bats of offshore wind farms in Europe and onshore facilities in the United States.

“The weight of evidence gathered from studies conducted over many years is quite conclusive,” said Dr. Kerlinger. “

For this false opinion Dr. Kerlinger drew upon the flawed survey data collected at the project location. He also reviewed the very limited information available pertaining to offshore wind farms. But most importantly, the mortality evidence from land based wind energy facilities looked at was produced from *bogus nonscientific research studies conducted over a period of many years.*

The European Wind Energy Association in their recent report, “Birds and offshore wind farms” made this true statement: *“For offshore wind, there is little knowledge regarding certain aspects, such as collision mortality”.* Keep in mind that the first offshore wind farm was constructed 22 years ago in Denmark in 1991 and little is still known about offshore wind turbine collision mortality.

While all this may seem amazing to some, it makes a little more sense when one realizes that offshore wind turbine impacts cannot be studied with conventional wind industry methodology. Those methods call for searching around turbines for carcasses and then making calculated estimates. This cannot be done with offshore turbines because bodies drift away and remains quickly become fish food.

The obvious thoughts to most reading this are that there are other ways to get this information: Cameras. It would be so easy and inexpensive to do so with 24-hour video surveillance on a few select turbines.

So why has this not been done? It never will be because this visual truth about the wind industry's ongoing bird and bat genocide would be revealed. It has not been done for the same reasons that it has not happened on land based wind turbines. Camera surveillance would be this self-proclaimed green industry's worst nightmare. The site of peregrine falcons, whooping cranes, bald eagles or any beloved species being cut in half would not sit well with the public. With cameras, the industry's hidden mortality would be revealed and the numbers would be staggering. Slow agonizing deaths of victims along with bodies being removed by scavengers and wind personnel would also be revealed.

I have also reviewed a number of Dr. Kerlinger's wind industry related mortality studies. I have found all of them to be unscientific due to severely flawed research methodology. I found data his collection methods to be very biased and found his opinions and reports lacking in giving the professional forthright information one would expect from a true expert.

My enclosed attachment of the article "Exposing the wind industry Genocide," examines some of Dr. Kerlinger's bogus land based turbine research.

Another research group Tetra Tech conducted radar studies for this project. Like Dr. Kerlinger's research, I am well aquatinted with its unscientific wind industry research. Besides reading over a severely flawed mortality study from the Hatchet Ridge wind turbines in Northern CA, I even had credible evidence given to me of mortality searches written up for these turbines, that did not take place.

As for Tetra Tech's Lake Erie research, I found that the their Avian and Bat Studies were deliberately designed so important incidental data could be excluded, so radar sampling missed the highest concentrations of migrating species and very important data detailing lower altitude bird flight patterns during periods of low visibility were left out.

"Though incidental observations of birds in the vicinity of the Study Area were not included in the results of the standardized surveys, they provide insight on the avian community in the general area."

"The MERLIN Avian Radar System operated offshore at the Crib (see Figure 1.1) during the 2010 sampling period, from May 1 to May 26, 2010, and again from August 16 to October 12, 2010."

*“It is known that **concentrations of most waterfowl species peak on Lake Erie during March to early April (Prince et al., 1992) with fall migration spanning a three to four month period where different species show peaks in abundance at different times late into the fall migration season (Ewert et al., 2006).**”*

*“**Data was not collected or analyzed due to weather (precipitation or fog) interference and/or radar mechanical downtime.**”*

When dealing with one of North America’s most important and highest concentrations of birds, one would think that credible scientific radar studies would have included year-round data and credible observations.

The Tetra Tech studies were supposed to provide baseline data for risk assessment. But this is not possible considering the limited unscientific data collected for this project. These studies included also no information or opinions about **avian behavior responding to the absence of ice expected around these offshore turbines during winter months, the risk created by increased year round perching availability attracting species, and the attraction of species from the increased food available to raptors and fish eating species at turbine sites that will accumulate because the cover provided by offshore turbines.**

The amount of ice cover on Lake Erie varies with the shallow western region of Lake Erie icing up first. The open water created by these turbines during periods of ice over will attract great numbers of birds to these turbine installations, increasing the numbers that will be killed.

Images of Lake Erie’s winter ice can be seen at the links provided below by NOAA.



NOAA Lake Erie winter Ice cover images

https://www.flickr.com/photos/noaa_glerl/8740487961/in/album-72157633501597864/lightbox/ https://www.flickr.com/photos/noaa_glerl/8740496195/in/album-72157633501597864/lightbox/ https://www.flickr.com/photos/noaa_glerl/11855372243/in/album-72157633501597864/lightbox/ https://www.flickr.com/photos/noaa_glerl/11855517894/in/album-72157633501597864/lightbox/

A Long History of fraudulent Wind Industry Research

As for wind turbine impacts, everyone accepts the fact that turbine blades kill birds and bats. What the public does not grasp is that these studies are routinely rigged **not to find** carcasses. From what I have seen in my research, the MO of this industry is to lie, pay others to lie for you and then keep on lying until the profits stop.

It has been that way since 1985. I say all this because the only credible wind turbine mortality study I have ever come across was published in 1985. It was also the first of such studies ever conducted by this industry. This San Geronimo pass study using truly scientific methodology, estimated an annual mortality rate of 6,800 birds per year or 34.5 fatalities per MW, a rate more than 12 times what the industry is currently reporting. Every other study I have read pertaining to wind turbine mortality has used methodology to produce false data and as a result, these studies are fraudulent.

Decades before wind turbines came on to the scene wildlife biologists used daily searches when looking for carcasses around communication towers. They did this because it was proven to be the most reliable methodology to get accurate mortality data. Periodic searches were also conducted far beyond standard search areas checking for missed carcasses. Generally, these standard search areas were conducted as far out from towers as the tower was tall. Periodic expanded searches were conducted as far out as 1 1/2 times tower height.

Today with this fraudulent green industry, carcasses searches are not daily and for 400 -500 ft. tall turbines, **the industry doesn't even fully search an area 150 feet out from turbines.** Proper search areas for these turbines should be or account for carcasses out to 600 feet out with periodic searches out even further. Anything found beyond their tiny standard search areas are generally dismissed as being incidental. I know of one study that dismissed several hundred carcasses as being incidental. Many of them were raptors.

Mortality numbers given out by this industry numbers are off by at least a factor of 90% and this estimate is based upon the industry's own data produced in their rigged studies. But since they are eliminating so much important data with rigged methodology and employee interference, the true numbers they are covering up are probably closer to 95-98%.

There are also cases when the mortality numbers are even higher. For example, with endangered species, if no fatalities are ever reported there is no data. This has been the case of the whooping cranes. The central flyway population was growing steadily each year until about 2006, the beginning of the turbine invasion in their habitat.

The wind industry primarily uses carcass data found in their “designated” search areas to estimate mortality. I happen to have evidence that shows over 90% of bird and bats smashed by turbine blades fall past the outer reach of turbine blade tips. In other word if a turbine blade is 50 meters then over 90% of the carcasses will be propelled beyond 50 meters from towers. Carcasses are primarily not looked beyond the blade tips and the industry like to pretend they do not even exist.

Methodology from a typical wind industry study

" The 2015 casualty study occurred during the fall (August 1 – October 15) migration period for Indiana bats. Casualty searches were completed once per week on roads and gravel pads of 118 turbines from August 3 – October 14, 2015. Personnel trained in proper search techniques conducted the carcass searches. Searchers walked at a rate of approximately 45 to 60 meters (m) per minute (about 148 to 197 feet [ft.] per minute) along each transect looking for bat carcasses. Transects were spaced at approximately 5 m (16 ft.) intervals on road and pads, and searchers scanned the area on both sides out to approximately 2.5 m (about eight ft.) for casualties as they walked each transect. Bias trials of searcher efficiency and carcass removal trials were conducted."

This may look good on paper but this search methodology is worthless.

Casualty searches in this study were completed just once per week on roads and gravel pads. I could scan easily every one of these cleared graveled areas around these turbines at least once a day. Waiting a week allows for scavengers and wind personnel more than enough time to pick up carcasses.

Making matters worse: *"Casualties found outside the formal search area by observers or by FRWF personnel were treated following the above protocol as closely as possible. Casualties found in non-search areas (e.g., near a turbine not included in the sample of search area) were coded as **incidental discoveries**".*

In other words, wind personnel are allowed to touch and were picking up carcasses during this study which further invalidates any scientific credibility.

The word "**incidental**" is important here because it is a trump card for data exclusion, being used in wind industry studies. **It also allows wind industry personnel to handle, move and even hide carcasses when studies are being conducted. When studies have a week, two weeks or even a month intervals, wind personnel have reams of time to locate carcasses ahead of searchers.**

These research activities produce fraudulent research data. For example, at Altamont Pass during years of formal studies, dozens of golden eagles killed by turbines were excluded from mortality estimates because they have been placed in the incidental category. How do these dead eagles get placed in the incidental category? Wind personnel go around and pick them up ahead of the people doing standardized surveys.

Icebreaker expert Dr. Kerlinger, also uses incidental carcasses in his flawed studies. In one mortality study conducted at the Maple Ridge wind farm in New York state, over 200 incidental carcasses which were most likely all turbine fatalities, were removed from the data. ***"If all added incidentals were treated as survey finds, the final fatality tally would have included an additional 66 small birds fatalities and 144 bat fatalities,"***

The truth is that wind industry's mortality research across America has changed from bad to worse over the years. For several years now, carcass or mortality searches used in the industry's fake studies, are generally completed about once per week **on roads and gravel pads of turbines.**

In order to understand the absurdity of all this, imagine a mailman pulling up to a mailbox then glancing at your driveway. In a fraction of a second a carcass sitting there in a mangled heap would be incredibly easy to spot. Now think of the hundreds of stops a mailman makes every day. It is about that easy to pre-scan for carcasses.

Yet in the wind industry's research now being produced, the industry makes it seem so difficult to find anything from the size a bat to an eagle in their search areas. At one time, there was some truth to this it but this is no longer the case because search areas have been conveniently reduced to roads and cleared areas around turbines.

It is not difficult to search a **road or and the gravel pad of a turbine site** as anyone can see in this image from the Wolfe island turbines. Anyone with decent eyesight could thoroughly scan around dozens of turbines in these ridiculous designated search areas (**roads and gravel pads**) several times a day. At these Wolfe Island turbines an eagle, gyrfalcon or snowy owl carcass could be seen from several hundred yards away, but it still would not be included in the data because these turbines had such tiny "designated" search areas.



How important are all carcasses?

Waiting a week allows more than enough time for scavengers, lease holder or wind personnel to pick up most carcasses. Just finding a carcass and flicking a few feet away from a designated search area excludes a carcass from the data. But it gets much worse because a single carcass found 100-200 meters away from a turbine base on a narrow road, **could actually represent 200 or more carcasses in an honest study** that fairly calculates for carcasses missed in the proportion of a search area not scanned by researchers.

The industry has hidden the slaughter of many millions of birds and bats. Currently the AWEA is claiming they are only killing about an average of 2.9 birds per MW and I expect this fake number will decline along with the increased rigging of wind industry studies. From my research into this industry's bogus mortality studies, the real number is at least 10-50 times higher depending on locations with some large turbines killing over 1000 birds and bat per year.

Below are some of the ways I have found in my research that fake wind industry carcasses data is being created :

(1) By searching turbines that are not operational so bodies are not found, (2) by searching for bodies in grossly undersized areas around wind turbines, (3) **by not searching turbines daily or even several times daily which allows time for carcasses to be moved or hidden by employees, more time for bodies to be consumed by predators, and more time for picked carcasses to be picked up by leaseholders wanting to protect their income,** (4) By not using trained dogs in searches which could quickly find virtually every small carcasses in a large areas around each turbine, (5) By avoiding turbines that are known to be killing the most birds at bats at a wind farms to be included in mortality studies, (6) By avoiding searches during periods of high usage by migrating birds, (7) By not counting mortality wounded birds that have wandered away from turbines, (8) By not counting birds taken to rehab centers which are later euthanized or permanently placed in captivity, (9) By repeatedly hiring industry shills to make sure that wind industry protocol is followed, (10) by not conducting mortality searches the first year of wind farm operation, (11) By letting farming practices plow carcasses into the ground and conceal others with dense growth in designated search during mortality surveys, (12) By rigging data input and calculations and discarding very important carcasses from the data and declaring them “incidental carcasses”(12) by outright lying about problematic data such as fatalities to endangered species, and most importantly (13) **By restricting formal search areas to the roads and cleared areas around turbines which also happen to also be the easiest areas for wind personnel to pre-scan for carcasses ahead of formal searches,** and (14) By not allowing 24 hour camera surveillance on turbines that would expose the truth regarding mortality. Camera surveillance on wind turbines at Altamont was suggested by well-meaning biologists over 25 years ago and to this day it has never happened.

Now read about this Maryland study

In the mortality report for the Criterion wind turbines it was claimed that searchers systematically searched along predetermined in transects in their search plots. I was told something completely different by an eyewitness (written statement) that he observed on two occasions **workers randomly picking up carcasses from the cleared areas around turbines** that were at the time also having formal mortality surveys. Two people were seen quickly picking up carcasses from the clear areas (roads and graveled areas) around the turbines. These areas were also the designated search areas for the study.

They were seen dumping carcasses in a bucket and driving off to the next turbine. They were not seen with a pen, no hand-held devices, a computer, no notebooks, they did nothing but grab bodies and drive off. This eyewitness even talked with them and saw bat carcasses in their bucket. They did not appear to be professional and barely spoke English. He also said he would be willing to testify to what he saw. This reported activity was likely an organized pre-scan for carcasses ahead of formal searches.

This observed activity was nothing close to being scientific and took place when formal searches were being conducted on these turbines in Maryland. These turbines are also located in the known habitat of the endangered Indiana bat.

In my evaluation of this 7-month wind industry study, I believe over 25,000 bat fatalities and about 7800 bird fatalities were concealed. This represents a death rate of 111 birds/MW and 357 bats per/MW or nearly 468 birds and bats killed per MW per year. This was the estimated mortality from just 28 - 2.5 MW turbines in Maryland. Their tiny search areas around the huge turbines amounted to what was claimed to be about 68% of a 50-meter distance from towers. These turbines had blades 50 meters in length and search areas and data should have allowed for launched carcasses out to at least 200 meters from the turbines.

I contacted the Interior Department about all this and they never responded back to me.

Are turbine carcasses being hidden?

Eagles turned in to the repository typically have died of natural causes or fatal encounters with power lines, windmills, vehicles, or illegal shooters or trappers. The repository does not accept poisoned birds because of the hazard they pose to human health.

YES. With voluntary regulations, rigging and an industry using a premeditated pattern of deliberately stupid, contrived, and completely nonscientific studies, the truth about wind turbine mortality impacts has been hidden.

About a year ago I had a meeting with a distraught wind tech working in CA. I was shown chopped up eagle images and was told about 5 golden eagles killed in 1 month by his company's wind turbines. I know these eagles were not reported because a USFWS agent provided me with the eagle carcass totals they had from the region.

I told the USFWS about this and waited weeks but there was no investigation. Unfortunately, this wind tech had unknowingly signed a nondisclosure agreement and did not even know it until I pointed it out in his contract. He wanted to tell this story but the USFWS would not give him immunity. Without immunity, he would have been prosecuted for reporting a crime.

My research into the Eagle Repository located in Denver has uncovered that this facility has **secretly received over 33,000 eagle carcasses since the Clinton administration opened it in 1997. Thousands of eagles are being added to this carcass total annually.** Thanks to the Clinton Administration, new laws were put in place and the Freedom of information act was changed protecting this fraudulent green industry. As a result, the public will never know the cause of death and origin of all these eagles.

Now after years of this fraudulent wind industry NOT reporting their massive slaughter to eagles, the Obama administration has put together a recent proposal that will allow the wind industry to legally slaughter 6200 eagles annually with their lies about "properly sited bird safe" turbines.

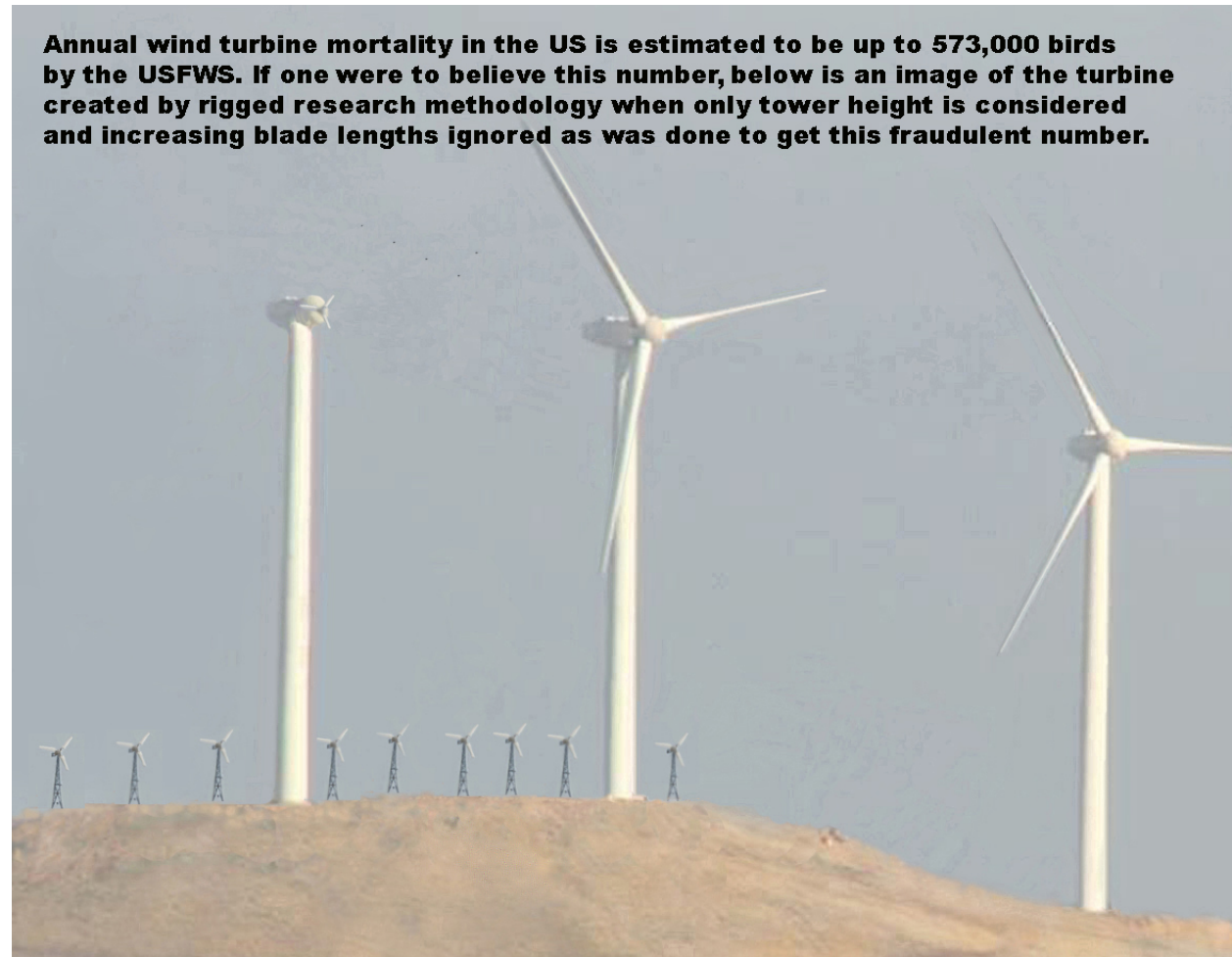
This proposal was put together in Washington because corruption rules in this country and the wind industry's slaughter of eagles is no longer a secret.

How many birds are being killed annually by the wind industry?

The annual estimated bird mortality from wind turbines in the US is claimed to be no more than 573,000. However, I want to point out that this number used by the bird conservation groups, the media and Government agencies, was created from a culmination of fake industry studies using a variety of highly deceptive research methodology tricks.

Then using all this false data from the industry's fake studies, a new culmination mortality estimate was derived using their false data and further reducing industry mortality figures. This was done by primarily accounting for increases in the tower heights of turbines as if all wind

turbines still had 20-foot-long blades.



One of the major problems with this bogus estimate is that incredible increases in turbine rotor sweep and proportional massive search area adjustments that should have been made, were not. These increases should have accounted for turbines blades up to and over 300 feet in diameter. This was all left out of this fake study creating this fake estimate.

Currently the AWEA is claiming they are only killing about an average of 2.9 birds per MW and I expect this fake number will decline along with the increased rigging of wind industry studies taking place. From my research into this industry's bogus mortality studies, the real number many millions each year and depending on turbine locations at least 10-50 times higher than current estimates.

Is Federal wind industry related research being rigged?

Yes, and here is one example. The Altamont Pass area reportedly has largest density of breeding Golden Eagles in the world. This myth was made up from bogus wind industry research.

Altamont is important because this wind energy site has been slaughtering golden eagles for decades. In 2015 the USGS published a report that estimated the eagle population to be approximately 280 pairs in a 2000 square mile region around Altamont. They came to this conclusion by relying on a previous bogus study from the Clinton Era and rigging the methodology used for this study.

The final USGS estimate of 280 pairs is even more remarkable when it is revealed that this study could only verify 11 occupied eagle nests that produced young in the region.

Look closely at the two images. One is from the fake Federal study, the other image is from a publication put together by the Mt. Diablo chapter of the Audubon Society with the help of the Ca Department of Fish and Game and numerous other local agencies.

The Audubon golden eagle nest map makes up a geographic area that amounts to about 40 percent of the area represented in the fraudulent USGS golden Eagle Population report from 2015. This Audubon shows 6 confirmed nesting sites and 4 probable unconfirmed nesting sites. The Audubon information was derived from many years of observations by a great number of qualified people. This information also is consistent with my knowledge of the golden eagles in this region.

Using this actual occupancy ratio from Audubon, the remainder of the USGS study area probably has no more than 12- 20 additional golden eagle nest sites.

The fraudulent USGS report from 2015 states:

“We documented a total of 138 territorial pairs of golden eagles during surveys completed in the 2014 breeding season, which represented about one-half of the 280 pairs we estimated to occur in the broader 5,169-square kilometer region sampled. The study results emphasize the importance of accounting for imperfect detection and spatial heterogeneity in studies of site occupancy, breeding success, and abundance of golden eagles.”

There is no question that from my expertise, knowledge of the area and my own research on the golden eagles living in this area, that the eagle population estimate of 280 pairs has been exaggerated by at least 10 times.

How? The reason is due to the phony methodology used in this study and by **falsely assuming from another bogus eagle study, that these eagle territories in this region are about 5 square miles in size.....** "As a consequence, we used a ***probabilistic sampling approach*** to infer estimates of occupancy, reproduction, and number of territorial pairs of golden eagles."

Why? This convenient survey approach gave the industry the fake numbers needed to hide a declining golden eagle population.

Motivation? Fake population numbers hiding declining eagle populations allow for more turbines to be built which create additional wind industry profits.

It is against the law to kill eagles, yet when a wind tech tells me about 5 unreported chopped up eagles killed in one month by his company's turbines and the USFWS does nothing, there is something very wrong with the system. When I have evidence of mortality searches written up in a mortality study that never took place and the Interior Department will not investigate, there is something very wrong with the system. When a Federal study on the eagle population around Altamont has embellished their numbers by more than ten times, there is something very wrong with the system. When the Eagle Repository has received over 33000 eagle carcasses with thousands upon thousands of these eagles coming from wind turbines and the Interior Department will not tell the public, we have big problems.

The Denver Eagle Repository or what truly is the "wind industry's eagle morgue", holds the hidden truth about this terribly destructive industry. **But just like this eagle carnage taking place, the public will never hear about the true carnage caused by Lake Erie turbines.**

Lastly about this projects' impacts, **hundreds of turbines on Lake Erie will kill off the bald eagles using this region.** Bald eagles will be killed when trying to hunt fish and birds attracted to tower sites. Not only will they hunt the concentrations of waterfowl attracted to these sites, they will be killed from blades when foraging off the waterfowl killed by turbines.

Are any of these turbines really needed?

No. Surely the Department of Energy is aware that enough cheap energy is being exported from the US that could produce triple the energy production from all of America's eagle killing wind turbines. This activity will last for decades, giving engineers plenty of time to completely redesign these terrible turbines.

Currently this industry is forcing America to trade these industrial towers, that will always produce just a small portion of our energy needs, for a coming extinction of species, with no change in climate and far few birds living across the world.

I hope the Department of Energy will help America clean up this horrible mess. A start on the right path, would require badly needed scientific research conducted by ethical researchers.

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