

Using and Installing Deer Whistles; *ITEM DER*

Do Deer Whistles Work?



Can't give a definitive answer in this report but will present the facts we have found! From our experience and what we found, we think they do. We have many deer in the area where we live. The 2 mile long twisty road we live on has very little

lighting and every night deer come from the wooded area on one side of the road to eat all the plants in the homes on the other! We had deer whistles installed on our Vette and SUV and a number of times when deer were observed coming toward the road, they stopped, froze and look straight at us. Fortunately we never had a collision problem – however some of our neighbors hit deer or worse, trees avoiding deer! Was it my Deer Whistles that caught their attention or our car noise!? We can't be sure, but Deer Whistles are inexpensive and unobtrusive; they are cheap insurance!

What Does The Research Show?

Like anything else on the internet you can find completely conflicting data. Let's start with some of the Pro's for the effectiveness of Deer Whistles (***my comments are in bold italics***):

1. A 2003 report by the County of Modac California was most compelling. First it was paid for by the California Office of Traffic Safety (not a Deer Whistle Company!!). Second it involved a real world tests in a county with lots of deer and a previous record of deer/vehicle collisions. Their method was simple. They advertised to give free deer whistles to as many who would install them until they hit ½ the cars in the county. They only reached 1648 out of the 8300 registered vehicles in the county but that was enough to reach statistically sound results.

Summarizing the results: In a two year period from January 1, 2001 to December 31, 2002 the cars without the Deer Whistles hit 29 Deer. Those with the Deer whistles hit none! Since there were more folks without whistles you would expect them to hit more. But statistically using the ratio of cars with and without to deer hit by those without yields $1648/6652 \times 29$ there should have been 7.2 Deer Hit by cars with whistles if they were not effective. For statisticians, they used a chi square test which essentially says what is the probability that the whistles were effective versus the probability the results found

were just a random occurrence. It says there is a 99.6% probability the whistles were effective and the results it are not a random occurrence!

The whistles tested were 418 electronic and 1230 air powered. The air powered were two types. ***One of a type I had used on my S-10 trucks for 10 years. The other was another type with two holes, Save-A-Deer. I decided to buy and install both!***

2. Another test was conducted from June 1986 to May 1987 by "Business Research Group" (not sure who they are or who paid for the tests.) They tested 9 flow through air powered Deer Whistles on mostly white tail deer. They defined criteria that if a deer froze for 4 seconds having heard the whistle that way considered effective. Of the 380 deer tested 351 responded positively and two of the nine devices tested showed over 90% effectiveness.

Not nearly as compelling a test as in number 1, but positive.

3. Now for some negative reports. A widely publicized Internet report quotes Peter Scheifele, director of bioacoustics research at the National Undersea Research Center. Summarizing: In North America, nearly 750,000 collisions occur each year between deer and vehicles. Efforts to reduce that number have spun off a multi-million-dollar industry: deer whistles. Scheifele, an animal bioacoustics and audiology expert, wanted to know more about the devices, so he and his research team scientifically tested their effectiveness. He and his team tested six air-fed whistles in the laboratory and in the field. The study's goal was to determine the actual frequencies generated by the whistles and the intensity at which they are produced, compare that data to the hearing abilities of deer, and then take the animal's acoustic behavior into consideration. Following the directions on each package, the team mounted the devices onto a car's front bumper. Using a road closed to the public, they drove the car at speeds ranging from 30 to 45 miles per hour while recording sound and data. "We tested them strictly from an acoustical point of view," explains Scheifele. He found that the whistles typically produce a signal either at a frequency of 3 kilohertz (kHz) or 12 kHz. The hearing range of white-tailed deer, the most common species in the United States, is between 2 kHz and 6 kHz, so the animal is not capable of hearing the 12 kHz signal. Although deer may be able to hear the 3 kHz signal, it is only 3 decibels louder than the road noise created by the car, so the signal is buried.

But even if deer can hear the electronic signal, the UConn scientist questions how one alerts rather than startles the animal. This is where animal behavior comes into play. "Think about the metaphor 'deer in the headlights'," says Scheifele. "It is used to conjure up an image of someone who is confused or frightened. When deer sense something unusual, we do not know for sure how they are going to react. "Will they freeze in their tracks, run off, or charge towards the sound? Their behavior is related to the "fight-or-flight response." According to scientific literature on the subject, there is an amount of space in which an animal feels safe, but once that boundary is violated, the animal's reaction is unpredictable. Its response will depend on a number of factors,

including age, sex, type of enemy, and surroundings. "All in all, the air-fed whistles do not make sense to me acoustically," states Scheifele.

In my opinion this fellow sounds more like a deer psychologist! The tests he conducted do not, in my opinion, justify his negative opinion!

4. Roy Truelsen, Portland, Oregon published another negative article about Deer Whistles. This is a summary of some of the points:

He states, "Perhaps the most definitive condemnation of deer whistles and their claimed effectiveness is described in the May 12, 1997 article entitled "Deer-Vehicle Collisions are Numerous and Costly. Do Countermeasures Work? published by "Road Management & Engineering Journal"(RMEJ) . On page 4 of 6 of the RMEJ article reviews the deer whistle manufacturers standard claims that the whistles emit ultrasonic sounds as the vehicle travels over 30 miles per hour and that these sounds (not audible to humans) are effective in frightening deer away from the roadway.

"Georgia's Game and Fish Department, for example, found that in hundreds of observations from vehicles equipped with deer whistles, deer didn't respond. Whistles on vehicles going 25-30 mph produced no ultrasonic sound, although some ultrasonic sound was produced when the whistles were blown by mouth. According to wildlife biologists at the University of Georgia, NEITHER DEER NOR HUMANS CAN HEAR ULTRASONIC SOUND."

So the next time you think about purchasing a deer whistle, consider the quality research that has been performed by professors, universities and police forces across the country that establish that deer whistles don't work. Then compare this data to the unsupported claims made by the manufacturers and sellers of deer whistles and decide for yourself who is telling the truth before you spend your money.

He does quote some semi-objective evidence that raises questions about the quality of the tests mentioned in item 2 above, however most of his diatribe quotes the subjective opinion of others! However he and other "authoritative" experts keep on saying Deer Whistles don't work because they don't generate ultrasonic sounds and Deer don't hear that frequency. However I do not believe it is relevant that the makers of these devices know why and how they work! The research from Example 1 and my experience say they might well!

5. Anything New from when the above Reports were summarized?

There was work reported in 2012 by Joanne Will, although not definitive it has some good, logical preventative information. Also one State Trooper said this about positive Deer Whistle tests: Folks who put on Deer Whistles probably are more alert and understand the risks and what can be done to avoid being a victim! He attributed positive results to that assumption!

In addition, I have continued to watch deer on our twisty narrow 2 mile road from the highway to my house in the Country Club where I live. We have woods on one side of the road and homes on the other where they come to eat plants etc.! I have watched them in both my Vette and my wife's SUV

stop and look at me as I approach. Maybe they hear the car but if there is a chance the Deer Whistles are part of the reason the cost is sufficiently small to use them!

The following is the logical info in Joanne Will's internet info:

Understanding when you're most likely to hit a deer is important. Night isn't actually such a bad time to be driving, but dawn and dusk are horrible. That's when deer are most active and focused on eating, so they're not paying much attention to the roadway. ***(In our area I have seen many at night, when folks are asleep in their homes I am sure they feel safer to enter our yards!)***

Avoiding deer also means considering the particular times of year when they're most active. "In places with a seasonal climate, such as Edmonton Canada, we see a peak in collisions in June near the calving season for deer because the mothers have to eat a lot to nurse their young,".

But in all jurisdictions where these collisions are recorded, they find a major peak in late fall and early winter. That's the mating season for deer, movement rates increase dramatically and the males tend to get so focused on mating that they're really reckless near roads.

Maintaining a speed appropriate for driving conditions is always important, and this includes peak wildlife period. The best thing you can do is be alert in areas where deer are prevalent, and during peak periods.

The most important thing you can do is slow down, because crashes are often unavoidable and slowing down helps prevent a more serious crash from happening after the impact with the deer. A lot of the serious crashes involving deer happen in the subsequent impacts when vehicles go out of control and hit other things, or go off the road and roll over.

Remember, if you're driving and see one deer, chance is there are more. If one crosses your path, you need to prepare recognizing that other deer are likely to follow.

Joanne had the idea that the warning signs, because they're cheap and easy to install, were being overused. An analogy would be the overuse of penicillin: it's used so often to fight infection that the effect is lost. My experiment looked at using historical locations for deer-vehicle collisions, and modelling these hotspots – where they were being hit the most, and with new roads where they were likely to be hit the most – and only placing the signs there, rather than just putting them up anywhere. I did find this significantly reduced deer-vehicle collisions at those hotspots.

What Can Be Concluded:

First, as mentioned, air powered Deer Whistles are inexpensive and unobtrusive. I'm not sure what design works best so why not use one of each on either side of the grill. Second, when you see a deer honk the horn and go slow. Stop if feasible and needed, but if possible get past them. Never sure what will spook them and make them go across the road and even hit your stopped car. Or in the case of your Corvette try to jump or step over it!.

Third, DO NOT swerve and hit a tree, etc! If you can turn and avoid hitting one fine but not in place of going off road. On the four lane highways in deer areas (often marked with signs) with woods on the right side, stay in the left lane giving more time to stop or change lanes if deer run across the road.

Installation:

Installing Deer Whistles is straight forward. If the double sided tape often provided is not already attached instead of Velcro I prefer a 3M™ product called Dual Lock™. It has thousands of plastic mushroom heads sticking up from each piece. When pressed together, these mushroom heads interlock with one another creating an audible snap that announces that the fastener is locked. They are a reclosable and offer superior shear and tension holding ability when compared to traditional hook and loop.



Photos of Whistles Installed:

<p>The C6 is an easy install with several Deer Whistles available that will fit the grill area. Use the 3M Dual Lock as noted above</p>	
<p>The C7 has very little room to mount a Deer Whistle. The only one that I found that will fit the grill area is called Save-A-Deer (info@deerwhistle.com.) Use the 3M Dual Lock as noted above.</p>	
<p>The Grand Sport has ideal spots for two deer Whistles, the brake cooling ducts.</p>	

Other 2017 Grand Sport & 2014 Stingray PDF's Available:



Some 40 items discuss improvements or information about a 2017 Grand Sport and 2014 Stingray function and/or esthetics. Some are minor and others, like the installing ceramic brake pads, include detailed install information.

Below are the PDF's available. Click on picture (may need Ctrl pressed.) Or just copy and paste the PDF info (Blue type) into your browser. Or email me at GUtrachi@aol.com and state the title desired, shown in Yellow:

Note: GS indicates that info may only be in the process of being added to C7 PDFs.

Rusty GS/C7 Muffler

*Why the C7 muffler is rusted and a simply way to make rust turn matte black.
Bottom pic rusted, top pic treated*

http://netwelding.com/Muffler_Rust.pdf



Change GS/C7 Oil

*WHY change your own oil and HOW to do it
Revised, includes C7 Lifting Methods*

http://netwelding.com/Changing_Oil.pdf



C7 Carbon Fiber Side Skirts

*How to install side skirts with jacking information for
DIY's without lifts*

http://netwelding.com/Side_Skirts.pdf



C7 Carbon Fiber Splitter w/End Plates

How to install Splitter & Nylon bra fit

http://netwelding.com/CF_Splitter.pdf



C7 Removing GM Plastic Film

How To Remove The Rocker Panel Film

http://netwelding.com/Rocker_Panel_Film.pdf



GS/C7 Mirror Proximity Alarm

Limit switch alarm warns when passenger mirror is too close to door frame

http://netwelding.com/Mirror_Proximity_Alarm.pdf



Jacking Pads for GS/C7

Jacking Pads must 2 1/2 inch max OD. Made four. Also Hockey Puck pad and 2 1/2 inch OD x 2 inch high pads bought after installing side skirts.

http://netwelding.com/Jacking_pads.pdf



GS/C7 Radar Power

The C7 cannot tap the mirror or sun visor for power !

http://netwelding.com/Radar_Detector_Power.pdf



GS/C7 Belt Rattle

Passenger seat belt rattles against the seat back. The solution, add a shoulder belt pad.

http://netwelding.com/Eliminate_Rattle.pdf



Aluminum C7 Chassis and Weld Repair

The C7 has an all aluminum chassis, made from 117 welded pieces

http://netwelding.com/Aluminum_Chassis.pdf



GS/C7 Ceramic Brake Pads

The Z51 has very dusty brakes. These pads help!

http://netwelding.com/Ceramic_Pads.pdf



GS/C7 License Plate Frame;

Must Meet South Carolina Law

[http://netwelding.com/License Plate_Frame.pdf](http://netwelding.com/License_Plate_Frame.pdf)



Manage GS/C7 Spilled Gas

Protect the side of the C7 when filling up with gas

http://netwelding.com/Manage_Spilled_Gas.pdf



GS/C7 License Plate & Cargo Lights

LED license plate light & cargo area bulbs are brighter and whiter

[http://netwelding.com/License Plate_Light.pdf](http://netwelding.com/License_Plate_Light.pdf)



GS/C7 Rear Cargo Area

Rear cargo area needs storage device and rear protector

http://netwelding.com/Rear_Cargo_Area.pdf



C7 Door Panel Protector

protector plate added to prevent scuffing of door when exiting

http://netwelding.com/Door_Panel_Protector.pdf



GS/C7 Improved Cup Holder

A solution to the cup holder spilling under hard braking or sharp turns.

http://netwelding.com/Improved_cup_Holder.pdf



GS/C7 Wheel Chatter/Hop

Why sharp, low speed turns with cold tires causes the front tires to chatter/hop.

http://netwelding.com/Wheel_Chatter.pdf



C7 Carbon Fiber Grille Bar

Install genuine carbon fiber grille bar overlay

http://netwelding.com/CF_Grille_Bar.pdf



Jacking a GS/C7 Vette

Safely jacking either front only or back and front

http://netwelding.com/Jacking_A_C7.pdf



Deer Whistle Installed on GS/C7

Do they work? Plus Install Info

http://netwelding.com/Deer_Whistle.pdf



Replacing C7 Battery

After using a GM type charger and showing fully charged, voltage low, replaced battery with AGM!

http://netwelding.com/Battery_Issues.pdf



GS/C7 Window Valet

Lower Windows with FOB

Window Valet Helps 2014/2015 Latch Hatch

http://netwelding.com/Hatch_Latch.pdf



GS/C7 Splash Guards

GM offers splash guards for the C7 Corvette. An easy DIY installation.

http://netwelding.com/Splash_Guard.pdf



GS/C7 Blind Spot Mirror

Smaller rear and side windows cause C7 blind spots. Small "blind spot mirrors" help

http://netwelding.com/Blind_Spot.pdf



GS/C7 Skid Pad Protector

After the air dam, the aluminum "skid pad" hits driveway ramps etc. Plastic protector helps.

http://netwelding.com/Skid_Pad_Protector.pdf



GS/C7 Wheel Locks

Wheel locks, torqued to required 100 ft-lbs, help protect your expensive wheels from theft.

http://netwelding.com/Wheel_Locks.pdf



GS/C7 OnStar Lights

The OnStar LED's in the rear view mirror, at a quick glance, look like a police car flashing light! This is a fix.

http://netwelding.com/OnStar_Lights.pdf



GS/C7 Skip Shift Eliminator

Skip Shift Eliminator install with suggestions on jacking a C7.

http://netwelding.com/Skip_shift_Eliminator.pdf



C7 Catch Can & Clean Oil Separator

Direct inject engines like the LT1, are particularly subject to "coking." What is Coking and how to reduce the potential?

http://netwelding.com/Catch_Can.pdf



GS/C7 Round Shift Knob

A round shift knob shortens throw.

http://netwelding.com/Shift_Knob.pdf



GS/C7 Stingray Sill Plate

Stingray sill plate replaces original.

http://netwelding.com/Sill_Plate.pdf



GS/C7 Nylon Bra

Nylon Bra Stops Bugs on Front and Grill.
http://netwelding.com/Nylon_Bra.pdf



GS/C7 Clutch Fluid Change

Clutch fluid after 3000 miles gets dirty
http://netwelding.com/Clutch_Fluid.pdf



C7 Carbon Fiber Hood Vent

Replaces Plastic Hood Vent
http://netwelding.com/Hood_Vent.pdf



GS/C7 Cold Air Intake

Low Restriction Air Filter & Duct
http://netwelding.com/Cold_Air_Intake.pdf



Garmin GPS for GS Cubby

Garmin Mounts in GS Cubby
http://netwelding.com/GPS_In_Cubby.pdf



GS Splitter Stage 3 Winglet

Stage 3 Winglets Intergrate with Spats
http://netwelding.com/Stage_3_Winglets.pdf



GS 2LT to 2.5 LT

Red Upper Dash Pad Like 3LT
http://netwelding.com/Red_Dash_Pad.pdf



Jake Emblem/Decals for GS

Jake Symbols Support GS Racing Image
http://netwelding.com/Jake_Emblems.pdf



GS Splitter Protectors

Cone Washers Protect Splitter Bottom
http://netwelding.com/Splitter_Protectors.pdf



May Be Of Interest: Engineering a ProStreet Rod

*How Our '34 ProStreet Rod Was Designed and Built
8.2 Liter Engine, 4 Wheel Disk Brakes & Coilover*
<http://netwelding.com/Engineering%20Street%20Rod%203-08.pdf>

