Dane Line
REIMAGINED

MARCH
2021

BE SURE TO JOIN US FOR OUR UP-COMING SHOWS:

Supported Entry at the
Chickadee Classic, Maine
June 26- 27

2021 Fall Specialties
Thanksgiving Classic, Springfield
November 27- 28
Thanksgiving Weekend

Published by the Great Dane Club of New England

President's Letter
March 2021

Hi Everyone,

I hope everyone is well.

As you may know, the GDCNE, in memory of Ellie Berger and Ronnie Levine, is matching members' donations to the Great Dane Rescue of New England up to a limit of $500 until March 31st. I'm so pleased to report that, due to the generosity of our GDCNE members, the limit has already been met! Thank you, everyone, for your support in this Rescue Challenge.

While you are home during this long, cold winter, I would like to encourage you to do things with your dogs at home. I am including some information in this issue on the Trick Dog program. I encourage you to get involved. For this issue, I'm also including the description of the Trick Dog Novice testing. If your dog has a Canine Good Citizen title, you only need to perform five tricks. Without a CGC, you will need ten tricks. You can videotape your dog performing the tricks and earn a virtual title from home. Just submit the videos to an evaluator. AKC has extended this virtual program to December 31, 2021. Please note that, because the CGC is a test of your dog's temperament, it may not be done virtually.

I am an evaluator for the AKC Canine Good Citizen, Trick Dog and Virtual Home Manners programs and I am offering here to evaluate the dogs of GDCNE club members at no charge for a trick dog title. If you have any questions, please don't hesitate to contact me.

Best wishes,

Sue Davis Shaw, President

Susan Shaw Davis

Getting to Know You

Marcia Roddy

I started in Danes over 20 years ago when I rescued a "rare blue merle" from someone's cellar that I came across at work. I brought Madison home, unbeknownst to my husband, Peter, but had an appointment that afternoon. So I brought this 10 week old puppy to the police station, where he was Chief, and I said: "Just keep her until dinner. If you insist, I'll return her tomorrow".

When I got home, I found he had left work early (unheard of!) and he was working at the kitchen table with Maddy in his lap and a new collar, leash & dog bowl in the foyer. Thus began our journey with this breed.

After rescuing a second Dane through GDCNE, we lost Maddy to osteosarcoma and I proceeded to contact Pat Ciampa for a puppy. I found her via the internet and then a recommendation from Suzanne Kelly and off we went to meet Pat. She hooked us up with a breeder who had bred to her boy, Indy (CH Kativa's Infraed of Maitau), and our handsome guy Sundance came home with us. I had no idea that Maitau had contributed so notably to the world of Great Danes or that a pedigree with Quaker Hill, Sandale, Primrose & Maitau was significant. So, we took our "pet" brindle home.

Pat then called me to check in and tell me about a dog show coming up in the area. She suggested I might want to take a few handling classes and enter Sunny. So, wanting to be a good pet owner, off I went to handling class. Then she showed me how to complete a show entry and pointed me in the direction of "the bald guy", Mike Teneriello, and said, "go hire him".

Again, thinking this was like basic obedience, off I went to talk to the scary one and he agreed to "handle" my dog. You know what is next; we took Winner's Dog at Sunny's first show!! The rest is history.

A few years later, we went back to Pat, Helen & Tiff and asked for a "real" show dog (even though Sunny finished in great form). They gave us Roxie, and as we drove off with her they were all giggling and said; "You have to Special her"!! What in the world were they saying; of course she was "Special"!!

CH Maitau's All Eyes On Sundance, AOM took us on a ride we will never forget. She took us to the Top 20 twice and introduced us to friends we will treasure for a lifetime.

I have been on the Board of the GDCNE for the past 18 years and one of my favorite parts of our Club is the honor of being the Raffle Chair for our Specialties. Our two sons, Chris and Colin, have grown up helping out at the shows and being jealous of the dog's Sprinter. We have had amazing Danes since Roxie and

have bred five litters. Thanks to our Maitau friends, we now have Jules, CH Maitau N Sundance You Gotta Believe, a singleton born in the late winter of 2019. Jules came home with us just after I was diagnosed and operated on for lung cancer. It is impossible to be self-absorbed with this minx in the

house; she has a zest for life and makes us laugh every day. It was she who rescued me this time.

We do not know where these special dogs will continue to take us, but we know we will never be bored!

In Memory

Eleanor Berger

Eleanor Berger, Cedar Hills Kennel, passed away on January 2, 2021 at the age of 96. Ellie, as she was affectionately known, was a long time breeder of Great Danes. She was a member of the Great Dane Club of New England for over 50 years and joined the Great Dane Club of America in 2004. She owned and bred American and Canadian champions. Cedar Hills Chantilly Lace received GDCA Top Producer Award in 2002. CH Cranmoor Cedar Hill Here We Go went Best Breed By Exhibitor in Show at the Souhegan Kennel Club Dog Show in 2006. Ellie touched the lives of many people in the world of dogs and was active in Hockamock Kennel Club and numerous other breed specific kennel clubs.

Ronnie Levine

Although not a member at the time of her death, Ronnie was a member of the Great Dane Club of New England for many years. When GDCNE started a rescue as part of our club, Ronnie was a great help to our Rescue Chairmen, helping in any way that she could and fostering many Danes over the years. Many unplaceable dogs lived the remainder of their lives as part of her family because she wouldn't give up on them. Sadly, there was a house fire during the night of January 19th and Ronnie and her husband, Allan, escaped. Ronnie ran back into the house to save the dogs and lost her own life in that attempt. She will be remembered for her kind and generous nature and for her dedication to those who needed her help.

They're Here

2021 Futurity Nominated Litter
1 Black Male, 2 Black Females
and 5 Fawn Females

Dierks

Honey

BISS Ch RainMaster's Make My World Go Black
(Gunner X Delaney) **CHIC#139255**

GCHB Longo Miller N Lore's Queen Bee V Nor'East
(Primo X Scout) **CHIC #136528**

Contact Dianne Powers - diannepowers@ptd.net

Ad by Cosmic Creations

ABOUT TRICK DOG

From the 1920's and 1940's when trick dogs such as Rin Tin Tin and Lassie won peoples' hearts, trick dog training has become one of the most exciting new areas in dog training today.

TRICK DOG TITLE INFO

AKC Trick Dog titles are official AKC titles listed on the dog's title record.

The processing fee for each title is $20. Multiple titles for the same dog can be sent in together, each one will be processed in succession after each previous title has been added and printed.

Dogs must have an AKC, PAL, or AKC Canine Partners number to earn a title.

All dogs can get a number including purebreds and mixed breeds.

4 TRICK DOG TITLES

NOVICE TRICK DOG (TKN)

The dog performs 10 skills from the Novice list. If a dog has a Canine Good Citizen (CGC) certificate or title on record at AKC, it can do 5 Novice tricks (CGC + 5) to earn the Novice title.

INTERMEDIATE TRICK DOG (TKI)

The dog must have the Novice title, plus perform 10 Intermediate tricks.

ADVANCED TRICK DOG (TKA)

The dog must have the Intermediate title, plus perform 5 tricks from the Advanced list.

TRICK DOG PERFORMER (TKP)

In this title, handlers perform a short routine with at least 10 tricks previously learned.

NOVICE LEVEL *Trick Descriptions*

1. Balance Beam

The dog will walk on a low balance beam or board a few inches off the floor. The dog will perform this trick at least 2 times in a row.

The board should be approximately 6-ft. long

The board should be stable.

Handler may be beside the dog for safety.

2. Bark on Cue

When the handler says, "Bark!" or "Speak!" (or another chosen verbal cue), the dog will bark. The dog will perform this trick at least 2 times in a row.

3. Crawl

The dog will respond to the handler's cue to crawl by getting in the down position and crawling on his/her belly at least 3 body lengths. The dog will do this trick at least 2 times.

In the Novice level, the handler may instruct the dog to "down" in preparation for the crawl.

The handler may use a lure.

4. Fetch

The handler will throw an object such as a favorite toy or ball for the dog to retrieve. The dog will fetch the object, and bring it to the handler within 2 feet. (2 times)

The dog will fetch the object from at least 10-feet.

5. Find it

A treat (or scent item) will be hidden under one cup, object, or container and the dog will be told to "find it." The dog will touch the cup/object/container with its nose or will turn the cup/object over.

[At the Intermediate level, this trick will be done with 3 cups]. (2 times)

6. Get your ____.

When told by the handler, "Get your__" [may be a brush, toy, name of specific toy, etc.], the dog will get the object from at least 5-ft. away and will bring it to the handler.

Fetch it involves the handler throwing the object. In "Get your ___" the object has been placed at least 5-ft. away from the dog. (2 times)

7. Get in (the box or container)

When the handler tells the dog, “Get in,” the dog will jump or step into a box. (2 times)

The box will be big enough to hold the dog .

The sides of the box may be trimmed so the box is only several inches high.

A box lid may also be used if the lid is several inches tall.

All 4 paws will be in the box.

7.b. Sits in box/container on cue [This is an optional separate trick]

When the dog is in the box/container, the handler will cue the dog to “sit” with a verbal cue or hand signal.

8. Get on (low platform or step, etc. with 4 paws)

When the handler tells the dog, “Get on,” “Hup,” or any other preferred cue, the dog will jump or step onto a low platform. This can be a wide step for the dog to stand on with all 4 paws, an agility pause table, or a trick dog pedestal. (Will do 2 times)

Remember that whenever the dog is jumping onto something, the object should be stable.

9. Hand signals (Choose one: sit, down or come)

The dog will respond to one of the hand signals for sit, down or come. Dog will do this trick (respond to selected hand signal) 2 times. If a hand signal has not already been taught, we suggest using the hand signals for AKC obedience if the handler is interested in obedience training. This trick tests the dog’s ability to respond to a hand signal; lures and verbal cues may not be used for this trick.

10. High five

In the high five trick, when cued by the handler, the dog raises one arm into the “high five” (chest height) position. This trick can also be called “wave hello,” or “wave goodbye.” At the Novice level, the dog may simply raise the arm and does not have to wave or paw at the air. (2 times)

11. Hold (at least 3-seconds)

For the Novice Trick Dog “hold”, the dog will hold an object given to it by the handler for at least 3-seconds. (Object will be given to dog to hold 2 times)

The object may be a favorite toy or ball. For an obedience dog, the handler may wish to have the dog demonstrate holding a dumbbell.

Objects at the Novice level are held at least 3-seconds.

Other objects could be a basket (handle), a stuffed animal that could be worked into a trick dog routine (“take the cat outside”), a letter, etc.

12. Jump (through a low hoop or over a low bar)

When instructed to, “Jump!” by the handler, the dog will jump over a low bar (a few inches from the floor) or the dog will jump through a low hula hoop. (2 times) In Novice, a lure may be used to get the dog

through the hoop or over the jump.

13. Kennel up (go in crate, stay in until released)

When told, “Kennel up,” “Crate,” or “Get in your crate,” etc., from 3 to 5 ft. away, the dog will go into the crate and will stay there (quietly and with no resistance) with the door closed for at least 10-seconds. (2 times)

The handler will open the door after 10-seconds and will release the dog.

14. Kiss (handler’s cheek or back of hand)

The handler will turn his/her cheek (or offer hand) to the dog, say “Kiss,” or “Give kisses,” etc. The dog will kiss the handler’s cheek or back of hand. (2 times)

15. Paws up (2 front paws on low footstool or step)

When told, “Paws up,” by the handler, the dog will step up and place his/her two front feet onto a step, stepstool, upside down wooden box or other raised surface. (2 times)

Stools, pedestals, and other surfaces should be stable so that they don’t slide when the dog steps up.

A practical example of this skill is in therapy settings when the dog needs to raise its head so a patient in a bed can reach it for petting.

16. Push-ups (sit, down; sit, down; sit, down)

Push-ups are a good exercise for puppies who are learning tricks.

In Novice, a lure may be used to guide the dog into a sit. From sit, the dog is instructed to “down,” then sit again, then down.

The dog will perform the sit/down sequence 3 times.

17. Shake hands

When the handler says, “Shake,” “Paw,” or “Shake hands,” the dog will raise her/his paw chest high so the handler can ‘shake hands.’ (2 times)

Remember that you can reward the dog with food in Novice.

18. Spin in circle

When told, “Spin” or “Circle,” the dog will spin in a full circle.

The dog may circle to the right or left. More advanced trick dogs can learn to respond to the verbal cues “circle right” and “circle left.”

The handler may use a lure in Novice to get the dog to spin.

The dog should spin at least 2 times in a circle (does the trick twice).

19. Touch it (hand or target stick)

The touch is the foundation for a lot of trick training. When told, “touch,” the dog will touch the handler’s hand or target stick. (2 times)

Say, “touch” and present the object to be touched to 1) the right of the dog’s head, 2) then to the left, then 3) in front of the dog (so the dog will demonstrate it can do this in 3 positions).

For this exercise, we encourage handlers to learn to use a clicker if they haven't already. In training, click and reward each time-- the instant the dog does the behavior correctly. First click, then treat.

By the time handlers get to the Trick Dog test, they may or may not have faded some of the clicks.

20. Tunnel (agility or child's tunnel)

In this Novice trick, the dog will go through a tunnel (2 times). The handler may guide the dog into the tunnel at the entrance.

Remember that agility and obedience equipment is no longer permitted in Performer and Elite Performer.

21. Other: Handlers Choice

For the Novice title, the handler may choose up to 2 Handler's Choice tricks. This is to accommodate handlers who have taught tricks not on this list. If the trick is more difficult than a Novice trick, the handler may wish to save this trick for a more advanced title. Tricks may not be repeated from one title to the next. This trick should be demonstrated 2 times.

22. Other: Handlers Choice

See #21.

Dues announcement

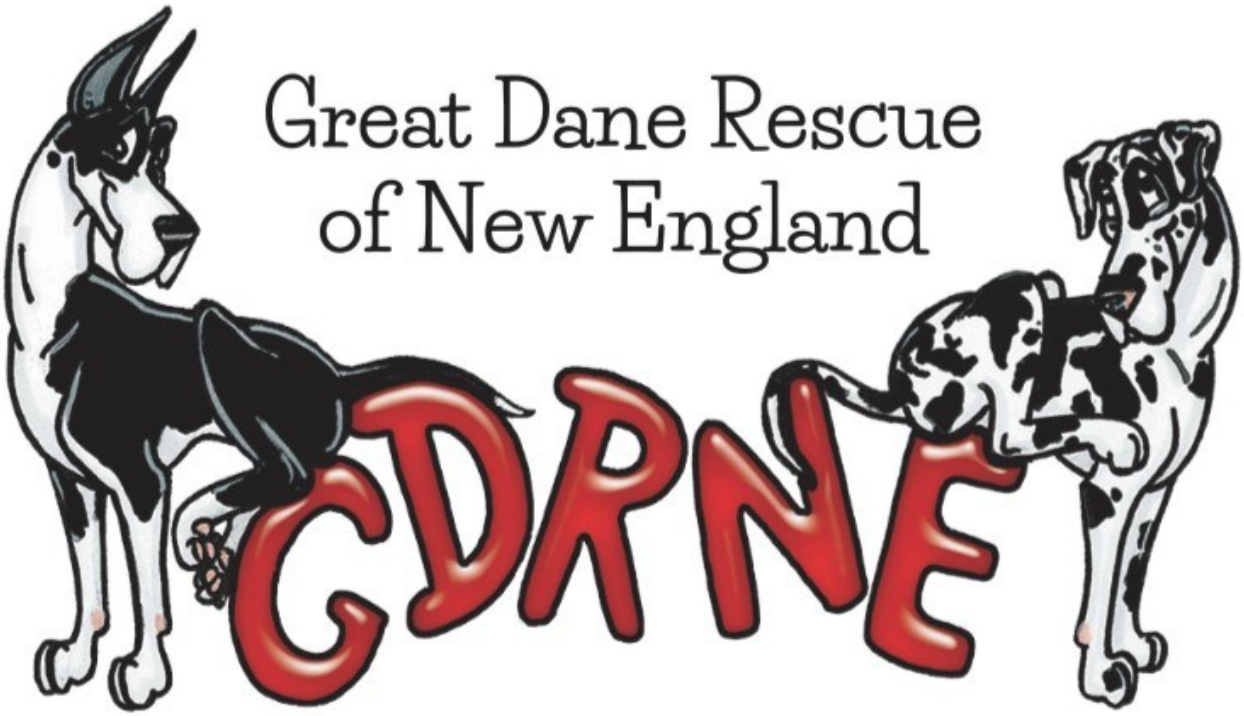
Dues are due on January 1 st. Members joining after September 1 st are exempt from dues the following year. A membership shall be considered lapsed and automatically terminated if such member's dues remain unpaid after March 1st of any fiscal year. The Executive Board may grant an additional grace period (not to exceed sixty (60) days) to such delinquent members in meritorious cases as long as said member personally contacts, in writing, the Treasurer or the Executive Board for an extension period prior to the March 1st deadline.

Family Membership $25.00

Single Membership $15.00

Associate Membership $10.00

You can pay via PayPal on the GDCNE's website at http://www.gdcne.org/contribute or send check to Sharon Boldeia, Treasurer, 1 Rennie Road, Merrimack, NH 03054.



Rescue Challenge

From all of us volunteers here at rescue we would like to thank all of you that participated in the rescue challenge and made donations to the rescue as well as thank you to the club for making this possible and matching the donations.

Fundraising as you can imagine has not been like it was and in these crazy times it makes conducting them very difficult to raise funds.

We have taken in and placed 8 Danes so far this year, we have had to be very selective as many sadly are bite cases and we do not take bite cases, so sadly we have had to refuse more than we would like but we need to keep our adopters and fosters safe and the level of these human bites are just not workable and a major liability.

Now that restrictions have lightened up a bit we have a handful of evaluations that we will be able to conduct of possible surrenders, we have been doing home visits virtually as it is the safest way. We are very fortunate we have many repeat adopters and a home visit isn't required.

Thank you all so much for your continued support of rescue and all the Danes we get into GDRNE that need our help for a very much deserved second chance at the life they should have.

For Great Dane Owners: Embark Testing; Know What You Are Getting (and not getting)!

Many of you have heard about Embark genetic health testing and if you've gone to their website you have probably been quite impressed with the incredible advancements in genetic health testing for dogs. Embark tells you for the low cost of $179, they will take a swab sample from your dog and "will screen for over 160 genetic mutations". Sounds amazing, right? Unfortunately, the reality is not nearly as amazing as they make it sound.

Of those 160 genetic mutations that they will test for, only 3 apply to the Great Dane breed. The other 157 tests are absolutely useless. Yes, you will receive a report listing a "clear" result for your dog for those other 157 diseases but the fact of the matter is that your dog may or may not be clear for those diseases at all – you are no closer to knowing than had you not even tested your dog!

Why is that, you might ask? Because of the way genetic disease testing works. When a scientist decides to work on isolation of the mutation that causes a disease it is usually because they have received funding for a very specific project and usually for a single, specific breed. When a mutation is found that can be shown to be the cause of disease, it is called a marker for that disease. When a dog is then genetically tested for that disease, the lab goes right to that marker and looks to see if the mutation is present or not.

The problem arises when you take into account that many genetic diseases in dogs are not caused by the exact same mutation across breeds. Therefore, a marker that accurately predicts whether Breed A will or will not have Disease X does NOT always mean that it can accurately predict whether Breed B will also have or not have Disease X.

Embark advertises a panel of 160+ genetic diseases for which they screen. But this is inclusive of all breeds, not just Great Danes. So when you break it down to your dog, a Great Dane, there are really only 3 tests that can provide accurate results. These are Degenerative Myelopathy (SOD1A), Inherited Myopathy (BIN1) and Ichthyosis (SLC27A4). And of these 3, OFA is only confident enough in 1 of them as to their accuracy as a marker for the breed and therefore will only publish results for Inherited Myopathy. OFA will also publish results for Centronuclear Myopathy which is not offered by Embark but is offered by other laboratories.

The biggest problem of all is there are breeders out there who actually think this panel is screening their dog for 160+ genetic diseases. They do not understand that 157 of those tests are useless to their breed. Even worse are breeders who are choosing to do this panel in place of actual physical health testing like hip x-rays and cardio echos. This is a major problem for our breed and probably the single largest "dupe" in genetic health testing of dogs in the last decade.

The above information is reprinted with permission from the author, Jennifer Hester, who is a Research Advisor for the GDCA Charitable Trust

Getting to Know You–Suzanne Kelly

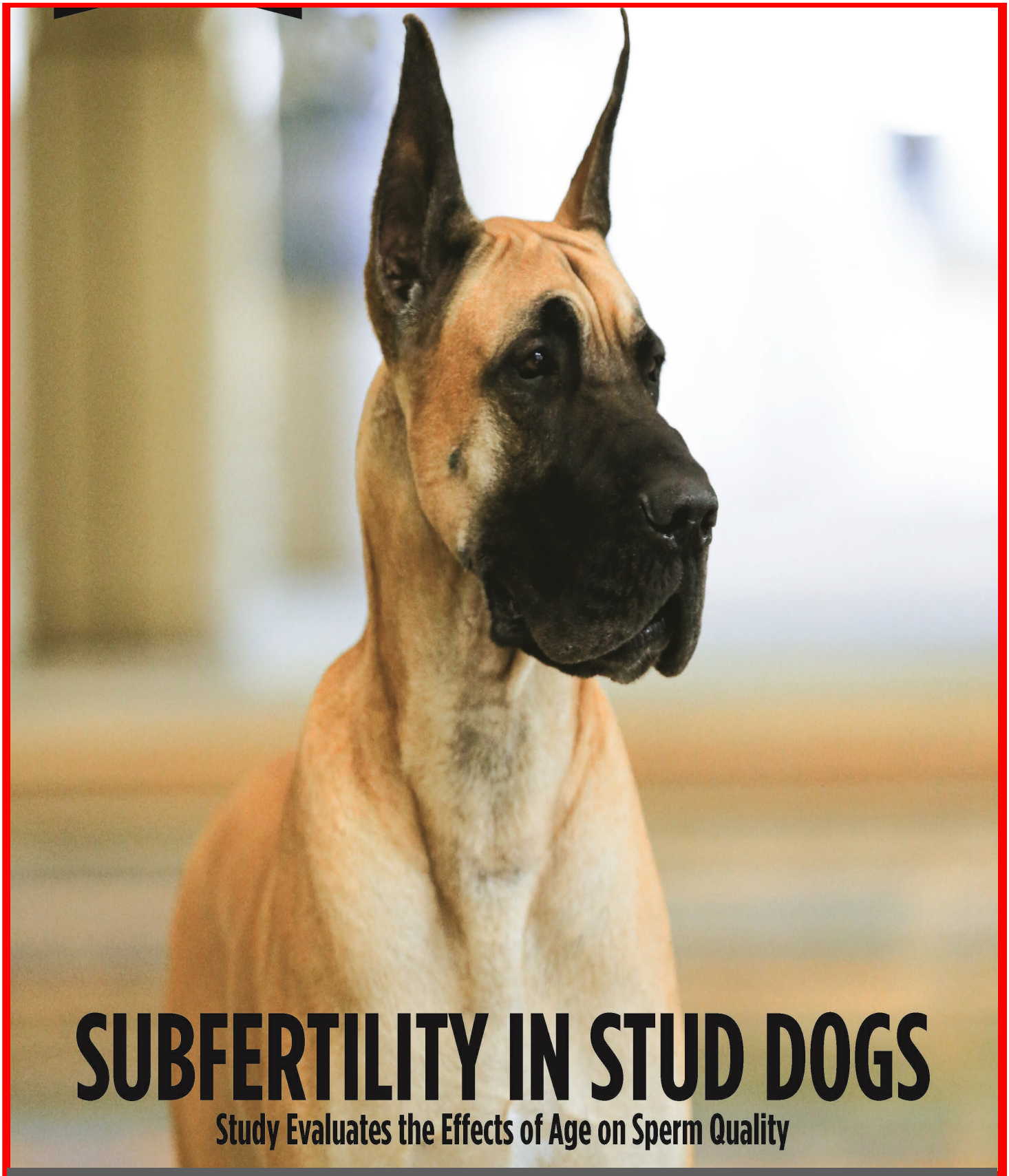
We purchased our first Great Dane Gretchen in 1970. I had just left my job as a cytology technician in the clinical genetics lab at Children's Hospital in Boston to have my daughter, Kristin. Three years later I had my Son, Greg. Gretchen was a very smart and sweet girl and taught me all about Great Danes. I had the opportunity to meet Carolyn Thomas, of Harmony Hill Great Danes, at the Framingham Kennel Club show when it was a benched show at Hines Auditorium in Boston. She was very helpful.

We continued to have Danes but didn't get involved in showing until 1987 when our children were older. It was not something we ever intended to do but when we got Colby from Laurel Malvezzi, everyone was telling us he was beautiful and should be shown. He was our first male and first brindle. Arlyne and Milt Koopmann mentored us about showing in conformation along with Laurel. They also sponsored us into the Great Dane Club of New England. I served on the board numerous times and chaired the Great Dane Rescue for 13 years. The following year Laurel and Charlie Malvezzi sponsored us into the Great Dane Club of America. We attended our first National Specialty that year also in York, PA which was very exciting and informative.

I went to handling classes and met Al Kirby, of Stone House Great Danes and Corgis, who taught me to be a better handler. I finished Colby's championship at 2 years old owner handled. I owner handled several of our other dogs also. I later used professional handlers Terry Silver, Judy Harrington and Jamie Donelson.

I bred our first litter in 1993 out of Kiera and Benny. I chose the kennel name Allegro as I was a classical flutist. All of the registered names for our dogs were music related. We went on to breed a few other litters and produced many champions over the years. When not showing we enjoy vacationing in Italy. We have been there 6 times exploring the different regions. We hope to get back there again soon.

After 50 years of Danes and 32 years of showing, we retired Giulia from conformation after the National in Virginia Beach as a grand champion handled by Jamie Donelson. We then lost Poggi, Giulia's dad, to bone cancer. Giulia was very depressed. We had made the decision not to breed her because of our age and health problems. We had been looking at and considering other breeds and made the decision to purchase a Spinone Italiano named Milan. He was perfect for Giulia and he makes us laugh every day. They get along so well and are very tightly bonded. I continue to work both dogs in rally, obedience and agility as it keeps them active and using their brains. We have made many friends all over the country through our dogs. It has been a wonderful experience.



SUBFERTILITY IN STUD DOGS

Study Evaluates the Effects of Age on Sperm Quality

GREAT DANES ARE FOCUS OF LARGEST MALE FERTILITY STUDY IN A SINGLE BREED

A powerful, muscled fawn Great Dane named "Logan" (BISS CH Surfside Lera Wave Ryder AOM) sired 11 champions out of 27 puppies whelped from his early natural breedings. At age 5 when he could have been earning points for Top Stud Dog, Logan was no longer able to produce puppies.

A Best in Specialty Show winner, "Logan," photographed at 7 years of age, began having fertility issues when he was 5, an age generally considered the prime for breeding male Great Danes.

Vicki Kimbell and her late husband, John Kimbell, of Sierra Vista, Arizona, lamented the premature loss of fertility in their handsome male. "Logan passed on to his offspring beautiful fronts, and they had a true shoulder layback even when he was bred to bitches that didn't have this," says Kimbell, a longtime owner of Great Danes.

"As more people wanted to breed their bitches to Logan, we began using fresh chilled or frozen semen," she says. "The semen quality as he got older was getting poorer and poorer. I describe him as having 'delicate sperm.' When it was apparent that he was not able to reproduce, I had to turn people away from breeding to him."

Joy DeGruccio of Costa Mesa, California, was a co-owner of Logan. A longtime breeder of Great Danes under the Tydwind prefix, DeGruccio, who is a trustee of the Great Dane Club of America (GDCA) Charitable Trust, learned that other stud dog owners were likewise experiencing early reproduction problems in their dogs and were concerned about the emerging health issue.

"Our dogs hit 5 years of age and start having fertility difficulties," DeGruccio says. "We have no idea why this happens. They should be in their breeding prime at that age."

Volunteering to research studies of stud dog reproductive health

for the GDCA Charitable Trust, DeGruccio found an expert at the University of California-Davis. Stuart Meyers, DVM, PhD, DACT, professor of anatomy, physiology and cell biology, specializes in male fertility and sperm biology. His work evaluating the semen of healthy male Labrador Retrievers in the breeding program at Guide Dogs for the Blind in San Rafael, California, was the first comprehensive study for a single breed to evaluate canine semen. The research conducted from 2015 to 2017 was funded by the AKC Canine Health Foundation. The findings were published in July 2019 in *Theriogenology*.

DeGruccio reached out to Dr. Meyers to learn if he would do a fertility study in male Great Danes. Dr. Meyers welcomed the opportunity to continue exploring factors that affect sperm function in dogs and how they differ among breeds and age groups.

"Extrapolating between breeds and age groups is challenging because the normal distribution of semen and fertility characteristics varies among breeds," Dr. Meyers explains. "This is a study of sperm quality. We do not know how fertile these males have been, but this is an important first step in sorting out how factors underlying sperm function can drive age-related sperm quality losses in Great Danes."

With funding support of $150,000 from GDCA and the GDCA Charitable Trust, Dr. Meyers and his team began collecting semen samples. They drew 25 semen samples at the 2018 GDCA National Specialty in Topeka, Kansas, 25 samples at the 2019 Northern California Great Dane Specialty Show in Lodi, and 50 samples at the 2019 GDCA National Specialty in Virginia Beach, Virginia. Owners received a complete analysis of their individual dog's semen quality report.

The study is the largest male fertility study conducted in a single breed. The aim is to determine whether there is a relationship between a dog's age and sperm parameters that determine his viability as a reproducer. "As a giant breed, Great Danes age rapidly and have a relatively short life span," Dr. Meyers says.

GREAT DANE CLUB OF AMERICA CHARITABLE TRUST HELPS FUND MALE FERTILITY STUDY

The Great Dane Club of America (GDCA) Charitable Trust, working closely with GDCA, is a significant source of funding for research that helps to advance the health and well-being of Great Danes. The male fertility study featured in this issue of the *Great Dane Update* is an example of the two organizations working together to fund important research.

GDCA president Jason Hoke notes that male fertility issues have increased over the past five years. "Back in the '80s and '90s, it was rare for males to have a fertility issue unless the dog had an infection," he says. "Now, it is not uncommon to see dogs that have been tremendous show winners suddenly become unable to reproduce. The Great Dane community owes it to the breed to work together and sort this problem out so we can understand what happens as males age and what can be done about it."

Founded in 2002, the nonprofit GDCA Charitable Trust also supports breed rescue, helping to rescue and rehome 1,800 Great Danes in 2018, and breed education. A disaster relief fund was begun in 2018, and a college scholarship program provides financial awards to young people involved with Great Danes.

Great Dane breeders and owners are encouraged to contribute to the GDCA Charitable Trust. To learn more, please visit gdca.org/charitable-trust/trustees/.

"When males become subfertile in middle age, years before they should, it is concerning."

DANE FERTILITY STUDY

"The production of sperm is a dynamic, constantly occurring biological process," Dr. Meyers explains. "Any semen sample we assess is considered valid only for that day and that time of collection. Many factors can alter sperm production. Since it takes two months to make a sperm cell, factors such as fever, trauma and infection can manifest after we assess a given sample."

The decline in male fertility that occurs with aging is well-known, he says. "The degree to which male fertility declines is highly dependent on the individual male and is likely linked to a genetic influence," says Dr. Meyers. "This decline in fertility may cause lower sperm numbers, lower sperm quality and declining libido."

Dr. Meyers and his team are evaluating these measures of sperm health and how they relate to a dog's sperm production capabilities:

- sperm motility, the total number of moving sperm and the progressive motility of sperm moving in a straight line
- sperm morphology, the size and shape of sperm, which reflects the sperm manufacturing process inside the testicles
- testicular volume, or sperm density
- DNA damage
- velocity, or the speed at which sperm travels

Sperm morphology, the size and shape of sperm, is used to help predict a dog's fertility. Dogs with normal sperm quality typically have at least 60 percent or more morphologically normal cells in an ejaculate.

Although testicular volume generally correlates with total sperm count, this was not a predictor of the total number of sperm in Great Dane ejaculates. Additionally, analysis of the Great Dane sperm samples showed a significant loss of total sperm motility with aging.

"There is an approximate 8.35 percent decrease in total motility with every one year of age in the Great Dane males we've studied," Dr. Meyers says. "This means that as a male ages, there is a decrease in the ability of his sperm to reach the oocyte and fertilize an egg resulting in pregnancy. Increasing age is also associated negatively with sperm concentration and progressive motility.

"These age-related decreases in motility parameters and sperm concentration highlight a progressive reduction in the fertilizing potential of Great Danes. Exactly how they impact or affect breeding success is not known."

As dogs age, there is less lateral sperm head motion, a process

TIPS FOR OWNERS OF STUD DOGS

- Semen evaluations should be done annually to assess a stud dog's fertility. More frequent evaluations are advised if a dog misses with one or more bitches or goes from having normal-sized litters to small litters. A semen evaluation also is warranted before a chilled semen breeding or before freezing semen.
- A breeding soundness examination (BSE) should be performed annually to monitor declines in semen quality or libido. A BSE documents semen quality, libido, and testicular and penile health, and includes an assessment of sperm morphology and motility. It also establishes a baseline to track changes in an individual dog. An abnormal result should be repeated in two to three months to give the testes time to make new sperm.
- Stud dogs should be current on vaccinations.
- Good body condition, defined as having a 4 or 5 rating on a 9-point body condition score, is important for health and vigor.
- Brucellosis testing is recommended every three to six months for males that are bred frequently, particularly in areas of the country known to have the bacterium *Brucellosis canis*. Brucellosis is a highly infectious, devastating disease and a leading cause of infertility in dogs.

whereby the sperm head moves back and forth laterally that is thought to be important for penetrating and fertilizing an egg. Sperm use reactive oxygen species (ROS), also known as oxygen-free radicals, to make the energy molecule adenosine triphosphate (ATP) that powers the sperm's flagellum and propels sperm toward the eggs for fertilization. This is what occurs just after mating inside the female's genital tract. During this process, sperm can overproduce oxygen-free radicals, which can damage sperm cell membranes and contribute to infertility.

In Great Danes, there is a reverse ROS relationship, according to the findings. "We attribute high ROS levels in Great Danes with greater total and progressive sperm motility. This positive relationship between ROS and motility highlights a delicate balance between fertility and cellular damage," Dr. Meyers says.

"As we gain better understanding of how these factors influence sperm function, we can look at possible effects from genetic background, coat color and environmental factors such as diet and toxins," he says.

ENVIRONMENTAL EFFECTS

A U.K. study conducted from 1988 to 2014 reported on the potential effects of environmental chemicals on stud dog fertility. Investigators at the University of Nottingham found a significant fallout in sperm quality and a concurrent increased incidence of cryptorchidism, or undescended testicle(s), in males across all ages over the 26 years of the study.

Published in August 2016 in *Scientific Reports*, the study indicated a possible relationship between environmental toxins and the decline in canine semen quality. Noted particularly were the effects from diethylhexyl phthalate (DEHP), a substance added to plastic to increase

LOOKING TO REPRINT?

Great Dane Update articles may be reprinted provided the article is used in its entirety and in a positive manner. To request permission to reprint this article, please contact the editor at: Barbara.Fawver@purina.nestle.com. Reprints should include the following attribution: Used with permission from the *Great Dane Update*, Nestlé Purina PetCare.

flexibility, and polychlorinated bisphernol 153 (PCB-153), a manmade chemical used commercially until 1977 in insulation, coolants, lubricants, and electrical equipment.

Breeds included in the study were Border Collies, Curly Coated Retrievers, German Shepherd Dogs, Golden Retrievers, and Labrador Retrievers. The researchers evaluated the morphology and progressive motility of the stud dogs' sperm and found environmental contaminants in their sperm and testes that directly affected sperm function and vitality.

The investigators associated a widely reported significant decline in human semen quality over the past 70 years from exposure to environmental chemicals during development with evidence that canine testicular cancer over the past 40 years has increased in parallel with the changes seen in humans. Importantly, since dogs share our environment and develop similar diseases such as testicular dysgenesis syndrome, which includes cryptorchidism coupled with declining sperm quality, this provides a One Health opportunity in which dogs may contribute valuable information about environmental influences on fertility in men.

Meanwhile, Dr. Meyers' research of the Labrador Retrievers in the breeding program of Guide Dogs for the Blind found declines in progressive motility and morphologically normal sperm in senior dogs 7 years of age and older compared to young dogs from 1 to 3 years of age or middle-aged dogs from 4 to 6 years of age. Velocity also decreased with increasing age and was lower in chilled semen compared to fresh or frozen semen.

"Overall, the magnitude of changes was small given that our sample consisted of healthy stud dogs relative to what might be expected from dogs with significant fertility problems," Dr. Meyers says. "Our hypothesis was that oxidative damage to sperm membranes and mitochondrial DNA could provide another tool to help assess fertility and longevity of sperm.

"Oxidative damage occurs during spermatogenesis inside the testis because of exposure to oxygen and oxygen-free radicals that result from mitosis and meiosis in the testicular tubules. It also can occur when sperm is being processed for transporting or cryopreservation. As dogs age, the process of mitosis, or cell division, becomes more error-prone and the cellular mechanisms of sperm formation become less efficient in generating cellular energy for making sperm."

The aim of the Labrador Retriever study was to evaluate the relationship between fresh and post-thaw sperm quality and age as they relate to total motility, progressive motility, velocity, viability, morphology, and the presence of reactive oxygen species. Dr. Meyers and his team reported that freezing and thawing of sperm is likely to have a significant decrease in sperm motility, viability and membrane integrity. "Sperm

motility is generally a more sensitive indicator of cellular damage caused by the freezing-thawing process than any other parameter measured in this study," he says.

SEMEN SAMPLES NEEDED

Stud dogs are not always the source of reproduction problems. "Poor semen quality comes in second to poor ovulation timing," Dr. Meyers says. "Although it is impossible to catch all stud dog reproductive problems before a dog is bred, owners can take steps to lessen the likelihood of disappointment by having annual semen evaluations and breeding soundness examinations."

As for the Great Dane study, Dr. Meyers hopes to gather more semen samples from senior dogs, noting that the oldest dog thus far was 5 years of age. "Bringing older Great Danes into the study should shed more light on the impact of ROS levels and potential damage caused by oxygen-free radicals," he says. "It is very important to recruit senior dogs to increase the power of the study. The broad use of artificial insemination today underscores the need to better understand ways to optimize sperm function for storage as well as for maintaining stud dog fertility."

The ultimate goal is to gain knowledge that will help breeders keep their male Great Danes fertile as they grow older. "We are on our way to understanding the complex nature of fertility and how that will benefit our dogs today and in the years to come," Dr. Meyers says. ■

Purina appreciates the support of the Great Dane Club of America, particularly Dr. Daryl Pitts and Dr. Neil O'Sullivan, co-chairs of the GDCA Health and Research Committee, in helping to identify topics for the *Great Dane Update*.

GDCA/ GDCA Charitable Trust News

The GDCA Charitable Trust has voted to increase the reimbursement for echo cardiograms to $75 for the calendar year 2021. There is still a limit of one per dog and this excludes echo's done at the National since they are already subsidized by the Trust.

The Trust will be having an on line auction in March for some items in Pookie Kostuk's collection. The auction will benefit rescue. Details to follow.

The GDCA National Specialty dates for 2022 are extra early and will be held the week of October 7 – 18th in Norman, Oklahoma at the Embassy Suites.

At their April meeting, the GDCA board will be voting on a realignment of the divisions, lowering the number of divisions from six to four. This means that beginning in 2024, the rotation for the National will be every four years. Yikes! Anyone having strong feelings either way is urged to contact GDCA board members.

Membership

At the board meeting following our January meeting, the board approved Tyree Kilgore into an Associate Membership and Colleen Ventre into regular member. Welcome to you both!

The board also accepted the application for regular membership of Dawn Williamson for publication. Dawn is sponsored by Sue Davis Shaw and Paul Bowman. Any comments on this membership should be directed to Sue at Davisdane@comcast.net.

OFA Echocardiograms

Subsidized By The

GDCA Charitable Trust

"UPDATE for 2021" **

We are pleased to announce that beginning in 2021, the Great Dane Club of America Charitable Trust will be reimbursing $75 toward echocardiograms for GDCA and Affiliate Club Members for exams performed in 2021. Guidelines for participating are listed below. We would like to thank Darryl Pitts for taking the helm as the Gatekeeper for this program.

The GDCA Charitable Trust will reimburse (subsidize) OFA advanced cardiac (echocardiogram) studies for GDCA and Affiliate Club members in the amount of $75.

Limited to ONE PER DOG for either INITIAL or FOLLOW UP Echocardiogram. **

Great Dane must be one of seven acceptable colors as recognized by the breed standard.

Echocardiograms performed at GDCA National will be excluded as they are already subsidized and offered at a reduced rate to participants.

Send a copy of receipt, OFA application, and mailing address for receipt of check to Darryl Pitts at ECHO.GDCA@gmail.com

If you are not a GDCA member, please indicate affiliate club membership.

Processing of checks will be done quarterly.

IMPORTANT SCHOLARSHIP INFO

The GDCA Charitable Trust is pleased to provide scholarships for students in our Great Dane community who are pursuing further education after high school and are involved in our breed. Involvement includes active participation in conformation, rescue, therapy, obedience and performance events. Further education is defined as a college, university, or an accredited vocational school.

Under the age of 18, the applicant or applicant's family must belong to the GDCA or an affiliate club. An applicant who is over the age of 18 MUST themselves be a member of the GDCA or an affiliate club. Deadline for applying is April 1st.

The Carmody Scholarship is awarded at the discretion of Mrs. Mary Lou Carmody. No additional application is required.

Link to the scholarship application:

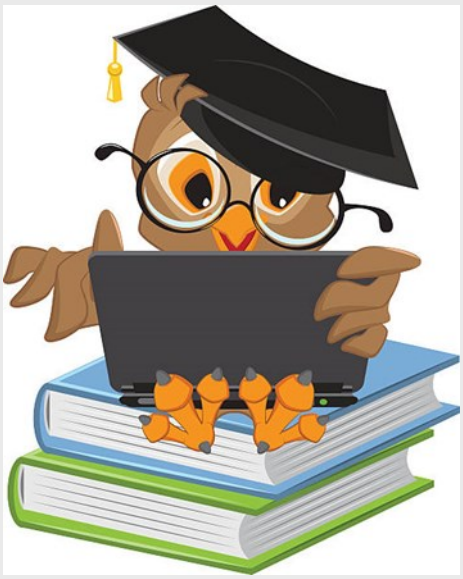
https://gdca.org/wp-content/uploads/2018/11/GDCACTScholarship-Application-Effective-2.2018.pdf

ADDITIONALLY…The GDCA Charitable Trust would like to express our sincere appreciation to Mrs. Carolyn Thomas of Harmony Hill Great Danes for her generous donation of $25,000 to the Trust. As many of you know, Carolyn & her husband Bob bred and exhibited some of the most famous Great Danes in our history, many of whom left their mark as sires or dams of great repute. We are most grateful to Carolyn, and we have established the "Bob & Carolyn Thomas (Harmony Hill Great Danes) Scholarship Fund". Per Carolyn's wishes, the monies will be held in account and disbursed as follows:

$18,000 to be awarded as a $1,000 scholarship to an applicant in veterinary school with an affiliation to the Great Dane community. This scholarship can be renewed annually upon application.

$7,000 to be awarded as a $500 grant to a Junior Handler applicant who qualifies and competes at Westminster with a Great Dane.

Please contact Sue Davis Shaw, Davisdane@comcast.net with any questions or for more information.



GDCA CHARITABLE TRUST

Our 2020/2021 Fundraiser

The Rainbow Bridge
1-1/2 inches by 1-1/2 inches
with an 18 inch gold rope chain.
Donated through the generosity of
Ana & Julien Goulet,
Virginia Perry Gardiner/Ana Goulet Studios

~ Tickets ~ $5.00 each

* Winner Need Not Be Present to Win *

All Tickets Purchased in 2020 will be placed in the drawing for 2021.

Tickets will soon be available through your Affiliate Club,
ONLINE, in our Charitable Trust Store at gdca.org and
at the Trust Booth (all week) at the 2021 GDCA National Specialty.
The drawing will be held at the Awards Dinner, on Saturday, October 30, 2021.

Questions or Additional Info ~ Please Contact

Cathy Schaefer * dick.schaefer@gmail.com

Central Maine Kennel Club

Presents our All Breed Heart & Eye Clinic

381 Kennebec Road , Hampden, Maine 04444

Heart & Eye Clinic Registration Form

Saturday April 17, 2021

Name:_____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Dr. Ruth Marrion- (Ophthalmologist) Dr. Nate Deering (Cardiologist)

#.....@ $35.00= _____ Eye Exam $40/ after closing date

#.....@ $65.00= _____ Auscultation (good for 1 year)

#.....@ $235.00 _____ Advanced Auscultation (good for life)

$_____Total due *along with application*

Saturday 8:00 to TBD_____

This clinic is for healthy animals, for breeding purposes only!

Please go to www.OFFA.org to create a CAER eye application prior to attending the clinic. If your dog has a microchip number and want it verified, YOU MUST FILL THE DOGS MICRO-CHIP NUMBER IN ON THE ONLINE FORM!!! If Dr. Marrion has to type in your dog's MICROCHIP NUMBER, There will be a $5.00 charge per dog! Please come 20 minutes prior to your exam time, to administer eye drops and fill out any necessary paperwork,

Please make checks payable to: CMKC (Central Maine Kennel Club)

Mail to: Denise Blanchette, P. O. Box 563, **Sabattus, Me 04280** (207)754-2600

Email: Gacres9@fairpoint.net

There will be no refunds for cancellations!

All monies as to be paid prior to appointment.

Closing date April 8,2021 Appointments will be sent by April 12,2021

Next Clinic May 23,2021—Heart & Eye Clinic

141 Spring Road Augusta, ME

Central Maine Kennel Club Presents our All Breed Heart & Eye Clinic

141 Spring Road , Augusta, Maine 04330

Heart & Eye Clinic Registration Form

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Phone: _____ Email: _____

Dr. Ruth Marrion- (Ophthalmologist) Dr. John MacGregor (Cardiologist)

#.....@ $35.00= _____ Eye Exam $40/ after closing date

#.....@ $65.00= _____ Auscultation (good for 1 year)

#.....@ $235.00 _____ Advanced Auscultation (good for life)

$_____Total due *along with application*

Saturday 8:00 to TBD_____

This clinic is for healthy animals, for breeding purposes only!

Please go to www.OFFA.org to create a CAER eye application prior to attending the clinic. If your dog has a microchip number and want it verified, YOU MUST FILL THE DOGS MICRO-CHIP NUMBER IN ON THE ONLINE FORM!!! If Dr. Marrion has to type in your dog's MICROCHIP NUMBER, There will be a $5.00 charge per dog.

Please come 20 minutes prior to your exam time, to administer eye drops and fill out any necessary paperwork,

Please make checks payable to: CMKC (Central Maine Kennel Club)

Mail to: Denise Blanchette, P. O. Box 563, **Sabattus, Me 04280**, (207)754-2600

Email: Gacres9@fairpoint.net

There will be no refunds for cancellations!

All monies as to be paid prior to appointment. Closing date May 14,2021

Appointments will be sent by May 17,2021

TOPICAL REVIEW

Intracranial Trauma in a Dog due to Being "Swung" at Birth

Sophie A. Grundy, BVSc (Hons), MACVSc, DACVIM,[a] Serena M. Liu, VMD, MS, DACVP,[b] and Autumn P. Davidson, DVM, MS, Dipl ACVIM[c]

A male Labrador Retriever neonate presented for evaluation 8 hours after birth because of the onset of generalized seizure activity. The neonate was one of 8 puppies delivered over a 19-hour period to a 4-year-old female Labrador Retriever at an assistance dog breeding colony. Uterine and fetal heart monitoring were performed during the first and second stages of labor; secondary uterine inertia was diagnosed 10 hours after the onset of stage-1 labor. In addition to standard medical therapy, manual assistance was provided for the delivery of all but the second puppy (feathering, pulling, elevating forequarters, abdominal compression). The puppy presented was the third puppy born. At birth, resuscitation efforts were instituted because of a lack of spontaneous breathing and bradycardia. In an effort to remove amniotic fluid from the airways, the puppy was "swung" by an experienced attendee in an arch from mid-abdomen height to knee height while cradled in both hands with the head stabilized. Initial evaluation of the puppy revealed normal blood glucose and no ultrasonographic evidence of hydrocephalus. Because of continued seizure activity, euthanasia and necropsy were elected. At necropsy, there was gross evidence of subdural hematoma formation. Subsequent histopathology of the brain, liver, lung, spleen, small intestine, colon, and kidney revealed subdural and intracerebral hemorrhage. Findings were consistent with high-velocity deceleration trauma ("shaken baby syndrome"). Traditional neonatal resuscitation via "swinging" is a dangerous and potentially lethal practice capable of inducing significant brain trauma in the canine neonate.

Keywords: neonate, neonate resuscitation, brain trauma, dystocia, swung, seizure, subdural hemorrhage, intracerebral hemorrhage, shaken baby syndrome

A male Labrador Retriever neonate was examined 8 hours after birth because of the onset of seizure activity. Seizures were characterized by generalized muscle fasciculation, full-body twitching, and loss of consciousness. Each episode was approximately 20 seconds in length, and the puppy was not readily rousable during the interictal phase. A total of 2 seizures were recorded before presentation.

The neonate was 1 of 8 puppies delivered over a 19-hour period to a 48-month-old female Labrador Retriever. The litter described represented her third whelping. Whelping occurred at 65 days of gestation (as determined on the basis of estimation of the luteinizing hormone [LH] surge by evaluation of serial serum progesterone concentrations to detect the initial increase to $>$ 2 ng of progesterone/mL). Uterine and fetal heart monitoring (Whelpwise; Veterinary Perinatal Services, Wheat Ridge, CO) were performed during the first and second stages of labor; secondary uterine inertia was diagnosed 10 hours after the onset of stage-1 labor. Dystocia was medically treated by subcutaneous administration of calcium gluconate 10% (total dose, 13.95 mEq; American Regent Laboratories Inc, Shirley, NY) and oxytocin (total dose, 6.5 units, 10 USP/mL; American Pharmaceuticals Partners, Inc, Los Angeles, CA), in addition to manual assistance for the delivery of all but the second puppy (feathering, pulling, elevating forequarters, abdominal compression). Some of the recorded fetal heart rates were consistent with fetal distress (range, 130-210 beats per minute).

At the time of whelping, the bitch was current on all vaccinations (distemper, canine adenovirus type-2, parvovirus, parainfluenza, rabies, and *Bordatella bronchiseptica*) and was receiving regular heartworm prophylaxis. Serological testing for brucellosis had been completed every 6 months; all test results were negative. The bitch had a medical history of chronic otitis externa associated with *Malassezia* species, but no aural treatment or other medications had been administered during pregnancy other than routine heartworm prophylaxis. Prior litters were delivered at 24 and 36 months of age. For the first pregnancy, the bitch whelped prematurely at

[a]VCA Sacramento Animal Medical Group, Carmichael, CA, USA.
[b]Animal Medical Center, Department of Pathology, New York, NY, USA.
[c]Department of Medicine and Epidemiology, VMTH SAC, University of California, Davis, CA, USA.
Address reprint requests to: Sophie A. Grundy, BVSc (Hons), MACVSc, DACVIM, 4990 Manzanita Ave., Carmichael, CA, 95608. E-mail: sophie.grundy@vcamail.com

1527-3369/06/0604-0171\.00/0
doi:10.1053/j.tcam.2008.12.003

60 days of gestation (as determined on the basis of estimation of the LH surge by evaluation of serial serum progesterone concentrations). The bitch gave birth to 11 puppies, 8 of which were stillborn. Premature labor was attributed to bacterial placentitis and subsequent metritis based on pure bacterial culture of nonenteric Gram-negative rods from a fetal membrane (ie, placenta). For the second pregnancy, onset of whelping occurred at 65 days' gestation (as determined on the basis of estimation of the LH surge by evaluation of serial serum progesterone concentrations). Eight puppies were delivered during a 5-hour period; the last of which was stillborn.

For the current litter, the puppy presented was the third puppy born. At birth, resuscitation efforts were instituted because of a lack of spontaneous breathing and subsequent hypoxemia-induced bradycardia. The puppy's heart rate at birth was 80 beats per minute. Initially, in an effort to remove amniotic fluid from the airways, the puppy was "swung" by an experienced attendee in an arch from mid-abdomen height to knee height while cradled with the head stabilized, as commonly described for canine and feline neonate resuscitation. Supplemental oxygen was administered in conjunction with manual stimulation (rubbing), and the JenChung acupressure point was stimulated with a 25-gauge needle to stimulate breathing. Once the puppy was dry, it was placed in an infant incubator with the temperature set at 32°C (90°F). Ambient humidity in the kennel was maintained at 50%. No other puppy in the litter was resuscitated in this manner. The puppy was bottle-fed approximately 3 mL of colostrum obtained by milking the dam within 6 hours of birth.

Initial physical examination of the puppy revealed a quiet, hydrated puppy with cardinal signs within normal limits (rectal temperature was 37°C [98°F], heart rate was 220 beats per minute, and respiratory rate was 15 breaths per minute). The remainder of the physical examination failed to reveal any significant abnormalities and included evaluation of the abdomen, perineal area, and toes for signs consistent with sepsis, in addition to evaluation of the oral cavity for congenital abnormalities. Neurologic examination was limited because of the age at presentation; however, rooting reflexes, reflex urination, and righting response were present and evaluated as normal. The predominant posture was flexion.

Differential diagnoses for seizures in a canine neonate include degenerative (storage disease), developmental (hydrocephalus), toxic (lead, organophosphates, hydrocarbons), infectious (canine distemper, *Toxoplasma gondii*, *Neospora caninum*, encephalitis), metabolic (hypoglycemia, portocaval shunt, hepatic insufficiency/encephalopathy), nutritional (thiamine, parasitism), and trauma. The kennel environment was a professionally maintained, controlled-environment whelping kennel. Stringent hygiene regulations and handling protocols were established, and there was no known access or exposure to toxins. Toxin transfer from the dam was felt unlikely.

Initial diagnostics were limited because of the patient's body weight and estimated blood volume of approximately 35 mL (90 mL/kg). Serum blood glucose was evaluated via an ear prick blood sample and the use of a human portable blood glucose testing device (Ascensia Elite XL; Bayer, Tarrytown, NY). The obtained value of 47 g/dL was considered age and species appropriate. Transfontanel ultrasonography was used to evaluate for evidence of hydrocephalus. The lateral ventricles were not dilated, confluent, or consistent with hydrocephalus.

Because of the patient's size and age, initial therapy consisted of supportive care (warmth, nutritional support, stimulation of urination and defecation, and 24-hour monitoring). Medical therapy with anticonvulsants such as phenobarbital and potassium bromide were not commenced because of dosing difficulties and concerns regarding the impact of hepatic enzyme development and incomplete nephrogenesis on excretion and toxicity. After initial evaluation, the puppy continued to exhibit seizure activity with increasing severity. He was euthanized within 12 hours of birth, and immediate necropsy was performed.

At necropsy, the overall body condition was good, and there were no external signs of trauma. Significant findings were limited to gross evidence of subdural hemorrhage on removal of a section of the frontal and parietal bones without evidence of significant hemorrhage in any other organ. Samples submitted for histology included the thymus, liver, lung, spleen, small intestine, colon, kidney, and brain (entire). Histopathology revealed acute subdural and intracerebral hemorrhage (Figs 1 and 2) without any evidence of trauma or abnormality in any other tissue.

Discussion

Intracranial bleeding as a result of violent shaking was first described in children in 1946 and later termed "whiplash shaken baby syndrome" to describe the clinicopathologic combination of retinal hemorrhage and subdural/subarachnoid hemorrhage, with minimal signs of external trauma, in

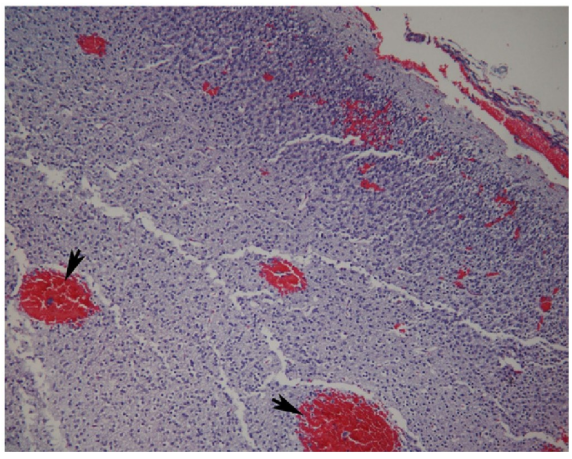


Figure 1. Multiple foci of acute intracerebral hemorrhage (*arrows*). Hematoxylin and eosin, 10× magnification.

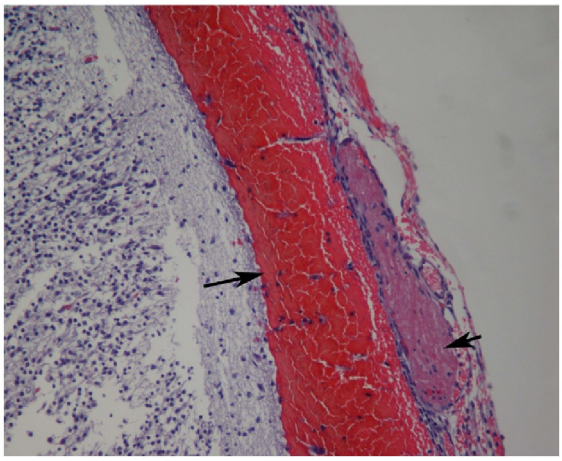


Figure 2. Acute subdural hemorrhage (*long arrow*) and intravascular fibrin thrombus (*short arrow*). Hematoxylin and eosin, 20× magnification.

infants.[1,2] The majority of shaken baby syndrome cases occur in infants under 12 months of age, which is related, in part, to weaker neck muscles, a greater head weight:body weight ratio as compared with that of older infants, and large volumes of cerebrospinal fluid, which allow greater movement of the brain within the cranial vault.[3,4] More recent evaluation of the biomechanical forces at play suggests that sudden deceleration is responsible for the majority of severe nonaccidental brain injuries, and that the injury type and severity are largely determined by the magnitude and type of deceleration (linear or rotational).[5]

The clinical signs of shaken baby syndrome range from mild clinical signs that may be confused with less serious childhood illness (fever, irritability, vomiting, and lethargy)

Figure 3. Aspiration and ventilation devices for neonate resuscitation.

Figure 4. Neonate aspiration.

to more obvious abnormalities such as difficulty breathing, apnea, or loss of consciousness.[3,5] Seizure activity is reported to occur in 45% to 70% of cases.[6–8] Physical examination findings of unilateral or bilateral retinal hemorrhage, although not specific for shaken baby syndrome itself, are highly associated with inflicted head injury and may be detected in up to 95% of cases.[5,6] Advanced imaging with computer tomography and/or magnetic resonance imaging are vital for the documentation of intracranial lesions (subarachnoid hemorrhage, subdural hemorrhage, diffuse brain injury, and brain swelling) and provide antemortem support of the diagnosis.[3,5,6]

The prognosis for children surviving shaken baby syndrome is often considered poor because of neurological and developmental consequences.[3,5,6,9,10] Although reports vary, up to 68% of survivors may exhibit late cognitive and neurologic abnormalities on follow-up evaluation.[9,11] Recovery in severe cases may be hopeless regardless of treatment.[5] Initial treatment is related to the level of patient consciousness and may include ventilatory support, decompressive craniotomy or fontanelle tap, anticonvulsant medication, thermal support, and fluid resuscitation.[5,9]

In veterinary medicine, recognition of a shaken baby–like syndrome as a result of neonate "swinging" may be challenging during the first weeks of life because of the unique developmental timeline of the canine and feline neonate. Puppies generally are limited to 2 activities during the first weeks of life: sleeping and nursing. Unless an individual puppy is noted to be less easily roused as compared with its littermates, milder cases of nonaccidental intracranial trauma may not be detected.[12] Detection of retinal hemorrhage via fundoscopic examination is not possible in either species until the eyelids open at approximately 2 weeks of age. Neurologic evaluation is also extremely limited to a handful of basic motor and sensory responses such as body righting, rooting, reflex urination, and flexor tone until 3 to 4 weeks of age.[12,13] Finally, advanced diagnostic imaging for the small animal

neonate is typically cost prohibitive and logistically challenging with respect to anesthesia requirements.

Traditionally, in canine and feline neonatology, gentle "swinging" of the newborn in a downward motion from mid-torso height to knee height while cradling the neonate in cupped hands has been used as a method to remove amniotic fluid from the airways and lungs. The force of deceleration is operator dependent and uncontrolled, placing the neonate at great risk for intracranial trauma. Although the head and neck are typically supported while "swinging," the rapid deceleration (linear or rotational) is sufficient to induce significant intracranial hemorrhage as was documented in the case described here. Additionally, the risk of aspiration of stomach contents is far greater after "swinging." Despite the potential morbidity and mortality associated with neonate "swinging" it continues to be widely accepted among the lay population and is presented not only as an acceptable option, but a standard of care for neonate resuscitation in veterinary medicine.[14]

There are better, safer, more medically appropriate and professional methods of neonate resuscitation in small animal medicine that are readily available, cost effective, and are not associated with the risks of neonate "swinging." Appropriate neonate resuscitation consists of warming, respiratory assistance, and circulatory support.[15] Initial removal of amniotic fluid can safely be achieved with an infant nasal aspirator or mask, which is used to gently apply suction to the nares and pharynx without risk of trauma (Figs 3 and 4).

To the author's knowledge, this is the first published case report documenting intracranial hemorrhage in the canine neonate as a result of "swinging" during neonatal resuscitation. However, in the author's opinion, it is probable that there are many more cases of intracranial trauma secondary to "swinging" that have not been detected for a variety of reasons including lack of evaluation by a veterinarian, lack of necropsy, lack of detection of mild clinical signs, and/or lack of detection of long-term consequences in nonworking "pet" animals. Traditional methods of neonatal resuscitation that include "swinging" puppies and kittens are antiquated, medically unsound, and potentially lethal, and should not be advocated by the veterinary profession as an acceptable standard of care.

References

1. Caffey J: Multiple fractures in the long bones of infants suffering from chronic subdural hematoma. AJR Am J Roentgenol 56:163-173, 1946
2. Caffey J: On the theory and practice of shaking infants. Its potential residual effects of permanent brain damage and mental retardation. Am J Dis Child 124:161-169, 1972
3. Altimier L: Shaken baby syndrome. J Perinat Neonat Nurs 22: 68-76, 2008
4. Morad Y, Kim YM, Armstrong DC, et al: Correlation between retinal abnormalities and intracranial abnormalities in the shaken baby syndrome. Am J Ophthalmol 134:354-359, 2002
5. Duhaime A, Christian CW, Rorke LB, et al: Nonaccidental head injury in infants—the "shaken-baby syndrome." N Engl J Med 338:1822-1829, 1998
6. King WJ, MacKay M, Sirnick A, et al: Shaken baby syndrome in Canada: clinical characteristics and outcomes of hospital cases. Can Med Assoc J 168:155-159, 2003
7. Ludwig S, Warman M: Shaken baby syndrome: a review of 20 cases. Ann Emerg Med 24:536-540, 1984
8. Johnson DL, Boal D, Baule R: Role of apnea in nonaccidental head injury. Pediatr Neurosurg 23:305-310, 1995
9. Reynolds A: Shaken baby syndrome: diagnosis and treatment. Radiol Technol 80:151-170, 2008
10. Duhaime AC, Christian CW, Moss E, et al: Long-term outcome in infants with the shaking-impact syndrome. Pediatr Neurosurg 24:292-298, 1996
11. Barlow KM, Thomson E, Johnson D, et al: Late neurologic and cognitive sequelae of inflicted traumatic brain injury in infancy. Pediatrics 116:e174-185, 2005
12. Lavely JA: Pediatric neurology of the dog and cat. Vet Clin Small Anim 36:475-501, 2006
13. Poffenbarger EM, Ralston SL, Chandler ML, et al: Canine neonatology. Part I. Physiologic differences between puppies and adults. Compend Contin Educ Pract Vet 12:1601-1609, 1990
14. Greenhough JE: Caesarean section: the nurse's role, in Proceedings of the British Small Animal Veterinary Congress, 2008
15. Traas AM: Resuscitation of canine and feline neonates. Theriogenology 70:343-348, 2008

"Dogs have given us their absolute all. We are the center of their universe. We are the focus of their love and faith and trust. They serve us in return for scraps. It is without a doubt the best deal man has ever made. "

Roger A. Caras

GDCNE's Judges

Conversation with GDCNE & Ms. Judy Harrington

How did you get started in dogs in the first place?

I have always had animals; rabbits, cats, dogs, horses at different stages of my life. Very young my uncle had field trial beagles that I couldn't stay away from. My first AKC dog was an oversized Sheltie. I had always wanted a Great Dane but my parents always said "you can do that when you have a place of your own" - and that's just what I did!

What made you choose Great Danes?

Always thought that they were a magnificent breed and from a very young age loved horses so their size and magnificence was always appealing to me.

How did you transition from a love affair with Danes to showing and breeding and/or handling Danes?

I had always enjoyed training both the horses and dogs and preferred to exhibit them as an owner/trainer/handler and have always been comfortable in the show environment. As I became successful showing my own Great Danes I was invited to show other friends and acquaintances Great Danes.

Judy, with the first Great Dane to finish in the U.S. with natural ears
Ch. Sterling Blue Lupine, Judge Diane Taylor
Owner/Breeder, Sterling Moffat

Who were your mentors and people who influenced your breeding program?

The Lovett's were my first mentors in the breed. We had many lively conversations and one of their comments early on was that you wouldn't do anything in the Great Dane ring unless you hired a handler - fighting words to a Sagittarius LOL!!! Carolyn and Bob Thomas were local active and successful breeders as well and all were members of The Great Dane Club of New England. Matches at that time often had nearly 70 entries at our specialty matches. It was a very good time.

Ch. Longo's Rose Royce,
Pictured with Judge Robert E. Layne

What made you decide you wanted to become a judge?

My first love will always be as a breeder and second as an exhibitor/handler. Handling, when it is done properly as a professional, requires long hours of proper care of your exhibits, dedication and loyalty to your clients and much time away from home. I was an AKC and PHA approved handler for many years and had the opportunity to not only judge the GDCA Futurity early on but many specialty sweepstakes and always enjoyed finding the dogs I would be proud to own.

I believe all successful breeders are judges, able to evaluate the pros and cons of their combinations and pedigrees. Not everyone is comfortable with being in the ring as an approved judge. I am content to only please myself when I leave the ring after making my decisions as a judge and truly love finding the one early on that becomes a top representative of their breed.

Judy pictured with Aussie GCH BIS BISS Propwash Reckon and co-owner Leslie Frank
Winner of the BIS and World Challenge
at the AKC National Show in CA and FL respectively.

What made you decide to add additional breeds to your judging repertoire? (n/a if you only judge Danes)

I have only shown dogs that I have evaluated prior to accepting as clients. To maintain enough quality dogs to be a successful professional it is necessary, in my opinion, to have other breeds to show. There are some handlers who are fortunate enough to be able to have clients in a single breed that make them exclusive to that breed and breeder but they are few and far between. I never have taken what would be referred as "Gas Dogs" - not the best quality but support the expenses. Not in my truck!

How many breeds/groups do you judge?

Best in Show, Sporting, Working and breeds in Toy, Hound and Herding.

CH Terragans Magic Show - Owned by Terri Loncrini

What do you look for in the ring?

Correct breed head type and body proportion with the soundness required to do the purpose of their breed. There are often compromises that must be made that should be in an acceptable range. If the compromises are too extreme that wanders into the area of withholding awards.

What has been your most exciting assignment and why?

Being invited to judge Best of Breed at my two breed National Specialties; Great Dane Club of America and The United States Australian Shepherd Association. I will add Westminster Kennel Club Working Group to that list in June of 2021.

What excites you the most when judging?

Finding the one - no matter what the class - that I would own or buy for a client when handling.

What is your biggest pet peeve when judging?

Dogs being raced around the ring and over grooming of coated breeds.

How has being a breeder or handler informed your choices in the ring?

Early on being a new breeder/owner/handler made me aware that there are some (very few) judges that favor professionals, look away when an obvious novice is moving or don't extend the same courtesy to each exhibitor. Each exhibitor pays for an evaluation and deserves the same attention and time. You pay for an evaluation and hope for a win - bottom line. Once I walk into the ring to judge everyone is equal.

Do you have certain philosophies that you maintain as a judge?

#1 Judge The Dogs

What do you say to exhibitors who feel that judges are political?

For the most part they aren't. Most judges have been longtime members of the dog show community, we do know each other and have spent much time together at shows over the years. It probably appears more political than it really is.

Do professional handlers make any difference to your decisions?

Never

What do you say to exhibitors that feel that show selections are pre-determined or highly influenced?

You need to be realistic about the quality of the entry within the guidelines of the breed standard. The advertising budgets of some heavily campaigned dogs are astronomical but if they don't deserve the win so be it and if they are outstanding it may appear that it is predetermined when it isn't - they are just that good and deserve the win. I will often say, if your dog wasn't in there which one would you have selected?

Judy showing the first natural eared Great Dane to go Winners at a National - Ch. Goodwin's Houston

What do you say to exhibitors who are walking away from showing because they feel there are too many politics involved?

Life is choices. If you are passionate about the breed but don't want go to dog shows and will always own a Great Dane that's one choice. There are probably politics in every aspect of life and if you want to continue to exhibit you make a list of judges you won't show to because they have proven to be too political for you - BUT - be realistic.

What advise do you have for the folks just starting to show?

Join an all breed club and a specialty club and have at least 3 mentors in any breed you have. DON'T GOSSIP!

What advise do you have for new judges or those thinking of applying to judge?

Don't ever forget what it has taken for every single exhibitor in your ring to be there. Breeding, vets, heartbreak, training, travel, expenses, etc. and give every exhibitor the same time when evaluating.

When you leave a judging assignment, who is it that you hope you have left behind?

I would hope that exhibitors will feel that they had a good experience and a fair evaluation.

Thanks for the invitation to share some ideas and thoughts with *DaneLine Reimagined.*

Judy Harrington

BIS/BISS Ch. Longo's Sweetalk V Michaeldane

Two 20 Winner 1995/#1 1993 all systems

Owned by Tootie & J. Longo

Judy with LuLu

Brags

GDC PA 2/13 & 2/14

Ch. Davisdane's Ducktor Drakken I Presume BN RN RI CGC CGCA TKB BCAT AOM

GDCA Versatility Award

Drakken was awarded Best Veteran and an Award of Merit under Judge, Mrs. Pam Tozzi and

Best Veteran under Judge Mr. Stuart Craig Lynn. Owner, Rachel Wilson

Brags

OHBISS Ch. Davisdane's N Balor The Chronicles of Ridduck CGC TKN BCAT AOM GDCA Versatility Award Riddick was awarded OHBISS under Judge Ms. Darcy Quinlan GDCPA 2/13 & 2/14 He was also awarded Major Select & AoM handled by Matilda Reck under Judge Mr. Stuart Craig Lynn He recently received the GDCA Versatility Award and scored a90 on Second Leg towards his Rally Novice Title

Rachel Wilson reports that her Creed - GCHB Maitau Cosmic Balor Believe In The Eys of The Prophecy RN RI CGC CGCA TKN AOM AOE GDCA Versatility Award - recently scored an 83 on his last leg * towards his Rally Intermediate Title

*Pending AKC Approval

BRAGS

Happy 11th Birthday to our Sami!

She is still sound, sassy, and the picture of health.

Sami proved that you can teach an old dog new tricks by earning her Novice Trick Dog and her Rally Intermediate titles this year!

In true Sami fashion, in the first attempt at the cupcake pic she whipped it out of Dana's hand and stole it before we could get a picture!

CH Davisdane's Rubber Ducky You're The One, CD, RN BN RI CGCA GDCA Venerable Dane, Versatility Dane

Brags

Davisdane's Quacker Jack TKN RN

We are absolutely thrilled that our silly 18-month old got it together enough to earn his Rally Novice, qualifying with very respectable scores of 84, 87 and finishing his title with a 93. Good boy, Jack!

A dog is the only thing on earth that **LOVES** you more than he loves himself.

Josh Billings

Can You Afford NOT to Feed Your Pets Raw?

by Betty Lewis, RVT, Dr. A. N.

Let me tell you the worst pet food story I have heard as an Animal Communicator. This one is the worst, but it doesn't exist alone. Unfortunately, I hear similar, though less dire, stories regularly.

It was some years ago that I was interviewed by a TV reporter, whom I'll call Julie. She was the host of a local New Hampshire TV show about local businesses. I, and two of Julie's neighbors met at Julie's lovely new home for the filming. The interview with the dog, cat, and Chinese Green Lizard went fine, and later aired on television.

But my story lies with Julie's personal dog and cat, with whom I also spoke, both before, and after the interview.

After talking to her German Shepherd Dog, and her cat, my senses were on high alert, as I felt catastrophic danger. Several times, both before the neighbors arrived, and again after they left, I tried talking to Julie about the distress I felt. I reported that neither animal was feeling truly well, and that I felt action needed to be taken quickly. I also tried to interest her in the concept of changing her pet feeding to a raw diet. But, she would have none of my conversation, and her previously congenial demeanor became belligerent. Nevertheless, I persisted because of the urgency I felt, but eventually gave up because of her reaction.

About a week later, I received an unexpected phone call from her. She demanded to know what her cat had said to me. I responded again about the urgency I felt about the health of both pets, and how strongly I felt she should get them off of commercial pet food. I said that the cat had reported eating a white powder.

Again, she became hostile. She said they had just moved into this brand new house, and there was NO white powder anywhere. I admit that I had seen her lovely, and very clean house & garage, and it did seem unlikely that the house could be the source of what I felt was toxic ingestion.

Before she hung up, I asked her why she wanted to know. "Because the cat died," she said. It also turned out that the dog was hospitalized.

It was about another week before the answer to this situation was revealed to me. That was when the national news story broke about China putting the white powder, melamine, into pet foods to enhance the "protein" levels for the label.

The contamination crossed many pet food brands because a lot of companies buy raw materials from the same source. When *you* buy, you have no idea what is in the food, and it seems that neither do the pet food manufacturers.

Sadly, even feeding from human grade raw ingredients is no longer as pristine as it used to be, but at least you *know* what you're feeding. You also can make your own choices. When you feed kibble, canned or dried commercial food that some big company created, you've abdicated your freedom of choice. When you are the creator of your pets' diets, you can choose pasture raised meats & eggs, and other organic ingredients when possible.

If you're not already on board with a home prepared raw diet, I implore you to consider doing so for the health of your pet family.

Editor's Note: Opinions or statements expressed in *DaneLine Reimagined* are not reflective of the Great Dane Club of New England.

Next Issue for *DaneLine Reimagained* is May 2021

Submission deadline for next issue is April 24th