

In Defence of Dogs

I am back after a couple of very busy months: I was busy writing for “real” magazines, freelancing as a translator and editor and... studying for my last veterinary school exam. Now that all veterinary schools exams are over, internships aside, I need to start researching more for my dissertation which is going to be on Gundog Welfare ([check the link for more information](#)). Right before starting to dig into scientific journals, I decided explore the books and ebooks I have at home and I wish to share something with you. First of all, if you have not done it yet, take some time and explore the works of [Temple Grandin](#). Yes, she focuses on livestock mainly, but her stuff is great.

As a second step I suggest you two books I am going through. One is titled In Defence of Dogs by John Bradshaw. This is one of my favourite books ever: it is pleasurable to read and yet extremely accurate. Every dog lover should own a copy, especially if he or she plans to train his dog. The other book is titled The Domestic Dog. Its Evolution, Behavior and Interactions with People and it is edited by James Serpell. The book is indeed a collection of chapters by different scholars such as Raymond Coppinger, M.B. Willis, Benjamin and Lynette Hart and Valerie O’ Farrel. I currently have the first edition, published in 1995 but I know there is an updated 2nd edition published in 2016.

One more valuable resource on [Animal Behavior and Welfare](#) is the online course by the University of Edinburgh available online through the [Coursera.org](#) educational platform. It can be taken for free and subtitles are available in different languages.

I will try to be back soon with more articles!

The English Springer by Arthur Croxton-Smith

From the book *The Power of the Dog* (1910)

THE ENGLISH SPRINGER

"O, how full of briers is this working-day world!"
Shakespeare—*As You Like It*.

"The chief requisite in all kinds of spaniels is, that they be good finders, and have noses so true that they will never overrun a scent. . . . They should be high-mettled, as regardless of the severest weather as of the most punishing cover, and ever ready to spring into the closest thicket the moment a pointed finger gives the command."

General Hutchinson

The transition from the toy varieties to a spaniel is somewhat violent. The one is intended to please the eye, to gratify the æsthetic sense, and charm by his manners in the house; the other is designed primarily, by serving the sportsman in the held, to accomplish useful duties, **but at the same time his docility of disposition, sagacity of expression and beauty of coat make him also a welcome companion when the day's labours are ended.** In estimating the worth of a gundog I should lay much stress upon his fitness for associating with mankind, for there is no doubt that if we win the confidence and friendship of our four-footed servitors the pleasure in their possession is much increased, and we have them under far better command when at work. Of all the foolish things written the hackneyed

couplet so much quoted has precedence:

"A woman, a spaniel, and a walnut tree,
The more you beat them, the better they be."

The ladies are quite capable of looking after themselves, and need no champion. I daresay a walnut tree may be all the better for a good "splashing," as we used to say in the Midlands, **but I am certain the less a whip is used on a dog of any sort the more likely are we to be successful in our efforts to exact prompt and ready obedience to our commands.** The man who uses physical correction too freely is in want of a practical application of the monition contained in the Book of Proverbs: "A rod for the back of fools."

Of the many handsome sub-varieties of spaniels with which we are familiar to-day the English Springer, perhaps, enjoys the least popularity, although his merits as a worker entitle him to a high place in our regard. As a show dog he has never assumed much prominence, but at held trials and on private shootings he is constantly demonstrating his utility. **No other spaniel has been bred less for "points" or more consistently for work.** Less excitable than the volatile Cocker, his longer legs and sturdier frame adapt him to purposes which the smaller is unable to perform. **On the other hand, unless well broken, he, by ranging too far afield, may put up the game out of gunshot. It therefore follows that in his early days he must be made absolutely steady. Whether he becomes so or not is not so much attributable to the inherent wickedness of the dog as to the lack of patience in his breaker.** One is almost inclined to say that the good breaker is born not made. **At any rate, supposing you have the leisure, this is a task better undertaken by yourself than entrusted to a gamekeeper, who may have neither the time nor disposition to act as a wise schoolmaster.**

A Springer is large enough to retrieve both far and feather, but whether or no he should be encouraged to do this depends

upon circumstances. General Hutchinson says: *"When a regular retriever can be constantly employed with spaniels, of course it will be unnecessary to make any of them fetch game (certainly never to lift anything which falls out of bounds), though all the team should be taught to 'seek dead.'* This is the plan pursued by the Duke of Newcastle's keepers, and obviously it is the soundest and easiest practice, for it must be always more or less difficult to make a spaniel keep within his usual hunting limits, who is occasionally encouraged to pursue wounded game, at his best pace, to a considerable distance."



"Tissington Flush"
Owned by Sir Hugo
Fitzherbert, Bart
and Painted by Maud
Earl

The word Springer is applied to all medium-legged spaniels, as apart from the short-legged ones, that are neither Clumbers nor Sussex. It is of good old English derivation, denoting the object for which the dog was employed--to spring birds to the net or gun. The form of the dog has not undergone any marked change since a Dictionary of Sport, published shortly before Queen Victoria came to the throne, spoke of him as differing but little from the Setter, except in size, being nearly two-

fifths less in height and strength. He is of symmetrical formation, varying a good deal in size from thirty pounds to sixty pounds, with unbounded energy. He may be a self-coloured liver, black, or yellow, or pied or mottled with white, tan, or both. Miss Earl's picture brings out beautifully the correct shape of his body, and the handsome intelligent-looking head. Older pictures suggest that a hundred years ago or less the skull was broader between the ears, and the head shorter, but the refining process has not been carried far enough to jeopardise the brain power. In many breeds I have noticed that a broad skull indicates self-will and stubbornness, and therefore it seems to me that the slight change is all for the better.

The other variety of Springer indigenous to Wales is quite distinct from our own. He is smaller in size, and in colour he is red or orange and white, preference being given to the former.

From the same book: [click here to read about the English Pointer.](#)

PS. Don't forget to take a look at the [Gundog Research Project!](#)

The Pointer by Arthur Croxton-Smith

From the book *The Power of the Dog* (1910)

The Pointer

*"His nostril wide into the murky air,
Sagacious of his quarry from so far."*

Milton—*Paradise Lost*

*tiff by the tainted gale with open nose,
Outstretch'd and finely sensible, draws full,
Fearful, and cautious, on the latent prey;
As in the sun the circling covey bask
Their varied plumes, and, watchful every way,
Through the rough stubble turn the secret eye.*

Thomson

The respective virtues of the Pointer and Setter have been discussed without stint for many years, the advocates of each retaining their opinions uninfluenced by the arguments on the other side. It may not be known that no less a person than Sir Walter Scott once had a mild hand in the game. In "St. Ronan's Well," if you turn to the account of the dinner party which led to much ill-humour, you will find these remarks: "*The company were talking of shooting, the most animating topic of conversation among Scottish country gentlemen of the younger class, and Tyrrel had mentioned something of a favourite setter, an uncommonly handsome dog, from which he had been for some time separated, but which he expected would rejoin him in the course of next week. 'A setter,' retorted Sir Bingo with a sneer; 'a pointer, I suppose you mean?' 'No, sir,' said Tyrrel; 'I am perfectly aware of the difference betwixt a setter and a pointer, and I know the old-fashioned setter is become unfashionable among modern sportsmen. But I love my dog as a companion, as well as for his merits in the field; and a setter is more sagacious, more attached, and fitter for his place on the hearth-rug, than a pointer—not,' he added, 'from any deficiency of intellects on the pointer's part, but he is generally so abused while in the management of brutal breakers and grooms that he loses all excepting his professional accomplishments, of finding and standing steady to game.'*"

Sir Bingo could not understand why one should wish for anything more. He never before heard that a setter was fit to

follow any man's heels but a poacher's. Tyrrel's point was that "many people have been of opinion, that both dogs and men may follow sport indifferently well, though they do happen, at the same time, to be fit for mixing in friendly intercourse in society." A sentiment which we cordially approve. Whether the shooting man should select a Pointer or Setter to aid him in the field or on the moor resolves itself very largely into a question of individual taste. Either, when well broken, is capable of carrying out his highly specialized duties with great skill, and no prettier sight can be imagined than a brace of these clever animals quartering the ground and coming to a statuesque point when the game is winded. Of course, in externals the two breeds present many striking differences. Some admire the beautiful coat and gentle expression of the Setter, while others there are who declare that:

Loveliness

Needs not the foreign aid of ornament,
But is, when unadorn'd, adorn'd the most.



"Flax" Owned by
William Arkwright,
Esq. Painted by Maud
Earl (1910)

In other words, form appeals more to them than coat. They dwell upon the handsome outline of the Pointer, his

symmetrical, powerfully knit body, his straight legs and muscular quarters. The modern dog is not without his critics, however, who contend that a foxhound cross has been used in modern times as well as many years ago, and that the hound qualities introduced are detrimental rather than otherwise. It is urged that the duties demanded of the Pointer are even more exacting than those of the foxhound, as regards stamina, and that if the old dogs could perform them creditably there was no occasion to resort to outside blood, which developed a headstrong disposition that renders breaking more difficult, and tends to unsteadiness. In justice to the other disputants, it should be explained that they deny the alien cross, and contend that, as the foxhound is a perfect piece of mechanism, Pointer breeders are justified in attempting to work up to such a worthy model. Although one does not ask for a potterer it is questionable if great pace in a gundog is either necessary or desirable, for the fast animal is liable to pass birds that a slower one would find. After all, the truest test of excellence is finding birds for the guns, a feat in which the flashy worker is not always proficient.

In the innumerable letters which have appeared upon the subject I have never seen reference to the remarks of General Hutchinson. Possibly they have been quoted and escaped my observation. This gentleman, who is very rightly regarded as a sound authority, laid stress upon a sporting dog having small, round, hard feet, which he held [to be a more certain test of endurance than any other point.](#) *"Rest assured, that the worst loined dogs with good feet are capable of more fatigue in stubble or heather than the most muscular and best loined, with fleshy 'understandings.' The most enduring pointers I have ever seen hunted had more or less of the strain of the foxhound; but doubtless they were proportionately hard to break."*

A variety of Pointer not much seen now-a-days is the black, or Scottish, which, of course, is free from any imputations as to

the purity of his lineage. He is said to be all that one could wish.

From the same book: [click here to read about the English Springer.](#)

PS. Don't forget to take a look at the [Gundog Research Project!](#)

A few more words on gun shyness

The [previous article](#) on gun shyness triggered many reactions.

This had pretty much been forecasted, but I hoped to find a larger number of open minded people. In the end, however, I must admit hearing that you, owner, can be deemed responsible for your own dog gun shyness is not pleasant. Modern ethology is not being kind here, and it is much easier to blame the genes, the bitch, the stud or the breeder. Acknowledging the role of environment, upbringing and training is tough, it can make us feel guilty.

What did the readers say? I was told stuff like *"I never introduced the pup to noises, but when the first day of the shooting season came, I brought him with me and shot a whole covey of partridge on his head and nothing happened! The dog is fine! Socialization and all that stuff, bullshit."* If these people had carefully read the first article, they would have realized I wrote that sometimes people are very lucky, and a dog can survive such intense experience, without any prior training. Is luck often that blind? Not really, what most likely happens is that the dog has been exposed to noise and other stimuli, the owner is simply not aware of this. Maybe the pups grew up by the house, or on a farm, where he learnt

to recognize the tractor, the lawn mower and other sounds, maybe they were born during a stormy summer and learnt not to fear thunders. Dogs living near humans are generally exposed to noise and this could prevent gun shyness.

It is now time to discuss the second objection "*In the past dogs were not socialized, nor exposed to noise, yet, they were normal*". This is a false myth. Let's think about the past: about one century ago, almost all the hunting dogs used to belong to rich people. These people had professional staff taking care of the dogs, it is highly unlikely that these dogs were poorly socialized. What about ordinary people? At a certain moment in history, people with lower incomes started to become interested in hunting dogs. These people were mainly farmers and, usually, had some mixed breed dogs who could work like a hound, a spaniel or a terrier (their contemporary equivalent would be the lurcher). These dogs used to live on the farm, close to their owner, to other humans and to human made noises.

In Italy, lower and middle class hunters began being involved with purebred hunting dogs after WWII, more vigorously from the sixties. At the time, the idea of breeding dogs as a business had not yet been developed and most of the litters were homemade and raised by amateurs. It could be the rich man with his staff or the plain hunter, sharing the burden of raising a litter with his wife and children: dogs and humans, whatever the wealth, used to live close to each other.

Things changed later, as soon as people realized that breeding and selling dogs could become a profitable business. Dogs began to be seen as "livestock" and raised as you would raise a farm animal. Separate living quarters with kennels were built and sometimes multiple litters were raised simultaneously. Pups are nowadays sometimes raised at a distance from human made noises and sometimes experience less interactions with humans. Commercial kennels, however, are not the only ones to blame, hunters have changed as well. Some

hunters now live in the city, they do not want to share their apartment with muddy dogs and send them to live “in the countryside” (locked in kennels) paying someone local human being to go feed and clean them. Some hunters have a detached house in the suburbs, but pups destroy gardens so they end up in a kennel far from the house. Hunters return home late from work, they are tired and they do not feel like interacting with their new pup, even if he has a great pedigree and was paid a lot of money.

If the pup would not be such a thoroughbred but just a farm mutt, things could maybe be easier for him. Some modern purebreds are not that different from thoroughbred horses and are equally nervous and sensitive. We selected these dogs taking speed and reactivity in great account, well... they can now be highly reactive even when we would prefer them not to be. Times and contexts have changed, why people refuse to acknowledge this? I think we should pay more attention to the dogs' needs and remember that the dog is “man best friend”. We should put the pup first and do our best to make him grow into a happy and fearless adult. We should no longer bring a gun shy pup back to the breeder asking for a replacement or a refund, we should, in a few words, be responsible of our actions.

PS. Don't forget to take a look at the [Gundog Research Project](#)!

Does a gun-shyness gene exist?

I wrote about this on several occasions and, usually, I do not

like re-writing about things I already wrote about but, last week, reading an online forum, I realized that gun-shyness is still a mystery.

People buy dogs, mate dogs, collect dogs but never “waste” time trying to educate themselves about dogs or, more simply, trying to switch their brains on. I am not sure whether you are familiar with Patrick Pageat, he is a French veterinarian and animal behaviourist who wrote the book “L’homme et le Chien” (The Man and the Dog), he writes: *“How can a gun-shyness gene exist? How could nature have foreseen gun powder and shotguns?”*

Le mythe du gène de la peur du fusil

On trouve dans de nombreux ouvrages la description du gène de la peur du coup de fusil ou encore du gène de la peur du bâton, etc. Le gène de la peur du fusil pose cependant un énorme problème théorique qui est celui de l'extrême prévoyance de la nature qui a bien sûr imaginé qu'un jour l'homme inventerait la poudre et le fusil ! On imagine assez difficilement l'ADN préfigurant l'existence des armes à feu... ou alors on entre dans le domaine de la théologie et non plus de la biologie. Ce qui est moins drôle, c'est que des chiens ont été euthanasiés parce que considérés comme porteurs d'un gène qui les rendrait inaptes et donc impropres à la reproduction.

Aujourd'hui, il existe, dans le cadre des épreuves de qualification pour les chiens de défense, ce qu'on appelle le TAN, le test d'aptitude naturelle – notons qu'« aptitude naturelle » sous-entend que c'est inné. Lors de ce TAN, les chiens subissent une épreuve de réaction au tir du pistolet à amorce. Si le chien a peur, c'est *gravissime*, et le chien est considéré comme très mauvais. Or il faut savoir que le TAN a été créé par des gens qui sont eux-mêmes éleveurs et qui vous expliquent froidement que, si un chien a une mauvaise note, c'est qu'il a été mal préparé pour son test. Ce qui est pour le moins étonnant car soit il s'agit effectivement d'aptitudes naturelles et le chien est comme il

est, soit c'est un examen qu'on fait passer au chien après apprentissage et il s'agit donc d'un acquis, ce qui signifie purement et simplement que le gène de la peur du coup de fusil ne peut pas exister.

Obviously, nature could not have predicted shotguns, but some dogs are indeed gun-shy, why? Are they faulty? I hate seeing dogs labelled as "faulty", their behaviour can be explained through a more refined explanation. These dogs are not "faulty": did you know, for instance, that some dogs are more sensitive than others? This has been demonstrated in humans as well, some people are more sensitive to noise, light and so on and this has been proved scientifically. So, yes, some dogs might be more sensitive than others. Is this genetic? I think so and, in my experience, I found gun-shy dogs in some breeds more than in others. These dogs, and more generalizing these breeds, were also more difficult to rehabilitate. Generally speaking, again, these dogs were quite reactive, fast and somehow nervous and... sensitive! It is selection, it is how we want dogs to be: let's try to compare an English Setter (or a Border Collie) and a Neapolitan Mastiff: they are not exactly the same thing.

We should not, however, talk about fear, analyzing sensitivity would be much more appropriate. Are there dogs who are more sensitive to noise? Yes, but being sensitive to something, does not mean being fearful of something. Yet, some dogs are afraid of gunshots, but fear came after sensitivity and was triggered by something external to them. What do most of the fearful dogs have in common? Could environmental factors play a role? Most of the gun-shy dogs I met (in about 20 years spent around gundogs), had indeed something in common: they all had been poorly socialized.

I am not going to write about puppy socialization in this article, but I am going to point that, sometimes, hunters, as well as dog breeders, do not pay enough attention to this fundamental process. The "average" hunting dog is born in the countryside and grows up in a kennel, an environment which tends to be rather silent and lacks of natural stimuli. These quiet, rural settings do not fully prepare the pup for his future life.

Furthermore, once adopted by the new owner, the pup continues living in a similar environment and tends to be left there until he turns 7 or 8 months old. Only a few hunters start training pups early, as they fear they would get “ruined”. Once deemed old enough, the pups are put in the car (so far they had generally been in the car only to go to a veterinarian) and are taken somewhere to be tested on a bird (that is going to be shot), generally on a quail, or, even worse, to a shooting party.



Having had no exposure to gunshots, two things might happen: 1) the dog has a very strong temperament (and his owner is very lucky!) and he does not mind the noise or 2) we witness a disaster and the dog becomes gun-shy. Unfortunately, these things happen and... frequently! I did not invent anything and, sadly, I have seen this happen more than once and I can tell you about people who keep repeating these same mistakes. There are people who end up owning only gun-shy dogs: each pup they purchase will turn in a gun-shy adult. Some of them realized this and now only purchase adult dogs. Some other people, on the other hand, had never owned a gun-shy dog despite having purchased all their dogs as puppies, from different sources..

Let me tell a short story: M. Smith purchased a high quality puppy and raised her in the kennel. Once she turned 7 months old, he introduced her to birds and gunshots with the fore mentioned techniques and she became gun-shy. During the

following YEARS she overcame, more or less, her gun-shyness but her breeder donated a second pup, a sister to the previous one, to Mr. Smith, as a replacement. Mr. Smith, after committing the same mistakes for many years, had the chance to meet some properly socialized puppies and decides raise her differently. The new pup grows up experiencing noises and living different experiences: she is not gun-shy and she is much much bolder than her older sister.

PS. Don't forget to take a look at the [Gundog Research Project](#)!

Vinci un servizio fotografico – Win a free photo session

FOR ENGLISH SCROLL DOWN

Per tenere vivo interesse e partecipazione al [Gundog Research Project](#), abbiamo aggiunto un nuovo premio: un servizio fotografico gratuito.

Dettagli: servizio fotografico all'aperto con possibilità di includere cani, bambini e selvaggina, se presente. Possiamo programmarlo durante una sessione di addestramento, durante



una giornata di caccia o altro.

Riceverete un numero illimitato di immagini sotto forma di files digitali ad alta risoluzione e quindi stampabili e i files saranno anche raccolti in una galleria online.

L'unico limite è legato alla località, il servizio fotografico dovrà aver luogo dalle mie parti, altrimenti ci sarebbero delle spese di viaggio.

Per vincere il servizio dovete solo compilare il questionario online, più cani inserirete, maggiori saranno! le possibilità di vincere!

[Cliccate qui per saperne di più](#)

To keep the interest around the [Gundog Research Project](#) alive, I decided to offer one more "prize": a free photographic session with me.

The photo session will take place outside and can include people (adults and children), dogs and, if present, wildlife. It can take place during a training session, during a shooting day or in a similar context.

You will receive an unlimited number of images as a high resolution (printable) digital files. The images will also be

featured in a dedicated online photo gallery



There is only one limitation: we should organize the shooting session not too far from where I live (Northern Italy): I would be very happy to travel to another continent but it might be expensive.

Fill out our survey to win and remember, the more dogs you tell us about, the more chances you have!

[Click here to know more](#)

A Quick Update on Taurine

A few weeks ago, I posted about taurine and, more specifically, about some breeds which might be less efficient in producing it ([you can read everything here](#)).

As taurine deficiency can lead to DCM (dilated cardiomyopathy) I think all those owning a breed at risk should assess their dogs. I eventually tested Briony and her results fell in the normal range: she eats an homemade diet and,

apparently, despite my poor cooking skills, she is getting enough methionine and cysteine that she can convert into taurine.

As said above, her results are within the normal range, but I showed them to a nutritionist (Lucia Casini, Professor of Veterinary Nutrition at the University of Pisa, [School of Veterinary Medicine](#)) asking her whether Briony should benefit, like other athletes, from any taurine supplements during the hunting/shooting season and she said yes, to supplement with **500 mg a day** (she weighs around 20 kgs) in these periods.

Some of the laboratories testing for taurine in Europe are: Idexx, Laboklin and San Marco.

Considering that most of my readers own working dogs ([read about the Gundog Research Project!](#)), let me also add that these athletes might need more taurine than the average dog. The web is full of articles on taurine and DCM in dogs, go and read them if you want to know more, I am just here to spread the word and raise some awareness.

Break it Down- by Tok Mostert

There is no doubt that seeing a well trained dog doing everything right is a pure delight to owner/handler or observer, not to mention a judge. The seamless way they cut up a field missing no ground, the sudden stop and lock up on point, the flush on command, the stop, the marking of the fallen bird, the glance for permission to retrieve, the retrieve and the delivery all flowing like a gentle mountain stream over smooth rock. Pure dog poetry in motion!

What few understand is how exactly you get a dog to that

level. Many fail due to their lack of experience, the experienced fail due to their lack of adapting. There is nothing more heartbreaking to watch than a handler train one dog after another in the same way, and making the same mistakes, dog after dog. For the novice it is a minefield of advice and methods, some good some totally disastrous!! Some novices will seek advice from the old dog hands, other will shun all help.

I have my own way of training a dog, most of it is old school, some of it is purely my way of doing things, I still do things wrong, but I learn from that pretty quickly when I fail my dog. Yes, I fail my dog, not the dog fails me. If I have not trained or exposed my dog to certain things, I am failing my dog, but that is another topic.



Getting back to watching a dog do everything right. To get to that level a good handler/trainer would have broken down every single step in the opening scenario and then he would have also compartmentalized the individual steps into single separate training sessions. Don't get it?

The retrieve can be broken down as follows:

1. Dog sitting steady by your side
2. Dog looks at you when you whisper his name or click your tongue
3. Dog takes dummy, or bird, from your hand on command, does not chew or play
4. Dog stays sitting as you walk away, does not drop the bird or dummy
5. Dog comes straight in when called, still holding the

dummy

5.1 Dog does not keep circling you with dummy or bird

5.2 Dog does not drop the bird/dummy at your feet

5.3 Dog sits calmly with dummy in his mouth until you give him the deliver command

6. Dog holds steady on a cast, waits for command

7. Dog does not lift on the cast

8. Dog marks cast

9. Dog does not move when you walk and pick up dummy or bird

10. Dog does not move when you place multiple dummies out

11. Dog does not switch dummies/birds when they are placed together

This gives you a general outline of how small the different steps can be broken down into. It is the same for every single thing you train. The point, the flush, the way the dog works a field, everything. I have said times before, sit down and decide what signals you will use, whistle, hand or verbal, train them into yourself long before you try and teach them to the dog, this is crucial!

Do not be in a hurry to weave this all together into your invisible leash. Once the dog can 100% of the time complete these micro exercises you can start putting 2 together, then 3 and so on. This is the only way to forge a unbreakable invisible leash. Few dogs fall apart during trials, most of them fall apart under high volume high pressure shoots and hunts, this is exactly the time you can least afford it or correct it.

Many people wait for the season to open so they can let their dogs run on field and find birds, this is foolish when you can train so many other aspects before the field season opens.

Keep it fun, keep it focused!

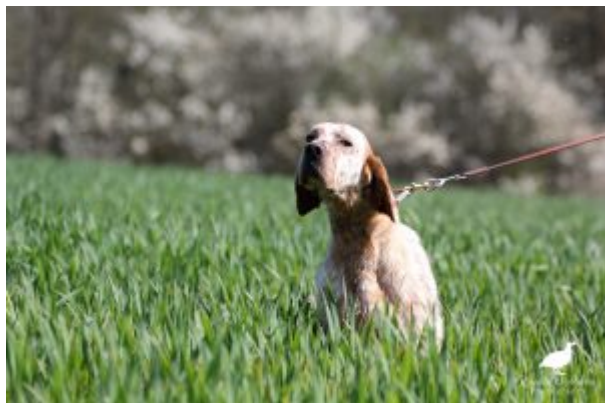
Are you interested in gundogs? [Check out the Gundog Research Project!](#)

Tok Mostert, a Professional Hunter from South Africa, now living in Sweden, is sharing his writings on dog training with us. [You can start reading them from Part 1 here.](#)

Taurine, English Setters & other breeds

Last week the server crashed after I published an article on [tyrosine](#) and dark coats. I stayed away from the admin panel for ten days because I was afraid I could crash it again, but now I am back discussing another amino acid. A couple of days ago, an English Setter owner living in the USA posted on FB about her dog's being diagnosed with congestive heart failure. The dog had developed [DCM](#) (dilated cardiomyopathy) and the cardiologist suggested testing his taurine blood levels. She tested him and her other dogs and the tests confirmed that some of them had indeed very low levels of taurine. Curiously, those with lower levels were fed a grain free, high protein, trendy dog food while the other ones, eating what would be considered an "average" dog food, were doing better.

Taurine has multiple functions, as you can read [here](#), but can taurine deficiency in the diet lead to DCM? We know this can happen in cats: taurine is, for cats, an essential amino acid which means they cannot synthesize it and that it must be introduced with the diet. When it comes to dogs, instead, taurine is not considered essential as they can produce it by themselves. But... to do so, they need to convert dietary sulfur



amino acids (SAA, methionine and cysteine)

I decided to speak again with Lucia Casini, Veterinary Nutrition Professor at the [University of Pisa](#), and she confirmed what I just wrote above, adding that a lack of methionine and cysteine could, however, cause taurine deficiency. So, are some dog foods lacking of methionine and cysteine? Maybe, or it could also be that some animals are less efficient when it comes to transforming them into taurine. There are several breeds of dogs that have a lower than normal ability to convert SAA: American Cocker Spaniels, Cocker Spaniels, Golden Retrievers, Labrador Retrievers, St Bernard, English Setters and Newfoundlands (and probably more we still do not know about). In their cases, taurine supplementation could have a preventive, rather than [curative](#) role.

So... What should we do? I think further research is needed but, personally, owning an English Setter, I am investigating on laboratories which can assess taurine levels and trying to collect information about the cost of this service. Would I advise you to do the same? Probably, and I am also wondering if other breeds, especially those related to the aforementioned breeds and those prone to DCM, should be tested: more research is certainly needed!

Update: in Europe at least 3 labs test for taurine in dogs: Idexx, Laboklin and San Marco. Prices are around 40-50 euros. [Update on my test here.](#)

Considering that most of my readers own working dogs ([read](#)

[about the Gundog Research Project!](#)), let me also add that these athletes might need more taurine than the average dog. The web is full of articles on taurine and DCM in dogs, go and read them if you want to know more, I am just here to spread the word and raise some awareness.

Own a dark dog? Read this!

Black dogs sometimes turn rusty brown. People tend to attribute this to “too much sun” but, indeed, some black dogs never turn brown, while some others are brownish all year round, winters included. I owned a black dog only for a couple of months: he was a rescued Greyhound and he was, indeed, brown but this was caused by severe anemia and leishmaniasis. We all known systemic diseases can affect coat colour, but nutrition can as well.

Yesterday, my friend Lucia Casini, who is professor of Veterinary Nutrition at the [University of Pisa](#), shared this study with me [“Tyrosine supplementation and hair coat pigmentation in puppies with black coats – A pilot study.”](#)

Volume 3 January 2015, e10

Tyrosine supplementation and hair coat pigmentation in puppies with black coats – A pilot study

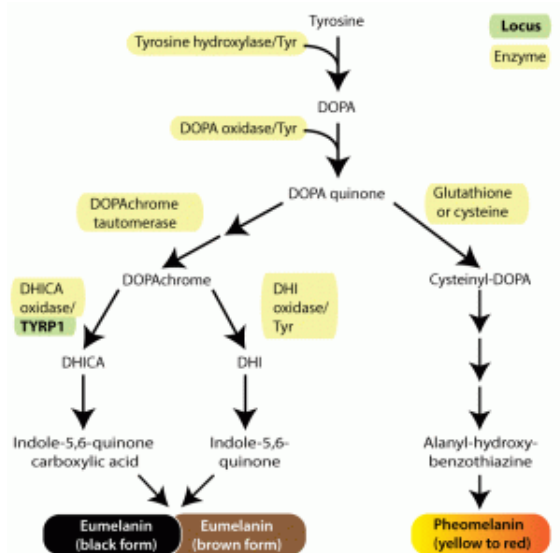
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DOI: <https://doi.org/10.1017/jan.2015.8> Published online: 22 September 2015

Abstract

The appearance of a red hue to the hair in black coated cats and dogs has previously been reported as a “red hair syndrome”. Such changes in hair colour are related to an alteration in the proportions of two types of pigments produced by melanocytes; black eumelanin and brown pheomelanin. In black cats, it has been demonstrated that higher levels of phenylalanine + tyrosine (Phe+Tyr) than those recommended for growth are required to support eumelanin synthesis. The purpose of this study was to evaluate if a similar observation could be made in dogs. Twelve black coated puppies (Black Labrador retrievers and [Newfoundlands](#)) were divided into 3 groups of 4 and fed 3 diets with increasing concentrations of Phe+Tyr (A: 4 g/Mcal; B: 5.8 g/Mcal; C: 7 g/Mcal) for a period of 6 months. Quantification of plasma amino acids (Phe, Tyr, Cys) and spectrocolourimetry of hair samples from the Labrador retrievers (as the a* dimension of CIE Lab system) were performed at the beginning, during and at the end of the study. There was a significant negative linear relationship between plasma Tyr levels and a* values of hair in Labrador dogs on diets A and B, suggesting that a diet with total Phe+Tyr content of 6 g/Mcal (higher than the growth recommended allowance) was necessary to ensure an optimal black coat colour in these puppies and that levels up to 7 g/Mcal can lead to a more intense black coat colour. Moreover, similar to what was found in kittens, plasma levels of Tyr up to 54 µmol/l did not guarantee an optimal black colour coat and led to the “reddish hair” appearance in black coated puppies.

The study, as you can read in the abstract, suggests that dogs with darker coats need twice the amount of tyrosine the average dogs needs – according to the NRC guidelines. Furthermore, the longer the coat, the higher the requirements for tyrosine. She also explained that the role of tyrosine and coat colour has been studied more in cats, but added that some commercial foods, especially those poor in proteins of animal origins, do not contain enough tyrosine for black dogs. Phenylalanine seems to play a role too and they are both essential aminoacids, hence they must be introduced through the diet.



Some biochemistry...

Meat, especially pork and poultry, is a good source of tyrosine. The National Research Council (USA) recommends: 2g of tyrosine each 1000 kcal for adult dogs and 3,5 g for puppies, but darker coated dogs requirements seem to be double.