



AMERICAN
KENNEL CLUB

AKC Breeder

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Sponsored by ROYAL CANIN

THE AMERICAN KENNEL CLUB'S QUARTERLY NEWSLETTER FOR BREEDERS

FROM THE AKC

From Royal Canin we have in this issue a most informative article on canine maternal behavior. In the eyes of a breeder, good mothering ability is without a doubt the number-one trait a quality bitch can have. Mothering behavior has a definite hereditary aspect, but learn about the other factors that influence it as well.

Our feature article is on the matching of puppies with the right families. This issue's first installment on the topic centers on the reaching and screening of potential owners. Next issue's concluding article will discuss the assessing of puppy personalities and how to best match each pup with the right home.

"Advice from the Breeder": Jean Boyd, half of the American Kennel Club Breeder of the Year's 2007 Working Group recipient-team, shares how she has kept the passion alive with her and her husband, Wayne's, involvement with their breed and the sport of purebred dogs in general.

"Inside AKC" spotlights AKC Companion Animal Recovery. Founded in 1995, it is the nation's largest nonprofit pet ID and recovery service, serving pet owners, clubs, vets, shelters, and of course our AKC breeders. Read how and why it works.

And finally from the Canine Health Foundation, information on the latest videos released as part of the series from their 2009 National Parent Club Canine Health Conference.

Don't forget to check out our listings of Genome Barks Podcasts and Breeder's Symposia. Both are excellent, first-rate sources of education for all breeders, novice and experienced alike.

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Mary Bloom

Made for Each Other Matching Your Puppies With the Best Prospective Homes

Part One: Reaching and Screening Potential Owners

By Arliss Paddock

While screening prospective homes for a litter of English Cocker Spaniel puppies several years ago, I had a memorable phone conversation with a caller who was inquiring about a pet puppy. This person was of that especially challenging category: He'd never had a dog. He had decided it was time, though, and he'd earnestly done research on dog breeds and responsible ownership.

We had a pleasant initial chat about the breed and its proper care and were about to hang up when, after a pause, he offered a final question, with great concern in his voice.

"If the dog had been on the sofa, and then I sat on the sofa afterward, would I get dog hair on my pants?"

Uh oh, I thought. This nice fellow has not done quite enough homework. Perhaps he's not quite ready to get a dog, if indeed he ever will be. I explained that, yes, he probably *would* get dog hair on his pants—and on his shirt, and in fact there would always be some amount of dog hair all over the house, no matter how often he cleaned.

Finding wonderful homes for puppies is far from easy. For many breeders, this process—not cleaning up soiled puppy-papers—is the most unpleasant aspect of raising dogs. Carefully screening prospective buyers so as to match each available

continued on page 2



Inside

Made for Each Other1
 A Passion for Excellence3
 AKC Companion Animal Recovery ..4
 CHF Video Releases5
 Royal Canin.....7
 Breeder Symposia & Podcasts12

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AKC MISSION STATEMENT

THE AMERICAN KENNEL CLUB IS DEDICATED TO UPHOLDING THE INTEGRITY OF ITS REGISTRY, PROMOTING THE SPORT OF PUREBRED DOGS AND BREEDING FOR TYPE AND FUNCTION. FOUNDED IN 1884, THE AKC AND ITS AFFILIATED ORGANIZATIONS ADVOCATE FOR THE PUREBRED DOG AS A FAMILY COMPANION, ADVANCE CANINE HEALTH AND WELL-BEING, WORK TO PROTECT THE RIGHTS OF ALL DOG OWNERS AND PROMOTE RESPONSIBLE DOG OWNERSHIP.

AKC Breeder articles are selected for their general interest and entertainment values. Authors' views do not necessarily represent the policies of The American Kennel Club, nor does their publication constitute an endorsement by the AKC.

“MADE FOR EACH OTHER” *continued from previous page*



Mary Bloom

pup with the most suitable home can be a time-consuming process accompanied by enough stress and worry to keep one tossing and turning for many a night.

What can you do to help ensure that you'll find the right puppy homes? Although there is no perfect formula, there are a number of things that can optimize your success in screening potential owners and pairing them with the pups who suit them best.

Getting the Word Out

The first step is making sure that people know you have or will have pups available. If you are relatively new to breeding, this will entail more effort on your part than for the prominent longtime breeder who may have a large network of people who know of her or have obtained dogs from her in the past. Such a breeder may even have a waiting list of homes for upcoming litters.

If you're not yet a member of your breed's AKC parent club, as a responsible breeder you should be, and you can look to the club for excellent resources to help in puppy placement. The AKC recommends to prospective owners that they start their search for a puppy with the parent club, and most parent clubs maintain a breeder-referral program whereby prospective owners who contact the club are referred to breeders in their area.

For many parent clubs, breeders who wish to participate in the referral program are expected to abide by the club's code of ethics. This requirement affirms for potential owners that the people listed have the breed's best interests foremost in mind.

Links to the parent-club breeder-referral contacts for every AKC breed are provided on

the AKC website (akc.org), under both the "Breeders" and "Future Owners" headings. As a supplemental resource, the AKC site also offers online Breeder Classifieds (akc.org/classified), where available puppies can be listed.

Many parent clubs provide space for advertisement of planned or current litters in the club publication or on the website. An ad in the club publication can be a great place to feature the litter's pedigree and photos of the sire and dam.

The Importance of Having Your Own Website

If you haven't done so already, as a reputable breeder you might consider creating your own website where you can share news and information about your line and about the breed. Your website can be an excellent educational resource for potential owners who want to learn about the pros and cons of living with the breed. Take advantage of the fantastic public-education opportunity the Internet offers. You can refer people who inquire about a puppy to important, in-depth breed information on your website and that of the parent club. Be honest about the challenges of owning the breed as well as its delights. An understanding now of these realities by someone who thinks they want to own this breed might prevent an unfortunate situation later for both the dog and the person involved.

Coming Up With the Right Questions

If the person has been educated about the pros and cons of owning the breed and is still interested in a puppy, the next step is to have him respond to a puppy-buyer questionnaire. This consists of a series of questions that will first of all help to confirm whether this person will provide an appropriate home for a dog of this breed. Secondly, the responses will help to indicate areas where the person may need education. Finally, they will provide valuable information toward identifying which puppy in your litter, if any, will most suit this person in aspects such as temperament and activity level.

The questionnaire can consist of a page on your website where a potential owner can enter information, or it can be a document that you provide in printed form or via e-mail. It's important that the questionnaire is tailored

continued on page 6

Advice from the Breeder

A Passion for Excellence

After 40 years, Jean Boyd of Rivergroves Great Pyrenees still seeks that special something.

A lifetime of love and commitment to Great Pyrenees started for me as a child's simple love of dogs. While most children's interest change as they mature, mine evolved to a rewarding career of breeding and showing a magnificent breed. My foundation pair produced 15 champions, including Ch. Rivergroves Crusher's Re-Run, my first homebred Best in Show dog. From these two dogs, Rivergroves has been able to genetically continue a successful breeding program to the current dogs of today.

Breeding dogs is both an art and a passion for excellence. It is the search for that perfect dog which is never quite attainable yet remains the goal of all serious breeders.

When you begin to breed dogs, you must first study your breed standard and your pedigrees as well as books on genetics, structure and movement. You must understand the origin and purpose of your breed along with the development of breed type. Type is what defines your Great Pyrenees and differentiates them from other breeds. There are many good books available to help you.

It is also important to watch other breeds at dog shows. This will help you understand and identify the differences in type, structure, and movement. We have always made it a policy to stay and watch all the groups and Best in Show at most every show we attend.

Pitfalls, Traps, Disappointments

It is important to take your time and decide what your goals are before making breeding decisions. As a breeder, one begins with the highest-quality dogs possible. They should reflect the qualities you want to bring out in your puppies. In trying to minimize unwelcome surprises, you need thorough knowledge of the pedigree behind your dogs.



Jean and Wayne Boyd, of Rivergroves. "There is nothing more rewarding than knowing you held that little puppy in your hands at birth, wiped him down, raised him, trained him, finished him, and ultimately showed him to number one."

You must fully understand the strengths and weaknesses in the pedigree and learn how these will be reflected through the sire and dam. Maybe the sire or dam didn't exhibit the phenotype you had hoped to see in the offspring, and that should be noted.

Once the puppies are whelped and on their feet, we like to begin evaluation around 7 to 8 weeks of age. Don't fall into the trap of feeling if it can't be shown it will be good for breeding. You must also reevaluate your breeding stock from time to time. If a litter shows no improvement over the parents, perhaps it would be wise to retire the sire or dam or try another combination. The best breeders have a drive to enhance their lines with every breeding.

There are many pitfalls for the novice. You must learn to see the entire dog with all its faults, and remember nothing happens overnight. To reach your goal you must be prepared to compromise. You might breed to a dog with a less than perfect head but with a perfectly structured body and sound movement. You must think in terms of years and prepare for hard work and many

disappointments. Successful breeders combine an artist's eye for beauty, symmetry, and balance along with the ability to foresee the present as the road to the future. The great bloodlines will live forever as a blueprint for future generations.

Pyr Review

Breeding Great Pyrenees for the show ring is no different than breeding for pet companions. All puppies should be confident with good temperaments, correct breed type, good structure and balance. It is during observations and evaluations in the early weeks the potential show puppy becomes apparent: that will be the one with

"attitude" as well as structure, balance, and type. There are many ways to look at puppies. I have found when they single-track when moving at 8 weeks they never really change. This is made possible by correct structure: a balanced front and rear with ample reach and drive. Always look for balance. They are working dogs, so you must remember their initial purpose and look for the dog who can withstand the stress of working. Their temperament must be confident, outgoing, fearless, and curious. Puppies with these traits make wonderful pets as well as show dogs.

We like to take all our puppies to puppy training classes for socializing and car/crate training. We keep it "fun" so they have a good experience. Here is where we start training for the show ring. We begin with stacking and gaiting, using show collars and bait and lots of praise.

To begin with, your show puppy has to have excellent breed type and I use the word "type" as overall conformation. With Great Pyrenees it has to have a certain elegance, correct movement with reach and drive, good

continued on page 11

Inside AKC

AKC Companion Animal Recovery

CAR Has 400,000 Good Reasons to Do the Right Thing

ID works! There are several instances where your dog or a puppy you've sold may turn up missing. From devastating weather to a gate that was inadvertently left open, pets may somehow become disconnected from you.

AKC Companion Animal Recovery (CAR), founded in 1995,

is the nation's largest nonprofit pet ID and recovery service, serving pet owners, clubs, vets, shelters, and of course, our AKC breeders. Since CAR's inception, almost 400,000 lost pets have been reunited with their owners through their microchips, tattoos, or CAR collar tags. Our pets are family members indeed, and with 125 years of AKC history supporting us, we understand the unique love and dedication breeders have for the dogs they produce.

To protect your dogs and the puppies going to new homes, AKC CAR provides

- A simple, one-time enrollment process
- AKC collar tag included with enrollment
- 24/7/365 dedicated Recovery Coordinators
- Unlimited free updates, including phone number and address changes.

CAR also provides many services for breeders:

Discounts. Microchipping is a way to differentiate the caliber of your breeding operation. It shows prospective pet owners that you are concerned for the pet's safety, should it ever go missing. Let your clients know about your microchipping practices. Not only will they appreciate the extra service and care,



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COMPANION ANIMAL RECOVERY

but it also offers them peace of mind surrounding the pet's added safety.

AKC breeders are entitled to special microchipping discounts. You can get microchips for \$7 per chip (in boxes of 20 or 25) by using the coupon code PUPPYCHIP at check out. You can also get the ProScan 700 microchip reader at a discount. Microchips or the reader can be ordered through our online store or by calling 800-252-7894.

When new puppy buyers enroll their dog's microchip in the AKC Lost and Found program when they register their pet with AKC, they get savings at up to 25 percent off the standard enrollment price.



Wellcock © AKC

Recordkeeping and Identification of Dogs. As a responsible breeder, you understand it is critical that you can identify each of your dogs and know their parentage. Microchips provide proof-positive permanent identification that not only meets the requirement of identifying your dogs, but also provides puppy buyers additional peace of mind

knowing that their pet can be identified if lost.

Microchipping Clinics. Clinics are a great fund-raiser, open-house event, or public-service offering. Join up to assist a local dog club sponsoring a microchip clinic or host a mini-clinic for your puppy buyers.

With the AKC CAR ID System, hosting a microchip clinic is both easy and beneficial. To get more information on organizing a microchipping clinic, call 800-252-7894 or e-mail chipclinic@akccar.org with your phone number and the date(s) of your clinic. A CAR representative will contact you to help get you started. A variety of resource materials are also available at akccar.org to assist you with planning and promoting your clinic in your community and with the local media.

PINcentive Enrollment

Program. When registered in the PINcentive program, you can enroll other manufacturers' microchips in the CAR recovery service and earn rebates and points toward *free* CAR products.

CAR also supports:

Pet Poison Helpline. With this

continued on page 11



CHF Releases New Health Conference Videos

“Cancer & Genomics,” “Herpesvirus-1” complete 10-part free online series

The AKC Canine Health Foundation has released two new videos in a series recorded at the 2009 National Parent Club Canine Health Conference, held in St. Louis. The releases—“Canine Cancer & Comparative Genomics: New Technologies, New Opportunities” (Dr. Matthew Breen) and “Canine Herpesvirus-1: A New Pathogenic Role for an Old Virus” (Dr. Eric Ledbetter)—complete the 10-part series of videos archived at ondemand.thecanohouse.com/CHF/.

The conference, sponsored by Nestlé Purina PetCare Company, brought together leading researchers and representatives from AKC parent clubs to discuss the present and future of canine health research.

“Canine Cancer & Comparative Genomics”

Comparative genomics may be defined broadly as any area of research in which the sequence and function of genomes of different species are compared. With complete genome sequences available both for human and dog, we can now identify regions of both genomes shared by and associated with disease, and thus begin to understand which genes specifically are playing key roles in a variety of disease processes. The core similarity of genes defining human and dog allows the dog to be considered as a valid biomedical model system of numerous human genetic disease, including cancers.

The comparative value of biomedical research is widely accepted and there is every expectation that data generated from studies of canine diseases ultimately will have a major impact on human health.

The application of advanced genomic technologies for routine health is cost prohibitive, even for human medicine, but technology is becoming faster and less expensive. The human genome was estimated



to have cost approximately 3–\$5 billion and took almost 15 years to complete; the mouse genome cost \$100,000,000 and took approximately three years; and the dog genome cost \$40,000,000 and took about a year. The race for the \$1,000 genome sequence has begun.

It is conceivable that, as with human health, the next decade may bring genotyping and whole genome sequencing and analysis, and proteinomic evaluation of animal patients for the purposes of health management.

Such analysis of patients will begin to play a central role in routine veterinary care as we approach the ultimate goal in clinical veterinary genomics: individualized medicine based on the genetic health status of our animals.

Dr. Matthew Breen, of the North Carolina State University College of Veterinary Medicine, researches the genomics, genome mapping, and the comparative aspects of canine cancer. He has a number of active CHF grants focused on the molecular cytogenetic evaluation of canine tumors.

Breen completed his Ph.D. in cytogenetics in 1990, then spent two years as a “Post Doc” in molecular genetics at the U.K. Medical Research Council’s Human Genetics Unit in Edinburgh.

Breen spent four years working for the research arm of the Australian Thoroughbred industry before returning to the U.K. in 1996. His laboratory developed molecular cytogenetics reagents, resources and techniques for application to canine genome mapping, comparative cytogenetics, and

cancer studies.

“Canine Herpesvirus-1”

Canine herpesvirus-1 (CHV-1) was first identified in the mid-1960s as a cause of severe morbidity and mortality in fetal and neonatal dogs. In the following decades, CHV-1 infections in mature dogs were

sporadically and infrequently associated with several relatively mild conditions, including genital mucositis and respiratory-tract disease. More recently, the significance of CHV-1 as an ocular pathogen in mature dogs has been recognized and investigated. In the past few years, several ocular diseases have been linked to primary and recurrent CHV-1 infection in mature dogs, including conjunctivitis, ulcerative keratitis, and nonulcerative keratitis. In addition, CHV-1 has been reported as the most common etiology of viral conjunctivitis in client-owned dogs and as a cause of large epizootics of ocular disease in group-housed dogs. The true prevalence and spectrum of CHV-1 ocular diseases remain unknown, but recent discoveries suggest a common and substantial role for this virus in the development of ocular diseases in dogs of all ages.

Dr. Eric C. Ledbetter is an assistant professor of ophthalmology at the Cornell University College of Veterinary Medicine and a Diplomate of the American College of Veterinary Ophthalmologists.

After graduating from the University of Missouri College of Veterinary Medicine, he completed a small-animal medicine and surgery internship at Texas A&M University College of Veterinary Medicine and an ophthalmology internship at the Animal Ophthalmology Clinic in Dallas. His residency training in ophthalmology was completed at the Cornell University College of Veterinary Medicine.

Ledbetter’s research program focuses on ocular infectious diseases and noninvasive imaging techniques of the anterior segment of the eye. ♦



“MADE FOR EACH OTHER”*continued from page 2*

according to issues especially relevant for your breed. For example, if dogs of your breed or bloodline are prone to leaping or climbing out of enclosures, you might include very detailed questions regarding the height and construction of the potential owner’s fences. If your breed can regard small animals as prey, you’ll need to ask specifically about any small pets in the household.

A paragraph at the top should convey to the potential owner that the function and intent of the questionnaire are ultimately to help ensure the best-possible match and the best-possible future for *both* dog and owner. Ideally the person will realize that honest answers are vital to identifying which puppy will be most suitable to their household, lifestyle, and personality.

Also at the top, you will want to provide space for the person’s name, address, and other contact information.

Below are examples of the sort of questions that you might invite potential owners to respond to. Again, it will be most productive to tailor the questionnaire with an eye toward the special needs and idiosyncracies of your breed and bloodline. ♦

A Sample Questionnaire

1. Please indicate what type of dwelling you live in (e.g., single home, townhouse, or apartment). Does it have a doggy door leading outside?
2. How long have you lived at this address? Do you own or rent your home?
3. Is your yard fenced? If so, please describe the enclosure (height of fence, material/construction, and so on).
4. Who will be the puppy’s primary caregiver?
5. Where will the puppy spend the daytime hours?
6. Will someone be at home with the puppy during the day? If not, what arrangements will be made to feed and exercise him?
7. On average, how many hours will the puppy be left alone every day? Where will he stay when left alone?
8. Where will the puppy spend the night?
9. Do you have a swimming pool? If so, is it fenced?
10. Do you have children living in the household? If so, what ages are they?
11. Is anyone in your household allergic to dogs?
12. Do all household members agree to the addition of a dog?
13. Please describe a typical weekday in your household.
14. Please describe a typical weekend day in your household.
15. What leisure activities do you engage in frequently that you would like to do with a dog?
16. Have you ever owned a dog? If so, what breed(s)? What happened to the dog(s) you previously owned?
17. Have you ever bred a dog and/or raised a litter of puppies?
18. Have you ever turned in an animal to a shelter or rescue?
19. Have you ever had a dog hit by a car?
20. Describe any other animals in your household. (Species? Size? Age? Sex? Spayed or neutered?)
21. Have the other animals in your household been around a puppy or dog? If so, how did they react?
22. What is your feeling about crate training?
23. How do you plan to housetrain this puppy?
24. Are you willing to attend puppy-socialization and basic obedience classes?
25. Have you ever attended puppy-socialization or basic obedience classes with a dog you own? If so, what was that experience like for you?
26. Have you ever participated in a sport or competition for dogs? Would you like to? If so, which one(s)?
27. How do you feel about the fact that this dog will shed hair?
28. How much grooming of this dog do you plan to do yourself?
29. What do you consider to be the ideal activity level of the dog you hope to own?
30. What do you consider to be the ideal personality of the dog you hope to own?
31. Why do you want a dog of this breed? Please be very specific.
32. What gender of dog do you want? Why? Will you agree to spay or neuter?
33. Are you prepared to make a commitment to this dog for its entire life?

Coming Up in Part Two

Next time we’ll conclude our discussion of screening the potential owner, and we’ll also look at assessing puppy personality with an eye toward matching each pup with the right home.

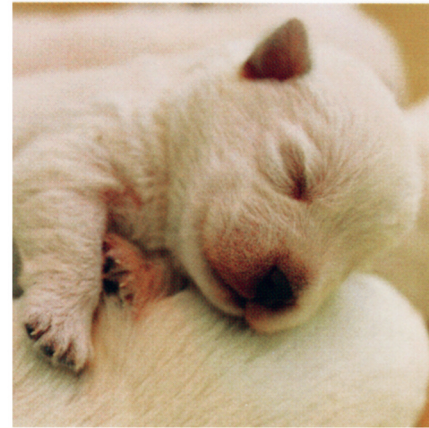
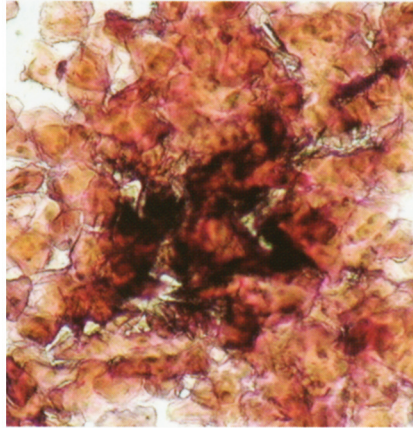
Arlliss Paddock breeds and shows English Cocker Spaniels, is former managing editor of the AKC Gazette, and is editor of the magazine’s Breed Columns.



The Science of Breeding by Royal Canin

BREEDER'S HANDBOOK

Photos courtesy Royal Canin



Since 1967, Royal Canin has been at the forefront of developing innovative nutritional responses in the field of dog breeding. Even if nutrition is fundamental in breeding, it cannot give all the keys for success. Application of reproduction techniques is the deciding factor.

MATERNAL BEHAVIOR

By Bretaigne Jones, DVM

Senior Veterinary Services Manager

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©Yves Lanceau

One of the best traits a bitch can have in the eyes of a breeder is good mothering ability. Unfortunately, the mothering behavior of the bitch or the female relatives of the stud dog (especially mothers and daughters) is not often a primary consideration when choosing the dogs to be bred. Mothering ability has a strong hereditary aspect, but other factors exert influence as well.

HORMONAL ASPECTS OF MATERNAL BEHAVIOR

There are four hormones that trigger aspects of mothering behavior: estrogen, progesterone, prolactin, and oxytocin.





©Jean-Michel Labat

Estrogen is the most active hormone in reproduction from its primary actions in stimulating the physical and behavioral changes associated with estrus (swollen vulva, bloody vulvar discharge, and pheromones to attract male dogs), to its secondary role as a primer for mammary development, lactation, and maternal behavior. In order for the estrogen molecule to trigger a response, the target tissue must have estrogen receptors on the cell membranes. The location of the receptors within the brain and their concentration will determine the type and strength of the response.

The second maternal hormone, progesterone, is recognized as the pregnancy hormone. The ovarian follicular cells start to change after ovulation and secrete progesterone to maintain pregnancy. It has some effect on inducing maternal behavior, particularly when its receptors are primed with estrogen.

Just before birthing, progesterone levels drop abruptly, with a concurrent rise in prolactin, the third maternal hormone. This combination of level changes seems to be largely responsible for stimulating immediate mothering behavior such as nesting and protective maternal aggression. Prolactin's function

is largely stimulatory for lactation. Both actions of prolactin, maternal behavior and lactation, are enhanced if estrogen has "primed" the tissues.

Lastly, oxytocin is released from the pituitary gland in response to the physical pressure of a puppy against the cervix during labor. One of the actions of oxytocin is to synchronize contractions of the uterus in birthing and to stimulate



©Jean-Michel Labat

the let-down of milk. In conjunction with the other hormones, it stimulates maternal recognition of her pups and care behavior.

BEHAVIORAL ELEMENTS OF MOTHERING

Other than the behavior exhibited in the estrus cycle and breeding, there are not behaviors specifically associated with pregnancy until the dam nears labor and delivery. At that time, she will exhibit nesting behavior, typically searching out a protected, private place where she can feel safe.

Once the puppies are born, if appropriate hormonal activity has occurred, the dam will begin her mothering by licking them. Initially it is the scent of her amniotic fluid that communicates that the puppies are hers. The dam performs the licking in order to stimulate breathing and to dry the pups' coats. Later she will lick the genitalia of each pup to stimulate urination and defecation since the pups won't eliminate on their own until about three weeks of age. The bitch will also use licking on the heads of the pups to guide them to nurse.

NEGATIVE MATERNAL BEHAVIORS

Some postpartum behaviors, however, are undesirable. Dams may be aggressive to their pups, especially when the pups are making noise. Causes of this aggression can be varied. The first consideration is if the bitch is in pain. Mastitis is a condition that can cause pain and can trigger aggressive behavior toward the pups. Aggression can also be triggered if the bitch does not recognize the pups as her own. Inadequate levels of oxytocin can influence this recognition, as the hormone makes the brain receptive to the amniotic fluid smell immediately after birth and pheromone secretion. Another factor is if the pups are removed



©Yves Lanceau

and cleaned up so thoroughly immediately after being born that when returned to the bitch they no longer have the amniotic fluid scent to identify them as hers.

In extreme cases, aggression can escalate to cannibalism of one or more of the pups. This type of cannibalism is called kronism. Again, pain can be the cause, and as before, mastitis needs to be considered.

Another trigger is pre-eclampsia, a condition where the bitch's blood calcium (unbound) is too low, but she isn't yet exhibiting the classic signs of seizures, fever and weakness. Other causes can be hereditary (a lack of estrogen receptors, which negatively impacts the action of other hormones), psychological (first-time mom, very nervous, and so on), and physiological (elevated neurotransmitter release due to

too much noise, too much foot traffic in the nursery, overcrowding in the nursery area, and other stimuli.).

On a less aggressive level, rejection of the pups can also be a problem. If it is just one or two pups, it may indicate something is wrong with those particular pups; whereas if it is the entire litter, the problem usually lies with the dam. It can be more common in first-litter bitches. Usually if it involves just one or two pups, they may be cold or too still.

The three big threats to the survival of neonates are hypothermia, hypoglycemia, and dehydration. If caught soon enough, the pup can be slowly warmed, or if dehydrated, it can be bottle fed to stimulate activity.

Warning: One should never attempt to feed a cold puppy, as they are not capable of swallowing and may aspirate the milk into their lungs instead. Once

the puppy has reestablished a normal body temperature, the dam will accept it. It is important to note that occasionally rejection will escalate to cannibalism.

SUMMING UP

In summary, maternal behavior is a composite of hormonal, physiological, and genetic factors.

Undesirable maternal behavior can be triggered by a variety of factors, such as hormonal (lack of receptors, inadequate production, or lack of stimulation), inexperience, nervous disposition, stress, or in reaction to pain.

It is important to consider all of these factors when assessing a bitch's mothering ability.

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All photos courtesy of Royal Canin

Feed her for their critical development needs from gestation through weaning.

PRO HT 42d™

From the 1st day of heat until the 42nd day of gestation, Royal Canin® PRO HT 42d™ is the nutritional answer developed to prepare the bitch for reproduction and ensure optimal embryonic and fetal development.

REPRODUCTIVE PREPARATION

Vital nutrients prepare the bitch for reproduction and support the uterus, ovulation, and gestation:

- Chelated minerals (Zinc, Copper, & Manganese)
- Beta Carotene
- Specific amino acids (L-Carnitine, Arginine, & Tyrosine)
- Vitamin complex

HEALTHY EMBRYOGENESIS

Vital nutrients support embryo development and maturation:

- L-Carnitine & Arginine help support embryo development
- Powerful antioxidants (Beta-Carotene, Vitamins E & C, & Taurine) help protect the developing fetus from free radicals
- Omega 3 essential fatty acids (EPA & DHA) allow for ideal maturation of motor and visual function in newborn puppies

PRO Starter™

From the 42nd day of gestation until the end of lactation, Royal Canin® PRO Starter™ provides bitches with vital nutrients, which are passed to puppies during their critical development stage.

L-CARNITINE

The newborn puppy's ability to synthesize this essential element is limited, as his enzymatic system is still immature. Therefore, it's crucial to his development that it be supplemented via maternal milk in the first days of life.

- Enables heart cells to access fuel (fatty acids)
- Helps increase muscle and bone mass
- Helps support healthy hepatic function

Whatever your breed, Royal Canin PRO provides precise nutritional answers to the needs of the dog from gestation through adulthood.



PRO HT 42d™ for breeding females:

- Supports embryo and fetal development from heat through 42nd day of gestation.

PRO Starter™ for new puppies:

- Establishes a stronger immune system.



To find out how to order Royal Canin PRO, contact us toll-free at 1-800 592-6687 or visit our website, www.royalcanin.us



“A PASSION FOR EXCELLENCE”

continued from page 3

angulation, and overall balance. Another essential for my breed standard is a correct head and beautiful almond eyes. The eyes should be dark and have good fill. There are too many Pyrenees with large round eyes, large heads with too much stop, droopy lips and short deep muzzles appearing in the show ring all of which is contrary to our breed standard. If it looks like a white Newfoundland, it is not a correct Great Pyrenees. The head should be wedge shaped with no apparent stop. The ears should be set level with the eye and the mouth should have tight lips with good pigmentation. It takes many years for new breeders to know the correct look for a Great Pyrenees.

What Puts the *Special* in Specials?

A good show dog must have that extra something—an attitude, and an enjoyment of being in the show ring with all its distractions. A specials dog is just that. It brings something *special* in attitude and spirit.

Often there is a remarkable rapport between the handler and the dog as they seem to be moving as one. Handling dogs looks deceptively easy. It is not but with a lot of practice you can become proficient.

Most who attempt dog breeding don't last more than a few years. Some expect to make money and find soon enough that is not the case. If you get truly hooked and make that long-term commitment, you will find it fulfilling on many levels: the challenge of trying to produce the best with consistency and the thrill and hope of each new litter, the intellectual challenge of always learning something new, and the joy of placing pets with people who will love and cherish them as you would.

What Dreams Are Made Of

Showing a Great Pyrenees is a difficult and time-consuming job which doesn't begin in the show ring. The show ring is where the true worth of the breeding program becomes apparent. The basic, fundamental, most

productive and rewarding elements in breeding dogs for the show ring is a well-planned breeding program.

Each generation must be improved not by chance or luck, but by a well-thought-out and carefully planned breeding program. Showing a dog with a handler is an option, but breeder-owner-handled is the triple crown of dog showing. There is nothing more rewarding than knowing you held that little puppy in your hands at birth, wiped him down, raised him, trained him, finished him, and ultimately showed him to number one. It is a wonderful experience for you and the dog you love. Surely the pinnacle of my career and what breeder's dreams are made of. ♦

Jean Boyd and her husband, Wayne, have been owner-breeder-handlers of top Great Pyrenees for nearly 40 years under the Rivergroves banner. They were the American Kennel Club's Working Group recipients in the 2007 Breeder of the Year Award.

“AKC COMPANION ANIMAL RECOVERY”

continued from page 4

optional add-on to the CAR Recovery Service enrollment, you can get immediate treatment advice from animal experts around the clock. If your pet accidentally swallows something poisonous, you need help—fast. And that's just what you'll get with Pet Poison Helpline.

SpotLight GPS Pet Locator. SpotLight provides you with the next generation of pet-locating technology coupled with CAR's nationwide pet-recovery service. With SpotLight, you have hands-on tracking of your pet. The SpotLight GPS Pet Locator will allow you to pinpoint through Google Maps where your pet is at any time. Plus, it will send you text and e-mail alerts should your pet wander outside of its “SafeSpot” boundaries that you set for your pet's safety.

Giving Back. As a nonprofit organization it is vital to give back to the pet community. All donations to the CAR Operating Fund will help further our efforts to support the companion

animal community. This fund helps CAR in its efforts to provide low-cost and donated microchips, scanners, and enrollments, and free recovery-service enrollments to active military and service animals.

Veterinary Student Scholarships.

Veterinarian support of microchipping pets plays an integral part in responsible pet ownership. This is why, since 2002, CAR has awarded a total \$800,000 toward veterinary student scholarships to well-deserving veterinary school students. ♦

More Information

For information about the AKC Companion Animal Recovery and the programs it supports, visit akccar.org. To enroll in real time with CAR's online-enrollment system, visit akccar.org. Or, call 800-252-7894 to have an enrollment form mailed or faxed to you.

AKC CAR Canine Support & Relief Fund

Throughout history, dogs and humans coexisted as teams to find food, work with livestock, and serve our country. Arguably a canine's most noble vocation, search-and-rescue dogs acted on behalf of lost or injured humans as early as 1750. The canine search-and-rescue teams of today put the canine-human bond into practice by tracking and finding victims of crime, terrorism, avalanches, earthquakes, floods, and other natural disasters.

The charitable foundation, AKC Companion Animal Recovery Canine Support & Relief Fund, provides resources, support, funds, and other assistance to not-for-profit organizations such as canine search and rescue, veterinary units that support the canine rescue teams, and animal shelters that provide care for domestic animals orphaned or displaced as a result of natural or civil disasters.

For more information on the CAR Canine Support & Relief Fund, visit akccar.org.



AKC Breeder

American Kennel Club
8051 Arco Corporate Drive
Raleigh, NC 27617

*We're more than champion dogs.
We're the dog's champion.*



Mary Bloom

GENOME BARKS PODCAST

Here is a partial list of podcasts currently in our library, found at www.akc.org and www.akcchf.org.

- *Probiotics*, with Dr. Gail Czarnecki-Mauldin
- *Neurological Disorders* with Dr. David Brewer
- *Reproduction*, with Dr. Vicki Meyers-Wallen
- *Cardiac Disease*, with Dr. N. Sydney Moise
- *Indicators of Dystocia*, with Dr. Cindy O'Connor
- *Novel Cancer Therapies*, with Dr. David Vail
- *Purina Parent Club Partnership Program*, with Mike Allway
- *Nestle Purina Pro Club*, with Ann Viklund
- *Tick Borne Diseases*, with Dr. Ed Breitschwerdt
- *Bartonella Infections*, with Dr. Ed. Breithschwerdt

Don't forget to check the Genome Barks archives—a new podcast is released every two weeks.

American Kennel Club and
AKC Canine Health Foundation

**BREEDER'S
SYMPOSIUM**

PRESENTS THE SCHEDULE FOR 2010

August 28 - Olympia, Washington

September 11 - Athens, Georgia

For information contact Ron Rella; rnr@akc.org
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www.akc.org