

PURINA

Today's Breeder

A Nestlé Purina Publication Dedicated to the Needs of Canine Enthusiasts

Issue 82



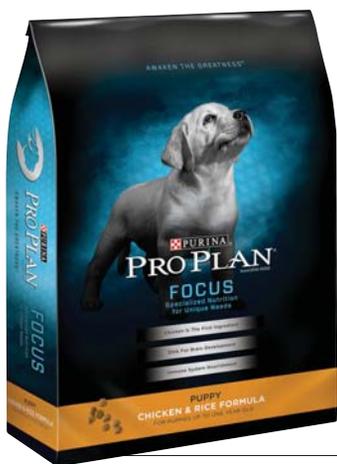
BREEDER PROFILE
Lily Pad Boykin Spaniels

CCL Stabilization
Beginning a Bloodline
Schnauzapalooza

Why Large-Breed Puppy Food Is Not Recommended for Pregnant Bitches

Q: I am a new breeder of German Shepherd Dogs. Since this is a large breed, I feed the adults *Purina Pro Plan Focus Large Breed Formula* and the puppies *Purina Pro Plan Focus Large Breed Puppy Formula*. I am planning to feed my pregnant bitches the same large-breed puppy food. Will this food provide proper nutrition to support them during pregnancy?

A: While most *Purina* puppy foods are appropriate for pregnant and lactating bitches, this is not true for the large-breed products. This is because large-breed puppy food is deliberately reduced in calories to help avoid excessively rapid growth in large-breed puppies, which can lead to skeletal health problems. During gestation and lactation, any of the standard *Pro Plan* puppy foods, such as Chicken & Rice or Lamb & Rice Puppy formulas, can be fed. After weaning, both the dam and puppies can be transitioned to appropriate large-breed formulas. ■



TB Magazine invites you to send your nutrition questions to today'sbreeder@purina.com. Purina Research Scientist Dottie P. Laflamme, D.V.M., Ph.D., DACVN, who is boarded by the American College of Veterinary Nutrition, answers these questions. She has more than 20 years' experience in the pet food industry and lectures worldwide on canine nutrition.



Today's Breeder Advisory Board

Jorje Quinn, Vice President, Professional Engagement Team

Candy Caciolo, Portfolio Director of Marketing

Gianna DeiSanti, Brand Director, Conformation and Sporting

Lisa Walsh, Communications Manager

Scott Smith, Managing Director of Field Operations

Ann Viklund, Director of Conformation, and Breeder, Labrador Retrievers and Norwich Terriers

Bob West, Director of Sporting

Brock Fitzgerald, Director of Purina Farms and the Purina Event Center

Kaite Flamm, Manager, Purina Event Center

Deborah Greco, D.V.M., DACVIM, Senior Research Scientist, and Breeder, Standard Poodles

Connie Wagner, Senior Area Manager (Southeast), Conformation, and Breeder, Dalmatians

Carol Grossman, Western Area Manager, Conformation, and Breeder, Great Danes, Rottweilers and Dachshunds

Ann Balotti, Purina Event Center Area Manager

Marci Sale, Northeast Area Manager, Conformation, and Breeder, Labrador Retrievers

Christa Townsend, Plains Area Manager, Conformation, and Breeder, Bouvier des Flandres

Diana Allen, Field Representative, Conformation, and Breeder, American Eskimo Dogs

Peggy Schilling, Field Representative, Conformation, and Breeder, Great Danes

Rod L. Carter, Area Manager, Sporting, and Breeder, Beagles, Boston Terriers and Yorkshire Terriers

Pat Lamantia, Area Manager, Sporting, and Breeder, German Wirehaired Pointers

Dean Reinke, Area Manager, Sporting, and Breeder, English Springer Spaniels

Karl Gunzer, Area Manager, Sporting

Today's Breeder is produced and published by Nestlé Purina Public Relations.

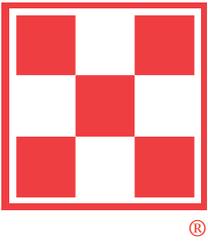
Keith Schopp, Vice President, Public Relations

Barbara Fawver, Manager, Pet Influential Communications, Editor, *Today's Breeder* Magazine, and Breeder, Brace Beagles

Melissa Miller, Photo Editor, *Today's Breeder* Magazine, and Senior Communications Specialist, Pet Influential Communications

Kayla Miller, Digital Editor, *Today's Breeder* Magazine, and Communications Specialist, Pet Influential Communications

Today's Breeder articles may be reprinted provided the following guidelines are used: That the article be used in its entirety. If the entire article is not desired, submit in writing what you plan to use; that it be used in a positive manner; that credit be given to *Today's Breeder* as the article's source. The credit should be as follows: Used with permission from *Today's Breeder*, Nestlé Purina PetCare Company.



PURINA *Today's Breeder*

A Nestlé Purina Publication Dedicated to the Needs of Canine Enthusiasts

Issue 82

If you have moved or changed your name, please let us know by calling 1-877-776-2582 or write us at: *Purina Pro Club*, 1400 South Highway Drive, Fenton, MO 63099.

ANY QUESTIONS?

When you have questions about *Purina Pro Club*, please call 1-877-776-2582 between 7 a.m. and 5 p.m. CST Monday through Friday (holidays excluded).

Today's Breeder is not responsible for unsolicited submissions, manuscripts, photographs, and other submitted material. Submissions will not be returned. Submission constitutes permission for *Today's Breeder*, at its sole discretion, to use the submitted materials, in whole or in part, without compensation. For reasons of space and editorial content, *Today's Breeder* reserves the right to delete or alter any solicited or unsolicited information, or part of, that is submitted or received for consideration for inclusion in this publication.

Today's Breeder is sent as a courtesy to members of the *Purina Pro Club*. Extra copies are available for \$2.95 each. Make your check or money order payable to *Today's Breeder* and send to: *Today's Breeder*, c/o Editor, Nestlé Purina PetCare Company, 2T Checkerboard Square, St. Louis, MO 63164.

Trademarks owned by Société des Produits Nestlé S.A., Vevey, Switzerland.

© 2013 Nestlé Purina PetCare Company

4 BEGINNING A BLOODLINE

Experienced breeders Megan Lane of Edgehill Pointers and Rob Engelking of King's Kennel give advice to new breeders Kelley Cheek and Pat Muia, respectively. Sharing their know-how, they help them research prospective stud dogs for their females and prepare for the puppies.

8 CELEBRATING THE SCHNAUZER

A historical event, Schnauzapalooza combined the Miniature, Standard and Giant Schnauzer National Specialties this past spring at the Purina Event Center. An eager-to-please, athletic male Standard was named the Best Schnauzer in Show. More than just a competition, this show was a celebration of all things Schnauzer.

10 LILY PAD'S LITTLE SOUTHERN SECRET

Bill and Dawn Crites of Lily Pad Boykin Spaniels think these "little brown dogs" are the best-kept secret of the dog fancy. Their talented Boykins have earned many hunting titles in the United Kennel Club Hunting Retriever Club. As breeders, they aim to recreate their foundation bitch, "Lily," an inexhaustible hunter with a loving personality.



10

16 STABILIZING THE STABILIZER

Researchers are helping to shape the future of cranial cruciate ligament disease through their discoveries related to prevention, diagnosis and management of the most common orthopedic disorder seen by veterinarians. The goal is to return dogs to normal functioning and get them back in their game.

20 A HEART FOR SIBERIAN HUSKIES

Having grown up with Siberian Huskies, Tim Terella of Glennridge Kennels has a soft spot, not to mention a natural handling ability, for the Northern breed. Among his accomplishments was winning the Spitz and Primitive Breed Group out of 5,000 dogs at the 2012 World Dog Show with a male named "Fizzy," the No. 1 Siberian Husky in the country.

Regular Departments

2 Nutrition Matters 22 Circle of Champions 24 Breed Snapshot

On Our Cover

SHR UH Lily & Piper's Story for Ever ("Ever") is a 3-year-old female Boykin Spaniel bred, owned and handled by Bill and Dawn Crites of Blythewood, S.C. Cover photo by Melissa Miller. See story on page 10.



20

Beginning a Bloodline

BY KAYLA MILLER

Breeding is no easy task. Careful decisions must be made throughout the pre-breeding process. Here, TB Magazine tells about two enthusiasts who have recently bred their first litters after enlisting the help of experienced, successful breeders.

Fulfilling a Dream

Kelley Cheek patiently sits in her living room next to her pregnant Pointer, GCH Penpoint San Antonio Rose, JH. The 7-year-old bitch, called "Savvy," is about to whelp her second litter of puppies. It is Cheek's first litter.

In the week leading up to the whelping, Cheek, of Tulsa, Okla., took Savvy's temperature daily, waiting for it to drop, signaling the start of the delivery usually

within 24 hours. Late one June evening, Savvy began to push, but there were no puppies. When Savvy stopped having contractions, Cheek immediately took her to the veterinarian, who determined she would need an emergency cesarean section.

Cheek sat in the waiting room through the wee hours of the morning. Shortly before 7 a.m., six Pointer puppies were born. One male, who was half the size of the others and had trouble breathing, did not survive. This left Cheek with two males and three females, one of which she will keep for her breeding program and to follow in Savvy's footsteps by competing in conformation and hunting tests.

When she arrived home, Cheek placed Savvy and her puppies in a 4-by-4 foot whelping box made of corrugated plastic and vinyl with a PVC bumper to keep Savvy from rolling on her puppies.

"I've wanted to become a successful breeder and handler since I began showing dogs as a young girl," Cheek says. "I want to develop my own bloodline that meets the Pointer standard in every way."

Cheek has been involved with dogs for 22 years. Her mother, Terry Cheek, worked part time at Rhapsody Acres Kennel, owned by Dr. Barbara Bach in Clinton, Md., where she taught obedience

"Savvy" is shown with her 3 1/2-week-old puppies.



and basic training classes and assisted with the grooming and whelping of Siberian Huskies and German Shepherd Dogs. She occasionally bred her own litters of Rat Terriers.

As a 10-year-old, Cheek began showing a Siberian Husky, Rhapsody's Penny Lane. Two years later, she showed a Pointer, CH Sunup's Thunder, in Junior Showmanship competition, and at age 15, she got her first Pointer, CH Marjetta's Coming Attraction, as a gift from her mother. While showing "Hershey," Cheek decided she wanted to become a breeder.

When planning her first litter, Cheek spent two years searching for a foundation bitch. In 2008, Savvy caught her eye at the American Pointer Club (APC) National Specialty. Cheek bought Savvy from LeeAnn Stagg of Penpoint Pointers in Crowley, La., who bred Savvy's first litter. Savvy went on to win Best of Breed at the Westminster Kennel Club Dog Show and an Award of Merit at the APC National Specialty in 2009.

"I wanted my foundation female to be an exemplary Pointer, so I held out until I found a spectacular dog," Cheek says. "I strived to find a bitch that was above and beyond the other dogs."

While looking for a stud dog, Cheek met Megan Lane and her mother, Jane Johnston, of Edgehill Pointers in Little Rock, Ark. Lane became Cheek's mentor, and they agreed that GCH Seasyde Edgehill Heart of Gold, the 2011 Reserve Winners Dog and 2012 Best of Breed winner at the APC National Specialty, would best complement Savvy. "Gibson," who is owned by Lane and Johnston, would be an out-cross sire.

Gibson has a short, well-tapered tail and symmetrical bone structure that offsets Savvy's low croup, the region around a Pointer's pelvic area where the topline falls to the tail, and longer tail that Cheek was trying to minimize. A hardworking hunting breed, the Pointer was originally bred to stand game. The breed standard calls for a level croup and a tail shorter than its hocks. Lane and Cheek also admired Gibson's loving, playful temperament, sturdy body, and the darker pigmentation of his orange and white coat color, similar to Savvy's coloration.

Lane co-bred her first Pointer litter in 2003, drawing from her mother's 20 years' experience and seeking

help from her good friend, Helyne Medeiros of Seasyde Pointers in Cape Cod, Mass., who co-owned the No. 1 dog in the country in 2008, CH Cookieland Seasyde Hollyberry, a Pointer handled by Michael Scott.



"Rather than telling me how to think, Helyne encouraged me to form my own opinions," Lane says. "Because I have been blessed with multiple mentors, I feel it's my duty to pass on my knowledge to return the favor."

Throughout the breeding process, Lane answered her questions about whelping, nutrition and caring for the puppies via phone calls and text messages.

Kelley Cheek, who breeds under the Hollyfrost prefix, holds Pointer puppies from the first litter she bred.

Pat Muia practices fieldwork with his Deutsch Kurzhaar German Shorthaired Pointers, "Reese," left, the dam of "Luca," 4 months old.



After the puppies were born, Lane switched the focus to offering advice on caring for the neonates and their dam.

Lane also advised Cheek about how to screen puppy buyers. She recommended choosing which puppy goes to which home based on what a person is looking for in a puppy. She explained that she would have the most knowledge about the puppies' temperaments and their potential.

Lane's approach to breeding involves looking at the total package. Regardless of prior knowledge about particular Pointer bloodlines, Lane thoroughly researches a stud dog's pedigree before going to the Canine Health Information Center database on the website of the Orthopedic Foundation for Animals to search for health certification on eyes, thyroid and hips.

"My No. 1 goal is to produce happy, healthy Pointers," Lane says. "Having a beautiful show dog featuring the Edgehill stamp of a stunning head and balanced outline is just the icing on the cake."

In the future, Cheek, a part-time groomer and full-time pharmacy student at the University of Oklahoma, plans to breed occasionally under the Hollyfrost kennel prefix. "I hope that my bloodline will become recognized for having well-balanced,

sound Pointers that have clean movement with classic, chiseled heads and short, tapered tails," Cheek says. "Savvy's puppies are the first generation toward this goal."

Bettering the Breed

At 5 a.m. on a brisk, chilly Sunday in March, Rob Engelking got the call from Pat Muia. Reese vom Riverwoods ("Reese"), a 4-year-old German Shorthaired Pointer owned by Muia, had gone into labor. Engelking, who had been a mentor throughout the breeding of Muia's first litter, was on his way to Muia's house just outside Chicago to assist with the delivery.

Almost 24 hours later, five puppies were born in a whelping box in Muia's living room. Months later, one puppy still is in rehabilitation after suffering a severe jaw injury during the delivery. Three puppies went to homes that were arranged before the breeding. Muia kept one male, Luca vom Riverwoods, who he will use for hunting after completing the Shorthair's Deutsch Kurzhaar testing, a German performance-based system to determine dogs most suited for breeding. Muia and his family referred to the litter, Reese's first, as "Reese's Pieces."

Muia has been involved with dogs for more than 20 years. He bought his first hunting dog in 1996, a German Shorthaired Pointer called “Cheyanne,” from a co-worker who had whelped his first litter. After Cheyanne passed away, Muia bought Reese from Engelking of King’s Kennel in Riverwoods, Ill., in 2009.

Muia met Engelking through the North America Deutsch Kurzhaar Club (NADKC). Engelking, who helped found NADKC with his father, the late Willy Engelking, has served as president for the past 15 years. He strives to help educate club members through a mentorship program that teaches proper breeding and training practices. Having been involved with breeding and training German Shorthaired Pointers for more than 30 years, Engelking passes down the knowledge he received from his father, who also was his mentor.

“Dad’s ideals were about sharing knowledge of proper breeding and training processes,” Engelking says. “Too many breeders keep their techniques too close to the breast, so when they’re gone, that information will be lost. It’s vital to share your knowledge.”

Muia decided to breed his first litter after he realized he needed a second dog to bring a competitive edge to the testing and fieldwork he was doing with Reese, who received Prize 1 Derby, Prize 1 Alterszuchprüfung (AZP) and Sehr Gut (SG3) ratings in conformation tests. He enlisted Engelking’s help to research pedigrees.

They agreed that Inka vom Riverwoods, the most titled male German Shorthaired Pointer of all time and the producer of nine dogs with Deutsch Kurzhaar titles, was best-suited to sire the litter, an outcross breeding. Owned by Engelking, “Ike” had an even temperament, medium size and solid liver color. These traits complemented Reese’s easy trainability and sound, well-balanced conformation.

In his breeding program, Engelking strives to relate genotype and phenotype to performance. Originally bred to be versatile hunters, German Shorthaired Pointers should have power, endurance and desire, plus an even temperament.

“It’s important to look at the offspring of a potential sire and what they’ve accomplished on a performance level,” says Engelking. “Temperament

also is important. You want a companion as well as a performance animal.”

Another major component of Engelking’s breeding program is nutrition. Along with his detail-oriented breeding philosophy, providing his dogs with a nutritionally sound diet is something he has passed down to Muia. They both feed *Purina Pro Plan Savor Shredded Blend Lamb & Rice Formula* to their adult dogs. Puppies are fed *Purina Pro Plan Focus Lamb & Rice Puppy Formula*.

“As much as planning, research and knowledge go into breeding, nutrition is just as important,” Engelking says. “That’s why I feed *Pro Plan*. A pregnant dam can only produce milk and carry

Breeding Tips From the Pros

Megan Lane of Edgehill Pointers and Rob Engelking of King’s Kennel offer these tips on breeding.

- Always breed the best bitch possible to the best male possible. Not every dog is perfect, but starting your breeding program with a less desirable female will mean you’ll be playing catch up longer.
- Set aside money for potential emergencies. You won’t know ahead of time if you’ll have complications and need an emergency cesarean section, which can cost \$750 to \$2,500, depending on your location. Start saving in advance just in case a problem should arise.

the puppies for the entire pregnancy term when eating a high-quality food.”

Absorbing Engelking’s knowledge and advice from this first litter, Muia hopes to breed again depending on how “Luca” performs in Deutsch Kurzhaar breeding and puppy tests, including Derby, Solms and AZP, which measure a dog’s inherited abilities. He will continue to register his future dogs under Engelking’s Riverwoods prefix. Muia’s job as the director of operations for Baxter Health Care recently transferred him to Largo, Fla., where he hopes to establish a NADKC chapter.

“I’m not going to breed dogs that perform average in any of our tests or do not possess the correct traits,” Muia says. “As a breeder, it’s important to have high standards. We breed to better the breed.” ■

Celebrating the Schnauzer



The Schnauzapalooza logo and poster were designed by Kate McMillan, a freelance commercial artist and Miniature Schnauzer breeder-owner-handler.

Distinct, high-pitched barking could be heard in the parking lot. Excited exhibitors and spirited Schnauzers with whiskered noses, bushy eyebrows and wiry coats were making their way to the Purina Event Center in Gray Summit, Mo., for an unprecedented event. On this warm, breezy day in May, three Schnauzer National Specialties would take place simultaneously under one roof.

Planning for Schnauzapalooza began in late 2008. Breed club officials representing the Standard Schnauzer Club of America (SSCA), Giant Schnauzer Club of America (GSCA) and the American Miniature

Schnauzer Club (AMSC) decided to combine their specialties in hopes of drawing larger entries and a bigger crowd.

“We came up with the name ‘Schnauzapalooza’ because we wanted this to be a celebration of everything Schnauzer,” explains SSCA show chair Arden Holst of Agoura Hills, Calif.

“Our excitement for Schnauzapalooza has been building for the past two years,” says Miniature Schnauzer breeder-owner-handler Kate McMillan of Delisle, Saskatchewan, Canada. “Having the Standards and Giants here remind us Miniature exhibitors of where our origin lies.”



Judge Bruce Schwartz of Los Angeles, center, evaluates the Giant, Standard and Miniature Best of Breed winners for Best Schnauzer in Show at the Purina Event Center.

The oldest of the German breeds is the Standard Schnauzer, which was the prototype for the other two breeds. The Standard and Giant, originally bred to drive livestock, are members of the Working Group. The Miniature, which was bred as a general purpose farm dog specializing in vermin control, hails from the Terrier Group. The three breeds have a characteristically bristly mustached muzzle and feisty temperament. Their size distinguishes them. The Giant Schnauzer is 25 inches tall, the Standard is up to 20 inches tall, and the Miniature is no more than 14 inches tall.

In The Great Hall of the Event Center, professional handler Leonardo Garcini of Henryville, Ind., handles GCH Ramahill Absolutes I Am Legend of RW ("Legend"), a 5-year-old male, to win the GSCA National Specialty over 78 Giant Schnauzers.

"We just won the National!" exclaims Garcini, hugging members of Legend's team. This includes breeders Peggy Wilkes of Burgettstown, Pa., and Debbie Dayton of Ashtabula, Ohio, and owners Marcia Adler of Delray Beach, Fla., and JoAnn and Luke Edmonds of Burgettstown, Pa.

In the next ring, GCHMistic's Longfellow Serenade outperforms 197 Standard Schnauzers to capture Best in Show at the SSCA National Specialty. Handled by Shawne Imler of Baltimore, "Schweitzer" was bred by Carol Filer of Indiana, Pa., and is co-owned by Sally Marsh and Al DeRenzo, both of Baltimore.

"I was looking for a robust dog with a proper, stocky build," says Dr. Klaus Anselm, of Keswick, Va., who judged the SSCA National Specialty. "Schweitzer was a nice choice because he had it all — style, substance, reach-and-drive movement, and a correct, wiry coat."

Finally, CH Regency's Playmaker, a 5-year-old male, outperforms 169 Miniature Schnauzers to win the AMSC National Specialty. "JR," who is co-owned by breeder Beverly Verna of Tracy, Calif., and handler Sonny Wang Zeting of La Habra Heights, Calif., completes the *Purina Pro Plan*-fed Schnauzer sweep of the National Specialties.

Schnauzapalooza also features a Best Schnauzer competition, in which the winners from the respective National Specialties compete for top honors. This unique judging includes Best Schnauzer Bred-By

Exhibitor in Show, Best Schnauzer Brace in Show, Best Schnauzer Junior Handler in Show, and Best Schnauzer in Show. Those deemed the "Best of the Best" receive large framed rosettes.

Imler jumps for joy when Schweitzer wins Best Schnauzer over 444 Miniature, Standard and Giant Schnauzers. The 3-year-old male wowed the crowd and judges with his muscular, athletic build, confidence and eager-to-please temperament.

"To win Schnauzapalooza is unbelievable. It's the highlight of my career," Imler says.

Throughout the five-day event, competitions in rally, obedience, agility and junior showmanship were held. The GSCA and SSCA also hosted herding trials. Among the milestones, the GSCA celebrated its 51st annual National Specialty anniversary, and the SSCA had the largest conformation entry in history, with 214 dogs competing.

"We were thrilled that all three Schnauzer clubs joined together for Schnauzapalooza," says Purina Event Center Manager Kaite Flamm. "Spectators got to see all three breeds, and the club members were happy to be here. Their love for their dogs was apparent. This truly was a celebration as much as a competition."

"The Purina Event Center and Purina Farms provided a wonderful venue and a convenient, central location," says McMillan, who won Best Schnauzer Brace in Show and Best Schnauzer Bred-By Exhibitor in Show with Miniatures from her Minuteman kennel.

"The beautiful Purina Event Center was an excellent choice for Schnauzapalooza," Holst agrees. "The wonderful service and hospitality enhanced our experience and made for a memorable event." ■

To schedule an event at the Purina Event Center, contact Kaite Flamm, Purina Event Center Manager, at 314-982-5211 or by email at kaite.flamm@purina.nestle.com.



A Miniature Schnauzer clears an agility jump. All three Schnauzer breeds took part in the agility trial.

Lily Pad's Little Southern Secret

STORY AND PHOTOS BY MELISSA MILLER



At left, breeder-owner-handler Bill Crites of Lily Pad Boykins casts SHR UH Lily & Piper's Story for Ever on a retrieve during a training session.

With an intense focus burning in her amber eyes, "Ever," a 3-year-old Boykin Spaniel, watches as a white bumper sails across the clear blue sky. At the cue, she shoots off in an explosion of energy, tearing through the grassy field with determination on this South Carolina morning. The waves in her rich liver coat gleam in the sunlight as she races to bring the bumper back to breeder-owner-handler Bill Crites of Lily Pad Boykins. With a gentle pat on the head, he bends down to take it from SHR UH Lily & Piper's Story for Ever.

Bill and his wife, Dawn, describe Boykin Spaniels as "a little known Southern secret," but the breed's popularity is growing. According to the Boykin Spaniel Society, its registry has grown from 300 in the 1970s to more than 28,000 Boykins registered today, which includes some abroad in Canada, Switzerland, Austria and Germany.

The Crites have bred and raised four generations of Boykin Spaniels at their home in Blythewood, S.C., about half an hour north of the South Carolina capital of Columbia. Just like Ever, many of their puppies have gone on to excel in the field, while others have found success on the agility course or helped others as therapy dogs.

The Boykin Spaniel, the state dog of South Carolina and one of few breeds to originate in the United States, is a loving, loyal companion. At the



Three generations of Lily Pad Boykins are, from left, SHR UH Lily & Piper's Neverending Story, SHR UH UAG-1 Pooshee's Dusa Lily Pad, and SHR Lily's Promise to Piper.

same time, the Boykin is a smart hunter, says Dawn. "They flip that switch between being a hunting dog and companion dog so quickly, and they really love both jobs," she says.

The Crites enjoy their days in the field with their dogs as much as they enjoy having them as pets in their home. "You can't spoil the hunt out of a Boykin," says

Bill, who sits in an oversized leather living room chair with SHR UH Lily & Piper's Neverending Story ("Story") sprawled across the ottoman at his feet.

"Believe me, if anybody could do it, I could, but I haven't yet," adds Dawn, sitting across from Bill on the stone fireplace hearth with Boykins sitting on either side of her.

On the mantle is an impressive collection of field trial trophies and two small wooden boxes etched with the faces of their beloved Boykin Spaniels that have passed on. The Crites currently have five Boykins and an English Setter. Their dogs have earned Started Hunting Retriever (SHR), Hunting Retriever (HR) and Upland Hunter (UH) titles through the United Kennel Club (UKC) Hunting Retriever Club, as well as numerous awards in Boykin Spaniel Society and Carolina Boykin Spaniel Retriever Club competitions.

In the Crites' expansive living room, French doors lead to an area of their house devoted to the dogs. The walls of their kennel room are lined with strings that bow from the weight of numerous ribbons in a rainbow of colors designating various places won at field trials. Along with housing the dogs' crates, the kennel contains food, supplies and a sink for baths. A large yard is fenced around the perimeter, giving the dogs plenty of room to run. Their backyard also is home to a large pigeon coop, where Bill raises the birds he uses when training his Boykins in an open field with a pond across the road.

Bill is president of PeeDee Environmental Inc., a firm specializing in environmental monitoring



Dawn and Bill pose with, from left, SHR Lily's Promise to Piper ("Piper Anne"), Lily's Story's Lies & Allegations ("Rumor"), SHR UH Lily & Piper's Neverending Story ("Story"), and SHR UH Lily & Piper's Story for Ever ("Ever").



Dawn releases Rumor to make a retrieve.

and cleanup that Dawn founded 20 years ago. She left the company last year to work for the Boykin Spaniel Society as its executive secretary, where she helps maintain the breed's official registry. Bill serves on the board of the Boykin Spaniel Foundation, which is dedicated to reducing inherited diseases in the breed.

Their First Boykin

Bill got his first Boykin Spaniel, Maggie Belle ("Maggie") as a present for Dawn in 1991, when the couple was dating. His grandfather raised English Setters, and he'd always wanted a bird dog but found a Boykin was the perfect fit.

When Maggie died, after suffering from multiple health issues, the couple contacted the Boykin Spaniel Society in an effort to find a healthy puppy from a strong hunting line. "We got Maggie from an ad placed in the newspaper. We really didn't know anything back then," Dawn says.

SHRUH1 UAG-1 Pooshee's Dusa Lily Pad, who they called "Lily," was the result of their research. She came to the Crites' home in 2000 from Pooshee Kennel in Awendaw, S.C. The

Pooshee line had produced many successful field trial dogs. Lily, who was sired by Pooshee's Tom Cruise out of Pooshee's Annie Oakley, later became the foundation bitch of the Crites' breeding program.

"She was so loving and affectionate, and she was the best hunter. She had a wonderful nose," says Dawn. "She was smart too. In field trials, she would figure out how to run down the corn rows and air scent over them, while the other dogs were beating themselves up in the corn stalks."

Lily was the Charleston Retriever Club Flushing Dog of the Year in 2003, received the Boykin Spaniel Society Novice Upland Gunners Choice Award in 2006, and was a Boykin Spaniel Society Upland Roustabout Doubles winner in 2007 and 2010. She took third in the National Upland Classic North Carolina State Shooting Dog competition in 2007.

The Crites began breeding in an effort to pass on Lily's best qualities to future generations. "In the field she was inexhaustible," Bill says. "It didn't matter whether it was 102 degrees in the dove field or we walked 15 miles across Nebraska prairies, she was just all heart."

Before breeding Lily in 2002, Dawn wanted to discover as much as she could about Lily's line. She sought information about Lily's littermates to learn their conformation, health concerns and breeding successes.

Performing a water retrieve, Lily, the Lily Pad foundation bitch, was an exemplary hunting dog and loving companion.



The biggest challenge, Dawn says, was picking the sire with the right attributes. "You look at what his strengths are, what hers are, what his weaknesses are, what hers are. If you double up on something, you need to know if you're doubling good or bad traits," she explains.

"A good breeder must be able to identify the faults in their dogs before they can accomplish anything positive," Bill adds.

Since the couple was active in field trial clubs and focused on competing at the national level, they had the opportunity to see many possible mates. "We didn't want to just hear about them or read a pedigree, we wanted to see these dogs work," Dawn says.

They chose RocknCreek Webster ("Webster") to sire Lily's first and only litter, which produced nine puppies. "I loved his face," Dawn says. She also liked Webster's dark, rich liver coat and his drive and determination in the field.

From this litter, the Crites kept SHR Lily's Promise to Piper ("Piper Anne"). So far the Crites have kept at least one puppy from every litter. Piper Anne got Webster's face and his dark, thick coat and all her mother's hunting ability. Her Boykin Spaniel Society successes include receiving a Judges Award of Merit in the Novice class in 2008 and winning the Upland Roustabout in 2009 and the Upland Roustabout Doubles in 2011. In 2012, she received the Upland Gunners Choice Award and was the Carolina Boykin Spaniel Society's Novice Flushing Dog of the Year.

Bill wrote a children's book about Piper Anne's escapades in the tall grass, originally as a gift for his nieces and nephews. "Piper Anne Crabby Pants' First Big Adventure," illustrated by fellow Boykin owner Julie Horner of Knightdale, N.C., now in its second printing, is available on the Lily Pad Boykins' website at lilypadboykins.com and at Boykin Spaniel Society events.

Success in Breeding

In 2007, Piper Anne was bred to Earnest Tee of Mossy Oak ("Ernie"), producing a litter of six puppies with consistent attributes. "They all had the same temperament, excellent hunting drive and excellent health," Dawn says.

This litter produced SHR UH Lily & Piper's Neverending Story, an exceptionally skilled upland hunter. "There's no cover that is too tough or too challenging for her," says Bill. "She's a bulldog to hunt with. In field trial work, her marking is always spot on."

Story received a Judges Award of Merit in the Novice class at the 2010 Boykin Spaniel Society National Upland Championship and was the Carolina Boykin Spaniel Retriever Club Novice Flushing Dog of the Year Runner-Up in 2012 and 2013.

HRCH UH Jeff's True Luck Tucker ("Tucker"), who was the 2007 Boykin Spaniel Society National Champion, was bred to Piper in 2010, which produced eight puppies. Two of the puppies, SHR UH Lily & Piper's Story for Ever ("Ever") and SHR Lily's Hallelujah Hal Palmer ("Hal"), live with the Crites. In addition to earning the Started Hunting Retriever title, Ever earned a Judges Award of Merit in the Novice class at the Boykin Spaniel Society National Upland Championship in 2011 and was the Carolina Boykin Spaniel Retriever Club Puppy

The Boykin Spaniel: A Dual-Purpose Dog



SHR UH UAG-1 Pooshee's Dusa Lily Pad

The state dog of South Carolina, the Boykin Spaniel is renowned for being an all-around hunting dog and a loving, devoted companion. According to legend, the first Boykin Spaniel was a small, stray spaniel-type dog that one Sunday morning around 1905 befriended banker Alexander L. White by following him to the First Presbyterian Church in Spartanburg, S.C.

White, who had a kennel of hunting dogs, discovered the little brown dog he named "Dumpy" had an aptitude for retrieving. He sent Dumpy to a longtime friend and hunting partner, Whit Boykin of Camden, S.C., who developed the little dog into an exceptional turkey dog and waterfowl retriever, and then bred him to a small reddish-brown female spaniel he called "Singo." The puppies, which he sold to local hunters, became known as Mr. Boykin's Spaniels.

The Boykin's compact, medium size contributes to his popularity. Weighing 25 to 30 pounds, males are 15 ½ to 18 ½ inches at the withers, and females are 14 to 16 ½ inches. Coat colors range from light chocolate to a deep rich liver, and the texture can be kinky or have a loose curl. The Boykin Spaniel excels in many activities including hunting, tracking, field trials, agility, obedience, rescue, and conformation.



Rumor watches Dawn prepare her dinner of *Purina Pro Plan Sport Performance 30/20 Formula*.

of the Year that same year. At this year's Boykin Spaniel Society National Upland Championship, Ever took third place in the Novice division and was also the Carolina Boykin Spaniel Retriever Club Novice Flushing Dog of the Year. Meanwhile, Hal, who is just beginning his career, received a Judges Award of Merit in the Novice class at the 2013 Boykin Spaniel Society National Championship.

Story was bred to SHR Tug Town's Edisto Fripp the past two years, producing eight puppies in each litter. Both dogs have earned UKC hunt test titles and Boykin Spaniel Society National Championship placements.

The Crites kept Lily's Story's Lies & Allegations ("Rumor") from Story's 2012 litter and are working on her Started Hunting Retriever title. Rumor was the Carolina Boykin Spaniel Retriever Club's 2013 Puppy of the Year. Rumor's littermate, UH Black Majick's Lily on The Ashley ("River"), was the 2013 Boykin Spaniel Society Puppy National Champion. Two puppies from Story's litter whelped this year are going to homes where they will compete in field trials, and the others were placed with hunting families across the country.

Caring for & Raising Boykins

Bill trains with his dogs after work and on weekends, spending three to four hours each

week, depending on the weather. He competes in six to 10 local club trials and four to six national hunt tests each year. The Crites have chaired Hunting Retriever Club hunt tests as well as the Boykin Spaniel Society National Championships. Bill also enjoys judging competitions.

The Crites feed their dogs *Purina Pro Plan Sport Performance 30/20 Formula* to help them maintain healthy, shiny coats and overall well-being. Depending on their age and body condition, the dogs are fed between 1 ¼ and 2 ½ cups once a day. They started feeding *Purina Pro Plan* when they had Lily.

"Lily was such a picky eater, and she loved the *Pro Plan Shredded Blend Chicken & Rice Formula*," Dawn says. They feed their puppies *Purina Pro Plan Focus Lamb & Rice Puppy Formula*.

The goal of their breeding program is to help perpetuate the breed's natural hunting ability, Bill says. HRCH Lily's Full Choke Hunter ("Hunter"), out of Piper and Ernie, is proof of these efforts, placing second at the Boykin Spaniel Society Nationals in 2012.

But not all their puppies have gone on to hunt, some have other jobs. One of their puppies, Lily's Piper's Running Barley, who is now 3 years old, runs around the golf course with his owner every day.

"Their enthusiasm we love as hunters adapts to agility or running or anything else you want them to do. They're eager to learn," Bill says.

Training Tips from Lily Pad Boykins' Breeder Bill Crites

Q: How did you get started training dogs for field trials?

A: I was training "Lily" (SHR UH UAG-1 Pooshee's Dusa Lily Pad) to be my hunting companion. She was doing so well I convinced myself that she could be a national contender, so I entered her in the Boykin Spaniel Society National Championship in the puppy division. She was excused on the first bird. Though she was done, I was hooked on field sports.

Q: How are training Boykin Spaniels different than working with other breeds?

A: The main difference is their versatility. In the South, they are mainly used as non-slip retrievers. In the North and West, they are used more as upland flushing dogs. Some of us do both. Training a dog to quarter an upland field and then expect it to run a straight line to a blind fall can be tricky.



Bill takes a training bumper from Story.

Q: What advice do you offer someone who is bringing home a Boykin puppy?

A: Start training ASAP. Keep it simple. You want to develop early that drive to go get something and bring it back. Join your local obedience club when your puppy is 6 to 8 months old and sign up for an obedience class. It will train you and your dog.

Q: Describe your training philosophy.

A: Start puppies early and keep it fun for as long as possible. Once the drive to get

a bird, bumper or ball is a single-minded obsession, you can add in drills and more regimented training. If the dog starts to balk at this point, it is easy to build him or her back up with birds.



Lily's Sea Shell, out of Piper and Ernie, has earned seven titles from the United States Dog Agility Association, and another puppy from this litter, Lily's Mini Cooper ("Cooper"), sired Carolina Magic's Thatcher Dail ("Thatcher"), a therapy dog at the Ronald McDonald House in Charlotte, N.C. Lily's Stories to Folly is now training to help her owner, Dr. Rachel Aragone of Fairfax, Va., in her physical therapy practice.

When it comes to placing puppies, the Crites make sure they will have a purpose in their new homes. Dawn interviews prospective owners before the litter is whelped, keeping in touch with them as the puppies grow. She matches each puppy based on the personality of the owner, the dog's temperament and the type of activity they plan to do with their dog.

"Some Boykins are more aggressive, and some have better noses. You can figure that out when you spend seven weeks with them, but you can't figure that out in one hour when you come to pick a puppy," Bill says.

As the due date for each litter draws near, the Crites give a large whelping box, handmade by Bill, a fresh coat of cotton-candy pink paint. After their arrival, Dawn stays at home with the puppies. When they are a few weeks old, she takes them to the office with her daily. The Crites' niece, Maddison, and nephews, Nick and Jacob, who

live next door to them, help with early socialization by playing with the puppies.

At about five weeks, Bill starts the puppies playing fetch with tennis balls. After they've had their immunizations at 6 weeks old, the puppies are taken to the shallow end of the pond for their first swim.

The Crites hold a barbecue before sending puppies to their new homes. "That way, everybody gets to see everybody else's puppy, and they all leave at the same time," Bill says.

The Crites stay in contact with the owners of every puppy born at Lily Pad Boykins, even sending birthday cards and Christmas presents to the dogs. Staying connected with the puppies is Dawn's way of keeping her beloved Lily alive. With each litter, she keeps trying to make another Lily. "They all have some of her attributes, but there are none that are just like her," she says.

Inspired by Lily, the Crites have devoted their lives to bettering the Boykin breed. Through their work with the Boykin Spaniel Society, they are helping to raise awareness of these "little brown dogs" they admire so much. ■

Dawn and Bill lead their Boykin Spaniels to a field for training. From left are: Piper Anne, Rumor, Ever, Story, and Hal.

Two-week-old puppies whelped by Story are shown with some of the Crites' many ribbons won in field trials.



Stabilizing THE Stabilizer

BY BARBARA FAWVER

When an 8 ½-year-old black male Labrador Retriever named “Weezer” hobbled into Dr. Jeffrey J. Schuett’s veterinary clinic in Pewaukee, Wis., it was a classic case of a torn cruciate ligament injury. During training, the Labrador yelped in pain while running to make a blind retrieve and then refused to put weight on his left rear leg.

The dog’s owner, Bob Johnson of Madison, Wis., took Weezer to Schuett, an upland game hunter and retriever enthusiast. Johnson not only wanted the injury repaired, he hoped his accomplished retriever could return to field trials.

“We discussed the options and decided that a TightRope procedure would work best for Weezer,” says Schuett. “Weezer stayed at my clinic for one and a half months postoperatively while undergoing hydrotherapy treadmill rehabilitation six days a week.”

A finalist in six National Retriever Championship Stakes before his injury, FC-AFC Weezer Retreezer went on to qualify for the 2010 National Open Stake after taking a year off for rehabilitation. In 2011, he qualified for the National Amateur Retriever Championship and won a double header at Vicksburg, Fla.

The cranial cruciate ligament (CCL) is a critical stabilizer of the stifle (knee) joint. It functions as a rope as it stabilizes the femur (thighbone) to the tibia (shinbone), preventing the stifle bones from shifting during activity. Without the normal CCL stabilization, a dog’s movement is compromised and painful osteoarthritis develops.

“In most dogs, CCL rupture occurs due to preexisting, progressive fatigue of the cranial cruciate ligament,” says Dominique J. Griffon, D.M.V., Ph.D., DECVS, DACVS, professor of small animal surgery at Western University of Health Sciences in Pomona, Calif. “Though trauma can cause the CCL to tear, it is more likely due to a complex, multifactorial condition that develops over time.”

The less-invasive TightRope stabilizing procedure, which Schuett performed on Weezer, and lateral suture are extracapsular surgeries that use a synthetic material to mimic the function of the CCL for long-term stability. Bone-cutting surgeries, such as the popular tibial plateau leveling osteotomy (TPLO) and tibial tuberosity advancement (TTA), alter the anatomy of the stifle to achieve stability.

No one surgical procedure is consistently successful for all dogs. In fact, the tibial osteotomies are associated with compli-

cations in 28 to 59 percent of dogs.¹ Long-term success of the procedures used to manage CCL disease is shortchanged by the return of instability and degenerative joint disease, causing pain and decreased range of motion and functioning.²

Experts estimate that \$2 billion is spent annually treating dogs for CCL disease. The most common orthopedic problem seen by veterinarians, the disorder has gradually increased over the past 40 years.² The majority of dogs, even Weezer, end up having CCL disease in both stifles. The prevalence rate across all breeds is 2.55 percent. Large breeds are considered predisposed, with 8.90 percent of Newfoundlands affected, 8.29 percent of Rottweilers and 5.79 percent of Labradors.³

Research funded by the AKC Canine Health Foundation is providing better understanding of CCL disease, a condition that 60 percent of parent clubs report as a health concern in their breeds. Here is a review of this research.

Identifying Dogs at Risk

After more than a decade performing surgery on dogs with CCL disease at the University of Illinois Veterinary Teaching Hospital, Griffon believed that some conformation factors affected the way dogs move, thus predisposing them to CCL disease. She began studying the conformation of the hindlimbs and the

Foundation Funds CCL Research Portfolio

The AKC Canine Health Foundation is funding a portfolio of research aimed at learning more about cranial cruciate ligament (CCL) disease, the No. 1 cause of lameness in dogs. The research, featured in this article, includes a conformation score to determine risk, a 3-D computer model to evaluate the biomechanics of surgical procedures, and regenerative medicine as an alternative therapy.

“Research does not work in isolation,” says Shila Nordone, Ph.D., Chief Scientific Officer for the Foundation. “To create depth in areas of importance, we have to address health problems from multiple angles.”



gait mechanics of Labradors with and without CCL disease.

The research led to the development of a conformation score system that helps to identify Labrador Retrievers at risk for CCL disease. The equation used to determine the conformation score came from a study of 20 Labradors. The researchers observed sound Labradors, classified as predisposed or low risk, trotting on the ground or running on a treadmill. They discovered that dogs at risk for CCL disease generated more energy around their stifle and tended to extend their hocks.

“When we evaluated the gait of sound Labradors at low risk for CCL disease, we found the difference in conformation between the groups was associated with a modification of gait that would

lead to the overloading that occurs in CCL disease,” Griffon explains. “We also found some evidence that the gastrocnemius (calf) muscle plays a dominant role. It is the muscle that generates the cranial tibial thrust normally antagonized by the CCL.”

Griffon’s current research is testing how well the conformation score system works in a larger population of Labrador Retrievers. She and her team aim to evaluate 200 Labradors, a breed chosen based on its predisposition for CCL disease and popularity as the No. 1 breed registered in the U.S.

Adult purebred Labradors with CCL disease and sound Labradors over 6 years of age are eligible to participate. Radiographs taken of their pelvis and both hind limbs will help determine the validity



Professional handler Ray Voigt casts FC-AFC Weezer Retreezer at the 2010 National Open Retriever Championship in Vicksburg, Miss. “Weezer” came back from a torn cranial cruciate ligament injury to qualify for his seventh National Stake. The talented retriever, now 11 and retired, earned more than 100 All-Age points during his career.

of the conformation score equation. The study includes healthy dogs that are not lame, those that have had surgery for CCL disease, and those scheduled for CCL surgery.

"We believe these gait characteristics are due to the dogs' conformation, hence our interest in identifying them before they develop CCL disease," Griffon says.

Determining the Best Treatment

Knowing which surgical procedure is likely to have the best outcome for a dog with CCL disease is part of the challenge for veterinarians and owners. Gina Bertocci, Ph.D., the endowed chair of biomechanics at the University of Louisville, put her expertise to work trying to answer this question.

Evaluating a Canine Brace to Support the Cruciate Ligament

The 3-D computer model that researchers at the University of Louisville are using to assess the best treatment option for a dog with cranial cruciate ligament (CCL) disease also is being used to evaluate the effectiveness of a canine stifle brace.



"The stifle brace provides a surgical alternative for dogs that are older, poor anesthesia candidates, suffer from other disorders and whose owners cannot afford surgical management," says lead investigator Gina Bertocci, Ph.D. "The brace also can be used pre- and postoperatively to stabilize and protect the stifle joint."

The 3-D model is helping Bertocci to evaluate the effect of the brace on a dog's pelvic limb biomechanics in a CCL-deficient stifle and determine how well it returns a dog to normal stifle biomechanics. They are studying the brace design, including the type of material and the hinge joint.

"We want to minimize the loss of muscle mass and strength," Bertocci says. "We also want to improve our understanding of how design factors influence stifle stabilization."

Made by OrthoPets, a Denver-based custom orthotics provider for pets, the canine stifle brace is similar to what is used for humans with knee instability. The cost, which varies by the size of dog, ranges from \$600 to \$850. For information about the brace, contact Dr. Patrice Mich, the co-principle investigator, at OrthoPets at 303-953-2545.

A 3-D computer model, developed by Bertocci and her research team, provides an insightful view of how anatomical characteristics may affect the likelihood of CCL deficiency and the biomechanical effectiveness of treatment options. "While no single procedure has proved to be superior, we can use our 3-D model to see how well these procedures return the stifle biomechanics to that of a healthy dog," Bertocci says.

The 3-D modeling technique was developed from a computed tomography (CT) scan of the pelvic limb of a healthy Golden Retriever.⁴ "We reconstructed the CT image to create a 3-D model of each bone segment using specialized software," explains Bertocci. "We joined the 3-D segments using elements to represent ligaments and muscles. We then conducted gait analysis, recording the same dog's motion using cameras and a force platform to measure the force of his paws on the ground surface."

The dog's hind limb motion and ground force data, combined with data from the CT scan, allowed the researchers to create a model simulating the dog's gait. The model will allow the researchers to gauge the biomechanical effectiveness of TPLO, TTA and extracapsular stifle stabilizing procedures for dogs with CCL disease.

The ability to assess the influence of various anatomical characteristics for a given surgical treatment option is promising. "We can compare a multitude of scenarios through a parametric sensitivity analysis," Bertocci says. "By varying a specific parameter, such as the tibial plateau angle, and then running our model to simulate gait, we can determine the influence these changes have on a dog's stifle biomechanics."

Although the 3-D computer model is only practical for research, it may provide information that will one day benefit clinicians. "Computer modeling and parametric analysis should help improve the clinical decision-making process," Griffon says.

The Future of Regenerative Therapy

Regenerative medicine, the process of replacing or regenerating cells, tissues or organs to restore or establish normal function, has taken hold in human medicine. Today, researchers are applying this concept to helping dogs with CCL disease.

Peter Muir, BVSc, Ph.D., DACVS, DECVS, professor of small animal orthopedics at the University of Wisconsin-Madison School of Veterinary Medicine, is investigating whether platelet-rich plasma (PRP) from a dog's own blood can help heal cranial cruciate ligament damage. "This approach may offer a safe, effective therapy to prevent the progressive tearing of ligament fibers, enable healing and block progression of osteoarthritis over time,"

he says. "It has potential to modify ligament damage, reduce joint inflammation and promote ligament healing."

Muir has begun a two-year study evaluating PRP that will include 25 dogs undergoing treatment for CCL rupture at the University of Wisconsin Veterinary Care Teaching Hospital. Platelets from the dogs' own blood, which are rich in growth factors, will be separated and concentrated by centrifugation. PRP treatment will be provided to the stable second stifle with early cruciate damage.

"Three scenarios are common in dogs with CCL rupture," explains Muir, who has studied the condition for more than 10 years. "Bilateral rupture makes up about 10 to 15 percent of cases. The rest of the cases are a complete rupture in one stifle with severe lameness, or dogs that have clinically stable stifles usually with mild lameness. In dogs with a complete rupture in one stifle, there usually are signs of early disease in the second stifle joint. Over time, a second rupture is fairly predictable."

If the PRP therapy for the second stifle with early cruciate damage proves successful, the researchers will begin using it routinely in dogs brought to the hospital. "Treatment for the unstable stifle is a great challenge," Muir says. "With the current surgical management procedures, progression of arthritis over time is typical. If PRP therapy has a sparing effect in the second stable stifle in the trial, we plan to extend this work to regenerative medicine treatment for unstable stifles with complete CCL rupture."

The potential use of stem cells to repair torn cranial cruciate ligaments is the focus of Mandi J. Lopez, D.V.M., Ph.D., DACVS, associate professor of veterinary surgery at Louisiana State University School of Veterinary Medicine. "The best way to restore CCL function is to recreate the native structure," she says. "We found that infrapatellar adipose tissue in front of the cruciate ligament has the most progenitor cells that have the best ability to grow in culture and differentiate into diverse tissues. This finding is important for continued efforts to restore joint tissues like the CCL that have been lost to disease, age or trauma."

Besides the infrapatellar adipose tissue, the researchers have isolated cells from the joint capsule, the lining inside the joint, and the CCL synovial covering, between the ligament and the joint, in considering the best source of stem cells.⁵ "There are several tissues in the stifle containing cells capable of dividing and maturing into different tissues that came from the same layer during embryonic development," Lopez explains.

Tips on Reducing the Risk of CCL Disease

Cranial cruciate ligament (CCL) disease occurs in all breeds of dog and is particularly common in large breeds. Researchers attribute CCL to many causes, including a dog's genetics, conformation, environment, inflammation and compromised immune functioning. Here are tips from the experts to help prevent a CCL rupture.

- Keep excessive weight off your dog. An overweight dog has two times greater risk for developing CCL disease than healthy, fit dogs. Obesity increases the amount of force applied on the stifle joint at each step, causing repetitive loading that overuses and fatigues the CCL.
- Keep your dog active. Inactivity decreases the stimulation of the CCL, potentially causing atrophy and weakening of the ligament. An active lifestyle helps maintain muscle tone and joint health, as well as optimum weight, and may help reduce the risk of CCL rupture.

The use of stem cells to manage canine CCL disease is coming in the not-too-distant future, Lopez predicts. "Recent scientific advances make it feasible that stem cells isolated from individual patients may soon be used to direct stem cells in the body to regrow new tissues or generate new tissues in the laboratory," she says.

The future of diagnosing, preventing and managing CCL disease will likely be shaped by this collection of research. The ability to return a dog to normal functioning is the goal. Despite suffering from CCL disease, even a cruciate rupture, most dogs cannot wait to get back to the things they enjoy most.

Weezer is an example. Now retired, the 11-year-old Labrador thrives on weekly visits to the retriever club. His desire, as strong as when he was winning field trials, is seen in the intensity of his focus as Johnson prepares to send him on a retrieve. After two TightRope procedures, Weezer is on top of his game. ■

¹ Griffon DJ. A Review of the Pathogenesis of Canine Cranial Cruciate Ligament Disease as a Basis for Future Preventive Strategies. *Veterinary Surgery*. 2010;39:399-409.

² Ragetly CA, Evans R, Mostafa AA, Griffon DJ. Multivariate Analysis of Morphometric Characteristics to Evaluate Risk Factors for Cranial Cruciate Ligament Deficiency in Labrador Retrievers. *Veterinary Surgery*. 2011;40:327-333.

³ Witsberger TH, Villamil JA, Schultz LG, Hahn AW, Cook JL. Prevalence of and Risk Factors for Hip Dysplasia and CCL Deficiency in Dogs. *Journal of the American Veterinary Medical Association*. 2008;232(12):1818-1824.

⁴ Brown N, Bertocci G, Marcellin-Little D. Development of a Canine Stifle Model for Evaluation of Cranial Cruciate Ligament Deficiency. *Journal of Mechanics in Medicine and Biology*. 2013;13(2):1350043-1350071.

⁵ Zhang N, Dietrich MA, Lopez MJ. Canine Intra-Articular Multipotent Stromal Cells (MSC) from Adipose Tissue Have the Highest *In Vitro* Expansion Rates, Multipotentiality and MSC Immunophenotypes. *Veterinary Surgery*. 2013;42(2):137-146.

A HEART *for Siberian Huskies*

Growing up with Siberian Huskies, Tim Terella became a natural at handling the intelligent, independent Northern breed. His expertise caught the attention of a Canadian breeder who watched ringside when he took Best of Opposite Sex with a Siberian at the 2008 Westminster Kennel Club Dog Show.

Breeder Kim LeBlanc of Coldwater, Ontario, Canada, admired Terella's ease as he sailed around the ring with the handsome Siberian Husky, Multi-BIS/Multi-BISS AM/CAN CH Coventry's Peace Negotiator ("Carter"). Convinced the Siberian would be a perfect stud dog for one of her females, LeBlanc contacted Terella who helped coordinate the breeding with Carter's breeder-owner, Jean C. Edwards.

It was the beginning of a professional relationship that led to LeBlanc asking Terella to handle a Carter son from that breeding, AMGCH/CAN CH Snowmist's Quicksilver Speigas ("Fizzy"), at the 2012 World Dog Show in Salzburg, Austria.

Although it was Terella's first World Dog Show, the pair won the Spitz and Primitive Breed Group out of 5,000 dogs. Sanctioned by the Fédération Cynologique Internationale, the World Dog Show is a prestigious three-day show that draws about 25,000 dogs worldwide.

Dozens of breeds competed simultaneously in small side-by-side rings, where judges and handlers who spoke different languages communicated mostly by hand motions. Fizzy stood out, capturing the attention of the judges. "Fizzy is a natural show

dog," says Terella of Edinboro, Pa. "He has the movement, charisma and personality that judges like."

LeBlanc, as well as Fizzy's new owners, Hiroyo Shimizu of Japan and Laura Barytle of Lithuanai, realized what a good team

Terella and Fizzy made. Last January, Fizzy came to the U.S., so Terella could campaign him as a Special. So far, they have won 12 Bests in Specialty Show.

Terella, a professional handler, got his start in Siberian Huskies from his father, Glenn Terella, who bred and trained them for racing sports. Today, Terella, along with his wife Megan, brother Rick and mother Beth, carries on the family tradition using his father's prefix, Snoebear, in his breeding program. His handling business, Glennridge Kennels, is named after his father as well.

At age 12, Terella was handling dogs in American Kennel Club (AKC) Junior Showmanship. "I fell in love with showing dogs. It's just gone on from there," he says.

Terella was the AKC's No. 1 Junior Handler of Siberian Huskies and a Top Ten Junior Handler in the Working Group in 2000 and 2001. In 2000, he also was named

the Best Junior Handler out of 80 young handlers at the Kennel Club of Niagara Falls (N.Y.) Dog Show. A particularly heartfelt win was Best Junior Handler at the 2001 Siberian Husky Club of America (SHCA) National Specialty.

After a successful junior handling career, Terella went on to learn the ropes of the show circuit working under professional handlers Karen and Sam Mammano, Bill Sahloff, Mike Szabo,



Professional handlers Megan and Tim Terella are shown with Siberian Huskies, from left, "Eva," "Carter" and "Fizzy."

and Gretchen Conratt. By age 18, Terella owned and handled his first Siberian Special, CH Highlander's Temptress of Jo-Kar ("Foxy"), to a Top Twenty ranking at the SHCA National Specialty. By age 24, Terella was handling Carter, the No. 1 Siberian Husky in the country.

As a breeder, Terella has bred more than 20 champions from four generations of Siberian Huskies. With an emphasis on breeding healthy dogs with a friendly, gentle temperament, he says, "It is our responsibility to advance our breed."

A medium-sized working breed that originated in Northeast Asia as an endurance sled dog, the Siberian should be compact and well-balanced. Terella strives to produce athletic dogs that have power, speed and endurance but are light on their feet. Grooming their dense, well-furred coats is a challenge that Terella enjoys.

Carter, his foundation sire, went on to capture a second Best of Opposite Sex at Westminster in 2009. The prominent male, who won 13 Bests in Specialty Show and took 40 Working Group Firsts, has been bred to bitches from Japan, Thailand, France, Italy, and Austria, producing many Multiple-Best in Show winners. He is the sire of 17 AKC champions, which includes Fizzy, the No. 1 Siberian, and GCH Snowmist's Quidditch Seeker, the No. 2 Siberian.

After retiring from conformation showing, Carter's owner, Edwards, allowed the Siberian to retire to Terella's Glennridge Kennels. Carter is "King of the Kennel," Terella says affectionately.

Foxy, who is co-owned by Karen and Dominic Potts, is Snoebear's foundation bitch and the dam of 10 champions and Multiple-Best in Specialty Show winners. Foxy received a Top Twenty ranking at the SHCA National in 2005 and an Award of Merit at the American Kennel Club National Championship in 2006.

Carter and Foxy produced AM GCH/CAN CH Snoebear's Silver Seduction ("Eva"), who in 2012 was Best Brood Bitch at the SHCA National Specialty and received a Top Twenty ranking in the U.S. and Canada. A great

producer, her first litter includes five champions, all earned with Specialty majors.

Terella and his wife, Megan, both handle Siberian Huskies as well as other breeds. Currently, Terella also shows an English Springer Spaniel, Flat-Coated Retriever and German Short-haired Pointer.

The couple met at a dog show in Buffalo, N.Y., where she was showing Golden Retrievers. In addition to being professional handlers, they teach a weekly dog training class for people getting started in conformation.

The Terellas, and the 25 dogs they care for, recently moved into a new house on 10 acres and are in the process of building a new kennel facility. Several exercise paddocks provide ample space for free running, which Terella believes helps build muscle. "Dogs can really stretch out and work their muscles well in an open area," he says.

Each day starts at 6:30 a.m. to let the dogs out for exercise in specially selected play groups followed by feeding and grooming. Terella feeds his dogs *Purina Pro Plan Sport Performance 30/20* and *Purina Pro Plan Select Sensitive Skin & Stomach* formulas.

Terella concedes he loves the challenge of working with Siberian Huskies because they are such an intelligent breed. "Some handlers don't like showing Siberians because the dogs find ways to outsmart them," he says.

"They can make the best handler look like a novice. In training, they can be perfect every single time, and then drag you around when you're in the show ring. Siberian Huskies want to do everything on their own terms. You have to convince them that it's what they want to do."

Last May, Terella returned to the World Dog Show in Budapest, Hungary, with Fizzy's half-sister, also sired by Carter, CH Snowmist's Soda Pop ("Soda"), who he will campaign in the U.S. in 2014. He also plans to make a third trip to the World Dog Show in 2014 in Helsinki, Finland.

"It is a rewarding experience to go to another country and show off some of the best dogs in our breed to a whole new group of people who can see and appreciate them as much as I do," Terella says. ■

Tim practices gaiting with AM GCH/CAN CH Snowmist's Quicksilver Speigas, the No. 1 Siberian Husky.





CIRCLE OF CHAMPIONS

Please visit the Circle of Champions on the Purina Pro Club website at purinaproclub.com to read about top-performing show and sporting dogs powered by Purina.

No. 1 Briard Is a Déjà Vu Male

A 6-year-old male Briard called "Dill," who only began his Specials career last January, already is the No. 1 Briard and No. 6 Herding dog in the country. Breeder Terry Miller of Cleveland Heights, Ohio, says, "Dill has a stunning, erect head, parallel ears and effortless movement with smooth reach-and-drive." Sired by Multi-BIS CH Déjà

Vu Up Close & Personal, the breed's top sire for five years, Multi-BIS GCH Déjà Vu Mia Cool As A Cucumber is co-owned by Miller and co-breeder Amie Melton of Xenia, Ohio, with Lynn Bernard of Cape Cod, Mass., and Dominique Dube of Cleveland Heights, Ohio. Regina Keiter of Saylorsburg, Pa., handles Dill, who is fueled by *Purina Pro Plan Sport Active 26/16 Formula*.

"Dill" is a third-generation Multiple-Best in Show Briard from the Déjà Vu line.



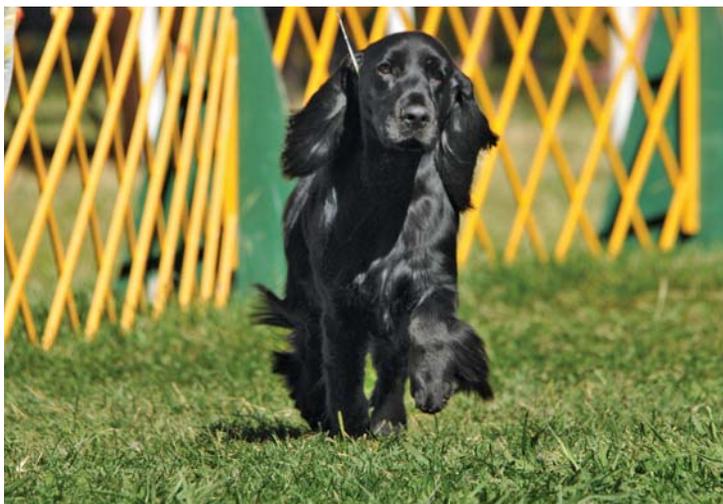
©WineChurchill, DogPhoto.com



Outgoing and energetic, "Jackson" is a wonderful show dog.

Papillon Called 'Jackson' Is No. 1

With his big, beautiful butterfly ears, a 4-year-old male called "Jackson" has fluttered to the top as the No. 1 Papillon. Multi-BIS/Multi-BISS GCH InVolo The King of Pop, the No. 7 Toy dog in the country, has won five Bests in Show and 11 Bests in Specialty Show. Professional handler Brian Livingston of Aubrey, Texas, says, "Jackson never meets a stranger. He has great energy and a zest for life that make him a wonderful show dog." After limited showing by breeder-owner Gia Garofalo of Washington Township, N.J., which included winning the breed at the AKC National Championship, Livingston began showing Jackson in January, leading him to Best of Breed at the Westminster Kennel Club Dog Show. Jackson is fed *Purina Pro Plan Sport Performance 30/20 Formula*.



'Gideon' Is First Black Field Spaniel to Win Best in Show

The first black Field Spaniel to win a Best in Show is an energetic 2-year-old male called "Gideon," who took top honors in May out of 1,000 dogs at the Santa Cruz Kennel Club Dog Show in Woodland, Calif. Professional handler Elizabeth Jordan-Nelson of Sacramento, Calif., who has handled Gideon to six Reserve Bests in Show and 18 Sporting Group Firsts, says, "He never lets me down." GCH Promenade Pay It Forward, the No. 1 Field Spaniel in the country, became a champion at the precocious age of 13 months. Bred by co-owner Jane Keller Schlidman and William Schlidman of Cincinnati, Gideon also is co-owned by Jane Chopson and Nicki Kuhn, both of Port Costa, Calif. He is fed *Purina Pro Plan Select Sensitive Skin & Stomach Formula*.

"Gideon" trots around the show ring.

Purina Honors 2012 Retriever Award Winners

'Pete' Delivers a Dream Come True

A 7-year-old black male Labrador Retriever called "Pete" is the Purina Open All-Age Retriever. NFC-AFC Seaside's Pelican Pete, who was handled by Steve Yozamp of Kimball, Minn., earned 43.5 Open points plus 5 bonus points as the winner of the 2012 National Open Stake. Winning the Purina Award with Pete was a dream come true for owner Robert Zylla of St. Cloud, Minn. "Pete had a phenomenal year," Zylla says. "He and I won back-to-back Amateurs to complete his AFC title, and he went on to win six Opens with Steve." Pete is fueled by *Purina Pro Plan Sport Performance 30/20 Formula*.

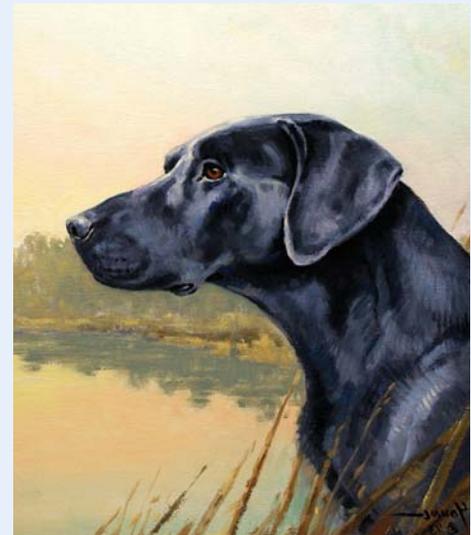
'Nike' Is Owner's 'Best Dog Ever'

A 5-year-old black male Labrador Retriever called "Nike" captured the Purina Outstanding Amateur Retriever Award, earning 42 points, which includes seven Amateur wins. "Nike is the best dog I've ever had, no question," says owner Paul Foster of Medford, Ore., who ran his first dog in 1943. "He won this first field trial on his first birthday and went on from there. He's a superb marker with

intensity and drive." AFC Rockliffs Justdoit entered 18 trials and finished 14, tallying seven wins and 10 placements. Co-owner Sally Foster, an avid retriever enthusiast who judged the 2007 National Amateur, says, "We put in a lot of hard work, and it paid off. Nike is a wonderful retriever." The hardworking retriever is powered by *Purina Pro Plan Sport Performance 30/20 Formula*.

'Aarrow' Has Great Genes and Talent to Boot

The 2012 Purina Outstanding Derby Dog is a 2-year-old black male Labrador Retriever named Aarrow. Owned and trained by Barton Clark of Harrington, Del., Aarrow had a phenomenal year, earning 10 wins and 20 placements. "He's a happy dog, and a great dog to work with," says Clark, who has competed in retriever trials since 1985. "He's one of those dogs with a great personality, who's good with everybody and has the genes and talent to go with it." Looking forward to Aarrow's All-Age career, Clark says, "He already won an Amateur this year." That Amateur Stake was won in Savannah, Ga.



The 2012 Purina Retriever Award winners, pictured in oil paintings presented to their owners, are, from left: "Pete," "Nike" and "Aarrow."

'Prosperity' Sets English Toy Spaniel Record with 12 Bests in Show

A 3-year-old male English Toy Spaniel called "Prosperity" is on a roll, having won 12 Bests in Show and surpassing the previous record of three Bests in Show for the King Charles & Ruby Variety. Professional handler Jeff Wright of Topeka, Kan., who handles the No. 5 Toy dog in the country, says, "The essence of the breed is the head, and Prosperity has a big, round head with a soft expression and dark spaniel eyes. He also has a wonderful show attitude and merry temperament." Multi-BIS/BISS GCH LTO Prosperity, who broke the record in March, captured Best of Breed in May at the English Toy Spaniel Club of America National Specialty, where his offspring took



Winners Bitch and Winners Dog. The following weekend, Prosperity captured all three Bests in Show at the Fargo-Moorhead Kennel Club Dog Show in West Fargo, N.D. Bred and owned by Ray J. Cole and Mark A. Landers of Hartville, Mo., Prosperity is fed *Purina Pro Plan Focus Chicken & Rice Puppy Formula*.

"Prosperity," a King Charles Variety English Toy Spaniel, is winning shows with his gorgeous head type.

GET CONNECTED TO PRO PLAN ON FACEBOOK

The *Purina Pro Plan* for Professionals Facebook page allows breeders and enthusiasts to connect using the popular social networking site. Fans can post photos, videos and experiences and share insights about breeding, handling and other topics.

Go to the *Purina Pro Plan* for Professionals page on Facebook to become part of the conversation and share your passion for the sport with a community of dog enthusiasts.

Today's Breeder
Nestlé Purina PetCare
Checkerboard Square
St. Louis, MO 63164

Prsrt Std
U.S. Postage
PAID
St. Louis, MO
Permit No. 475

BREED SNAPSHOT

BORZOI:

The Russian Wolfhound

Bred by the Russian aristocracy for hundreds of years, the graceful, elegant Borzoi is a sighthound prized for his speed, agility and courage. The breed's tall, rangy body allows him to chase quarry for long distances, excelling as a hunter of wolves, foxes and hares. Formerly known in this country as the Russian Wolfhound, his name was changed in 1936 to Borzoi, derived from the Russian word "borzii," which means swift.

The Borzoi was developed by crossing Arabian greyhounds with thick-coated Russian sheepdogs, creating a breed well-suited to hunt over the open plains of Russia, often in parties of more than 100 dogs. Borzoi would capture, pin and hold their prey until the huntsmen riding behind on horseback arrived.

The first American to visit Russia and to import Borzoi was C. Steadman Hanks of Massachusetts, who established Seacroft Kennels in the 1890s. Two of his Russian Borzoi became AKC champions.

Today, this beautiful, intelligent breed remains largely unchanged in his appearance and quiet, gentle nature from his Russian ancestors. The modern Borzoi is as comfortable in the living room as in the field.

The speed of the Borzoi makes him successful in lure coursing, and he is easily trained to do well in obedience competitions. With his long, silky coat, which can be flat, wavy or curly in any color or combination of colors, this noble breed is a natural in the show ring. Known for being affectionate and loyal, the Borzoi is catlike in his independent nature. Considered a giant breed, males are at least 28 inches tall at the shoulders, while females are 26 inches tall.



Source: *The Complete Dog Book*, Official Publication of the American Kennel Club (New York: Ballentine Books, 2006).