



# Seward County Kennel Club

A CLUB FOR PERSONS INTERESTED IN DOGS AND THE SPORT OF DOGS.

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Information for the newsletter, including brags, needs to be submitted by the first week of the month to be included in the next newsletter. Please email submissions to the editor.

## BREED SNAPSHOT: THE PYRENEAN SHEPHERD



Enthusiastic, mischievous, and whip-smart, the Pyrenean Shepherd is an indefatigable herder descended from ancient sheepdogs of the Pyrenees mountains. Tough and sinewy Pyr Sheps come in 'rough-faced' and 'smooth-faced' coat varieties.

These tough, lean, and lively herders, famous for their vigorous and free-flowing movement, come in two coat varieties: rough-faced and smooth-faced. Roughts have profuse, 'windswept' hair above the muzzle and a generally harsh coat; smooths

have short facial hair, a finer-textured coat, and a slightly longer, pointier muzzle. Both varieties of this sinewy, rectangular breed come in many colors and patterns. Pyr Sheps see the world through dark almond-shaped eyes conveying an alert and cunning expression.

#### History

Pyr Sheps descend from an ancient line of herding dogs known among shepherds of the Pyrenees (the mountains forming the natural border between France and Spain) since time immemorial. No one can say for certain how long Pyr Sheps have been moving flocks from one grazing area to another amid the Pyrenean slopes and valleys, but it's a job they still perform in their homeland today. Pyr Sheps often worked in tandem with the Great Pyrenees, the region's mighty flock-guardian breed.

*Photo and content from akc.org.*

## NEXT MEETING Nov 21, 2024

Pizza Kitchen - 411 First St, Milford, NE 68405  
No Special Program - General Meeting 7:30pm

# MEETING MINUTES

Seward County Kennel Club  
September 19, 2024  
Pizza Kitchen, Milford, NE

Members present: Mary Bristol, Kayla and Jon Thomas, Kathy Jackson, Morgan Ehlers, Troy and Tabitha Dvorak, and Tanya Williams.

Meeting called to order by Tabitha Dvorak at 7:35pm

August minutes read by Secretary. Motion made to approve August minutes by Kayla and 2nd Tanya. Motion approved.

President Report: None

Secretary Report:

- AKC has set up a Title Application Portal (TAP) to make it easier to guide through the steps of CGC, trick dog, temperament test, fit dog, fetch, barn hunt, diving dog, disc dog, flyball, virtual home manners, any titles recognized under the parent club title recognition program. Users just must set up an account.

- The Pilot program for the three-legged dogs in non-jumping rally and obedience classes has been extended through June 30, 2025.

- AKC is celebrated 140th anniversary on September 17th. AKC is the largest not-for-profit dog registry and second oldest amateur sport-governing body in the country and there are over 5,000 clubs.

- Meet the Breeds in New York City January 25-26th, 2025. America's largest educational dog extravaganza!

Treasure Report: Balance read and motion made by Kayla and 2nd by Troy.

Membership: None

Performance: Monday the 16th was the 1st night of fall class. There was 10 in basic and 5 in puppy class. Costume contest October 21, 2024. Motion made by Mary to have best dog and handler prize and best dressed dog prize 2nd by Kayla. Motion approved.  
CGC testing October 28th, 2024.

Spring class tentatively set for March 17- April 28, 2025. Tabitha will be put in an application rental for the 4-H building.

Legislation: None

Show:

Obedience judges for 2025 Susan and Susan were notified of assignment change and are ok with change.

Show 2026: April 17-19, 2026

Will have FastCat and Foy Trent in 2026.

Old Business:

- Rebecca Rivera and High in Trial ribbon. Rebecca has not gotten back to all of Tabitha's messages and texts. Motion made by Kayla to have another High in Trial rosette made for Holly Huss (exhibitor). Jon 2nd motion passed.

- Mary: Dog Tiles and Etched glass Mary and Morgan

New Business:

Mary will send the scholarship money to recipient's college.

Motion for adjournment made by Jon, 2nd by Kayla. Motion passed.

Meeting adjourned at 8:20pm.

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Seward County Kennel Club  
October 17, 2024  
Pizza Kitchen, Milford, Ne

Members present: Tabitha and Troy Dvorak, Diane and Gerold Nitz, Kathy Jackson, Mary Bristol, Tanya Williams, Cindy Hill and Morgan Ehlers  
Guest: Ashton

Meeting called to order by Tabitha at 7:30pm

September minutes read by Secretary. Motion made by Troy to approve minutes as read. 2nd by Diane. Motion passed.

President's Report: None

Secretary's Report: None

# MEETING MINUTES

Treasure's Report: Balance read. AKC may owe us \$75 for over charges for application fees. Yolanda will get in touch with Tabitha. Motion made by Tanya accept balance. 2nd by Troy. Motion passed.

## Performance:

Class is going well.

Costume contest is October 21st. Racheal Pickering is making cups for the contest. Diane made motion for the club to cover the cost of the prizes for costume contest of \$40. 2nd by Cindy. Motion passed. CGC testing will be October 28th.

Possible places to have 2025 Spring class.

The Alps in Seward: Fee is \$100 a night- \$50 for rental, \$50 for cleaning. Mary, Morgan and Cindy will check out the facility. Con: if we had class at the Alps, we would not be able to offer puppy class at the Alps due to puppies not having shot requirement.

It was suggested to keep the application/reservation for 4-H building just in case, can cancel later.

Discussion of other places we could move obedience class Tuxedo park, Crete and Fillmore county fairgrounds.

Legislation: Nothing to report for Nebraska.

Chief Ring Steward: None

## Show:

Judges for 2025 AKC approved.

Breed judges: Brian Meyer, Cindy Meyer, Penny DiSiena, Pam Tozzi, Fred Bassett, and Carolyn Herbel

Obedience/rally judges: Suzanne Hemminger and Suzanne Mayborne

St. John's Lutheran youth group of Seward is going to do food stand in 2025. They made \$1,600 in 2024. Motion made by Diane to donate \$160 (our portion of profit) for their mission trip. Troy 2nd motion passed.

The Stock dog show in Ord, NE. Club profited \$435 for FastCAT.

Discussion about adding fetch and temperament testing to the spring show list of offerings.

Awards and Trophies- Tanya has started getting

donations/pledges.

## Founder's Award:

Members must attend meetings 75% of meeting, help with the spring dog show and be in good standing with club and AKC.

Members who qualify right now: Mary Bristol and Tabitha Dvorak

Members who need a few more meetings to qualify for award are Morgan Ehlers, Kathy Jackson, Diane Nitz, Linda Soukup, Kayla Thomas and Jon Thomas.

## Old Business:

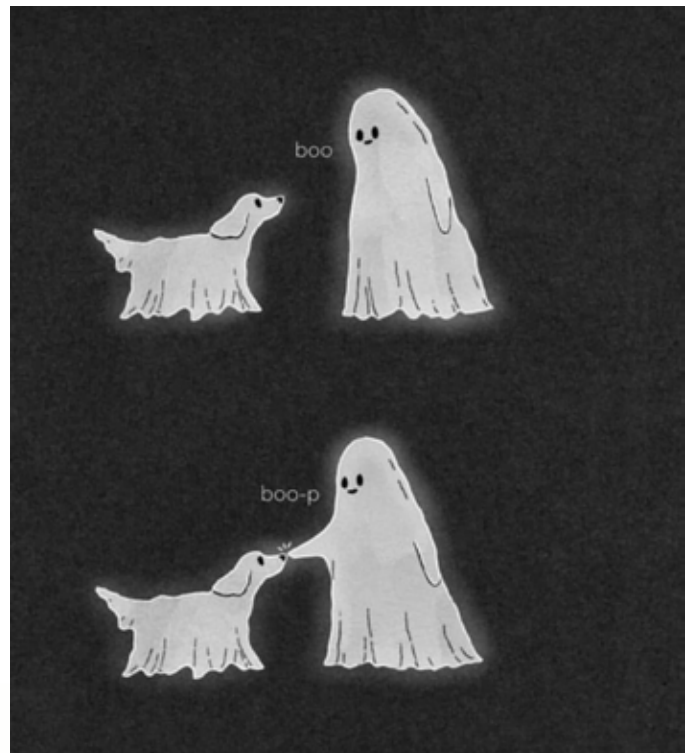
High in Trial ribbon saga: Kathy has gotten a vendor from Etsy who can do the ribbon for \$20ish. Done within the week.

## New Business:

It was suggested to a member that SCKC should go to the city/county council meeting to bring our concerns about the fairboard. How the Spring show is beneficial to Seward and has great economic impact.

Motion for adjournment made by Tanya. 2nd by Kathy. Motion passed.

Meeting adjourned at 8:36pm



NOVEMBER IS NATIONAL  
EPILEPSY AWARENESS MONTH

# WHEN THE SEIZURES DON'T STOP

## AN OVERVIEW OF REFRACTORY EPILEPSY

BY SIMON R. PLATT, BVM&S, FRCVS, DIPL. ACVIM (NEUROLOGY), DIPL. ECVN  
CEO AND FOUNDER OF WEB-VET SEIZURE SPECIALISTS

As we enter National Epilepsy Awareness Month (NEAM) in November, we are reminded that there is a vital need for more effective therapies and management strategies, with approximately 30% of idiopathic epilepsy dogs being treatment-resistant to one or several antiepileptic medications.<sup>1</sup>

Refractory epilepsy refers to seizures that persist despite the use of at least two appropriate antiepileptic drugs (AEDs) at the correct doses.

This condition, sometimes referred to as drug-resistant epilepsy, can be frustrating for both the dog and its owner, significantly affecting the owner's and animal's quality of life.

While it has been emphasized that partial therapeutic success with a reduction in seizure frequency, seizure severity or reduction in the occurrence of seizure clusters or status epilepticus can be of relevance for canine patients and their owners, seizure freedom is the main aim of clinical management.<sup>2</sup> The severe impact of drug-resistant epilepsy highlights the importance of aiming for complete seizure control in all dogs experiencing seizures. It's crucial to enhance our understanding of the reasons behind drug resistance and how they relate to various causes, progression of the disease and affected breeds. Additionally, we need to focus on developing and evaluating new pharmaceutical and non-pharmaceutical treatment

approaches, as well as combinations of these methods.

### CAUSES OF REFRACTORY EPILEPSY

There is no single known cause of epilepsy in dogs, and the reasons why some develop refractory epilepsy remain unclear. It can be caused by a range of factors, including:

- 1. Idiopathic epilepsy** is the most common form of epilepsy in dogs and is considered genetic. Some breeds, such as border collies, Australian shepherds and Belgian shepherds have a greater prevalence of this disease and can be more resistant to medications while experiencing more severe seizure frequencies and severities.<sup>3,4</sup> A high density of seizures, along with seizure clusters and status epilepticus, has been linked to treatment failure in various dog breeds.<sup>4,5</sup>

2. **Structural epilepsy** This form of epilepsy results from an underlying issue such as brain trauma, tumors or encephalitis or inflammation of the brain, in many dogs presumed to be immune-mediated.
3. **Drug tolerance or resistance** Some dogs may metabolize or respond to anticonvulsants differently, reducing their efficacy over time. Drug resistance means that the appropriately selected drug or drug regimen, administered in therapeutic and, if appropriate, maximally tolerated doses, fails to control epileptic seizure activity.<sup>6</sup> Tolerance refers to a decrease in the effectiveness of a drug due to changes in its metabolism (metabolic tolerance) or its effects on the body (functional tolerance). This can lead to the drug being less effective, ultimately causing treatment to fail. Studies have shown that tolerance can develop in dogs being treated with phenobarbital or levetiracetam.<sup>7,8</sup>
4. **Pseudo-resistance** Several other factors which may also cause therapeutic failure are often summarized under the term pseudo-resistance, including wrong diagnosis, wrong drug or wrong dose. This term covers all factors that lead to inadequate therapy including issues related to owner compliance. In this context, it should be noted that one study revealed that only one out of five owners seem to meet a compliance of 100%.<sup>9</sup>
5. **Other health issues** Metabolic diseases such as hypothyroidism, liver or kidney problems or imbalances in electrolytes can complicate epilepsy treatment, making seizures more difficult to control.
6. **Drug choice** Certain epilepsy syndromes have different responses to drugs. For example, Rhodesian ridgebacks with myoclonic epilepsy, cats with feline audiogenic reflex seizures and dogs with Lafora disease have specific treatment preferences. Levetiracetam and potassium bromide are the first and second choice treatments for these cases, while phenobarbital seems to be less effective for this type of epileptic seizure.<sup>6,10</sup>

## TREATMENT OPTIONS FOR REFRACTORY EPILEPSY

Dogs with refractory epilepsy require ongoing care, regular vet visits and consistent medication monitoring.

While seizures may not be completely eliminated, they can often be reduced to improve the dog's quality of life. Keeping a detailed seizure log is imperative to fine-tune the treatment plan. While managing refractory epilepsy is challenging, there are several treatment strategies available. Trying to prevent it may be an easier task, though; observational studies have suggested a positive effect of early treatment on subsequent therapeutic success. For instance, treatment after the second epileptic seizure was associated with a better outcome than after the third seizure in Italian Spinone dogs, and Labrador retrievers with a low total number of epileptic seizures before initiation of phenobarbital had a better outcome.<sup>11,12</sup>

1. **Adjusting medication** The initial step in managing seizures in dogs often involves increasing the dosage, adjusting the dose frequency or adding a second or third antiepileptic drug. Commonly used anticonvulsants in dogs include phenobarbital, potassium bromide, zonisamide and levetiracetam; less commonly used alternatives include gabapentin, pregabalin and topiramate. The choice of which drug to use depends on various factors such as legal approval status, cost, efficacy, associated adverse effects, mechanism of action and frequency of administration. See below for a brief discussion on the role of potassium bromide in refractory epilepsy.
2. **Dietary management and the gut microbiome** The issue of drug-resistant epilepsy in dogs has prompted recommendations for non-pharmacological treatment options at the early stages of epilepsy management, before adding or increasing other anticonvulsants. There is evidence that diets enriched with medium-chain triglycerides (MCT) have been shown to improve seizure control in dogs with epilepsy that is resistant to at least one anticonvulsant.<sup>13</sup> The gut microbiome may impact how the body responds to drugs by signaling from the gut to the brain. This can affect the severity of the condition as well as how the body processes anticonvulsant medications. In dogs with epilepsy, there

seems to be a lower level of GABA and short-chain fatty acid producing bacteria compared to healthy dogs. It has been observed that diets enriched with MCT can positively change the microbiome.<sup>14</sup>

3. **Cannabidiol (CBD)** The anticonvulsant effect of cannabidiol (CBD) has been confirmed by findings from animal models and human trials and has attracted the interest of veterinary practitioners and dog owners. Additionally, there is renewed awareness of cannabinoids, which have been used for epilepsy since ancient times, due to social media and public pressure. While research is still in its early stages, some studies have shown promising results in reducing seizure activity when used in conjunction with traditional anticonvulsants.<sup>15</sup>
4. **Vagus nerve stimulation (VNS)** If a dog with epilepsy does not respond to multiple anticonvulsants and dietary modifications, there are other non-pharmacological treatment options to consider. These include vagal nerve stimulation (VNS), deep brain stimulation and transcranial magnetic stimulation. Some evidence suggests that individual dogs may benefit from these treatments, but more studies are needed to determine if they can improve long-term seizure control and if they are cost-effective. VNS involves surgically implanting a device that sends electrical impulses to the brain via the vagus nerve, which may help reduce seizure frequency,<sup>16</sup> although handheld devices may also be successful.<sup>17</sup>
5. **Acupuncture and alternative therapies** Some pet owners turn to holistic treatments like acupuncture, herbal supplements or homeopathy. While the evidence supporting these treatments is limited, some dogs may benefit from these approaches.

### *Benefits of potassium bromide as an add-on therapy*

Potassium bromide has been used as an anticonvulsant for over a century and is particularly effective in managing seizures in dogs. Its mechanism of action differs from that of phenobarbital, zonisamide and levetiracetam, making it an excellent candidate for combination therapy.<sup>18</sup>

*Continued*

**1. Improved seizure control** For many dogs, phenobarbital alone may not completely control seizures, especially in refractory epilepsy. Adding potassium bromide to the treatment regimen can provide additional seizure control. Studies suggest that potassium bromide is effective in reducing seizure frequency in approximately 50-80% of dogs when used alongside phenobarbital.<sup>19</sup>

### 2. Lower phenobarbital dosages

Phenobarbital is metabolized by the liver and can lead to hepatotoxicity in some dogs. By adding potassium bromide, veterinarians can often reduce the dosage of phenobarbital, decreasing the risk of liver damage while still maintaining adequate seizure control.

**3. Non-hepatotoxic** Unlike phenobarbital, potassium bromide is primarily excreted by the kidneys, making it an attractive option for dogs that are prone to liver problems or already showing signs of liver damage.

## ADMINISTERING POTASSIUM BROMIDE TO DOGS ON PHENOBARBITAL

When transitioning a dog to a combined therapy of potassium bromide and phenobarbital, careful planning is essential to avoid complications and ensure optimal seizure control.

### Loading dose vs. maintenance dose

One of the most important considerations when starting potassium bromide is whether or not to administer a loading dose. Potassium bromide has a long half-life (up to 24 days in dogs), so it can take weeks or even months to reach steady-state levels when given at a standard maintenance dose. To accelerate this process, a loading dose may be used.

**1. Loading dose** The loading dose is a high dose of potassium bromide given over several days to quickly bring blood bromide levels to a therapeutic range. The loading dose (400-600 mg/kg) is typically divided over three to five days to minimize gastrointestinal upset, which is a common side effect during this phase.<sup>20</sup>

**2. Maintenance dose** Once the loading phase is complete, potassium bromide is given at a lower maintenance dose to maintain therapeutic levels in the blood. The maintenance dose is usually administered daily, either in food or as a liquid formulation.

The recommended dosage of potassium bromide for dogs is generally in the range of **30-50 mg/kg/day** when used as an adjunct to phenobarbital. The exact dose will depend on the individual dog's response and tolerance to the medication. Close monitoring of blood levels is required to adjust the dose and avoid toxicity.

### 1. Monitoring therapeutic levels

Blood bromide levels should be measured periodically to ensure they remain within the therapeutic range, typically between **1.0 and 3.0 mg/mL**. Monitoring should be done every few weeks initially and then every 3 to 6 months once stable.

### 2. Adjusting phenobarbital dosage

After potassium bromide has been added and is effective in controlling seizures, the phenobarbital dosage may be tapered to minimize side effects. Reducing phenobarbital should be done gradually under veterinary supervision to avoid triggering rebound seizures.

## MONITORING AND LONG-TERM CARE

The use of potassium bromide in combination with phenobarbital requires ongoing monitoring to ensure therapeutic effectiveness and avoid side effects. Key aspects of monitoring include:

- 1. Regular blood tests** Blood levels of both potassium bromide and phenobarbital should be measured regularly to ensure they remain in the therapeutic range. Kidney and liver function tests are also recommended to monitor for any signs of drug-induced organ damage.
- 2. Seizure diary** Owners should keep a detailed record of their dog's seizures, noting frequency, duration and severity. This information is invaluable for adjusting medication dosages and assessing the effectiveness of the treatment plan.

**3. Behavioral and physical changes** Owners should watch for signs of sedation, lethargy, ataxia or gastrointestinal distress and report them to the veterinarian. Adjusting the dosage or changing the treatment plan may be necessary if side effects become problematic. ■

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