



Green Mountain Pug Rescue

The Twisted Tale

2017 Summer Edition

A Welcome Message by GMPR:

After taking a restful nap, The Twisted Tail has returned and wagging like ever as the official E-newsletter from the Green Mountain Pug Rescue (GMPR) providing you educational, seasonal, and fun topics in how to care and spoil all pugs of every shape and size! This summer's edition is pug-packed full of information from how to battle ticks to how to keep your four-legged curly tailed friend cool, comfortable and full of delicious goodies.

We would also like to introduce our recently rescued alumni, Munchkin, who's whipping up some treats in the kitchen and answering your questions about his brachycephalic breed for every edition!

We hope you enjoy and please let us know of any future topics you would like to see published in an upcoming edition. Please email your ideas to kelli.rothenberger@gmail.com or visit below.

GMPR Website and Facebook Page

GMPR maintains a website and Facebook page for those who wish to stay current on GMPR news through the internet. The website will also be the new residence for The Twisted Tail E-newsletter! Both the website and Facebook pages contain news of members, adoptions, available dogs, upcoming events, dogs with special needs and much more! Our website contains online applications for adopting, fostering, transporting or volunteering.

Please visit our website at www.gmpr.org and our Facebook page at <http://www.facebook.com/greentnugrescue>.

Donations

We are only able to help pugs through the generous monetary donations and invaluable volunteer time that pug lovers graciously give! If you want to help us with events or make a donation, please visit our website as noted above.

Donations to GMPR go for vet care for the pugs, and anything they need. We work closely with other rescues to ensure that all pugs in our area are safe and secure.

Inside This Issue:

- **Readers Welcome!**
- **Protect Your Pug: Tick prevention and management**
- **Munchkin Knows Best: Why do my pug's feet smell like corn chips?**
- **Chillin' Like A Villain: Keeping your pug cool this summer**
- **Munchkin in the Kitchen: Sweet frozen fruit treats**

Protect Your Pug: Tick Prevention and Management

Due to a mild winter by Vermont standards, anticipate a busier tick season than usual. For such a tiny package, this insect can pack a punch with many dangers. The prevention and, if necessary, timely management of a tick bite is essential to decrease the risk to your pug, so here is what you should know!

What is a tick?

As part of the arachnid family, these parasites live from the blood of mammals, birds, and other animals having a life cycle consisting of 4 stages: Egg, larvae, nymph and adult.

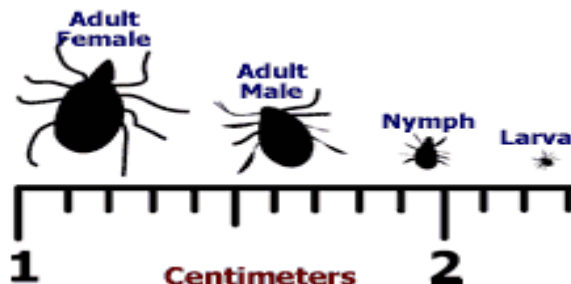


Image courtesy of peteducation.com

Depending on what phase in the life cycle, this will determine which host a tick will feed from. Except for the egg phase, all aspects of its life cycle depend on blood to grow and survive. Ticks can either be soft or hard-shelled, which make them more tolerant to temperature; therefore, more difficult to kill. Ticks possess an organ that is able to detect odor, heat and humidity to track food sources. It is believed that ticks are able to jump, but this is a common myth! Ticks don't actually jump, but climb to higher elevations to access their hosts. As they require higher elevations to climb to, an ideal tick environment includes high grass and wooded areas. Risk factors to determine how likely a tick encounter will occur depend upon:

- Geographical location
- Time of year
- Pug's habits (includes indoor versus outdoor exposure)
- Appropriate use of tick products

Munchkin Knows Best: Why do my pug's feet smell like corn chips?

Craving a salty snack when you get a "whiff" of your pet's feet may not be as weird as it sounds. This is also known as "Frito Feet" or "Popcorn Paws", which is caused by bacteria and/or fungi that normally lives on your pug's skin, but controlled by the immune system. If the setting is right, the immune system may become overwhelmed and these small critters flourish in between and within the cracks of the paws where the odor can be the most pungent. Remember, your pug's foot pads are like human arm pits and loaded with sweat glands!



Factors that may contribute to this phenomenon include diets enriched in carbohydrates and/or sugars, environments with high levels of moisture such as summer humidity or from heat while staying indoors in the winter to keep warm, or improper paw hygiene

If the odor is a bit too strong:

- Always check for swelling, wounds, skin/nail changes, hair loss, drainage or other signs of possible infection or serious injury
- Follow-up with a veterinarian if these signs are noted especially if there's difficulty walking or excessive licking/scratching of the feet, ears or skin folds
- Trim excess fur at the base of the pet's feet and scrub affected areas on a regular basis
- Various topical disinfectants are available, but ensure they are pug-friendly and non-toxic such as white vinegar or hydrogen peroxide and combine with warm water in a appropriately sized container

Of the 13 different species identified in Vermont, five are known to bite and four of these can transmit disease. The pictures below depict tick species that use dogs as a common host:



American Dog Tick Lone Star Tick Woodchuck Tick Brown Dog Tick
Images courtesy of Google and healthvermont.gov

When a tick bites, it will insert its mouthparts into the skin and remains attached by a glue-like substance secreted from their mouth. A tick can remain attached to its host for several days before detaching itself.

What are the potential risks?

These risks do not just apply to dogs, but to other domestic animals and potentially humans!

Tick-Borne Disease Facts (includes bacteria and viruses)

- Ask your veterinarian if there's any preventative options available to better protect your pug (Ex. Lyme Disease)
- Certain ticks can carry certain diseases
- The longer a tick remains attached, the more likely for disease transmission, especially if greater than 24-48 hours
- Most common diseases that could be transmitted include **(not an all-inclusive list)**:
 - Lyme Disease
 - Rocky Mountain Spotted Fever
 - Ehrlichiosis
 - Anaplasmosis
 - Babesiosis
 - Hepatozoonosis
- Onset of symptoms could be sudden or delayed depending on the source
- If any of the following symptoms are observed, these could be associated with a tick bite and to contact your veterinarian **as soon as possible**:
 - Fever
 - Muscle or joint pain and/or swelling
 - Lameness
 - Swollen lymph nodes
 - Lack of energy
 - Lack of appetite and/or weight loss
 - Runny eyes/nose
 - Unusual bruising and/or bleeding
 - Vomiting
 - Diarrhea
- Irritation, pain and possible infection at the site of entry can occur especially if any parts of the tick are left in the skin
- Anemia (rare, but defined as a deficiency of red blood cells in the blood showing as paleness and lack of energy)
- Tick-bite paralysis (rare, but reported in certain female tick species)

- Fill enough to immerse the pug's feet and, if able, distract, play and praise so they remain for several minutes in the container to soak the affected areas
- Dry paws thoroughly with a clean cloth

Information courtesy of Dogster magazine



Image courtesy of www.reddit.com

Chillin' Like A Villain: Keeping Your Pug Cool This Summer



With the pug breed, it is important to be cautious of and avoid if necessary extreme conditions as regulating their body temperature can be difficult. This is especially important as the weather warms. According to the American Kennel Club (AKC), a pug's body temperature is a slightly higher than humans normally ranging from 101 to 102° F. If their body temperature were to rise too high, this could lead to a condition called hyperthermia presenting with symptoms such as excessive panting, lethargy, red gums, thick saliva, and/or warm to the touch.

Naturally, a dog's coat will help in regulating their body temperature, but how they cool off is a bit different from humans. Sweat glands are limited, only existing in the paw pads, so other mechanisms are used such as vasodilation, which is the expansion of veins causing the skin to be red and flushed in appearance, so that the blood comes closer to the skin surface to cool. Panting is the main method for all dogs to cool off,

How can I protect my pug?

Since there may not be curative treatments for tick-borne disease and in the potential complications that can occur, appropriate prevention is important! Tick control consists of not just protecting your pug, but of managing the tick's environment to minimize risk.

Your Environment (especially in areas where your pug resides)

- Remove the tick's habitat such as leaves, brush, and tall grass
- Create a buffer zone in between the lawn and tick-infested areas such as mulch, wood chips or gravel to decrease migration
- If possible, control other tick food sources such as deer and rodents
- Exercise caution if using products to assist in this maintenance – Be mindful in how this could affect the environment, those that live in it and consider hiring an exterminator if necessary
- Depending on the species, certain ticks may become dormant versus others can be quite active during the colder months, so prevention all year round is important!
- Ticks may survive indoors, so if this occurs certain measures can be performed:
 - Flea or tick fogger - To flush out and remove ticks accordingly
 - Insecticide (i.e. powder) - A 1 foot barrier on the wall above a carpeted room (caution advised if using these substances)
- Wash bedding that your pug comes into contact with regularly

Your Pug

- Minimize exposure to the tick's environment
- Perform a "tick check" after returning outdoors and don't forget to check yourself!
 - If detected, remove immediately (discussed later)!

6 Places Ticks May Hide on Your Pet

What to look for

To find a tick, feel for lumps or bumps and look for areas that appear irritated.

A deer tick is about the size of a sesame seed.

Regularly check your dog for ticks after all outdoor playtime and walks, even if your pet is on a preventative.

Some species of ticks are no bigger than a grain of sand.

Ticks are drawn to dark, moist areas on the body like:

- 1 under the collar
- 2 under the tail
- 3 inside the groin area
- 4 between the toes
- 5 under the front legs
- 6 elbow

And even on your dog's eyelids!

PET MD

Image courtesy of www.petmd.com

but for pugs this may increase stress due to their flat, squished (i.e. brachycephalic) faces.

To keep your pug cooler this summer, here are some tips, tools and tricks that they can enjoy:

- Stay cool indoors with the use of fans and air conditioning
- Keep them in plenty of shade at all times if outdoors
- Hydrate with fresh, cold water and a lot of it with the use of ice cubes and fountains
- Splash in a pug-friendly pool instead of a walk, but if going into your backyard pool don't forget the life jacket as pugs may not be the best swimmers!
- If walking, go during the coolest time of the day avoiding peak heat hours (10am-2pm) using the grass to walk on and staying off of pavement or sidewalk, which can burn their paw pads
- Use cooling products such as mats/beds to lay on, bandanas, vests and neck ties, but ensure your pug doesn't get caught up in the wrong place with such apparel
- Provide a refreshing snack such as pug-friendly fruits and ice blocks for rehydration → Refer to this edition's recipe for more ideas!
- Always be vigilant for signs and symptoms of overheating as listed above especially if your pug's coat is darker causing quicker heat absorption
- **Never leave a pug in a hot car!**

Always ask yourself, is it too hot to take my pug along today?

- Hot cars heat up quickly to dangerous temperatures even as low as 70°F outside
- **Example:** 85°F outside = Up to 102°F in 10 minutes then 120°F in 30 minutes in a car!
- Even if it's "just a minute", dogs can only tolerate such temperatures for a short time, but can quickly lead to severe illness, organ damage or even death!

- A product that repels and/or kills ticks is highly recommended where there's a variety of options available (**not an all-inclusive list below**)
 - Check with a veterinarian as to which product may be best for your pug especially if young, pregnant, or nursing
 - Review package instructions carefully and its activity (kill versus repel)
 - Check label for +/- flea and other insect/parasite coverage
 - Keep out of reach of children and minimize unnecessary exposure to household
 - Dosing and products can be based on age and weight
 - Any preventative is only effective once the tick is in contact with the ingredients

Product/ Ingredients	Information
Topicals (Permethrins, pyrethins)	-Apply once a month in between the shoulders on the back -Avoid area until product has dried to avoid ingestion -Easy to administer and water resistant once applied -Longest duration of action, which deposits and releases from the sweat glands -Certain products may only cover certain tick species -Readily available and cost varies -Skin irritation, vomiting or diarrhea reported
Sprays (Permethrins, pyrethins) *Natural ingredients available	-Dosing varies to as needed, weekly, monthly, etc. -Available as aerosols or pumps -Spray all parts of your pet in a well-ventilated area, but do not soak them -May be used in between dips and shampoos -Use a cotton ball around the face avoiding eyes, nose and mouth -Vomiting, diarrhea, drooling, depression, lack of appetite and shaking reported -Less expensive vs topical products
Shampoos (Pyrethins, piperonyl butoxide) *Natural ingredients available	-Usually applied when ticks already present -Some residual activity noted, but requires more frequent treatments vs sprays -Apply and lather on entire body, leave on for 10-15 minutes and then rinse off -Avoid similar areas as to sprays -Less expensive vs topical products, but labor intensive
Powders (Pyrethins) *Natural ingredients available	-Dosing varies; typically weekly if used on pug and stays dry -Easy to apply in a well-ventilated area, but may be messy -Use small amounts and slowly rub into skin -Certain products may be used on the pug's environment -Avoid use if your pug has asthma -Avoid same areas and similar side effects to sprays -Less expensive vs topical products
Dips/Rinses (Permethrins, pyrethins)	-Concentrated amounts of ingredients require further dilution in water -Applied to the entire body with a sponge or over the back -Some residual activity noted, but repeat dosing may be necessary -Apply in a well-ventilated area and do not rinse -Insert cotton balls into pug's ears and ointment into eyes for protection, but important to avoid these areas -Avoid same areas and similar side effects as to sprays and powders -Less expensive vs topical products

- When in doubt, keep your pug at home where it's cool and comfortable
- For more information, refer to www.MyDogisCool.com

Information courtesy of The Pug Diary and Pet Health Network

Munchkin in the Kitchen: **Sweet Frozen Fruit Treats**



- 1/2 cantaloupe (peeled and seeded)
- 1 cup (240 mL) of low-fat blueberry yogurt
- 2 tablespoons (30 mL) of honey

Preparation:

1. Puree cantaloupe in a food processor
2. Add yogurt and honey into the puree and mix together
3. Pour into an ice cube tray and freeze

*Various combinations possible: Try different types of fruit or yogurt

*Other fruits can include: Apples, bananas, blackberries, blueberries, cranberries, honeydew, huckleberries, kiwis, oranges, pears, raspberries, strawberries, and watermelon

Courtesy of Cesar's Way

Caution:

- Don't forget to wash all fruits and remove/discard of any inedible parts such as rinds, skins, seeds and peels before serving to your pet

Collars
(Permethrins, pyrethrins, amitraz, piperonyl butoxide)

- Proper application to ensure collar is tight enough for skin contact (i.e. 2 fingers in between collar and neck) and cut off excess when sizing to avoid ingestion
- Concentrated amount of ingredients dispersing throughout body, but collars mainly protect head and neck area
- Duration of action up to several months, but lasts longer if remains dry
- May be used in addition to a topical product if residing in a highly infested area
- Skin irritation, allergic reaction and strong odor reported
- Less expensive vs topical products

Oral
(Simparica®, NexGard®, Bravecto®)

- Available by prescription only
- Given once a month or every 3 months by mouth depending on product
- Treatment may be given at any time and it should continue all year around
- Provides both flea/certain tick prevention and treatment
- Depending on product, vomiting, dry/flaky skin, diarrhea, lethargy, and lack of appetite reported
- Caution advised if pet has a history of seizures with NexGard and Simparica
- Bravecto also available as a topical solution
- Refer to veterinarian for additional information

How do I remove a tick?

If a tick is detected on your pet, the longer it remains attached then the risk of disease transmission increases, so remove as soon as possible!

Equipment will include: Gloves, clean tweezers or other removal tool, antiseptic, and isopropyl alcohol.

- If using tweezers:
 - Grasp tick as close to the pug's skin as possible without pinching the skin
 - Pull out tick in a straight and steady motion without leaving any parts behind



Image courtesy of www.akc.org

- If using other removal tool, review package instructions prior to use
- Place tick into isopropyl alcohol, note the date of tick removal, keep the specimen, and if symptoms present of a potential tick-borne illness or if the bite appears infected, notify the veterinarian immediately as further testing and tick identity may be needed
- Wash hands, clean tick bite with antiseptic and disinfect tweezers/tool with isopropyl alcohol

- **Fruits to avoid (even deadly):** Grapes, persimmons, peaches, plums, raisins, currants, or cherries

Where can I find additional information?

Please contact your local veterinarian on further education about tick prevention, treatment and removal. The resources below were also utilized in the production of this article.

- www.pededucation.com
- www.pethealthnetwork.com
- www.petsandparasites.org
- www.petmd.com
- us.bravecto.com
- www.nexgardfordogs.com
- www.simparica.com
- www.humanesociety.org

Can my dog eat this?		
YES	YES, BUT . . .	NO
BANANAS Rich in potassium and vitamin C	APPLES . . . don't let him eat the seeds!	AVOCADOS Can cause vomiting
BLUEBERRIES High in antioxidants	LEMONS . . . he may not like the bitter taste.	CHERRIES Can cause cyanide poisoning in large quantities
KIWIS Good source of vitamin C and potassium	ORANGES . . . they're high in natural sugar; give in moderation.	GRAPES Can cause kidney failure
PINEAPPLE Try frozen for a cool treat!	PEACHES . . . remove the pit; it can cause intestinal blockage.	RAISINS Can cause kidney failure
STRAWBERRIES High in fiber and antioxidants	WATERMELON . . . remove the rind first!	

Image courtesy of www.pinterest.com

Thank you for reading and we hope you enjoyed it! Stay tuned for the next edition due this fall!

