Zoo animals that do their own matchmaking may see more success (Portland Tribute (Ore.), The) 2/28

Selecting mates for zoo animals based on genetic diversity may not be the best strategy suggests a study at an Oregon zoo. Experiments with female pygmy rabbits showed that those females who chose their own mates were more likely to give birth, have larger litters and better offspring survivability. A previous study done with mice showed similar results.

Comment: *We all know bitches and dogs that have definite preferences in who they mate with – well this study suggests maybe they know something we do not. Having trouble with a healthy bitch conceiving maybe having several studs for her to choose from may improve the odds. SEM*

In the news: Will bromethalin become a bigger issue? (BerkPets.com (reading, Pa.)) 3/11

Bromethalin is the active ingredient in Assault, Fastrac, Gladiator, Rampage, Talpirid and Vengeance rat and mouse baits. This poison may become a more common poisoning to our pets (and children) as some of the older rodenticides products, which contain an anticoagulant poison, become less available. Bromethalin causes brain and spinal cord swelling producing weakness, ataxia (loss of coordination), muscle tremors, seizures, paralysis and death. Signs may occur 2 hours to 14 days after ingestion and cats are three times more sensitive to this poison than dogs. There is no blood test to tell if bromethalin has been consumed (unlike the anticoagulant rodenticides). Treatment which includes decontaminating the stomach, preventing further absorption and reducing brain and spinal cord swelling is best started before signs develop. Affected pets that do recover may have permanent neurological damage.

Comment: *Newer products are usually considered safer than older products but here is one that does not fit that – we seem to be trading one evil for another more dangerous one. Having a mouse problem I would still stick to mouse traps – or a cat. SEM*

Equine contraceptive could help control populations of other species (PetMed/Fully Vetted blog) 3/6

The U.S. Environmental Protection agency (EPA) has approved an equine contraceptive vaccine (GonaCon) for use in wild horses and burros. The vaccine stimulates production of antibodies against the hormone (GnRH) responsible for the production and release of sex hormones. The vaccine causes a decrease level of estrogen and progesterone and therefore stops sexual activity. Effects of the vaccine tend to last for several years. This vaccine has been used in white-tail deer and may be studied as to its use in prairie dogs and feral dogs. One study in cats showed that at the end of the study, 5 years, 27% of the cats remained infertile.

Comment: *While I understand the need for a product such as this it also raises some concerns. How do we know which horses/animals to vaccinate? Maybe some of the ones vaccinated would be the better choices to allow to breed. No work has been done to determine how long the vaccine actually lasts or if it can cause permanent sterilization in some animals that has been given it. And the big concern is what if this gets into the wrong hands what damage can be done – will our pets be at risk of extremists? SEM*

Modified diet improves performance of detection dogs, study finds (ScienceDaily) 3/27

Cornell University researchers found that decreasing dietary protein content down to 18% and increasing the percentage of dietary fat improved a dog's scenting ability. Less protein resulted in a faster return to normal body temperature therefore decreasing panting and increasing better sniffing ability. Corn oil was used to enhance the fat content in the diet but due to its polyunsaturated fats it may also enhance the sense of smell as past studies suggest. A "high-performance" diet may need to be defined more by what the dog is intended to do.

Comment: *Maybe the saying now needs to be "You eat what you are" versus "You are what you eat". SEM*

Dual therapy could improve vision in dogs and people (MLive.com (Michigan) (free registration)) 4/10

A Michigan State University veterinary ophthalmologist studying treatment of inherited retinal disorders in dogs showed that combining gene therapy with using a protein called CNTF can maximize treatment success of retinal therapy. This type of treatment may become useful in humans too.

Comment: *Another case where canine research may benefit humans.*

Auburn studying hepatitis vaccine for canine osteosarcoma (AL.com (Alabama)) 5/8

A studying being funded by the AKC-CHF at auburn University is looking at modifying a virus used as a hepatitis vaccine in dogs to treat canine osteosarcoma, an aggressive bone cancer. The modified vaccine replicates inside the cancer cells, causing them to rupture and die while also releasing more of the vaccine to further attack other cancer cells. The modified vaccine is used in conjunction with amputation and chemotherapy treatments. The vaccine is used to treat the cancer cells that have spread, either by killing them directly or making them more susceptible to the chemotherapy

Comment: *In this day and age when vaccines are blamed, oftentimes wrongly, for a lot of things, including causing cancer – here is one being made to possibly treat cancer. SEM*

Study: Cancer-linker herbicide found in dogs (Discovery) 5/8

Purdue researchers found that dogs can be exposed, by ingestion, through the skin or by inhalation, garden and lawn chemicals (herbicides commonly called 2,4-D, MCPP and/or dicamba) that have been linked with bladder cancer. Pets that pick up the chemicals on their fur or paws can transfer them to floors and furniture potentially exposing their owners. Dogs were also shown to shed the chemicals in their urine.

Scotties, Westies, Shelties, Beagles and Wire-haired Fox terriers are at a higher risk due to a higher genetic propensity for bladder cancer. Pet-owning homeowners should avoid use of herbicides where animals (and children) may be exposed to them. If the herbicides are used proper precautions should be used to minimize contact – such as washing a pet's feet each time they

come in from the outside, rotating treated areas with untreated areas to allow use of a less contaminated area, etc.

Comment: *Personally I don't mind a few weeds in my lawn if it means a healthier pet. SEM*

German shepherd atopic dermatitis gene sheds light on human eczema (MedicalDaily.com) 5/9

Swedish researchers have identified a gene linked to atopic dermatitis (atopy, inhalation allergies) in German Shepherds. The researchers identified abnormal functioning in a gene (PKP2) that promotes and maintains a healthy skin barrier. Further studies are needed to show whether this gene is responsible for atopy in all breeds. The future may hold a genetic test for atopy and treatments that may be able compensate for the defect gene.

Comment: *This is a great beginning breakthrough for a disease that causes a lot of discomfort for many dogs. SEM*

Why dogs love to run (Discovery) 5/14

It seems that dogs and possibly other mammals that are built to run may experience a "runner's high". A study found that the feel-good neurotransmitters, endocannabinoids, were elevated in both dogs and humans after exertion. A certain threshold of activity was needed to elevate the levels thus, via a neurobiological means, rewarding the animal for engaging in the exercise.

Comment: *A scientific reason why our dogs love to run! Proof that they enjoy what they are doing – and not being forced to do it! I would love to see this studied further to determine if there are breed differences with this, can the "high" be quantified to determine if one dog may be a better performer than another, is this the elusive "heart" we talk about when an animal outperforms what its body is built for? SEM*