March 27, 2014

The recent recirculation of an article published in late 2013 has prompted a lot of discussion and concern about the use of Birch Oil in the sport of Nose Work. We wanted to take a moment to address the issue and hopefully diminish the worry that this article has raised (Veterinary toxicology alert: Oils used in 'scent training' can harm dogs).

We encourage everyone to process information with a discerning eye. There are a few things in this article that raise questions as it relates to the validity of the issues discussed:

1) The assumption, without any reported cases that we are aware of, that dogs will start showing interest in Xylitol laced chewing gum. There are thousands and thousands of dogs that have become involved in K9NW around the country. We have heard of only one dog that may have had increased interest/ingestion of gum after becoming involved in K9NW.

2) The article neither noted nor referenced any research on the toxicity levels of the ingredients in question (see link below) in the amounts and way it is used for nose work training.

3) There is no mention of how the authors came to their conclusions as there is no substantial data on the number of dogs engaged in the sport of NW requiring medical attention due to engaging in the consumption of gum or drinking bottles of birch oil.

4) No apparent attempt on the authors' part to find out how the dogs are trained and the ways in which training aids are prepared.

We have an expectation that K9 Nose Work® Certified and Prospective Instructors have a sound understanding of how odor kits and supplies should be made and stored.

As with any canine activity, safe practices and common sense should always prevail and we strongly encourage such with the handling and use of K9 Nose Work oils. These oils are not intended for human or animal consumption. When preparing odor kits we use and recommend very little oil in relation to the number of Q-tips. The oil evaporates and what is left is vapor and that is what the dogs are searching for, or better the odor molecules contained within the vapor. We stay with the Q-tips as the mode of odor transport to further ensure that the context is clear for what we are asking the dogs to hunt for, Q-Tips + Odor = reward, not Q-Tips alone or Odor Alone or combined with other substances. Additionally, the dogs are ultimately trained to alert to the presence of odor to receive a reinforcement not to eat the odor.

You'll note that the toxicologist who was 3rd author on this article (see in bold below) has never seen a case of birch toxicity. That does not mean you should not use due diligence in the preparation of kits, storage of oils and general usage.

>>>> Used with permission from Beth Bishop, CNWI:
"This article was in a newsletter of the Diagnostic Center for Population and Animal Health, which is an off-shoot of the School of veterinary medicine at Michigan State University. After the article was published I mentioned it to a friend of mine, who is a

vet that works there and she arranged for me to talk to the third author. He is a toxicologist. The second author is a vet student who was given this as a project (I know her, she has been an agility student of mine). She was not eager to write this but was assigned it. **I spoke with John, the third author and shared my/our objections to the article. He told me that the article wasn't his idea, and he informed the first author that he had never seen a case of birch poisoning.** He explained that his concern was people being careless with the oils. This comes from his experience with animal poisonings from people being careless with other things, pesticides, over the counter medication, foods. He told me that he just wanted people to be careful and he wasn't worried about trainers or people working with trainers, but rather with John Q. Public who would try it on their own (????). I explained to him how NACSW educates people on handling the odor and what a very small amount is used and how it is used. I told him that the article made it sound like dogs were eating Q-tips willy-nilly and people were regularly in contact with birch oil. He assured me that this was NOT the intent of the article and he asked me to help correct that impression.

In the end, he understood where I was coming from and I understood his concern. Sounds like it was the first author who was the impetus for the article. Hopefully he will communicate some of these things to her. I hope that this info will help instructors when addressing students questions."<<<

>>>Shared with permission Virginia Huxley, Ph.D., CNWI, The Merek Index, for example, is actually available free online (we have fat little books from different years in most of the 'old fashioned' labs because they are so useful): http://www.rsc.org/merck-index/ but if you are not part of a university or a business that subscribes you may be asked to pay for the data.

Good old Google though yields the following (exhaustive) comprehensive assessment of methyl salicylate as a food additive and insecticide from the EPA: http://www.epa.gov/pesticides/chem_search/reg_actions/reregistration/red_PC-076601_9-Nov-05.pdf

It is extensively referenced and the toxicity values for different species are on page 5 of the document (page 7 of the pdf) with canine studies :(on page 7 of the document (page 9 of the pdf); human studies and projections begin on page 17. Please note that methyl salicylate is bad news if you are a pregnant rat or hamster being fed the material every day - but you will have noted from the table on page 7 that the toxic dose for rodents is much lower than for canines or humans!

In the end the EPA points out that the compound is used every day in the likes of Ben Gay with very little reported harm unless you happen to be an unfortunate who is sensitive to the compound. Amy did her homework - we just need to have Michigan publish another article and send it out to the vets who are good enough to read their literature.<<<

Please feel free to share this memo.
Thank you.