Aromatherapy for animals by Dr. John Fudens DVM HMC PH

The use of aromatherapy in animals can be and is controversial because of the reports of animals getting sick from their use. The following article is the result of my using different sources to describe how they can be used in a safe manner. In all honesty as a previous conventional vet and now doctor of homoeopathy I have used very little essential oils in my career not because I am biased against them but because I am more effective using homoeopathy and other therapies in treating my patients.

The similarity to humans made horses and dogs ideal test subjects for essential oil research in the early 1900's. There are more case histories and research done on horses and dogs than any other animal. Because of the resurgence in aromatherapy today, our other domestic animals such as cats, birds, hamsters, gerbils, etc. are now being treated with essential oils and our volume of case histories is accumulating. One case reported by a veterinarian was a cat found listless, unable to walk or crawl, after the owner applied just one drop of undiluted peppermint oil to the cat's stomach. The vet's diagnosis was a mysterious case of poisoning, and administered fluids and prescribed a two day stay in the clinic. Fortunately, the cat finally was able to go home. Another case concerned a cat that was distressed, disoriented and hypothermic after it was bathed in citronella oil. The cat was washed to remove any essential oils and given I.V. fluids, but it went into shock, its temperature rose, and it exhibited abnormal movements. Unfortunately, the cat had to be euthanized.

Because of such extreme cases some aroma therapists advocate never using any essential oils on cats. On the other end of the spectrum, therapeutic-grade essential oils have been credited with saving a cat's life from blood clots and cardiomyopathy (a heart disease).

An excellent reference is a book by Kristen Leigh Bell, who did her master's thesis on aromatherapy and animals (2002, Findhorn Press). Kristen's book provides many up-to-date case studies and practical research. Like Kristen, I believe in a moderate practice of using aromatherapy with animals. The following is a compilation of my research. You'll have to form your own opinion as to what is appropriate for you and your companion animals.

When wild dogs, wolves, cats and horses are sick, they seek out certain plants to eat in order to get well. As we domesticated these animals, they lost this instinct as well as their access to wild plants. Plants combine minerals from the soil, water and energy (in the form of sunlight) to produce certain chemical compounds (a process called photosynthesis). These essential chemical compounds nourish the plant, protect the plant, heal broken parts, counteract infections and fungus, attract insects for reproduction, and allow the plant to adapt to harsh environmental conditions. All these healing properties are encoded in the plant's DNA. To obtain these same healing benefits animals will seek out certain plants, eat them and digest the plant material for the healing chemical compounds. Plant metabolism is a precursor to human existence. Humans have learned to ingest the same plants (or herbs) as animals to metabolize the same healing substances. This process is called the "biosynthetic blueprint."

Aromatherapy primarily works on the physical level of animals, since animals don't have many of the emotional connections to scents as humans do. For example, animals don't connect romance with rose oil, or holidays with pine, orange, and cinnamon, the way humans do.

It is important to introduce animals to essential oils with a positive experience. Do not introduce animals to essential oils when they are fearful from people, loud noises such as storms or in pain or shock. It is always best to let the animal smell the oil first before applying. Then watch for signs of acceptance such as sniffing, wanting to lick the oil, or rubbing against you. Signs the animal dislikes the oil include turning their head away, panting, drooling, pacing, whining, sneezing or snorting. Never put essential oils on an animal's nose or snout. This takes away their freedom of choice and is intrusive therapy.

Most companion animals have considerably less body mass than an adult human. The rule-of-thumb I use for smaller animals is the same as for small children—if the dosage for essential oils is not stated, start with a 3-4% dilution. For example, mix 3-4 drops of essential oil to 96-97 drops of carrier oil (e.g., almond, hazelnut, jojoba, olive oil). For large and giant breed dogs, a 5-10% dilution could be used.

Melaleuca alternifolia (Tea Tree oil) has been widely used for years for both humans and pets. But there have been many reports of animals that developed in coordination, weakness, tremors, behavioral disorders and even depression after using melaleuca oil. This was probably due to using undiluted oil or poor quality oil. The Australian standard states that pure melaleuca oil must have cineole greater than 15% and terpinen-4-ol greater than 30%. I suspect the bad case histories of melaleuca oil resulted from using oil from a manufacturer that doesn't test every batch of their oil. Melaleuca oils with chemical compositions outside the Australian standard have been known to be caustic when applied full strength. My suggestion is to always use a therapeutic grade (Grade A) melaleuca oil from a manufacturer that tests every batch of oil and always dilute the melaleuca oil before using on animals. (NOTE: there have been fatalities in cats who had this oil applied to them.)

Dogs have a large nasal cavity and their sense of smell is 50-100 times stronger than humans. Always avoid any oils high in phenols and ketones. Avoid stimulating oils of peppermint, rosemary, niaouli, melaleuca (Tea Tree), spearmint, ravensara and eucalyptus, unless in highly diluted form. It is also recommended to avoid rosemary on dogs that are prone to seizures or with epilepsy. It is not recommended to use essential oils on medium to large breed puppies younger than eight weeks. For small or toy breed puppies, wait at least until they are older than ten weeks. When in doubt use the gentler hydrosols (water-soluble by-products of essential oil distillation) on puppies instead of essential oils.

Oil blends seem to work best on canines. Essential oils have a very profound effect on shelter, rescue and adopted dogs. They help the dog bond with the owner after such a traumatic experience. Veterinarians have reported success using frankincense on dogs with gum disease. As in humans, humans, lemongrass is good for canine cruciate ligaments and joint injuries. lavender and a blend of valerian, vetiver, petitgrain, sweet marjoram and sweet orange are good for calming and relieving the stress for show dogs. For arthritis, use the anti-inflammatory blend of peppermint, cypress, juniper berry and lavender. Dogs and horses, having metabolism similar to humans, tolerate oils better than other animals. Cats and birds are a totally different story.

Cats' livers do not have the necessary enzymes to break down and excrete certain chemical compounds in essential oils. The chemical compounds accumulate in a cat's body and are sometimes toxic to the point of death. Cats are very sensitive to morphine, certain sulfonamides, salicylic acid (aspirin), acetaminophen (Tylenol), allyl propyl disulfide (onions) and compounds containing benzene (benzyl alcohol preservative). Avoid all the following oils around cats:

- Wintergreen and birch oils contain methyl salicylate, the same chemical compound in aspirin.
- Phenol-containing oils: oregano, thyme, cinnamon (cassia), clove, savory, birch, and melaleuca (Tea Tree oil)
- Ketones, such as sage
- Monoterpene hydrocarbons pinene and limonene, most commonly found in the citrus and pine oils: lemon, orange, tangerine, mandarin, grapefruit, lime, bergamot, pine, spruce, and any fir oil. Many household cleaners and even pet products have these latter substances in them to make them smell nice to the owners.

Symptoms of a toxic buildup include being depressed, clumsy, uncoordinated, partially paralyzed, vomiting, drooling, or in a daze. The diagnosis for toxic poisoning is a blood test that shows elevated liver enzymes. It is best to seek immediate veterinary care if toxic poisoning is suspected.

Hydrosols (by-products of essential oil distillation) are safer to use on cats. This is because the monoterpene alcohols have an affinity for water and are safe for cats. Phenols and ketones do not appear in hydrosols. There are no known case histories of hydrosols or monoterpene alcohols causing toxicity in cats. Hydrosols of chamomile and a combination of rose, lavender, geranium and neroli are known to have a calming effect on cats. Wounds can be cleaned with diluted lavender, rose, geranium, and chamomile oil or their hydrosols. Itching can be

alleviated using witch hazel, rose, lavender or German chamomile.

Does this mean we need to stop using essential oils if we have cats? Since there is no scientific evidence that essential oils and hydrosols are totally safe for cats, the safest rule is not to use them on or around cats until they are proven absolutely safe. On the other hand, there is also no conclusive scientific evidence that all essential oils are harmful to cats. There is plenty of anecdotal evidence of cats being "harmed" by essential oils, as well as many vets who use essential oils safely on cats in their holistic practice. Each animal guardian must make their own decision. If one must use essential oils, here are some suggested safe rules to follow.

1. I would always use a highly diluted formula (some aroma therapists say 1-2%, while others say 3-4% is safe). If I use any of the cat-harmful oils on myself or around the house, I keep the cats away for at least one hour. I never diffuse any of those oils or blends containing these oils around cats.

2. I never keep cats in an enclosed area when diffusing oils in the air. I always keep a window open or put the cat in a different part of the house. A safer method is to put the diluted essential oil mixture on cotton balls and leave them in the same room as the animal or on their bed.

3. If I want to use essential oils on cats, I always use a highly diluted formula with essential oils. When in doubt I use hydrosols instead of essential oils on animals. Hydrosols are water-based, gentler and much easier to tolerate.

4. When using cleaning products with the above essential oils, especially citrus or pine, I keep the animals away and off the floor until it dries. Make sure you rinse and dry the surface as thoroughly as possible.

Allow the animal to investigate the essential oil first before using it. I introduce the essential oil to the animal by letting them sniff it and watch for signs of acceptance as mentioned above. I also use kinesiology with a human surrogate tester for the animal. One can also use a dowsing pendulum or one of the many electronic radionic devices for testing an oil.

Birds, with their rapid metabolism, are even more sensitive to essential oils than cats. One owner applied one drop of Tea Tree oil to a bleeding blood feather on her lovebird. Within ten minutes the bird collapsed on the bottom of the cage. Fortunately, the vet was able to revive the lovebird. Another owner applied full strength Tea Tree oil to a minor abrasion on a cockatiel's foot. The bird became depressed and developed respiratory distress. Despite all efforts by an avian vet the bird died within 24 hours. The best recommendation is to use hydrosols only and in highly diluted form in the bird's water, somewhat like a homeopathic remedy. Suzanne Catty's book, has some excellent recipes for common bird ailments. Most of them call for using 2–4 drops of a hydrosol in a bowl of fresh

water for the bird. When treating small mammals such as guinea pigs, ferrets, gerbils, rabbits, mice, hamsters, etc. Kristen Leigh Bell recommends using extreme caution. She recommends using hydrosols as you would for cats, but diluting it again with water 1:1.

Here are some good references for using essential oils on dogs & cats: Veterinary Aromatherapy by Nelly Grosjean Hydrosols: The Next Aromatherapy by Suzanne Catty Holistic Aromatherapy for Animals by Kristen Leigh Bell

The author, Russell Louie, and Margaret Auld-Louie, are the owners of <u>Optimum</u> <u>Choices, LLC</u>, a holistic health site for people and pets, and distributors of BioSuperfood.