

Animal health

Directly from the Animal Health department, we will try to tell you about the daily work of a veterinary, accompanied by the animal health technicians. Taking care of over 1,000 animals, broken down into about 100 species, means that we have a very varied working life. You can easily imagine, then, that in one day we might find ourselves taking care both of a bird and of a moose! It goes without saying that one needs a wide field of knowledge to deal with all this, but of course we learn a little more each day!

Prevention is very important if we wish to keep animals in good health, and for preventive care, vaccination is a must. The vaccines we use are the same as those employed with domestic animals and pets. For example, the cougar will be receiving the same vaccines as a cat, a coyote will have the same vaccines as a dog. The moose and all the other cervidae will receive the same vaccines as those given to bovines, because they are sensitive to the same pathogens (diseases). We have even introduced a very forward-looking preventive vaccination against the West Nile virus.



Another very important form of preventive care is to monitor internal and external parasites. This means that, every spring and autumn, we analyze the fecal matter (coprology) of each species and give it the appropriate dewormer. In most cases, the vermifuge is mixed with the animal feed.

Dressing hooves is also part of preventive care. Species whose hooves are dressed 2 to 3 times a year include the bighorn, Dall sheep, horses, asses and certain moose.

Most of our animals are wild, which means that we cannot carry out a full examination without using anaesthetisation. Once the animal has gone under, we make an in-depth evaluation of its state of health. We take a blood sample (haematology/biochemistry) that allows us to check that all its organs are working

properly. We take x-rays and, finally, we make a dental examination and scale the animal's teeth.

Other preventive tests are required on a regular basis. Since 1991, we have been carrying out federal tuberculin tests. These are required every three years for cervidae and every five years for bovines. This allows us to confirm that our herds are not contaminated by bovine tuberculosis and to check up on their health. These measures also allow us to import and export cervidae and bovidae, both inter-provincially and internationally.

Technically, this is how we proceed when running tests. First of all, we need to immobilise the animal in order to inject 0.1 ml of intradermal tuberculine (under the ectoderm, or first layer of skin). This sterile solution allows us to know whether the animal has ever been in contact with bovine tuberculosis. Secondly, we take a reading of the test three days later. The reading involves checking whether the animal has had a cutaneous reaction (a lump on the skin). When there is no reaction, this means that this animal has never been in contact with the disease. Obviously, this is the result we are hoping for.

As you may imagine, these tests are lengthy and require the cooperation of the entire animal health team and the keepers. To start with, we have to capture the animals, which live in semi-liberty in the Nature Trail Park, and bring them willingly into large paddocks set up for this purpose. This is when we have to be clever. We install a system of traps with doors that close after the animal has gone through. We attract the animal into the holding pen by offering it food.

Fortunately, so far we have had no positive cases. This means that our herds are tuberculosis free.

Spring and summer are two very busy seasons, for this is when the animals drop their young. Each newborn has to be identified, vaccinated, provided with vitamin supplements and its umbilicus (or navel) has to be disinfected. The most frequent problems amongst the newborn are diarrhoea, pneumonia and lameness. Moreover, the mother sometimes abandons its young and at that point we have to become its adoptive parents and bottle-feed it! This is hard work, but very rewarding. Additionally, at the time of parturition, there are sometimes complications which require intervention.

It is thanks to the close collaboration of the whole team of keepers, who constitute the vet's onsite eyes, and the joint work with the animal health technicians, that the veterinary practitioner can do her job and look after the health of all our magnificent animals.



Thus, the first stage when dealing with a sick animal is reporting the case. Subsequently, the veterinary practitioner visits the animal and makes a visual assessment. Next, depending on the seriousness of the case, the team may decide to place the animal under observation for 24 to 48 hours, or to take immediate action. One always has to balance out the risk involved in capturing an animal and using anaesthesia and weight it against the present condition of the animal. A decision that is not always easy to make!

Let us take a recent example. The keeper in the Nature Trail Park reported a marked lameness in the left foreleg of an adult female bison. The bison was putting her weight on the foot, but seemed to be in great pain. The first step was to see the animal and attempt to isolate it in the holding pen. The visual examination revealed no evident trauma, no obvious swelling, the hooves seemed normal and the animal was eating well.

The second step was to administer an anti-inflammatory to relieve the pain and then see how she responded to the treatment. We led her into the restraining cage, where we were able to administer injections safely three days running. Following these injections, the lameness improved by 75%. Nonetheless, we kept the animal alone, so that she might enjoy a long rest.

Fortunately, a week later, everything had returned to normal and the bison went back with the rest of the herd. If the lameness had worsened, preventing her from putting any weight on the hoof, we would have had to render her unconscious in order to take x-rays. However, since the condition had improved and the medical treatment was effective, we were able to avoid anaesthetising the animal.

So, as you can see, each case is unique and procedures will vary depending on a number of factors, for example: the age of the animal, the seriousness of its condition, the outside temperature (at - 40 C or at + 35 C, there is more risk for the animal when it is being captured and anaesthetised), the location of the animal (a moose may hide far away in the woods)... One has to use one's judgement and adapt to the situation! This is very demanding work, with no respite, but it does allow one to push beyond one's limits and offer a better quality of life to the animals. This is a job that provides enormous satisfaction and gratification, because we are working with animals and they are our passion.

Josée Tremblay
veterinary practitioner