



NOTICE

This publication is produced and maintained by our friends at the Bi-State Wildlife Hotline, Inc., which granted Animal Help Now permission to distribute it. **Please follow the instructions herein carefully to alleviate any potential safety concerns.**

This document is normally included in a package that contains the drug Ivermectin and syringes.

Ivermectin is available for purchase by the public at many farm supply or “feed” stores.

This document is current as of January 2020. Animal Help Now cannot guarantee that the Bi-State Wildlife Hotline has not published a more recent version.

Our gratitude to the hotline for sharing with us this indispensable document and for all of its good work on behalf of our animal friends.

For more information on the Bi-State Wildlife Hotline, see www.wildlifehotline.com.

Disclaimer: Animal Help Now encourages you to consult local and state laws to ensure legality in implementing this treatment protocol.



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www.wildlifehotline.com

Bait-Treating Sarcopic Mange in Wild Foxes and Coyotes

Thank you for caring about the wild foxes and coyotes in your area!

These instructions are authored by the Bi-State Wildlife Hotline of Missouri & Illinois. Our organization runs a program called Mange By Mail. This program allows the public to order a kit from us to treat mange quickly, effectively and conveniently in the wild. For a small donation we mail the donor a small amount of injectable Ivermectin, the medication used to treat mange, along with detailed instructions and syringes to inject the medicine into ground meat to feed to an afflicted fox or coyote. We have great success with this program nationwide.

If you are interested in signing up for this program you can do so at www.wildlifehotline.com/mange. Alternatively, you can purchase Ivermectin at any farm/feed store, or online. This document is intended to teach you what you need to know to follow our mange treatment program instructions without signing up for the program. There are a few drawbacks to doing it this way, but it is certainly your decision to make.

The advantages of ordering through the Mange by Mail Program are as follows:

- We send out a SMALL amount of medication (about 3ml) which is MORE than enough to treat 20 foxes or 12 coyotes. When purchasing injectable Ivermectin yourself, the smallest available size bottle is 50ml and you will probably not use more than 2ml of the bottle before it expires and goes to waste.
- We send syringes in the correct size and gauge to administer the medication. Ivermectin is extremely thick and the syringe needed is specific and not always as easy to find.
- We offer 24 hour support to participants in the Mange by Mail Program in case you need help at any time.
 - Your donation to the Bi-State Wildlife Hotline to participate in the Mange By Mail Program funds the treatment and care of sick, injured and orphaned wildlife and allows for the treatment of other mange cases beyond your area.

If you decide to skip the program and do this yourself, you will need to find/purchase the following items:

1. Injectable 1% Ivermectin: This comes in a 50ml bottle, or larger, is clear in color, and will often be found in farm and feed stores near the cattle and livestock supplies. You can also purchase it online at on [Amazon](https://www.amazon.com), or on [Jeffers Livestock](https://www.jefferslivestock.com)'s page. Both sites are extremely reputable and their prices are very low. The brand name doesn't matter, but the type and strength do. You are looking for 1% INJECTABLE Ivermectin. Note: DO NOT purchase Ivermectin that is blue in color or bottles that state they are the "Pour On" variety.



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2. 22g Syringes: The 'gauge' of a syringe refers to the thickness of the needle itself. The lower the number of the gauge, the larger the thickness of the needle. Injectable Ivermectin is very thick and viscous and you will need a large gauge needle to draw it out of the vial. Any syringe that is 22g or larger (22, 20, 18, 16 gauge) will work. You will not be using this needle to inject the animal at all. It is only needed to draw the medication from the vial and injecting it into the bait. This means that it is perfectly fine to use and reuse the same syringe multiple times if needed. Dispose of used syringes in a heavy plastic container like a laundry detergent bottle or orange juice container, in your regular trash.
3. Bait: We prefer that you use ground turkey or chicken as bait. Foxes and coyotes tend to swallow this meat whole, which helps to mask the bitter taste of the medication. Ground meat also prevents small animals like rabbits and squirrels from eating it. Any kind of ground chicken or turkey is fine as long as it doesn't have seasoning and it is used raw.

Ivermectin can be stored at room temperature in the original bottle. It does NOT need refrigeration, but it does stay good in cold temperatures or in the refrigerator if needed. Do NOT heat, microwave, cook medication/bait food after adding the medication.

Instructions

1. Observe the fox/coyote to take note of where he/she prefers to lie down or den on a reliable, regular basis. Also, note the time of day when you usually see them.
2. We recommend baiting the fox/coyote with unmedicated bait for 2-4 days before attempting the medicated bait. During this time you will learn the animal's behavior to know exactly where to put the bait, when to place it outside, and these days help establish a habit in the animal's routine. Also watch for feral cats, raccoons, and other wildlife and take note of their behavior in order to avoid placing bait where they can get to it. By day 3 or 4 you should know exactly when to put the bait out and be confident that it will reach your intended target and ONLY your intended target.
3. Use a syringe to draw up medication. (Please see "How to Read a Syringe" attachment for help) Red foxes are usually between 12-20lb. Many times the mange has made them skinny, and they might be on the lower end of that range. Coyotes **rarely** weigh more than 40lb. Most coyotes with mange will weigh between 25-35lb.

Weight	Dose
5lb (typical GREY fox juvenile)	.1ml
10lb (Max weight of GREY fox)	.2ml
15lb (typical juvenile RED fox)	.3ml



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20lb (typical adult RED fox)	.4ml
25lb	.5ml
30lb	.6ml
35lb	.7ml
40lb (adult coyote weight)	.8ml
45lb and above	Please call us. This may not be a coyote or fox.
*The abbreviation "ml" and "cc" are the same. If syringe says cc, that is exactly the same as ml.	

Warning! *You must be capable of predicting the movements of the sick animal with reasonable accuracy before using medicated bait. It is important that the bait be eaten entirely by the intended target animal – the coyote or fox with mange. PLEASE MAKE SURE THAT PETS DO NOT HAVE ACCESS TO THE BAIT STATION! Some breeds of dog are extremely sensitive to Ivermectin and it can be toxic to them. These breeds include Collies, Australian Shepherds, Sheepdogs, and Shelties. Learn more about this sensitivity and have your pet tested for it at Washington State University's Veterinary Clinical Pharmacology Lab at <http://www.vetmed.wsu.edu/>. Also, as with all medications, please keep away from children and other pets. More warnings and info on Ivermectin included later in this packet.*

4. After finding the correct dose, it is time to inject it into food that the fox or coyote will be willing to eat. Ivermectin tastes horribly bitter. Thankfully, both species are great about swallowing their food and not really tasting it. We prefer that you use raw ground chicken or turkey. Both can be found at any grocery store, and you don't need to purchase the more expensive 'lean' variety. We prefer it with the higher fat content, as animals need that extra fat in the wild. You can roll the raw meat into golf-ball sized 'balls' to help estimate the amounts to feed. Foxes should get 2-4 'meatballs' per day, where adult coyotes may need 4-8 per day depending on size. If you cannot find ground turkey or chicken, you can also use raw whole pieces of turkey or chicken, such as a leg (drumstick) or thigh. The bones will not be an issue for a fox or coyote. You will probably have to inject the medication in multiple spots if using whole pieces of meat, a little at a time to get it all in there, but that is okay. It is also perfectly fine to inject it into multiple pieces of food for one dose, as long as you are reasonable sure that the animal will eat ALL of the food you are putting out. Fox and coyote tend to swallow food without chewing and will usually eat ALL of whatever is presented to them.
5. When done injecting, place the cap back on the syringe and store away from pets and children.
6. Place the medicated food on the ground at the site where you most reliably see the animal. Do this an hour or so before you normally see him/her in that area, and begin watching from afar to make sure it is eaten by your target animal. You MUST watch the bait station on the night that you place the medicated bait outside. You need to know if the target received the medication.



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7. If he/she does not take the bait at all that, and/or something else eats it, repeat the process and try again. You have plenty of medication for this trial and error. If the bait goes uneaten, feel free to refrigerate it overnight and try again the next day. The medication will stay good in the refrigerator for as long as the meat stays good (around 3 days). Do not HEAT or COOK the medication, but refrigeration and cold temperatures are fine.
8. In 85% of cases, only ONE DOSE of medication is needed to treat a fox or coyote for mange. This is explained in more detail below. However, if you happen to see THIS coyote or fox again/still in 14 days or so, please redose him/her with the same dose first given. We try to give the secondary dose two weeks later, but it is not always possible. One dose is immensely helpful, even when the second one is missed.

After treatment, you will see a drastic change in *behavior* within 24–48 hours. The medication will immediately kill the mites that are causing the majority of the itching, and finally, the fox or coyote will get a good night's sleep. Within the next day or two, he will *feel, internally*, like his old self again. Of course, he will still **look** terrible, but that takes time. In most cases the animal will move away from people in this time frame, and stop coming back to your bait station, as soon as they are able to hunt for themselves again. It will take longer for the hair growth and skin clearing. Some coyotes/foxes grow their hair back in 4–6 weeks, and others take 12+ weeks to look normal again. The majority of the time you will not SEE the coyote/fox after 7–10 days, making it hard to tell if the treatment worked. This is because as the fox/coyote begins to feel better, he returns to his wild diet. Coyotes and foxes truly WANT to catch their food and eat 'hot' meals like rabbits, squirrels, rats, moles, etc. He was only hanging out near people and taking handouts because he was ill. Now that he feels better, he will want to be back in the woods hunting prey as he was designed to do. If you happen to have a coyote/fox that you can re-dose in 14 days, please do so. Technically Ivermectin is supposed to be administered in two doses– one now, and one in 14 days. Frequently in this program, it is impossible to administer the second dose because the animal is no longer visible. However, if you think that you can get him the second dose, please do so. Studies have shown that even with a single dose, many animals recover easily. (over 92%!)

Under the advice of our team of veterinarians, we use the broad-spectrum parasiticide drug Ivermectin at a dose of 300 µg/kg to treat wild canids with sarcoptic mange. Outside of a special warning for certain breeds of dogs, Ivermectin is considered extremely safe and has been used worldwide since 1981 when first developed. However, overdosage of Ivermectin is



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still possible. Follow the charts given in this document and **be vigilant** to ensure that it only reaches the target animal you are trying to treat. Feral cats/outdoor cats should NOT have access to this medication. While Ivermectin is used in cats, the dosage is much lower and use at this dosage can have adverse effects on cats. For dogs: 'Ivermectin Sensitive' breeds include Collies, Australian Shepherds, Sheepdogs, and Shelties. Farmers across the globe POUR copious amounts of this same medication onto their cattle and other livestock every season, with no known reports of soil damage or environmental impact. It is the same medication present in Heartguard Heartworm Prevention, Iverhart for Dogs, and many other flea, tick, and worming veterinary products- at different dosages. There have been no reported issues with public health. In fact, it is on the World Health Organization's List of Essential Medicines, a list of the most important medication needed in a basic health system.

Thank you for helping the wildlife stay wild another day! If you have any further questions or concerns, please call your local rehabber by going to www.ahnow.org, entering your zipcode and clicking "Wildlife Emergency" or you can reach Bi-State Wildlife Hotline via email at help@wildlifeline.com. Remember - be proud of yourself. You HAVE saved a life today!! (with a little help from the Bi-State Wildlife Hotline!)

How to Read a Syringe

