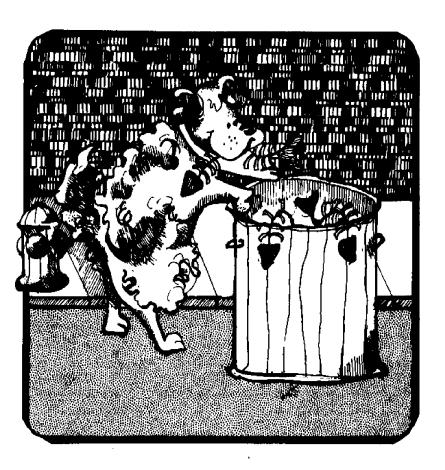
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MARINE ADVISORY - EXTENSION SERVICE

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SALMON POISONING THE UNNECESSARY KILLER OF DOGS

What is this phantom that some people talk about with fear or regret while others laugh it off as a hoax? Let this be said, salmon poison ing is a very real disease of dogs, but it is limited to a narrow band of the northern Pacific Coast; specifically, western areas of north ern California, Oregon and southern Washington west of the Cascade Mountains. In fact, for those in northern California, Mad River (near Arcata) is usually agreed on as the southern limit of this disease. Because of this narrow range of the disease, dogs are never troubled with it unless they eat salmon, trout, or some freshwater fish from our north Pacific Coast.

WHAT IS IT?

The disease is caused by a virus-like organism called a Rickettsia which is related to the organism that causes Rocky Mountain Spotted Fev er. It is found inside a worm which lives the intestines of many fish-eating birds and The ill effects are caused only in canines: dogs, foxes, coyotes and wolves, and are usually fatal. Cats are not susceptible to the rickettsia and, therefore are not affected. The span of time the rickettsia-carrying spends in the intestine of warm-blooded animals is only the last portion of the worm's cycle. The cycle begins when the eggs of the worm are released in the feces of the animal. If these eggs find their way into freshwater, they hatch into microscopic forms that invade a certain species of water snail. Inside the snail, the worm reproduces; a form is produced that is released and infects the fish. ally all salmon and trout can be infected. Also, other types of freshwater fish have been known to carry the disease. When these fish are eaten by a bird or mammal, the life cycle of the worm is completed, and starts all over. The snail is the important member of the cycle; without this key member, the worm, and consequently the disease, cannot survive. But this snail is plentiful in the streams of northwestern California, western Oregon, and southern Washington - the reason why the disease is limited to that area.

HOW DO DOGS GET IT?

Dogs become diseased when they eat fresh or cool-smoked fish infected with the worm that, in turn, is infected by the salmon poisoning organism. But few people feed fish to their dogs. This doesn't stop dogs from getting to them --rummaging through garbage cans, digging up buried fish in the garden, getting into fish boxes --- are only few ways they can come across the fish. Then again, with dog feed prices so high, fish can be a good source of protein. If dogs are fed fish, cooking it will kill the diseasecausing organism and make it safe to eat. There is an old belief that salt water kills the para site in fish, therefore, ocean-caught salmon or steelhead are safe for dogs to eat. This is about as true as most old remedys, since the fish become infected while they are in fresh water before going to sea and many remain so un til they die. Since a large portion of the sal mon caught in the ocean off California originally come from Oregon and Washington, they are potentially infected with the disease-carrying worm. It is important to note that all fish in the streams and rivers of the north Pacific Coast region can harbor the disease, and nonnative varieties such as Atlantic Salmon are especially susceptible.

Although there is no commercial vaccination available for your dog, the disease can be cur-

ed with drugs. In fact, it isn't even an expen sive cure, usually costing no more than having your veterinarian treat your dog for a fever. The symptoms of salmon poisoning are very similar to those your dog would show for distemper: fever, listlessness, loss of appetite, slight nasal discharge, and weight loss. In later stages there may be vomiting and diarrhea (possibly bloody). These symptoms will start to appear 5-7 days after eating an infected fish. If untreated, most dogs will die 10 to 14 days after the signs appear. Very rarely does an untreated animal survive, but occasionally one will due to natural resistance. Death is gener ally caused by dehydration and blood loss.

HOW IS IT TREATED?

Now, what do you do if you find or suspect your dog of eating fish? The first thing most veterinarians stress is don't get excited; wait a week and watch him closely for symptoms. The easiest symptoms to recognize are a listless attitude and loss of appetite. If you have a thermometer, a fever is a sure sign (don't diag nose this by a wet or dry nose -- it's to unreliable). If these signs appear, whether or not you suspect him of eating fish, take him to the vet. The most positive method of diagnosing the disease is to look for eggs of the worm in the dog's stool. Treatment then takes 3 to 4 days and is accomplished with antibiotics. The dog's temperature will usually drop after the first 24 hours of treatment. The treatment is not expensive, is usually successful, and is very important considering the fatal consequences if the disease is not treated. This disease usually is contracted only once. After a dog recovers from one infection, whether it be natural or by treatment, it develops an immunity. The dog can then feed on raw fish. In fact, periodic feeding of salmon is advised to maintain a strong immunity toward the disease.

THREE IMPORTANT THINGS TO REMEMBER:

- 1) All fish caught in streams of the northern Pacific Coast region should be suspected of being infected with salmon poisoning. This includes ocean-caught salmon and trout.
- 2) Don't get excited if you suspect your dog of eating fish -- wait a week for the symptoms to appear, then take him promptly to a veterinarian if they do show up.
- 3) It is a relatively easy disease to cure, yet if left untreated it will almost surely result in the death of your dog.

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