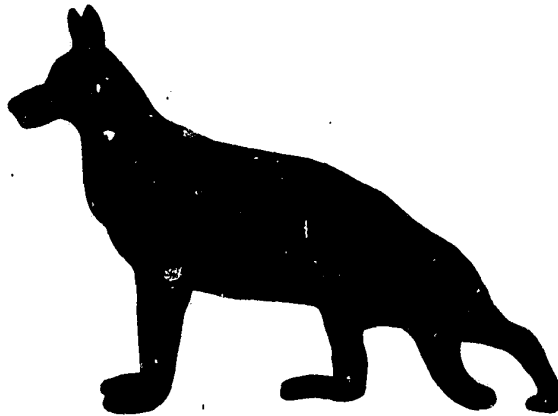


✓ Metropolitan Police

Department
Training Division



66848

CANINE TRAINING
SECTION

WASHINGTON, D.C.

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DOES YOUR POLICE DEPARTMENT NEED A CANINE UNIT

DOES YOUR POLICE DEPARTMENT NEED A CANINE UNIT?

For thousands of years, dogs have been used in a variety of roles to assist man. In ancient times we know dogs were staked out around military encampments to warn of on-coming enemy forces. Dogs were even trained to attack and harrass mounted warriors to delay their effective advancement.

Even in modern times of war their roles have only slightly advanced to guarding aircraft, camps and leading patrols. In the early 1960's the use of dogs in the civil rights marches in the South have painted a barbaric picture of the dogs role in modern law enforcement. Dogs trained for police work in this age are far more sophisticated than their predecessors. The modern approach to training has produced a new tool for us to employ in the battle to stem the tide of lawlessness. It is because of the past that many so-called progressive thinking police administrators do not feel that there is a place for an ancient tool in today's world.

The question of the advantages of employing a canine unit is clearly linked to the crime problems of your area. The basic duties of a police dog are searching, tracking, apprehension, and crime deterrence through the psychological effect of their presence on the criminal element. In any police department the canine affords the individual police officer greater personal protection and saves the department many more hours otherwise wasted in searching for hidden or escaping criminals and physical evidence discarded at the scene of a crime. Through the use of its olfactory abilities, the dog is able to locate a hidden criminal in a relatively short time whereas it might take a large number of officers numerous hours to achieve the same or only too often with negative results. The primary concern of most administrators would be "what will it cost". Well, dogs can be purchased from about \$200 each (this may vary with the area) or as many departments do, dogs are donated to the canine units.

There are still many uses for the well-trained dog which we have not even mentioned, such as the locating of buried bodies, detecting gas leaks, smoke detecting dogs, as well as the more well-known crime scene searching dogs or tracking dogs.

The age old adage of "man's best friend" is true and could be even more true for the police officer on patrol. In the age of computers and electronic equipment I can find no other special tool which can take the place of a well trained man/dog team, searching a large warehouse, tracking from the scene of a crime for a fugitive, locating evidence or declaring an area free of explosives or drugs.

The training normally takes about 10-14 weeks and should be acquired from a well-known and established canine unit. The Federal Bureau of Investigation or Justice Department may be able to refer you to a department who can assist you in your organized training. Yearly upkeep of a trained dog again may vary but \$300 - \$500 yearly should more than cover it.

Over the past 10 years or so, there have been many new highly publicized uses for the trained canine. I am referring to the locating of explosive and drugs. This one capability may merit the establishing of a canine section.

GENERAL CANINE INFORMATION

When a law enforcement agency considers the use of dogs in the prevention and detection of crime, it must consider three primary factors before arriving at a definite decision: costs of the program, advantages of the program, and needs of the city.

In order for a police canine program to be successfully activated, a public relations campaign should be conducted to acquaint the public with the anticipated formation in order to gain proper support. Of course, all information disseminated should be acquired from an experienced source. This phase of the program should not be expensive if the news media is approached diplomatically. Public relations, through planned demonstrations, after the first dogs are trained is advisable.

Before any dogs are acquired, arrangements for suitable quarters and grounds must be made for their training. If the police department desires to establish its own school, acquisition of grounds in a suitable location and construction costs must be evaluated. Next, suitable dogs must be obtained for training. Many departments are able to acquire suitable dogs through public donors. However, in some localities it is not possible to acquire all of the dogs needed by this method, thereby necessitating the purchase of dogs.

Unless one or more men are sent to an already established school, the cost of an experienced police dog trainer is a prime requisite. Many police departments have had their canine program fail because they employed ex-military personnel or obedience trainers who knew nothing about the exacting techniques employed to train dogs for police work. Conversely, many of these trainers have produced good working teams for patrol when given time enough to experiment by trial and error. This type of operation is usually very costly because of the lack of knowledge in planning and executing the administration of a canine program. Handlers are usually obtained directly from the department. Their regular salaries during the training period (14-weeks) are a part of the training costs, due to their absence from street patrol. After the training period, most departments increase the salaries in varying amounts. On the other hand, if the police department is small and plans to employ only a small number of dogs, it may send its handlers to another city with an established school for training.

Special training equipment is needed. The size of the program will determine the costs. Leashes, collars, feed pans, grooming equipment, tracking harnesses, and lines are needed, in addition to special attack training equipment and various types of agility obstacles. Added to this, vehicles are usually specially adapted to carry the dogs while on patrol.

In addition to special vehicles, the next costs to consider are the actual operating expenses in respect to food, medical care, kennels, and working equipment. After training, the yearly costs of maintaining the dog usually runs from \$300 to \$500 each.

Special insurance must be considered. When the training is done properly by an experienced person, there is little fear of civil suits against the department. Although the handler should be responsible to his department for the actions of his dog, he should not be held responsible to the individual, but he can be sued. The department should carry insurance for itself and the handler, unless it is large enough to feel it is self-insured against civil suits.

After considering the cost, a police department should consider what will be gained by the use of the dogs. This is closely linked to the particular crime problems confronted. In cities where muggings, purse snatchings, burglaries, armed robberies, and assaults against women are prevalent, the dogs will serve more effectively than in the areas where "White Collar crimes" constitute the greatest problem. They should be assigned to those areas with the highest crime rate and during the peak hours. They should be made mobile. Many larger departments utilize dogs in special tactical squads. The handlers wear civilian clothes and drive unmarked automobiles. These teams are assigned to the high crime areas and are usually equipped with walkie-talkies for inter-communications.

OVERALL ADVANTAGES:

1. Because of their superior sense of smell and hearing, the dogs are able to seek and locate a hidden person very rapidly, where a large number of police officers very often fail, resulting in man-hours saved and a higher rate of arrests.
2. Canines are capable of being taught an amazing number of duties and are able to combine their many talents to achieve a specific purpose. They are fast and agile, enabling them to overtake and stop a suspect much easier and quicker than the police officer.
3. Although classed as a use of force, dogs will not inflict the injuries of a gun. When properly trained they do not "savagely" a person and under no circumstances will they kill.

4. They are excellent protection for the officer, not only in detecting hidden persons, but in preventing or repelling a possible attack on the handler or other officers. They can be used to guard a suspect while the officer summons assistance or searches a second person.

5. They are useful in dispersing or holding back large crowds at the scene of a disorder. Dogs are not used for crowd control in Washington, D.C.

6. They can effectively trail escaping criminals and be utilized to find lost children or aged and senile persons under the most adverse conditions. The most important advantage, which unfortunately cannot be statistically evaluated, is the deterrent effect they have merely by their presence or even the knowledge of their existence.

FOR GUIDANCE AND HELP OF HANDLERS

OBEDIENCE ON LEAD

INITIAL TRAINING: The initial training requires great care and the handler must be in complete command at all times. It is on this training that the behavior response and control of the finished dog depends.

RELIABILITY: Is an essential characteristic of the potential handler. He must be capable of carrying out what he has been taught in training without strict supervision. He must be a dog lover as well as an efficient police officer.

The successful handler must develop unfailing patience and untiring determination to succeed whatever the task may be and however long it may take.

THE LEAD: The lead should be used to check and not punish disobedience. Nothing is worse than to see a dog cringe when its lead is produced. When it is produced the dog should show pleasure.

DISOBEDIENCE AND FAULTS: Check faults as soon as they occur; never let one pass, they soon develop into disobedience and produce badly trained dogs. BUT, be very careful to discriminate between disobedience and misunderstanding. By punishing misunderstanding, the dog becomes fogged and this simply delays training, because the dog will lose that trust in its handler, which may be there before any useful training starts. Most punishment can be administered by tone of voice. Before any punishment, be sure in your own mind that it is disobedience and not misunderstanding; when it is necessary it must follow the act in a very few seconds. If delays occur the act must go unpunished. It is only on very grave occasions that severe punishment is necessary.

CONTROL: The foundation on which all future training will be built is obedience and it will be a very long time before the handler has that control off lead which he enjoys on it. Because of this control it is possible in these first few weeks to make that foundation sure, but conversely it is possible to spoil good material.

FIRMNESS AND NAGGING: If the handler continually checks his dogs unnecessarily by use of the lead, eventually the dog will not respond. At all times be firm, but do not "nag" or be harsh. Try and put yourself in the dogs place and wonder if being perfectly dumb, you could understand what you tried to teach the dog.

PRAISE: Remember always praise your dog if he has done what he has been told to do. If you continually call him a good dog, it will become a perfectly normal thing with him. Use your rewards sparingly and at the right moment and the dog will soon realize that it means that he has done the right thing, and to receive more praise he will again do the right thing.

ALERTNESS: Remember too, that when out training you must be just as much on the alert as you expect your dog to be. Do not wander, keep your mind on what you are doing, for you can be perfectly sure that unless you are on the alert, your dog's mind will wander to other things, and he remember, must be checked.

DOG'S INTEREST: The whole time your dog is out his brain must be kept interested so you will see that to prolong a lesson to a stage when the dog becomes bored is harmful. It merely retards training and we must strive the whole time to advance it.

FINISH OF LESSONS: When a lesson has been done well, reward, and finish. It may not have occupied as much time as you thought, but in all stages of training always finish with the dog doing well. If a particular difficult stage is met, continue as long as possible, then give the dog something to do which he can do well and easily. Reward him for this and finish. Later, again try the difficult lesson.

DOG'S AFFECTION: The more a dog is taught the easier it is to teach him. Training makes it receptive, but much useful work can be done by the handler simply being with the dog. It increases the dog's affection and general knowledge. It is the former which must be obtained before any difficult training can commence. If it is not obtained before the dog does not have that immediate interest on sighting its handler (which is most necessary) and when serious training begins, the dog gradually develops passive hostility towards the handler. Gain this affection at all costs.

COMMAND: The tone of voice puts into the command what will be reflected in the way which the dog obeys. Words of command need not be uttered in a loud voice, but should be crisp and authoritative. Toneless mumbling will produce sluggish responses from the dog. If commands are given crisply, the response will be equally crisp. It is up to the handler to see that they are.

QUALITIES: Handlers must be keen, alert, firm, patient, kind and above all have DOG-SENSE. All these qualities will be strained to the breaking point in one way and another, but whatever happens, tempers **MUST** be kept. A quick thoughtful action may retard and possibly spoil a dog.

BUILD-UP: The dog's training must proceed along lines so that he "grows up" in his training just as he does in body. Each stage must be built up thoroughly so that it becomes instinctive and between the handler and dog an invisible but unbreakable link. To start with, this link will be visible in the lead, later, affections and confidence will take the leads place.

Remember, AT ALL TIMES

REWARD	Good work
HUMOR	Misunderstanding
PUNISH	Disobedience immediately

LESSON MASTERED: Once the dog has mastered the rudiments of each lesson and understands what to do on word of command, all lessons can be practiced daily. But, all previous lessons must be mastered before proceeding further.

TAKING DOG OUT OF KENNEL

Take dog's collar firmly in left hand and close door.

Slide hand around collar to find ring.

Snap clip of lead over right.

Coming out of kennel the dog is probably frisky, so hold lead firmly with loops over RIGHT wrist taking up slack in lead with left hand. This is the correct way to lead dog while under training.

Where possible take dog immediately to exercising ground. After urination and emptying of bowels, training proper can begin.

During exercise handlers will inspect dog's stool to see that there is : (a) No diarrhea; (b) No worms. If either is apparent it will be properly reported immediately. In the case of diarrhea the dog will be carefully watched for any other unusual symptoms.

WORDS OF COMMAND

The following is a list of words TO BE USED:

The same word must always be used for the position the handler wishes dog to assume, e.g., if the dog is to sit by command "SIT" do not use "DROP".

The actual word used is of little importance. The following are designed to describe positions and to be easy and crisp to say and also with which one can emphasize command.

Exceptive for imperative commands as 'SIT', 'DOWN', 'NO', the word should always be preceded by the name of the dog, e.g., 'JET, COME' with slight pause between name and command. By doing this the handler at once gains the dog's attention before giving it a definite order.

Commands need not be given in a loud voice, indeed should not, but always clear and distinct, putting as much emphasis as possible into the tone.

There must be no question of the dog complying with the handler's requests. They must be commands and obeyed instantly.

NO	DOWN
HEEL	STAY
SIT	COME

There are more command which will be given in the advanced training.

NO

Word of Command NO.

to be used whenever the dog is doing anything contrary to the wishes of the handler.

It can only be taught as and when the occasion arises and there is no set way to teach this.

Whenever the occasion arises give a sharp jerk on the lead and at the same time Command NO.

WALKING TO HEEL ON LEAD

Word of Command HEEL.

Position of dog - standing on left, shoulder opposite and close to handler's knee.

Handler Walks forward at normal pace at the same time saying: (NAME), HEEL. The dog will recognize name and be on the alert, but heel will be meaningless to him.

Any reluctance to follow will be countered by smartly jerking lead any words of encouragement, repeating dog's name at frequent intervals.

Once the dog follows willingly, position will be maintained.

Handler retains lead in right hand, during training.

Frequent halts to be made.

Encouragement given vocally and by the LEFT hand when dog behaves correctly.

Check by use of lead if position is not correct.

Always commence with NAME -- HEEL.

Handler must not let slack lead swing in front of dog's nose.

This exercise should be done at a slow and fast walk, on the run and incorporate "Right" "Left" and "About" turns. Always remember that when the dog is in the correct position to slacken the lead as it is necessary for the dog to leave his position and to experience discomfort as a result, and for this purpose regular loosening of the lead is essential. He will eventually take up his position on the left side of the handler automatically and verbal commands will be omitted. He should then be trained to assume the "SIT" position as soon as the handler halts. This training is described in the next paragraph.

SIT AND STAY

Word of Command SIT STAY

Position of dog - On left of handler, right shoulder into the handler's knee, hind-quarters and paws of front feet only on the ground.

The dog on the lead is standing on the left side of his handler. The handler places his left hand on the hindquarters of the dog and his right hand across the chest to prevent the dog moving away. Under equal pressure from both hands the dog is pushed into the "SIT" position near the left knee of the handler and at the same time the verbal command "SIT" is given. This procedure should be followed until the dog assumes the required position on verbal command only. The handler should ensure that the dog does not sit too far away, or at an angle to his knee.

Should the dog take up an incorrect position it should be stopped and re-introduced to the exercises.

The "STAY" exercise is slowly developed for the "SIT". Once the dog is taught to "SIT" the handler faces it and moves away step by step giving the firm command 'STAY'; at the same time place the right hand (palm toward the dog) in front of the dog. The dog should remain in the sit position. Should the dog change or give any sign of changing his "SIT" position the handler should immediately stop or go back to the dog and impress upon it, by gesture and command to remain sitting. The handler at the outset must only move a few steps away from the dog, this distance can be lengthened when the handler is satisfied the dog will remain in the "SIT" position.

When definite progress is made, in order to strengthen the dogs ability to stay, various distracting movements should be introduced, e.g., handler out of sight, the dog called by various persons, strangers walking around and passing the dog, etc. This exercise should conclude with the handler returning to the dog and not by calling the dog to him.

DOWN

Word of Command DOWN

Position of dog - On left side of the handler, fore and hindquarters on the ground, forelegs extended.

The dog is in the "SIT" position on the left side of the handler. The handler places his left hand behind the shoulders and exerts a downward pressure, at the same time the lead which is in the right hand is pulled down. The command "DOWN" is given as the movement is carried out. This direct pressure, together with the command is repeated if the dog attempts to rise. Once proficient in this exercise, the "DOWN" "STAY" is developed as in the "SIT" "STAY" .

RECALL

Word of Command COME

This exercise is started while the dog is still on the lead and from the "SIT" position. The handler leaves his dog in the "SIT" position and stands in front of the dog at the full extent of the lead, he then gives the command "COME" at the same time giving the lead a sharp jerk and taking several steps backward. The dog must be given plenty of encouragement both verbally and by signs, e.g., good boy, patting your legs with the left hand, etc. Make a great fuss of the dog when he gets to you. When the dog is coming to you freely and willingly in the shortest possible route, and not before you can now begin to teach the dog to "SIT" immediately in front of you on the recall. A longer line can replace the training lead if necessary.

Extreme patience is required in this type of training and under NO circumstances should the dog be punished if it fails to return on command. The dog should eventually realize that when it returns to the handler it is always welcome. If punished for any tardiness the opposite will be achieved and it will become shy of its handler.

To complete this exercise and bring the dog to the correct heel position from the "RECALL". The dog is in the "SIT" position immediately in front of the handler, and the handler has the lead in the right hand and as he gives the command "HEEL" the handler takes a step back with the right foot and jerks the lead and passes it behind his back round to the front again, at the same time patting the left leg with the left hand until the dog is in the correct "HEEL" position.

The exercise must be practiced on the lead until the dog obeys the command "HEEL" without any inducement or guidance from the handler.

MEDICAL MANUAL

The importance and nature of police work places the police dog in a special class, even though among the working breeds of dogs. The number of working hours, the physical exertion and the constance vigilance which must be maintained by the dogs while working is very demanding on the dog's body. Thus, the health and care of the dog is extremely important to the successful accomplishment of the teams function, and every effort must be made to keep the animals in the best possible state of health.

The veterinarian is able to apply his skill and training in his efforts toward treatment, prevention and control of diseases, but, requires the handler's help. The handler must possess a knowledge of those diseases that can seriously affect the health of his animal so that he can immediately report any symptoms to his instructor or veterinarian. The following information emphasizes the handler's responsibility in good grooming and inspection of his dog for his health.

GROOMING AND INSPECTION

Routine grooming and inspection are extremely important events in the life of a police dog. So important in fact that they must be accomplished on a daily basis the year around. With grooming you are helping to keep your dog in good health by proper care of his skin and coat. When inspecting your dog you are looking for signs of illness or disease that may be affecting his health. Although grooming and inspection are different procedures they are considered together because a large part of inspecting is performed at the time of the grooming.

GROOMING

German Shepherd dogs have a double coat; the deeper layer, or undercoat, is composed of soft woolly hair and the outer coat is composed of stiff hair, which is somewhat oily and water resistant. It is important that you brush your dog's coat daily. First, give the dog a good brisk rubdown with your fingers to loosen the dead skin and hair. Follow the rubdown with a thorough brushing. The coat should be brushed twice, first against and then with the lay of the coat. This not only keeps the dog's coat clean and free from foreign matter but also polishes it so that it imparts a healthy glowing appearance. Occasionally you may have to comb your dog's coat, i.e., when losing their winter coat, but in the winter combing should be very limited to avoid tearing out the warm undercoat. Bathing is not a routine

part of grooming, but occasionally a bath may be necessary. The skin of your dog has many glands which produce an oily substance. This substance keeps the skin soft and prevents it from becoming dry and cracked. In addition, it protects the hair coat and makes it water resistant. When a dog is bathed too frequently this natural oil is removed and the skin and hair coat becomes unnaturally dry and the skin may crack and open same to infection. It is best to rely on the advice of the veterinarian as to the frequency of bathing and the type of soap to use. He will generally recommend that a mild soap be used and that the dog be given a thorough rinsing after the bath.

EYES

A dog's eyes are often referred to as the mirror of his body. This means that illness of the body as a whole is frequently accompanied by changes in the eyes. Your dog's eyes should normally be bright and clear with the surrounding membranes pink in color. Symptoms of trouble which you might detect in the eyes include reddish or yellowish discoloration of the membranes and whites of the eye; paleness of the membranes, the presence of whitish or yellowish discharge from the eyes and cloudiness or other discoloration of the clear portion of the eye (cornea).

NOSE

The black pad at the end of your dog's nose is usually shiny and moist. If it is persistently dry and dull it may be a symptom of illness. Other symptoms which you may observe in your inspection include; the presence of a watery yellowish or reddish (bloody) discharge coming from, or caked around, the external openings of the nose; sneezing, snorting and pawing at the nose. Under NO circumstances should you probe into the nose with anything.

EARS

The erect portion of the ear which is most obvious to you is called the ear flap or leather. Leading downward from the base of the ear flap is the ear canal. The portion of the canal which you can see with the un-aided eye is the vertical canal. There is a deeper portion which you cannot see which is called the horizontal canal. Small quantities of brownish wax are frequently seen in the vertical canal and are normal. The presence of reddish discoloration,

swelling or large amount of discharge in the ear canal are abnormal and should be reported. Other symptoms which you may observe associated with the ears include a foul odor from the canals, shaking of the head, holding the ear flap down, holding the head to one side, twitching the ear, scratching or pawing at the ear, and pain when the ear is touched. You will be instructed on how to clean your dog's ears during lectures. You must never probe down into the ear canal with any object.

MOUTH

When the handler looks into the dog's mouth, there are numerous things that need to be checked. Normally the gums and inner aspect of the lips are a healthy pink in color. The teeth should be firm and shining white in color. Symptoms of illness to look for include paleness of the gums and membranes, redness and bleeding of gums, sores of various types, persistent drooling, bloody saliva and a foul breath. Loose and broken teeth, tartar accumulations on the teeth and foreign objects lodged between the teeth and other conditions that should be reported. The handler should also take notice of any gagging or pawing at the mouth.

SKIN AND HAIR COAT

Under normal conditions the hair coat of the dog should have a glossy appearance if he is well fed and well groomed, and the skin should be soft and pliable. The hair coat is subject to changes in appearance when the climate and season change. The undercoat is thicker and more prominent in cold climates or seasons; shedding is more noticeable in hot climates or seasons. These changes in the dog's coat are normal. The following conditions are indications of skin trouble: reddening, moist discharges, scabbing, scratching, shedding that is abnormal for the season or climate, loss of hair in one of several spots, dryness, and loss of pliability. The handler should always watch for fleas, ticks and lice.

FEET

Proper care and attention must be given to the police dog's feet if the animal is to carry out his duties effectively. The handler must inspect the dog's feet for foreign objects that may be caught in the pads or hair, for cuts and bruises, and for abrasion of the pads. The dog will usually keep his nails worn to the proper length so that when he stands the tips of the nails do not touch the ground. Some times, however, the nails become too long and interfere with his work. This should be reported as should any nails broken or split.

Attention should be paid to the dew claws which may grow until they curve back into the dog's leg. The handler should notice any lameness, as this is a symptom of a foot problem.

LIMBS

The legs of the dog, as well as the feet, should be carefully checked. Wounds, swellings, and sores of various kinds may be found. Lameness is also a common symptom of problems in the legs and should be reported at once. On the forelegs there is normally an area on the outer side of each elbow which is known as the callus. This is an area of hairless thickened skin which is about an inch in diameter. When the dog lies down or gets up a pressure and abrasive action is exerted on the callus and it may become inflamed. If this happens it should be reported to the veterinarian.

GENITALS

If the dog is a male there are certain things to look for in the genital organs. The penis is located in a fold of skin known as the prepuce or sheath. Normally there is a small amount of greenish-yellow discharge from the prepuce which the dog removes while cleaning himself. Should this discharge be present in large amounts or in increased amounts, it should be reported. The penis is subject to a number of injuries and the appearance of blood from the prepuce should be reported immediately. The scrotum is the pouch of the skin in which the testicles are located; the handler should note any swelling, reddening or scabbing of the scrotum.

ANAL REGION

The last portion of the dog's digestive tract is called the rectum and the opening from the rectum to the outside of the body is called the anus. On either side of the rectum near the anus is a small gland known as the anal gland. This gland is frequently a source of trouble in the anal region. The handler should look for any swelling and reddening of the skin in the area or of anus itself. The dog may turn to bite at the area or may slide along the ground while in a sitting position.

ATTITUDE

The dog's attitude is the one of the best indications of his general state of health. Through the handler's close association with, and the knowledge of his dog, he can

readily detect a change of attitude. If the dog begins to show undue nervousness, loss of vitality and energy, an increased desire for sleep, quick tiring or inattention while on duty or in training, the handler should report this immediately.

BODY FUNCTIONS

This refers to the natural functions which are continuously carried on by the body; breathing, digestion, formation of waste products, etc. Disturbances in these natural functions are accompanied by many symptoms. The handler's alertness in detecting them is extremely important. The handler may notice an increase or decrease in appetite or thirst or a change in the manner of breathing such as an unusual amount of panting. Vomiting may occur, or there may be a change in the nature of the stool as evidenced by a very soft or watery stool, blood may occur in the vomitus or in the stool. Whenever possible the handler should watch his dog when the animal is urinating, or having a bowel movement. By doing so the handler may be able to detect blood in the urine or that his dog is having difficulty with the passage of urine or a stool. If blood is present in the urine the handler should notice whether it is the first or last portion of the urine or whether it is distributed throughout the entire passage. The handler should pay attention to the frequency of urination and bowel movement and report increases or decreases in the frequency of either.

TEMPERATURE

A dog's body temperature can readily be determined and is one of the best indications of the animal's state of health. Normally the body temperature is within the range of 101.5 to 102.5 degrees. Variation from this range frequently indicates an illness of some type, however; some variation may not be abnormal, e.g., following exercise of agitation. The handler should always consult his instructor or the veterinarian when variations from the normal are detected. A dog's temperature is always taken rectally and the thermometer should be left in the rectum from 2 to 3 minutes before the reading is taken.

COMMON DISEASES OF DOGS

The causes of diseases that may affect dogs are many and varied. The following paragraphs will be limited to a few of the common and important diseases of dogs. In dealing

with them, the veterinarians concern is not only in treating the infected animal but also in preventing and controlling its spread. In some cases these diseases might be spread to humans and the veterinarian is very interested in preventing this. The veterinarian is able to apply his skill and training in his efforts toward treatment, prevention and control of diseases, but, he requires your help. He relies heavily on your detection of symptoms and on your reporting them quickly.

CANINE DISTEMPER

This widespread disease is caused by a virus. It is very serious, highly contagious and it is very often fatal. It is found mostly in young dogs, but it may affect an animal of any age. Canine distemper is usually spread from one infected dog to another through the air. Many of the tissues and organs of the body (involving the brain, lungs and intestines) are affected by the virus which causes canine distemper. An infected animal may show the following symptoms: yellowish discharge from the eyes and nose, coughing, fever, loss of appetite, vitality, also, diarrhea and convulsions. Immunization will usually prevent canine distemper.

INFECTIOUS CANINE HEPATITIS

This is also a widespread virus disease of dogs and as with distemper it is seen most commonly in young dogs but may affect animals of all ages. The majority of infected animals recover after a long period of recuperation. Infectious canine hepatitis is spread from one animal to another through contaminated feeding and drinking pans and through the urine of infected dogs. Primarily, this virus affects the blood vessels and the liver. Symptoms are fever, loss of vitality and loss of appetite. Immunization is used to prevent this disease.

LEPTOSPIROSIS

Bacteria causes leptospirosis a disease fairly common in dogs. Animals other than dogs can be infected and it can be transmitted to man. It is a serious disease and many infected dogs die. Leptospirosis is spread through the urine of infected animals; dogs and rats are common sources of infection. In a dog with leptospirosis, the stomach, liver kidneys and intestines are some of the organs of the body which are infected most. Symptoms may include muscular stiffness and soreness, fever, reddening of the membranes of the mouth and eyes, loss of appetite, vomiting and diarrhea.

As with distemper and infectious canine hepatitis, immunization is the method used to prevent the disease. To control the spread of leptospirosis emphasis is placed on keeping the kennel area free of rats, since these rodents may be carriers of the disease. The possibility of human infection with leptospirosis points out the need for personal hygiene when handling dogs. Since there are several diseases which can be passed from dog to man, the handler must always wash his hands thoroughly after handling his dog.

RABIES

This disease, sometimes called hydrophobia, is one of the most serious disease of men and animals. It is caused by a virus and affects all warm blooded animals. Some countries of the world are free of the disease, but in most, including the United States, it is still a problem. It is spread through the saliva of infected animals; for this reason, it is usually associated with a bite from an infected animal. With the possible exception of bats all infected animals die. In an animal the nerves, spinal cord and brain are the parts of the body which are most affected. Symptoms of rabies may include a sudden change of disposition, excitement, difficulty in swallowing water or food, paralysis and coma. Dogs with rabies often have paralysis of the muscles in the jaw and the lower jaw will remain partially dropped. Such an animal may appear to have something lodged in the mouth or throat. It is always wise for the handler, with an animal with such appearance, to have the veterinarian examine rather than attempt an examination himself. Because rabies is spread through the saliva of an infected animal the handler should report any wounds he or his dog receive by being bitten; this includes handlers who are bitten by their own dogs.

PARASITIC INFESTATIONS

Not only contagious disease but also parasitic infestations can materially affect the health of a dog. There are many diseases of dogs which are caused by animal agents known as parasites. These parasites all have one thing in common: they depend upon animals, such as dogs, for a livelihood.

Some parasites live on the outside of the dog's body or in the skin. These are called external parasites. Others live inside the dog's body and are called internal parasites. Many of these live in the intestines, and one internal parasite lives in the dog's heart.

All parasites are harmful to the health of the dog and some can spread diseases to the dog or the handler. They should all be controlled as quickly as possible.

When speaking of parasites, the term "life cycle" refers to the stages of development in the parasite's life from the beginning as an egg or larva (immature form) to the time it becomes an adult. A knowledge of the life cycle is extremely important in the control of parasites.

EXTERNAL PARASITES

The parasites discussed here are all small insects. These parasites, which live on and in the skin, cause damage by sucking blood or by eating at the dog's tissues. In doing so they produce an irritation and the dog responds by biting and scratching himself. This in turn may cause further damage and aggravate the dog's condition.

TICKS

These small parasites are very common in many parts of the United States. They suck the blood from the dog and, when in large numbers, may cause a serious loss of blood. Ticks can most often be observed standing still on the dog's body with their heads buried deep in the skin. Ticks are capable of spreading diseases through their bites, including human diseases. The handler should exercise care when handling ticks and should receive instructions from the veterinarian or veterinarian office before trying to remove them. Ticks do not spend all of their lives on the body of the dog and may be found in bedding or in cracks in the floors and sides of the kennel. They may be present in the grass and bushes of the training and working areas. Control therefore does not only depend on treating the individual animal. It may also be necessary to treat the kennels and training and working areas with insecticides. Treatment with insecticides must be accomplished only with the approval of the veterinarian, as many chemicals can be harmful to dogs.

FLEAS

These pests torment the dog, irritate his skin, and spread diseases. They are most often observed as they crawl or hop very rapidly through the dog's coat of hair. They are difficult to control because they do not spend all of their time on the body but, live in bedding and in the cracks of the kennel. Control depends upon repeated individual treatment and kennel sanitation.

LICE

There are two types of lice which affect dogs: biting lice and sucking lice. Biting lice live off the dog's tissues, while sucking lice suck their blood. Both produce great irritation. Biting lice may be observed crawling over the skin and through the hair. Sucking lice are usually immobile, and they stand perpendicular to the skin. The eggs of lice are called nits and are found as small white or gray crescent shaped objects fastened to the hairs. Lice, unlike fleas and ticks, can live only a short time when they are not on the dog's body. Control, therefore, depends more on the treatment of affected animals.

MITES

There are several types of small insects called mites which affect dogs and produce a condition known as mange. One of these, the ear mite, lives in the ear canals and causes a severe irritation. Affected dogs not only scratch at the ears but, may hold their heads to one side and frequently shake their heads. The ear canals usually contain a large amount of dark colored discharge. Ear mites are small but are visible to the naked eye as tiny white crawling specks. Other mites which affect the dog live in the animal's skin. These mites are too small to be seen with the naked eye and can be seen only with the aid of a microscope. The control of mites depends on the treatment of the animal.

INTERNAL PARASITES

The parasites which live in the body may cause considerable damage by irritating the tissues, constantly robbing the body of blood or essential parts of the diet or by interfering with a specific body action. Of the internal parasites discussed here, only a part of the life cycle is spent in the body of the infected animal. The control measures for these parasites are based largely on a knowledge of that part of the life cycle which is spent outside the body. It is only by leaving the body that these parasites can spread from one animal to another.

HOOKWORMS

One of the most harmful parasites that lives in the dog's intestines is the hookworm. These parasites are small and thread-like, only 1/2 to 3/4 of an inch in length. They suck blood and also cause blood loss by grasping and tearing at the intestinal wall with the many hooks in their mouths.

In the life cycle of hookworms the adult lives in the dog's intestines, and eggs are produced by the female. The eggs are passed in the dog's stool. Immature hookworms (larvae) develop from these eggs, and these larvae can then infect the same dog or another dog. The larvae gain entrance to the body by penetration of the dog's skin or by being swallowed as the dog licks the ground or himself. After the larvae gain entrance to the body they pass directly to the intestine, or through the body tissue, to the lungs. Those reaching the lungs are coughed up and swallowed, thereby reaching the intestine. Once they are in the intestine they develop into adult hookworms and the life cycle begins again.

Dogs infected with hookworms may have a variety of symptoms, depending on how severe the infection is. Membranes of the mouth and eyes may be pale, stools may be loose and contain blood. The animal may lose weight. By using a microscope the veterinarian makes a diagnosis of the disease when he finds hookworm eggs in the animal's stool.

Control measures consist of treating the individual animal and to a large extent on good sanitation. The handler who has a knowledge of the hookworm's life cycle should understand the importance of keeping the kennel area and training grounds free of stools, since the stools from infected dogs are the source of infection for healthy animals.

ROUNDWORMS

These parasites also live in the intestine. They are much larger than hookworm and vary from 2 to 8 inches in length. The life cycle is similar to that of the hookworm, however, the eggs, which are passed by the adult roundworm, do not develop into larvae until they have been swallowed by a dog. Adult roundworms cause trouble by robbing the infected animal of essential nutrients in the diet. The larvae produce an irritation as they travel through the lungs.

Symptoms shown by an infected animal may include vomiting, diarrhea, loss of weight and coughing. As with hookworms the diagnosis is made by finding the eggs in the stool. Occasionally adult worms may be vomited or passed in a stool, in which case they may be seen by the handler. Control measures depend upon treating the individual animal and upon good sanitation in the kennel area.

WHIPWORMS

These intestinal parasites are smaller than roundworms but larger than hookworms. The life cycle is very similar to that of the roundworm, however, the larvae do not travel to the lungs before coming adults in the intestine of the infected animal.

Symptoms of infection may include diarrhea, loss of weight, and paleness of the membranes of the mouth and eyes. The diagnosis is made by finding the microscopic eggs in the stool. Control measures depend upon treating the individual animal and upon good sanitation in the kennel area.

TAPEWORMS

These worms are long, flat and ribbonlike in appearance. They have many segments and a head. The tapeworm uses its head to attach itself to the wall of the intestine. There are several kinds of tapeworms that may infect the dog's intestines, only one of the most common ones will be described here.

The life cycle of the tapeworm is rather complex. After the eggs have been passed in the dog's stool, they are eaten by the larvae (immature form) of the dog flea, the external parasite previously described. The larvae of the tapeworm develops in the flea, and when the adult flea is eaten by the dog, the tapeworm larvae gains entrance to the dog's intestine where it develops into an adult tapeworm.

The symptoms produced by the tapeworms may not be too noticeable. They may include diarrhea, loss of appetite and loss of weight.

Some of the tapeworms may pass from the dog through the bodies of rabbits, mice or squirrels (instead of the flea) during their life cycle. Dogs become infected by eating a rabbit or other animal which contains the tapeworm larvae.

Often the eggs of the tapeworm cannot be detected by the veterinarian during stool examinations, many times however, segments will be passed by the infected dog. These segments may be seen in the stool or among the hairs in the dog's anal region as small white objects about 1/4 of an inch long, and they may be moving in a rhythmic manner.

Control measures include treatment of an infected animal, good sanitation in the kennel area, control of fleas and not allowing the dog to eat animals which are likely sources of infection.

HEARTWORMS

Unlike the other internal parasites that have been described, the adult heartworm is found in the heart and lungs, rather than in the intestines. The heartworm interferes with the heart action and circulation of infected dogs. The adult worms are threadlike in appearance from 60 to 11 inches long.

In the life cycle of the adult worms in the heart produce larvae which are called microfilaria. These microfilaria circulate in the infected animal's bloodstream where they may be picked up by mosquitoes the insect responsible for the spread of the heartworm parasite from one dog to another. The larvae continue their development in the mosquito and then after a period of time are infected back into the dog's tissue when the mosquito again feeds on the dog. The microfilaria gradually travel to the heart of the dog and develop into adults, the life cycle is ready to begin again.

Dogs infected with heartworms may exhibit coughing, loss of weight, difficult breathing and a quick loss of energy. The disease is diagnosed by the veterinarian when he finds microfilaria during a blood test. Treatment is then given to kill the adult worm and the microfilaria.

Control measures consist of treating infected dogs to prevent them from serving as sources of infection, and controlling mosquitoes in the area.

FOREIGN OBJECTS IN THE MOUTH

A police dog will occasionally get a stick or other foreign object in his mouth or throat. When this occurs, the dog may cough and gag, have difficulty in swallowing, paw at the mouth and drool saliva. Should these symptoms appear, caution should be exercised because an animal with rabies may show similar symptoms. If the dog is obviously having great difficulty in breathing and the handler can see the foreign object, he should attempt to remove same. In all cases, whether the foreign object has been removed or not, the veterinarian should be contacted immediately.

POISONING

The handler can usually prevent his dog from becoming poisoned. In the approach to all types of diseases and injuries, prevention is the desired goal. With the dog under careful control it should be easy to prevent him from eating anything except his normal ration. If food material of any kind is discovered in a place where the dog can find it, it must be regarded with great suspicion and the handler should not permit his dog to eat it. Such a discovery might suggest to the handler the possibility of an attempt to poison a dog. A possible source of poisoning for dogs is rat poison. There are several types of rat poison and many of them are harmful to dogs.

The symptoms of poisoning are variable and may be similar to those of many disease conditions. Unless the handler is certain that his dog has eaten a poisonous substance, it is not wise to treat him for poisoning. If, in spite of all the handler precautions his dog has eaten poison, immediate action is necessary. The handler should notify the veterinarian at once.

OVERHEATING

Overheating represents a very serious medical emergency in which immediate action by the handler may be necessary to save the animal's life. Overheating results when a dog is unable to eliminate its body heat rapidly enough. In the summertime, or in hot climates, overheating is seen occasionally in working dogs. Overheating may even occur at night. In hot weather a police dog may become overheated during training and when he is being transported or left in the car for a short time.

Symptoms of overheating may include vomiting, weakness, unsteady gait, difficulty in breathing or labored breathing, convulsion and collapse. There is a very high body temperature of 105 degrees or more.

First aid treatment consists of carrying the animal as rapidly as possible to the nearest shade and of trying to lower the body heat of the animal quickly. Body heat can be lowered by running and sponging cold water over the head, body and legs. If a stream, or body of water, is available the animal should be immersed. The handler must be sure that the dog's head is above the water at all times so that water cannot get into the lungs. If ice is available it should be massaged over the body and legs. Ice packs may be placed on the inside of the forelegs near the body or on the inside of the dog's thighs. Large blood vessels are close to the surface in these areas and body temperature can be rapidly lowered by this means. If the animal must be moved more than a few yards to the shade or to the treatment area, he should be carried by his handler, or transported in a vehicle. Walking or running him only serves to increase the overheating problem. To prevent overheating: training and vigorous exercises should be kept to a minimum in very hot weather, frequent rest periods should be allowed.

GASTRIC DILATATION-TORSION COMPLEX IN THE DOG

Simple gastric dilatation occurs in all canine breeds and at any age, but most frequently in the young puppy after overeating. Gastric dilatation complicated by a torsion (the twisting of an organ upon itself or around its long axis) of the stomach occurs most frequently in large, deep-chested dogs. Gastric torsion has also been reported in the dachshund and the pekingese.

Gastric torsion can occur at any age and is more common in the male than in the female, as well as in the older large-breed dog. The frequent occurrence of gastric torsion in certain breeding lines suggests there may be a hereditary predisposition for this disorder. Seasonal incidence reports vary from increased frequency in warmer weather to year-round-occurrence.

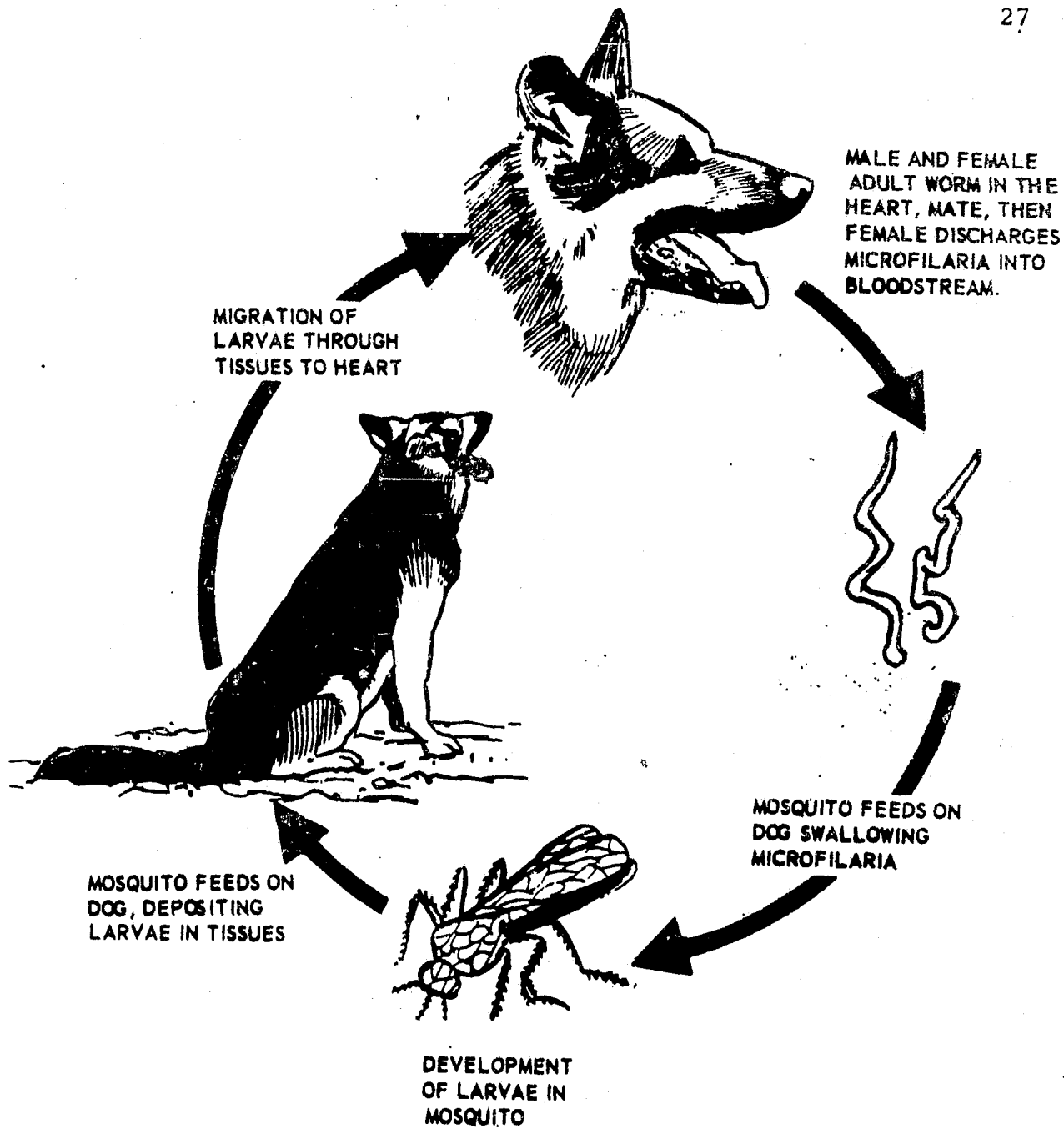
Many factors are believed to cause gastric dilatation. The most common are emesis (vomiting), parturition (giving birth), pica (ravenous appetite), abdominal surgery, post-prandial (occurring after meal) exercises, and anatomic factors such as in deep-chested breeds, and splenic rotation. As gastric dilatation is thought to precede gastric torsion, all of the factors causing gastric dilatation may also cause gastric torsion.

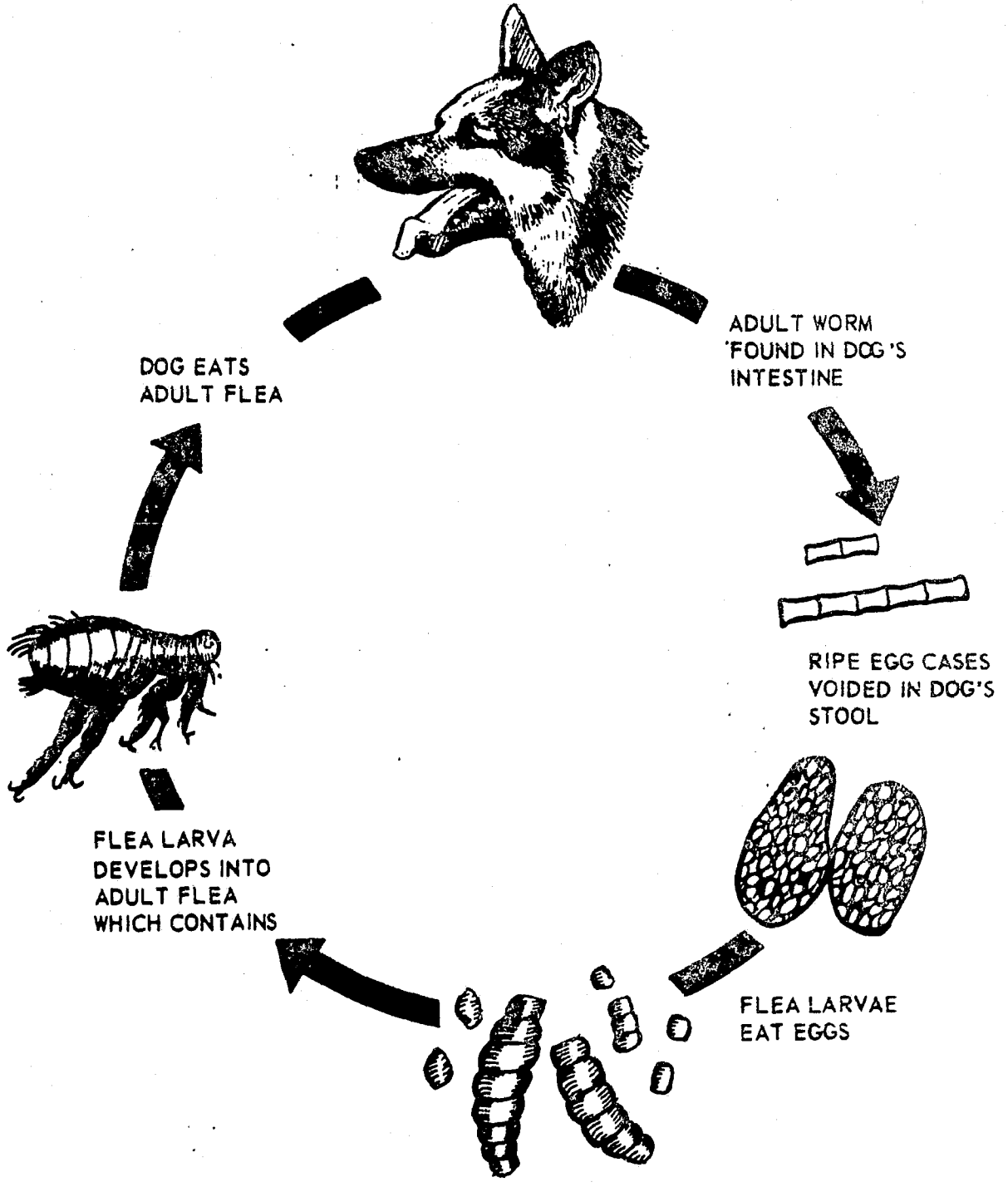
The clinical signs of gastric dilatation are a distended abdomen, stomach pain, restlessness, and excessive salivation. Gastric dilatation with torsion is characterized by abdominal distention with tympany (bell-like percussion), and retching with an inability to vomit.

The mortality rate of gastric dilatation-torsion is quite high. The most significant factor in preventing the death of an affected animal seems to be the interval between the onset of signs and the vigorous initiation of therapy. Owner education is thus a prime prerequisite to lowering the mortality rate.

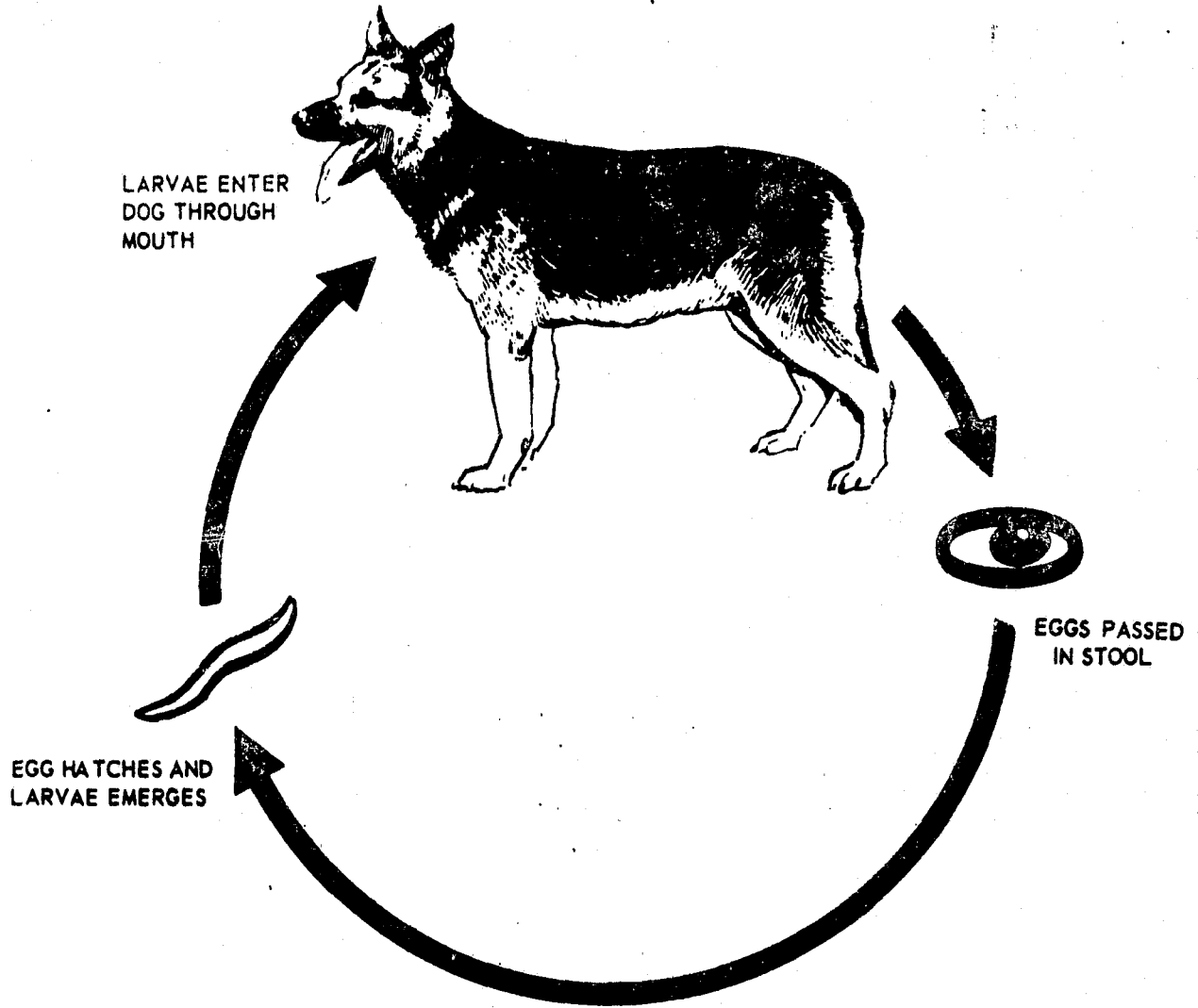
In order to help prevent this condition, an animal owner should avoid feeding a very large meal with lots of water, and the animal should not be allowed to exercise for at least two-three hours after a meal. Some dogs may need two or three meals a day in order to eliminate pica, which will in turn reduce the amount of air taken in between each bite.

In summary, gastric dilatation-torsion complex is a life-threatening emergency and the death of an animal is usually associated with a pet owner's slowness in seeking professional help or his failure to recognize the clinical signs.

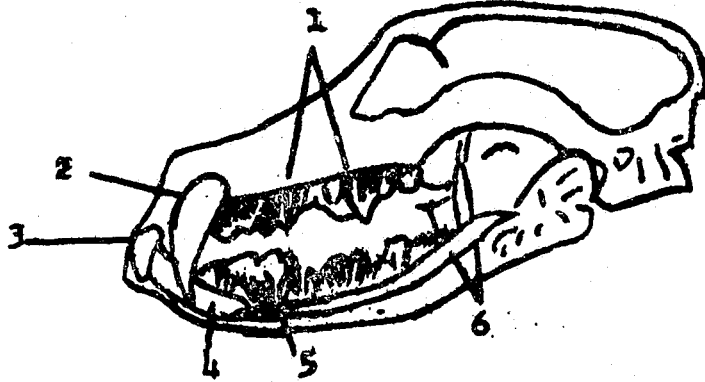




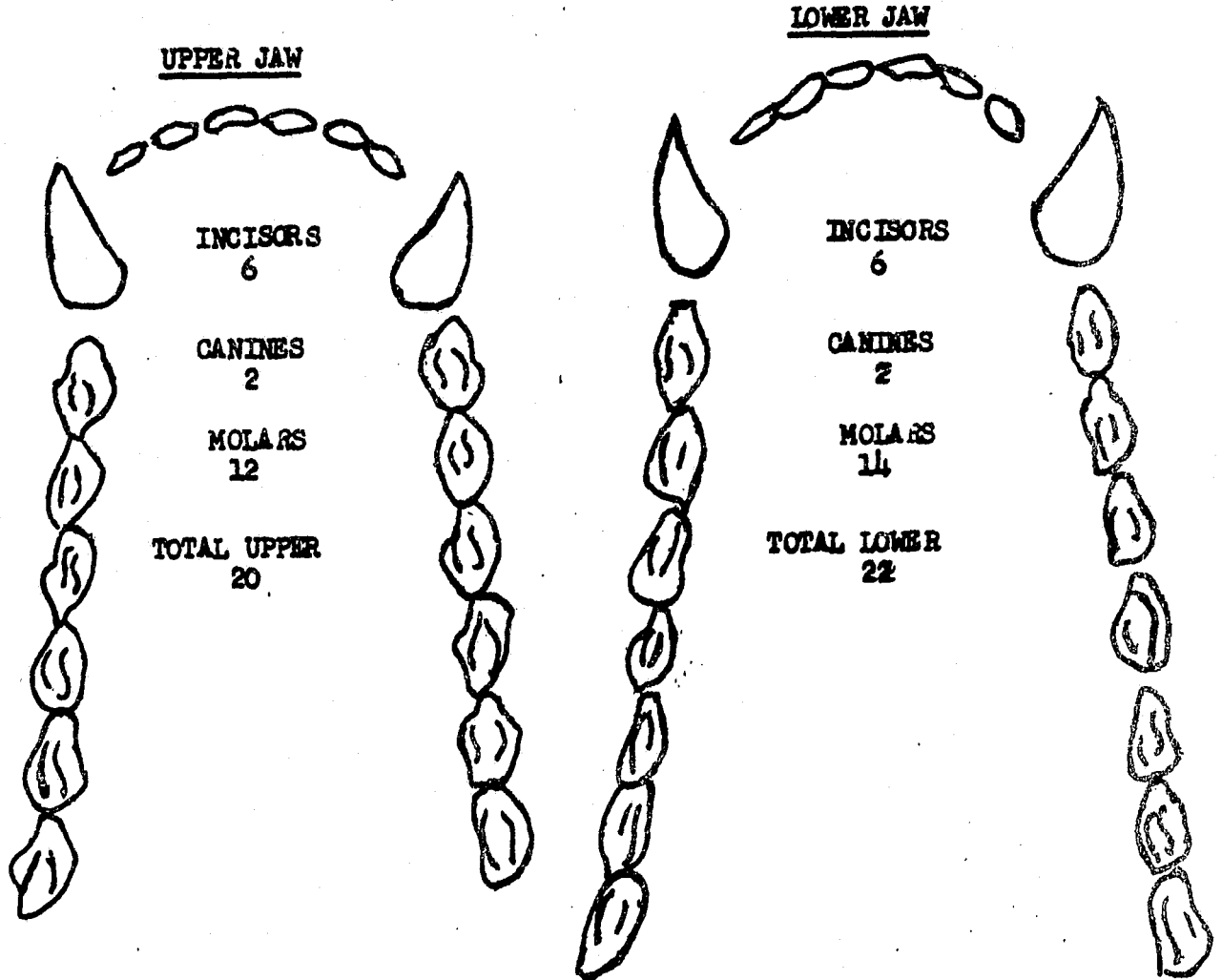
Indirect life cycle of tapeworm.



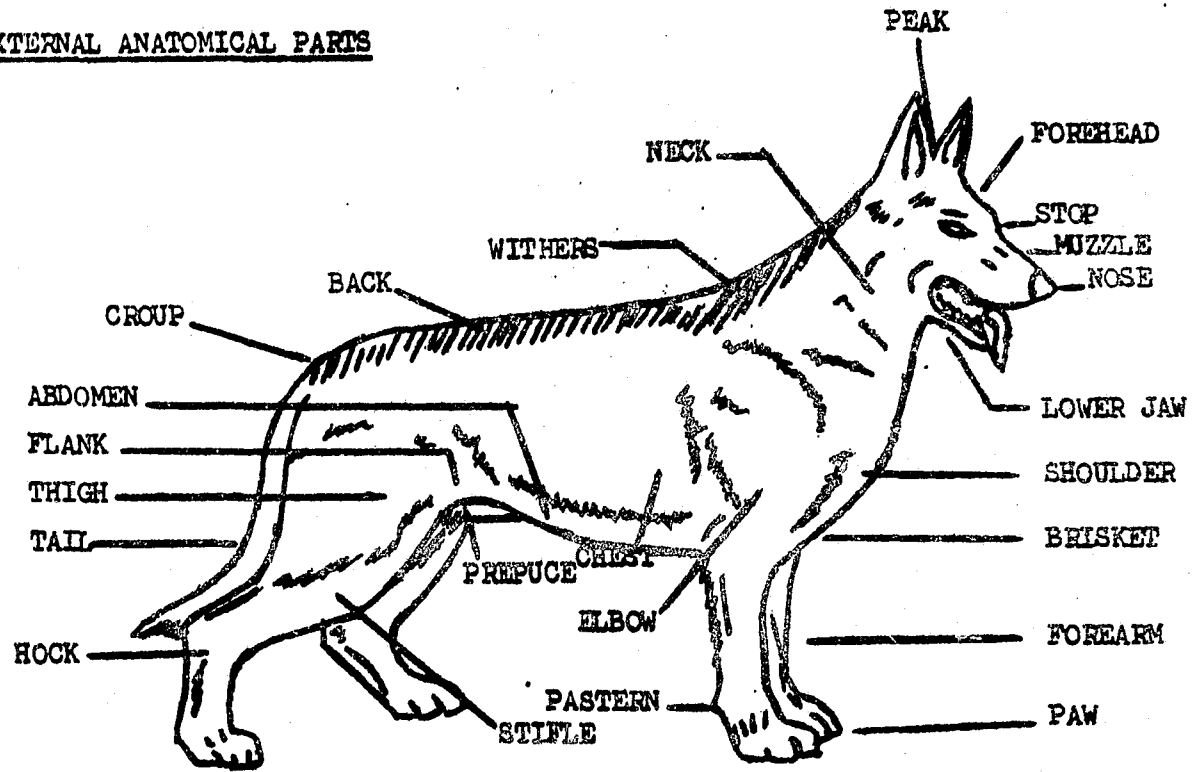
Direct life cycle of intestinal parasites.



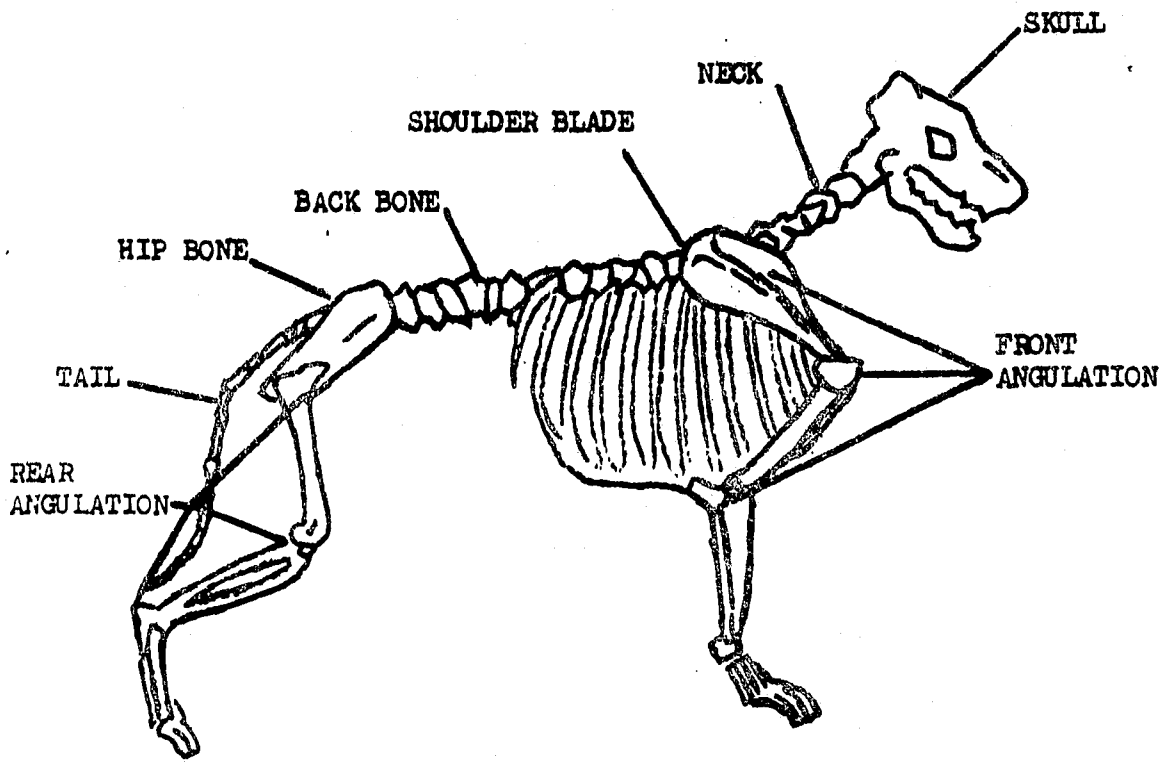
1. Laniary tooth of the superior maxilla
2. Fang tooth of the superior maxilla
3. Incisors
4. Fang tooth of the inferior maxilla
5. False molar
6. Laniary tooth of the inferior maxilla



EXTERNAL ANATOMICAL PARTS



SKELETON OF GERMAN SHEPHERD DOG



AGILITY

Agility, along with obedience, is among the most important phases in the early stages of Police Dog Training. It is felt that a great deal of handler/dog confidence is developed on the agility course. In the fourteen week training course at the Metropolitan Police Department the principles of agility phase of our training program is to accomplish the following:

1. To teach a dog to respond to "jump" or "up" on command (and only on command).
2. To develop confidence as well as muscles.
3. To prepare a dog for the eventual time he may be required to deal with an obstacle in pursuing a subject. Or, to handle an object/obstruction in the performance of a particular job, e.g., entering a window.

In teaching a dog to jump it is felt that first he must be shown exactly what will be required of him and on what command he will respond, i.e., word association.

BOARD JUMPS

Early in training a series of small board jumps are set up on the obedience/agility field. The jumps are graduated in height from one foot to four feet and painted a LIGHT colored (color is important as it must be obvious in vision). While the dog is heeling he is directed to the lowest jump. With no preparation the dog is walked to the jump and the handler, holding the seven foot lead in his right hand, strikes the center of the lead (underneath) with his left hand, palm up, and virtually lifts the two front feet of the dog over the jump and at the same time he gives the voice command of "up" which should be high pitched in sound. When the dog has cleared the jump and his four feet are about to touch the ground the handler reverses his left hand (placing same on the top portion 'in the center') and commands the dog to heel. The above basic exercise is repeated with the one and two foot jumps for several days, along with regular obedience work, remembering that the dog is not to anticipate the jump. He is to jump on command and remain at the heel position after the jump (always remember to praise after each exercise). The jumps are done on the move and later the dog will be required to sit in front and wait the command prior to jumping the obstacle.

LADDER CLIMB-CAT/WALK

During the same period, early in training, the dog should be exposed to the other obstacles on a police department agility course. Ladder climbs, such as the ladder to the catwalk should be experienced early in training and improved upon during the entire course. If trouble is encountered in getting a dog up a ladder climb, as on the catwalk, the dog could be taken to the opposite end of the catwalk where the down ramp is located and walked up the ramp and down the ladder. After repeating this several times the dog usually gets the idea. In any climbing exercise the dog should be verbally encouraged by the handler with the lead held short and the handler beside the dog if possible. Once the dog starts the climb the handler should not stop the dog until he has reached the top of his objective.

SCALING WALL

A scaling wall should be adjustable and after the dog is jumping the four foot hurdle (discussed previously) he should try the scale and the same procedure used in jumping should be utilized. Later in training the dog should be commanded to "climb". There should be a finish to all the obstacles. After clearing any obstacle the dog should be returned to the finish position.

BROAD JUMP

The broad jump should also be taught early in training, starting with two or three sections spread out to cover about three feet. The dog is left in a sitting position, on lead and in front of the jump, and the handler with lead in hand walks to the other end of the jumps and the dog is called. The lead, still in hand, is tightened and the left hand again is struck under the seven foot training lead which lifts the dog over the broad jump. When the dog's four feet come in contact with the ground the lead is tightened and the dog is returned to the heel position. The same procedure is repeated until the dog jumps on command and returns to the heel position. Later in training when the lead is removed the dog will usually step between the spaces in the broad jump and often fails to clear the entire obstacle. Several things can be tried to correct this situation:

1. Move the jumps closer together.
2. Place a two foot hurdle in the middle of the broad jump (this will make the dog jump higher to clear said obstacle).

3. Return to the use of the lead and have the dog complete the exercise correctly.

TUNNEL OR PIPE

The tunnel or pipe presents some problems at times and most dogs reject this exercise early in training, but after they have been properly introduced to the crawl through the pipe they are then anxious to please the handler and complete the exercise on command. The dog is placed in the down position at one entrance to the pipe with the handler at his side. Prior to the aforementioned the trainer has already placed a 30 foot web lead through the pipe so the snap end is in front of the dog. The snap of the 30 foot web lead is attached to the dog by the handler and the dog is commanded to crawl. When the command is given the trainer, on the other end of the pipe and the 30 foot web lead, pulls on said lead, not giving up to resistance on the part of the dog which is usual at first, making sure the dog continues through the pipe. When the dog's head has started through the pipe the handler runs to the other end where the trainer is and assumes control of the web lead from the trainer and the handler then finishes pulling the dog through the pipe and praises the dog for doing said exercise.

CONCLUSION

A good agility course should be:

1. Functional and not just fancy.
2. In good repair and painted as stated before in a light color.
3. Contain the types of obstacles which the dog may encounter during his actual tour of duty on street patrol.
4. All ladder climbs should be interchangeable in rungs so the dog will not get used to just one kind and meet the various types which are used on assorted ladder types.

SENSE OF SMELL

The nose is the dogs most important weapon. Because a dogs sense of smell is so much more highly developed than a mans, he can be used for tracking by the direct scent of the human body, by ground scent and additional scent. (See chart) It has been found by experiment that if the olfactory nerves in a new-born pup are cut, the dog will die because he cannot find the way to the mother's teats for food. Newborns are temporarily blind, therefore they move solely by scenting. A dog lives in a world of smells and quickly learns to discriminate between them. Consequently, a police dog brought to the scene of a crime can pick up and follow a ground scent, or can quickly search a wide area, and will disclose persons (or property) hiding in the vicinity by picking them up by direct scent, even if they are concealed in dense vegetation, or in trees. Equally good results can be obtained in the searching of large premises of warehouses or factory areas. Darkness is really no handicap for this type of dog work. This quality is also of the greatest value on patrol. The dog is trained to give warning to his handler, of persons whose presence in the vicinity would not otherwise be revealed. With the assistance of his dog, a handler is in a position to investigate and make an arrest when a large number of policemen, alone, might fail.

TRACKING

Tracking is one exercise that a dog cannot be made to do. A dog must track because he wants to. The technique of teaching a dog to track is by stimulation and incentive.

Stimulation is induced by the tone of voice. Incentive is given by praising, and correctional type of voice tone when the dog drops an article without command. Another incentive when teaching the dog to track is to lay a short track and allow the dog to see it laid. Proper handling of the tracking line must be accomplished by the handler. It should always be handled lightly, never jerking or pulling the dog about. If the dog goes to the full length of the line, a steady holding pressure should be used. If the line is jerked the dog will invariably lift its head. When tracks are first laid, they should be of short length and time duration. A heavy scent pad should be laid, gradually becoming lighter as the dog advances in talent. In the first stages, the handler should always see the track laid and know as near as possible, where the turns are and where articles are dropped. A gradual increase of time and distance of the track can be made as the handler and dog learn to work together. However, both should not be built at the same time. The existing conditions will determine the length and time of track during training. The type of terrain will also be taken into consideration.

In a dogs nose are olfactory nerves which are much more sensitive than mans. Periodically, during a track, a dog will, by nature, lift its head and clear these olfactory senses to combat nasal fatigue. The type of surface the dog is tracking on will affect the length of time it takes for nasal fatigue to set in.

When laying a track, the "criminal" should never place an article on a turn. The dog should be given room to cast when losing the track on a turn. The handler should never stand on a turn when the dog is tracking. It reduces the dogs chances of picking up a clean track.

When placing articles on a track, they should always be put in the line of the track. Large ones should be used at first. The articles should vary (wood, paper, rubber, cloth, etc.).

Tracking must be a coordinated effort by dog and handler. The handler must acquaint himself with the signs of indication his dog gives. He must learn to handle the line properly and learn to use his voice for control and stimulation.

During training, avoid putting a man on the end of a track all the time. Vary your condition of tracking by placing other objects, because, it will tend, after a time, to not only make a dog track too fast, but will probably cause him to miss a turn, or drop an article, and also tends to make the dog lift his head to "air scent" instead of keeping his nose down, which is a requirement if the dog is to track successfully.

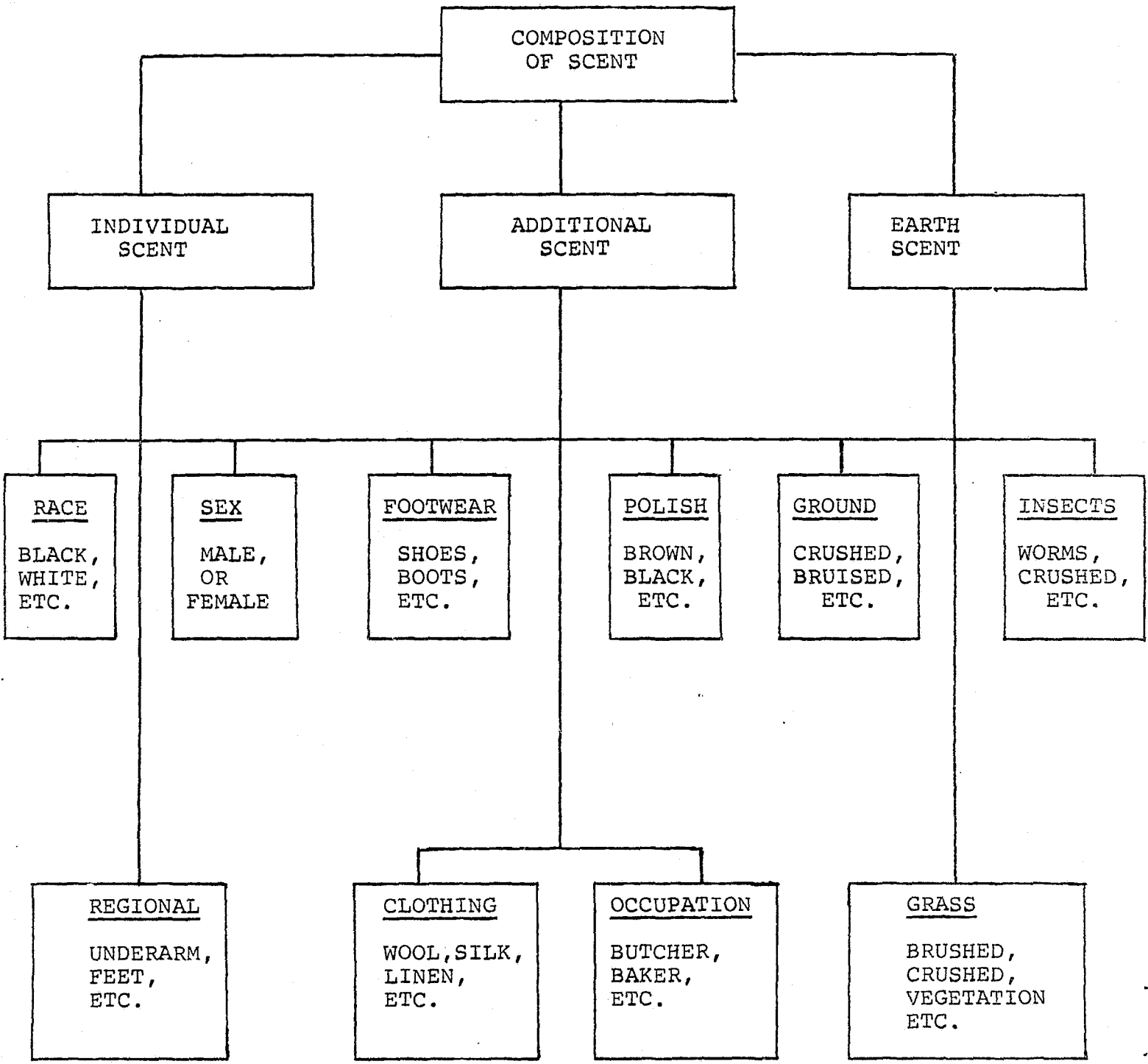
In tracking, a dog must always reach a successful conclusion on a track. This is most important in refresher training. To accomplish this, the handler must know exactly where the track goes and where articles are dropped. In training, it is the job of the "criminal" to try not to lose the dog. Quite the contrary. Only if the handler knows exactly where the track goes, can he learn to read his dogs signs, when the dog goes off to investigate a fresher "cross track", misses a turn, indicates a dropped article, etc. By knowing these signs of indication in his dog, a handler will be able to tell much about an actual track when on a practical job on the street. This point cannot be stressed too strongly. It is incumbent upon the handler that he watch the track laid, or ask the "criminal" the exact details of the track, if he is to have the needed confidence in his dog when on an actual job.

SUMMARY POINTS OF THEORY OF SCENT

1. Sweat consists of 99 percent water and 1 percent fatty acids. The latter of which contains the scent.
2. Man loses 1/64 percent of his total weight or approximately 2 pounds of sweat every 24 hours.
3. Scent is not due to finely divided particles of odoriferous matter, either solid or liquid, but to scent molecules disperse as a gas and carried by air currents to the olfactory senses.
4. The individual scent track of a man is caused by a trail of odorous liquid particles. (scent oil)
5. Scent oil of man derives its individual odor from the fatty acids of which "isovalerianic and Propionic" give out the most lasting smells.
6. The scent trail of a mixture of fatty acids forming synthetic sweat, evaporates after five hours of exposure to sunlight.
7. Individual scent tracks of all animals are due to a trail of scent oil.
8. The most favorable conditions for scent are when the dog is tracking upwind and when the earth is warmer than the air (i.e., night).
9. Any sudden fall of temperature in the air causes scent to be good and vice-versa.
10. Experiments prove that the earth breathes. Scent is good when the earth is exhaling and vice-versa.
11. The earth exhales when the temperature is higher than that of the air and vice-versa.
12. Scent is usually bad when the sun is shining.
13. The scent of grass is not greatly affected by sunlight.
14. Scent will not last longer than five hours during direct sunlight in warm weather.
15. No dog (including bloodhounds) can track a man after five hours of direct sunlight unless it has learned to follow the track of bruised herbage or other additional scent which is independent of the natural and distinctive odor of the quarry.

16. Sunlight deodorizes scent owing to the ultra-violet rays.
17. It has been found that the track of a man may be deodorized more effectively during one hour of sunlight than ten hours of darkness.
18. A high wind causes eddy-currents and makes scent conditions uncertain.
19. Scent is good in snow which has fallen before a frost and vice-versa.
20. Frost checks scent which may appear when thawed.
21. Heavy rain, falling on a track, obliterates scent.
22. Heavy rain, obliterates scent, high winds dissipates scent.
23. Moist land carries a better scent than dry.
24. Scent spreads with great rapidity in water.
25. Barometric pressure has no perceptible influence on scent.
26. A scent trail is caused by actual contact between the quarry and the surface to which the scent is imparted or by air-borne scent.
27. So called "body-scent" only exists when the quarry is close enough for his direct scent to be detected by the dog.
28. Dogs tracking many yards down wind of the quarry's path are following the scent carried by the wind from the track of the quarry (air-borne scent).
29. Dogs probably hunt a strong line of scent at some distance downwind in order to avoid nasal fatigue.
30. A trail of scent is left when a weight is dragged across a grass field due to the oderiferous juices of the crushed grass.
31. Grass will not give out a scent when crushed during a frost.
32. Rubber does not leave a lasting scent.
33. Nasal fatigue will set in if an odor is continuously smelled for a short time (i.e., hospital, flowers, etc).

34. Nasal fatigue in dogs may occur after two minutes of continuous sniffing of a strong scent, but the olfactory senses will recover after a rest of thirty seconds.
35. The stronger the smell, the quicker nasal fatigue will appear.
36. All scent tracks grow weaker owing to evaporation.
37. Cancellation of scent may be caused by chemical action.
38. A scent may be overwhelmed or masked by a more powerful odor.
39. A combination of scents may form a different smell than that of the individual ingredients.
40. Dogs cannot track over burnt grass, dry sand or other surfaces where particles irritate their nostrils.



CANINE COMMUNITY RELATIONS

Canine Community Relations in the Metropolitan Police Department is a very important and useful Section in our dealing with the public. When the Canine Corps was in its "youth", there was a great amount of animosity created in the city by militant groups. Basically, their theory was, "We don't need those vicious, killer dogs herding us around". "We are not animals".

The only true way to suppress this kind of thinking was to give the public a better understanding of the trained canine, qualifications of the officers that must handle these dogs, how the dog is trained, what he is trained to do, how he gets along with the public, and most of all, how the Police Department obtains the dogs (through donation).

The Chief of Police, realizing this critical situation that existed in the minds of the public, implemented a Canine Community Relations Program.

There is usually a problem in selecting a man-dog team for Community Relations. First, an officer has to be selected that is willing to accept this kind of program, one who is tactful in his manner of speaking to the public, know what he is talking about, has a dog that will get along with the public, yet do his job as a police dog should when he is assigned to street duty.

When a Community Relations Officer talks to an audience about how friendly his dog is, he must be in a position to prove this. If there is any doubt in the officers mind as to his dogs ability to perform correctly before the public, he should never put himself or his dog in a position to be criticized; for as sure as this happens, his dog is going to bite someone, and this may well spoil the whole program.

Your program must be organized as far as presenting your dog to the public for demonstrations in basic obedience.

First, it is always suggested that you, with your dog, go out into the "field" and personally set up your demonstrations, thereby letting the public know that you are interested in them knowing about the Canine.

Generally, people think that the canine is trained only to be vicious, therefore causing them to have fear of the dog as soon as they come in contact with him. The first impression is usually the best, therefore, by entering a building and allowing a dog to move through a crowd without him become aggressive will substantiate the point that you

will make in your talk and demonstration, that the dog is safe, and reacts on your command. Walk your dog to the front of the audience, put him in a "Down" position and do not allow him to move until you are ready to start your program. This in itself should be enough evidence that your dog is better trained than some people, (which in many cases, the public will tell you this).

In setting up your programs, it is always advisable to know the audience you will be addressing, such as, ages and type groups. In the schools, your audience will consist of age groups, Pre-school through the 2nd grades, of which you can talk on one level, and 3rd grades through 4th who are almost on an equal level, and 5th through 6th grades, who usually understand the normal every day language. Junior High School through College level, you will find to be your best level, wherein you will feel more freedom in talking to them.

In putting on a public demonstration, there must be a pattern or outline to follow. Through habit, this will become a part of your everyday living; you will first gain confidence in what you are talking about, your manner of delivery will be more intelligible, in the demonstration and speech. Have someone critique your program. It is advisable to start your program with a history of how the dog is obtained. In the case of the Metropolitan Police Department, our dogs are donated to us by various citizens in the Metropolitan Area, the District of Columbia, Maryland and Virginia. We use only the male shepherd between the ages of one to two years. The dogs are more adaptable to their training at those ages.

There are various reasons why we only use the German Shepherd, but our main reasons are, they are plentiful, even-tempered, very intelligent, a large type dog, works well in extreme cold temperatures, and makes a good family dog.

The Community Relations Program can best be put over by showing the public, through demonstrations, how the dog is trained. The average citizen that has an interest in dogs, would like to know how they are trained. This is a part of your program that would hold their interest throughout. It is also advisable to begin by showing how the Canine is trained to walk on one side of you and only on that side. In our training, the dog is taught to walk on the left side of every canine officer, because we go along with the majority. The majority of our officers are

right-handed and the lead is carried in the left hand. If the situation presented itself, wherein the officer had to get to his service revolver in a hurry, his right-hand would be free to do so without interruption. The left-handed officer also walks with his dog on the left; the only difference is, if he chooses, he may carry the lead in the right-hand, with the same results. We use the example of persons who walk their dogs (or rather the dogs who walk their masters) with them pulling. We show how to put and keep the choke chain up and around the dogs ears, tell him to heel and jerk at the same time the command is given, and repeat the procedure until the dog becomes familiar with it.

After your demonstration, always allow enough time for questions. This procedure will eventually "Relax" you, and cause you to gain more knowledge of your subject. Remember, you cannot tell everything about Canine in a short time. The average demonstration should take no more than thirty minutes to one hour. "Little People" lose interest fast, and the "Big People" can keep you "forever". Outline a procedure of your demonstration, practice it, and you will find that less retractions will be made during your program and success is sure to be gained.

NARCOTIC DETECTION DOG

In February of 1969, as a part of a continuing program to eliminate drug abuse in Washington, D.C., it was decided by the Metropolitan Police Department to study and determine the feasibility of training dogs to detect narcotics.

A two year old black, male, labrador retriever and two german shepherds were trained to find narcotics. They were selected because of their friendly disposition and adaptability to this type of work.

By the use of a narcotic seeking dog, whose dominant feature is his ability to discriminate by scent, and the fact that narcotics can be secreted in such small quantities in hard to locate areas, many hours of police searching can be saved with the use of a dog.

The Narcotic Dogs, demonstrate a high degree of proficiency in detecting, on and off lead, carefully concealed narcotics in buildings, airports, warehouses, bus stations baggage rooms, in automobiles and on people. Their services have been utilized with a great deal of success by our Narcotic Squad, as well as other local and federal agencies.

SELECTION OF A HANDLER

Potential marijuana dog handlers should be selected from the following:

1. Volunteers who have a love for dogs will establish a better relationship between the man and dog.
2. Officers who have already received some police dog training.
3. Patience. The performance of the dog will equate directly to the capabilities of the handler.

SELECTION OF DOGS

1. A dog less than twelve months of age should not be considered, because the attention span is limited.
2. Temperament is a most important factor.
3. Alertness.

4. Good physical condition.
5. Breed - known to have good scenting ability.

MATERIALS TO BE USED IN TRAINING

Marijuana and Heroin in various stages, e.g., raw, pure, ground up, old, etc., should be obtained. At the beginning, the narcotics should be divided into various portions, sewed into pillow ticking, and with heroin in plastic bags so that the dog can hold a bag in his mouth without consumption or loss of the narcotics. Start with large amounts, as pure as possible and gradually decrease to smaller portions as the dog progresses in proficiency.

Other items that are needed in training are herbs such as oregano, parsley, basil and any other herb that looks and smells like marijuana. All of the above should be sewed into pillow ticking and marked so that contents are known. Along with the information items, raw quinine, lactose, dextrose and powdered sugar should be obtained for heroin.

Great care should be taken to prevent the marijuana from coming in contact with any other package used, to avoid contamination and transference of scent.

TRAINING METHODS

The overall training program may be viewed in four phases: The first is the establishment of rapport between man and dog while training in basic obedience. Second, distinguishing between marijuana and other scents. Third, detection of heroin. Fourth, detection of narcotics in progressively more difficult concealment and develop proficiency in finding narcotics under simulated field conditions.

The exact amount of time it takes to train a dog depends on the ability, personality and interest of the dog. The proficiency of the dog is developed by working a couple of hours each day for about twelve weeks. A higher degree of proficiency will be attained after the dog has acquired experience on the street, working in the natural surroundings where marijuana and heroin is used.

Medical check up should be obtained on all dogs in training to locate heroin, before starting the dogs they should have a blood test and urine test and maintain a chart with the findings. You should continue the test periodically during training.

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The first week of training should consist of basic obedience, such as heel, sit, down and recall. It is important that the dog has a certain amount of basic obedience for control. Little emphasis should be placed on regimentation so that most of the rewards given will be associated with retrieving articles. At all times, lavish praise as a reward is extremely important.

In initial phases of training the area must be free of distraction, such as individuals, dogs, etc. Later, the dog may be introduced to distractions of the type that will be actually encountered, and should ignore these distractions. This should not be done until the dog becomes proficient at basic search and scenting techniques.

After a week of basic obedience you should start the game of fetching articles. The initial training of retrieving articles involves the sense of sight more than the sense of smell. You start this exercise by throwing an article out and have the dog retrieve same, also by playing a game of holding the article in his mouth, always praising the dog.

The command you can use is "Find and Fetch". When the dog runs after the article and picks it up, drop the command "Find" and tell him to "Fetch". When he picks it up, play a game of tug-of-war with him saying, "Hold it" and then back up giving the command to "Come". After a short distance you may take the article from the dog and reward him a lot of praise.

As the dog's interest increased and you feel the dog is retrieving on command and is enjoying it, change the article and use a bag of marijuana. At first the dog may not like the smell or taste.

In approximately the fifth week as the dog's proficiency in retrieving increases, a bag of marijuana is thrown straight out, increasing the difficulty of the game. Initially this should be done by throwing the marijuana into a concealed location such as high places or behind something. This encourages the animal to search by using his nose. He should be able to find the marijuana, with constant encouragement from the handler. Whenever he finds the marijuana praise him, let him know when he finds his objective that he gets a reward (praise).

At this point, the relationship between the handler and the dog is critical. The key to training a dog is to communicate to him just what is desired. The handler must convey to the dog the understanding that he will be praised when he indicates the presence of marijuana. The actual form of indication is unimportant as long as the handler can interpret it.

SIXTH WEEK

When the dog can detect marijuana and locate it in very difficult places, introduce him to heroin, starting with pure heroin and gradually reducing the percentage from 50 percent to 25 percent, etc. Make sure the dog is proficient in each percentage before moving to the next percentage exercise.

Finding by scenting should be encouraged by hiding drugs in progressively more difficult locations, and also in places where the dog cannot retrieve it.

The dog should also learn to gain reward (praise) by alerting at the location where the marijuana is hidden. When working an area, use systematic screening of the area, don't go directly to the location, but, let the dog work a little on his own, giving you an idea of how he works away from the scent of the narcotics. Because each dog's indication is different, there is no standard method in which each dog can be trained, instead, each handler is trained to recognize the way his particular dog responds to the scent of drugs. Some of the methods you may use to encourage are: barking when hidden up high and out of reach, retrieve by fetching, scratching at locations where hidden, pointing, wagging his tail, going into a down or sitting position, staying at the location, etc.

The ease with which a dog can detect narcotics varies directly with the amount of drugs and length of time it has been hidden. Therefore, when the animal is expected to detect recently hidden narcotics, larger quantities should be used. On extremely small amounts, it should be left for a longer period of time, allowing the scent to escape and spread.

SEVENTH AND EIGHTH WEEK

Depending on how well the dog has progressed, you can start hiding in very difficult locations with accompanying development of systematic techniques. For example, foot lockers, buried in the ground, desk, closet, etc.

When searching automobiles, guide the dog in a systematic search of the car on lead, making sure the dog has a chance to search all areas of the car. Cars and small rooms should be done on lead as these areas are too confining and the dog has a hard time working without guidance. Around the ninth week, a rejection period may be observed in the dog as training becomes intensified and progressively harder. This is the time when the game of retrieving becomes work and his interest will decline. This is a type of boredom that is caused by working in familiar training areas and exercises.

To solve this, try something in more practical field operations, e.g., bus stations, warehouses, etc., these areas being populated to accustom the dog to distractions.

In the final weeks of training, hide the narcotics in various sizes, and more than one pack, also, when hiding the marijuana, hide herbs similar in scent, such as bay leaves, parsley, oregano, basil, etc., in bags marked so that you don't praise the dog for indicating on the wrong scent. If the dog indicates anything other than the marijuana or heroin, he should be corrected.

SUMMARY

To say how much time it takes to train a dog depends largely on the ability of the dog to accept the type of work and also the experience of the handler in working with dogs. It is important to keep in mind that the dog is to be used as an extension of mans ability to search. The dog is merely a tool with which the man is able to rapidly screen areas in which narcotics may be concealed.

NOTE:

Those Departments who have sufficient Canine teams can eliminate the obedience training phase and save considerable time by using a previously trained street patrol dog as a marijuana and heroin dog. We have found that by using several of our excellent seeking and retrieving Shepherds, they can easily be specialized as marijuana and heroin dogs.

EXPLOSIVE DETECTION DOG

EXPLOSIVE DETECTION DOGS

During World War I and again in World War II we called upon the trained dog to assist us with our problems. Well we are again in a war, a war of terrorism and kidnapping and again we call upon our canine friends. In recent years the most important advance in the world to detect explosives has not been a computer, an electronic device or transistorized wizard but a dog. This is no ordinary dog but a dog who displays acute olfactory abilities and accompanied by his human partner they make up a valuable team. These teams can search more quickly, with a saving in manpower resources and they have the ability to indicate areas not readily accessible to man.

Once these dogs have been properly trained and introduced to every known explosive they will search and indicate to their handler by a precise action (i.e., sit, down or speak) the area in which the explosive is hidden.

The training period for explosive detection teams may vary from school to school but generally a trained dog can receive this additional capacity in about 6-8 weeks. This training demands the utmost care and patience since the handler and dog must work more closely as a team and the handler must learn to "read" his dog's every action.

The speed with which these dogs work is remarkably fast as compared to that of a human search. The reliability of these dogs is well in excess of 95 percent. This high reliability combined with the rapid rate of search make this an excellent choice in checking out bomb threats. To this date no known scientific instruments can compare to a dog's nose for detecting such a wide and varied assortment of odors, many of which are totally undetectable by humans.

The great risk and responsibility that are placed upon the handlers of explosive detecting dogs cannot be overemphasized as a major consideration in the training of detector teams. These teams are called upon to search large buildings and areas where explosive are alleged to be hidden, they search room by room declaring each area safe as they leave. Eventually the entire area is declared safe. A great responsibility as thousands of lives are governed by the actions of these canine teams.

Charles R. Kirchner

After basic training, specialized training should begin. Bomb detection training should take about six weeks. The phases of training will demand the utmost patience on the part of the handlers, since he must learn to "read" the dog. Research has not yet been able to pinpoint what the dog smells in an explosive compound, and like narcotic detector dogs, they must be introduced to each new explosive that is to be found.

The goal, or objective in training, is to produce a dog that is capable of finding a variety of explosives, and to find them in any location. Detector dog training should take place in many locations with a variety of distractions.

EXPLOSIVE DOG TRAINING

The beginning of explosive detection is accomplished in several different ways. The method used is generally the retrieving of a small canvas bag, containing about one half cup of gun powder. After the dog becomes proficient at this phase of training, the bag should be hidden in rather obvious places where the dog cannot retrieve it and at this point encourage the dog to "speak" at the explosive article.

Replacing the bag with other explosives, such as, Dynamite, T.N.T., and various types of plastic explosives, always encourage the dog to "speak" when he locates the explosive and not allowing him to touch it.

Praise the dog only when he locates the explosive, this will cut down on or eliminate false indications. Always remember after finding the explosive, a sit or down should occur and praise your dog and show him the explosive for his good work.

The introduction of new explosives are done in like manner.

NOTES:

1. Hiding places and receptacles should resemble places used by actual bombers.
2. Amounts and containers of explosives should be the types most used in your area.
3. Heights of hides will present problems unless it is increased gradually.

4. Daily exercises are important until the dog is proficient and their problems are dealt with accordingly. Constant practice should be continued to keep up their proficiency and interest.
5. The following is a list of explosives in their degree of probable difficulty from the easiest to probable hardest:
 - a. Powder (black and gun)
 - b. Dynamite (all types)
 - c. Plastic
 - d. T.N.T.

SUMMARY OF SURVEY ON
USE OF DOGS IN POLICE WORK

For this project, questionnaires on the utilization of dogs were mailed to 240 police departments at the municipal, county, and state levels of government. A total of 166, or 69 percent, were returned. 96 were from present users, 6 were from past users, and 64 were returned from departments that had never used dogs. It is estimated 130 departments in the United States now use dogs. This figure is derived by adding the 120 departments record in 1963 to those that have started using dogs since that time. The 96 responses from present users represents 74 percent of the total departments now using dogs. Of the 64 non-using departments responding, 26 indicated they would possibly use police dogs in the future.

The 96 departments were using a total of 830 man-dog teams. Chicago had 48, Baltimore 60, and Washington, D.C., 75. The mean number was 8.6 and the mode was 2, with 12 departments reporting they used that number.

The survey indicated that the actual costs of establishing and maintaining dog units are difficult to determine. For one thing, the question as to which items are to be included in the cost of training presents a problem. The estimates of the departments concerning their annual cost of maintenance per dog ranged from \$100 to \$900, with eight departments unable to give an estimate. The average was \$270 and the mode, appearing 15 times, was \$250. Over half of the departments received the dogs from donations exclusively, while 24 percent purchased them. 19 percent received donations and purchased them as the situation demanded.

4 of the departments did not comment on their training programs. The remaining 92 had training periods ranging from 2-weeks to 17-weeks, with an isolated instance of 1 year. The average number of weeks was 11, and the majority of the other periods clustered around this point.

Also varied were the number of hours of retraining administered by the 96 responding departments. 7 did not conduct refresher training at all. The average number of hours of refresher training each month was 16 and the mode was 8-hours, with 16 departments reporting this number.

27 of the responding 96 departments indicated that their dogs were used at night exclusively, and were available only for special calls during the day. All other agencies reported that their dogs were used for both day and night duty. The hours of patrol shifts varied too greatly to

correlate, but the greatest concentration of activity occurs between the hours of 5 p.m. and 4 a.m. which is the time the crime rate is the highest in most urban communities.

21 of the departments maintained motor patrols exclusively, while only 3 used just foot patrols. Most departments reported that the dogs worked out of standard police cars, modified to contain a kennel instead of a rear seat. Another type frequently used was a station wagon with the same fencing arrangement. This type, unlike that previously described, can be used for carrying prisoners.

12 of the 96 reporting departments indicated that they maintain central kennels for the dogs. 83 said they kept them at the handlers house, and 1 had kennels at both places.

The study revealed the 96 responding department currently using dogs believed them to be effective in varying degree. The tasks receiving the highest qualitative ratings were crowd control, searching of buildings, tracking, and answering burglary calls. The tasks receiving somewhat marginal ratings were control of purse snatching, detecting narcotics, and searching for evidence for which many dogs had never been trained. The dogs were generally reported effective for general police patrol, for use as a psychological deterrent against crime, and for assisting in apprehension and arrest. The dogs were also useful in finding lost persons.

In using dogs for searching, the study revealed that the effectiveness and the amount of use varies considerably with the type of searching operation. Dogs are used extensively for searching enclosing areas such as buildings and warehouses; less frequently for searching open areas; and are used very little in searching for narcotics.

All departments indicated that the dogs are always worked on a leash and released only for attack and special seeking duty. All the department but 5 indicated that the dogs were handled by only 1-officer; in no department were the dogs handled by more than 2-officers. The legal implications in using dogs for police work have not been explored in the past. Most sources show that police departments fear this aspect, especially the civil liability implication. 38 of the 96 using departments had purchased liability insurance from commercial firms at varying costs. The remaining departments handled the question of liability in the same manner as other forms of public liability, with the city assuming the risk.

To date, the injury rate for the dog units had been relatively low. 35 of the responding departments reported the dogs had bitten persons being arrested, while 26 reported other officer had been bitten. There were 17 cases of bystanders being bitten, and this appears to present the biggest hazard to cities concerned about civil liability. Answers to the question concerning court cases resulting from actions of the dogs indicated that only 4 such cases have been filed. 2 were minor and are pending while the 3rd was decided in favor of the police department. The 4th and most significant case occurred in Washington, D.C., and was decided, upon appeal, in favor of an innocent bystander who was bitten by a police dog.

Although California is the only state to attempt to pass legislation to restrict the use of police dogs, 20 cities have passed ordinances to protect the dog while performing his police function.

END