

1929

**Scottish
Terrier Club
of America**



*From Nancy Aly
Henshaw
8 April 1962*

BREED PAMPHLET

SCOTTISH TERRIER CLUB
of
AMERICA

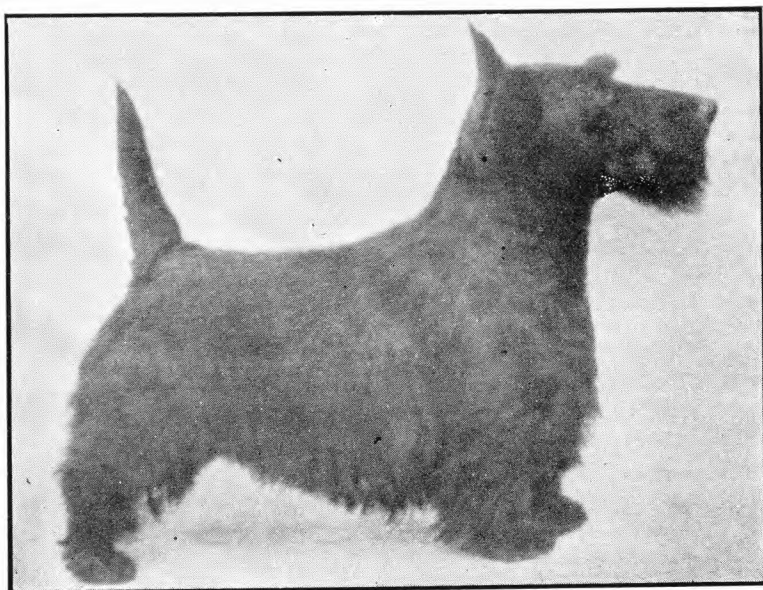
With appreciation to those who have so kindly contributed, this pamphlet is respectfully submitted.

Maurice Pollak
Caswell Barrie
Stuart G. Hardy

Committee.

CONTENTS

Frontispiece (Champion Heather Reveller of Sporran).....	4
Officers of the Scottish Terrier Club of America.....	6
Rules and By-Laws.....	7
Scottish Terrier Club Standard.....	11
The Ideal Scottish Terrier.....	13
Care of the Brood Matron During Pregnancy with Aftercare and Notes on the Care and Feeding of Puppies.....	22
Description and Simple Treatment of Common Dog Ailments....	29
The Weston-Levine Vitamin Chart.....	35
Advice to the Novice Exhibitor.....	38
Breeding Hints	43
Rearing Puppies to Maturity.....	48
The Educational Value of Showing in all Parts of the Country....	53
The Scottish Terrier Club of America.....	56



Champion Heather Reveller of Sporrán

Salient Facts of His Show Career 1931-1935

BEST OF BREED AT 47 SHOWS
PLACED IN GROUP AT 21 SHOWS
FIRST IN GROUP AT 18 SHOWS
BEST IN SHOW AT 11 SHOWS

To those who love his dour independence but who also have had occasion to admire his loyalty and courage; to those who know there is no greater friend, no better watchdog, no dog so staunch in adversity yet so loving to those of the household—to the many who for all these reasons subscribe to the feeling that once a Scottie lover always a Scottie lover, this pamphlet is dedicated.

OFFICERS OF THE
SCOTTISH TERRIER CLUB OF AMERICA

1939

President

H. ALVIN McALEENAN

Vice-President

MAURICE POLLAK

Secretary-Treasurer

STUART G. HARDY, Redding, Conn.

Delegate to the American Kennel Club

HENRY D. BIXBY

Governor at Large

KARL B. SMITH

Governors

Caswell Barrie

Kenneth MacBain

Robert D. Hartshorne

Morgan Stinemetz

Honorary President

Dr. Fayette C. Ewing

RULES AND BY-LAWS

1. This Association shall be known as and called the Scottish Terrier Club of America.

2. The object of the club shall be:

(a) To promote the breeding of pure bred Scottish Terriers.

(b) To define precisely and publish a definition of the true types, and to urge the adoption of such types on breeders, judges, dog show committees, etc., as the only recognized and unvarying standard by which Scottish Terriers are to be judged and which may in future be uniformly accepted as the sole standard of Excellence in breeding and awarding prizes of merit to Scottish Terriers.

(c) To do all in its power to protect and advance the interest of the breed by offering prizes, supporting certain shows, encouraging the development of working qualities, and taking any other steps that may be deemed advisable.

3. The management of the Club shall be vested in a board of nine Governors. They shall be elected at the annual meeting of the Club, which meeting shall take place in New York during the winter show of the Westminster Kennel Club. Six members of the Club shall constitute a quorum at all meetings.

On or before December 1st of each year, the president shall appoint a Nominating Committee of two to present names for Officers for the following year. Any member may also make nominations, which must be seconded by another member. All nominations must be in the hands of the Secretary not later than December 31st. He shall prepare a printed ballot, bearing all the names in nomination. Such shall be forwarded during the latter part of the following January to every member in good standing on the 20th of that month. The votes shall be opened at the annual meeting and a plurality shall elect. In case of a tie vote, the members present shall, by vote, decide between those ties.

4. All vacancies occurring in the Board shall be filled by a majority of the members thereof.

5. The Board of Governors shall be constituted of the Officers of the Club—President, Vice-President, Secretary-Treasurer.

urer, Delegate to A. K. C. and Governor-at-Large, and four others.

6. The Board of Governors shall, from time to time, make regulations in accordance with the power herein given or on matters not herein provided for.

7. The Board of Governors shall cause to be prepared annually a detailed statement of the financial condition of the Club, showing its receipts and expenditures for the current year, the number of members, and other matters of interest to the Club, and a copy forwarded to each member. The fiscal year shall terminate on the 31st of December each year.

8. The interpretation of these rules shall be given by the Board of Governors.

9. The President, or in his absence, the Vice-President, shall preside at all meetings of the Club or of the Board of Governors, and shall have power to call all special meetings.

Inasmuch as it is scarcely possible for the Governors to meet more than once or twice a year, it shall be competent for the Secretary-Treasurer to transact by letter, such business as might be done at a meeting, but the replies in writing of the majority of the Governors must be obtained before such business shall be considered as having the sanction of the Board of Governors and binding accordingly.

10. The Secretary-Treasurer shall keep a complete record of all meetings of the Club or Board of Governors, and of all matter of which a record shall be ordered by the Club. He shall have charge of the correspondence of the Club. On the election of a member he shall send him a written notice of his election, and furnish him with a written copy of the rules and standard of the Club, and request him to pay his entrance fees and annual dues. He shall notify officers and members of their election or appointment, and shall issue notice to members of all meetings. He shall keep a roll of the members of the Club, with their addresses.

11. The Secretary-Treasurer shall collect and receive all moneys due, or belonging to the Club, and receipt therefor. He shall deposit the same in a bank satisfactory to the Board of Governors, in the name of the Club. His books shall at all times be open to the inspection of the Board of Governors, and he shall report to them at every meeting the condition of the finances of the Club, and every item of receipt or payment

not before reported; and at the annual meeting of the Club he shall render an account of all moneys received and expended during the year previous, which account must be audited by the President of the Club.

12. Every candidate must be duly proposed by a member, in writing, addressed to the Secretary-Treasurer.

13. The name, profession and residence of the candidate shall be filed with the Secretary-Treasurer and the latter shall notify the Governors at least ten days before the balloting.

14. Candidates for membership shall be voted for by the Board of Governors. A majority vote of the Board shall be necessary to elect.

15. Every person shall within thirty days after notification by the Secretary-Treasurer pay to him his entrance fees and annual dues, and shall then become a member of the Club. In case of failure to do this his election shall be void, at the discretion of the Board of Governors.

16. The interest of any member in the property of the Club ceases with the termination of his membership.

17. The Board of Governors shall have the power, by a two-thirds vote of the whole Board, to forfeit the membership of any member of the Club for conduct on his part likely, in the opinion of the Board, to endanger the welfare or character of the Club.

18. Notice shall be mailed to each member when his annual dues are payable, and should such dues remain unpaid for ninety days after the regular notice has been given, he shall cease to be a member of the Club, except in cases of absence from the country, which shall be left to the discretion of the Board of Governors. A second notice of indebtedness shall be mailed six weeks after the dues are payable.

19. The Club may be dissolved at any time with the written consent of not less than two-thirds of the members for the time being. After payment of all the debts and liabilities of the Club, its property and assets shall be divided equally among the members.

20. A special meeting of the Club shall be called by the President, upon a written request of five members.

21. These rules can be amended only by two-thirds vote of the members present at the regular or special meeting called for the purpose. The proposed amendments must be embodied

in the call therefor and mailed to the members fifteen days before such meeting.

22. At the meetings of the Club, the order of business, so far as the character and nature of the meeting may admit, shall be as follows:

1. Calling of roll and reading of minutes.
2. Report of Governors.
3. Report of Committees.
4. Election.
5. General business.
6. Adjournment.

23. Every member shall pay an entrance fee of five dollars, and the sum of five dollars as annual dues, payable on the first day of January of each year.

24. All complaints and suggestions as to the management, must be made in writing to the Board of Governors.

25. All resignations must be in writing, addressed to the Secretary-Treasurer. No member can resign while he is in debt to the Club.

26. Three members of the Board of Governors shall constitute a quorum for the transaction of business.

27. At all regular and special meetings of the Club, members can be represented by proxy, which may specify vote, as in case of election of officers or amendments to the rule.

SCOTTISH TERRIER CLUB STANDARD

As accepted by the Club, February 12, 1925

Skull (5 Points): Long, of medium width, slightly domed and covered with short hard hair. It should not be quite flat, as there should be a slight stop or drop between the eyes.

Muzzle (5 Points): In proportion to the length of skull, with not too much taper toward the nose. Nose should be black and of good size. The jaws should be perfectly level and teeth square, although the nose projects somewhat over the mouth, giving the impression that the upper jaw is longer than the lower.

Eyes (5 Points): Set wide apart, small and of almond shape, not round. Color to be dark brown or nearly black. To be bright, piercing and set well under the brow.

Ears (10 Points): Small, prick, set well up on the skull, rather pointed but not cut. The hair on them should be short and velvety.

Neck (5 Points): Moderately short, thick and muscular, strongly set on sloping shoulders, but not so short as to appear clumsy.

Chest (5 Points): Broad and very deep, well let down between the forelegs.

Body (15 Points): Moderately short and well ribbed up with strong loin, deep flanks and very muscular hindquarters.

Legs and Feet (10 Points): Both fore and hind legs should be short and very heavy in bone in proportion to the size of the dog. Fore legs straight or slightly bent with elbows close to the body, as Scottish Terriers should not be out at the elbows. Stifles should be well bent and legs straight from hock to heel. Thighs very muscular. Feet round and thick with strong nails, fore feet larger than the hind feet.

Tail (2½ Points): Never cut and about seven inches long, carried gayly with a slight curve but not over the back.

Coat (15 Points): Rather short, about two inches, dense undercoat with outer coat intensely hard and wiry.

Scottish Terrier Club of America

Size (10 Points): About ten inches high at the shoulder and weight about 18 or 20 lbs. for both sexes. The correct size must take into consideration height fully as much as weight.

Color (2½ Points): Steel or iron grey, brindled or grizzled, black, sandy or wheaten. White markings are objectionable and can be allowed only on the chest and that to a slight extent only.

General Appearance (10 Points): The face should wear a keen, sharp and active expression. Both head and tail should be carried well up. The dog should look very compact, well muscled and powerful, giving the impression of immense power in a small size.

Faults

Eyes large, round or light colored. Light bone. Out at elbows. Ears round, drop, or too large. Coat soft, silky or curly. Jaw over or undershot. Over or under size.

SCALE OF POINTS

Skull	5
Muzzle	5
Eyes	5
Ears	10
Neck	5
Chest	5
Body	15
Legs and Feet	10
Tail	2½
Coat	15
Size	10
Color	2½
General Appearance	10
Total	100

THE IDEAL SCOTTISH TERRIER

There Are Definite Reasons for Every Line Written into the Standard of a Breed

By S. EDWIN MEGARGEE, JR.

(Illustrations by the Author)

It has always been my conviction, that a written Standard, even though most carefully phrased, cannot give an adequate idea of the animal described, no matter how exhaustive it may be in its elaboration of detail. A Standard is, after all, nothing more than a written description, and to describe any animal so that a person unfamiliar with it can get a definite mental picture is, in my opinion, impossible. This is especially true where an attempt is made to convey all the niceties and refinements of line and contour, the dimensions and proportions, the relation of one part to another that go to make up an ideal type.



EDWIN MEGARGEE

THE AUTHOR'S IDEA OF THE CORRECT TYPE

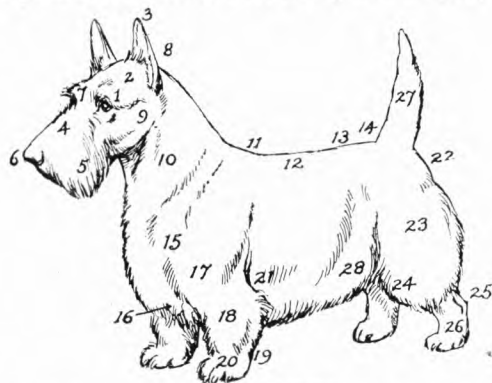
Most Standards are written by those and for those who are in a greater or lesser degree familiar with the breed described. To the novice, they are difficult if not largely unintelligible. They abound in unfamiliar terms such as stifle, brisket, flank, stern, furnishings, etc., and serve to confuse rather than to instruct the uninitiated.

In trying to make a child understand what a horse or a cow looks like, we do not give it a detailed description of the animal,

we know the futility of this, and if there is not an actual animal at hand, we show it a picture.

This is the point I want to bring out, the only way to give the average person a definite mental conception of a particular animal is to show him either the animal itself or a pictured likeness of it. When the conception that is to be conveyed is that of an imaginary ideal, which does not exist in the flesh, the obvious course is to present a drawing of that ideal.

In this article, it is my purpose to discuss and elaborate on the Standard and to show pictorially my conception of the perfect type of Scottish terrier, as well as to illustrate in drawings of the various parts, the good and the bad features. To facilitate this discussion, I have made a chart showing all the anatomical points of the dog so that there can be no misunderstanding of the terms used. Further, I have drawn a diagram showing the skeleton of the dog as I believe a knowledge of the bony structure will simplify in the reader's mind some of the points that I wish to bring out in proper order.



NOMENCLATURE

- 1: Eye. 2: Skull or forehead. 3: Ear. 4: Muzzle—foreface. 5: Whiskers—furnishings. 6: Nose. 7: Stop. 8: Occiput. 9: Cheek. 10: Neck. 11: Withers. 12: Saddle. 13: The loin. 14: The croup. 15: Point of shoulder. 16: Brisket. 17: Arm. 18: Forearm. 19: Pastern. 20: Foot. 21: Point of elbow. 22: Buttock. 23: Thigh. 24: Stifle. 25: Hock. 26: Foot. 27: Tail at stern.

To begin with, the general impression that a Scottish terrier should convey is that of a small, powerful, active dog, compact and muscular. His thickset body is hung between short, heavy legs and with a head that is distinctly long. These characteristics, joined with his keen, piercing expression, his erect ears and tail, are, I think, the salient features of the breed.

To my mind, it is impossible to over-emphasize the fact that the Scottie is first of all a terrier. He must be keen and alert, with an air of courage and competence that impresses one at once. This terrier character, plus the general makeup of the dog, the symmetrical relation of one part to another, constitute what is termed "general appearance" in the Standard.



SKELETON A

- 1: Shoulder blade. 2: Point of shoulder. 3: Pelvis. 4: Pin bone.

The head of the Scottish terrier is most characteristic, and a really good-headed dog is difficult to find. The Standard calls for a long head—and long it should be—but length is not the only thing to look for. With length there must be quality and balance. There should be a nice adjustment between the skull and the muzzle, the one should not appear longer than the other, and the inner corner of the eye should mark the longitudinal center of the head from nose to occiput. The top lines of the skull and the muzzle should be in different planes, broken by the stop, but the planes should be parallel. When they are not parallel, the effect is very unpleasant, either in the convex head or "down face" as will be seen in Fig. 4,

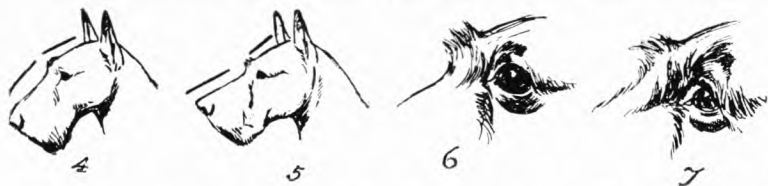


which is a very common fault, or in the concave head or "dish face"—Fig. 5—which, while not so common as the former, gives an even worse appearance.

The skull, as described in the Standard, is "slightly domed" and "not quite flat." If this section is handled, it will be found that this slight dome or roundness is broken by a gentle depression that extends from about the middle of the forehead on down between the eyes (Fig. 3).

While the Scottie, with his long, punishing jaw, must have sufficient muscular power to grip and hold properly, he should not be thick in head or cheeky. Fig. 3 shows this section as it should be, and Fig. 1 shows a thick, prominent, overmuscled cheek which is a very serious fault. The muzzle, as described in the Standard, should taper toward the nose, nevertheless, the muzzle must be a good handful with plenty of depth from top to bottom, and should be fairly full under the eyes.

The Standard requirement that the mouth must be level is



no longer strictly interpreted, and while a dog with a level mouth cannot be penalized, judges prefer what is known as a "scissors mouth." The term scissors mouth means just what it implies. When scissors are used in cutting, the blades do not meet directly but the cutting edges slide by each other very closely. This is what is wanted in a scissors mouth: the upper front teeth biting down just in front of and against the lower teeth as in Fig. 8, as opposed to the level mouth shown in Fig. 9. In addition, the mouth should be broad and the arch



almost square, not round, narrow, and contracted. See Fig. 10.

The ears make a great difference in the expression and appearance of a Scottish terrier. They should be small, pricked,

and well set up on the head as in Fig. 3. Wide set, big lobed, bat ears are a common and very bad fault. These are shown in Fig. 1. Big, mule-like ears are also faulty, and spoil the appearance of the head. See Fig. 2.

The eyes, more than any other feature, are the index to the character of the Scottish terrier. They should be small, of almond shape, and fairly wide apart. Deep set, keen, and well shaded by the attendant hair, they should have a twinkling, sharp expression that is sometimes described as "varmity." In Fig. 7, this correct type of eye is shown, while Fig. 6 depicts a common type of faulty eye, large, round and prominent. The latter gives its owner a soft, appealing spaniel-like expression, utterly foreign to a Scottish terrier.

The body. "Moderately short and well ribbed up." Bodies are more often too long than too short, but they can be too



short. When this occurs, and is accompanied by the immense head advocated by a few extremists, the effect is weird and monstrous. A nice balance between body and head is what is desired. While no hard and fast rule as to the proportion can be laid down, I like to see one and three-quarters to two head lengths from the point of the shoulder to the rear end, as the desirable body length.

The line of the back should be level without drop behind the withers or arch over the loin. The ribs should not be round nor flat but should arch away in a wide spring from the backbone, descending in a flattening curve to the breastbone. Wide enough at the top to give lung space and deep enough to give heart room. To put it more graphically, a cross-section of the body, back of the shoulders, should present not a cylinder nor an oval, but a sort of heart-shape, which, of course, tapers toward the rear flank.

The chest should be wide and deep, and well let down between the forelegs. A narrow, weak chest is often accompanied by flat ribs and a narrow pelvis, and is, of course, most

undesirable. Too wide a chest is however, almost as bad. Its usual accompaniments, are coarse withers, round ribs, and bad shoulders, giving the dog a lazy, waddling gait. Fig. 14 shows this type of chest.

To quote from the Standard: "Legs should be short and very heavy in bone." Forelegs that are slightly bent are permissible. To my mind, the slightly bent foreleg is preferable to the perfectly straight one. A dog as low as a Scottish terrier needs a slight bend in foreleg to give room for the chest and to permit freedom of action. In speaking of this bend in the foreleg, I, of course, mean a bend as seen from the front. Any bend from the side view is intolerable, one wants neither a dog that is weak in pasterns nor that knuckles over.

The feet should be round, thick, and compact, not "cat-footed" like a foxterrier, but similar to a bear's paw, and they should toe straight ahead.

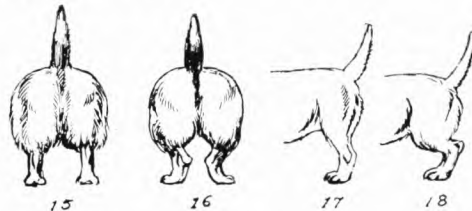
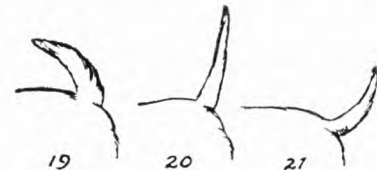


Fig. 13 shows forelegs, out at elbows and with a decided bend, producing a crooked front, a very common failing. Fig. 14 shows a wide front with out-turned feet, giving a bulldog appearance. In Fig. 11 there is shown the side view of a straight shouldered, straight fronted foreleg in contrast with a correct foreleg and shoulder in Fig. 12. Also see Fig. A and Fig. 22.

The hindquarters, which are the real propelling force in any animal, are of even more importance than the forequarters, though not generally so regarded. Big, powerful hindquarters are essential in a Scottish terrier. The hams should be wide and well-muscled, the stifles and hocks well bent. A straight stifle, as in Fig. 17, is a bad fault, and should be discouraged. Overbent stifles and hocks, due to too great length from hock to heel, sometimes occur, as in Fig. 18, and this also is undesirable. Fig. 15 shows a proper hind view; and Fig. 16 shows a hind view that is weak or cow-hocked.

The tail is the Scottie's flag, and, if properly carried, lends a gaiety and charm to his every appearance. It should be set well forward of the pinbone and not mark the extreme rear end of the dog, nor should it have its beginning below the curve of the rump. See Fig. 21. It ought never to be raised higher than at a right angle to the back. When carried forward of this angle, it is called "a gay tail"—Fig. 19—and is most undesirable. The length of the tail, in my opinion, should vary with the length of the head. A great long head with a stump of a tail seems to me grotesque; and the reverse is also true. Fig. 20 shows the overlong, ratty tail. Where the Standard calls for a tail of about seven inches, I would elaborate this by saying that the tail should be about one inch shorter than the head.



The importance of a proper coat to a Scottish terrier can be judged from its allotment of fifteen points in the Standard. It should be about two inches in length, and should consist of an outer and an under coat. The latter should be short, soft, and woolly and so dense that it is difficult to part it sufficiently to see the skin. The outercoat should be about two inches long, and very hard and wiry in texture. It must be straight, as any tendency to wave or curl is objectionable. This coarse outer jacket should look neither slick nor unkempt, but should present a broken haired look all over the body.

As to color, the Standard is quite explicit. The various shades of brindle almost always carry better coats than the blacks which should score heavily in their favor. I am glad to see that blacks are no longer favored to the extent they were some years ago.

Having covered the specific points of the Standard, I feel that the thing that should be dwelt on and emphasized, in studying a Scottish terrier, is balance, or if you prefer symmetry. A dog may be almost perfect in every section, taken part by part, but because of a lack of harmony in balance between these parts may be only a fair specimen.

Once you have a vivid picture in your mind of the ideal type, the faults of the dog that does not conform to the standard will stand out very clearly. It is as though you imposed the negative of one photograph upon another and looked through them at a strong light. You would know instantly where the incorrect type failed to measure up. Possibly because the Scottie with its rather blocky lines, lends itself so well to the silhouette, this test is a good one, but at any rate, it is in the silhouette that perfect balance may best be seen.

While the Standard covers all of the main points of the Scottish terrier there are, as every judge of dogs knows, certain things about a good one that are almost indefinable. One of these general terms is quality. Almost any one can detect the major faults in a dog, such as large ears, long tail, crooked front, bad eyes and similar ones. But just wherein lies that elusive something that we call quality is hard to determine. Personally, I believe that the best balanced dog is most likely to possess it. Although carriage and bearing as well as personality also enter into it. In one of his race horse stories, John Tainter Foote describes this something as "the look of eagles." Call it what you will: "style," "quality," "it," or "personality," it is an indefinable something which is instantly recognizable and yet utterly indescribable.

Of late years, there has been entirely too much emphasis put on long heads and short bodies. A Scottie *can* have too long a head and it *can* have too short a body. I believe that over-emphasis to the point of exaggeration is a fault, and should be so regarded. And I do not believe that the size of the head should be the sole criterion of excellence in any breed.

A Scottish terrier can and should have a head of good length without being grotesque to the point of looking like a miniature hippopotamus, and American breeders who are today breeding some of the best Scotties in the world, would do well not to be carried away by anything just because it has a foreign label.

The beginner should, by all means, study the Standard. By this I do not mean just to read it, but to learn it by heart. No one can ever speak "dog language" until he knows every point in the Standard of his breed.

The mere act of committing the Standard to memory will help to develop a mental picture which will be sharpened and defined by a study of the foregoing charts and drawings.

Going to a dog show just because you like dogs is of course better than not going at all, but it is at the ringside that you will learn the finest points of the dog game. It is here that you will see the Standard used as a gauge of merit or demerit.

By studying the decisions of the judges you get to know what the good ones should be like, you will learn how a sound dog should move and you will learn also how to spot an unsound one.

Handle dogs whenever you can, especially the good ones. Talk to those whose specimens are worth looking at, and in this way you will reach a sure and definite knowledge of the breed.

In conclusion, I could wish that all of us, when we contemplate the Standard, would think of what is back of it. It is not a set of arbitrary requirements, formulated to satisfy the whims of any particular group or to fit the changing mode of fashion.

Rather it was written and has been maintained to preserve and perfect a particular type of dog, bred for a very definite purpose; namely to go to earth. There are definite reasons for every line of the Standard.

The Scotty's strong head and tremendous jaws are built to grip and hold his prey. His eyes are deepset and well protected by brows and hair so that he will not be blinded in digging. His legs are short and powerful so that he can dig effectively. His chest is deep and roomy so that he can live and breathe when underground. His body is short enough to permit him to turn in narrow quarters, but not so short that he cannot worm his way along successfully.

His sloping shoulders, with bent elbows, stifles and hocks, not only give him a good and springy gait above ground, but also give power and flexibility below ground. His harsh and heavy coat not only protects him against the elements, but also acts as a very effective armor against the foes he battles with. Let us bear this in mind and resist the fads or fashions which would tend to make our rugged, husky, little favorite into an exaggerated showing dandy.



CARE OF THE BROOD MATRON DURING PREGNANCY WITH AFTERCARE AND NOTES ON THE CARE AND FEEDING OF PUPPIES

By CHARLES F. LYNCH, M.D. F.A.C.S.

Member Health Council, State of Massachusetts

When asked to write this article by the Club Committee, it was necessary to bring some of the old chapters up-to-date, regarding present day veterinarian treatment. The attached were submitted for approval to Dr. A. R. Evans, chief veterinarian, at the Springfield Branch of the Angell Memorial Hospital. Dr. Evans is a specialist of large experience in the care of small animals. Dr. Evans' changes and suggestions have been incorporated in this article. I might add that when your dog is seriously ill, it is best to consult your veterinarian, rather than treat him yourself.

The brood matron should not be too fat; she should be well nourished, however. When one intends to breed a bitch her diet should be mainly animal foods for about two months in advance of her period. Whether to breed the first season must be determined by the individual characteristics of the bitch; if she is robust, eats well and seems able for the burden of bearing and nourishing puppies, all will be well; if she is frail or is not a good feeder, it is better to defer breeding until a later time.

The time for mating is well into the period of the oestrus, well beyond the tenth day and when both animals are willing to mate, the fourth day afterward is considered the ideal time. In the early days of pregnancy it is well to secure the elimination of intestinal parasites. This may be accomplished by the giving of the well known drug, Santonin, with or without Calomel, in doses of half grains once a day for three days. This may be carried out for three successive weeks. Santonin may be administered without Calomel, though it is frequently combined with it. A few doses of the combined drugs are harmless but the continued use with Calomel may produce

chronic mercurial poisoning with disagreeable and dangerous symptoms. Tetrachlor-ethylene in one c.c., gelatin capsules may be given instead, once a week for three weeks, each dose followed by one ounce of Milk of Magnesia or one half teaspoonful of Epsom Salts. In using Tetrachlor-ethylene, care must be taken that the animal is not given fatty foods for twenty-four hours before, and that no cathartic containing oil be given afterwards.

The duration of pregnancy is sixty-three days or nine weeks; labor may be expected a day or two before or after the sixty-third day. If an animal passes the sixty-third day, appears well, eats normally, it should cause no concern. If after two days or more, labor has not started and no symptoms have appeared, it is best at this time to consult your veterinarian.

During the final two weeks, the animal should spend her resting hours in the place she will be expected to occupy at the time of whelping. The location should be warm in cool weather and at the end of her time, it is safer, if there is a dim nightlight. She should have privacy and be comfortable and should have access to fresh drinking water at all times. Her diet should vary; a diet mostly raw meat cut into one and a half inch squares, one pound daily. Dog bread and other foods that the animal likes may be used. We have found them very fond of kidney and liver and once or twice a week, they are given cooked liver or kidney cut up with the meat feeding. Kidney and liver furnish special glandular food products not found in muscle meats. Fresh tripe is also valuable in this connection. These special products are very helpful fed to the animal at any time. Do not deny the expectant mother plenty of animal food if she will eat and plenty of vitamin D milk, and above all other considerations, feed her well.

When the time has arrived, she should be confined to her quarters. Usually she will refuse food, but will drink water freely, though some bitches will eat within an hour or two of the birth of their first puppy.

The time from the beginning of the first uterine contractions until the birth of the first puppy may vary from two and a half hours to four or five hours under normal conditions; the first litter may require a longer labor for the first puppy than it does for experienced matrons. The interval between puppies may vary from a half hour to two hours, the labor pains quieting down between times, allowing the bitch some rest

and an opportunity to clean up and care for the puppy. She will usually labor twenty to thirty minutes delivering each remaining puppy. We permit a laboring bitch to attend to her own affairs. She is marvelously competent at this time and is amply endowed with instinct to care for her self under normal conditions.

When abnormal conditions arise, such as transverse or shoulder presentations, a veterinary should be consulted. The application of obstetrical forceps is fraught with great danger. The puppy is almost invariably destroyed and too often the mother as well. The birth canal is too small to apply forceps accurately or to be absolutely sure that the forceps are on the presenting part of the puppy and are not clutching the uterine wall. This wall is soft and friable, and rupture or deep laceration is fatal. A Caesarian operation done with present day equipment will give a chance for the life of the mother and the remainder of the litter. Have your operating done in a modern veterinarian hospital, and by an animal surgeon whose equipment is clean and modern and whose reputation is for doing good animal surgery. A mother dog, well treated at such an operation, can nurse and care for her litter and usually will do so.

When a part of a puppy has presented and become arrested in delivery, assistance may be given. The presenting part is head or breach. The path into the world is downward and backward with the bitch on her feet and her quarters faced by the operator. The outlet through the animal's pelvis is through an inverted V. Traction should naturally be downward toward the floor and outward at the same time. If the bitch is on her side, traction must be in the same direction, NEVER upward or directly backward. With a part presenting, one should grasp it gently but firmly, using a towel to prevent slipping. Make traction downward and backward synchronous with uterine contractions. Do not pull between pains unless the bitch is exhausted and is not laboring. The traction should be steady and not violent enough to fracture or lacerate the puppy. The traction may be made with two fingers, one on each side, and in this manner there is no encircling pressure to strangulate or otherwise injure a puppy that may still be alive. When delivered, pass it to the mother and let her care for it if she is able; if not, rend the sack, turn out the pup, tie and cut the cord one and a one half inches from the body, wipe

the secretions from the mouth and gently rub and press the chest until the puppy cries. Disregard the afterbirth, the dam will often spend more time cleaning up than she will on her offspring. The dam will then clean her puppy and tuck it away under her for warmth and nourishment. When the birth of another is impending, the firstborn and others should be removed and placed in a warm receptacle and kept there until labor has terminated and then the entire family should be transferred to a warm dry bed.

Following a normal whelping, or even a whelping that has not required surgical operation, we have found that the bitch is ready to eat a good meal and our practice is to give her a feeding of raw meat and allow her to eat all she will. She will eat close to a pound. A pint of milk is left for her to help herself and she will consume this amount within an hour or so. We feed all the meat that the mother will eat at three feedings a day and leave a pint of milk, in which are two eggs and some sugar, for the night. Feeding in this manner when the dam is nursing from four to seven puppies, gives us healthy strong litters and allows the dam to finish the fifth week in good flesh and beginning a new coat, showing no reduction in weight or vitality following her whelping.

Care after surgical operation comprises a clean dry bed, proper adjustment of dressings and but little medicine. Allow the dog to eat and drink if she will; light diet for a day or two, then full diet if all is well. One ounce of Milk of Magnesia in twelve to eighteen hours should be given her in milk or by spoon or medicine glass. The rule holds for canines as for humans after operations; if they persistently vomit and the intestines fail to act, they die. Enemata containing glycerine, one teaspoonful; turpentine, drops 10; and soapsuds, four ounces, may induce the intestines to function. Pituitrin, one half ampule or one half cc injected under the skin, may assist also.

When there is a small litter and the breasts are engorged, fluids should be restricted to milk and the anterior set of breasts bandaged. Abscesses of the breasts should be opened and drained under anaesthesia. A bitch who has lost her litter will usually take other puppies of early age and rear them, but beware of putting strange puppies into a small litter. The best natured bitch may accept them for a short time and then without warning, furiously destroy the strangers and perhaps

her own litter as well. Some bitches destroy their own, no one knows why, some primal instinct, perhaps. It is better that no other dog be permitted to come near a litter until it is well grown. It is said that fear of predatory animals causes the bitch to destroy her own rather than allow other animals to do so.

Metritis is an inflammation of the uterus; it is a complication often following whelping. The noticeable symptom is a profuse discharge which soils the rear end, the thighs, legs and under side of the tail, large deposits may be seen about the floor; the discharge is sero-purulent, sometimes offensive in odor; if untreated this condition may become chronic and result in sterility. Treatment is given by vaginal irrigation, using alkaline solution only. Normal salt solution is the safest, made 1 teaspoonful of common salt to one quart of water; borax or bicarbonate of soda may be substituted. Do not use chemicals such as mercury or sulphonaphthol. In severe cases the veterinarian may use intrauterine irrigations; such practice is discouraged except in the hands of the experienced surgeon.

Vaginal irrigations should be given twice a day, given without force, supporting the douche container not higher than twelve inches above the animal's body, the douche nozzle should be the large sized one and sterilized before each irrigation. Internal treatment is directed to secure a firmly contracted uterus, corpus luteum extract 5 gr. tablets three times a day, or pituitary extract $\frac{1}{2}$ grain three times a day. These medicines are animal extracts and are non-poisonous. Additional medical treatment is the use of Sulfanilamide four times daily for four days.

Positively, no saline laxative should be administered while using the last named drug.

Eclampsia is a metabolic disorder occurring after whelping and is considered to be the result of a calcium deficiency in the body. Calcium is exhausted in the bitch by prolonged nursing of her litter and her failure to receive a supply from the drinking of the proper amount of cows milk containing calcium in easily soluble form. Symptoms are—lassitude and sudden change in disposition, recurring convulsions, fever, prostration, and sudden death if not promptly treated. Treatment if quickly given is almost magical and consists of the injection of a solution containing 20 grains of calcium gluconate into the body of the sick animal; an expert puts it into a vein, otherwise

under the skin. The treatment must be followed by feeding milk with other nourishing foods and the daily administration of 20 grains of calcium gluconate, or dicalcium phosphate which may be procured as a chocolate confection which dogs will readily eat. After a convulsion a dog should be given a sedative such as Veronal gr. V, Amytal gr. 3, or Nembutol gr. 2 to gr. III; placed in a cool dark place and allowed at least six hours from her litter. The occurrence of this dangerous complication may be obviated by daily administration of Calcium before and after whelping and the feeding of fresh cows milk in generous amounts while nursing the litter.

One may begin to feed puppies between three and four weeks after birth, earlier if necessary. We have had success starting with plain milk. We use the top milk and in a day or two, finely ground raw lean meat is added and the puppies are fed meat and milk four times a day. For variety, egg and milk is substituted occasionally. In a few days they are eating unassisted and consuming a teaspoonful of meat to each puppy four times a day, gradually increasing the amount to all the milk and meat they care to consume. At the sixth week, we begin to use puppy meal with the meat, giving egg and milk separately, allowing all the food they care to eat at four feedings a day. The puppies get little or nothing from the mother after the fourth week and they are permanently removed at five weeks. We bring the dam to them once or twice, or more, for the purpose of emptying her breasts, but after the second visit, no further milk forms. Before completely finishing with her family, the dam usually eats heartily and about two hours later disgorges her digested meal for the benefit of the puppies and they consume every particle of it. She will repeat this two or three times and from then on, they must shift for themselves.

Veterinarian supervision of worming a litter will materially reduce or prevent the death rate in worming. There are four common worms in dogs and pups, tape, whip, round and hook, and often require the use of a different drug for each type. Capsules of carbon tetrachlor ethylene, the three minim size for the young puppy and the 15 minim for the grown dog, is an efficient expeller of the common round worm; Santonin in $\frac{1}{4}$ gr. doses is also useful. It is to be remembered that these drugs are given on an empty stomach and followed in one hour by a saline cathartic, such as milk of magnesia.

Never use an oil cathartic in conjunction with carbon tetrachlor ethelyne.

One form of Rachitis, or Rickets, that is seen in puppies is that form that is manifested about the time the puppy is supposed to get up on its feet and walk. Instead of walking, the legs spread and the hindlegs drag, reminding one of the locomotion of a seal. No matter how great the deformity and distortion, this condition may right itself with appropriate treatment. In the Summertime, put the pup on short grass in the sun, with some shade, of course. In cold weather, put on a carpet where it can get a grip without slipping, in the direct sun if possible. Use a sun lamp with a mercury bulb if you cannot get them in the sun. Give them a diet of raw meat, raw eggs and milk, fincut partly cooked liver and kidney, tomato juice, puppy meal for roughage and vitamin D milk. For medicine, first relieve them of worms and then give one half teaspoonful of Cod Liver Oil each day. Haliver Oil, the oil from halibut liver, is said to be more concentrated and three drops of this or of the well known Viosterol may be given twice a day. If the puppies are not down too long, there will be no deformity and the gait will not be interfered with, though occasionally the bitches may have deformed pelves and it is possible that if they are bred, difficult and delayed labor may follow. Long delay in treatment of this disease means delay in recovery and often some deformity with the quarters. The treatment is sunlight, good food, vitamin D milk and exercise.

It is claimed by the nutritional experts that Rickets may be prevented and readily cured if present by the use of food materials high in Vitamin D readily found in Vitamin D milk. This is developed by furnishing a definite ration of Irradiated yeast to the herd of cattle. For the same reason the bitch may be fed a ration of yeast before and during her nursing period, producing Vitamin D milk for her puppies. The antirachitic treatment should continue until full grown.

DESCRIPTION AND SIMPLE TREATMENT OF COMMON DOG AILMENTS

By DR. S. H. SHINDELL

The owner of dogs is faced with the problem of recognizing the common ordinary illness and applying the necessary first aid and treatment. The following are the most usual:

DISTEMPER:

The most serious of all is distemper. This disease to-day is not so common and serious as it was ten years ago. Because of the generalized use of serum and vaccines, a certain amount of immunity has now been developed so that this disease has become attenuated and less frequent. Owners and kennels have learned to vaccinate their dogs in the early months of their existence so that distemper is not indiscriminately spread about and, therefore, most of the kennels are to-day free from it. In the early stages this disease is difficult to recognize. The symptoms are not typical and vary considerably. The dog lies about quietly and appears to sleep most of the time, he has a hot nose, not interested in food; the temperature may vary from 102 to 105°; he may have a sore throat and a hacking cough and his membranes congested. Only in the later stages does the average person recognize distemper and that is when there is a discharge from the eyes and nose. Very often this also is absent. This disease is often confounded with streptococcus.

The treatment here consists of giving large doses of serum in the early stages — when the disease is somewhat advanced the injection of Neo-prontisil or the administration of properly proportioned doses of Sulfanilimide is called for. Most important of all is good nursing — clean the eyes and nose and wash the mouth with a warm boric acid solution. Give him stimulating tonics to keep his appetite up, offer him tempting morsels of food such as beef or liver. If his appetite is poor, force beef juice and orange juice down his throat. Teaspoonful doses of equal parts of brandy and sugar or honey should be administered every three to four hours. If chorea results from a prolonged case of this disease, nothing can be done to alleviate it.

Cough may be due to tonsillitis, laryngitis, bronchitis, tracheitis, bronchial pneumonia, worms, or a foreign body. To properly differentiate between these a Veterinarian must be called in. Except in the case of foreign bodies or worms, rest is essential in all these cases. Keep the dog confined to a small area, keep him warm and give him small doses of ordinary cough medicines and feed only soft foods. Allow very little exercise and keep animal from barking as these only induce more paroxysms of coughing.

FITS:

This is an outburst of hysterical barking and is quite common in pups. It may be a forerunner of distemper or due to calcium or vitamin deficiency, teething, metabolism changes, meningitis, worms or fright. During an attack he will run blindly into objects so it is important to restrain him. Put him in a closet or room where he cannot hurt himself; apply cold cloth to his head. You will need professional help to administer morphine or nembital if the attack runs any length of time. Ascertain the cause and correct this.

DIGESTIVE DISTURBANCES:

Bad breath may be due to bad teeth, infected tonsils, or tumors in the mouth or in the stomach. Often a particle of bone lodged between the teeth will produce an offensive odor. Clean the teeth regularly, remove scales. If there is an inflammation of the gums or pyorrhea, treat the gums with a 10% Tincture of Iodine in water. Have the loose teeth removed.

Vomiting is caused by overloading the stomach, eating tainted or poisoned food, or foreign bodies, or the presence of excessive bile in the stomach (this latter is known as billiousness) or any irritation of the stomach or presence of parasites. When vomiting occurs it is always well to keep all food or water away for a time. This will rest the stomach and no drugs will be necessary to correct this condition.

Gastritis is an inflammation of the stomach. The causes and symptoms are the same as in vomiting. The treatment is withholding food and water for a while, later feeding very small quantities of beef, white of egg, orange juice; give only small quantities of water, otherwise it will be vomited back.

Small doses of rhubarb and soda and essence of peppermint are beneficial.

Diarrhea or dysentery is caused by the ingestion of irritating foods or poisons or foreign bodies. It is frequently found with the presence of hook worm and whip worm in the intestinal tract. The treatment consists of removing the irritating and foreign bodies and the worms — if it still persists, give large doses of any of the forms of Bismuth or Alukalin.

Constipation is caused by the disease of the liver, dry foods, and most often by eating large quantities of bones. Liberal doses of mineral oil, milk of magnesia and enemas will correct this. When impaction is due to partially digested bones, oil enemas and rectal manipulation with the finger is necessary before the bowels will rid itself of the mass.

WORMS:

The presence of worms in pups or grown dogs is usually recognized after a microscopic examination of the stool. The only exception here is the tape worm. This parasite is discovered only when the segments break off and are eliminated in the feces. These can be recognized with the naked eye. The segment will also wriggle out of the rectum and attach itself to the hair or fall on the bed. The common round and stomach worm and hook worm is easily eliminated. The most difficult to eliminate is the whip worm as they hide in the caecum and it is difficult to dislodge them. The most common vermifuge is Tetrachlorethylene commonly known as "nemas." This will dislodge most all of the worms except the tape worm which respond to arecoline hydrobromide and enemas. Other vermifuges used are Santonin, areca nut, aspidium, jalap, kamala, etc. There are many commercial worm removers on the market and unless one is familiar with the pharmaceutical contents they become a dangerous medication—about the only exception is "nema" which is tetrachlorethylene, and Vercaps, which is nema plus the addition of epsom salts. In the use of nema the dosage is quite important. Do not give more than two mimums of this drug per pound weight of dog and follow with a generous dose of laxative. Nema should not be used on dogs that have a temperature or liver disorder.

COMMON POISONS AND TREATMENT

ARSENIC compound is found in rat poison, insecticides or Paris Green.

The Symptoms—Irritation of the mouth and pain in region of abdomen, violent vomiting, thirst, frequent bloody diarrhea and paralysis of extremities.

Treatment—Immediately induce vomiting, give milk of magnesia, white of egg and follow up with 1% Sodium Thiosulphate.

LEAD POISONING—(usually from licking paint).

The Symptoms—Vomiting, abdominal pain, constipation, black stools, muscular twitching, cramps, stupor.

Treatment—Same as arsenic poisoning, also add 10% Magnesium Sulphate.

PHOSPHORUS—from rat poison, roach poison and matches.

The Symptoms—Increased thirst, vomiting, pain around abdominal regions, restlessness, may pass blood and very frequently belches—a garlicky odor.

Treatment—If animal has vomited then give 2% copper sulphate in teaspoonful doses every fifteen minutes.

STRYCHNINE POISONING—follows the dosing of dogs with human cathartic pills or accidentally picking them off the floor, also from deliberate and willful poisoning.

The Symptoms—Muscular spasms with stiffening out of the entire body followed by periodic spasmodic rigidity, convulsions and locking of jaw.

Treatment—Administer, if possible, an emetic, then apply ether or chloroform to nose—a generous dose of morphine or nembutal is very essential if animal has taken a large dose. Keep animal very quiet.

URINARY DISEASES:

The bladder and kidney are the centers of these disturbances. When the bladder becomes inflamed or irritated, we are dealing with a Cystitis—this may be due to infections, toxins or colds. The urine is frequently cloudy and has a very strong odor—it may be colored with blood. Sometimes what appears to be a bloody urine is only the reddish color due to eating of beets. Blood may be caused by the presence of stones or calculi in the bladder. In this case the effort to urinate becomes quite frequent accompanied by distress and constant straining — the only treatment in these cases is

operation and removal of stones from bladder or urethra. The usual treatments for cystitis is 2½ to 5 gr. Urotropin tablets three to four times daily with addition of copious amounts of water.

Infection of kidney or Nephritis is a common occurrence in dogs and most frequently overlooked. A proper diagnosis should be made from a urine analysis. This disease follows prolonged infection such as distemper or streptococcus infection, administration of certain drugs or poisons. The disease can be recognized by the stiffness in the hind quarters, arching of the back, frequent attempts to urinate, bad breath, and often diarrhea. In the late stages they go into convulsions and uremic coma.

Treatment—Consists of low protein diet, plenty of liquids. Medication here is more complicated and depends upon the type of Nephritis.

SKIN DISORDERS:

Under this heading come eczema, mange, and parasitic skin diseases. Eczema may be dry or moist. The causes are obscure. It may be due to wrong diet, vitamin deficiency, liver or pancreatic disorders, worm infestation, too much sunshine or excessive scratching may be due to lice, fleas, chiggers or ticks. Before beginning treatment remove the causes then apply a soothing skin lotion preferably with a sulphur base dissolved in a bland oil. If eczema is moist apply a 10% Salicylic and Tannic acid or calomine lotion. Insects should be removed with some form of Pyrethrum product. Mange may be follicular or sarcoptic. Follicular mange is caused by a demodex mite burrowing deep under the skin, the sarcoptic or scabies type is on the surface and causes scabs. The former is recognized by hairless red spots appearing around the neck and face with very little itching, while the latter is recognized by intense itching with the rapid spread all over the body. The proper way to diagnose these is with the microscope. A scraping of the skin on a slide will usually reveal the parasite.

Treatment—Consists of washing the skin with germicidal soap. To the follicular victim Rotenone in castor oil is applied. This must be in divided doses because of its toxicity. Scabies is treated with sulphuretted oil applied daily.

EYE:

The most common diseases are conjunctivitis. This is an inflammation of the inner membranes of the lids that lie adjacent to the eye. This produces a redness to the surface and frequently creates a mucus and pus discharge. The lids may be shut or in squint position. This condition follows severe infectious diseases such as distemper, also due frequently to foreign body as a cinder, injuries such as a blow or dog fight.

Treatment—Application of warm Boric acid is the most frequent treatment. Eye wash as Collyrium and ophthalmic ointment such as 1% yellow oxide of mercury or 5% argyrol is used. Keratitis (an inflammation of the cornea) follows severe infections of the conjunctiva or injury to the eye ball. The cornea turns a cloudy grey or blue. This condition may develop into an ulcer. The proper treatment here is the application of Atropin in minute doses and keep the animal in a darkened room.

EARS:

When the dog shakes his head violently or holds his head to one side the chances are that there is an ear disturbance. An examination may disclose an accumulation of debris such as wax, dirt, or a moist messy and smelly discharge. This may be caused by ear mites or inflammation of the ear canal through a cold, water, draft or just straight eczema. If the condition is not soon cleared up it develops into an ear canker. Always remove the debris before treatment starts. This can be done by wrapping cotton around an orange stick and moisten this in 50% alcohol or witch hazel. After the ear is cleaned, if a dry eczema is present, put in a few drops of 1% phenol in glycerine—if moist, then drop in a little 10% Tannic Acid and Salicylic Acid in alcohol. In some cases an ointment containing resorcin and oil of cade could be spread around the inner cartilage—for ear mites a parasiticide is necessary to destroy this parasite.

**THE WESTON-LEVINE
VITAMIN CHART**

Revised to December, 1938

By **ROE E. REMINGTON, Ph. D., D. Sc.**

*Director of Food Research Laboratory
Medical College of the State of South Carolina*

Copyright 1931, 1934 by South Carolina Food Research Commission

EXPLANATION

The term vitamin is used to designate a group of accessory food substances which are not identical with the familiar nutrients—proteins, fats, carbohydrates, and inorganic salts—and which, despite the minute quantities present in most natural food materials, are nevertheless essential for normal nutrition. Although the chemical composition and structure of some of the vitamins is now fairly well known, and hence they might be given strictly chemical names, the designation of "vitamin" still persists in scientific literature and common usage. Furthermore vitamin activity may be a property of chemical compounds other than those so far isolated and identified. While evidence for the existence of others is being continually advanced, at present the existence of at least eight independent vitamins has been definitely established.

The vitamin potency of foods was formerly expressed by such general terms as "fair," "good" or "excellent," or by such symbols as +, ++, +++, etc. The Vitamin Standardization Committee of the League of Nations has adopted units of activity for vitamins A, B, C, and D as follows:

Vitamin A: The growth-promoting activity of 0.0006 milligram of pure beta-carotene.

Vitamin B (B₁): The activity of 10 milligrams of a standard adsorption concentrate of the vitamin on fuller's earth.

Vitamin C: The scurvy-preventing activity of 0.05 milligram of pure ascorbic (hexuronic, cevitamic) acid.

Vitamin D: The anti-rachitic activity of one milligram of a standard solution in oil of purified irradiated ergosterol, equal to 0.000025 milligram of crystalline vitamin D.

The B vitamins: The name vitamin B was originally applied to a water-soluble substance which specifically prevents polyneuritis or beri-beri, and promotes growth. Natural sources of this vitamin also contain other water-soluble substances effective in prevention of pellagra in man and various other disorders, such as florid dermatitis, loss of hair, and failure of growth in experimental animals. For a discussion of the fractions of the vitamin B complex, refer to recent literature, particularly Eddy and Dalldorf. The following may be noted:

Vitamin B¹: Prevents beri-beri in man, polyneuritis in rats and fowls, and is necessary for growth.

Riboflavine (formerly called Vitamin G): Prevents loss of hair and a non-specific type of dermatitis in rats, and is essential for growth.

Vitamin B²: Prevents florid dermatitis (acrodynia) in rats, and is necessary for growth.

Vitamin P P: The pellagra-preventive factor of Goldberger, formerly thought to be identical with vitamin G. Prevents pellagra in man, and black-tongue in dogs.

Of these, only B¹, riboflavine, and P P are included in the chart.

Since not all foodstuffs have been tested with sufficient accuracy to enable their potency to be expressed in numerical units, and for the further reason that the vitamin potency of vegetable foods varies somewhat with conditions of growth or part of the plant used, and that of animal foods depends to some extent on the vitamin supply in the diet of the animal, it has not been thought best at present to assign numerical values in the chart. The sources of each of the vitamins have therefore been divided into the four following classifications:

Concentrates, intended for medicinal use under guidance of a physician.

Most potent, yielding one-half or more of the estimated daily requirement in one serving or in an amount which would ordinarily be eaten in one day.

Excellent, yielding twenty per cent or more in the above amount.

Good, yielding ten per cent or more in the above amount.

This method has been followed with regard to vitamins A, B, C and flavin. It is not known whether the adult requires vitamin D, hence the values used for this vitamin are those necessary to prevent rickets in infants. The daily requirement of vitamins P P and E is not known, hence the classification of these is only roughly relative.

Many foods, which are known to contain vitamins, have been omitted from the table because they do not as ordinarily used yield the amounts specified above. Foods given in the same column are not necessarily of equal potency. Neither have we attempted to include other than common foods which are generally available. Extensive tables of vitamin potencies of foods can be found in the monograph by Daniel and Munsell (see bibliography, last page).

Vitamin A has been termed the "anti-infective" vitamin. However, impaired nutrition in any respect makes for a weakened physical state and increased susceptibility to infection, hence all vitamins with the possible exception of E may be said to aid in maintaining resistance to infections.

In general, the evaluation of each vitamin source as given in the chart is based on the food material in its original state. However, some of the vitamins, as indicated, are susceptible to inactivation or destruction by heat or oxidation. It is impossible to say in view of the widely different methods employed in the cooking of food, to what extent the vitamin activity is decreased by the cooking process. Due to modern methods in commercial canning, most foods suffer but little loss in vitamin potency in the canning process, and canned fruits and vegetables are superior to those cooked in an open kettle with access of air.

N.B. The Chart of the Various Vitamins is attached to the rear cover of this booklet.

(Published By Special Arrangement)

ADVICE TO THE NOVICE EXHIBITOR

By STUART G. HARDY

To write a brief treatise that will answer all of the problems that a novice breeder will encounter is manifestly impossible, but conversely to restrict the comments from fear of being trite might endanger the purpose of the article. Let us, therefore, create a hypothetical individual to whom these observations might be addressed. Such an individual would be one with the average intelligent interest in dogs exemplified by the ownership from time to time of pets whose characteristics might be fairly close to the breed standards, and also perhaps with the experience, intentionally or unintentionally, of having had a litter or so to rear. Let us further assume that at some crucial point an entry in a show results in getting a ribbon, and the elated and confident owner decides to extend his interest to the breeding and showing of his favorite breed, presumably Scottish Terriers. From this point onward the progress of the disease becomes more rapid.

Here the first constructive suggestion can be made. Proceed deliberately. If money is no consideration, it does not take long to buy top-notch dogs, build a plant, hire an expert manager, and begin winning. But our average prospective breeder, like most of us, will be limited in the amount of his expenditures, and will probably have to rely on his own industry or at best on part of the time of the hired-hand. It is therefore inadvisable to load up too quickly for fear of finding that the responsibilities of maintenance are such a drain on available time as to preclude showing. It would be sensible to buy as a starter a couple of good bitches, not necessarily ones that can be shown, but definitely ones from blood lines that have produced winning stock. It is generally a mistake to buy a stud dog at the beginning. For the annual up-keep of a mediocre dog, one will find that a few bitches can be bred to the best dogs available, which if done sensibly will also give a background of blood-lines that will permit cross breeding within the kennel when it has been expanded.

As for the beginner's plant, it is comforting to realize that some of the greatest dogs have been whelped under the kitchen

stove, and raised without benefit of fancy buildings and runs. Again the recommendation is to progress gradually but with plans that will allow comfortable and economical expansion if the more important growth of quality and quantity of dogs materializes. A part of the barn, an old chicken house converted with inner sheathing, or an outside room, have frequently been very satisfactory beginnings for a small kennel. If it is necessary to build, a single room can be constructed, say ten feet by twelve, with a door at either end. Equipped with an old kitchen stove which can be converted with oil burners for cooking and heating, a sink if running water is available, and a removable battery of sleeping boxes, the main requirements of handling a few dogs can be satisfied. Outdoor pens can be built so that one of the doors gives access to them. If expansion becomes necessary, the building can readily be extended at the free end to provide a room which can make available indoor pens of solid construction, either of wood or galvanized iron, and more space for a larger battery of sleeping boxes. The original room can then become merely the kitchen and washing space, and if convenient a place for records. Space in the addition should be left to set up a work table for grooming, trimming, and handling the dogs. This table should be made high enough so that while one can see the top of the dog, it is not necessary to stoop in grooming or trimming. Another caution is to remember that dogs will chew all wood into which they can set their teeth. The carpenter should be warned of this so as to have all surfaces as smooth and free from corners as possible. If it is impossible to accomplish this the most obvious places can be covered with zinc sheet or light galvanized iron. In planning the runs care should be taken that the mesh of the wire is small enough so that the show stock cannot nose through it and rub off face furnishings that take tedious weeks to regrow. Also plan the runs so that the only exit from them is either through the kennel building or through an approach run. This will keep two gates or doors between the dogs and freedom and will save weary hours of chasing dogs that develop a shrewd ability to dart between a person's legs when the gate is opened.

Operations now begin and the first litters are available for consideration. Their rearing and diet is gone into most exhaustively in other pages of this pamphlet, so our questions are limited to the practicalities of the situation. It is hopeless

for a beginner to attempt to pick the good ones from a litter when they are very young, so if possible it is advisable to keep them all until about five months. About then one can be fairly sure which puppies are going to be definitely no use for show, and it is advisable to sell them as soon as possible. As for the others, it is safe to say that there is more chance of them getting worse than there is of them getting better, but it may still pay to keep them a little longer. Remember that a bad fault rarely cures itself, and also that a fault can develop almost overnight. Generally speaking a badly undershot mouth, an extremely gay tail, coarseness in the skull, poor ears, and a markedly bowed front never improve. And conversely, a good mouth at six months can be undershot at nine months, a dark eye can become light, and a seemingly good coat can develop into a semblance of a piece of moth eaten buffalo rug. As a practical matter the breeder is dealing in an application of the law of probabilities, which ordains that it is infinitely more difficult to obtain a dozen good characteristics than a half dozen, and not merely twice as hard. As a result there is the rule of thumb that you have to breed about a hundred puppies to get one flyer. The common remark that there was never a good one without faults is in the main true, and is readily understandable when thought is given to the myriad of accidents of growth and development that have to be avoided before maturity is reached. No discouragement is intended. On the contrary, it is thought that appreciation of these facts will tend to allay the discouraged feeling everyone gets when the best laid plans seem always to go astray.

But in any event, let us assume that out of the first few, one does shape up fairly well. Our novice has studied the standard of the breed, has attended shows, and has talked to other fanciers. On the basis of this information he can begin to form an opinion on the points where his puppy is at fault. If this simple acknowledgment can be made, our beginner is progressing and can attempt to learn to trim his dog so that these faults are not too obvious. As an example, if the puppy has more than enough tail, it does not help his general appearance to leave an inch or so of hair on the end of it. Conversely, if the tail is too short, it might be found advisable to leave more hair than usual. The aim of all trimming is to bring out the good points fully as much as hiding the poor ones. A judge, if he is able, will find the true facts under the trimming, but

it is natural that he cannot be expected to assume the whole responsibility of discovering the good points of an animal he judges. Remember that in preparing for a show or series of shows that the situation must be planned ahead. It takes from twelve to fourteen weeks to grow sufficient body coat for a show and beginning with a month or six weeks before the show, the closer trimming of head, chest, tail and quarters must be begun. For each full body coat it is possible to trim the latter named portions quite a few times. A proficient trimmer can keep the body coat going indefinitely but this will probably be found to be beyond the capabilities of the novice at the outset. He can expect therefore that about twice a year the dog has to be taken down completely and time allowed for a new coat to grow. Once in bloom it can be kept for quite a while by thinning out the long hairs from time to time. If our novice does not aspire to start out trimming the show stock himself, do not forget that a professional needs just as much time. He cannot be expected to do a good job on a dog taken to him a few days before a show, and for this reason he should be approached well ahead of time and allowed to do the basic trimming necessary.

As for the actual showing, much of the training and preparation will be the owner's whether or not a professional is used on the day of the show. As soon as the puppies need grooming, it should be done on the table so that they become used to being handled and standing in the pose that will be demanded of them when they are older. An adjustable slip noose suspended from the ceiling over the table can help instill standing. At the same time a gentle upward stroking of the tail will teach them to keep erect this important factor of their general appearance. At an early age they should be taught to lead, and a definite conclusion reached on the question of who does the leading. Once on a lead the puppy should be made to pay strict attention to business, and walk with head up a couple of feet away from the handler's legs without requirement of a tight lead. Prevent a young dog from getting the habit of moving in front, for it will tend to allow him to move with head down and throat hard against the collar. While teaching the puppy to stand and lead, it is advisable to broaden its education as to other sounds, places, and people. If there is a club that puts on puppy matches nearby, our novice should join and give his puppies and himself the necessary experience

to be gained from actual competition. The judging will be about the same procedure as in a large show and the steps that are normally taken in judging can be studied. The novice should not be burdened with too many objects in his pockets. A very thin lead, light collar, comb, very small brush, and perhaps a small ball or piece of liver is plenty of paraphenalia to keep track of and at the same time do justice to the dog. It will be found that the pattern of judging is generally a moving of all the dogs, a detailed individual examination, individual moving, and final comparison of all of the class in a line. The training of the puppy on the table and on the lead is demanded to suit this program, and that accomplished, about the best advice available is to get into the ring and keep notice of what is going on. Each time some new point will be noticed from observations of those more experienced, until finally our former novice suddenly, and to his intense surprise, finds some one else is watching him. He has then arrived.

BREEDING HINTS

By MAURICE POLLAK

Most exhibitors go through a process of evolution that is identical—first there is the thrill of winning, preferably with an import; then there is the satisfaction of winning with an American Bred; and then comes the realization that the ultimate objective and greatest thrill of all is to breed and win with one's own breeding. The uncertainties attached to breeding, the fascination of watching plans mature and puppies develop, and the satisfaction of seeing your own breeding win—that is the incentive and stimulus that helps keep dog lovers in the game. It is the very difficulties and disappointments that must be overcome, the realization that so few turn out up to expectations, that make successful breeding the difficult but fascinating sport it is.

A successful breeding establishment will lay particular stress on its bitches and brood matrons. Remember, it is not necessarily the top show bitch that will make a good producer. In fact, a careful study of the breed indicates that the successful show bitch which also is a top producer is the great exception. In the selection of foundation stock and the most desirable type of bitch to breed out of, there are two factors to consider—first, the type of bitch herself—secondly, her blood lines. My experience has been that the best results are obtained out of what I shall describe as the brood bitch type. This is a bitch that would be bigger than my ideal of a show bitch. She should be sound, full of Terrier type, have plenty of room to carry puppies and be a slightly over-sized good one. In selecting my brood bitches I likewise would want to eliminate any that had an outstanding transmittible fault: she definitely should have a good coat and I would not breed out of a poor coated one. If her eye were a little on the big side or not quite as perfect as I should like, this would not be too serious if she met my other requirements as by breeding her to the right dog this could be readily overcome and naturally the brood bitch in question is not going to be perfect. I would try to pick a brood bitch who has champions close up. In other words, I would like a fair number of champions among her

first two generations and, bearing in mind the type of Scottie I should like to breed, would like the bloodlines to contain a sprinkling of the type of Scottie that represents my ideal. With the above type brood bitches as the foundation of my breeding establishment I then would carefully study the available stud dogs. It is better to miss a bitch than to breed her to whatever dog happens to be nearest or most reasonably priced as you cannot breed to inferior stock and expect to produce winners. It is better to economize by breeding less bitches but to use the best dogs.

The question has often been asked, "Why are more winners produced in England than here?" My answer is that more winners were produced, but I believe that Scottie records over the past few years show that American breds are readily gaining the ascendancy, and I attribute that to a realization on the part of American breeders that they should use the best stud dogs rather than try to own their own stud dog. I believe that more breeders have been held back by an ambition to own their own stud dogs than any other one single factor. A study of the pedigrees of many great champions will show that many small breeders have persistently plugged along breeding their bitches to the best outside dogs and thus slowly but steadily improved their strain. These are the first principles to remember—use the best stud dog you can afford to use and emphasize the strength of the females in your kennel. Unless a male gives indication of developing into a top specimen, do not keep him. On the other hand, however, keep your females if they are typy and represent the right bloodlines.

Now we come to the all important matter of selecting the stud dog we wish to breed our matron to. In selecting this dog several factors must be considered. First, what is the outstanding fault we wish to correct in our brood matron? Let us assume her eye could be smaller and darker. Then it follows that we must select a stud dog who dominates in this respect and who already has proven by his progeny that he is producing good small dark eyes. Secondly, we want a dog who has proven himself to be a producer of typy, quality Scotties. Our next consideration is the all important matter of bloodlines. If our brood matron dominates in "Necessity" strain, for example, it will be well to continue that strain, and we will want a dog that contains some of the same blood as our brood matron. At this point I should like to say a few words regard-

ing line breeding and inbreeding. The most successful breeding of dogs, cattle and animals in general has been the result of inbreeding. Cattle and poultry have been inbred much closer than dogs. In dogs the most successful breeding has been accomplished by intelligent line breeding but breeding that is not too close. You must remember above everything else in line breeding that you must line breed for good points but must not line breed if the closely related dogs have the same outstanding faults. Thus if your brood matron has an eye that is not too good and if her sire has this same fault, you must not breed her to a stud dog who has the same faulty tendency no matter how appealing the line breeding looks on paper. On the other hand, if your brood matron dominates in coat and has a beautiful expression, it by all means is the soundest kind of breeding to breed her to a half brother who dominates in the same quality. The offspring of such a breeding should firmly implant that good quality in your strain and you then can attempt in the next generation further improvement along other lines. The most successful type of line breeding is that which provides common grandmother. This is not practised very often because it obviously requires more patience and a longer period of time to be able to breed in this fashion. The most popular type of line breeding is to have common grandsire, and many of our greatest winners are the result of common grandsire and in some cases the result of three of the four great grandsires being identical. On the other hand, I am convinced a greater percentage of good ones is produced out of common granddams than any other way provided, of course, the common granddam is a good one.

The impression that excessive line breeding or inbreeding produces nervous dispositions is erroneous if due regard is taken of previous remarks about avoidance of line breeding where common faults exist. Thus, no matter how many times we line breed it will not affect dispositions provided dogs being inbred have good dispositions themselves—just the reverse—it will establish the good dispositions in our strain. Where nervousness is developed as a result of inbreeding, it is the result of line breeding dogs who have the common fault of nervousness themselves. At this point, while on the subject of disposition, I should like to particularly dwell on the importance of Scotties having Terrier fire and breeders avoiding the use of stud dogs or matrons lacking fiery dispositions, not alone for

the welfare of the breed but from the point of view of winners in the showing. It will be noted that many times a good specimen that is a fine shower will go over superior dogs possessing indifferent showmanship.

An important point in producing successful stock is the condition of your dogs. A bitch should be in good hard condition prior to being bred. Plenty of exercise is an important requisite. After trying many systems we have decided it is the best policy to worm our brood bitches as soon as they come in season, and we do not worm them once they have been bred. Some bitches have a tendency to miss, but very few bitches or dogs are sterile. It will be of interest to breeders to know that during recent years great success has been achieved by injection of Antuitrin-S, Registered Apoidin—a Parke-Davis product. Brood bitches should be injected twice a week for two weeks prior to the date due in season and stud dogs should receive injections twice a week for two or three weeks. The result of these injections has been tested both on human beings and dogs, and it has been definitely proven that both humans and animals who were thought to be sterile have conceived successfully. It will be well to consult your Vet regarding this product if some particular favorite of yours has not been able to produce.

In referring to bitches I have used the words "brood matron." I do not wish to create the impression that champion bitches have not produced great ones. I do mean to stress, however, the importance of breeding out of the right type of bitch and to point out that just because you are breeding out of a champion it does not follow that best results will be obtained. In breeding you will at times find that a certain bitch bred to a certain dog produces an "exceptionally good litter—a "nick." When this is the case, it is sound policy not alone to breed the same bitch back to the same dog but to breed as many bitches as you have of similar blood lines preferably to the same dog or if this is not possible, to a dog of the same blood lines. A study of the background of many of our great Scotties will show that a "nick" has been the guiding light which has enabled many famous kennels to get their start.

Just as among producing bitches it is, generally speaking, the doggie type of bitch that is best, so in the selection of a stud dog have I found that there is what I might refer to as a stud dog type that usually is most dominating. My idea of this type is a dog who has heavy bone, is very short in

back but nevertheless has a powerful body and great depth of brisket. A dominating stud dog is seldom found who does not also own this latter requisite and together with these points, a fiery dominating disposition.

Some particular dogs or bitches dominate in one particular respect; I have seen the progeny of certain bitches consistently produce beautiful tails (the kind that are short and carried upright when moving) no matter to what dog bred; certain dogs produce wonderful eyes consistently. Obviously the clever breeder will select his stud dogs or brood matrons according to his requirements. It will be realized that a sound breeder must be an intelligent, sound observer and the extent of his success will depend upon his ability to sense correctly the dominating influence of the dogs under consideration and then make proper use of his observations.

It is a common failing on the part of inexperienced breeders to select as their stud dog an outstanding winner. Yet, how seldom is the outstanding winner a great stud force! What chance has he had to prove wherein he dominates? Is a dog in physical shape to give of his best at stud if shown steadily—burning the candle at both ends as it were? From observation and experience I venture the opinion that the sooner a stud prospect is retired from the showing the greater his opportunity to develop into a dominating producer.

Many conscientious breeders spend hour upon hour studying pedigrees in order to select the best stud dog. Here again I feel the better policy is to be guided by soundness and reason. The greatest pedigree alone does not denote dominance in the points you want improved unless you know the factors that particular strain excels in as well as its shortcomings. I am a great believer in knowing all about the grandparents of the dogs to be mated as very often the influence of the grandparents is greater than of the parents. That is why dogs so often dominate in transmitting qualities they themselves apparently fail to possess.

It will be readily understood from the foregoing what a fascinating study breeding involves and why breeders whether they be big or small are the foundation stone upon which continued development and improvement of our favorite breed depend.

REARING PUPPIES TO MATURITY

By THEODORE W. BENNETT

In the entire life span of a dog there is no more critical time than the comparatively few months between weaning and maturity. It is in this period that the greatest physical and mental growth takes place, demanding conscientious and intelligent care on the part of the owner. Until six or seven weeks the dam has had the entire care of the puppies, and, if everything has been normal, she has done a pretty good job of it; it is up to us to see that in the remaining period of growth the puppies are given the same advantages.

By observing a litter toward the weaning time it will be noticed that not more than four or five complete nursings are given per day, and possibly one or two during the night. Therefore when weaning is completed it is not too much of a step to put the litter on four or five feedings a day. It is good practice to give the first meal early in the morning and the last one as late in the evening as is convenient, the other two being spaced at equal intervals during the day. On this schedule the puppies have an eagerness for their food, and there is no wasting time or effort in attempting to force food on them whether they want it or not. As the puppies grow their need for more food increases, but, at the same time, their stomach capacity increases at a greater rate, and it is usually found that after three to four months three meals per day will be sufficient. Allow each puppy to eat as much as he can hold at each meal even if it distends his little belly so that it takes on the contours of an inflated balloon. In my experience no ill results have occurred from permitting a puppy to eat his fill, but after partaking of such a heavy meal he should not be played with but allowed to sleep it off, which he will do naturally. Water should be given sparingly to puppies since this requirement is largely taken care of by the moisture contained in the food. An excess of water will cause loose bowels, and the amount that should be given can be governed by the consistency of the stools. From six months to about nine months, two meals a day will maintain all possible growth; thereafter one meal is found to be sufficient. There is disagree-

Scottish Terrier Club of America

ment among breeders regarding the frequency of feeding puppies, many advocating more meals per day; however, I have found that this feeding program produces full-nourished and good-boned puppies which mature into physiologically sound specimens. By following this outlined procedure, and providing the quality of food is right, there will be fewer fastidious eaters and "poor doers."

Providing they are given as much exercise as they will take, puppies seldom put on much excess fat; especially is this true from the ages of three months on. All nourishment seems to go toward building bone and tissue, and what is left over is consumed in supplying the energy for running about and playing.

Often there will be one or two individualists who will fight off the other members of the litter, at the same time trying to gulp as much food as possible for themselves. I remember one little gourmand in a litter of seven that was so busy trying to keep the others from the food pans that he invariably lost out on his own share. It is best to segregate such belligerent gluttons at meal time.

More important than the question of how often to feed is the one of what to feed. Again variance of opinion will be found on this point, but the disagreements usually are confined to relatively unimportant details, some insisting on horse meat as against beef or mutton, others advocating a certain brand of prepared dog food as opposed to another brand; however, every intelligent breeder tries to give his puppies a diet containing all the proteins and carbohydrates along with the vitamins and minerals, all of which are absolutely necessary to promote normal growth and freedom from any of the diet deficiency diseases. In weaning puppies I have used with complete success a canned simulated bitch's milk of which there are several brands on the market. This product fills a long-felt want and is easy to prepare and administer. By following directions on the can it can be given to good advantage for sometime after weaning, using it as one of the daily meals. Immediately after weaning the basis of feeding should be meat mixed with one of several dry puppy foods. Many dog food companies make a dry meal that is expressly intended for young puppies. In preparing the food it is advisable to add about an equal volume of water to the meat and bring it to a boil in order to kill any bacteria or germs that might be present. To this is added sufficient meal

to produce a mixture of a crumbly consistency. Care should be taken not to make it too sloppy. During the period of rapid growth, an extra supply of bone-building material must be made available in the diet. This is furnished by adding calcium to the food in the form of di or tricalcium phosphate, or better still calcium gluconate which is said to be more readily assimilated. For each puppy a teaspoonful a day of a good grade of cod liver oil will assure an abundance of necessary vitamins. In summer this amount can be cut in half. Although not absolutely necessary, canned fish makes a welcome change in the diet as well as supplying fish oil and many of the minerals. Canned ground whiting or cheap canned salmon is excellent for the purpose. Bones or hard biscuits should be given rather frequently to aid teething and to promote proper teeth development.

It is easy to differentiate at an early age any individuals in the litter who are destined to be over-sized, but there is no possible way of controlling their ultimate growth unless it is at the sacrifice of complete physical development, and it is preposterous to suppose that a puppy or a young dog can be kept down to size by starving it. Such an attempt would result only in a stunted and deformed specimen. Likewise a puppy which looks as if it were going to be under-sized cannot be made to grow faster or larger by forced feeding or by giving it special tonics or drugs.

Worming puppies, although quite necessary in some cases, is apt to be overdone. It is the practice of many breeders to worm their puppies as soon as they are weaned and periodically thereafter as a matter of routine. Vermifuge is a stringent medicine and should be used with caution. As in all other matters pertaining to the care of puppies, prevention is better than cure, and the worm problem is best solved by making sure that the dam is free of worms at the time she is bred and that she is kept free of them until the litter is weaned. If the puppies are found to be infested by a microscopic examination of the feces or by other positive proof, they should be given the prescribed dose of carbon tetrachlorethylene, taking care to follow directions in regard to withholding food before and after administering. They should be kept under observation, and, if they do not have a bowel movement after about four hours, they should be given a tablespoon of milk of magnesia.

The treatment should be repeated in two or three weeks, making sure there is no reinfestation in the meantime.

Teething takes place normally about the age of four months at which time the so-called milk teeth begin to loosen and drop out, to be replaced gradually by the permanent set of teeth. This process may be aided by manually extracting the loose ones and by giving the puppies bones on which to gnaw. An under-shot mouth before teething does not necessarily mean that this condition will exist when the permanent teeth have assumed their final position, but it is wise to forestall such a possibility by the following method: The upper incisors should be loosened and extracted before they naturally are ready to come out, while at the same time the lower ones are left in place as long as possible. The result of this is to stimulate and encourage the extrusion of the upper teeth and to hold back the lower ones. The upper teeth having come through first will be in a position to reflect inward the lagging lower ones and to keep them permanently in their proper place. During this time bones or other objects on which the puppy can chew should be withheld so as not to cause the lower teeth to loosen and fall out. This method has been used with considerable success in very discouraging cases where it seemed that badly under-shot mouths would eliminate the showing of otherwise promising puppies.

No exposition on the rearing of puppies would be complete without a consideration of the development of character and spirit in a puppy. Though a dog may be a marvelous physical specimen and a living example of the breed standard, if he is shy and shrinks from the companionship of man he is useless and should not be allowed to live and reproduce his kind. Extreme shyness is incurable. A puppy so afflicted should be put away as soon as this condition is determined. Not only is it a kindness to relieve the puppy of its acute misery, but also the owner is released from a great deal of worry and mis-directed sympathy. Giving a shy puppy away to a friend only serves to advertise his affliction to the world and to create an unfavorable opinion of the breed. I am pleased to state with positive assurance that we have no more incurable shyness in Scotties than in any other breed and a great deal less than in some.

Extreme shyness is almost always congenital and is in contrast to the type brought on by impatience and thoughtless

handling. The latter may be cured with care and kindness, but here again prevention is better than cure. Never grab quickly at a puppy nor chase him into a corner to capture him; always allow the puppy to come to you, playing with him, and stroking him before taking him in your hands. An effective way to train the puppy is to whistle when food is set in front of him. He will soon learn to associate the sound with a pleasant sensation and will come when this signal is given. After a time, when no food is forthcoming, he forgets the food part of it but still retains the connection between the whistle and the act of coming to you. Constant petting and playing will serve to accustom the puppy to handling and pave the way for easier training in later months. Movement of the body and action of the hands should always be slow and deliberate when doing anything near or to the puppy. No serious training, including housebreaking, should be attempted until at least four months. Until then the puppy has not developed his mental equipment to the point where he can learn and retain the tasks demanded of him. In breaking a puppy to the lead never pull or jerk him roughly, but encourage him along with a pat or a bit of food. Two or more puppies can be broken to the lead more easily than one, for in a group they are more apt to forget their restraining bonds in frolicking about with one another. They soon learn to associate a lead and collar with a good time and will welcome any opportunity to be taken for a walk.

A breeder who rears one or two litters a year has the advantage over one whose puppy production is much greater, in that he has more time devote to the individual youngsters. Dogs of all ages, especially puppies, need an abundance of human companionship, and it is only this that will bring out the true and noble character which we like to think prevails to the greatest extent in our breed.

THE EDUCATIONAL VALUE OF SHOWING IN ALL PARTS OF THE COUNTRY

By BRYCE GILLESPIE

Provincialism in the dog game is just as pernicious and dangerous to the growth of the sport as it is in science, the arts, or politics. It seems that most Scottie breeders are content to try to be the "big frog in the small pond," if they can even attain that, rather than risk a chance to find what small frogs they can become in the big pond.

Probably in the past five years we have traveled more miles with Scottish Terriers and covered a greater area showing them than any others in the breed, so that we feel we are in a position to expound somewhat on the educational value of doing so. Since this cannot be a paid advertisement, we will merely admit that local achievement not then fully matched, prompted our first Transcontinental trip and, in truth, has been the urge every Spring since.

Traveling so far so fast, by automobile at least, is hard on dogs and drivers, and here let us say that dogs under one year should not be subjected to such a strain. They seem to be bewildered and confused, and become finical in eating and lose pounds in weight and bloom. We have started out twice with a youngster each time in perfect bloom and condition, and arrived with a near wreck, all in six or seven days one way. Mature dogs do not go "off" to any degree.

We are not believers in visiting kennels unannounced solely to "see the dogs," as most dogs are at a disadvantage there. Few, if any, are in show shape, and it is disheartening and unfair to see Ch. So and So under poor conditions. We do, however, like to meet owners on their home grounds, and one can enjoy visiting with them there much better than in the turmoil of the shows. Puppies one sees at kennels suffer little in appraisal, regardless of grooming, as most of us see our own continually in the same condition and appearance, and can make fair comparisons.

A different general type seems to govern each section visited, limited by origin, bloodlines, etc. Until one gets well around, one cannot realize to what old fashioned types some hitherto well known names in the breed adhere. We are not champions of every change that comes along, but when the majority has accepted the newer versions to the subjugation of the old originals, we feel in this age of progress we must alter our sights accordingly. We particularly recall a very fair specimen seen far away from home, who must have been descended from twenty-year ago stock, without the infusion of any so-called modern blood whatsoever. His wirey, short brindle coat had never been plucked and his ears had never been clipped or trimmed at age four years. The ears had the short firm hair on the back less than one-quarter inch long, and no fringe worth mentioning. In other words, his ears were in show condition always. The standard we know calls for such ears, but work with clippers and razors is needed now to present them in the way prescribed. Such a dog, beating all in regard to coat as per standard, would fail miserably today, although he was as the standard reads in that regard, but not otherwise as the *style* dictates. Another instance was where an old time fancier in Canada, who hasn't shown for many years, brought out with pride his aged Champion, well known in his day, who was so long in back and tail that if shown today he would create a scene. The owner, when he saw what we had, said he never dreamed a Scottie could be bred to look like that, so short and so sprightly. We asked if he liked our dogs better, and he just smiled and said it was a pity his stuff was so long and ours so short, as even between them the puppies would still be plenty long!

One has to see these things to get the proper balance when it comes to showing Scotties, and if the owners of the out-moded types had themselves seen the trends becoming styles, they would probably have changed too. Isolation causes more "Letters to the Editor" about the good old days of Scotties than anything else.

It is only at the shows, and at as many as possible, and as far apart too, that one can get the proper appraisal of their own dogs and those with whom they are in competition. To our minds, the judging for the matter of education is quite secondary to one's own comparison and mental placements. Whatever way the judge on the day sees them will invariably

be somewhat changed by the next judge. Some of those you see you'll like better than your own, perhaps, because most of us have certain features we prefer, and the heretofore only hoped for feature is visible as an actuality. It is always best to review all the entries collectively, if one can, or at least all those of generally similar lines. In that way a composite specimen can be built up in the mind's eye which is much better than taking the dogs singly. Too much stress should not be directed in such a survey to the Best of Breed or the glorified imports, as these only come "one to a case" and are less dominant in the composite whole, however near the ideal, or your ideal, they may be.

One must dismiss kennel blindness if one wants to profit by the experience of seeing clearly, and the sway that one outstanding specimen always has should be held in check lest one become fanatical on only one feature carried by but one dog. Discount accentuations wherever they present themselves and always keep in mind the grace of balance and proportion.

We have found our excursions into the far fields very profitable and helpful, tending to a much better sense of understanding and mutual cooperation. Every conscientious breeder, we are sure, would welcome more visitation and exchanging of views and ideas with those who some day will feel constrained to take to the road with the best they have and enter the lists at shows in sections other than those in which they are customarily active.

THE SCOTTISH TERRIER CLUB OF AMERICA

SOME FACTS CONCERNING ITS EARLY HISTORY

By CASWELL BARRIE

When I undertook to write this article dealing with the early history of the Scottish Terrier Club of America I had no idea the work would be so interesting and difficult. I assumed it would entail the setting down in chronological order easily accessible, important and interesting facts in the life of the Club. However, I soon found that to garner even a portion of such matter would be difficult, for with the exception of recent years there are no complete Club records to use as source material. So the task has resolved itself into digging here and digging there to unearth a few facts, going to this old time member or that long time breeder to glean a few reminiscences. It is by these means I have collected the information which I have set down in the following article. *I present it as a sort of frame work* which I hope will serve as the beginning for a more complete document and I ask all those interested who can draw upon their memories or who have in their possession old letters, magazine clippings or other material bearing upon the history of the Club, its officers, members, judges, breeders, exhibitors, specialty shows, trophies and famous dogs, to communicate with the writer with a view to including such material in any subsequent edition of this booklet which may be published.

I take this opportunity of expressing my sincere appreciation and thanks to Dr. Fayette C. Ewing and Mr. Henry D. Bixby who have very materially aided me in assembling the data which appears in the present article.

The Scottish Terrier Club of America was organized in 1900. It owes its being to the enthusiasm and hard work of two gentlemen, Dr. Fayette C. Ewing who at that time was a resident of St. Louis, Mo. and Mr. J. Steele Mackenzie of Cincinnati, Ohio, who brought together the membership of the Club that little group of Scottie lovers who thirty nine years ago were struggling to improve and popularize their beloved Diehard.

Scottish Terrier Club of America

In 1895, before the formation of the Scottish Terrier Club of America, there had been an organization known as the American Scottish Terrier Club composed of four or five gentlemen who had attempted to foster the breed but after several years they abandoned the idea, at least so far as a specialty club was concerned, for the American Scottish Terrier Club ceased to exist. However, its treasurer, Mr. James L. Little of Boston, Mass. became active in the new Club.

The original officers of the Scottish Terrier Club of America were, President, Mrs. Jack Brazier; Vice-President and Treasurer, Dr. Fayette C. Ewing; Secretary, J. Steele Mackenzie; Delegate to the A.K.C. J. B. Brazier.

When the first Club booklet was published setting forth the Constitution and By-Laws, Mr. James L. Little's name appears for that of Mrs. Brazier.

As it is printed in this Club booklet of 1900 it is interesting to read the list of members and the many states represented.

Mrs. Jack Brazier	Bay Shore, L. I., N. Y.
Mrs. C. W. Sherman	Brockton, Mass.
Mrs. W. H. Mayer	Newport, R. I.
Mrs. C. B. Gerhart	St. Louis, Mo.
Miss Fanny Brooks	Hyde Park, Mass.
Dr. J. S. Cattawach	New York, N. Y.
Dr. J. Varnum Mott	Boston, Mass.
Mr. Robert Irvine	Hempstead, L. I., N. Y.
Mr. Richard T. Perkins	West Chester, Penna.
Mr. R. T. Judd	Arastia, Colo.
Mr. Edward Cunningham	Boston, Mass.
Mr. I. K. Grundy	Chicago, Ill.
Mr. William Burke	New York, N. Y.
Mr. Thomas E. Carr	St. Louis, Mo.
Mr. Tileston Dorr	Roxbury, Mass.
Mr. Winslow Clark	Southville, Mass.
Mr. W. B. Emery	Boston, Mass.
Mr. W. C. Dulles	Newport, R. I.
Mr. G. A. Chamberlin	New York, N. Y.
Mr. A. D. Bunsen	O'Fallon, Ill.
Rev. Quincy Ewing	Greenville, Miss.
Mr. J. B. Church	Flushing, L. I., N. Y.

The foregoing list together with the four officers comprise an "Honor Roll" of twenty six members.

The Scottish Terrier Club of America was elected a member of the American Kennel Club in 1900 which at the close of that year had a total membership of twenty five clubs. Our first delegate to the A.K.C. was Mr. J. B. Brazier.

Our first specialty show was held March 28, 1910, on the estate of Mr. Lauder, Greenwich, Conn. There were 61 entries judged by James Mortimer. This show was held in conjunction with the West Highland and Welsh Terrier clubs.

Our second specialty show was held June 2, 1915, in the Italian Garden of the Hotel Biltmore, New York City. There were 75 entries judged by Henry T. Fleitmann.

It was in May, 1915, that the first issue of the Club's "Bulletin" was brought out. This little pamphlet measuring $5\frac{3}{4} \times 6\frac{3}{4}$ inches and containing from 16 to 20 pages and cover is filled with interesting news about the members and their dogs. It was published quarterly. Mrs. A. P. Saunders was its first editor and continued in that capacity until 1917 when Henry D. Bixby assumed the work. Because of the World War it was discontinued in 1919. Mr. Bixby has generously presented a file of Bulletins to the Library of the American Kennel Club where they may be examined by anyone who is interested.

In 1916 the Club's officers were: President, Mr. Francis G. Lloyd, New York, N. Y.; Vice-President, Mr. Clarence C. Little, Brookline, Mass.; Secretary-Treasurer, Mrs. A. P. Saunders, Clinton, N. Y.; Governor-at-Large, Miss Fanny Brooks, Readville, Mass.; Delegate to the A.K.C., Mr. J. W. Gillis, Pittsford, N. Y.

This year in addition to the Bulletin the Club published an attractive Year Book of 24 pages and cover. The list of members numbered eighty two. In the advertising section there are twelve kennels represented. Today all of these are inactive and at least eight have ceased to exist. Mr. Bixby's kennels are featured under the name of Sand Hill which because of the similarity to Dr. Harvey's Sandy Brook he later changed to Boglebrae.

At Westminster 1916 Mr. Whittem, judging, found his Best Scottie in Miss Jean Crawford's Conqueror, subsequently runner up to the Best in Show, the foxterrier Matford Vic. Conqueror was handled in the ring by Walter Reeves, now well known all rounder, but in 1916 manager of the Crawfords Vickery Kennels at which Percy Roberts was then second in command.

It is in the March, 1916 Bulletin among the list of new members that the name of Henry D. Bixby appears.

Another paragraph in this same issue states, "Captain H. W. Lance's Lancecote Kennels, Peapack, N. J., are under the care of John McOwen."

In the "Stud List of Members Dogs" published in 1916 there are 39 dogs listed. The highest fee is Walescott Merlewood Laddie \$50.00, with Walescott Daredevil II at \$40.00, and Merlewood Marquis and Laidon Linn both belonging to Walescott \$30.00. Twelve dogs stand at \$25.00, seven at \$20.00, three at \$15.00, five at \$10.00, and eight with no fee stated.

Our third specialty show was held June 9, 1916, at Brigham Hill Farm, the home of Miss Margaret Brigham at North Grafton, Mass. There were eighty entries judged by Harry Lacey, well known editor of the American Fancier.

It was this year that Herbert Hankinson, who made his reputation as kennelman of the great Bapton Kennels of Deane Willis, who had been with Mr. Walter Stern's Earlybirds, became Kennel manager at Walescott for Mr. Lloyd.

In view of the falling off in Scottish terrier registrations and the decrease in the number of entries at shows it is interesting to read the following from the Bulletin of June, 1916. "Scotties certainly seem to be on the rise, new breeders are turning up with encouraging frequency and the older ones are strengthening their stock. It seems a fitting tribute to the breed that while other terriers, as for example the West Highland White, have had a meteoric ascent into popularity followed by an equally abrupt fall, the Scottie has steadily held its own and shown a conservative and healthy growth in popularity which justifies its designation as the most steadily popular breed of terriers."

The Approved List of Judges for 1916 notes the following additions, J. W. Gillis, J. B. Cooper, Frank F. Dole and Dr. John E. De Mund.

Also this same year saw the advent of Sherwood Hall. He became a member of the Club and with Mrs. Hall launched the Glenmanor Kennels which later were to become a real contender in the show ring.

In 1917 the Club's officers were: President, Mr. Clarence C. Little, Brookline, Mass. Vice-President, Mr. Francis G. Lloyd, New York, N. Y.; Secretary-Treasurer, Miss Margaret Brigham, North Grafton, Mass.; Governor-at-Large, Dr. Fay-

ette C. Ewing, St. Louis, Mo.; Delegate to the A.K.C., Mr. Henry D. Bixby, Huntington, L. I, N. Y.

The Annual Meeting at which these officers were elected was held at the town residence of Mr. Lloyd, 157 East 71st Street, New York City. After the meeting Mr. and Mrs. Lloyd entertained the members at a luncheon. I quote from the Bulletin, "Twenty one of us were there and with our new and first Honorary Member, Mr. Harry W. Lacy mounted up to twenty two."

Our fourth specialty show was held June 2nd, 1917, at J. Sergeant Price, Chestnut-Hill, Penn.

This was the first Scottie Specialty Show the writer attended and he will always remember it. The day was perfect, sunny and pleasantly warm. The old lawn of the Sergeant Price's place was a most lovely setting. We sat around the little ring on the grass, under the trees and chatted with each other and greatly enjoyed it. I first met Sherwood Hall here. Old Ben Lewis, father of the late Benny Lewis, showed a lovely bitch, Drumclamp Betty for Bob Ross of Montreal. Mr. Price was the kindest of hosts. There were 44 entries judged by Mr. Whitem.

In 1918 the Club's officers were: President, Mr. Francis G. Lloyd, New York, N. Y.; Vice-President, Mrs. A. P. Saunders, Clinton, N. Y.; Secretary-Treasurer, Miss Margaret Brigham, North Grafton, Mass.; Governor-at-Large, Dr. Fayette C. Ewing, St. Louis, Mo.; Delegate to the A.K.C., Mr. Henry D. Bixby.

As had become the pleasant custom this meeting was held at the New York home of Mr. Lloyd and was followed by luncheon.

At this meeting was learned the sad news that Miss Fanny Brooks was seriously ill. The Club directed the Secretary to send her some flowers and a message of sympathy and all the members present rose and stood a moment in silence in recognition of her great services to the Club. The next day news came that she had died.

Fanny Brooks was one of the first few to own and breed Scottish terriers in America: a founder, and for long years a loyal supporter of the Club, she brought a wise common sense to bear on all the counsels of the Club of which she was until the previous year one of the five Governors.

Additions to the Approved List of Judges for this year were Dr. Hannah Morris, Miss Mary Ray Winters and Mr. Henry D. Bixby.

At this meeting the writer was elected to membership.

In view of present world conditions I print the following from the March, 1918, Bulletin, written by the Club's Secretary, "To close my report I should like to read the following names from our Roll of Honor. I have no doubt the thoughts of all these loyal, patriotic men and women are with us today and I know ours are with them. That they may all come through safely to us for our 1919 meeting is our earnest wish.

Our President, Capt. C. C. Little, in Washington, D. C.

Our Vice-President, Private Lloyd, Coast Artillery

Our Governor, Capt. F. C. Ewing, Base Hospital, La.

Our very good friends:

Lieut. Robert Sedgwick, Jr., Aviation Corps, Fort Sill.

Raymond Freer, in France.

Henry Fleitmann, in France.

Dr. Lance, since the beginning of the war in England and France.

Capt. Charles Williams, Base Hospital, Camp Mead.

Charles Butler, General Secretary Y.M.C.A., France.

Mr. Mulford, in France.

Dr. Harvey, Medical Corps.

Miss Frances Hoppin, relief work for women and children in France.

Colonel Adelaide Baylis, Motor Corps. New York City.

There are no doubt others unreported or waiting to join up and our good wishes go with them.

I would suggest that cash prizes of \$2.50 be paid in Thrift Stamps, thus making our Scotties do their part to down the German dogs of war.

Respectfully submitted,

Margaret Brigham,

Secretary-Treasurer

Feb. 21st, 1918

On motion, it was voted to pay all cash prizes for medals in thrift stamps for 1918.

The question of a Specialty Show was taken up and it was voted to hold one at North Grafton in connection with the Grafton Kennel Club All Terrier Show. Mrs. Seagrave, Miss

Scottish Terrier Club of America

Brigham and Mr. Hall were appointed the committee on arrangements, however, some time after the meeting this decision was withdrawn and because of the war and general conditions no Specialty Show was held in 1918.

In 1919 the Club's officers were all re-elected for another term, however the Secretary-Treasurer, Miss Brigham later resigned and Mr. Robert Sedgwick, Jr., was elected to fill the vacancy.

The Annual Meeting this year was as usual held in the New York city home of the Club's President Mr. Lloyd. The Treasurer reported \$600.00 in Liberty Bonds and a working balance of \$250.00. Nearly \$200.00 were still out in unpaid dues and a motion was made and carried, "That on account of unsettled conditions of the past year, members with dues in arrears shall have one more notice sent them that if dues are not paid in, they will be dropped from the Club and that in case of no reply, they be automatically dropped."

In 1921 the Club's officers were: President, Mr. Henry D. Bixby, Huntington, L.I., N. Y.; Vice-President, Mr. Clarence C. Little, Cold Spring Harbor, L. I., N. Y.; Secretary-Treasurer, Dr. N. Darrell Harvey, Providence, R. I.; Governor-at-Large, Mr. R. M. Cadwalader, Jr., Fort Washington, Penn.; Delegate to the A.K.C., Mr. Robert Sedgwick, Jr., New York.

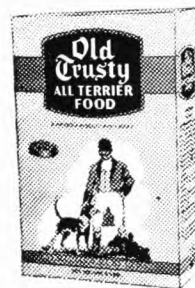
This year saw a change in the trend of Scottish terrier affairs. Mr. Lloyd had died in 1920, and with his death several of the old guard became less active. At the same time there was inaugurated an increasing interest in Scotties throughout New England, especially around Boston. The fancy there was flourishing and rumor had it that a group of breeders was about to form an independent club. This seemed unfortunate to many and so with the beginning of 1922 the office of President, was filled by Mr. Charles E. Jeffrey, Jr., of Boston and New England remained in the ranks of the Scottish Terrier Club of America.

Perhaps some time, if there is enough interest, the record of events in the Club's course may be continued from this point.

Feed Your Dog Old Trusty

ALL TERRIER FOOD AND BOVEX

The best dog food combination on the market.



All Terrier Food — the foundation of the dog's diet. A delicious crunchy coarse-ground biscuit. Principal ingredients: wheat flour, ground beef, and bone meal. Rich in proteins, high in vitamin and mineral content, it contains all the elements needed to build a healthy and happy dog.

Bovex — the big value one-pound can containing meat, and meat by-products, cereals, vegetables, ground bone, salmon, and cod liver oil.

This Old Trusty combination has built many generations of champions.



OLD TRUSTY DOG FOOD COMPANY

NEEDHAM HEIGHTS
MASSACHUSETTS

and

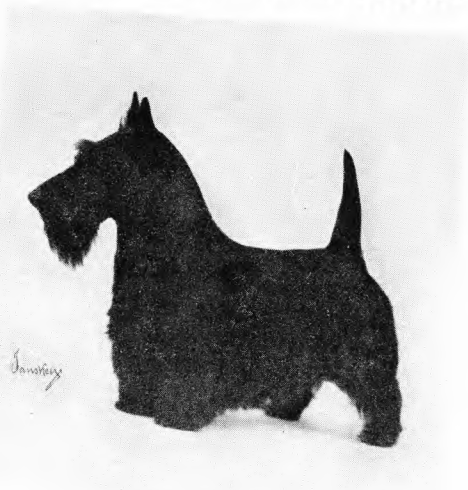
EMERYVILLE
CALIFORNIA

RELGALF KENNELS
MRS. FLAGLER MATTHEWS, Owner

OFFER AT STUD

Ch. Flornell Sound Laddie

WINNER OF THE
FRANCIS G. LLOYD MEMORIAL TROPHY 1938



Laddie's show career has been brilliant, winning thirty eight best of breed awards during 1938-1939. His young stock no less so, they, during the same period have won 126 firsts, 69 seconds, 23 thirds, 17 fourths, 29 Reserve Winners, 18 Winners, 9 Best of Winners, 5 Best of Breeds, 1 Terrier Group, and three times 3rd Terrier Group, one champion finished and three well on the way to their title all in eighteen months. May we suggest that Laddie be included in your breeding plans. For stud cards address

RUSSELL OPENSHAW, Manager
BOX 98
RIDGE STREET
RYE, N. Y.

64

RELGALF KENNELS
MRS. FLAGLER MATTHEWS, Owner

OFFER AT STUD

Ch. Bradthorn Bullion



Bullion, the noted English champion is offered with every confidence to the fancy as a proven sire of high class stock.

Already the sire of Bradthorn Block-out, Gillsie Desire, Gillsie Dominion, Gillsie Dala and many others soon to be shown.

Choice breeding stock and companions usually for sale.

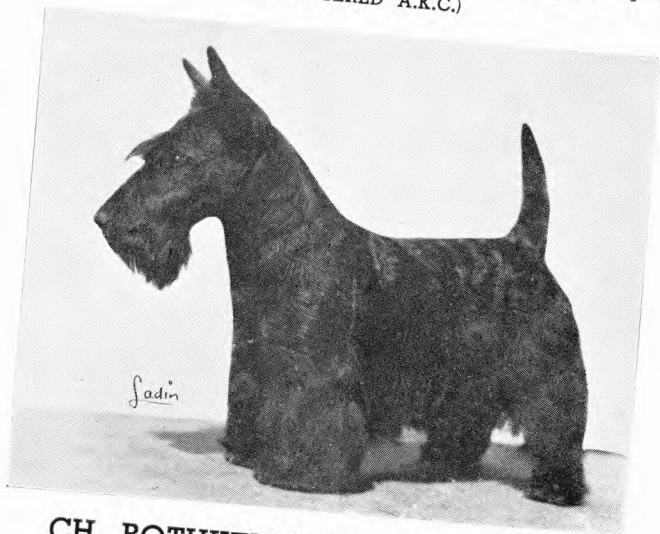
For all particulars address.

RUSSELL OPENSHAW, Manager
BOX 98
RIDGE STREET
RYE, N. Y.

65

BOTHKENNAR SCOTTIES

(REGISTERED A.K.C.)



CH. BOTHKENNAR CORONATION

DOGS:

CH. REDLINGTON RUMPUS
 CH. BOTHKENNAR
 FASHION PLATE
 CH. BOTHKENNAR SAFEGUARD
 BOTHKENNAR NECESSITY
 BOTHKENNAR JUGGERNAUT
 BOTHKENNAR BENEFACOR
 BOTHKENNAR TYPESETTER

BITCHES:

CH. INVERDRUIE SHERRY
 CH. BOTHKENNAR COQUETTE
 CH. BOTHKENNAR CORONATION
 BOTHKENNAR FASHIONETTE
 BOTHKENNAR BOBOLINK
 BOTHKENNAR BANDANA

THIS CALIFORNIA KENNEL, HOME OF SIX CHAMPIONS, MAINTAINS A STUD OF IMPORTED AND AMERICAN-BRED SCOTTISH TERRIERS OF A HIGH DEGREE OF EXCELLENCE. THE BLOODLINES EMPHASIZED ARE THOSE OF THE GREAT CH. HEATHER NECESSITY, HIS EQUALLY FAMOUS SON CH. HEATHER FASHION HINT, AND CH. ORTLEY AMBASSADOR, ALL BY DIRECT DESCENDENTS, AS WELL AS THOSE OF THE INCOMPARABLE CH. ALBOURNE ADMIRATION. CHOICE PUPPIES AND GROWN STOCK GENERALLY AVAILABLE.

MR. & MRS. BRYCE GILLESPIE

1134 NORTH ISABEL STREET
 Glendale, California

VIGAL KENNELS

MR. & MRS. H. ALVIN McALEENAN,

OWNERS



INTRODUCING FLORNELL REAL FASHION

(Champion Heather Realization ex Bradthorne Mary,
 She by Champion Heather Fashion Hint.)

Scottish Terriers

FOR SALE AND AT STUD

FRANK BRUMBY
 MANAGER

JERICO, LONG ISLAND
 Telephone Syosset 1472

Mrs. William Constable's Scottish Terriers
AT STUD

INT. CH. WALSING WALLET

A.K.C. No. 976444

Sire of four champions and many outstanding winners
Appointments made and bitches shipped to

MRS. A. M. HENSHAW
College Hill, Cincinnati, Ohio.

Fee \$35. prepaid.

HIS AMERICAN BRED SON out of Ch. Heather Linda
HEATHER POCKET EDITION

A.K.C. No. A315549

Fee \$25. prepaid

and

BOTHKENNAR ROYAL SCOT

A.K.C. No. A340658

By Eng. Ch. Ortlely Ambassador out of Bothkennar Bobolink
Fee \$25. prepaid.

A few homebred puppies occasionally for sale
out of the following bitches

American & Canadian CH. HEATHER CHARMING

A.K.C. No. A139846

By Heather Realization out of Heather Remembrance.
English and American CH. WALSING WATERLILY

A.K.C. No. A71840

(Litter sister to Ch. Walsing Wagtail)

By Int. Ch. Walsing Wallet out of Walsing Waitress.

AM. CH. HEATHER LINDA

A.K.C. No. A58185

By Heather Fashion Hint out of Gaisgill Daffodil.

GAISGILL DAFFODIL

A.K.C. No. A24516

By Gaisgill Nicholas out of Gaisgill Ling.

MURRAY ROSALIND

A.K.C. No. A39448

By Ch. Ortlely Michael out of Henshaw's Mirk.

HEATHER FROLICSOME

A.K.C. No. A6957

Heather Necessity out of Nora of Shankra Muir

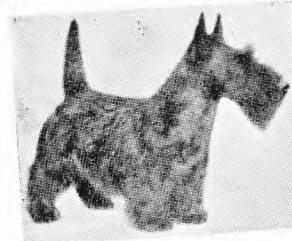
All inquiries should be addressed to owner

MRS. WILLIAM CONSTABLE

69 RIVER STREET

BOSTON, MASSACHUSETTS

We announce the safe arrival of



ENG. CH. WALSING WARRANT

By Britain's greatest show dog, the late Ch. Heather Realisation, out of probably the greatest producing bitch in Britain, Ch. Walsing Wellborn (by Ch. Malgen Juggernaut ex Walsing Waitress, by Ch. Albourne Barty ex Ch. Walsing Whisper).

The following are quotations from several of Britain's leading breeders:

Robert Chapman, Heather Ks: "Perhaps best bred and most valuable dog in this country and very prolific sire. Would not have been obtainable at almost any figure under normal circumstances."

Wm. Singleton, Walsing Ks: "Warrant is undoubtedly the greatest stud force obtainable today."

Mrs. Caspersz, Sec'y Scottish Terrier Club of England: "Probably best sire living."

Ch. Walsing Warrant at this writing is just two years old . . . the first time, to our knowledge, when one of Britain's outstanding stud dogs has been permitted to leave the country so young.
At stud to approved bitches at the introductory fee of \$50.

. . . Also at Stud . . .

CH. GLENIFFER TRADEMARK OF MARLU
MARLU MILADYSMAN — MARLU TRADEWIND

Our bitches include: CH. MARLU MILADY, CH. MARLU MORNING GLORY,
CH. MARLU DUSTY ANSWER, CH. WROCKWARDINE WISH OF MARLU,
CH. MARLU MERRIE LASS.

Puppies and Show Stock available

MARLU FARM KENNELS

SCOTTISH TERRIERS

WELSH TERRIERS

West Long Branch, N. J.
Mr. and Mrs. M. Pollak, Owners
Robt. Braithwaite, Mgr.

N. Y. 'phone LE 2-0700
Long Branch 1014

Acton Hill



Scottish Terriers

Mr. & Mrs. John Kemps Enka, (Nr. Asheville), N. C.

**A LEADING SOUTHEASTERN
KENNEL**

U. S. Champions and Near-Champions at Stud and For Sale.
Specializing in Sound Foundation Stock.

Reasonable Prices

For

Quality Stock Only.

ALL STUD FEES PERMANENTLY \$35.00

SOUNDNESS

STYLE



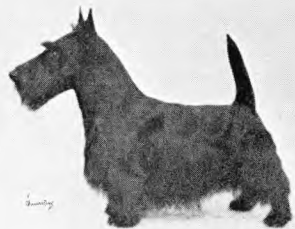
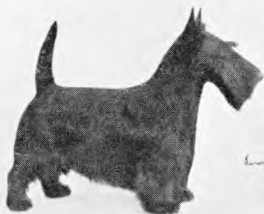
Exhibiting Successfully in all Sections of the Country.

Only Proven Sires At Stud.

Cards Furnished Upon Request.

QUALITY

SHOWMANSHIP



Acton Hill's line of dogs are the result of selective and progressive line breeding, soundly based upon a foundation of the finest available stock. We firmly believe in a great future for the American Bred Scottish Terrier.



CH. ORNSAY EILEEN OF CATTERTHUN

CATTERTHUN KENNELS

SCOTTISH TERRIERS

FOR SALE and AT STUD

REDDING, CONN.

PHONE 139

BALQUHAIN KENNELS

EMERSON LATTING, Owner



CH. BRECK OF SHERWOOD

Scottish Terriers

AT STUD

AND

FOR SALE

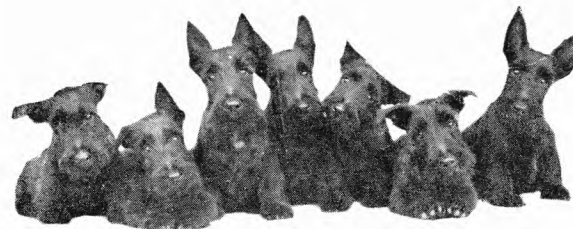
Address Inquiries To

R. VOCKINS

PHONE KATONAH 432

KATONAH, N. Y.

BARBERRY KNOWE KENNELS



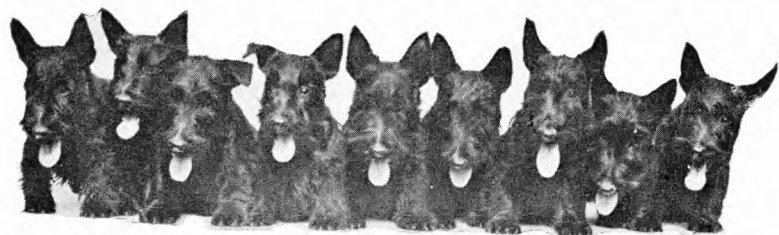
A RECENT LITTER

Breeding Stock and Puppies
Usually For Sale

Mr. and Mrs. CHAS. C. STALTER
Hohokus, N. J. - owners

PHILIP PRENTICE
Mahwah, N. J.
MANAGER

DEEPHAVEN KENNELS



"By constant elimination of the poorer specimens and by intelligent breeding to the standard, this midwest kennel has established a reputation for producing sound Scottish Terriers of the highest quality"

T. W. BENNETT, owner
1601 FOSHAY TOWER
MINNEAPOLIS, MINN.

GRAECROFT KENNELS

(REGISTERED)

A SMALL ESTABLISHED KENNEL PRODUCING SCOTTISH TERRIERS OF CORRECT TYPE FROM THE BEST BLOODLINES. YOUNG STOCK FOR SALE AT REASONABLE PRICES FOR BREEDING, EXHIBITION OR COMPANIONS.

MRS. CHARLES D. GRAY, Owner
15 OVERLOOK ROAD — NEEDHAM, MASS.
Telephone Needham 1718

Mrs. John G. Winant EDGERSTOUNE KENNELS

CONCORD, N. H.



ENG. CH. MASTERPIECE OF ROOKES
ENG. CH. HEATHER INDEPENDENCE
EDGERSTOUNE BENEFACTOR
AT STUD

DIEHARD and CABRACH KENNELS

Closter, New Jersey

OFFER THE PROVEN STUDS

CABRACH REEK (AL. BRIGAND EX NECESSITY BITCH)	\$35
CH. CABRACH CALIBAR (C. REEK EX NECESSITY - LAURIESTON BITCH)	\$50
CH. CABRACH TANNER (H. ROMANCER EX LAURIESTON BELLSTANE)	\$35
CABRACH AJAX (H. ROMANCER EX. H. FASHION HINT BITCH)	\$25
CABRACH EXCALIBUR (C. CALIBAR EX BRIGAND - NECESSITY BITCH)	\$25
DIEHARD CARNAC (C. CARNAC EX C. CALIBAR BITCH)	\$25

AT STUD

CABRACH MAC-GREGOR II

A.K.C. A 239272

MAC-CLAN'S LITTLE COLONEL

A.K.C. A 297576

MRS. SETH MALBY

7 PARK STREET, TENAFLY, NEW JERSEY



FAMOUS VETERINARIAN TELLS WHY PUPPIES, DOGS MUST HAVE THIS VITAMIN!

● Dr. J. W. Patton has been acclaimed the country over—in newspapers, magazines, scientific journals—for his discovery that vitamin B₁ deficiency in dogs can cause extreme timidity, running-barking fits, nervous malnutrition.

Troubles that cost 100,000 dog lives a year. Extreme cases were brought back to normal in only 48 hours by Dr. Patton—with pure vitamin B₁. Now dog owners everywhere are turning to the food that guarantees this important vitamin.

Over 200 Units of Vitamin B₁ in Every Pound of Fresh Meat Ken-L-Biskit

Independent laboratory tests prove that Ken-L-Biskit contains over 200 units of vitamin B₁ in every pound. In addition it contains generous amounts of fresh meat—not scraps and wastes. So completely

nutritional that dogs are kept in top condition on this food alone! Specify Ken-L-Biskit for your dog's health protection.
CHAPPEL BROS. INC., Rockford, Ill.
Use Maro-Meat—The ALL MEAT Supplement

"FEED K.F.S. TESTED DOG FOODS"

K. F. S. Cero-Meato and K. F. S. Canned Food

These foods bear the Seal of Approval of the American Animal Hospital Association, granted on the basis of Biological and Chemical Analyses made under the supervision of the Committee on Foods of the Association and following the favorable appraisal of test data by the Advisory Scientific Council consisting of five eminent authorities in animal nutrition associated with four leading universities in various sections of the United States.

Write for free samples or send \$1.00 for a ten pound trial order.



THE KENNEL FOOD SUPPLY CO.

Factory and Main Office

Fairfield, Conn.

DWIGHTING KENNELS, Reg.



1207 MUNSEY BLDG.
D. HUNTER SMILEY
WASHINGTON, D. C.

DISTRICT 3833

CY ANN KENNELS

BOX 1538
FORT WORTH — TEXAS
Phone — Birdville 5F3

Breeders of Good Scotties for over 10 years.

STUDS at SERVICE

MR. & MRS. C. K. RICKEL

78

CRAEBERT KENNELS REG.

AT STUD

CH. CRAEBERT COMMANDER

(Glentworth Chic — Craebert Countess)

CRAEBERT CANDID CAMERA

(CH Craebert Commander — Craebert Charmer)

*Puppies of highest type breeding, disposition,
and character usually available.*

MR. & MRS. ALBERT W. ROTH

1832 E. 75th STREET

KANSAS CITY, MO.

SCOTTISH TERRIERS

Puppies and Grown Stock for Sale

HISCOTT KENNELS

MRS. JOHN H. CLOWES

East Shore Road

Great Neck, L. I., N. Y.

BERNAGH KENNELS

A few choicely bred Scottish
Terrier Puppies generally for sale.

THOMAS H. MULLINS,

New Canaan, Conn.



CEDAR ROOT FARM KENNELS REG.,

MRS. DUDLEY E. JONES,

Rt. 6, Box 326

Memphis, Tenn.

Offer At Stud:

CH. CEDAR POND CASTAWAY,

(CH. CEDAR POND CHARMER-CEDAR POND CANNY)

To approved bitches — Fee \$50.00

REALIZATION'S BUDDY

(BR. CH. HEATHER FASHION HINT-GYPSY OF GLENAYLMER)

Fee — \$25.00

Puppies and young stock of select breeding available.

79



PHILABEG KENNELS

MERRITT N. POPE, Owner

305 Lee Highway, Falls Church, Va.

SHEFFSCOT KENNEL

LAPHAM ROAD, NEW CANAAN, CONNECTICUT

J. M. SHEFFIELD, Owner

SCOTTISH TERRIERS

TELEPHONE NEW CANAAN 1156



Ch. Red Gauntlet's Guy Fawkes

Owner, Dr. & Mrs. Charles F. Lynch
SPRINGFIELD, MASS

Ch. Heather Gold Finder

Ch. Red Gauntlet Blue Chip

Ornsay Bess Second

Ch. Hitofa Chief

Red Gauntlet's Agnes D.

Ornsay Bess Second

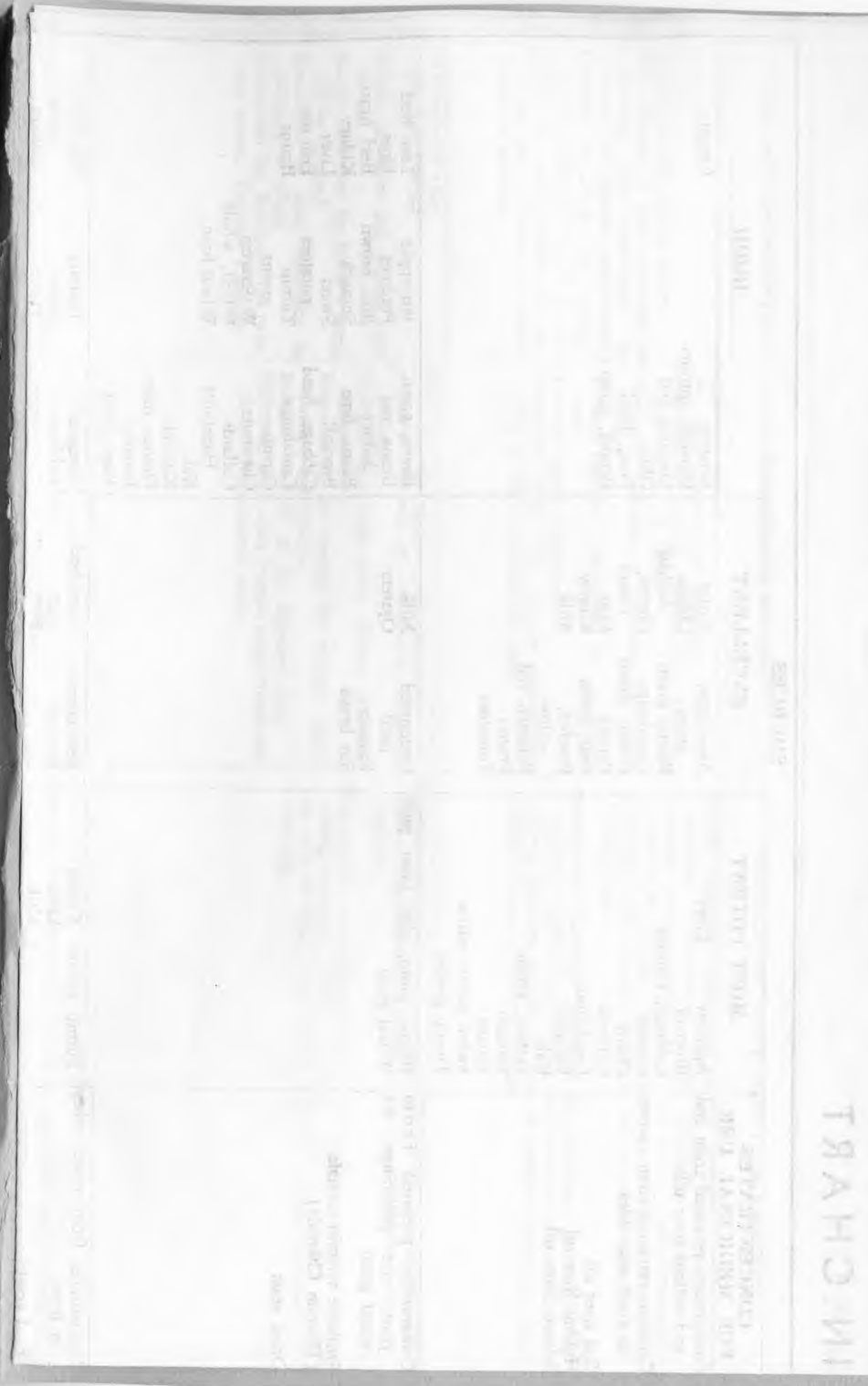
Boarding . Clipping

Fastidious Trimming

JOHN P. MURPHY
PROFESSIONAL HANDLER — ALL BREEDS
SCOTTISH TERRIERS A SPECIALTY

Telephone
Wyckoff 362

Hdgrs: KENNEL HOTEL
R. F. D. No. 1, Forest Rd.
ALLENDALE, N. J.



MICHTY

NAME AND DESCRIPTION	FUNCTIONS IN BODY	RESULTS OF DEFICIENCY OR ABSENCE	CONCENTRATES FOR MEDICATION
<p>VITAMIN A ($C_{20}H_{30}O$)</p> <p>Soluble in oils, not in water. Not affected by heat (cooking or drying), but inactivated by oxygen at higher temperatures. Carotene ($C_{40}H_{56}$), an orange-colored pigment found in carrots and green plants, is converted into Vitamin A when eaten by animals.</p>	<p>Promotes growth Promotes appetite and digestion Essential for normal reproduction, lactation, and rearing of young Maintains integrity of epithelial and nerve tissues Protects against infections of respiratory tract Protects against ophthalmia Estimated adult daily human requirement 4200 to 5600 International units.</p>	<p>Specific: Impaired vision due to loss of visual purple, night-blindness; inflammation of the conjunctiva accompanied by dryness, or even ulceration, of the cornea (xerophthalmia); injury to the linings of the cavities of the body, as respiratory passages and sinuses, stomach and intestines, bladder and urinary tract.</p> <p>Non-specific: Lowered resistance to infections, particularly of respiratory and urinary systems; inflammation of intestines and colon; retarded growth or loss of weight; diarrhoea; renal calculi; injury to nervous system.</p>	<p>Concentrates of cod liver oil and halibut liver oil Carotene extract or green vegetable Cod liver oil Halibut liver oil Salmon liver oil</p>
<p>VITAMIN B (B₁) ($C_{12}H_{18}N_4OSCl_2$)</p> <p>Soluble in water and alcohol, not in oils Readily absorbed by fuller's earth and by charcoal Inactivated by heat, especially in presence of alkali Synthesized by Williams in 1936, and named Thiamin Chloride</p>	<p>Promotes the appetite and digestion Promotes growth by stimulating metabolic processes Protects body from nerve disease (beriberi, polyneuritis) Required by the mother for normal reproduction and lactation Promotes tonicity of the digestive tract Estimated adult daily human requirement 200 to 400 International units.</p>	<p>Specific: Beri-beri (polyneuritis), characterized by paralysis with nerve degeneration, cardiac weakness, and edema. Loss of appetite.</p> <p>Non-specific: Impairment of digestion; impaired growth of young during lactation period; decreased fertility; retarded growth or loss of weight and vigor; probable lowered resistance to infection.</p>	<p>Concentrates of yeast, rice bran, and wheat germ Synthetic vitamin B₁ (Thiamin Chloride) Dried yeast</p>
<p>RIBOFLAVIN ($C_{17}H_{20}N_4O_6$)</p> <p>Soluble in water and dilute alcohol, not in oil solvents. Stable to heat.</p>	<p>Essential for growth, and possibly of importance in maintaining a healthy condition of the skin. Estimated daily human requirement 600 Bourquin-Sherman units.</p>	<p>Specific: Retarded growth or loss of weight.</p> <p>Non-specific: Loss of hair (in rats) and a low grade dermatitis.</p>	<p>Concentrates of yeast or liver Dried yeast</p>
<p>VITAMIN P P</p> <p>Has been identified as nicotinic acid ($C_6H_5NO_2$). Soluble in water, not in oil solvents. Stable to heat.</p>	<p>Necessary for prevention of pellagra. Daily requirement not known.</p>	<p>Specific: Pellagra, characterized by digestive disturbances (diarrhoea), skin eruptions, usually sensitive to sunlight (dermatitis), and nervous disorders leading to insanity (dementia).</p>	<p>Extracts from yeast Dried yeast</p>
<p>VITAMIN C ($C_6H_8O_6$)</p> <p>Ascorbic acid Soluble in water, not absorbed by fuller's earth Rapidly inactivated by oxidation, particularly at higher temperatures.</p>	<p>Necessary in the oxidation processes of cells. Essential for formation of the intercellular cement substance, also for normal bone and tooth formation. Estimated adult daily human requirement 300 to 450 International units.</p>	<p>Specific: Scurvy, characterized by muscular pains and weakness, break-down of capillaries with hemorrhages throughout the body, fragility of bones, loosening and decay of teeth.</p> <p>Non-Specific: Weakness, fatigue, loss of weight and appetite, increased susceptibility to infection.</p>	<p>Purified ascorbic acid from lemon or orange Synthetic ascorbic acid</p>
<p>VITAMIN D ($C_{27}H_{44}O$)</p> <p>Vitosterol (activated ergosterol, calciferol) Soluble in oil solvents Stable to heat, and fairly stable to oxidation Occurs in several forms</p>	<p>Regulates the absorption and metabolism of the bone-forming elements — calcium and phosphorus Regulates the mineral metabolism of the bones and teeth Required by pregnant mother to prevent rickets in the young Estimated daily human requirement 135 to 675 International units.</p>	<p>Specific: Rickets, characterized by failure to deposit calcium and phosphorus in growing bone; osteomalacia (in adults) characterized by softening and increased fragility of bones.</p> <p>Non-Specific: Increased tendency to dental caries; enlarged thyroid and parathyroid glands; possibly lowered resistance to infection.</p>	<p>Approved ultraviolet light Concentrates of cod liver oil Ergosterol or calciferol Irradiated yeast Cod, halibut, fish liver oils</p>
<p>VITAMIN E ($C_{29}H_{50}O_2$)</p> <p>Soluble in oil solvents Stable to heat, as cooking, drying, or sterilization Inactivated by oxidation</p>	<p>Essential for normal reproductive function (a) Required for normal germ cell maturation in male (b) Required for normal placental function in female Daily requirement not known.</p>	<p>Failure in reproduction (sterility) (a) Degeneration of germinal epithelium in male (b) Failure in placental function in the female (c) Disturbance in gestation (death and resorption of developing young)</p>	<p>Non-saponifiable wheat germ</p>

TAMIN CHART

DISEASE	SOURCES					
	CONCENTRATES FOR MEDICINAL USE	MOST POTENT	EXCELLENT	GOOD		
<p>Blindness, night-blindness (nyctalopia); respiratory distress; bladder and kidney disease; particularly of the intestines and stomach; renal disease.</p>	<p>Concentrates prepared from cod and halibut liver oils</p> <p>Carotene extracted from carrots or green vegetables</p> <p>Cod liver oil</p> <p>Halibut liver oil</p> <p>Salmon liver oil</p>	<p>Apricots Liver</p> <p>Broccoli</p> <p>Cabbage, Chinese</p> <p>Carrots</p> <p>Chard</p> <p>Collards</p> <p>Dandelion</p> <p>Escarole</p> <p>Kale</p> <p>Lettuce, green</p> <p>Spinach</p> <p>Squash</p> <p>Sweet potato yellow</p> <p>Turnip greens</p>	<p>Asparagus, green</p> <p>Butter Cheese, cheddar</p> <p>Beans, green</p> <p>Cantaloupe</p> <p>Celery, green</p> <p>Parsley</p> <p>Peas, green</p> <p>Peaches, yellow</p> <p>Peppers, red</p> <p>Prunes</p> <p>Tomatoes</p>	<p>Bananas</p> <p>Brussels sprouts</p> <p>Cherries, red</p> <p>Okra</p> <p>Peas, dried</p> <p>Pepper, green</p>	<p>Cream</p>	
<p>Diarrhea with loss of weight; loss of weight of young children; resistance to infection.</p>	<p>Concentrates prepared from yeast, rice polishings, or wheat germ</p> <p>Synthetic vitamin crystals (Thiamin Chloride)</p> <p>Dried yeast</p>	<p>Beans, pinto, dry Lean pork</p> <p>Wheat germ</p>	<p>Cottonseed meal</p> <p>Milk</p> <p>Oysters</p> <p>Peanuts</p> <p>Soy beans</p>	<p>Beans, green</p> <p>Beans, red kidney</p> <p>Beans, lima</p> <p>Broccoli</p> <p>Cabbage, head</p> <p>Cantaloupe</p> <p>Carrots</p> <p>Chestnuts</p> <p>Collards</p> <p>Hazelnuts</p> <p>Kale</p> <p>Kohlrabi</p> <p>Orange juice</p> <p>Parsnips</p> <p>Peas, dried</p>	<p>Pineapple</p> <p>Potatoes</p> <p>Rice, brown</p> <p>Spinach</p> <p>Sweet potatoes</p> <p>Turnip greens</p> <p>Watercress</p> <p>Wheat, whole</p> <p>Wheat bran</p>	<p>Lean beef</p> <p>Eggs</p> <p>Beef heart</p> <p>Kidney</p> <p>Liver</p> <p>Fish roe</p> <p>Brains</p>
<p>Acne; eczema; dermatitis.</p>	<p>Concentrates from yeast, whey or liver</p> <p>Dried yeast</p>	<p>Turnip greens Kidney</p> <p>Liver</p> <p>Milk</p>	<p>Beet greens</p> <p>Broccoli</p> <p>Egg plant</p> <p>Kale</p> <p>Soy beans</p> <p>Spinach</p> <p>Squash</p> <p>Lean beef</p> <p>Eggs</p> <p>Beef heart</p> <p>Veal</p> <p>Lean pork</p> <p>Oysters</p>	<p>Bananas</p> <p>Cabbage</p> <p>Cauliflower</p> <p>Collards</p> <p>Cottonseed meal</p> <p>Escarole</p> <p>Lettuce, green</p> <p>Peanuts</p> <p>Pears</p> <p>Prunes</p> <p>Watercress</p> <p>Wheat germ</p>	<p>Cheddar cheese</p> <p>Salmon</p>	
<p>Disturbances to sunlight; insanity.</p>	<p>Extracts from yeast or liver.</p> <p>Dried yeast</p>	<p>Wheat Germ Liver</p> <p>Peanut Meal Lean Meat</p>	<p>Collards</p> <p>Kale</p> <p>Green Peas</p> <p>Tomato juice</p> <p>Turnip greens</p> <p>Buttermilk</p>	<p>Cabbage, green</p> <p>Cow peas</p> <p>Kidney beans</p> <p>Mustard greens</p> <p>Soy beans</p> <p>Spinach</p>	<p>Egg yolk</p> <p>Haddock</p> <p>Milk</p>	
<p>General weakness, throughout the body; loss of appetite.</p>	<p>Purified ascorbic acid from lemon or orange juice.</p> <p>Synthetic ascorbic acid.</p>	<p>Asparagus</p> <p>Bananas</p> <p>Beans, green</p> <p>Cabbage</p> <p>Cabbage, Chinese</p> <p>Cantaloupe</p> <p>Cauliflower</p> <p>Collards</p> <p>Endive</p> <p>Gooseberries</p> <p>Grapefruit</p> <p>Kohlrabi</p> <p>Lemons</p> <p>Oranges</p> <p>Peas, green</p> <p>Peppers, green or red</p> <p>Pineapples</p> <p>Raspberries</p> <p>Rutabaga</p> <p>Spinach</p> <p>Strawberry</p> <p>Tangerine</p> <p>Tomato</p> <p>Turnip</p> <p>Turnip greens</p> <p>Watercress</p>	<p>Apples</p> <p>Avocado</p> <p>Beets</p> <p>Blueberries</p> <p>Broccoli</p> <p>Cherries</p> <p>Corn, green</p> <p>Cucumber</p> <p>Escarole</p> <p>Lettuce</p> <p>Onions</p> <p>Peaches</p> <p>Plums</p> <p>Potatoes</p> <p>Pumpkin</p> <p>Sweet potato</p> <p>Watercress</p>	<p>Blackberries</p> <p>Carrots</p> <p>Celery</p> <p>Cranberries</p> <p>Egg plant</p> <p>Pears</p> <p>Prunes, dried</p> <p>Radish</p>	<p>Milk</p>	
<p>Deficiency of calcium and phosphorus (rickets in children); enlarged thyroid gland; infection.</p>	<p>Approved ultra-violet lamps</p> <p>Concentrates from fish liver oils</p> <p>Ergosterol activated by ultra-violet light or by electrons.</p> <p>Irradiated yeast</p> <p>Cod, halibut, and some other fish liver oils</p>	<p>Milk enriched with vitamin D under proper supervision, so-called "Vitamin D Milk".</p> <p>Direct exposure to sunlight especially in summer forms vitamin D in the skin.</p>	<p>Egg yolk</p> <p>Salmon</p>	<p>Eggs</p>		
<p>Deficiency of calcium and phosphorus; delayed development.</p>	<p>Non-saponifiable fraction of wheat germ oil</p>	<p>Wheat germ oil</p>	<p>Lettuce</p> <p>Watercress</p> <p>Wheat germ</p>	<p>Alfalfa</p> <p>Barley</p> <p>Beans</p> <p>Corn (whole)</p> <p>Molasses</p> <p>Oat (whole)</p> <p>Oils (vegetable)</p> <p>Cottonseed</p> <p>Corn</p> <p>Peas</p> <p>Peanuts</p> <p>Rice (whole)</p> <p>Wheat (whole)</p>	<p>Egg yolk</p> <p>Meat</p> <p>Milk</p>	