

# Bernese Mountain Dog Health Survey 1998

## Summary of a Year of Bernese Health

by Steve Green

The following is an outline of the above scheme and presentation of the results. Although I devised and administered the scheme myself, the seed of the idea was planted during a telephone conversation several years earlier with Dr Jane Dobson at Cambridge Veterinary College when discussing the Bernese cancer survey.

### The Background



The Bernese fraternity over the years had attempted several health surveys targeted at different "afflictions" encountered within our breed. Typically, and in common with many other breeds, owners were usually asked to submit details of affected dogs purely on a VOLUNTARY basis. Whilst a certain amount of information can be accumulated on the exact nature of the condition itself from this type of survey, nothing other than anecdotal evidence can be gained as to the real extent of the problem within the breed. Over the years I felt that a somewhat negative attitude towards Ollie's breed had grown in some quarters inside and outside Bernese. Whilst not wishing to deny the existence or diminish the effect of any particular problem, I did not agree with the scale of it sometimes portrayed. So, I decided on a scheme to try and establish a true impression of the state of our breed and this idea received a favourable reception when presented at Breed Council.

### In a Nutshell



At the beginning of 1998 all Bernese owners who were members of the Breed Council clubs were circulated with a form asking them to register their Bernese for the survey. Around 540 owners responded registering 925 dogs, which I felt was little disappointing but it was enough. The essential requirement of this survey was to obtain a Sample of Bernese which was as representative as possible but established without any health bias or influence whatsoever. The only 2 criteria for being in the survey were that the dog was [a] a Bernese and [b] alive on the 1st of January 1998. Once it was established, the population of the survey was a closed sample; dogs developing health problems through the year, but who were not registered at the beginning, were not included later.

After the end of the year each of the Bernese owners registering dogs was sent a personalised printed form for each dog asking for basically brief "YES/NO" answers to a variety of Health issues, working from "Was the dog still alive on December 31st?" downwards. This was sent privately by me and not included in any other club mailing.

### Some Relevant / Key Points



Whilst original concept of the survey was to target mainly the age/causes of death and amount/types of cancer, the process was too good an opportunity to miss to ask all sorts of Bernese interest questions, hence the questionnaire grew (and grew!).

The fundamental point to the survey is that with regard to any reported disease or condition whatsoever, the amount and percentage of unaffected dogs is instantly available and its significance to the breed can instantly be established with a degree of authority.

As this was just a snapshot, no Kennel names or pedigree details were sought and in order to encourage a good response owners were told that just pet names or even numbers of their dogs would do. However the vast majority (approx. 99.7%) happily used full registered names. Individual confidentiality at all levels was stressed at all times and a professional approach to this aspect was maintained. No one can find out whose dogs are in or out of the survey except by asking the owners themselves.

This survey is mainly concerned with health issues affecting each dog only through 1998, and it is indicated where this is not the case. Essentially it is a health summary of 850 Bernese Mountain Dogs through a year.

As the survey was sanctioned by the Breed Council, regular progress reports were sent to each of the clubs involved.

### Summary



I feel the survey has been a great success but not because of any of the results which are in themselves irrelevant to the main aim. The objective was to establish a true picture of the breed and I feel there was a large enough response to feel that a reasonably representative sample of Bernese had been established. I do feel this is as realistic impression of Bernese Health (through 1998) as it is feasible to get and if anyone can come up with a better way then please let me know, (nothing please that involves anymore work though!).

On the questionnaire I tried to envisage the most salient issues to Bernese folk and have included many more issues in the overall summary which emerged in the "Any other significant visits to the vet?" type sections. Everyone in the survey had the chance to record anything they felt to be of veterinary relevance about their Bernese.

### The Results



Firstly a big sincere thank you to all those who have sent me the details of their dogs, especially those who may have found filling in the form at the end of the year rekindled some painful memories. I hope you find all the results of interest and that you feel your co-operation has been part of a worthwhile project. Thank-you to the Breed Council clubs who allowed me to circulate the scheme through their mailings and a mention to the Great Britain club who, from the club Health Fund, met the mailing and printing costs of the survey.

## Some Explanatory Points



On the general summary sheet you will notice several items that were not on the survey questionnaire. These have been extracted from information given in various parts of the survey but mainly from the "other reasons to visit the vet" category where I noticed that several complaints were being recorded more than once so these were given a separate category to enable counting. I hope everything is fairly self-explanatory but feel free to contact me if you have any queries. Strictly speaking, there are potentials for individual anomalies as any survey is only as good as the information supplied and maybe a some owners would pttll a different interpretation on a question to the majority but overall an accurate impression should have been obtained.

On the Summary of Deaths sheet 3 average ages are given; the second does not include the dogs who died accidental caused deaths, (these include swallowing foreign objects) as this is not a medically initiated death. The last figure also does not include the dogs who were put to sleep for aggression as, without wishing to diminish the seriousness of this. some may feel this is not a necessarily a medical situation.

## A Few Points



As to the actual results themselves then I would largely leave everyone to pick out the information of most interest to themselves but I would point out two issues which illustrate the whole ethos of the survey.

On the main general summary sheet you may notice that 29 out of the 37 dogs reporting cancer also reported as routinely inoculated by their vet. At 78.38% this would initially seem to be of great significance BUT it has to be compared with the percentage of dogs routinely vaccinated in the whole survey which is 75.88%. Ilost people would agree that the difference of 2.5% could hardly be described as significant.

Another figure upon which I feel a comment may be appropriate is on the summary of deaths, you can see that 38.5% of deaths were attributable to cancer which SOIUE may find disheartening, but I feel the position is not quite so gloomy when the average age of these deaths is also considered. At 7.64 years this is higher than the previously much quoted figure for all deaths. Until other breeds perform similar surveys to this we cannot say that we are particularly vulnerable or even resistant in comparison with others. My argument is not that 7.64 years is a good figure but simply that the picture is not as gloomy as some would paint. If you consider a hypothetical position where say 90% of Bernese died of cancer but at age 11 this may help you see my point that it is not necessarily the percentage but the age that is most important, they and we, all have to go due to something.

At 8.2 years the average age of all medically caused deaths is also a year better than previously thought. These figures do justify one of my main motives for the survey, to establish that things are not quite as bad as we feel. However many dogs you personally know who have developed problems and died young the substantiated figures in this survey are as realistic impression of the true picture as you are likely" to get.

All manner of other statistical conclusions can be extracted, such as: dogs are more likely to swallow problem objects; bitches more likely to have to have external lumps or cysts removed; dogs more likely to develop OCD related problems and foreleg lameness or have fits. However some of these would be based on quite small sample numbers and further surveys would be needed to substantiate them so I'll leave you to find the items of most interest to you and let you decide their significance.

Possibly the biggest mistake I made was in trying to simplify diets into an accountable form to be summarised. Almost 20% reported feeding some other food as part of or the whole diet and whilst cereal based complete was the largest category of diet fed on its own at over 30%, there were too many combinations of the categories to make them of any real relevance beyond that of passing interest. This section is one I will definitely not try again.

Even so I did have a try to correlate incidences of cancer and diet fed but would suggest that only the chart of dogs fed only on the reported diet could possibly become of any relevance. not the chart of those fed on the category of diet in any way, whether solely or as a part of a broader diet.

## What next?



I would like to continue the survey in a similar form for another year or two and with the co-operation of the Breed Council and its member clubs this will happen. If you have your Bernese in the survey you will receive a questionnaire early in the year 2000. If not, and you find the results of interest, then why not include your dog(s) in the survey for the year 2000 on the registration form. Again no one but me will see your dogs details and at the end of the year I will send you a survey questionnaire and your Bernese will be a part of the bigger picture presented.

Now that I have established the system and if the returns come in a little quicker (hint, hint), I would hope to be able to publish the results earlier in the year next time. If you would like to see any particular aspect specifically covered in the survey or have any other comments please feel free to speak to me. (Lane Farm, 49, Carr Road, Deepcar, Sheffield. S36 2PR. Tel: 0114 2882930)

## Footnote:



On Friday the 22nd of October 1999, along with representatives from around ten other breeds, I was invited to the Kennel Club to a meeting to discuss Breed Health

This is a direct copy of pages from the BMDC of GB Handbook for 2000

<b>General Summary of Reports on 1998 BMD Health Survey</b>							
<b>November 30, 1999</b>							
	<b>No. of BMD</b>	<b>% of Total Dogs</b>	<b>No. Fatal Cases</b>	<b>Dogs</b>	<b>Bitches</b>	<b>% Dogs</b>	<b>% Bitches</b>
<b>Overall BMDs in Survey Stages</b>							
<b>Number of Dogs Registered</b>	925			370	555	40%	60%
<b>Number of BMDs still to return forms</b>	75			40	35		
<b>ALL DOGS WITH DETAILS ENTERED</b>	850	91.89%		330	520	39%	61%
<b>Dogs Reporting: *</b>							
<b>Arthritis or Similar Conditions</b>	77	9.06%	6	30	47	39%	61%
<b>Cancer (not necessarily deceased)</b>	37	4.35%	25	16	21	43%	57%
<b>Positive Cancer Diagnosis with Biopsy</b>	13			4	9		
<b>Cancer AND routinely inoculated *</b>	29	78.38%		14	15	48%	52%
<b>Having one or more Fits</b>	12	1.41%		8	4	67%	33%
<b>Hip Dysplacia problems</b>	18	2.12%	1	7	11	39%	61%
<b>Histiocytosis</b>	6	0.71%		4	2	67%	33%
<b>OCD &amp; Related</b>	31	3.65%		19	12	61%	39%
<b>Other Foreleg Lameness</b>	44	5.18%		24	20	55%	45%
<b>Cruciate Problems of any Kind</b>	20	2.35%		7	13	35%	65%
<b>Skin Problem of any Kind</b>	20	2.35%		14	6	70%	30%
<b>Spayed</b>	11	1.29%			11		
<b>Pyometra</b>	5	0.59%			5		
<b>Any lump or cyst type growth removed</b>	7	0.82%		1	6	14%	86%
<b>Cystitis</b>	4	0.47%			4		
<b>Req Vet after being attacked by another dog</b>	2	0.24%		1	1	50%	50%
<b>Req surgery after swallowing / eating object</b>	6	0.71%	1	5	1	83%	17%
<b>Heart problem</b>	5	0.59%	3	1	4	20%	80%
<b>Entropian req operation</b>	2	0.24%		1	1	50%	50%
<b>Prostate Problem</b>	3	0.35%		3			
<b>Having Caesarian</b>	3	0.35%			3		
<b>Having Ear Problem of any Kind</b>	4	0.47%		1	3	25%	75%
<b>Having Bladder Stones</b>	2	0.24%		0	2	0	100%
<b>Any Other Problem req. Vet *</b>	74	8.71%		33	41	45%	55%
<b>General Interest *</b>							
<b>Being Hip Scored</b>	457	53.76%		148	309	32%	68%
<b>Being Elbow Scored (BMD or BVA/KA)</b>	301	35.41%		101	200	34%	66%
<b>Generally routinely inoculated by Vet</b>	645	75.88%		270	375	42%	58%
<b>Notes:</b>							

% figures of affected dogs are percentages only of the dogs with return details unless otherwise stated

\*Remember these are only reported if occurring during 1998

\*At any time, not just during 1998

\*This percentage figure is of a total reported cancers & should only be compared to BMDs inoculated in general population of survey (As such it is not as significant as it may at first appear)

<b>Analysis of Deaths</b>										
Summary of Cause of Death as given by owner	Category Total	Ages (years)			Dogs and Bitches				Percentages	
		Average Age	Oldest	Youngest	No of Dogs	No. of Bitches	% of Dogs	% of Bitches	% of Reported Deaths	% of Total Dogs in Survey (dogs returning details)
Cancer	25	7.64	9.75	4.58	11	14	44%	56%	38.5%	2.94%
Arthritis	6	9.51	10.92	5.83	0	6	0%	100%	9.2%	0.71%
Unknown	5	9.87	11.42	7.83	2	3	40%	60%	7.7%	0.59%
Old Age	4	13.02	14.00	10.50	0	4	0%	100%	6.2%	0.47%
Accidental	3	3.31	7.00	1.17	1	2	33%	67%	4.6%	0.35%
Heart	3	10.03	11.67	7.00	1	2	33%	67%	4.6%	0.35%
Histiocytosis	3	5.50	6.00	5.00	2	1	67%	33%	4.6%	0.35%
Temperament *	2	2.91	2.83	3.00	2	0	100%	0%	3.1%	0.24%
Bloat	1	8.08			0	1			1.5%	0.12%
Hip Dysplasia	1	7.08			1	0			1.5%	0.12%
Torsion of Womb during Caesarian	1	2.50			0	1			1.5%	0.12%
"Rage" syndrome	1	2.58			1	0			1.5%	0.12%
LHS Joints deformed at birth	1	2.83			0	1			1.5%	0.12%
Inflammable Bowel Disease	1	6.08			1	0			1.5%	0.12%
Auto Immune Dis-Rheumatoid Arthritis	1	6.75			0	1			1.5%	0.12%
Breakdown of Liver	1	6.75			0	1			1.5%	0.12%
Interstitial Cystitis	1	6.83			0	1			1.5%	0.12%
CDRM causing rear end wasting	1	7.42			0	1			1.5%	0.12%
Spondilitis	1	9.33			0	1			1.5%	0.12%
Stroke	1	9.50			1	0			1.5%	0.12%
Abscesses in Lungs	1	9.92			0	1			1.5%	0.12%
Tracheal Collapse - Respiratory Distress	1	10.25			0	1			1.5%	0.12%
Average / Totals	65	7.79			23	42	35%	65%		
Overall Returns for Comparison	850				330	520	39%	61%		

Total Number of Deaths = 65  
 Overall % of Dogs Died = 7.65%  
 Average Age of ALL Dogs = 7.8 years  
 Average Age NOT incl. Accidents = 8.0 years  
 Average Age NOT incl. Accidents and Temperament Caused = 8.2 years

\* Usually indicates dog put to sleep following at least one biting incident

Indicates where the dog bitch proportion is significantly different to that of the general population of the survey

### Summary of Reported Diets in 1998 BMD Health Survey

November 30, 1999

The questionnaire asked owners to indicate which of 5 given options best described the basis of their dogs diet. More than one box could be ticked and the last option was 'other', in which case they were asked to give details.

The 4 categories specified were:

**Fresh Meat Based:** This included frozen meats given with or without biscuit meal e.g. Tripe & Biscuit

**Complete Food Cereal / Biscuit based:** e.g. Omega / Wafcol / Beta / Pedigree Complete

**Complete Food Flake based:** e.g. Valumix

**Tinned:** with or without meal e.g. Butchers / Pal / Chappie etc.

Diet	Total BMDs	% of Total reported	Dogs	Bitches
<b>Fresh Meat Based Only</b>	121	15.76%	49	72
<b>Fresh Meat with Cereal Based Complete</b>	82	10.68%	30	52
<b>Fresh Meat with Flake Based Complete</b>	26	3.39%	6	20
<b>Fresh Meat with Tinned Food</b>	15	1.95%	5	10
<b>Fresh Meat with Some Other Added</b>	13	1.69%	3	10
<b>TOTAL FED ON FRESH MEAT AS WHOLE OR PART OF DIET*</b>	314	40.89%	110	204
<b>Cereal Based Complete Only</b>	239	31.12%	91	148
<b>Cereal Based &amp; Flake Based Complete</b>	19	2.47%	9	10
<b>Cereal Based &amp; Tinned Food</b>	114	14.84%	57	57
<b>Cereal Based &amp; Some Other Added</b>	18	2.34%	11	7
<b>TOTAL FED ON CEREAL BASED COMPLETE AS WHOLE OR PART OF DIET*</b>	531	69.14%	215	316
<b>Flake Based Complete Only</b>	9	1.17%	3	6
<b>Flake Based Complete with Tinned</b>	2	0.26%	1	1
<b>Flake Based Complete with Some Other Added</b>	0	0%		
<b>TOTAL FED ON FLAKE BASED COMPLETE AS WHOLE OR PART OF DIET</b>	67	8.72%	23	44
<b>Tinned Only</b>	29	3.78%	9	20
<b>Tinned With Some Other Added</b>	10	1.30%	3	7
<b>TOTAL FED ON TINNED AS WHOLE OR PART OF DIET</b>	233	22.14%	93	140
<b>Something Other Completely</b>	66	8.5%	30	36
<b>TOTAL FED ON 'OTHER' AS WHOLE OR PART OF DIET</b>	145	18.88%	55	90

<b>TOTAL NUMBER REPORTING DETAILS</b>	768		806	1266

\* These figures include all combinations, not just those detailed separately here.

the overall numbers on this table do not match those on the master charts as there are several combinations of 3 and 4 options that have not been included in this summary as they are of little relevance.

It is perhaps of note that the vast majority of the 'Other' category were what might be summarised as 'Natural' based diets, often with lots of fresh vegetables or manufactured products along these lines. the main exception to this in this category was some dogs being on specialised veterinary diets for (conventional) medical reasons.

### Summary of Cancers Reported in Survey

All ages are in years

			Number of dogs reporting cancer	35
			Number of dogs reporting cancer but still alive at year end	11
			Number of dogs deceased due to cancer	24
			Average age at Death caused by cancer	7.87
			Average age at year end of dogs afflicted by cancer but not deceased	8.22
			Number of dogs reporting cancer but giving no details	2
Type or Area of Cancer (as reported)	Male / Female	Biopsy Yes / No	Age at Year End (where appropriate)	Age at Death
Stifle spreadin to spine	M	Y		8.83
Intermuscular haemangiosarcoma top of leg	M	Y	4.00	
Mast cell tumour inside of hock	M	Y	8.50	
Lymphatic	M	Y		4.67
Spindle cell sarcoma R.F. leg	F	Y	6.17	
Mast cell tumour on left side	F	Y	10.83	
Knee joint discovered during cruiciate operation	F	Y	10.25	
Lymph system	F	Y		6.58
Malignant tumour obstructing colon	F	Y		5.58
Lymphoma (diag by Camb from mouth tumours)	F	Y	11.42	
Mast cell tumour front foot - 2 toes removed-OK	F	Y	8.25	
Malignant growth on chest	F	Y	10.08	
Lymph glands	M	N	5.50	
Lymphoma tumour in throat	M	N		8.83
Orig soft tissue on leg - later on heart	M	N	10.17	
Bladder	M	N		7.67
Spleen, liver and lungs	M	N		8.33
Prostate	M	N		7.50
Tumour in bone of rear leg	M	N		9.58
Abdomen	M	N		9.50
Spleen	M	N		6.17
Spleen (Haemangiosarcoma)	M	N	5.25	
Liver	M	N		8.92

<b>Lung</b>	F	N		5.58
<b>Tumour under root of tail</b>	F	N		10.17
<b>Lung</b>	F	N		9.50
<b>Lung, heart and elsewhere</b>	F	N		9.25
<b>Stomach</b>	F	N		8.17
<b>Bone in front leg</b>	F	N		5.67
<b>Spleen &amp; heart</b>	F	N		9.08
<b>Liver</b>	F	N		4.58
<b>Lungs</b>	F	N		8.00
<b>Tumours in chest cavity</b>	F	N		8.17

**NOTES:**

\* Sorted by Biopsy Y/N and then by gender M/F

\* There were 37 dogs reporting cancer but only 35 detailed here, this is because 2 had given no details  
This is why there is a small discrepancy between the figures given here and the main summaries.

**Correlation between Incidence of Cancer and Diet**

Incidences of cancer and Diet Food

Diet based SOLELY on:	Number of Cancers						General Population Figures					
	Total	% of cancers	dogs	bitches	% dogs	% bitches	Total	% of Total	dogs	bitches	% dogs	% bitches
<b>Fresh Meat</b>	2	6%	1	1	50%	50%	121	16%	49	72	40%	60%
<b>Cereal based complete</b>	10	29%	6	4	60%	40%	239	31%	91	148	38%	62%
<b>Flake based complete</b>	2	6%	2	0	100%	0%	9	1%	3	6	33%	67%
<b>Tinned</b>	3	9%	2	1	67%	33%	29	4%	9	20	31%	69%
<b>Other</b>	3	9%	1	2	33%	67%	66	9%	30	36	45%	55%

  

Diet in ANY PART including:	Number of Cancers						General Population Figures					
	Total	% of cancers	dogs	bitches	% dogs	% bitches	Total	% of Total	dogs	bitches	% dogs	% bitches
<b>Fresh Meat</b>	8	23%	3	5	38%	63%	314	16%	110	204	35%	65%
<b>Cereal based complete</b>	23	66%	9	14	39%	61%	531	31%	215	316	40%	60%
<b>Flake based complete</b>	4	11%	2	2	50%	50%	67	1%	23	44	34%	66%
<b>Tinned</b>	16	46%	6	10	38%	63%	233	4%	93	140	40%	60%
<b>Other</b>	5	14%	2	3	40%	60%	145	9%	55	90	38%	62%

The lower section not likely to be of any relevance due to the vast number of combinations of variations of diet it reflects  
The 'Population' figure refers to the population of the survey.