## Data Report: HCA Havanese Health 2004 Survey



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A Survey of theHealth of HavaneseDogsin 2004 By the Havanesedub of America (HCA)

Sponsored by HCA Health Committee:
Joanne Baldwin DVM, Chair - Mary Cane - Joan Little -
Roberta Lowry - Margie Staniszeski
Jane Ruthford, Project Leader
Using SurveySuite's service on the internet's World Wide Web, anonymous owner input for pet breeding and show dogs was received from the USA as well as many other parts of the world.

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## Acknowledgements

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## HCA Havanese Health 2004 Survey

## "An Overview"

Last year at the 2003 Annual Meeting of HCA, the membership voted to have the club develop and conduct a survey to determine the current health and welfare of Havanese. The HCA Health Committee collected information through an anonymous internet Survey available world wide. All Havanese owners were encouraged to participate by answering questions on the internet at the SurveySuite website. The answers for each dog were recorded on a SurveySuite computer at the University of Virginia. At the end of the survey, the records were downloaded into an ACCESS database by HCA and analyzed and summarized for this report.

The Survey started in March and concluded at the end of May 2004. In a sense, this Survey is a 'group snapshot of 756 dogs' taken over those two months. $90 \%$ of the dogs in the snapshot came into their household as puppies; $96 \%$ are owned by the person filling out the Survey; $89 \%$ are groomed by the person filling out the Survey. The surveyed dogs are well known by the person answering the Survey. $80 \%$ of the dogs surveyed are AKC registered. $20 \%$ of the dogs in the Survey are registered in kennel clubs other than the AKC; international dogs are represented in the Survey population.

After many hours of data analysis and consistency checks, the data analysis team is of the opinion that the data the Survey participants provided is consistent with the participants doing their best to accurately represent their dogs.

The Survey consists of two primary areas of interest. The first area is general questions about their Havanese and how they interact with their families. It includes personality, potty training, vaccination, height and weight and other areas to determine the general well being. The second area is focused on specific health issues and testing that is organized by the dog's major body systems.

## HCA Havanese Health 2004 Survey

## "An Orientation To Reading The Data Report"

Because looking a report of this size filled with numbers and data is somewhat like reading the phone book-lots of facts with no plot-we make the following suggestion if you are going to read the report linearly, from the beginning to the end. As you look at the data, imagine that you are a veterinary professional getting to know the Havanese Breed for the first time.

First, you are given snapshots of Havanese dogs, and then you observe their general behavior from a distance. As you become more familiar with Havanese, you progress to learning about specific issues. Among these specific issues are Havanese health and medical data. These are presented by categories much as they were in the Survey, generally by the dog's bodily system such as liver or skin.

Looking at problems in our breed, even those problems that show up in only a few dogs, provides a rich source of information. The Havanese owners who reported problems, especially those diagnosed by veterinarians, and those owners who tested for problems and found none are both valuable contributors to our knowledge of our breed.

We should not overlook the problems that are small in number in Havanese, and nor should we discount the problems. These problems can point to where there are weaknesses in our Havanese. We need to watch for the problems by testing, just as we watch to see if any car we start to drive has working brakes. We need to make wise breeding and buying choices, just as we would chose to only buy a new car that had working brakes. The small numbers of new cars that are sold without working brakes does not lessen the importance of the buyer checking out the brakes before purchase. In an analogous way, breeders should look for health problems in the dogs that they are using for breeding.

## HCA Havanese Health 2004 Survey

## "An Orientation To Reading The Data Report," continued.

If we as readers are looking for conclusions in this report, remember, this report is just 'Chapter One' of what could be written. We should be careful not to ask more of this report than it can tell us. The information came to us from the owners of a non-random selection of dogs, and the report is only as good as the information submitted in the survey. Because the survey is anonymous, input data can not be checked and confirmed.

Even without data that can be confirmed, the survey contains much information about a large group of Havanese. This is the Survey's greatest strength, especially since the Survey information is considered to be of high quality within the limits of having data that is owner provided and not randomly sampled. After doing consistency checks and analysis, the opinion of the data analysis team is that the data the survey respondents provided are consistent with the respondents best effort to accurately represent their dogs. Using the CERF Research Report for 2003 from Purdue on Havanese, their results and the HCA 2004 Survey data can be compared. However, the HCA Survey data on eyes is from more than one year of CERF reports, so an exact comparison between the two can not be made.
According to Canine Eye Registration Foundation (CERF), Purdue University, 2003

| \# of Dogs with "Problem in Lens" (includes cataracts, all kinds and sizes, and lens luxation or slippage) | \% of Dogs Examined |  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ | \% of Same Gender of Dogs Examined |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} 10 \% \\ \text { Or (1dog } \\ \text { out of } 10) \end{gathered}$ | Male | 36 | 10\% |
|  |  | Female | 76 | 11\% |
|  |  | Unknown gender | 2 | 6\% |


| Havanese Dogs With "Problem in Lens," According to HCA 2004 Health Survey Owner Submitted Reports |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| \# of Dogs with "Problem in Lens" (includes cataracts, all kinds and sizes, and lens luxation or slippage) | \% of Dogs Examined |  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ | \% of Same Gender of Dogs Examined |
|  |  | Male | 24 | 12\% |
| 55 | Or (1dog | Female | 31 | 10\% |
|  | out of 9) | Unknown gender | 0 | 0\% |

## HCA Havanese Health 2004 Survey

## "An Orientation To Reading The Data Report," continued.

Another important point about looking at what might be considered a small number of dogs with a problem, for example, in the Survey dogs $11 \%$ of the dogs examined by ophthalmologists were reported to have a "problem in lens." The $11 \%$ result may seem like a small number to some, but remember, that is one Havanese out of every nine.

A frequently voiced opinion when apparently small numbers of problems are found in a bodily system is that the testing that is being done is successfully influencing breeding decisions and therefore is reducing incidence of the problem. This Survey alone, however, is insufficient to support a definitive conclusion to that effect. It is only a snapshot of one moment in time and therefore can not measure the affect of decisions, such as breeding decisions that take place over years of time.

Future 'chapters' on the Health of Havanese could include:

- Surveys in future years, correlated over time.
-Further education of breeders and the measurement of its effectiveness.
-Research into possible causes of problems (cause and effect tests).


## HCA Havanese Health 2004 Survey



The Havanese Survey is like a 'group snapshot' taken in 2004 that includes 756 dogs.

Individual 'snapshots' of specific topics include smaller numbers of dogs ranging from 754 answering the first question to:


Groups of about 730 answering questions in the Personality section.

Snapshot size ranges groups of about 730 answering questions in the Personality section,


To small groups such as 56 dogs reporting allergies diagnosed by a veterinarian.

## HCA Havanese Health 2004 Survey

## Tally Precision

In presenting the Survey information about the dogs, numbers were rounded to the nearest whole number after calculating a percentage. Sometimes this practice resulted in displaying parts, that when added together equal $99 \%$ instead of $100 \%$.

In other instances tallies may appear to be "off" by one or two dogs. This happens when there are inconsistent answers between several questions on the same topic. Sometimes data records with inconsistencies were included in the tally; other times the data records were excluded.

For example, in the data on neutering, a few participants responded that their dog had not been neutered, then gave the age at which the dog was neutered. In this situation it was assumed that the dog was neutered and was therefore counted in the number of neutered dogs.

Other participants omitted answering the question of what sex the dog was, but said it was neutered. In this case, the record was omitted from the count of neutered dogs because it was unclear whether to put the dog in with females or males. They were listed as no gender recorded.

The number of inconsistent records for any given topic typically was less than five. (See "Data Collection Overview" in Part Five for further explanation of the data analysis.)

## Health Survey Summary

August 2004

Survey Satisfaction


Total Participants by Gender


Oreviens:
At the 2003 Annuel Meeting theHCA menbershipvotedtocanduct a sumey to detemine the current heelth and velfare of Our lreed The Heelth Cammittee collected infarmetion through an anonymous intemet Survey by Uilizinga SurveySuïte informationthrough an anonymous intemet Suney by utilizinga SurveySuite website This ereadivesummary was spedifically prepared for presentation to menbershipat the 2004 Ann
anailaldean the HCA welbsite.

TheSurvey began in March 2004 and ended in May 2004. It consisted of two prinary areas of interest. The first ares induded general questions about our Heveneseand how they interact with their families, It induded personelity, grooning color, andother areas to detemine their general well being Thesecond area wes focusedion specific heelth issues andtestingly major body system All Heweneseonners were encouraged to prerticipite.

1. Participants weresedisfied with the overall sumey. $7 \% \%$ were very satisfied $15 \% / d$ or 'satisfied' [20\%/] 14\%were'neutral' and $\% /$ wnere 'clissatisfied' [3\%/d or 'very dissatisfied [ $3 \%$. 4\%'nodita' (meens thequestion wes skipped). Pefer to top chart.

- There were 756 inclividual Henanesesurveys sulanitted Refer to midlledhart.

1 \% 412 Fenrales, $54 \%$ [168 Spayed 243 Intact, 1 undeteminedl] *. 337 Males, 45\%[170 Neutered, 166 Intact, 1 undetermined] * 7 Nogender recarcled 1\%
$\square$ The majarity of the 338 Hinanese spryed or neutered hed the procedure performed by thetimethey were 6 nonths old [599/.

* $<=6$ months [197 or 59\%/d
\% $>6$ months $<1$ year [37 or 11\%d
* $>1$ year $<=2$ years [30 or 99/]
* $>2$ years [68 or 20\%/d


## Health Survey Summary

August 2004

## Coat Type


$\square$ Themajority of thestudy priticipents were registered with the AKC [80\%/] Ohers were registered with the UKC [6/d and/or Another Cub[17/ $/$ ]

Registration Summary:
Registered in MultipleCulbs 78
Registeredin One Club 609
Registration Not Sent In 51
Registration Not Passible
51

NoDita Recorcled 6
Total

- Hevanesegenerally...
* Spart "Strang' beauliful coats [81\%] Refer to bottamchart.
*. Conrein a widerange of daminant colorss Black [37\%/ White[28\%, Cream

* Aregroared by their owners [90\%].
* AreFriendy/Polite [70/9] Ohers areShy/Timid[19/d and Ifew are

*. Live with other family pets such as: Other dogs [73P/t Cats [31\%/t and Birds [89\%. Therewerea few families wherea Hewanesewes the orly pet [15\%] Noter Totals cho not add becausesameHananese live with mitiple kinds of pets.
* Are identified vith Microchips [78\%/ Tattoos Orly [5\%/, Collar with TagOIly [12\%, Nbthing[4\%/, No Deta Recorded [1\%].
* Heneowners who wouldcansider participating in a nonanonymous HCA Health Survey [86/4]
* Haveprodens withear infections [18\%].


## Health Survey Summary

August 2004

Hesth TestingSummary
$\square$ MusaloSkeletal

- Padiograds for hips/forelegs [299/]
-Patella's examined [729]
-Surgery for Orthopedic proldens [3\%d ar 1 at of every 36 participants]
- CERF [84\%examined
-Eyes Examined-CERF Current [50/d
- Eyes Examined- NoCERF \# [299/d
- Eyes Not Examined [14\%/d
- No Dita Recarcled [20/d
- Liver [30\%testedll
-ALTTested [24\%]
- BileAcick [17/d
$\square$ Heart [80\%/tested]
-[P/d of these were examinedby using EKG Echocarciogram and/or Radiograph
- BAER[38\%testedl]

| System: Primary Health Problem(s) Reported [\# of Havs] | \# of Havs | Rate of Reported Occurrences | \% of Total |
| :---: | :---: | :---: | :---: |
| 1) Musaloskeletal: CD[154] Lueating Patella's [37] Henia [27] LP [7] | 205 | 1 in 4 | 27\% |
| 2) Eyess Pundetes [19] Catarads [15] | 112 | 1 in 7 | 15\% |
| 3) Skirx Dry Raky Skin [331, SA[]] | 84 | 1 in9 | 11\% |
| 4) Reproductive: Fenrales C-Section [23] Maless UndescendedTestides [20] | 83 | 1 in9 | 11\% |
| 5) Dental: Tartar Buildup[30] | 74 | 1 in 10 | 10\% |
| 6) Allergy: Vacainations [35] | 69 | 1 in 11 | 9\% |
| 7) Urinary: Crystals [21] | 40 | 1 in 19 | 5\% |
| 8) Liver: High Bile Acicts [33] | 38 | 1 in 20 | $5 \%$ |
| 9) Heart Mummur [37] | 38 | 1 in 20 | $5 \%$ |
| 10) Neurological: Seizures [9] | 18 | 1 in 42 | 2\% |
| 11) Hearingr Urilateral Deafiness [10] | 12 | 1 in 63 | 2\% |
| 12) Endbariner Hypothyroidism[3] | 10 | 1 in 76 | 1\% $14$ |

## Health Survey Summary

August 2004

## Weight and Height Data Table

The table summarizes the survey participants by reported age and sex.
The Min and Max Weight and Height values are included in the table to show the wide range of Havanese sizes submitted.

| AgeSummary | Sex | AngWeight (lbs) | Avgleight (inches) | Min Weight | Max Weight | Min Height | Max Height |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| < 6 months | Ferale | 6.4 | 8.2 | 1.5 | 12 | 5 | 10 |
| $<6$ months | Male | 81 | 8.3 | 1.5 | 15 | 5.5 | 11.75 |
| 6 months-1 year | Fenale | 9.1 | 9.5 | 6 | 12 | 7.5 | 11 |
| 6 monthe-1 year | Male | 11.1 | 10.4 | 6 | 18 | 875 | 125 |
| 1-2 years | Ferrale | 10.5 | 100 | 7 | 16 | 7 | 13 |
| 1-2 years | Male | 124 | 104 | 8 | 21 | 7 | 15 |
| 2-3 years | Fenrale | 11.4 | 102 | 7 | 18 | 9 | 14 |
| 2-3 years | Male | 13.4 | 10.7 | 7.5 | 23 | 6 | 14 |
| $3-5$ years | Fenale | 119 | 10.1 | 6 | 22 | 7.5 | 14 |
| $3-5$ years | Male | 13.0 | 10.8 | 8 | 22 | 9 | 20.25 |
| $>5$ years | Fenale | 127 | 102 | 7 | 24 | 8.25 | 15.75 |
| $>5$ years | Male | 13.9 | 108 | 9 | 25 | 8 | 15.5 |

## Health Survey Summary

August 2004

## TheHeight related datra analysis below anly indudes suney participants at least I year old withalleight of $>1$ inchreported

Hownciny suney pertiapentis meet the
Haicht Standard?
> [88\%/dill within the ftandardheight range of 8.5 and 11.5 indhes IANg Weight $=120 \mathrm{llbs}]$
$>$ [3\% wareless than 8.5 inches [Avg] Weight $=9.2 \mathrm{lbs}]$
> [90/d weregreater than 11.5 [Avg Weight $=160 \mathrm{llos}]$

## Another Interesting Fact on HEights.

> [65\%/dell within the "icheal" standard height range of 9.0 and 10.5 inches [AvgMeight $=11.5$ llbs]
$>$ [5\%/d wereless than 9.0 inches [Avg Weight $=9.3 \mathrm{lbs}]$
$>\quad[30 \%$ were greater than 10.5 inches [Avg Weight = 14.5 llos]

## HCA Havanese Health 2004 Survey

## A Letter From the HCA Health Committee


#### Abstract

It is the consensus of the Havanese Club of America (HCA) Health Committee that this survey has given us a valid snapshot of health issues affecting the breed. The information captured will assist us in improving the health of the breed in two primary areas. First, it will allow us to focus on addressing the problems that affect the most dogs. Second, it provides us an opportunity to prevent the less common health problems from becoming more widespread by promoting education and advocating testing standards. For example, although the incidence of unilateral deafness is currently low, it could increase dramatically if breeders do not know the status of their breeding stock. This makes it more important than ever for us to monitor our dogs with BAER testing. In this area we have the opportunity to prevent deafness from becoming a significant issue in the Havanese. This example contrasts sharply to the challenging area of orthopedic problems where $27 \%$ of the dogs reported are currently afflicted. It is typically much more difficult to work your way out of health crisis than to avoid one.


Havanese breeders are to be commended for their willingness to contribute to the health of this breed by health testing and by encouraging others to health test. The popularity of the Havanese is growing rapidly. We have moved from 86th to 56th in AKC registrations this year. We must continue to be the guardians of the breed's health if we are to keep from sliding downhill as so many other breeds have

## HCA Havanese Health 2004 Survey

A Letter From the HCA Health Committee, continued


#### Abstract

done. Many will say health testing is too expensive, but it is a small price to pay when you consider the potential impact to the future health and well being of our breed. We must do all the health testing necessary to assure the puppies we produce will be as healthy as possible. Again, prevention is the key. It is much better to prevent disease than attempt to cure it. We owe it to this breed that brings us so much pleasure. Let's not let these great little dogs down!

Special thanks go to Jane Ruthford who devoted many, many hours to the implementation of the survey. She worked on design, question development, data analysis and presentation. Jane's husband, Charles, was a huge help to her in developing the data spread sheets from the SurveySuite raw files. Thanks to Karon Fowler for working with Jane on data presentation and for creating the Survey Report PDF for the website from Jane's data report. And finally, thanks to Jim Cushman for reviewing the data for statistical accuracy and validity. The efforts these talented and hardworking volunteers have resulted in an outstanding health survey while saving HCA literally, many thousand dollars.


The HCA Health Committee:
Joanne Baldwin DVM, Chair - Mary Cane - Joan Little - Roberta Lowry - Margie Staniszeski

## GENERAL Knowledge



Over 90\% of the Health Survey dogs became part of their household as puppies. 96\% of the dogs in the Survey are owned by the person who filled out the Survey. $94 \%$ of the people filling out the Survey have the dog's pedigree.

Q 2.4, 2.5 \% Dogs with ID type [748 answering] or Dog Club Registration [750 Answering]


## GENERAL Knowledge

## Q 2.3 Copy of Pedigree? [749]

## Q 2.6 Familiar With Breed Standard?[741] Q 2.7 Do you Have a Mentor? [729 answering]



## GENERAL

Q 2.1, 2.2, 2.3, 2.6, 1.4, 1.5 Knowledge of the Survey Dog's Sire, Dam and Its Breed As Reported By the Survey Participants

119 dogs in the survey reported having all of the information on the sire and dam that was asked about in the Survey.

Number of Records with Positive Responses


## GENERAL <br> Knowledge

Knowledge Missing about Sire and Dam of Survey Dog
125 dogs in the Survey reported the lack or at least one kind of information.

Q 2.1, 2.2 Percent of Surveyed Dogs [756 Dogs] Reporting the Lack of Information About Sire and Dam


## GENERAL <br> Age

## Q 2.10 Age Distribution of Dogs in Survey



## GENERAL <br> Weight

The average reported weight of a Havanese older than 1 year of age is female 11.6 lbs , male 13.1 lbs .

| Q 2.24 Reported Weight of Survey Dogs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age Summary | Sex | Count | Avg. Weight (pounds) | Min. Weight (pounds) | Max. Weight (pounds) | Standard Deviation |
| < 6 months | Female | 28 | 6.4 | 1.5 | 12 | 2.546 |
|  | Male | 24 | 8.1 | 1.5 | 15 | 2.905 |
| 6 months - 1 year | Female | 26 | 9.1 | 6 | 12 | 1.809 |
|  | Male | 44 | 11.1 | 6 | 18 | 2.427 |
| 1-2 years | Female | 88 | 10.5 | 7 | 16 | 2.166 |
|  | Male | 79 | 12.4 | 8 | 21 | 2.959 |
| 2-3 years | Female | 71 | 11.4 | 7 | 18 | 2.319 |
|  | Male | 60 | 13.4 | 7.5 | 23 | 3.800 |
| 3 - 5 years | Female | 107 | 11.9 | 6 | 22 | 2.515 |
|  | Male | 66 | 13 | 8 | 22 | 2.953 |
| > 5 years | Female | 85 | 12.7 | 7 | 24 | 3.114 |
|  | Male | 60 | 13.9 | 9 | 25 | 3.382 |
| Average Weights for Dogs 1 Year or Older | Female | 351 | 11.6 | 6 | 16 | 2.672 |
|  | Male | 265 | 13.1 | 3.5 | 25 | 3.289 |

## GENERAL Height

The average reported height of a Havanese older than 1 year of age is female 10.1 in ., male 10.7 in .

| Q 2.25 Reported Height of Survey Dogs |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age Summary | Sex | Count | Avg. Height (inches) | Min. Height (inches) | Max. Height (inches) | Standard Deviation |
| < 6 months | Female | 27 | 8.2 | 5 | 10 | 1.387 |
|  | Male | 20 | 8.3 | 5.5 | 11.8 | 1.768 |
| 6 months - 1 year | Female | 22 | 9.5 | 7.5 | 11 | 0.890 |
|  | Male | 43 | 10.4 | 8.8 | 12.5 | 1.072 |
| 1-2 years | Female | 81 | 10 | 7 | 13 | 1.182 |
|  | Male | 69 | 10.4 | 7 | 15 | 1.094 |
| 2-3 years | Female | 66 | 10.2 | 9 | 14 | 0.884 |
|  | Male | 56 | 10.7 | 6 | 14 | 1.343 |
| 3 - 5 years | Female | 100 | 10.1 | 7.5 | 14 | 0.986 |
|  | Male | 64 | 10.8 | 9 | 20.3 | 1.582 |
| > 5 years | Female | 83 | 10.2 | 8.3 | 15.8 | 1.177 |
|  | Male | 56 | 10.8 | 8 | 15.5 | 1.167 |
| Average Heights for Dogs 1 Year or Older | Female | 330 | 10.1 | 5.3 | 15.8 | 1.070 |
|  | Male | 245 | 10.7 | 6 | 20.3 | 1.314 |

## GENERAL Height, Weight

Q 2.24, 2.25 Average Puppy Height and Weight
Reported At Exactly 4, 6, and 8 Months


## Coat, Color, and Symmetry



## Coat, Color, and Symmetry

Symmetry of Color Pattern Arranged by Dominant Color Q 2.9 Are the coat color patterns on the right and left sides of the dog exact mirror images of each other (symmetrical)? 700 Answered


## Coat, Color, and Symmetry

## Q 8.7 Coat Type Reported on Survey Dogs




## NEUTERING

## Q 2.14 Age That Female Havanese in the Study

 Were Neutered

| Q 2.13 Female Havanese In The Survey |  |  |  |
| :---: | :---: | :---: | :---: |
| Not Neutered | Neutered | Gave conflicting <br> answers | Total \# Female <br> Dogs Reporting |
| 240 | 162 | 10 | 412 |
| $58 \%$ | $41 \%$ | $1 \%$ | $100 \%$ |

749 dogs responded to neuter/spay questions
7 dogs had no gender reported
6 females gave conflicting answers: neutered=YES; age neutered=(blank)
3 not neutered female gave conflicting answers: neutered=NO; age neutered=1, 5, \& 12 yr
1 female was undetermined: neutered=(blank); age neutered=(blank)

## NEUTERING

Q 2.14 Age That Male Havanese in the Study Were
Neutered


## Vaccinations

## Q 2.17 Vaccination Frequency



## Vaccinations

## Q 2.18, 2.19, 2.20 Percentage of Havanese Survey Dogs Having

 Vaccination Titers [676 answering], Avoiding Lepto [655 answering] andCorona Vaccines [634 answering]


## Vaccinations

## Q 2.15 Types of Vaccines Received in the First Year of Life by Havanese in the Survey

| Type of Vaccine | Number of Dogs Reported <br> Receiving The Vaccine |
| :--- | :---: |
| (97 Comments in Pup Vaccine "Other")* |  |
| Bordatella (From "Other" list)* | 54 |
| DHPP (From "Other" list)* | 9 |
| Puppy Vaccinations my vet recommended, but I am unsure of the details | 296 |
| Distemper/parvo five-in-one booster (e. g. Fort Dodge Max-5) | 232 |
| Distemper/parvo seven-in-one booster (includes Leptospirosis \& Corona) | 68 |
| Distemper/Parvo with Corona | 69 |
| Distemper/Parvo with Leptospirosis | 29 |
| Distemper/Parvo (two in one vaccine.) | 87 |
| Distemper (monovalent -single antigen vaccine) | 22 |
| Parvo (monovalent-single antigen vaccine) | 53 |
| Pup Rabies | 508 |
| Pup Lyme disease | 54 |
| Pup Receiving no vaccine | 0 |

[^0]
## Vaccinations

## Q 2.16 Types of Vaccines Current <br> in Adult Havanese in the Survey

| Type of Vaccine | Reported Number of Dogs <br> Current On The Vaccine |
| :--- | :---: |
| (100 Comments in Adult Vaccine "Other")* $^{\text {Cord }}$ |  |
| Bordatella (From "Other" list)* $^{*}$ (From "Other" list)* | 45 |
| Titer | 18 |
| DHPP (From "Other" list)* | 11 |
| Adult Vaccinations my vet recommended, but I am unsure of the details | 210 |
| Distemper/parvo five-in-one booster (e. g. Fort Dodge Max-5) | 151 |
| Distemper/parvo seven-in-one booster (includes Leptospirosis \& Corona) | 37 |
| Distemper/Parvo with Corona | 46 |
| Distemper/Parvo with Leptospirosis | 17 |
| Distemper/Parvo (two in one vaccine.) | 67 |
| Distemper (monovalent -single antigen vaccine) | 14 |
| Parvo (monovalent-single antigen vaccine) | 19 |
| Rabies | 429 |
| Lyme disease | 50 |
| Adult Dog receiving no vaccine | 11 |

[^1]
## Personality and Style

In the previous section, you looked at general statistics about the Havanese in the 2004 "snapshot." In this section, imagine moving closer to a single Havanese dog and your attention is captured by how the dog is acting; what it's personality is like. The Survey answers questions about how the 756 Havanese dogs of the Survey act at home and in strange places; with family, strangers, dogs, and other animals.


A large number of the Havanese described in the Survey have a loving and affectionate relationship with their family, and are generally comfortable in new surroundings.


## Personality and Style



Many of the dogs were reported as confident. Their confidence, however, was reported higher overall at home than away from home.

The amount of experience the dog has had away from home, may have an impact on its level of confidence. The pattern in the ratings is similar.

## Personality and Style





A different amount of shyness at home was reported with family than with visitors. The Havanese were generally less outgoing with visitors.

## Personality and Style



The perceived level of suspicion that was reported in the survey with visitors in the dog's home when the Havanese greeted them or during the first hour or so of a visit is given in the graph. The pattern is different from the pattern of the levels of shyness reported (see previous page).

## Personality and Style

(A little over $90 \%$ of the dogs were reasonably happy to have strangers in their home, and about $8 \%$ of the dogs were at the extremes, either very timid or aggressive.)

## Dog's Interaction With Strangers in Dog's Home Environment



## Personality and Style



What Pets Share The Household Of The Havanese Surveyed?


The table to the left shows that out of 735 dogs in the survey, 621were rated 4 or 5 (high) in enjoying and being pals with the other pets.

The left table summarizes the pets that share a home with the Havanese dogs reported in the survey.


Other Pets that were Submitted in the Survey: turtles, guinea pigs, hamsters, potbellied pig, fish, rabbit, rehab owl, snakes, lizards, foster dogs
Type of Pets

## Personality and Style

(67\% of the dogs were rated quite eager to "Melt In Your Arms.")

"Is Your Dog An Overachiever?"(726 Answered)


## Overachieving at what?

This was perhaps not a very good survey question, however it shows up in several articles about Havanese.

Look at the "Melt In Your Arms" bar graph. Are Havanese overachieving in their role as a loving, healing companions to people?

Overachieving is a difficult concept to define.
-Does it involve doing something too much?

- Or is it a very persistent effort at everything attempted?
-Or is it descriptive of unusual successes?


## Personality and Style



The Havanese in the Survey reported a strong interest in play, with the most dogs having only a moderate interest in mischievous activities.

## Personality and Style



## Personality and Style



## Personality and Style

## Specific Issues

The following issues will be covered in the next seven pages.

## -Potty Training

-Motion Sickness
-Separation Anxiety
-Dominance
-Aggression
-Kind of Behavior
-Frequency of Occurrence

# Personality and Style <br> -Potty Training 



Clearly potty training or housebreaking is quite important to the owners of Havanese with $85 \%$ giving it a rating of 4 or 5 .

A surprising 125 dogs were reported as reliably potty trained at 10 weeks of age.
Survey Responses to the Question: "Was Your Havanese Reliably Potty Trained at 10 Weeks of Age?"



## Personality and Style

Type of Potty Training for the Dog Preferred by the Survey Taker (733 Answering)

## -Potty Training

The preferred types of potty training match fairly well with the potty training reported as actually achieved. The numbers are slightly lower for what was actually achieved, probably explaining why so many comments were added in the survey about potty training. It was a very popular
subject.
Number of Dogs
(More than one preference allowed for one dog)

## Personality and Style <br> -Motion Sickness

Motion Sickness has been attributed to many things including, young age, anxiety, and development or infection of the middle ear.

Exploring whether or not a correlation (but not a cause of the illness) could be seen in the survey with motion sickness and other characteristics, the 64 dogs with an extreme motion sickness rating of 4 or 5 were checked for their reported age, separation anxiety level, and possible intestinal parasite infection.

Dogs with extreme motion sickness level (4 or 5) $=64$
-49 were over one year of age
-54 had a rating of 3 or less for separation anxiety (moderate to none)
-2 had experience an intestinal parasite infection
The comparison was done to explore whether responses in this survey might or might not provide a productive direction for further investigation. In this case, it is probably not a direction to explore.

# Personality and Style <br> -Motion Sickness <br> -Separation Anxiety 



Though the graphs for motion sickness and separation anxiety look a bit alike, the dogs rated 5 in one were not the same dogs that were rated 5 in the other.

The amount of distress the dog exhibited when left alone at home was rated for each dog in the Survey by the owner.

## Personality and Style <br> -Dominance



Havanese in the Survey were as a group moderately to extremely eager to please and obey.

Interestingly they were in the moderate " 3 " range for dominance in greeting their family, but shifted to a stronger dominating "4 or 5" when relating to other dogs.


## Personality and Style <br> -Aggression

Though not many dogs Surveyed were reported as aggressive, the seriousness of any problem in this area made it important to have a more detailed breakdown on aggression in Havanese with respect to people.

A large number of dogs, 521, reported no aggression, 126 dogs reported to be aggressive very seldom, and only 16 dogs reported frequent aggressive behavior.

Those 3 groups were broken down into the reported behaviors where growling and chasing and nipping were the predominant behaviors. Bites included reports on two bitches with new puppies encountering a strange adolescent who moved in too quickly to the whelping box, and a report of one dog that "bit the cable man in his backyard." (the dog's backyard?--Editor's question.)

| Q3.27 "Has This Havanese Ever Shown <br> Aggression Towards Humans?" |  |  |  |
| :---: | :---: | :---: | :---: |
| No Aggression Ever | 521 | $79 \%$ |  |
| Very Seldom Aggression | 126 | $19 \%$ |  |
| Frequently Shows <br> Aggression | 16 | $2 \%$ |  |
| Number of Dogs Answering | 663 |  |  |

## Personality and Style <br> -Aggression

| Q3.27 "Has This Havanese Ever Shown Aggression Towards Humans?"- Type of Behavior by \# of Dogs | Frequency of the Behavior |  | havio |  | Bites | Chases and Nips | Other* |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Food Guarding | Territory Guarding | Growls |  |  |  |
|  | (All Reports) | 19 | 30 | 108 | 13 | 42 | 53 |
| \# of Dogs Reporting No Aggression and Behaviors | None | 1 | 1 | 1 | 0 | 0 | 2 |
| \# of Dogs Reporting Very Seldom Aggression and Behaviors | Very Seldom | 12 | 11 | 60 | 5 | 21 | 25 |
| \# of Dogs Reporting Frequent Aggression and Behaviors | Frequent | 2 | 3 | 14 | 3 | 5 | 5 |

(More than one answer allowed for each dog.)

> *See |Appendix B for tables of the answers to "Other, Please Specify" that were typed in by the Survey participants.

## Eyes

| Q 4.1, 4.2 Eye Examinations by Whom As Reported in the Survey |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# of Dogs Not <br> Answering | \# of Dogs Not <br> Examined | \# of Dogs <br> with Eyes <br> Examined | General <br> Vet | Ophthalmologist | Owner | Other |
| 13 | 102 | 641 | 206 | 516 | 4 | 6 |


| Q 4.3 Eye Problems Reported That Are Not Described On A "CERF" Exam Report |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No Problems | Conjunctivitis <br> Occasionally | Conjunctivitis <br> Frequently | Excessive <br> Tearing | Clogged Tear <br> Duct(s) | Inflamation Due to <br> Shampoo or <br> Conditioner | Other* |  |
| 567 | 20 | 4 | 76 | 9 | 8 | 38 |  |


*See Appendix C for tables of the answers to "Other" that were typed in by the Survey participants.

## Eyes

| Number of Dogs Reporting At Least 1 Eye <br> Condition and Were Examined By An <br> Ophthalmologist |  |
| :--- | :---: |
| Number of Dogs | 130 |


| Q 4.7 Condition (>1 Condition <br> could be reported by a dog) | Number of <br> Dogs |
| :--- | :---: |
| Cataract, right eye | 12 |
| Cataract, left eye | 10 |
| Cataract, unsure which eye | 1 |
| Punctate cataract, right eye | 17 |
| Punctate cataract, left eye | 17 |
| Punctate cataract, unsure which eye | 3 |
| Dry eye (keratocojunctivitis sicca), right <br> eye | 1 |
| Dry eye (keratocojunctivitis sicca), left eye | 2 |
| Dry eye (keratoconjunctivitis sicca), <br> unsure which eye | 9 |
| Vitreous Degeneration, right eye | 10 |
| Vitreous Degeneration, left eye | 3 |
| Vitreous Degeneration, unsure which eye | 38 |
| Other* |  |


| Q 4.8 Condition ( $>1$ Condition <br> could be reported by a dog) | Number of <br> Dogs |
| :--- | :---: |
| Cherry Eye, Right eye | 8 |
| Cherry Eye, Left eye | 5 |
| Cherry Eye, unsure which eye | 2 |
| Retinal Atrophy, right eye | 1 |
| Retinal Atrophy, left eye | 1 |
| Retinal Atrophy, unsure which eye | 0 |
| Retinal dysplasia, (folds) right eye | 0 |
| Retinal dysplasia, (folds) left eye | 1 |
| Retinal dysplasia, (folds) unsure which <br> eye | 0 |
| Retinal dysplasia, detachment, right eye | 0 |
| Retinal dysplasia, detachment, left eye | 0 |
| Retinal dysplasia, detachment, unsure <br> which eye | 0 |
| PRA (Progressive Retinal Atrophy), right <br> eye | 7 |
| PRA (Progressive Retinal Atrophy), left <br> eye | RRA (Progressive Retinal Atrophy), <br> unsure which eye |
| Other* | 0 |

*See|Appendix C for tables of the answers to "Other" that were typed in by the Survey participants.

## Eyes

| Q 4.9 Condition (>1 Condition could be reported by a dog) | Number of Dogs |
| :---: | :---: |
| Microphthalmia, (Abnormally small), right eye | 0 |
| Microphthalmia, (Abnormally small), left eye | 0 |
| Microphthalmia, (Abnormally small), unsure which eye | 0 |
| Iris to lens ppm (persistent papillary membranes), right eye | 1 |
| Iris to lens ppm (persistent papillary membranes), left eye | 2 |
| Iris to lens ppm (persistent papillary membranes), unsure which eye | 4 |
| Iris to iris PPM, right eye | 11 |
| Iris to iris PPM, left eye | 10 |
| Iris to iris PPM, unsure which eye | 4 |
| Entropian, (eyelid rolls inward), right eye | 0 |
| Entropian, (eyelid rolls inward), left eye | 0 |
| Entropian, (eyelid rolls inward), unsure which eye | 0 |
| Ectropian, (eyelid turns out, droopy), right eye | 0 |
| Ectropian, (eyelid turns out, droopy), left eye | 0 |
| Ectropian, (eyelid turns out, droopy), unsure eye | 0 |
| Distichiasis (eylash turned in), right eye | 12 |
| Distichiasis (eylash turned in), left eye | 10 |
| Distichiasis (eylash turned in), unsure which eye | 10 |
| Other * | 5 |

[^2]
## Eyes

Havanese Dogs With Normal Eyes and Those With "Problems in Lens" According to Canine Eye Registration Foundation (CERF), Purdue University, 2003

|  | \# of Dogs |  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ | \% of Dogs Examined | \# of Dogs Found to be Normal | \% of Dogs Examined |  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ | \% of Same Gender of Dogs Examined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Examined by a Board Certified Ophthalmologist | 1114 | Male | 376 | 34\% | 816 | 73\% | Male | 286 | 76\% |
|  |  | Female | 705 | 63\% |  |  | Female | 502 | 71\% |
|  |  | Unknown gender | 33 | 3\% |  |  | Unknown gender | 28 | 85\% |



| \# of Dogs with <br> "Problem in Lens" <br> (includes cataracts, all kinds and sizes, and lens luxation or slippage) | \% of Dogs Examined |  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ | \% of Same Gender of Dogs Examined |
| :---: | :---: | :---: | :---: | :---: |
| 114 | 10\% Or (1dog out of 10 ) | Male | 36 | 10\% |
|  |  | Female | 76 | 11\% |
|  |  | Unknown gender | 2 | 6\% |

## Eyes



Havanese Dogs With No Lens Problem, "Problem in Lens," and Significant Eye Problems According to HCA 200 Health Survey Submitted Reports*

|  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ |  | \# of Dogs | \% of Dogs Examined | \# of Dogs Reporting No Lens Problem | \% of Dogs Examined |  | $\begin{aligned} & \text { \# of } \\ & \text { Dogs } \end{aligned}$ | \% of Same Gender of Dogs Examined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Examined by a Board Certified Ophthalmologist | 516 | Male | 204 | 40\% | 458 | 89\% | Male | 180 | 88\% |
|  |  | Female | 309 | 60\% |  |  | Female | 278 | 90\% |
|  |  | Unknown gender | 3 | 0.6\% |  |  | Unknown gender | 3 | 100\% |


| \# of Dogs with "Problem in Lens" (see note below) | \% of Dogs Examined |  | \# of Dogs | \% of Same <br> Gender of Dogs <br> Examined | \# of Dogs with Eye Problems (see note below) | \% of Dogs Examined |  | \# of Dogs | \% of Same Gender of Dogs Examined |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 55 | 11\% Or <br> (1 Dog out of 9 ) | Male | 24 | 12\% | 88 | $\begin{gathered} 17 \% \\ \text { Or } \\ \text { (1 dog out } \\ \text { of 6) } \end{gathered}$ | Male | 38 | 19\% |
|  |  | 31 | 17 | 10\% |  |  | Female | 50 | 16\% |
|  |  | Unknown gender | 0 | 0\% |  |  | Unknown gender | 0 | 0\% |

"Problem in Lens" includes cataracts, all kinds and sizes.
Eye Problems includes cataracts, all kinds and sizes, dry eye, vitreous degeneration, cherry eye, retinal atrophy and dysplasia, and PRA
*See Appendix C for tables of the answers to "Other" that were typed in by the Survey participants
that were used in the tally of "Problems in Lens" and "Eye Problems" for the above table.

## Eyes

(The question asked: "If cataracts (all kinds, sizes) are indicated on a CERF form, what was the age of onset?)

## Q 4.10--Age of Onset in the 30 Dogs Reporting Cataracts \& the Age of Onset



## Eyes

Q 4.11--Age of Onset in the 47 Dogs Reporting Other CERF Eye Problems \& the Age of Onset


## Eyes



## Dogs Reporting Changes From A Previous CERF Exam



## Eyes

(Among the Survey dogs reported as having a current CERF exam, a trend is seen that once a dog is CERFed, that dog continues to be CERFed annually.)

X - Y Plot of Dog Age 'vs' Number of CERF Exams
for Dogs Having a Current CERF by Ophthalomologist ( $\mathrm{n}=405$ )


## Ears

## Surveyed Havanese BAER Test Results



## Ears

Reported Level of Hearing in Survey Havanese NOT BAER Tested


Dogs who do not hear in one ear are almost impossible to identify in your home. Known as unilaterally deaf, nine were identified in the dog population (290 dogs) that was BAER tested. If that same ratio is true for the untested dogs that appear normal (434 dogs), there could be about 14 unilaterally deaf dogs "hiding" and undetected among the untested dogs.



## Dental



Q 6.2, 6.3, 6.4 Number of Dogs Reporting Dental Problems (725 Answering)


## Musculoskeletal

| 7.1 Hips X-rayed (733 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't <br> Answer |
| Number of <br> Dogs | 212 | 521 | 23 |
| \% of Dogs <br> Answering | $29 \%$ | $71 \%$ | $3 \%$ |

-Hips
 seated into acetabuli that fit them well

| 7.2 Hips X-rayed By (210 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | General <br> Vet | Orthopediac <br> Specialist | Didn't <br> Answer |
| Number of <br> Dogs | 139 | 71 | 2 |
| \% of Dogs <br> X-rayed | $66 \%$ | $33 \%$ | $1 \%$ |


| 7.5 If X-rayed, Sent to OFA |  |  |  |
| :---: | :---: | :---: | :---: |
| (197 Answered) |  |  |  |

7.6 If X-rayed, OFA Rating (154 Gave Rating or Penn Hip)

|  | Excellent | Good | Fair | Borderline | Mild | Moderate | Severe | Other, <br> Pending or <br> PennHip | Didn't <br> Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of <br> Dogs | 23 | 82 | 20 | 1 | 3 | 0 | 1 | 24 | 58 |
| \% of Dogs <br> X-rayed | $11 \%$ | $39 \%$ | $9 \%$ | $0 \%$ | $1 \%$ | $0 \%$ | $0 \%$ | $11 \%$ | $27 \%$ |

## Musculoskeletal <br> -Patellas

| 7.7 Patellas Examined (707 Answered) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't <br> Answer | Number of <br> Normal <br> Patellas |
| Number of Dogs | 542 | 165 | 49 | 490 |
| \% of Dogs Answering | $77 \%$ | $23 \%$ | $7 \%$ | $69 \%$ |


| 7.10 <br> "If the patellas were examined by a vet, <br> were the results submitted to OFA?" |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't Answer <br> or N/A |  |  |  |
| Number of Dogs | 136 | 188 | 218 |  |  |  |
| $\%$ of Dogs Examined | $25 \%$ | $35 \%$ |  |  |  |  |


|  | 7.8, 7.9 Patella Problems |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Condition | Number of Dogs | Number of Grade 1 | Number of Grade 2 | Number of Grade 3 | Number of Grade 4 | Number of Grade 5 |  |
|  | Left patellar luxation, medial | 8 (includes dog "A") | 3 | 2 |  |  |  |  |
|  | Left patellar luxation, lateral | 1 | 1 |  | 1 |  |  |  |
|  | Right patellar luxation, medial | 5 | 1 | 1 | 1 |  |  |  |
|  | Right patellar luxation, lateral | $\begin{gathered} 3 \\ \text { (includes } \\ \text { dog "A") } \end{gathered}$ | 1 | 2 |  |  |  |  |
|  | Bilateral patellar luxation, medial | 6 | 4 |  |  |  |  |  |
| Tibial nuberosity $\begin{gathered}\text { Potelllor } \\ \text { ligament }\end{gathered}$ <br> Normal Patella | Bilateral patellar luxation, lateral | 4 | 2 |  |  |  |  | Medially luxating patella |
|  | Other* | 11 | 1 | 1 |  |  |  |  |
|  | Total Dogs with Patella Problems | 37 | * SeelA by parti | endix E fo ants. | bles of | nswers th | were type | e Survey |

## Musculoskeletal <br> -Forelegs

Eight dogs in the Survey were reported as examined by a vet \&/or specialist and diagnosed as having chondrodysplasia (CD). Leg structural anomalies that are often associated with CD were reported on the dogs in the survey: Bowing [141], Elbows sticking out [70], elbow dysplasia [4], and early growth plate closure [2]. Some dogs reported more than one of these conditions.

| 7.11 Bowing (734 Answered) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number <br> of Dogs | Extreme <br> Bowing | Slight <br> Bowing | Didn't Specify <br> Extreme or Slight |
| Two Front Legs Bowed | 70 | 6 | 44 | 20 |
| Left Leg Bowed | 29 |  | 15 | 14 |
| Right Leg Bowed | 23 | 1 | 10 | 12 |
| Other (Includes why 8 <br> dogs are straight*)** | 26 | 1 | 5 | 20 |


|  | Number <br> of Dogs | \% of Dogs <br> Answering* | Confident <br> in <br> Answer | Unsure in <br> Answer | Didn't <br> Specify <br> Confident <br> or Unsure |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Both Legs Straight | 488 | $66 \%$ | 312 | 19 | 157 |
| Any Bowing | 141 | $19 \%$ | 73 | 12 | 56 |
| No One Has Noticed Bowing | 87 | $12 \%$ | 7 | 4 | 76 |
| Other (Includes why 8 dogs <br> are straight*)** | 26 | $4 \%$ | 4 | 1 | 21 |



Shown above are 3 Havanese fronts Below are the same 3 fronts as seen on x-rays


[^3]
# MUSCULOSKELETAL <br> -Forelegs 



| 7.12 Evaluation of Left and Right Leg Length (671 Answered) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of <br> Dogs | Confident <br> In Answer | Unsure in <br> Answer | Didn't Specify, <br> Confident or Unsure |  |
| Right Elbow Out or <br> Toes Out | 25 | 13 | 2 | 10 |  |
| Left Elbow Out or <br> Toes Out | 29 | 13 | 2 | 14 |  |
| Both Elbows Stick <br> out | 16 | 8 | 1 | 7 |  |
| Straight and Equal | 472 | 294 | 14 | 164 |  |
| No One Noticed | 112 | 5 | 3 | 104 |  |
| Other* | 30 | 3 | 2 | 25 |  |



| 7.13 X-rayed (710 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't <br> Answer |
| Number of Dogs | 51 | 659 | 46 |
| \% Answering Q | $7 \%$ | $93 \%$ | $6 \%$ |


| 7.14 If Yes, Evaluated By (51 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | General Vet | Ortho | Didn't <br> Answer |
| Number of Dogs | 32 | 19 | 0 |
| \% Evaluated By | $63 \%$ | $37 \%$ | $0 \%$ |


| 7.15 Of Dogs X-Rayed, Diagnosis (40 Answered) |  |  |
| :---: | :---: | :---: |
| Condition | Number <br> of Dogs | \% of Dogs X-rayed with <br> Condition |
| Normal (straight and equal) | 19 | $37 \%$ |
| No Elbow Dysplasia | 7 | $14 \%$ |
| Chondrodysplasia | 8 | $16 \%$ |
| Bowing | 3 | $6 \%$ |
| Early Growth Plate Closure | 2 | $4 \%$ |
| Elbow Dysplasia | 1 | $2 \%$ |

* See Appendix E for tables of the answers that were typed into the Survey by participants.


Note malformation of R femoral head with decreased bone density (on viewer's left)
in this dog with LCP

Musculoskeletal
-Legg Calve Perthes

| Q 7.16 Diagnosed with LCP? (678 Answered) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't <br> Answer | LCP <br> right | LCP left | LCP <br> both |  |
| Number of Dogs | 7 | 671 | 78 | 6 | 0 | 1 |  |
| \% Answering | $1 \%$ | $99 \%$ |  |  |  |  |  |

-Skeletal Size

| 7.22 Skeletal Size (630 Answered) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Fine | Medium | Heavy | Didn't <br> Answer |
| Number of Dogs | 135 | 412 | 83 | 126 |
| $\%$ of Dogs Answering | $21 \%$ | $65 \%$ | $13 \%$ | $20 \%$ |

-Dew Claws
7.23 Were There Dewclaws on Hind Legs? (691 Answered)

| Condition | Number of Dogs | \% of Dogs Answering |
| :---: | :---: | :---: |
| Yes at Birth, have been removed | 34 | $5 \%$ |
| Yes at Birth, still present | 68 | $10 \%$ |
| Not present at birth | 212 | $31 \%$ |
| Don't know if present at birth | 375 | $54 \%$ |
| Other* | 2 | $0 \%$ |

* See|Appendix E for tables of the answers that were typed into the Survey by participants.


## Musculoskeletal

## -Additional, including hernia

| 7.18 Does this Dog Have Additional <br> Musculoskeletal Problems? (657 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't <br> Answer |
| Number of Dogs | 27 | 630 | 99 |
| \% of Dogs Answering | $4 \%$ | $96 \%$ | $15 \%$ |


| 7.19 <br> Musculoskeletal Problems of This Dog" |  |
| :---: | :---: |
| Condition | Number of Dogs |
| Elbow Dysplasia | 4 |
| Spinal Problems | 3 |
| Inter-Vertebral Disc | 1 |
| Skull Abnormalities | 1 |
| Syndactyly | 0 |
| Hernia | 14 |
| Valgus or Varus deformity | 1 |
| Chondrodysplasia (vet and/or <br> owner diagnosed) | 32 |
| Other |  |


| 7.20 Hernia Type <br> (14 answered) |  |
| :---: | :---: |
| Type | Number of <br> Dogs |
| Umbilical | 10 |
| Inguinal | 0 |
| Perineal | 1 |
| Don't Know | 1 |
| Other* | 2 |


| 7.21 Surgery Required to Correct the <br> Musculoskeletal Problem? (671 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't <br> Answer |
| Number of Dogs | 21 | 650 | 85 |
| \% of Dogs Answering | $3 \%$ | $97 \%$ | $13 \%$ |

* See|Appendix E for tables of the answers that were typed into the Survey by participants.


## Skin

| Q. 8.6 Do You Groom Your Own <br> Dog? (709 Answered) |  |  |
| :---: | :---: | :---: |
|  | \# of Dogs | \% of Dogs Answering |
| Yes | 678 | $96 \%$ |
| No | 30 | $4 \%$ |



678 Survey Takers do their own grooming, so they probably are quite observant, giving good answers about their dog's skin conditions.

14 Dogs reported skin problems that were vet tested and diagnosed. 84 Havanese reported skin problems some of which were diagnosed by a vet and while others were not.

On the following page, diagnosed skin conditions are grouped according to whether they were found in conjunction with other conditions. Hot spots and dry flaky skin are more frequently found alone on the dogs' skin whereas sebaceous adenitis is often associated with other skin conditions.

## Skin



| Total \# of Dogs (Out of 729) | Q 8.5 Combinations of Skin Conditions And The Number of Dogs With The Combination |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 33 | Dry Flaky Skin | Dry Flaky Skin | Dry Flaky Skin | Dry Flaky Skin |
|  |  | \& SA | \& Hot Spots | \& SA |
|  |  |  |  | \& Hot Spots |
|  | 25 | 3 | 3 | 2 |
| 7 | Sebaceous Adenitis (SA) | SA | SA | SA |
|  |  | \& Dry Flaky Skin | \& Hot Spots | \& Dry Flaky Skin |
|  |  |  |  | \& Hot Spots |
|  | 1 | 3 | 1 | 2 |
| 13 | Hot Spots | Hot Spots | Hot Spots | Hot Spots |
|  |  | \& SA | \& Dry Flaky Skin | \& SA |
|  |  |  |  | \& Dry Flaky Skin |
|  | 7 | 1 | 3 | 2 |
| 25 | See \|Appendix F for the list of "Other Skin Problems" that were entered in the Survey. |  |  |  |

## Allergies

| $\mathbf{8 . 8}$ "Does this Havanese Have Allergies?" |  |  |  |
| :---: | :---: | :---: | :---: |
| (713 Answered) |  |  |  |



8.12 Types of Tests That Were Used For Allergy Testing On the Dogs Reporting Allergies

|  | Interdermal <br> Skin | Blood <br> Test | Diet <br> Elimination | Skin <br> Biopsy | Other | More than one <br> test |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number of Dogs | 4 | 17 | 26 | 5 | 2 | 9 |
| \% of Dogs Reporting Allergies | $5 \%$ | $20 \%$ | $30 \%$ | $6 \%$ | $2 \%$ | $10 \%$ |


| 8.11 "How Were the Allergies Diagnosed?" (86 dogs) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | By symptoms alone | By allergy testing alone | Didn't Answer |
| Number of Dogs | 62 | 16 | 678 |
| \% of Dogs Reporting <br> Allergies | $72 \%$ | $19 \%$ |  |
|  |  |  |  |
|  |  |  |  |

## Allergies



| 8.15 "What Caused the Allergic Reaction In 86 Dogs With a Allergies?" |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drug | Vaccination | Insect | Unknown | Food | Shampoo |  |
| Number of Dogs | 20 | 50 | 14 | 8 | 6 | 3 |  |
| \% of Dogs <br> Reporting Allergies | $23 \%$ | $58 \%$ | $16 \%$ | $9 \%$ | $7 \%$ | $3 \%$ |  |


| 8.16 Type of Allergic Reactions Reported |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hives | Shock | Vomiting | Diarrhea | Hot spots | Itching Inflammation | Other* |  |
| Number of Dogs | 9 | 10 | 20 | 9 | 5 | 43 | 32 |  |
| * See Appendix G for comments about "Q 8.16 Other Allergic |  |  |  |  |  |  |  |  |
| Reactions" entered in the Survey by the participants. |  |  |  |  |  |  |  |  |

## Heart



## Heart



## Heart

| Q 9.6 Murmur Type |  | Murmur Grade (37 dogs) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | Number of <br> Dogs | 1 | 2 | 3 | 4 | 5 | 6 | Unknown |
| Systolic | 11 |  | 4 | 5 |  | 1 |  | 1 |
| Diastolic | 1 |  |  |  |  |  |  | 1 |
| Holosystolic | 0 |  |  |  |  |  |  |  |
| Machinery | 2 |  |  |  | 1 |  | 1 |  |
| Loudest on Left | 9 | 1 | 2 | 4 | 1 |  | 1 |  |
| Loudest on Right | 1 |  |  |  |  |  |  |  |
| Bilateral | 0 |  |  |  |  |  |  |  |
| Other* | 16 | 4 | 1 | 1 | 1 |  |  | 8 |


| Q 9.6 Murmur Type Other (16 answering) |  |
| :---: | :--- |
| Count | Heart Problem Murmur Other |
| 6 | dont know |
| 1 | Don't know - identified today - ultrasound on 6/3/ |
| 1 | I don't know. Vet said it was minor. |
| 1 | I think loudest on the left, but unsure |
| 1 | just noisy valve not a real murmur per cardiolgst |
| 1 | on inspiration only |
| 1 | pulmonary stenosis |
| 1 | small murmur don't know type |
| 1 | some regurgitation from the aortic valve |
| 1 | heart problems diagnosed at 13 years fine before |
| 1 | mitral valve degeneration |



## Urinary

## Q 10.1 Age Reliably Housebroken




## Urinary

Q 10.2, 10.3, 10.4 Number of Dogs with a Urinary Problem


Yes, Urinary Problems
Urinary Problems Vet Treated

Struvite

Q 10.5 Kinds of Crystals Found in Urine of Havanese Reporting Crystals


Calcium

Calcium oxalate monohydrate

## Urinary

Q 10.6 Urinary Problems Diagnosed, Apart From Crystals in Urine (27 answering)


## Reproduction

## -Problems

| 11.1 Male Problems (328 Dogs Answered) |  |  |
| :--- | :---: | :---: |
| Problem <br> (dogs could answer more <br> than one question) | Number of <br> Dogs | \% of Dogs <br> Answering <br> This Question |
| No problems | 214 | $65 \%$ |
| Neutered | 149 | $45 \%$ |
| Undescended testicles <br> (both) | 3 | $1 \%$ |
| Undescended right testicle | 12 | $4 \%$ |
| Undescended left testicle | 3 | $1 \%$ |
| Bouncing right testicle | 3 | $1 \%$ |
| Bouncing left testicle | 0 | $0 \%$ |
| Sterility | 2 | $1 \%$ |
| Low sperm count | 2 | $1 \%$ |
| Abnormal or dead sperm | 1 | $0 \%$ |
| Other* | 28 | $2 \%$ |
| Males reporting at least 1 <br> problem | $12 \%$ | U |

*See Appendix H for the participants' comments regarding other problems.
11.2 Female Problems (377 Dogs Answered)

| Delivery problems <br> (dogs could answer more <br> than one question) | Number of Dogs | \% of Dogs <br> Answering This <br> Question |
| :--- | :---: | :---: |
| No problems | 267 | $71 \%$ |
| Spayed | 144 | $38 \%$ |
| Heat cycle problems | 4 | $1 \%$ |
| Infertility | 1 | $0 \%$ |
| Resorption of puppies | 10 | $3 \%$ |
| Spontaneous abortion | 2 | $1 \%$ |
| Premature litters | 20 | $1 \%$ |
| Delivery problems | 5 | $5 \%$ |
| SIPS (sub-involved <br> placental sites) | 2 | $1 \%$ |
| Eclampsia | 4 | $1 \%$ |
| Retained placenta | 21 | $0 \%$ |
| Uterine infections/pyometra | 50 | $6 \%$ |
| Agalactia (no milk) | 2 | $13 \%$ |
| Other* | 2 |  |
| Females reporting at least 1 <br> problem | 2 | $1 \%$ |

## Reproduction

## -Offspring

## Q 11.4 Number of Dogs by Number of Litters Males



## Reproduction

-Offspring

Q 11.7 Number of Dogs By Number of Litters

## Females



## Reproduction

## -Offspring

| 11.3 Produced Offspring? (698 Answered) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Yes | No | Didn't Answer |
| Number of Dogs | 225 | 473 | 58 |
| \% of Dogs Answering <br> the Question | $32 \%$ | $68 \%$ |  |



## Reproduction

## -Offspring Problems

| 11.10 Problems Occurring in Offspring of Survey Dogs |  |
| :---: | :---: |
| Problem | Number of Dogs |
| Cataracts | 5 |
| Deafness | 6 |
| Patellar luxation | 5 |
| Cleft palate | 5 |
| Sebaceous Adenitis (SA) | 4 |
| Short Haired Havanese | 13 |
| Liver shunts | 5 |
| High bile acids | 6 |
| Cryptorchidism (undescended testicles) | 14 |
| Bouncing testicles | 8 |
| LCP (Legg-Calve-Perthes) | 7 |
| Missing incisor (s) | 25 |
| CD (chondrodysplasia) | 24 |
| Asymmetry | 24 |
| Syndactyly | 2 |
| Growth abnormalities | 1 |
| Ocular abnormalities | 3 |

225 Survey dogs reported producing offspring.

| Problem | Number of Dogs |
| :---: | :---: |
| Skull abnormalities | 3 |
| Cardiac abnormalities | 9 |
| Seizures | 4 |
| Hip dysplasia | 4 |
| Open fontanels | 8 |
| Kidney dysplasia | 1 |
| HMVD | 0 |
| Abnormal liver size | 0 |
| Abnormal adrenal gland size | 1 |
| Cushing's disease | 2 |
| Chronic diarrhea | 2 |
| Retardation | 2 |
| Twins | 33 |
| Other* | 108 |
| Number of dogs reporting at least 1 |  |
| problem | (48\% dogs reporting <br> offspring) |

*See Appendix H for Respondents' Comments About "Other" Problems of Offspring

## Reproduction

## -Delivery Problems

147 bitches reported having litters of puppies, only 140 reported data on the litters.

|  | 11.11 Delivery Problems (412 Females) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Yes | No | Didn't Answer |
|  | Number of Dogs | 38 | 146 | 228 |
|  | \% of Females in the Survey | 9\% | 35\% | 55\% |
| 11.12 Delivery Problems <br> (Of Those Answering Yes to 11.11) |  |  |  |  |
| Type | Number of Dogs |  | \% of Dogs with a Problem Reported This Type of Problem |  |
| Dystocia (difficult delivery) | 13 |  | 34\% |  |
| Puppy Stuck | 19 |  | 50\% |  |
| Uterine inertia | 5 |  | 13\% |  |
| Puppy retained | 3 |  | 8\% |  |
| Other* | 6 |  | 16\% |  |
| Number of Dogs having at least 1 problem | 38 |  | 100\% |  |

[^4]| 11.13 Females Needing Intervention During Delivery <br> (113 Answered) |  |  |
| :---: | :---: | :---: |
| Type | Number <br> of Dogs | \% of Dogs Needing Help <br> Received This Type of <br> Intervention |
| None | 62 |  |
| Manual assistance | 23 | $43 \%$ |
| Oxytocin given | 25 | $46 \%$ |
| C-section | 23 | $43 \%$ |
| Other* | 3 | $6 \%$ |
| Number of Dogs requiring at <br> least 1 type of intervention | 54 | $100 \%$ |


| 11.14 Number of Litters with Delivery Problems vs. <br> Number of Females Reporting A Delivery Problem <br> (46 answered) |  |  |  |
| :--- | :---: | :---: | :---: |
|  | 1 Litter w/ <br> Delivery Probs | 2 Litters w/ <br> Delivery Probs | 3 Litters w/ <br> Delivery Probs |
| Number of Dogs | 30 | 10 | 6 |
| \% of Dogs With <br> This Number of <br> Litters with a <br> Delivery Problem | $65 \%$ | $22 \%$ | $13 \%$ |

## Neurological



[^5]
## Liver

| Q 13.1, 13.2, 13.3, 13.4 Liver Problems, Testing and Diagnostician Reported in the Survey (Percentages are based on the number of responses to the question.) |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Has This Havanese Ever Been Tested For Liver Fucnction? (726 Answered) | Yes | 228 | 31\% | Chemistry <br> Panel (ALT) | 167 | 23\% | Paired Bile Acids | 129 | 18\% | Other* | 36 | 5\% |
|  | Yes | 22 | 3\% | Diagnosed By Specialist | 4 | 1\% | Diagnosed By General Vet | 17 | 2\% | Null | 1 | 0\% |
| Had Liver Problems? (688 Answered) | No | $66 e$ |  | Diagnosed By Specialist | 1 | 0\% | Diagnosed By General Vet | 1 | 0\% | Owner Diagnosed | 2 | 0\% |

Normal Liver posterior view

| Q 13.5 Tests Used for Diagnosis of |  |  |  |
| :--- | ---: | ---: | ---: |
| Reported Liver Problem (22 Dogs)* |  |  |  |
| Ultrasound | Radiograph | Biopsy | Bile Acids |
|  | 6 | 4 | 2 |


| Left Lateral Lobe | Q 13.6 Reported Diagnosis of the Liver Problem of the Havanese Dogs (22) in the Survey |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Portal Vein | Single Shunt | Multiple Shunt | HMVD Liver | Biliary Disorders | Abnormal Size | Elevated Bile Acids |
| Right Lateral Lobe | 1 | 1 | 3 | 2 | 3 | 20 |
| Right Medal Lobe | No one reported a diagnosis of --- Liver shunt location; Repaired liver shunt; or Cirrhosis. |  |  |  |  |  |
| f he Caudhte lobe Gallbladder | * See Appendix J for "Q 13.5" and "Q 13.7 Bile Acid Levels of the Survey Dogs" entered in the Survey by the participants. |  |  |  |  |  |

## Gastrointestinal

Normal Small Intestine

Q 14.1, Q 14.2 Number of Dogs Reporting Gastrointestinal Problems in the Survey

| Gastrointestinal <br> Problems | Yes |  | Specialist <br> Diagnosed | General Vet <br> Diagnosed | Owner <br> Diagnosed | Did Not <br> Answer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 67 | $9 \%$ | 5 | 36 | 19 | 7 |
|  | No |  |  |  |  |  |
|  | 654 | $91 \%$ | 0 | 1 | 3 | 650 |

Q 14.3 Gastronintestinal Problems Diagnosed in Surveyed Havanese (721 Answered)


## Endocrine

| Q 15.1 .115 .2 Endocrine Problems Rep |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| , \%embie | so |  |  |  |  |  |  |
|  | ves | 28 |  | - | mase |  | ${ }_{\text {comem }}$ |
|  |  |  |  |  |  |  |  |

## Miscellaneous



| Q 15.3 Are there any other problems this dog has been |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| diagnosed as having. |  |  |  |  |

## Miscellaneous

Health Issues that the Survey Participants Considered Important to the Havanese Breed

## Summary List*:

- High Incidence of retained puppy teeth
- Collapsed trachea
- Drug and anesthesia sensitivity - rabies, vaccinations
- Injected heartworm preventative
- Hiccups
- Unexplained deaths
- Poop eater
- Vomiting, colitis, inflammatory bowl disease, gastroenteritis
- Hop-Skip Disorder. May be neurological, but nothing thus far is conclusive.
- Autoimmune diseases
- Tear stains
- Pigmentation loss on nose
- Anal glands
- Enlarged prostate
- Unusual "lethargy"
- Obsessive/compulsive licking


## Diet

Q 16.1 Number of Dogs Fed This Type of Food Partially or Completely (714 Answered, Respondents could list more than 1 food)


See Appendix L for a complete listing of the diet that survey participants described.

## Diet

Q 16.1 Number of Dogs Fed This Type of Food Partially or Completely 714 Answered, Respondents could list more than 1 food)


## Diet

## Q 16.1 Number of Dogs Fed This Type of Food Partially or Completely

 (714 Answered, Respondents could list more than 1 food)

See|Appendix L for a complete listing of the diet that survey participants described.

## Diet

Q 16.2 Do You Suppliment this Dog's Food?


Q 16.3 Dog's Diet Supplimented with at Least 1/2 Egg per
Day

$42 \%$ of the dogs surveyed never supplemented the dog's diet.
$40 \%$ of the dogs surveyed supplemented their diet with egg each day.


See Appendix L for a complete listing of the diet that survey participants described.

## Study support

## Q 17.1 Willingness to Contribute to a Non-Anonymous Havanese Data Bank




647 dogs or $90 \%$ of the respondents answering this question might be available to contribute to a non-anonymous data bank.

## Satisfaction

Q 18.1 Are You Satistfied that You Gave HCA Useful Health Information About Your Havanese Dog?


| $80 \%$ | Satisfied or Very Satisfied |
| :---: | :--- |
| $14 \%$ | Neutral |
| $6 \%$ | Dissatisfied or Very Dissatisfied |

## Data Collection Overview

After the multiple data files were received from the SurveySuite tool, combined together and loaded into Microsoft Access there were a total of 765 records in the database. Each record was comprised of 701 fields or columns. The data files originally came with 699 fields. To facilitate data analysis, the "Age Decimal Years" field was added to combine the "Age Years" and "Age Months" fields and the "Height" field was added to combine the "Height Inches" and "Height Fraction" fields.

An initial analysis of the data showed that there were five records with all fields blank, three records with data in one field only, and one record with data in two fields. These nine records were immediately identified as invalid records. The number of non-blank fields in the remaining 756 records ranged from a low of 12 to a high of 190. The average number of non-blank fields was 130.8 with a standard deviation of 24.9. See figure 1 for a distribution of non-blank fields.


Figure 1. Distribution of Non-Blank Fields in Data Records

## Data Collection Overview, continued

A sampling of the records in the lower and upper tails, particularly the records containing from 12 to 36 non-blank fields, showed that the remaining 756 records to be consistent with valid entries. It was concluded that 756 would be the number of dogs present in this survey. To further check the reasonableness of the data, fields containing information about height, weight, age, number of litters, number of puppies per litter, and vaccinations were examined to see if their maximum, minimum, mean, and standard deviation values were within expected bounds. All fields checked were within expected bounds.

Additional checks of the data records showed a number of data entry errors. In some cases respondents enter "six" instead of " 6 " in a number field. There were approximately 10 instances of these kinds of errors. As it was obvious what the respondent intended, these types of errors were corrected. In cases where the errors were not obvious, no attempts to correct these errors were made. Records with uncorrected errors did not get included in later data analysis because the error was caught by the selection criteria and the record was excluded.

Consistency checks were performed throughout the data analysis phase. As an example, in response to the question, "Has this Havanese produced offspring?", there were 225 "yes"s, 473 "no"s, and 58 "blank" answers. Of the 225 "yes" answers, 77 were male dogs, 147 were female, and 1 didn't specify the sex of the dog. Comparing the 77 male dogs with the litter data for males showed that only 72 dogs actually had data about the litters. In this example, "72", instead of "77", was used as the base for calculating averages. It was also observed that there were records that contained litter data consistent with the dog being female and the "sex" field was blank. A record of this sort was excluded from further litter data analysis.

After many hours of data analysis and numerous consistency checks, it is the opinion of the data analysis team that the survey respondents were honest and that the data they provided is consistent with the respondents best effort to accurately represent their dogs.

## Survey Tools

## Using the SurveySuite Online Service as a Tool for Our Survey

A brief description of SurveySuite is that it is an unsupported survey service available on the internet for a yearly fee of $\$ 69.95$ per year. For this fee you can
-Do as many surveys as you wish in the year.
-Ask 15 types of questions on your survey.
-Edit and preview your survey before publishing it to the web.
-Download the responses to your survey to your own computer in the form of all questions, a tally, and a total.
-Reset the survey, erasing all previous answers to the survey.
-Download your questions, tally, and total onto an Excel spreadsheet.
Because this was our first experience with a club written survey and our first experience with the service, SurveySuite, we were presented two unanticipated challenges. First, we knew the survey was long, but we didn't anticipate its width across an Excel spreadsheet. Its questions and answers generated 699 columns across a spreadsheet. Excel and Access accept only 255 columns.

## Survey Tools

## Using the SurveySuite Online Service as a Tool for Our Survey, continued

So, the data was broken into three parts. On the spreadsheet table, imagine looking at a large, wide table from left to right and then separating the table into 3 sections so that the three sections can go into three worksheets in an Excel workbook.

Secondly, so many people took the survey that the answers required downloading four separate times resulting in four 'chunks' of data. In this case, on the spreadsheet table, imagine looking at a long table from top to bottom and then separating it from top to bottom into 4 sections because your computer only receives files of a smallish size from the computer at SurveySuite. To get a feeling for this, imagine that there is a ferry running between SurveySuite and your home. The ferry can only hold a few cars, so you must unload four ferries to get your full fleet of cars, or in our survey's situation, our full 'fleet' of responses.

Combining these 'chunks' of data and maintaining the proper alignment of the fields was the first task of the data analysis. The process steps that were used for maintaining the proper alignment of the fields can be provided upon request should data technology specialists be interested.


[^0]:    *See Appendix A for tables of the answers to "Other, Please Specify"
    that were typed in by the Survey participants.

[^1]:    *See Appendix A for tables of the answers to "Other, Please Specify"
    that were typed in by the Survey participants.

[^2]:    *See Appendix C for tables of the answers to "Other" that were typed in by the Survey participants.

[^3]:    * 8 dogs were reported as having front legs that were both bowed and straight both at the same time. Because of the impossibility of this occurring, the 8 dogs were omitted from the tally.
    ** See Appendix E for tables of the answers that were typed into the Survey by participants.

[^4]:    *See Appendix H for Respondents' Comments on Additional Reproductive Health Information

[^5]:    * See |Appendix I for "Q 12.4 and 12.5 Other Neurological Problems and Seizures" comments entered in the Survey by the participants.

