Table of Contents

INTRODUCTION / BACKGROUND	1
PARASITE CONTROL	
VACCINATIONS	
EXPOSURE TO COLORANTS AND PESTICIDES	
REPRODUCTION	
HEALTH STATUS	
Mortality	
Pathology	
Hip dysplasia	7

INTRODUCTION / BACKGROUND

The following is the 2008 Yr 1 Health Survey Analysis

A convenience survey of PBGV owners was conducted through the internet. A total of 312 dogs and 358 owners were represented in responses to the survey.

Only 100 of 358 owners (28%) were members of a breed organization. A majority of the owners (66%) had owned PBGVs for 1 to 10 years. Primary interests in owning PBGVs were as a pet and for show (92% and 23% respectively). One owner responding to the survey indicated "performance entertainer" as a reason for ownership and "watchdog" and "therapy" were also mentioned once. Forty four of the breeders indicated frequency of breeding and 80% indicated that they bred their dogs either occasionally or once. Eight bred their dogs 2 to 4 times and only 1 bred the dog more than 4 times. Responses to the question about contact with puppy buyers were interesting. There were 141 responses to the question indicating that a large number of owners who sell puppies do not consider themselves "breeders". Fifty-nine (42%) indicated that they always maintained contact and 32 (22%) indicated that they never or rarely maintained contact with buyers.

Table 1. Years of ownership of PBGVs

Years of ownership	Number	Percent
Less than 1	49	14
1 to 5	138	38
6 to 10	100	28
11 to 20	66	18
Greater than 20	5	2
Total	358	100

Table 2. Number of PBGVs owned

Number owned	Number	Percent
1 to 5	337	94
6 to 10	16	4
11 to 20	2	1
Greater than 20	3	1
Total	358	100

Table 3 Primary interests in breed.

Interest	Number	Percent
Pet	331	92
Show	82	23
Agility	48	13
Breeder	48	13
Assistance	46	13
Obedience	44	12
Field	35	10
Tracking	25	7
Rescue	11	3

One hundred thirty four (134, 43%) of the dogs were female and 178 (57%) were male. Most (290; 93%) of the dogs reported in the survey were AKC registered. Ninety percent (281) of the dogs represented in the survey were born in the United States Other birth countries represented in the survey were the Great Britain, Scotland, France, Finland, Denmark, Canada and Australia. Two hundred seventy-eight of the dogs lived in the United States. Sixty-eight (22%) of the dogs in the survey are in the DNA Bank at the University of Missouri.

An average height of 14 inches (minimum 10; maximum 30) was reported for 196 adults at least 2 years of age. One hundred ninety-eight (198) adults at least 2 years of age were reported to weigh an average of 33 lbs (minimum 14; maximum 63).

Owners of 289 (93%) of the dogs either obtained the dog from a breeder or bred dogs themselves. Fifty five percent (55%) of the respondents to the survey maintained contact with the breeder. Interestingly 7 (2.2%) of the dogs reported in the survey were obtained from shelters. Most of the dogs (244; 78%) represented in the survey were obtained before they were 6 months of age.

Table 4. General health of dogs reported in the survey.

Health	Number	Percent
Excellent	226	73
Good	47	15
Fair	23	7
Poor	15	5
Total	311	100

Table 5. Age at which general health began to decline

Age of health decline	Number	Percent
0-6 months	4	8
6-12 months	2	4
1-4 years	8	17
4-7 years	13	27
Over 7 years	21	44
Total	48	100

PARASITE CONTROL

Use of flea prevention was reported in 204 (65%) of the dogs. Only 3 reactions were reported to flea prevention products and these were: sluggishness, hair loss, and seizure. Flea treatment was reported on 26 (8%) of the dogs and no reactions to flea treatment were reported. Use of products for tick prevention was reported in 149 (48%) dogs and only one reaction (sluggishness) was reported. Fifteen dogs (15; 5%) were treated for ticks and no reactions were reported.

Use of heartworm prevention was reported in 193 (62%) of the dogs and reactions to the preventive were indicated in 6 (3%). Heartworm treatment was reported in 7 (2%) of the 312 dogs and no reactions to the treatment were indicated.

Giardia treatment was reported in 8 (2%) dogs. Diarrhea and vomiting were reported as a reaction to treatment in one of the dogs; however this reaction would be difficult to distinguish from the effects of the giardia alone.

Other parasite treatments reported in the last year by 12 respondents to the survey included Canex wormer, Panacur, Revolution wormer and pyrantel pamoate suspension.

VACCINATIONS

Owners of twenty dogs (6.4%) reported changing vaccination protocols within the last year. Titers were used in 54 dogs (17%). Twenty-one owners (21) used titers yearly, 7 every two years, and 22 every 3 to 5 years. Two reported using titers only once in a lifetime. Use of nosodes was reported in only 1 dog.

Vaccination reactions were reported rarely in the survey and were mild. Ten dogs were reported to have "soreness at the injection site and lethargy" following vaccination.

Table 6. Use of vaccines in 312 dogs reported by the survey.

Vaccination	Number	Percent
Puppy series	289	93
Rabies	284	91
Distemper	250	80
Bordetella	182	58
Parvo (killed)	182	58
Hepatitis	118	38
Leptospirosis	105	34
Coronavirus	101	32
Parvo (live)	65	21
Lyme disease	42	14

Table 7. Change in vaccine protocols

Protocol	Number	Percent
No change	174	56
No longer vaccinate	32	10
Vaccinate for fewer diseases	18	6
Vaccinate less frequently	82	26
Vaccinate more frequently	6	2

Table 8. Frequency of vaccination for selected diseases. Values in table given as percent of number reporting. N/A=not applicable

Frequency	Rabies	Distemper	Bordetella
Number reporting	239	177	157
Every 6 months	N/A	2	20
Yearly	30	55	63
Every 2 years	5	N/A	N/A
Every 3 years	65	31	7
> every 3 years	N/A	12	10

EXPOSURE TO COLORANTS AND PESTICIDES

Only one dog in reported in the survey was exposed to colorants and 23 of 312 (7%) were exposed to pesticides.

REPRODUCTION

One hundred eighty-eight (188) of the 312 dogs (60%) were reported to be neutered (spayed or castrated). Ten dogs were neutered at 7-9 years of age. Birth control was used on only 1 dog reported in the survey.

Table 9. Age at neutering for 188 dogs reported to be neutered in the survey.

		<u> </u>
Neuter age	Number	Percent
< 6 months	25	13
6 months – 1 year	90	48
> 1 year	73	39
Total	188	100

Table 10. Reasons for neutering in 180 dogs reported in the survey.

Reason for neutering	Number	Percent
Personal preference	101	56
Medical	34	19
Breeder requirement	22	12
Unsuitable	13	7
Behavioral	5	3
Adoption requirement	3	2
Age	2	1
Total	180	100

Twenty-five (25) dogs in the survey were reported to have been bred (23 females and 2 males). Thirty-nine (39) breedings were reported. Natural breeding was used in 32 (82%) and AI with fresh semen was used in 7 (18%). The sire was registered by the AKC (29) or the CKC (1) in 77% of the breedings.

Twenty-two females reported in the survey were responsible for 39 litters. A C-section was conducted in 9 of 39 (23%) whelpings. The average litter size born alive reported for 36 whelpings was 4.5 (median 5.5) with a minimum litter of 1 and a maximum litter of 9. The number of puppies weaned was reported for 21 whelpings and the average weaned was 3.7 (median 4). The minimum number of puppies reported to be weaned was 1 and the maximum was 6. Stillbirths occurred in 7 of 17 (41%) whelpings. The number of still births ranged from 1 (4 whelpings) to 3 (1 whelping).

HEALTH STATUS

Mortality

Twenty-nine (29; 9%) of the dogs reported in the survey were dead. The average age of death for 21 of the dogs was 9.6 years (minimum-5 months; maximum 17 years. Of the dogs that died from an accident, 2 were hit by a car and 1 was attacked by another dog in the household. When illness was the cause of death the diagnosis was confirmed by a veterinarian in 22 of the 23 dogs. A necropsy (autopsy) was performed on 26 of the 29 dogs (90%) that died. Twenty of the 29 dogs (69%) that died were euthanized. One dog was euthanized because of biting and aggression.

Table 11. Cause of death in 28 dogs reported in the survey.

Cause of death	Number	Percent
Illness	23	82
Old age	2	7
Accident	3	11

Table 12. Fatal disease conditions reported for 23 dogs.

Disease	Number	Percent
Cancer	6	26
Cushing's disease	4	17
Lyme disease	3	13
Bloat	2	10
Congestive heart failure	2	10
Bleeding problems	1	4
Kidney failure	1	4
Hydrocephalus	1	4
Vestibular disease	1	4
Whelping (toxicity)	1	4

Pathology

General disease conditions / organ systems affected are given in Table 13. Respondents to the survey indicated that disease diagnoses were made either by a veterinarian or laboratory in 91% of the cases.

Table 13. General disease conditions reported in the survey.

Disease / organ system	Number	Rate / 100 dogs
Eye	26	8
Reproductive (female)	10	7
Endocrine	19	6
Coronary	11	4
Skin	13	4
Neurological	10	3
Orthopedic	10	3
Gastro-intestinal	10	3
Cancer	6	2
Ear	6	2
Immune system	6	2
Urinary	6	2
Behavioral	5	2
Birth defects	4	1
Reproductive (male)	2	1
Teeth / mouth	2	1
Hepatic	1	<1

Table 14. Top eleven definitive pathological diagnoses indicated by the survey.

Pathology	Number	Rate/100 dogs
Hypothyroidism	13	4
Persistent papillary membrane	13	4
Allergic dermatitis	6	2
Heart murmur (no diagnosis)	6	2
Idiopathic epilepsy	5	2
Immune mediated meningitis	5	2
Sebaceous adenoma	5	2
Hip dysplasia	4	1
Hyperadrenalcorticism	4	1
Inflammatory bowel disease	4	1
Pancreatitis	4	1

Hip dysplasia

Thirty-nine dogs were reported to have had their hips x-rayed. Of 32 dogs with reported OFA status 1 (3%) was graded excellent, 12 (38%) were graded good and 19 (59%) were graded fair. Nine dogs were reported to have either mild (7) or moderate (2) dysplasia. [NOTE: only 4 dogs were reported with dysplasia in the above table from the file on pathology]