Survey of the Swedish Dog Population: Age, Gender, Breed, Location and Enrolment in Animal Insurance

By A. Egenvall¹, Å. Hedhammar¹, B. N. Bonnett² and P. Olson³

¹Department of Small Animal Clinical Sciences, Faculty of Veterinary Medicine, Swedish University of Agricultural Sciences, Uppsala, Sweden, ²Department of Population Medicine, Ontario Veterinary College, University of Guelph, Guelph, Ontario, Canada, ³Agria Insurance, Stockholm, Sweden.

Egenvall E, Hedhammar Å, Bonnett BN, Olson P: Survey of the Swedish dog population: Age, gender, breed, location and enrolment in animal insurance. Acta vet. scand. 1999, 40, 231-240. — A sample of the Swedish population was surveyed by interviewing households by telephone. The number interviewed was 11,762, of which 15.5% owned dogs, and of these, 77.9% had one dog. The estimated total population of dogs in Sweden was just over 800 000. Dog-owning was more common in more rural areas compared to larger cities. The numbers of male and female dogs were similar and few dogs were neutered. Mean age was 5.7 years with median 5 years. Mongrels comprised 13.3% and the most common breed was the dachshund (7.4%). Of dogs with information on insurance status, 68.4% of the dogs were insured for veterinary care and 58.3% were life insured.

dog population; demographics; Sweden.

Introduction

World-wide surveys on pet populations have been performed to provide estimates of the number of owned and unowned dogs to monitor changes in patterns of pet ownership through time, to investigate market activities involving pets and to provide a background for the study of diseases (Robinson 1967, Griffiths & Brenner 1977, Troutman 1988, Franti et al. 1990, Teclaw et al. 1992, Wise 1992, Patronek et al. 1997). Our research group is investigating the usefulness of various canine databases in Sweden. Specifically, we have accessed one from an insurance company (Agria Insurance, Stockholm, Sweden) to evaluate whether it can provide useful estimates of demography, mortality and morbidity of dogs in Sweden (Bonnett et al. 1997). A large number of Swedish dogs are insured by Agria and accordingly their demography is well defined. However, to be able to extrapolate the findings from the insurance data, further information is needed on the Swedish dog population. This information will help determine the similarities between the insured dogs and populations of dogs in Sweden and other countries.

The primary objectives of this study were to describe the composition of the Swedish dog population with respect to gender, age and breed, and to provide estimates of the actual size of the dog population. Secondary objectives were to determine how the dog population varied by geographic location and by human population density, the proportion of dogs enrolled in insurance and to what extent demography of insured dogs differed from non-insured dogs.

Materials and methods

The interview

Telephone interviews were performed during the period January 19 to April 9, 1998 by Sifo Research & Consulting (World Trade Center, Stockholm, Sweden), a company specialised in performing omnibus investigations. Questions asked in this study were part of a larger interview, the whole interview taking about 20 min to conduct. Interviews were conducted between 5 to 9 p.m., Monday to Thursday evenings.

Sampling

The sampling unit was household. To ensure an even distribution of households throughout Sweden, the sample was drawn proportionally over all telephone numbers within each specific area code. For each sampled telephone number there were 10 possibilities through changing the last digit from 0-9. If the call to the primarily sampled telephone number was not answered during the first attempt, the telephone number immediately after it was tried, and this procedure was repeated until a person willing to participate in the interview was found. Interviews were conducted until the desired sample size was reached. The procedure prohibits any calculation of non-response rate.

Sample size calculations were performed using Epi Info (Version 5.00, Public Domain Software for Epidemiology and Disease Surveillance, Atlanta, 1990). We wanted to predict the percentage per breed of the most common breeds, where prior estimates varied from 2% to 7% of the total dog population with an allowable error of 50% of the estimates. Considering these calculations, costs and practical considerations it was decided to sample households until at least 1800 dog-owning households had been interviewed.

Questions

Geographic location of the owner (southern,

middle, northern Sweden), the population density of the location, the number of persons in the household the household income and whether they owned any dog(s) was ascertained for all households. In which geographic area the dog owners resided was indicated by the first digits in the telephone number. The population density was categorised as either residence in 1 of the 3 largest cities, Stockholm, Gothenburg or Malmö, or in another community with more than 3000 inhabitants, or in a community with less than 3000 inhabitants. Dog owners were asked how many dogs they owned (excluding litters of puppies). Additional questions were asked for up to 3 dogs per dog owner (Table 1). Age categories were set a priori, and during the interview the dog's age was recorded as being in the age category closest to the age given by the owner. For example, a dog said to be 2 years and 11 months would be recorded as 3 years old. Dogs of breeds other than mongrel or one of the 26 purebred groups provided in the list were designated as "other".

Analyses

For dog owners or dogs measures are presented from the whole sample as well as separately for those with insurance for veterinary care and for life. The percentage of dog owners was stratified by the major regions in Sweden and by the density of the human population in the area where the owners lived.

The dog population was estimated both crudely using the total number of households in Sweden, as well as stratified by the number of households in each geographic location, as reported the 1st of November 1990 (*Anon.* 1998). For the total dog population, a 95% confidence interval (95% CI) was constructed according to Levy (*Levy* 1980). For simple proportions 95% CIs were calculated using the formula ± 1.96[(proportion(1-proportion))/n]^{0.5} (*Martin et al.* 1987). The statistical software pro-

Table 1. Telephone questionnaire to obtain demographic information about dog keeping in Swedish households. Questions asked for up to 3 dogs per owner.

Questions	Possible answers
What breed?	German shepherd dog/ terrier/ mongrel/ dachshund/ golden retriever/ labrador retriever/ stövare/ elkhound/ miniature dog/ poodle/ cocker spaniel/ rottweiler/ drever/ cavalier king charles spaniel/ shetland sheepdog/ sight hound/ collie/ flat coated retriever/ setter/ bernese mountain dog/ border collie/ springer spaniel/ newfoundland/ boxer/ doberman/ german pointer/ other purebred.
The age of the dog	1-14 years by year/ 15 years or over.
The gender of the dog	Female/ male.
Is the dog neutered?	Yes/ no.
The age at neutering	In months or years.
Is the dog registered in SKC?	Yes/ no.
How old was the dog when acquired?	In weeks, months or years.
Source from which the dog was acquired?	From breeder with several females for breeding/ from breeder with a single breeding female/ own breeding establishment/ gift or gotten other way.
The main usages of the dog (several answers possible)	Companion/ hunting/ sheepherding/ protection- guarding/ competition/ breeding/ other.
Has the dog been taken to a veterinarian during the last 12 months?	No/ yes-once/ yes-twice/ yes-more than twice.
Is the dog insured for veterinary care?	Yes/ no/ don't know.
If so – in what company is it insured?	Agria/ Sleipner/ Sveland/ GA-Aktiva/ Folksam/ Trygg-Hansa/ UAP-jaktjournalen ¹
Is the dog insured for life?	Yes/ no/ don't know.
If so, in what company is it insured?	Agria/ Sleipner/ Sveland/ GA-Aktiva/ Folksam/ Trygg-Hansa/ UAP-jaktjournalen ¹

¹ The main registered companies insuring dogs in Sweden.

gram SAS (SAS Institute Inc. 1990) was used to analyse the data.

Results

A total of 11 762 households were interviewed. The distribution of households in the sample with respect to population density, geographic location, number of persons in household and household income is shown in Table 2. The crude number and proportion of dog-owning households was 1824 and 15.5% (CI 14.9-

16.2). From the Swedish census data (*Anon.* 1998a), the percent of households in the southern, middle and northern region were 42.7%, 46.9% and 10.5% respectively, similar to the distribution in the sample.

The total number of dogs owned by the 1824 dog owners was 2486 dogs, giving a mean of 1.36 dogs per dog-owning household, out of which there was individual information on 2330 dogs. Of the households, 1420 had only 1 dog (77.9%), the number of dogs per household

Table 2. The distribution of 11762 households with respect to geographic region, population density, number of persons in household, household income and dog ownership.

	Number of households in sample	Percent in sample	Number of households with dogs	Dog owners % (95% CI)	Percent households with > 1 dog
Region					
Southern	4 9 5 9	42.2	795	16.0 (15.0-17.1)	20.3 (17.5-23.0)
Middle	5 572	47.4	783	14.1 (13.2-15.0)	23.0 (20.0-25.9)
Northern	1 231	10.5	246	20.0 (17.7-22.2)	25.6 (20.2-31.1)
Total	11 762	100	1 824	15.5 (14.9-16.2)	22.1 (20.2-24.0)
Population density ¹					
The 3 largest cities ²	2 855	24.5	244	8.5 (7.5- 9.6)	14.3 (9.9-18.7)
$\geq 3,000 \text{ people}^3$	6323	54.3	890	14.1 (13.2-14.9)	18.5 (16.0-21.1)
< 3,000 people	2 464	21.2	667	27.1 (25.3-28.8)	29.2 (25.8-32.7)
Total	11642	100	1 801	_	_
Persons in household					
One	4 135	35.2	344	8.3 (7.5- 9.2)	18.0 (14.0-22.1)
More than one	7 627	64.8	1 480	19.4 (18.5-20.3)	23.1 (21.0-25.3)
Total	11762	100	1 824	15.5 (14.9-16.2)	22.1 (20.2-24.0)
Household income⁴					
< 175,000 SEK	2 705	27.5	251	9.3 (8.2-10.4)	19.9 (15.0-24.9)
≥ 175,000 SEK	7 121	72.5	1 188	16.7 (15.8-17.5)	22.2 (19.9-24.6)
Total	9826	100	1 439		`

¹ 120 Missing values for population density.

ranged between 1-28 dogs, median 1 dog per household. Table 2 shows the percent of dog owners by region, population density, number of household participants and household income. Table 3 shows the number of dogs in the sample and estimates of the dog population stratified by geographic location. The estimate for the total number of dogs in Sweden, using the crude census data of the total population was 809 511 dogs (CI 762 618-856 405), while using the area-specific census data for number of households, the stratified estimate of the total population was 809 935 dogs. The total number of dog-owning households in Sweden was estimated to be 593 946 (CI 590 060-597831).

Of the 2330 dogs with individual information, 2174 had information on insurance status for veterinary care and 2074 had information on status for life insurance. Of these, 1486 dogs (68.4%) were insured for veterinary care and 1209 (58.3%) were covered by life insurance. Table 4 shows the distribution of dogs within geographic regions and population densities, for those said to be covered by veterinary care and/or life insurance as well as for dog owners with at least one dog insured. Sixty-one percent (CI 58.8-63.8) of dogs covered for veterinary care and 62.4% (CI 59.6-65.1) of those covered by life, were insured by one company, Agria. Of the 2315 dogs with information for gender and neuter status, 1151 were females (49.7%;

² Stockholm, Gothenburg and Malmö.

³ Excluding Stockholm, Gothenburg and Malmö.

⁴ 1,936 missing values for household income.

Table 3. Number of dogs in sample and estimated total dog population stratified by region in Sweden.

	Dogs in sample ¹	Total number of dogs owned	Total number of households ²	Estimated total dog population (95% CI)
Region				
Southern	996	1 048	1 633 972	345 312 (317 826-372 798)
Middle	1 009	1 074	1 794 561	345 901 (316 222-375 580)
Northern	325	364	401 504	118 723 (95 084-142 361)
Total	2330	2 486	3 830 037	809 511 (762 618-856 405)

¹ Information was collected on a maximum of 3 dogs per owner.

Table 4. Owners with at least one dog insured, and dog's insurance status stratified by geographic location and population density.

	Owners with $\ge 1 \text{ dog}$ insured % (95% CI) n = 1,737	Dogs insured for veterinary care % (95% Cl) n = 2,174	Dogs insured for life % (95% CI) n = 2,074
Region			
Southern	71.6 (68.5-74.8)	69.4 (66.5-72.4)	58.2 (55.0-61.4)
Middle	72.2 (69.0-75.4)	71.4 (68.5-74.3)	60.5 (57.3-63.7)
Northern	62.0 (55.7-68.3)	55.1 (49.4-60.8)	51.7 (46.0-57.5)
Total	70.6 (68.4-72.7)	68.4 (66.4-70.3)	58.3 (56.2-60.4)
Population density 1			
The 3 largest cities ²	74.3 (68.7-79.8)	74.7 (69.6-79.8)	59.1 (53.2-65.0)
$\geq 3000\mathrm{people}^3$	73.4 (70.5-76.4)	72.0 (69.2-74.8)	61.5 (58.4-64.6)
< 3 000 people	65.7 (62.1-69.4)	62.5 (59.2-65.7)	54.3 (50.9-57.7)

¹ Missing values for population density on 22 owners, and 29 and 26 dogs.

CI 47.7-51.8). Of these, 83 females (7.2%; CI 5.7-8.7) had been spayed. Neutered males numbered 43 (3.7%; CI 2.6-4.8) of all males.

There were dogs in the full range of ages in all subgroups (eg. by gender and type of insurance). The mean age for all dogs in the sample was 5.7 years, median 5 years. Mean age in males was 5.6 years and median 5, compared to females mean age 5.7 years, median 6 years (Fig 1). The dogs insured for veterinary care had a mean age of 5.2 years, median 5 years. Dogs covered for life had a mean age of 4.9 years, median 4 years.

The distribution by breed is shown in Table 5. "Other purebred" was the largest category, 13.5%, followed by mongrels 13.3% and terriers 8.4%. The 4 most common breeds were dachshunds (all varieties combined), german shepherd dogs, golden retrievers and labrador retrievers. Mongrels were insured to a lesser degree for veterinary care and especially for life, compared to most purebred dogs. Excluding mongrels, 1353 dogs (71.5%; CI 69.5-73.6) were insured for veterinary care and 1 124 dogs (62.2%; CI 60.0-64.5) were life insured.

Of the 2235 dogs in the sample 66.9% (CI

² Based on figures from 1990.

³ Based on the crude calculation.

² Stockholm, Gothenburg and Malmö.

³ Excluding Stockholm, Gothenburg and Malmö.

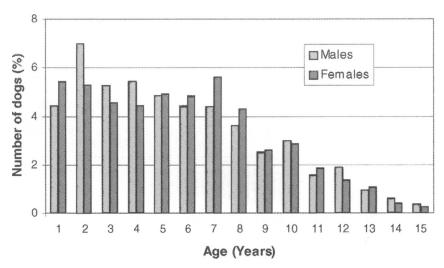


Figure 1. Age distribution of dogs by gender (n = 11760).

65.0-68.9) were registered in the Swedish Kennel Club (SKC). Of the SKC-registered dogs with information on insurance status for veterinary care ($n = 1\,423$) and/or life insurance ($n = 1\,359$); 1 120 dogs (78.7%; CI 76.6-80.8) were insured for veterinary care and 960 dogs (70.6%; CI 68.2-73.1) were insured for life.

Age at acquisition was provided for 2 305 of the 2 330 dogs. Most dogs, 87.4% (CI 86.0-88.7) had been acquired before 1 year of age, and 73.3% (CI 71.5-75.1) of all dogs had been acquired before 4 months of age.

Most dogs were used for company, followed by hunting and protection/guarding (Table 6). Dogs used for competition tended to be insured for both veterinary care and life to a higher degree compared with all other usages.

For the 2 294 of the 2 330 dogs in the sample, where information was provided on whether they had been seen by a veterinarian during the last year, 1 469 dogs, 64.0% (CI 62.1-66.0) had been seen by a veterinarian at least once in the last year. Of the 1 468 and 1 192 dogs insured for veterinary care and/or life respectively and

with data on whether they had visited a veterinarian during the recent year; 1085 dogs, 73.9% (CI 71.7-76.2) and 880 dogs, 73.8% (CI 71.3-76.3) respectively had been seen by a veterinarian once during the last year. Of the 684 dogs not insured for veterinary care and with data on visits to veterinarians during the most recent year, only 306 dogs 44.7% (CI 41.0-48.5) had visited a veterinarian.

Discussion

This study has provided estimates of the total Swedish dog population and demographic information for the year 1998, that can be useful for researchers and people in pet-related businesses and of interest for the general dog-owning population. For practical reasons interviews in this study were performed by a polling institute, which has also been the case in other studies (*Griffiths & Brenner* 1977).

The sampling procedure did not allow calculation of non-response rate, nor any means of investigating whether the non-respondents differed from the respondents. However, the point

Table 5. Breed distribution of dogs for the sample and within insurance categories.

Breed	Number in sample	Persent of all 2,330 dogs (95% CI)	Percent insured for veterinary care (95% Cl) ¹	Percent covered by life insurance (95% CI) ¹
All dogs	2 3 3 0	100	68.4 (66.4-70.3)	58.3 (56.2-60.4)
Mongrel	311	13.3 (12.0-14.7)	47.0 (41.2-52.8)	31.7 (26.1-37.3)
All purebreds	2019	86.7 (85.3-88.0)	71.5 (69.5-73.6)	62.2 (60.0-64.5)
Terrier	196	8.4 (7.3-9.5)	74.6 (68.2-80.9)	65.9 (58.8-73.0)
Dachshund	172	7.4 (6.3-8.4)	59.9 (52.1-67.7)	50.0 (42.1-57.9)
German shepherd dog	164	7.0 (6.0-8.1)	74.4 (67.5-81.2)	60.7 (52.7-68.6)
Miniature dog	161	6.9 (5.9-7.9)	77.3 (70.7-83.9)	66.0 (58.4-73.6)
Golden retriever	116	5.0 (4.1-5.9)	78.5 (70.7-86.3)	74.3 (65.7-82.8)
Labrador retriever	115	4.9 (4.1-5.8)	69.8 (61.1-78.6)	54.0 (44.2-63.8)
Elkhound	93	4.0 (3.2-4.8)	51.7 (41.2-62.2)	52.9 (42.4-63.4)
Stövare	86	3.7 (2.9-4.5)	57.8 (47.2-68.5)	58.5 (47.9-69.2)
Drever	75	3.2 (2.5-3.9)	54.8 (43.4-66.2)	55.4 (43.3-67.5)
Poodle	70	3.0 (2.3-3.7)	74.2 (63.3-85.1)	63.5 (51.6-75.4)
Collie	64	2.7 (2.1-3.4)	71.9 (60.3-83.6)	53.7 (40.4-67.0)
Cocker spaniel	49	2.1 (1.5-2.7)	68.9 (55.4-82.4)	54.5 (39.8-69.3)
Springer spaniel	42	1.8 (1.3-2.3)	95.1 (88.5-100)	82.1 (70.0-94.1)
Sight hound	41	1.8 (1.2-2.3)	92.7 (84.7-100)	75.6 (62.5-88.8)
Cavalier King		, ,	, ,	,
Charles spaniel	38	1.6 (1.1-2.1)	80.0 (66.7-93.3)	68.6 (53.2-84.0)
Rottweiler	37	1.6 (1.1-2.1)	86.5 (75.5-97.5)	66.7 (51.3-82.1)
Border collie	36	1.5 (1.0-2.0)	48.4 (30.8-66.0)	41.2 (24.6-57.7)
Setter	29	1.2 (0.8-1.8)	73.1 (56.0-90.1)	59.1 (38.5-79.6)
Flat coated retriever	25	1.1 (0.7-1.5)	87.0 (73.2-100)	68.2 (48.7-87.6)
German pointer	23	1.0(0.6-1.4)	82.6 (67.1-98.1)	66.7 (46.5-86.8)
Other purebred	315	13.5 (12.1-14.9)	70.7 (65.5-75.8)	64.5 (58.9-70.1)

¹ Of 2 174 and 2 074 dogs with information on status for the respective insurance types.

Table 6. Percent of dogs kept for or acquired for different purposes.

Usage	Number in sample ¹	Persent of all 2,330 dogs (95% CI)	Percent insured for veterinary care (95% Cl) ²	Percent covered by life insurance (95% CI) ²
Company	2 2 6 1	97.0 (96.4-97.7)	69.2 (67.2-71.2)	59.1 (57.0-61.3)
Hunting	595	25.5 (23.8-27.3)	61.4 (57.4-65.4)	58.7 (54.4-62.8
Protecting-guarding	459	19.7 (18.1-21.3)	64.3 (59.7-68.8)	55.6 (50.7-60.4)
Competition	426	18.3 (16.7-19.9)	86.0 (82.7-89.4)	81.1 (77.2-84.9)
Breeding	233	10.0 (8.8-11.2)	79.1 (73.8-84.4)	73.8 (68.0-79.5)
Other	157	6.7 (5.7-7.8)	68.9 (61.5-76.4)	63.6 (55.6-71.5)
Sheep-herding	72	3.1 (2.4-3.8)	55.4 (43.3-67.5)	52.3 (40.2-64.5)

 $^{^1\,}$ Dogs can to be in several categories. $^2\,$ Of 2 174 and 2 074 dogs with information on status for the respective insurance types.

estimation of the total dog population using the crude or stratified calculations gave very similar results, adding to the evidence that the sample was at least geographically balanced. We have no actual estimates for the distribution of telephones across different areas of Sweden or among different cultural groups. However, the share of households owning a telephone in Sweden is known to be large in an international perspective.

It appeared that most questions were answered accurately, with a few exceptions. Several dogs older than 10 years of age were said to be covered by life insurance, although insurance companies do not allow dogs that old to be insured for life. This mistake probably arises as owners do not always know which type of insurance they currently have for their dog. The number and proportion of dogs insured for veterinary care as well as for life from this study result in higher estimates than those reported from the Swedish insurance companies.

The females and males represented equal parts of the population. Male dogs were slightly younger than female dogs, a similar pattern seen in most other studies of dogs (Robinson 1967, Thrusfield 1989). The proportion of neutered males was lower than the proportion of neutered females. Very few Swedish dogs undergo elective neutering, in contrast to in the USA and Australia, where over 75% of the dogs have been reported as neutered (Avanzino 1991, Manning & Rowan 1992, Blackshaw & Day 1994). In Sweden, neutering most commonly takes place if the dog develops a disease condition where it is indicated.

The dogs in this study were older than what has been reported in most earlier surveys from other countries. For example, *Franti et al.* (1980) reported a median age of 3 years in a survey from the USA. However, a more recent study from the USA (*Patronek et al.* 1997) reported a median of 5 years, the same as in this

study. A large proportion of dogs were acquired at a low age by the present owners, indicating a low rate of re-homing in Sweden.

Naturally breed composition varies between countries, native breeds often being more popular in their country of origin. For example breeds in the group of stövare, several of them being Swedish breeds and also the drever, are common hunting dogs in Sweden. There are, however, similarities between the Swedish dog population and reports from other countries. For example, the labrador retriever and the german shepherd dog have been in the top-five most popular breeds both in studies from the USA (Franti et al. 1980) and the UK (Thrusfield 1989), as in this study. Non-pedigree dogs comprise a lesser part of the total dog population in Sweden than has been found in population-based studies from other countries. However, comparisons of breed distribution between population-based studies from different times must be done with caution. In the breed analysis it was necessary to combine separate breeds, for example all terriers belonged to one group. Thus, many breed-specific estimates were hidden in the group "other", so no estimates could be calculated.

The estimated size of the Swedish dog population based on this study was just over 800 000, higher than the most recently published estimate from 1990, where the Swedish dog population was estimated to be 690 000 (Moore 1991). The reason for the larger number estimated here might be due to different sampling techniques or a real increase in the Swedish dog population, although there has been a decreased number of dogs registered by the SKC in recent years (Anon. 1998b). It is impossible to demonstrate whether there is an increased population, either because of an increased number non-registered dogs in Sweden or due to dogs having longer life spans, without comparable data from previous years.

The percentage of dog-owning households varied between different geographic areas as well as by population density. The percentage of households owning dogs in one of 3 large cities was much lower than in the rural areas, similar to what has been found in the USA (Franti et al. 1980, Troutman 1988). Dog owning was significantly less common among single-person households as well as among low income households, similar to results from other countries (Franti et al. 1980, Troutman 1988, Teclaw et al. 1992). The association between dog ownership and different geographic areas or population density categories was similar in magnitude even if number of people in the household was controlled for (analysis of data not shown). Naturally, there was a strong association between number of people in household and the total household income (data not shown).

Over 60% of all dogs were insured for veterinary care and/or life, so this is now a common practice for dog owners in Sweden. It assures that people can afford to have their dogs treated by veterinarians for most problems, even though some conditions and procedures are not covered by the insurance, such as prophylactic treatment, dental care, mental ill health and diseases considered to be present when the dogs were initially insured. Although there are several companies in Sweden insuring companion animals, over 40% of all Swedish dogs were insured for veterinary care by the insurance company Agria and more than 30% were life insured by the same company.

Mongrels were insured to a lesser degree than purebred dogs, especially for life insurance, probably as a consequence of their lower monetary values. Dogs registered by the SKC were insured to a greater extent than non-registered dogs. Judged by the confidence intervals, hunting breeds such as the elkhound, stövare, drever and also dachshund (often used for hunting in Sweden) are covered by insurance for veteri-

nary care to a lesser degree than purebred dogs in general. For life insurance, the same trend is evident for the point estimates, although there is some overlap of confidence intervals.

Whether owners had any dog insured varied more by geographic location than by population density. In the northern region significantly less dog owners had insured any of their dogs. The study had insufficient power to evaluate the breed composition for separate geographic areas, but findings might be confounded as breed composition varies across geographic areas. The lower insurance degree in the northern part might also be explained by less tradition to insure dogs in the northern part because of fewer facilities provided for advanced veterinary care. In this study it was estimated that 64% of the dogs had been seen by a veterinarian during the previous year, lower than what was found in the USA where as many as 80% had been seen by a veterinarian during the recent year (Teclaw et al. 1992). An explanation for this might be different prophylactic health care schemes in different countries. Not surprisingly, insured dogs were more likely to have been seen by a veterinarian during the preceding year than the noninsured dogs.

Conclusion

The demographics of the Swedish dog population are similar in many respects to those from other countries. The population, however, has special characteristics with its high proportion of purebred, registered and insured dogs, and a low proportion of neutered dogs. Within this sample, insured dogs were slightly younger, included less mongrels and more dogs participating in competition compared to the general dog population in Sweden. They also visited a veterinarian more often. Survey data, such as those provided in this study, are useful not only for research, but also for planning of services to

Swedish dogs and their owners. To monitor changes over time, repeated studies are needed.

Acknowledgements

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Sammanfattning

Översikt av den svenska hundpopulationen: ålder, kön, ras, geografisk lokalisering och försäkringsbenägenhet.

Ett urval av svenska hushåll intervjuades via telefon. Antalet intervjuade hushåll var 11762, och av dessa hade 15.5% hund och 77.9% av de hundägande hushållen hade endast en hund. Den totala hundpopulationen i Sverige skattades till över 800,000 hundar. Att ha hund var vanligare på landsbygden jämfört med i större städer. Hanhundar och tikar utgjorde lika stor andelar och få hundar var kastrerade. Medelåldern var 5.7 år och medianen 5 år. Andelen blandrashundar utgjorde 13.3% och den vanligaste hundrasen var tax (7.4%). Av de hundar där information om försäkringsstatus fanns var 68.4% försäkrade för veterinärvård och 58.3% livförsäkrade.

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Reprints may be obtained from: A. Egenvall, Department of Small Animal Clinical Sciences, Faculty of Veterinary Medicine, Swedish University of Agricultural Sciences, SE-750 07 Uppsala, Sweden. E-mail: Agneta.Egenvall@kirmed.slu.se, tel: 46-18-671369, fax: 46-18-673435.