The Irish Wolfhound Longevity study

Purpose

The Irish Wolfhound Longevity Study is a population study, aiming at creating substantial basic research for a wide array of further in-depth studies, which in sum will help establishing the status quo of the Irish Wolfhound Worldwide. It is within the framework of the study to uncover patterns through statistical analysis of the gathered data.

Based on our findings, it is our aim that The Irish Wolfhound Longevity study, among other things, will be able to provide strategies for the future of breeding pedigree Irish wolfhounds and possibly pedigree dogs in general, where the next best thing to *survival of the fittest* will be a *selection of the fittest*.

Background:

Like many purebred dogs, the Irish Wolfhound has been bred within closed registries for approximately a century and a half, since the forming of pedigree issuing kennel clubs during the last quarter of the 19th century.

A purebred population of domesticated dogs can be defined as the result of a closed pedigree recorded, selective breeding program, which is frequently based on limited founding stock. It is no secret, that a large number of present day dog breeds have reached critical points, where the results of human selection processes, have inadvertently caused various breed specific health challenges.

Methodology:

Data for the Irish Wolfhound Longevity study has been collected through personal correspondence with breeders and owners, from various Irish wolfhound club publications and websites around the World. To exploit as many avenues of data collection as possible; two separate Facebook pages were created; *The Irish wolfhound Veterans page* and *The Irish wolfhound Memorial page*, which have provided information on sex, age at death, cause of death and parentage on close to 1000 Irish wolfhounds. Some kennels have shared their private kennel notes in full with us, which is extremely valuable for the study.

In our data there a disproportionately high number of veterans, and thus, not a reflection of the actual world population of Irish wolfhounds. Since we are dealing with owner reported data, we believe that there is a greater desire to share data on dogs which have lived into their veteran age rather than dogs which didn't make good ages. However, within the data are several identifiable populations, which reflect the general state of the breed. These results are used separately for relevant calculations.

Because we are working with owner reported data, the initial goal was to collect information on approximately 6.000 dogs or more to balance out possible sporadic inaccuracies in the data collected.

Several recent independent studies done on Irish Wolfhounds in various countries along with a study from 1955 by A.COMFORT *Department of Zoology, University College London* seem to come to the conclusion that median lifespan of the Irish wolfhound is somewhere between 6 and 6½ years.

Hypothesis

Findings in various human population studies, combined with our preliminary data on 6110, Irish wolfhounds, strongly indicate that the potential for longevity contains inherited components. Although, dog owners generally wish for their companion animals to live long lives, longevity in itself has no significance from a biological perspective: We base our study on the assumption, that the greatest drive in all life forms is the competition for the right to reproduce; a process which requires all encompassing vitality and strength. There are examples from a number of species, where parental life is sacrificed in the name of reproduction, thus demonstrating how strong this drive can be. As a rule, life is not necessarily sacrificed in the competition for the right to reproduce among canids, however, the process requires good health, vitality and stamina if left without human interference.

It is our hypothesis, that the potential for longevity is a "by-product" of good health, vitality and stamina. In other words, by selecting breeding stock from long-lived families, theoretically one should reap a series of health benefits in addition to longevity.

Preliminary findings

From the trial calculations done on our preliminary data of 6110 dogs we see indications that:

- There is a strong element of heritability in the potential for longevity. This is supported by a number of human population studies.
- In the group of dogs surviving 8 years and above, the sex ratio shows nearly 50% more bitches than male dogs, a gap which grows proportionally with an increase of age.
- The majority of veteran dogs (8 years and above) have at least one veteran parent.
- The potential for longevity increases exponentially according to the number of long lived dogs present in a 4 generation pedigree.
- Dividing the data in two groups: 1) dogs which have died under the age of 8 years and 2) dogs which have died at the ages 8 years and above, show that in the first group 39% died from cancer (all forms) and 19% died from cardiovascular disease (all forms). In the second group, we found that 31% of the dogs died of cancer (all forms) while the cause of death in 20% of the dogs was due to be cardiovascular disease (all forms). The relatively small variance in the percentual distribution of causes of death in the two groups may indicate that disease control could be exercised more effectively, if we aim at a postponement of the time of onset, rather than aiming at a total elimination of cancer and cardiovascular disease.
- Even kennels, which have bred more than an average amount of veterans, have not eliminated diseases such as osteosarcoma or heart disease from their stock. However, compared to the breed average, the time of expression frequently occurs much later, usually in the senescence of life.

What we need

We are asking you, if you would please help our project, by sharing information about your passed Irish wolfhounds with us. We are not just looking for veterans, but would like data on all dogs, no matter what age they have reached at passing.

The details needed are:

Registered name of dog
Sex of dog
Copy of its pedigree
Year and month of death
Cause at death
Other ailments or diseases (if any) during its lifetime
If possible, we would appreciate the same information on littermates to the dog

Information can be submitted to:

Pernille Monberg wolfhouse@post.tele.dk

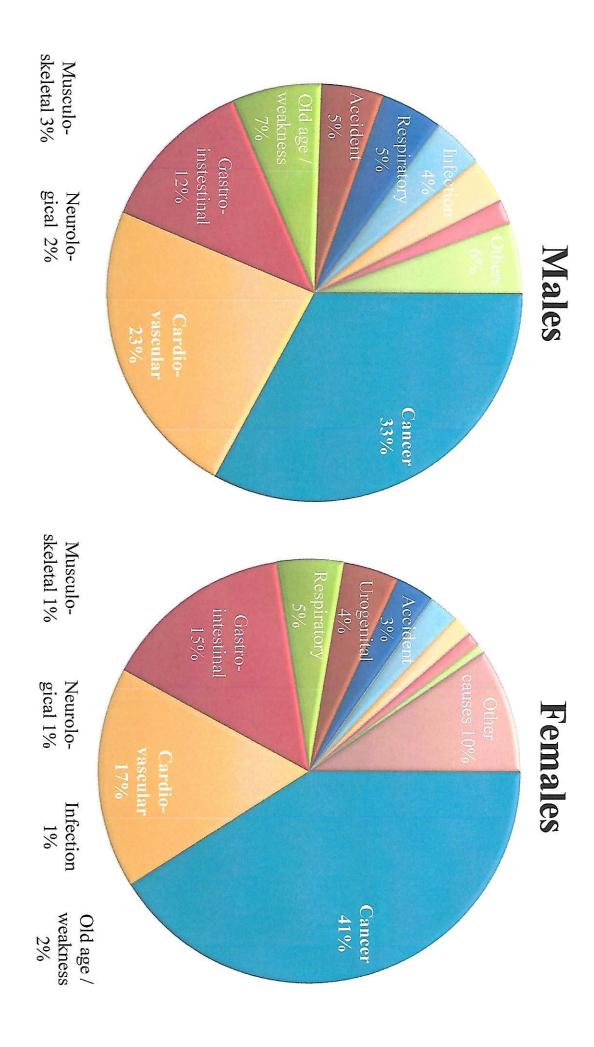
Edita Beresova <u>editaberesova@seznam.cz</u>

From: "Comparative Longevity of Pet Dogs and Humans: Implications for Gerontology Research" By: Patronek, Waters & Glickman. 1997 Journal of Gerontology, Biological Sciences Vol. 52A, No 3

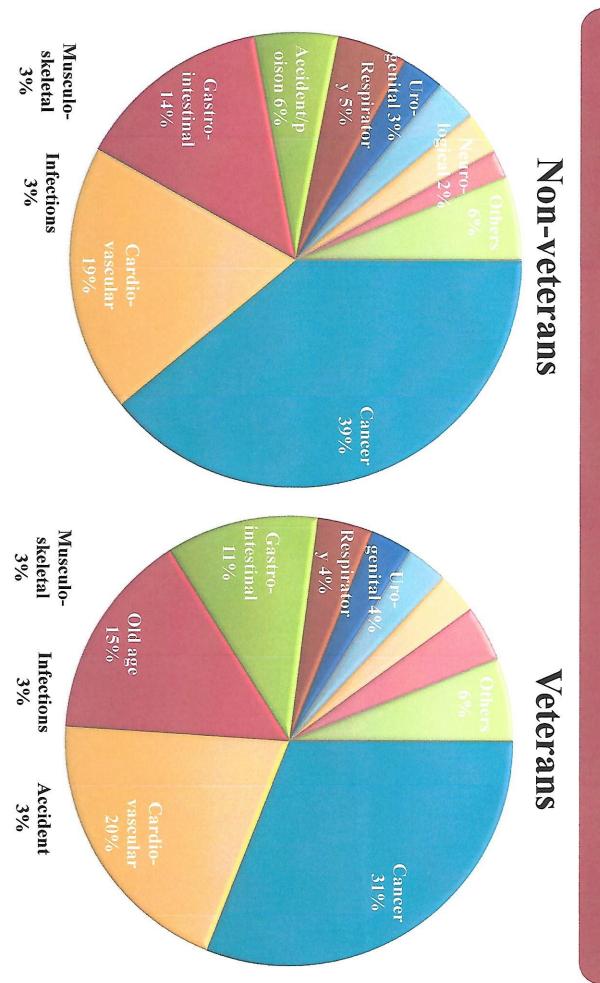
Table 3. Mean Age at Death of the Most Common Breeds of Dogs in the VMDB From 1980–1990*

Dog Breed	Number of Dogs	Median Age at Death (years)
Afghan	151	6.7
Airedale	164	6.5
Bassett	283	6.3
Beagle	417	6.6
Boston Terrier	256	8.5
Boxer	455	6.0
Brittany Spaniel	239	7.0
Bulldog	196	4.6
Cocker Spaniel	775	5.6
Collie	431	7.5
Dachshund	829	5.5
Dalmatian	164	6.2
Doberman Pinscher	1522	5.9
English Setter	197	7.0
German Shorthaired Pointer	173	7.2
German Shepherd	1793	6.8
Golden Retriever	1088	6.6
Great Dane	487	4.6

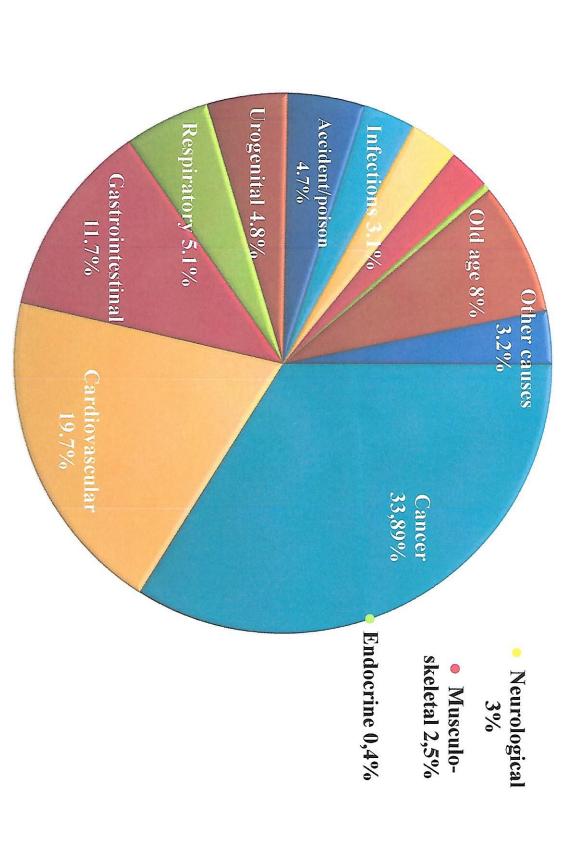
Comparing causes of death males vs. females



Comparing causes of death non-veterans vs. veterans



Causes of death



Gender vs. lifespan

