Purpose

The Irish Wolfhound Longevity Study is a population study, aiming at establishing the status quo of the Irish Wolfhound Worldwide.

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 pedigree recorded, selective breeding program, which frequently is based on limited founding stock.

It is no secret that a vast number of present day dog breeds have reached critical points, where the results of human selection processes, inadvertently have caused various breed specific health challenges.

Based on our findings, it is our aim that The Irish Wolfhound Longevity study will be able to provide a strategy 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*.

Hypothesis

Findings in various human population studies, combined with our preliminary data on 3.500 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 point of view: 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 numerous examples from a vast 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 3.500 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 38% died from cancer (all forms) and 22% died from cardiovascular disease (all forms). In the second group, we found that 35% of the dogs died of cancer (all forms) while the cause of death in 18% 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.

Methodology:

Data for the Irish Wolfhound Longevity study has been collected through personal contact with breeders and owners and from various Irish wolfhound club publications and websites around the World. Finally, 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 kennel notes with us, which can prove extremely valuable for the study. The gathered material has a disproportionate number of veterans and is therefore as a whole, not a reflection of the actual world population of Irish wolfhounds. However, within the data are several identifiable populations, which reflect the general state of the breed. These results are used separately for relevant calculations. Since we are working with owner reported data, the goal is to collect information on approximately 6.000 dogs or more to balance out 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.

What we need

We are asking you, if you would please help our project, by sharing information about your passed Irish wolfhounds with us?

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 Email : <u>wolfhouse@post.tele.dk</u>

Or Edita Beresova Email : <u>editaberesova@seznam.cz</u>