

The Financial Costs of Poor Dog Breeding Practices in Wales

1 Introduction

This short report is submitted to the Welsh Government to assist in their compilation of a Regulatory Impact Assessment for the proposed Animal Welfare (Breeding of Dogs) (Wales) Regulations. It seeks to ensure that the full financial costs of poor dog breeding practices in Wales are taken into account.

The report is provided by C.A.R.I.A.D. (Care and Respect Includes All Dogs) – the campaign coalition of dog rescue and welfare organisations across Wales.

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3 Overview

3.1 Wales has a high concentration of commercial dog breeders. Approximately 29% of licensed breeders in England and Wales are located in Wales (234 licensed DBEs in Wales out of approximately 800 across England and Wales combined in 2013)¹. The average size of dog breeding establishments in Wales (28 breeding dogs average per licensed DBE) is approximately twice that in England (15 breeding dogs average per licensed DBE), so that it accounted for approximately 43% of all breeding dogs kept on licensed premises in England and Wales in 2013 (c.6600 breeding dogs in Wales, c.8600 in England)¹. (On the U.K. mainland there are further volume dog breeders in Scotland but these have not been considered here).

3.2 Assuming an average litter size per breeding bitch of 4.5 puppies² and a neonatal mortality rate of 20%³, with approximately 5600 breeding bitches (out of the total of 6600 breeding dogs), licensed DBEs in Wales are likely to be producing about 20,000 puppies for sale each year.

3.3 There are additionally a significant number of commercial breeders above the licensing threshold which operate illegally without a licence. It is difficult to know the extent of these, but a study commissioned by the Welsh Government as part of the Companion Animal Welfare Enhancement Scheme (CAWES)⁴, indicated that in Wales the numbers of unlicensed breeders may have at least equalled licensed DBEs in the recent past. An unknown number currently operate between the current licensing threshold of 5 litters per annum, and the threshold proposed in draft Regulations of 3 litters per annum. It is likely that the total number of puppies produced through these sources is in the tens of thousands annually in Wales

3.4 The size of licensed DBEs in Wales ranges from 4 breeding dogs to 196 breeding dogs¹.

4 Financial benefits accruing to commercial dog breeders

4.1 The financial benefits accruing to those involved in volume commercial dog breeding operations is outlined here.

4.2 The gross revenue from puppy sales to volume commercial breeders in Wales will depend firstly on the sale price of puppies, secondly on the numbers sold and thirdly the route by which puppies are sold.

4.3 Commercial breeders in Wales rear a large number of different breeds. (An analysis of breeds kept by breeders in one large local authority in Wales is available as Appendix 1). However, certain breeds

are particularly popular and bred in much higher volumes. These tend to be smaller breeds. Advertised Internet sale prices for eight of the most commonly reared breeds are presented below:

Table 1 : Advertised prices of individual, pure-bred puppies in May 2014 on Internet puppy sale sites^{5,6}.

| Breed | Internet Advertiser | Average price per puppy | Price range per puppy |
|--------------------------------|---------------------|-------------------------|-----------------------|
| Cavalier King Charles' Spaniel | Epupz | £610.00 | £350.00 to £750.00 |
| | Pets4Homes | £540.00 | £300.00 to £800.00 |
| Bichon Frise | Epupz | £440.00 | £225.00 to £650.00 |
| | Pets4Homes | £440.00 | £300.00 to £800.00 |
| West Highland Terrier | Epupz | £490.00 (n=13) | £250.00 to £750.00 |
| | Pets4Homes | £490.00 | £350.00 to £750.00 |
| Cocker Spaniel | Epupz | £610.00 | £400.00 to £850.00 |
| | Pets4Homes | £570.00 | £350.00 to £850.00 |
| Yorkshire Terrier | Epupz | £440.00 | £295.00 to £750.00 |
| | Pets4Homes | £450.00 | £250.00 to £650.00 |
| Miniature Schnauzer | Epupz | £740.00 | £625.00 to £850.00 |
| | Pets4Homes | £700.00 | £400.00 to £850.00 |
| Labrador Retriever | Epupz | £480.00 | £350.00 to £700.00 |
| | Pets4Homes | £500.00 | £375.00 to £650.00 |
| Shih Tsu | Epupz | £490.00 | £350.00 to £900.00 |
| | Pets4Homes | £460.00 | £295.00 to £650.00 |

*Data collected on 7th May 2014 by searching the 'For Sale' database of two large Internet puppy advertisers^{5,6} using breed name as a search term and taking the first 20 advertisements for a pure-bred puppy (n = 20 for each average value unless indicated).

The breed price averages if averaged in turn yield an approximate 'global' average puppy Internet price for the most popular breeds of c. £500.00.

Table 2 Average litter sizes of commonly sold dog breeds**

| Breed | Average litter size |
|--------------------------------|---------------------|
| Cavalier King Charles' Spaniel | 3.8 |
| Bichon Frise | 4.4 |
| West Highland Terrier | 3.3 |
| Cocker Spaniel | 5.2 |
| Yorkshire Terrier | 3.2 |
| Miniature Schnauzer | 4.4 |
| Labrador | 6.2 |
| Shih Tsu | 3.9 |

** Litter sizes vary for all breeds but average figures are given based on a recent large scale study of over 10,000 purebred dogs².

4.4 An analysis of licence reports¹ received through FOI requests in 2013 for Carmarthenshire, which contains the highest concentration of licensed DBEs in Wales (85 licensed DBEs), has shown that a minimum of 49% of licensed breeders report that they sell their puppies to dealers. About 45% report

that they sell privately predominantly via the Internet. Selling channel was not reported in a minority of cases. Similar proportions may be anticipated amongst licensed volume breeders within other authorities in Wales.

4.5 As shown in Table 1 above, average retail price for popular breeds ranges between £440.00 (e.g. for Bichon Frise) to £740.00 (e.g. for Miniature Schauzer). Those breeders which sell direct to the final purchaser may be anticipated to receive the full retail price or close to it. For breeders which sell via dealers the sale price to the dealer will be less than advertised retail (Internet) prices. Breeder to dealer sale prices for popular breeds will vary with retail sale price and occur within a range allowing a 'mark up' for the dealer. C.A.R.I.A.D. investigations indicate that dealers will often purchase and collect large numbers of puppies from several breeders likely reducing expected dealer mark-up per puppy⁷. Further, since breeders have the option of selling direct via the Internet or privately, this will limit the minimum price that a dealer can negotiate.

4.6 From Table 1 assuming an average retail puppy price of £500.00, and a general average litter size of c. 4.5² for popular breeds, experiencing 20%* neonatal mortality³, then potential gross sales revenue per annum for licensed breeders is estimated to be in the following range :

Table 3 Predicted gross sales revenue of licensed dog breeders in Wales***

| Number of breeding bitches kept by DBE | Sales route | Predicted number of surviving puppies produced per annum | Predicted gross sales revenue if all puppies produced are sold at average retail price |
|--|-------------|--|--|
| 5 | Direct | 18 | £9000.00 p.a. |
| | Via Dealer | 18 | ? |
| 10 | Direct | 36 | £18000.00 p.a. |
| | Via Dealer | 36 | ? |
| 20 | Direct | 72 | £36000.00 p.a. |
| | Via Dealer | 72 | ? |
| 30 | Direct | 108 | £54000.00 p.a. |
| | Via Dealer | 108 | ? |
| 40 | Direct | 144 | £72000.00 p.a. |
| | Via Dealer | 144 | ? |
| 50 | Direct | 180 | £90000.00 p.a. |
| | Via Dealer | 180 | ? |
| 60 | Direct | 216 | £108000.00 p.a. |
| | Via Dealer | 216 | ? |
| 70 | Direct | 252 | £126000.00 p.a. |
| | Via Dealer | 252 | ? |
| 80+ | Direct | 288 | £144000.00 p.a. |
| | Via Dealer | 288 | ? |

* a neonatal mortality figure of 20% has been assumed as approximately that found in a large U.K. study conducted in 1963. A more recent (2012) large-scale Norwegian study³ has found lower mortality (c.9%) but current UK rearing conditions are likely to be in general poorer than those applying to the Norwegian sample. It is possible typical neonatal mortality in UK volume commercial breeders is lower than 20% in which case gross revenue would be higher.

4.7 As an example, a breeder with 20 breeding dogs including 2 stud dogs, producing an estimated 64 surviving puppies per year for sale, would typically have potential gross sales revenue of £32,000.00 p.a. if selling direct and all puppies produced are sold, but a lesser amount if selling via a dealer which will depend on factors influencing negotiating strength of the breeder.

4.8 It would be inappropriate to seek to constrain licensing regulation to enable profitability of dog breeding operations under current methods of sale. The problems created by breeding of dogs and their sale through third-parties (e.g. dealers and pet shops) are very significant. They include the facilitation of poor breeding practices because they prevent purchasers seeing rearing conditions, or seeing puppies with parents (particularly the mother) prior to purchase. They further prevent effective redress by

purchasers when later health or other problems arise as breeders become difficult to identify. Such methods of sale also create infectious disease risks by bringing together puppies prior to development of full immunity, and are prejudicial to proper socialisation of puppies at critical periods.

4.9 A very thorough analysis⁸ of the issues referred to in Paragraph 4.8. has been provided in a report by Canine Action UK which has previously been submitted to UK Government officials in DEFRA. (An electronic copy is attached for reference). It is strongly recommended that relevant content of this very thoroughly researched report is examined.

5 Financial costs created by dog breeding operations

5.1 The financial costs imposed on others by commercial dog breeding operations of inadequate standard in Wales can include:

- costs of veterinary care imposed on purchasers of puppies through failure to vaccinate and failure to prevent spread of infectious disease.
- costs of remedial treatment imposed on purchasers of puppies bred from parents of unsuitable temperament or arising from failure to properly socialise puppies.
- costs of veterinary care imposed on purchasers of puppies arising from in-breeding and from failure to conduct relevant genetic tests on parents.
- costs of legal action taken by purchasers of unhealthy puppies.
- costs to local authorities for animal warden and pound services provided for dogs abandoned because of poor behaviour arising from lack of socialisation or ill-health from poor breeding.
- costs to the health service of treatment of bites caused by failure to properly socialise puppies.
- costs to rescue organisations of care, veterinary treatment, kennelling and re-homing of ex-breeding dogs entering rescues.
- costs to rescue organisations of care, veterinary, treatment, kennelling and re-homing of owned dogs abandoned or given up through poor behaviour arising from lack of socialisation or poor breeding, and from failure to 'vet' potential purchasers.
- increased pet insurance premiums arising from widespread health problems of purchased puppies through poor breeding practices or unhygienic rearing.

5.2 The financial costs associated with poor dog breeding practices in Wales would fall on citizens and public authorities in both Wales and England, and potentially beyond. This is because a high proportion of puppies bred in Wales are sold on via dealers, sometimes through pet shops in England, and via Internet sales to purchasers in England and elsewhere.

5.3 These financial costs are examined more fully below.

6 Costs to purchasers

6.1 Costs of veterinary treatment for medical conditions of puppies arising from infection

6.1.1 Analysis of licence reports shows very few references to routine care of breeding dogs by vets^{1,9}. There are very few references to vaccination of breeding dogs. A substantial proportion refer to veterinary visits or the taking of puppies to a vet for the single parvovirus first vaccination prior to sale. A minority of licence reports record that there are veterinary visits to administer the first vaccination shot for multiple immunisation against parvovirus, canine distemper and canine hepatitis. A small proportion of reports include comments to the effect that vaccination is not done prior to sale to particular dealers who prefer this not to be.

6.1.2 The evidence from licence reports is that breeding dogs are not routinely vaccinated, that only a minority of puppies receive comprehensive first vaccination prior to sale, and that a proportion of puppies do not receive any vaccination prior to leaving the premises. Full immunity against parvovirus or other infections is not achieved after a single injection and is maximal only following a complete course. Immunity from parvovirus infection is approximately only 50% after the first injection.

6.1.3 Licence reports and other evidence (eg documented undercover investigations, RSPCA investigations and others) show that cleanliness of establishments is often poor and that there is inadequate attention to hygiene and regular cleansing routines. Moreover, the circumstances of breeding may involve bringing together large numbers of dogs of different breeds often from different sources. Where a premises is both a breeder and a 'licensed pet shop' or dealership puppies from multiple sources may be brought together and transported together. Infectious agents may also be transmitted by dealers and others – parvovirus for example may be transmitted from dog faeces and remains viable for a period in it.

6.1.4 These circumstances imply that there is considerable risk of transmission of infectious disease to puppies. This may be compounded by compromised immunity where rearing conditions are stressful.

6.1.5 Failures in hygiene, proper care of puppies and parents, and failures to properly vaccinate all create risk of subsequent financial cost to purchasers. Trading standards officials regularly receive complaints about puppies becoming sick shortly after purchase, and FOI requests reveal that complaints made against breeders frequently involve sale of sick puppies. However, it is likely that these recorded complaints are the minority only as purchasers may often simply pursue treatment without making formal complaints.

6.1.6 Costs of veterinary treatment for puppy illness arising from inadequate care of puppies are frequently very high. They often include costs of initial assessments, of drugs, of in-patient care and, in some cases, operations. In some cases, for example treatment of parvovirus infection, treatment is very intensive and quite sustained and therefore expensive.

6.1.7 It is difficult to provide a comprehensive financial estimate of costs created for purchasers of puppies which become ill as perhaps only a minority are reported and full data on costs incurred in the individual case may not be available. However, in each instance that this arises average costs are likely to be in the hundreds of pounds. The high volume of sales, the clear evidence of inadequate levels of vaccination, and the widespread occurrence of comments by licensing officials in reports about failures in hygiene suggest these amounts may be substantial.

6.1.8 Moreover, while veterinary treatment provided may be acute, it is often reported by purchasers that early physical health problems presage a litany of subsequent problems arising from damage to systems sustained as a result of earlier infections.

6.1.9 These reported problems strongly argue for the inclusion in Regulations of conditions requiring full veterinary care for both breeding dogs and puppies, of comprehensive vaccination protocols for puppies prior to sale and of breeding dogs, the requirement that breeders be registered with a vet, and that breeders agree on a regular basis suitable health plans for dogs kept.

6.1.10 Detailed examples of the experiences of purchasers of sick puppies and of the associated veterinary expenses are provided in a report produced by C.A.R.I.A.D. relating to the investigation of a particular breeder and third-party dealer in Lincolnshire. The 'Willow Farm Kennels Report' also highlights the way in which certain commercial breeders in Wales operate via intermediate dealers and how the processes jointly create disease risks.

6.2 Costs of veterinary treatment for genetic conditions of puppies arising from poor breeding practices.

6.2.1 Dogs of all breeds are potentially subject to inherited conditions that may have an impact on health and welfare, and which often may be serious¹⁰. Certain breeds are more susceptible to genetically-related conditions¹⁰. It is important that dogs which 'carry' potentially damaging genes are either not bred from or are only bred with suitable non-carrying mates such that risk of expression of a damaging trait would not occur¹⁰.

6.2.2 In order to prevent risk of transmission of genetic diseases it is essential that potential parents are appropriately tested. This may involve relatively superficial observation, investigation (for example, by x-ray) to detect presence of conditions or the direct assessment of DNA to determine if particular genes are present. All such tests involve costs. There is very little evidence that relevant genetic tests on

parents are currently conducted by the majority of volume commercial breeders and license reports make almost no reference whatsoever to the carrying out of such tests.

6.2.3 Where there is a failure to select out from breeding those carrying such conditions this contributes not only to the expression of disease, but to the undermining of efforts by breed societies to improve breed welfare. The extent and importance of genetically-based disease in dogs in terms of ill-health, suffering and premature mortality has now been documented in a series of influential reports and the importance and wide extent of the problem is beyond doubt^{e.g.¹⁰}.

6.2.4 Many of the breeds that are commonly bred by commercial breeders including licensed ones may be affected by a range of genetic conditions. One of the most widely bred breeds is the Cavalier King Charles' Spaniel which can experience a range of significant genetic problems if proper testing is not undertaken. These include syringomyelia where the skull cavity is too small and compresses the brain, and heart-valve defects^{11,12}.

6.2.5 The perpetuation of genetic defects through failure to test will be compounded by in-breeding. There is now much evidence that puppies produced by volume commercial breeders (and others) involves breeding close relatives such as father and daughter, siblings and so on. This increases the likelihood of common deleterious genes being inherited from both parents, and is more generally associated with reduced viability and susceptibility to disease.

6.2.6 Many dogs experience significant suffering as a result of selection for extreme conformations. Conformation is mostly determined polygenically and care needs to be taken not to cross parents which are likely to yield offspring with damaging conformations. An example, is the selection for brachycephalia (ie flat-faced-ness found in dogs such as pugs and Boston Terriers) which can result in significant breathing difficulties as well as other problems^{10,11,12}.

6.2.7 Inherited conditions are very often severe and are also often chronic. They may require expensive surgical intervention or sustained veterinary and other treatment (eg physiotherapy) the costs of which can be very high over the lifetime of a dog.

6.2.8 In terms of financial costs falling on purchasers of puppies alone, there would be clear justification for Regulations to require that proper attention is paid to the need to identify potential parents carrying genetic conditions, to avoidance of in-breeding where in-breeding coefficient is high, and to the prevention of matings which are likely to cause damaging extremes in conformation.

6.3 Costs of behaviourist advice or professional training arising from failure to properly socialise puppies or to breed for temperamental soundness.

6.3.1 An extensive body of research now attests to the need for puppies to receive a wide range of socialisation experiences from about four weeks of age¹³. Such experiences require to include exposure to litter-mates and subsequently other dogs, to a range of people through active interaction with them, and a wide range of sights sounds and events of the kind they are likely to experience in the environments they will live in. These recommendations reflect understanding of key development phases in the early life of puppies during which they are particularly open to learning and to over-coming potential fears. Where such socialisation is inadequate there is a much greater likelihood of behavioural problems.

6.3.2 Volume commercial dog breeders typically devote very little time and effort towards the proper socialisation of puppies during early development. This will often be prejudicial to subsequent development of the puppy. A primary reason for failure to adequately socialise is that staff resources provided are inadequate to do so. Barren and limited environments (eg predominantly sustained kennelling) further limit proper socialisation, while lack of knowledge about socialisation may often also prevent this.

6.3.3 Behavioral problems commonly arising include increased fear-based aggression, high levels of anxiety and fearfulness leading to withdrawal and other negative behaviours, destructiveness and difficulty in responding effectively to other dogs¹³.

6.3.4 A proportion of owners will seek behaviourist advice which may be needed over a period of time. Such advice is expensive but, whether pursued or not, is likely to be relevant to a significant proportion of puppies purchased from commercial breeders which fail to properly socialise puppies.

6.3.5 Behavioural problems are one of the major reasons for dogs to be given up^{eg 14}. This is a costly occurrence for the purchaser in that they will have likely paid a substantial amount for a puppy only for this investment to be wasted.

6.3.6 Treatment for behavioural problems leading to financial costs for purchasers also arise where the breeder has not taken care to ensure that only parents of suitable temperament are mated. It is likely that in many cases this is not given adequate consideration.

6.4 Costs of legal action taken by purchasers of unhealthy puppies.

6.4.1 Where a puppy has been purchased which presents quite soon with infectious disease or which later presents with serious conditions with a known genetic basis a purchaser may choose to seek financial redress from the breeder. This can be problematic because of difficulty in tracing the breeder and is invariably opposed by breeders^{7,8}. However, successful prosecutions are pursued where veterinary and other costs may be recovered. However, such actions tend to incur financial costs for the purchaser and involve considerable time, effort and stress.

7 Costs to the health service

7.1 It has been estimated that approximately 250,000 dog bites occur each year in the U.K. which involve at least minor injury treatment in an A & E hospital department¹⁵. This was based on a number of local studies which showed rates of A and E outpatient treatments for dog bites were in the range of approximately 1 to 3 per 1000. There will be a financial cost associated with each such treatment, as well as costs to the person bitten in terms of travel, time off and so on. The level of bites requiring treatment is likely to be a significant underestimate as many would seek treatment from their G.P. rather than going to A & E. The total national cost of dog bites for out-patient treatment in A and E or GP surgeries appears not to have been estimated.

7.2 About 6,500 bites lead to actual admission to hospital each year in the U.K. including for more thorough treatment of potential infection, suturing and plastic surgery¹⁶. A high proportion of bites occur to children. For hospital admissions average stay is 2-days. Total cost of such admissions is estimated at c. £9.5 million p.a assuming £1500.00 cost per admission.

7.3 There is a strong association between failure to properly socialise as a puppy and the likelihood of aggression by the dog subsequently including biting¹³. Being reared in a commercial kennel environment is associated with higher risk as is lack of exposure to everyday domestic and urban settings^{17,18}. Sale from a pet shop, implying source as a commercial dog breeder, is also associated with increased risk of aggression¹³. Apart from statistical evidence, increased aggression as a result of poor socialisation by creation of higher levels of fear is predicted theoretically¹³ and commonly reported clinically by behaviourists.

7.4 Commercial dog breeders which fail to invest staff time and resources in socialisation are likely to be culpable in the occurrence of aggression and biting in dogs purchased. Evidence from licence reports indicates that socialisation of dogs is likely to be precluded by the nature of the housing, by the lack of any dedicated areas, and by lack of availability of staff (low staff to dog ratios)¹. Moreover, analysis of licence reports indicates that until quite recently (eg up until about 2012) socialisation was seldom mentioned or considered by licensing inspectors. More recent reports for some authorities in Wales (eg in 2013 and 2014) show an improvement in this, but it is clear even from these that quite limited contact of breeders with puppies is viewed as constituting adequate socialisation.

7.5 It is difficult to quantify the financial cost of dog aggression associated with failures to socialise puppies. However, since there is a relationship between failure to socialise and future likelihood of aggression, albeit not yet quantified, wherever socialisation is less than optimal some increased risk of an aggressive incident will be created. This risk will be increased the poorer socialisation practice is. Since many tens of thousands of puppies are produced by commercial breeders, and evidence is that a

large proportion will lack proper socialisation, this must translate into a substantial number of the bite incidents presenting at A&E departments and G.P. surgeries. It will therefore be generating significant financial costs for health services.

8 Costs to local authorities

8.1 Local authorities have a responsibility for providing dog warden and pound services. In 2013 the Dogs' Trust reported¹⁹ that approximately 111,000 dogs across the U.K. were picked up as 'strays'. Such dogs create costs for local authorities in terms of dog warden pick up and transport, care and housing of dogs, veterinary treatment in a proportion of cases, and costs of euthanasia and cremation (about 9,000 dogs picked up as strays were euthanised in 2013). Kennelling costs are likely to be in the range £5.00 to £10.00 per day, euthanasia costs of the order of £50.00, and cremation costs will be added to this. Dogs abandoned as a result of poor commercial breeding practices in Wales will impact on local authorities across the U.K. so costs for these would be most pertinent. However, in Wales specifically, FOI requests concerning local authority dog warden and pound costs indicate that this is likely to exceed £2 million per annum²⁰.

8.2 Approximately 54,000 dogs were reclaimed by their owners from pounds across the UK in 2013 leaving approximately 57,000 that weren't¹⁹. It is likely that a significant proportion of these were abandoned rather than straying as such. Evidence is strong that behavioural issues of dogs lead to abandonment and surrender to shelters^{eg 14}. Behavioural problems in turn are often caused by failures of socialisation and of breeding¹³. While again it is difficult to financially quantify the impact of poor commercial dog breeding practices on this, such practices will create costs for these services.

8.3 The majority of breeders do not vet purchasers in any way. This is necessarily true of those which sell through dealers and pet shops. Failure to vet owners will mean that many puppies are purchased inappropriately, significantly increasing the risk of later abandonment and contribution to stray dog statistics and costs. A proportion of local authority costs for warden and pound service provision should be attributed to poor breeding practices of commercial breeders and failure to vet purchasers.

9 Costs to rescue organisations

9.1 Dogs reared in commercial breeding establishments which fail to properly socialise puppies and which otherwise adopt poor breeding and rearing practices will contribute directly to the proportion of dogs that are given up to rescue organisations. A comprehensive survey²¹ conducted in 2010 determined that about 130,000 dogs entered rescue organisations in the U.K. in that year. There is no reason to suppose this level has declined and in fact many rescue organisations have stated that they have received increasing number of dogs over the last few years. A significant cause of giving up dogs is reported behavioural issues including particularly, aggression, fearfulness and destructiveness^{eg 14}. Each of these is strongly influenced by failure to properly socialise puppies, though poor selection of parents in terms of temperament may also be a significant cause¹³.

9.2 Costs to rescue organisations of care and re-homing of each dog received are high. Rescue organisations will have costs of housing/kennelling, feeding and veterinary care. Additionally, most will spay or neuter and microchip where needed. Many dogs will require care before re-homing over many months or, in a proportion of cases, years. The Dog's Trust has quoted an average duration of stay of 38 days before re-homing. Other costs incurred include transport of dogs, publicity as well as euthanasia and cremation in a proportion of cases – about 10% of dogs entering rescue organisations are euthanised²². Rescue organisations are supported by an army of volunteers and paid staff – estimated to be in excess of 19,000 in the above survey²². The costs of rescue are met almost entirely by funds provided by the public²².

9.3 It is clear from the types of costs listed above that typical costs for any rescue organisation for each dog will on average be of the order of several hundred pounds²². A reasonable conservative estimate of annual costs to rescue organisations in the UK for care and re-homing of dogs based on this is £50 million (e.g. 130,000 dogs x average £400.00 per dog). This does not include the equivalent value of work done by volunteers, which is very substantial, or the costs they incur (eg transport, etc). A significant proportion of such costs will have been created by failure to socialise and poor breeding practices in both licensed and unlicensed commercial breeders.

10 Cost of insurance

10.1 Average pet insurance premiums will reflect the risk of illness or need for treatment and how expensive particular treatments are. Higher risk of illness and severity will create higher premiums. Pedigree and other dogs that are purchased which have been bred with disregard for undertaking relevant genetic tests, which may have been in-bred or which have been reared in unhygienic conditions disposing to infection will suffer increased risk of illness. There is much evidence that many puppies bought from commercial establishments experience illness within the first few months²³. These factors will contribute to raised pet insurance premiums which will have the effect that those who have researched and purchased healthy dogs subsidise others who have purchased from poor quality breeders.

10.2 The Association of British Insurers report that pet insurance premiums have consistently risen over recent years, though not as fast as claims²⁴. For example, pet insurance premiums rose by about 30% between 2007 and 2012 (by interpolation from graphical data). Some of this increase and premium level more generally may be attributed to the consequences of poor breeding practice. The pet insurance market is very large and such premium increases across a large number of policies will in total be substantial.

11 Conclusions

11.1 Poor breeding practices by commercial breeders create significant financial costs for society. These costs include veterinary costs of treatment of sick puppies, legal costs incurred by purchasers, health service costs of treatment for bites caused by failures of socialisation, costs to local authorities of dog warden and pound services for dogs abandoned as a result of behaviours arising from poor rearing, costs to rescue organisations which rehabilitate, care for and re-home dogs given up because of behaviour and health issues arising from poor breeding, and potentially wider costs of increased insurance premiums.

11.2 In many cases it is not possible to precisely quantify the total financial impacts of poor breeding practices of commercial breeders. However, there is firstly much evidence based on individual case studies and reports of the costs that can occur. There is also clear empirical evidence and associated strong theoretical prediction for relationships between such factors as inadequate socialisation, inadequate housing, poor hygiene, and failure to vaccinate or provide relevant veterinary care and the negative outcomes which are associated with costs to the public and authorities.

11.3 There is clear evidence from a range of sources that such inadequate breeding and rearing practices are widespread. This includes the content of licence reports from local authorities, the outcomes of RSPCA and other official welfare investigations, undercover investigations pursued by welfare organisations, and the many individual reports received by welfare organisations and authorities of observations of poor practice or the experience of obtaining puppies with illness or behaviour problems.

11.4 The scale of commercial breeding in Wales suggests that the total financial impact imposed on society as a result of limited and inadequate regulation and often poor enforcement may be very large. The total number of puppies currently produced by licensed breeders in Wales is likely in excess of 20,000 per annum, and this number may be reasonably anticipated to be at least doubled by the activity of unlicensed breeders from the evidence that is available.

11.5 The average size of commercial dog-breeding operations is high (eg 28 breeding dogs per DBE), but there are a significant proportion which are very large operating with more than 50 breeding dogs. There are a number of establishments with in excess of 100 breeding dogs and some larger than this (eg 196 in one case). Revenues from these operations are in most cases quite substantial and do not constitute for the majority some kind of peripheral 'pin-money'. Moreover, the breeders who benefit but create on-going financial costs for wider society compensate for none of these costs. A majority of puppy farming operations occur on farms, mostly dairy and sheep farms, and the often substantial income from these is additional to both farming incomes and farming subsidy.

11.6 It is essential that strong and comprehensive, enforceable regulation of dog breeding practice in Wales is introduced as a matter of urgency.

The costs detailed above do not include the substantial, intangible costs of the distress and illness of breeding dogs kept in poor conditions, the suffering and distress of puppies reared with serious genetic conditions, the suffering of puppies with infectious disease, the distress of purchasers who experience puppies with illness and which may require euthanasia, the time and effort of volunteers and others in rescue organisations, or the distress of volunteers and employees of rescue organisations, pound staff and others.

Sources

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Appendix 1

Breed types and numbers for licensed breeders (n=67) in Ceredigion, June 2012

| Breed | Total number of bitches | Number of breeders |
|-------------------------------|--------------------------------|---------------------------|
| Cavalier King Charles spaniel | 287 | 34 |
| Bichon frise | 217 | 30 |
| West highland terrier | 210 | 36 |
| Cocker spaniel | 116 | 21 |
| Yorkshire terrier | 95 | 19 |
| Schnauzer | 94 | 16 |
| Labrador | 76 | 16 |
| Shihtzu | 47 | 11 |
| Dachshund | 36 | 7 |
| Chihuahua | 32 | 6 |
| Cross breeds | 27 | 7 |
| Beagle | 27 | 7 |
| Scottish terrier | 27 | 9 |
| Poodle | 22 | 5 |
| Bulldog | 22 | 2 |
| Golden retriever | 19 | 7 |
| Basset hound | 17 | 6 |
| English bull terrier | 15 | 1 |
| Boxer | 13 | 3 |
| Jack Russell | 12 | 5 |
| Pug | 10 | 4 |
| French bulldog | 8 | 2 |
| Springer spaniel | 8 | 2 |
| Malamute | 7 | 2 |
| Sharpei | 5 | 1 |
| Lhaso apso | 4 | 1 |
| Boston terrier | 4 | 2 |
| Dogue de bordeaux | 4 | 1 |
| Miniature pointer | 2 | 1 |
| Hungarian vizler | 2 | 2 |
| German shepherd | 1 | 1 |
| Husky | 1 | 1 |
| Chow chow | 1 | 1 |
| Border terrier | 1 | 1 |
| Weimeraner | 1 | 1 |
| Pomeranian | 1 | 1 |
| Corgi | 1 | 1 |
| Collie | 1 | 1 |
| Rhodesian ridgeback | 1 | 1 |