

Virtual Dog Health Forum: *Bridging the Gap*

Organized by the **International Partnership for Dogs (IPFD)** and sponsored by **Royal Canin**

3 – 4 June 2025

Forum Purpose and Objectives

Building on the momentum of the 5th International Dog Health Workshop (IDHW) in Helsinki, the Forum continued discussions on key dog health and welfare issues, refocused collaborative work on action items from Helsinki workshop, and previewed the 6th IDHW in Bologna, Italy (2026).

The Forum theme, *Bridging the Gap*, focused on:

- sustaining progress between the 5th and 6th IDHWs,
- sharing knowledge and perspectives across global regions and stakeholder groups, and
- finding common ground to strengthen international collaboration for the health and well-being of all dogs.

Forum Objectives were to:

- promote global collaboration and networking,
- continue conversations on key topics from the 5th IDHW and address emerging issues,
- review progress since Helsinki,
- set new goals to achieve before the 2026 meeting, and
- secure commitments from individuals and organizations to support IPFD's work.

The Forum's virtual format facilitated broad global participation by approximately 150 representatives of kennel and breed clubs, veterinarians, veterinary care providers and veterinary organizations, canine authorities, researchers, educational institutions, industry partners, and non-profit canine health and welfare groups.

Forum Program

In addition to the theme-specific discussions (detailed later in this document), the Forum program included presentations on key IPFD projects and other topics of importance to the global dog community. These included:

Respiratory Function Grading Scheme in North America – Eddie Dziuk, Orthopedic Foundation for Animals (OFA)

Eddie Dziuk presented on The Kennel Club/University of Cambridge Respiratory Function Grading Scheme, which is being used by OFA under (free) licence in the U.S. and Canada. The testing started in 2022. So far, 891 dogs have been tested, with 73% graded as unaffected – a biased sample, which probably drew on the healthiest part of the population. Challenges include limited examiner availability, geographic and climate constraints, and lower-than-expected participation. Consistency in testing protocols and public perception remain issues. The program avoids using the term "BOAS" to reduce stigma and encourage participation.

The Choose Health Coalition – Laureline Malineau, Royal Canin

Laureline Malineau presented Royal Canin’s Choose Health initiative, launched in 2022 to address unethical pet production and extreme conformation. The initiative focuses on three strategies: safeguarding breeds, professionalizing breeding, and promoting responsible pet ownership, using a collaborative approach across the pet ecosystem. In 2024–2025, Royal Canin helped establish the Choose Health Coalition, bringing together major stakeholders including WSAVA, RVC, ICECDogs, FCI, World Cat Congress, Four Paws, and EU representatives. The coalition aims to develop unified messages, collect baseline data, and create educational materials to support responsible breeding and ownership, starting in Europe with plans to expand globally. More organizations are welcome to the coalition. For more information and questions about the Choose Health Initiative and Coalition, please contact Laureline at laureline.malineau@royalcanin.com.

International Collaborative on Extreme Conformation (ICECDogs): Addressing Extreme Traits in Dogs – Monique Megens, Åke Hedhammar, Paul Eckford, Dan O’Neill

Monique Megens introduced the work of the International Collaborative on Extreme Conformation in Dogs (ICECDogs), emphasizing that their goal is not to ban breeds but to reduce harmful exaggerations in conformation that compromise health, welfare, and temperament. ICECDogs promotes multi-stakeholder collaboration at national and international levels, involving kennel clubs, veterinarians, welfare organizations, and others.

Åke Hedhammar discussed examples of “too much” conformation (e.g., excessive skin folds, oversized coats, extreme angulation, oversized eyes/ears) which can cause serious welfare issues. He highlighted breed-specific instructions developed by Swedish Kennel Club and the Nordic Kennel Union and now used also in the FCI to guide judges and breeders away from harmful extremes.

Paul Eckford focused on the rarely addressed issue of “too little” — extremely small dogs bred for the “teacup” market. He highlighted serious health risks (e.g., skeletal deformities, dental issues, organ dysfunction, hypoglycemia, infections) associated with breeding for extreme miniaturization and emphasized that no kennel club standards support such extremes.

Dan O’Neill concluded by presenting ICECDogs’ broader framework for addressing extreme conformation using the innate health concept: dogs must be able to breathe, move, reproduce, communicate, and maintain normal physiology. ICECDogs has also developed international advertising guidelines to discourage the promotion of extreme conformations in marketing. The speakers emphasized that progress requires dialogue and cooperation among all stakeholders, avoiding blame and focusing on shared responsibility for dog welfare.

Update on the State of Pet Homelessness Project – Jo Gale, Mars Petcare

Dr. Jo Gale (Mars Science & Diagnostics) presented an update on the global State of Pet Homelessness Project, a collaborative data initiative launched by Mars with partners including IPFD and other international organizations. The project collects data on homeless cats and dogs across 20 countries, using shelter records, public surveys (~29,000 participants), and expert interviews (~200 professionals). Results show major global variation: in some countries only ~5% of pets are homeless, while in others up to 70% are without homes. Three main drivers were identified:

- Preventing unwanted pets (balancing supply and demand)
- Supporting responsible ownership (sustained care in homes and communities)
- Keeping pets in homes (preventing relinquishment)

The study highlights cultural differences in pet acquisition, ownership reasons, and relinquishment patterns. The online State of Pet Homelessness dashboard allows deeper exploration of country-level data. Dr. Gale noted challenges in obtaining consistent shelter data globally and emphasized that stray cat populations generally exceed stray dog populations. Expansion of the project to more countries is planned, with ongoing updates to improve data accuracy and usefulness.

The Global State of Companion Animal Veterinary Care – Richard Casey, World Small Animal Veterinary Association (WSAVA) (video presentation)

Richard Casey provided an overview of global trends, challenges, and opportunities in companion animal veterinary practice. Pet ownership has risen worldwide, especially during the pandemic, but access to veterinary care remains highly unequal across and within countries. Rising client expectations include personalized care, telemedicine, and accessible services, yet many regions face shortages of veterinary professionals or workforce well-being issues such as burnout and mental health struggles. Advances in veterinary medicine are progressing rapidly, but these innovations are often limited to affluent regions. Casey emphasized the importance of global collaboration to improve veterinary education, infrastructure, and leadership development, especially in under-resourced areas. WSAVA promotes digital innovation, partnerships, and ethical, sustainable practice models, while advocating for the greater inclusion of companion animal veterinarians in One Health and public policy. A collective, inclusive approach is needed to ensure equitable veterinary care worldwide.

IPFD progress since Helsinki and the Dog Wellness Network – Aimée Llewellyn-Zaidi, International Partnership for Dogs (IPFD)

Aimée Llewellyn-Zaidi provided an IPFD progress report since the 2024 Helsinki workshop. She highlighted achievements including publication of a post-workshop manuscript, increased North American engagement, development of the next International Dog Health Workshop (IDHW 2026), and a major rebuild of the DogWellNet website to support future collaborations and data sharing. Some initiatives remain in progress, such as building collaborations, expanding the health schemes database, cataloguing big data resources, and creating more educational content. She acknowledged the challenges of limited resources, time constraints, and the difficulty of launching new collaborative projects but emphasized the importance of continued collective effort.

Preview of the 6th International Dog Health Workshop (IDHW 2026) – Marc Ralsky (IPFD) and Stefano Frattini (Ente Nazionale della Cinofilia Italiana ENCI, Italian Kennel Club)

Marc Ralsky and Stefano Frattini announced that the 6th International Dog Health Workshop will be held in Bologna, Italy, in 2026, hosted by ENCI, the Italian Kennel Club. The 6th IDHW in Bologna aims to blend Italy's warm hospitality, international collaboration, and cutting-edge discussions to advance global dog health together. ENCI, founded in 1882 and a full FCI member, emphasized their commitment to international collaboration and improving canine health through genetic research and knowledge exchange. The workshop will be held just prior to the 2026 World Dog Show, offering excellent opportunities for broad participation. The theme selected for the workshop is "All Roads Lead to Dog Health", reflecting the many pathways to achieving shared goals in canine welfare. Planning is already underway, including virtual sessions prior to the in-person meeting to keep discussions active and productive.

5th IDHW Theme Summary Presentations

The Forum included four main themes, which were carried over from last year's workshop in Helsinki (with a small update to the title of the Breed vs. Variety theme): Supply and Demand, Breeding for Health and Well-being, Big Data, and Breed vs. Variety (genetic diversity).

Each of the four theme segments began with an introductory presentation by the theme leader, who reviewed the topic and summarized progress on action points over the past year, followed by an interactive panel discussion on progress and priorities moving forward.

Supply and Demand – Theme leader & speaker: Rowena Packer (Royal Veterinary College)

Rowena Packer (Royal Veterinary College, UK) provided an overview of supply and demand issues in the dog market, focusing largely on the UK but also highlighting international parallels. She described how demand for dogs surged during the COVID-19 pandemic, with long-term increases in impulsive buying, online puppy sales, and consumer vulnerability to illegal or unethical sellers. She emphasized the serious welfare risks to dogs bred in poor conditions, including puppy farms and illegal importation, often driven by organized crime due to high profits and low penalties. She stressed that many puppies are sold without proper licensing, health checks, or owner education, contributing to lifelong health and behavioural problems. Packer also addressed ongoing legislative efforts in the UK and EU to improve traceability, regulation, and public awareness. Finally, she noted the need to increase the number of responsible breeders, explore alternative breeding strategies like outcrossing, secure more research funding, and find more effective ways to influence consumer behaviour.

Breeding for Health and Well-Being – Theme leader & speaker: Dan O'Neill (Royal Veterinary College)

Dan O'Neill discussed ongoing welfare issues in dog breeding, focusing on the dog's point of view. Despite many years of attention, extreme conformations and inherited health problems remain widespread. Rising living costs, veterinary expenses, illegal breeding, and poor enforcement of regulations continue to contribute to ongoing poor outcomes for dogs. Extreme conformations remain one of the most serious health issues, but progress is slow despite (and indeed sometimes because of) available health testing and growing evidence of harm.

O'Neill emphasized the need to rethink breeding priorities using the innate health model, which focuses on a dog's ability to live a normal, healthy life rather than simply passing medical tests that are part of current 'health testing' protocols. He also highlighted the importance of clear definitions, stronger leadership, possible legislative action, and better public education. Early data from crossbred "designer dogs" suggest possible health benefits over extreme purebred types. The session concluded with a call for practical, measurable actions and stronger collaboration to drive meaningful change. SMART (Specific, Measurable, Achievable, Realistic, Timed) actions.

Big Data – Theme leader & speaker: Kari Ekenstedt (Purdue University)

Kari Ekenstedt presented an overview of the challenges and opportunities related to the use of big data in canine health and genetics. While excitement around big data is high, practical progress remains slow. Key challenges include data storage, standardization, consent, privacy regulations (e.g., GDPR legislation in the EU), and integrating genetic data with high-quality, up-to-date phenotype information.

She emphasized that meaningful use of big data requires detailed clinical records, consistent data formatting, and a better understanding among breeders and the public. Actionable ideas discussed

included using AI to extract value from unstructured datasets, developing template consent forms, creating a public database of available datasets, and promoting tools like estimated breeding values (EBVs).

Progress will require collaboration, education, and a focus on turning complex data into clear, useful guidance for dog breeders and owners.

Breed vs Variety (Genetic Diversity) – Theme leader & speaker: Alison Skipper (Royal Kennel Club)

Alison Skipper outlined three main approaches: reopening closed registries, allowing crossbreeding between related breed varieties, and launching formal outcrossing programs. Progress has been uneven across countries, with regulatory frameworks and implementation still inconsistent. While some kennel clubs (e.g., in the UK, Nordic countries, and Germany) have taken steps to open registers or support outcrossing for health and conformation reasons, uptake remains limited.

Skipper emphasized the need for better international harmonization, more transparency on practical implementation, and broader education on the historical and biological context. She concluded that interest and discussion around genetic diversity have grown since Helsinki, but more practical action and information sharing—especially via platforms like DogWellNet—are needed to make meaningful progress. Scientific oversight is critical but must include population genetic expertise, not just veterinarians.

Group Panel Discussion on Progress and Priorities

The Forum hosted an open discussion covering several topics related to the four themes. Across all themes, importance of consumer education and informed decision-making was again acknowledged as an important tool. It became also clear that the community needs to rethink outdated systems and shift towards health-based breeding practices.

Breeder Licensing and Regulation

Very little research exists on breeders themselves; most research focuses on owners or, to a lesser extent, vets.

Lack of evidence that licensing breeders directly improves health outcomes. Licensing often focuses on facilities, not health or welfare of the animals.

In countries like the UK, many small-scale breeders operate under the radar of licensing systems.

Licensing might discourage registration of puppies to kennel club registries and thus transparency if breeders fear additional bureaucracy.

Licensing could be more effective if linked to simple health assessments (e.g., innate health tools for inspectors to check physical features).

Regulation must focus on high welfare breeding rather than simply the number of litters.

Dog Population Data & Supply-Demand Metrics

Large gaps in accurate pet population data hinder understanding of supply and demand. It is difficult to track where dogs come from (especially outside of kennel clubs).

Current methods of population estimation (online surveys, telephone interviews, random sampling) yield inconsistent numbers.

In the US, AVMA data shows fewer young dogs in the population, suggesting lower puppy acquisition in recent years.

Licensing or national registries (as in Denmark) could greatly improve data quality.

Dog ownership density varies with human population density — lower in cities, higher in rural areas.

Genetic Testing in Breeding

Genetic testing can be a valuable tool but must be applied thoughtfully. While it helps eliminate certain high-impact monogenic diseases, many tests target rare conditions.

Overuse of non-priority tests can distract from more serious, widespread welfare issues. There's a need to balance genetic testing, clinical screening, and preservation of genetic diversity.

Education of breeders and owners on proper test use is crucial.

Jerold Bell is leading a WSAVA initiative to establish pre-breeding health screening guidelines. These guidelines will apply to all dogs, not just pedigree ones. Specific guidelines will be provided for different breeds, sizes, and body types.

Extreme Conformation

Shared Root Causes

The same underlying drivers seem to apply both to brachycephalic breeds and miniaturized "teacup" breeds:

- Selection based on appearance over function or welfare.
- Influence of social media and marketing, accelerating demand for exaggerated and extreme appearances.
- The recent 20 years have seen an increase in the speed and scale of these problems due to online platforms.

Defining "Too Much"

One of the key challenges discussed was: *Where do we draw the line?* Some traits (like leg length or degree of entropion) can be somewhat objectively measured. Others, like skin folds or muzzle length, have grey areas where mild traits may not cause harm, but more extreme versions do.

The approach suggested was to focus on **loss of function** — whether the conformation interferes with normal canine abilities (breathing, moving, eating, reproducing, communicating). As a practical rule, skin folds, for example, might be classified as problematic when folds touch skin-on-skin.

Rather than trying to set perfect cut-off points, the consensus was that breeders should select away from extremes, always moving toward moderation.

Use of Available Data

While it's acknowledged that more research is always helpful, there is already sufficient scientific data available for many extreme traits to promote meaningful action if there is the human will for this.

Waiting for perfect evidence should not be an excuse for inaction; steps can be taken based on existing knowledge.

Communication Approach — Avoiding Polarization

Concerns were raised about using only highly exaggerated images in public messaging. This can create the false impression that *all* dogs of a breed suffer severe problems. Owners of healthy individuals may dismiss valid data if the messaging feels exaggerated.

The recommendation was to:

- Present balanced, evidence-based information.
- Acknowledge that many dogs within affected breeds are healthy.
- Discuss traits, not breeds.
- Focus on solutions rather than generating public fear.

Role of Breed Standards

Breed standards were recognized as important but limited in influence over commercial breeders outside the registered purebred system.

In many extreme breeds, the fastest-growing segments are in non-standard colors and traits not covered by official standards.

Breed standards should still be updated to:

- Actively discourage exaggerations.
- Serve as *directional blueprints*, guiding breeds progressively toward improved health (e.g., longer noses, visible tails, fewer skin folds, etc.).
- Support judges and breeders in selecting healthier, less extreme animals.

Applicability Beyond Dogs

The problem is not breeds themselves, but harmful extremes within breeds.

A warning was made that similar trends are emerging in cats, with breeders increasingly producing extreme body shapes, miniaturized cats, and flattened faces. The same principles of caution about extremes apply across species.

The discussions concentrated much on exaggerated conformation, and this discussion dominates also public discussion. There's been limited attention so far to breeds with less extreme conformation but other health issues.

Broadening Scope Beyond Pedigree Dogs

Several participants noted that while pedigree dogs are well represented, large parts of the overall dog population (designer breeds, crossbreeds, random-bred dogs) remain poorly represented in current health discussions. Kennel clubs currently oversee only a fraction of dog breeding; many dogs are bred outside the formal system.

Incorporating designer breeds into kennel clubs, with appropriate health oversight, was suggested as a potential pathway to bring responsible crossbreeding under better regulation.

There's a need to consider inclusion of non-registered breeders, designer breed clubs, and crossbreed populations in both health research and breeder education.

Possible International or Unified Approach

There was recognition that unless kennel clubs evolve to take stronger leadership on welfare and open their registries to all dogs (including crossbreeds intended for health improvement), alternative registries may emerge.

A question was raised whether an overarching international registry or oversight organization would help. While possible, such an organization would need to prioritize health, welfare, and genetic diversity above other agendas. This would be a more inclusive model that incorporates both pedigree and crossbred dogs and moves away from excessive focus on show standards and aesthetics.

Purebred dogs, when thoughtfully bred, can still offer predictability and strong health benefits.

Big Data in Improving Dog Health

There is lots of existing data, but much is underused, fragmented, or inaccessible. Cohort studies are valuable but expensive.

Urgent need for a centralized international directory of big data sources (not a data repository, but a catalog).

Complexities in SNP panel harmonization across testing labs.

There's a WSAVA & ISAG genetic variant harmonization project ongoing, aiming to standardize variant definitions, nomenclature, and test validity across labs worldwide. This work could be highly complementary to IPFD's Harmonization of Genetic Testing database.

Although an international health and pedigree database would be extremely valuable, there are significant practical barriers. Rather than creating a database for a breed with a large population, it would be easier to focus on smaller breeds. Some breeds, such as the Irish Wolfhound, already have excellent international databases.

Outcrossing and Genetic Diversity

Outcrossing (crossbreeding) is becoming increasingly discussed and implemented in some countries. Scandinavia has taken a leadership role in applying science-based outcross programs to improve health in the breeds. Finnish breeders, for example, have successfully used crossbreeding (such as in Kooikerhondje) to address high inbreeding levels (30–40%).

Nordic countries lead in outcrossing, because of several reasons: strong trust in science, high transparency and open health data, mostly non-commercial dog breeding, strict animal welfare laws, centralized national databases (e.g., the Finnish Kennel Club's breeding database), active expert committees guide outcrossing efforts, and cultural support for cooperation and honesty.

In many countries crossbreeding is hampered due to strict kennel club rules and breeder culture. Also color and breed standards complicate acceptance of crossbreds.

There's a need for more data on health outcomes from outcrosses to scientifically support these efforts. Outcrossing should focus on addressing major health priorities rather than introducing purely aesthetic traits (e.g., Merle). Breed clubs must be fully engaged for outcrossing to succeed. Existing examples like the *Leonberger outcross program (Leogen)* were highlighted as well-structured, health-focused models.

Legal concerns: In Germany, welfare laws prohibit breeding that may risk producing animals with welfare problems (e.g., Robinow-like syndrome in French Bulldogs). This may hinder crossbreeding of breeds with severe health problems.

Summary of Collective Next Steps and Proposed Actions

Theme 1: Supply & Demand

- Explore how IPFD might help collect and share dog population and breed demographic data internationally.
- Prioritize actions that encourage and support good, responsible dog breeders. Ethical breeders with long-term dedication exist but are often invisible to the public; more visibility and recognition needed.
- Destigmatize responsible dog breeding and strengthen breeder-veterinarian relationships.
- Bridge gaps between researchers, vets, breeders, and the public — especially around perceptions of breeders.
- Identify ways to improve public education about acquiring healthy dogs.

Theme 2: Breeding for Health and Well-Being

- Develop and share guidelines/pathways for crossbreeding projects and health-focused breeding approaches across all breeds.
- Consider expanding the audience beyond pedigree dog systems to include designer breeds, crossbreeds, and non-registered dogs. IPFD could help facilitate broader inclusion efforts.

Theme 3: Big Data in Dog Health

- Big Data resource catalogue on IPFD's new website, including the information on who to contact regarding each resource. The catalogue should list cohort studies, genome projects (e.g., Dog10K, Golden Retriever Lifetime Study), national health databases, breed-specific data repositories, and available sequence archives. IPFD to compile the catalogue, not hold the data itself.
- Seek sponsorship or collaborative funding to support development of the catalogue. Even modest pooled funds could make the project feasible.
- Survey kennel clubs about their capacity to contribute health and pedigree data.
- Facilitate connections between data holders and users.

Theme 4: Breed vs Variety (Genetic Diversity)

- Collate and share crossbreeding and outcrossing projects and guidelines.
- Collect and share registration rules regarding crossbreeding between varieties and breeds
- Facilitate specific small group discussions to support kennel clubs in developing breed-specific crossbreeding guidance.
- Organize a dedicated working group or online event on outcrossing to share experiences.

IMPORTANT: Regarding compilation of information catalogues on different areas – big data resources, kennel club approaches to outcrossing and crossbreeding, data from genetic test providers – we need you to send what you have: info@ipfdogs.com. We also need financial support in order to make this happen.

Other suggestions

- Include show judges and breeders more actively in future discussions.
- Explore bridging the gap between veterinarians and conformation show communities.
- Consider incorporating a judge-vet dialogue session at Bologna 2026.

Proposed resolutions

Dan O'Neill's proposed resolutions for potential collective agreement:

1. Breed clubs explore options for opening breed registers/outcrossing in the next 12 months.
2. Charities flag extreme conformations in all dogs being rehomed.
3. Review breed standards regarding innate health.
4. Veterinary organizations, kennel clubs, and charities adopt straplines like *“Stop and Think Before Acquiring a Dog with Extreme Conformation.”*
5. Participants commit to complying with national animal welfare legislation in next 12 months.

Next Steps Before Bologna

- Share Dan O'Neill's proposed resolutions with participants for feedback, and further comments.
- Some of the proposed resolutions may require more discussion before broad agreement is possible — everyone agreed that ample dialogue is still needed.
- Allow time for participants to bring drafts to their boards or organizations for comment.
- Collect feedback and seek agreement on key points well before Bologna 2026.
- Compile and distribute discussion summaries, notes, shared resources, and chat contributions.

Overall, there is strong momentum across multiple themes. Success depends on kennel and breed club engagement, international cooperation, realistic resource commitments, and shared leadership and volunteer participation. Much more discussion is still needed – and this discussion continues next year in Bologna.

More than 100 participants consistently engaged over the two-day virtual forum. Thank you to all participants, speakers, panellists, and organizers – and thank you to Royal Canin for its sponsorship.

Post-Forum Meeting for Genetic Test Providers (GTPs)

- Brief follow-up with GTP attendees.

- Aimée invited GTP representatives (research, for-profit, or nonprofit) to contact her directly regarding forming a steering or advisory committee for the Harmonization of Genetic Testing for Dogs project.
- This group will help strengthen relationships between test developers/providers and test users (breeders, owners, veterinarians).
- Contact Aimée via direct email or through info@ipfdogs.com.

Recordings of Select Presentations

Video recordings of Forum presentations are being [posted on DogWellNet](#). More videos will be posted as we obtain consent from our speakers.

Papers and Projects Discussed During the Forum

Aegerter J, Fouracre D, Smith GC (2017) A first estimate of the structure and density of the populations of pet cats and dogs across Great Britain. *PLoS ONE* 12(4): e0174709.

<https://doi.org/10.1371/journal.pone.0174709>

Bryson, G.T., O'Neill, D.G., Brand, C.L., Belshaw, Z. and Packer, R.M.A. (2024) 'The doodle dilemma: How the physical health of 'Designer-crossbreed' Cockapoo, Labradoodle and Cavapoo dogs' compares to their purebred progenitor breeds', *PLoS One*, 19(8), e0306350.

<http://dx.doi.org/10.1371/journal.pone.0306350>.

Ilska, J.J., Ryan, P.B. & Tolhurst, D.J. Modern pedigree dogs in the United Kingdom Kennel Club: a journey through shifting population landscapes and demography. *Companion Anim. Health Genet.* 12, 3 (2025). <https://doi.org/10.1186/s40575-025-00142-1>.

Landolt, J.I., O'Neill, D.G., Unterer, S., Hartnack, S. and Kowalska, M.E. (2025) 'A mapping review of worldwide current and previous cohort research programmes in cats and dogs', *PLoS One*, 20(6), e0321007, available: <http://dx.doi.org/10.1371/journal.pone.0321007>.

McMillan, K.M., Harrison, X.A., Wong, D.C. *et al.* Estimation of the size, density, and demographic distribution of the UK pet dog population in 2019. *Sci Rep* **14**, 31746 (2024).

<https://doi.org/10.1038/s41598-024-82358-y>.

Meadows, J.R.S., Kidd, J.M., Wang, GD. *et al.* Genome sequencing of 2000 canids by the Dog10K consortium advances the understanding of demography, genome function and architecture. *Genome Biol* 24, 187 (2023). <https://doi.org/10.1186/s13059-023-03023-7>.

Teng, K.Ty., Brodbelt, D.C., Pegram, C. *et al.* Life tables of annual life expectancy and mortality for companion dogs in the United Kingdom. *Sci Rep* 12, 6415 (2022). <https://doi.org/10.1038/s41598-022-10341-6>.

5th International Dog Health Workshop (IDHW) report:

<https://cgejournal.biomedcentral.com/articles/10.1186/s40575-025-00143-0>.

More info on key findings from the 5th IDHW report and the infographic:

<https://dogwellnet.com/content/ipfd/ipfd-news/moving-from-information-and-collaboration-to-action-report-from-the-5th-international-dog-health-workshop-in-helsinki-june-2024-r857/>.

State of Pet Homelessness Project by Mars Petcare: <https://stateofpethomelessness.com/>.

VetCompass scientific publications on the RVC site: <https://www.rvc.ac.uk/vetcompass/papers-and-data/original-publications>.

Breed Specific Instructions (BSI) regarding exaggerations in pedigree dogs:
<https://www.skk.se/en/nku-home/about-nku/projects/breed-specific-instructions/>.

The Companion Dog Project: <https://www.companiondogproject.org/>.

Golden Retriever Lifetime Study / Morris Animal Foundation:
<https://www.morrisanimalfoundation.org/golden-retriever-lifetime-study>.

The Irish Wolfhound Database: <https://iwdb.org/>.

Finnish Kooikerhondje's outcross project – Annual Report 2024:
<https://drive.google.com/file/d/1rjZDUx-qOuBylOD4eJswCVc2B43DBSc5/view?usp=sharing>.

Swedish Kennel Club's Guidelines to increase genetic variation – An English version:
https://dogwellnet.com/content/ipfd-international-dog-health-workshops/263_ipfd-international-dog-health-workshop-5/5th-idhw-post-meeting-resources/5th-idhw-presentations-r842/.

LEOGEN – The Leonberger Genetic Diversity Project: <https://www.leogen.org/>.