



GOING TO **extremes**

By Anna Dunlop

Dogs with extreme conformations continue to be popular as pets, despite the overwhelming evidence of the associated health and welfare issues. So what more needs to be done to address this, and what part can veterinarians play?



They're man's best friend and New Zealanders own around 600,000 of them – in fact, it's thought that more than a third of all households in the country have at least one dog. But many of today's domesticated canines look nothing like their ancestors.

Dogs evolved more than 40 million years ago, and wild dogs around the world – think coyotes, wolves, dingoes and foxes – all have a remarkably similar phenotype: a medium-length nose, a tail that can wag and a spine that can bend. The concept of 'breed' was invented only 150–200 years ago.

"That was when we changed all the rules," says Dan O'Neill, Associate Professor in Companion Animal Epidemiology at the Royal Veterinary College in London and Chair of the UK Brachycephalic Working Group. "We became obsessed with breeding dogs who didn't look like dogs, with unique shapes that would distinguish one breed from another. Suddenly, health became much less relevant than looks."

Dan's comment refers to the 40 or so dog breeds (out of the 224 breeds recognised by Dogs New Zealand, previously the New Zealand Kennel Club) that have diverged so far from the typical canine phenotype that the dogs have what's known as 'extreme conformations'. (It's important to note that cats such as Persians and Scottish Folds can also have extreme conformations; this article focuses only on dogs.)

In April, the International Collaborative on Extreme Conformations in Dogs (ICECDogs) published a position statement (on which the NZVA and the Companion Animal Veterinarians special interest branch consulted) on reducing the negative impacts of extreme conformations on dog health and welfare. In the statement, ICECDogs defines extreme conformation as ‘a physical appearance that has been so significantly altered by humankind away from the ancestral natural canine appearance that affected dogs commonly suffer from poor health and welfare, with negative impacts on their quality and quantity of life’.

Dan, who is the co-founder of ICECDogs, has spent a decade researching extreme conformations in dogs. He says it took several years to develop what was the first international definition of extreme conformations, which is that: they were ‘invented’ by man (ie, they are genetic mutations that we’ve latched on to); they don’t exist routinely in nature; and they’re associated with reduced

health and welfare. “So by definition, every extreme conformation has to be associated with health and welfare issues. If it isn’t, it’s just an exaggeration.”

The position statement also says that to be capable of experiencing good welfare, a dog must have good ‘innate health’ – a concept that Dan has been developing for five years. “Put simply, innate health means that dogs are capable of living life as typical dogs,” he says. “They can move and sleep freely, and blink fully and give birth.” The statement includes other factors too, such as dogs’ ability to maintain body temperature, eat and drink effectively, communicate effectively with other dogs and, of course, breathe freely.

For a significant number of dogs of several breeds, innate health is a fantasy. The ICECDogs statement



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lists several examples of extreme conformation, including a clearly overshot or undershot jaw, large and protruding eyes, shortened, twisted legs, and facial and body skin folds. Brachycephaly probably has the greatest profile, seen in (English) Bulldogs, French Bulldogs, Pugs and other flat-faced breeds.

Research has shown that dogs from several common brachycephalic breeds are predisposed to a range of disorders related to their extreme conformation, including severe breathing problems, eye disease, spinal disease, heat stroke and an inability to give birth (O’Neill et al., 2020). These breeds have also been shown to have much shorter lifespans than non-brachycephalic dogs: 4.5 years for



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a French Bulldog, 7.4 years for an English Bulldog and 7.7 years for a Pug, compared with 11.8 years for a Labrador Retriever and 12.7 years for a Jack Russell Terrier (Teng et al., 2022).

However, despite the growing evidence and efforts to raise public awareness of this problem, dogs with extreme conformations continue to be popular as pets in many countries, including the UK, the US, Australia and New Zealand. “We’ve swamped the public with evidence on extreme conformations, but while ethical breeders know to avoid these issues, many producers are still breeding severely affected dogs. Much more could also be done at dog shows to reward the dogs with moderate conformation with prizes,” says Dan. “There’s a huge issue with normalisation: extreme conformations have been around for so long that they’ve become part of our culture.”

There’s a wealth of research on the ownership of dogs with extreme conformation, with much of it led

by Dan and his Royal Veterinary College colleague Rowena Packer. One study of brachycephalic dogs and their owners found that, despite being aware of the dogs’ health issues, 71% of the owners considered their own dogs to be in good health (Packer et al., 2019). Another found that 93% of owners of Bulldogs, French Bulldogs and Pugs were highly likely to want to own those breeds again in the future, with 65% recommending their breeds to other owners (Packer et al., 2020).

So what’s the solution? Dan says there’s no definitive single answer to a complex human problem, but that it’s vital to keep gathering evidence. “The volume of evidence has increased dramatically in the past 10 years, as has the number of organisational plans and strategies,” he says. “We need to continue with that and make extreme conformation its own discipline, with its own definitions, terminology and evidence base.”

In the UK, there are talks of developing new legislation to address extreme conformations, but Dan believes it’s just “kicking the can down the road” to pin all our welfare hopes on new legislation alone. He also points to two current pieces of relevant legislation in the UK:

- The Animal Welfare Act 2006 applies to everyone who keeps a dog and makes it an offence to cause unnecessary suffering to an animal.
- The Animal Welfare (Licensing of Activities Involving Animals) Regulations 2018 states that, ‘No dog may be kept for breeding if it can reasonably be expected, on the basis of its genotype, phenotype or state of health, that breeding from it could have a detrimental effect on its health or welfare or the health or welfare of its offspring.’

“The UK’s current laws are adequate to drive meaningful welfare change, we just aren’t applying them,” says Dan.

That isn’t the case in New Zealand, according to Becky Murphy, President of the NZVA’s Companion Animal Veterinarians special interest branch and former Kennel Club veterinarian, who says that our legislation is lacking. “Dogs New Zealand has rules and regulations that members must follow, but there is a lack of enforcement of the rules and regulations that fall outside of the registry system. There’s also no national legislation covering breeding, particularly in relation to hereditary disease and extreme conformation, and that’s a big problem.”

The ‘Code of Welfare: Dogs’ has a minimum standard: that ‘breeders must make all reasonable

efforts to ensure that the genetic make-up of both sire and dam will not result in an increase in the frequency or severity of known inherited disorders'. However, says Becky, "Codes are not directly enforceable."

She adds that it's important to keep breed standards up to date. "When I was with the Kennel Club, the Bulldog breed standard was updated to the current UK version. The original had been written in 1987 and included comments like 'the skull the larger the better', 'the face should be as short as possible' and 'skin about the head very loose and well wrinkled'.

"I don't think the people who wrote those standards realised how extreme some of the features would become," she says. "Nevertheless, some Bulldog breeders opposed the change citing a potential destruction in the nature of the breed, even though the intention was to just moderate the features which define the breed." She adds that many of the other breed standards have yet to be updated to prioritise health – and that New Zealand needs to do better in this respect.

Part of the problem, Becky continues, is that there are currently no specific tests for extreme conformation. "When we look at how a dog is structured, how do we quantify it? At what point does the conformation become extreme? It's often just a veterinarian's subjective opinion."

The ICECDogs position statement has taken a step in tackling the 'subjectivity' of extreme conformations, and there are also some potentially useful disorder tests. For example, the UK Kennel Club/University of Cambridge Respiratory Function Grading Scheme assesses Bulldogs, French Bulldogs and Pugs for brachycephalic obstructive airway syndrome. "Breeders are much more likely to accept that their animals aren't good breeding candidates if you can provide them with results from a scientifically validated test," says Becky.

She also believes we need

to move away from talking about breeds. "I think it's unproductive to say that certain breed types are 'bad'. If you ban breeds because they're 'unhealthy', it'll just drive the breeding underground." Dan agrees, and says the language should focus on the conformation. "Owners don't want to hear about their breeds being bad, but can be willing to accept that extreme conformation is bad. It's important to speak in a language that's positive."

Dan and his colleagues at the Royal Veterinary College have been using artificial intelligence to redesign breeds and show what, for example, a French Bulldog could look like with a longer nose and a tail that can wag. "It still looks like a French Bulldog but it doesn't have an extreme conformation," says Dan. "That's the beauty of defining the conformations – we're not talking against breeds, but trying to support them by moving toward health."

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Dan adds that clinical veterinarians have an important role in educating owners on extreme conformations and advocating to protect the welfare of affected animals. “Veterinary professionals are held to a much higher standard on animal welfare than the general public, so we need to think carefully about the animals we own,” says Dan. “It’s important that we ensure the messages we’re sending to the wider public are welfare-positive.”

That includes setting up practice policies on messaging, such as ensuring that any social media featuring extreme conformations is only doing so from a health and welfare perspective. Collaboration is key. “Get all the groups – the kennel clubs, charities, universities, veterinary associations and the government – together to say the same thing, and make sure the same messages are being shared by veterinary practices around the country,” says Dan.

He also says it’s important that the veterinary profession, along with the NZVA and NZVNA, continues to advocate against companies and brands

unnecessarily using images of dogs – and cats – with extreme conformations. The NZVA brand guidelines on photography state that the organisation avoids promoting breeds that have obvious welfare issues from breeding, and doesn’t use images of these breeds – which includes brachycephalic breeds – unless it is for educational purposes.

Dan continues: “At a professional level, we’re providing care for animals already afflicted with extreme conformation, so we need to be open to treating those animals and providing them with the best possible care. We also have to be careful about the language we use – we mustn’t be judgemental of owners, who all want healthy animals, but encourage them to learn from the experience of owning animals with extreme conformation.”

Becky advises fellow companion animal veterinarians to build their knowledge of genetic counselling. “Upskill and become a respiratory function grading assessor, offer disorder testing, and help people to make good decisions.”

She says it’s vital that veterinarians are selective in the breeders with which they work. “If breeders refuse to do respiratory function grading testing, I tell them I won’t do the artificial insemination – but I also need my colleagues to say the same thing. If everyone said no, we could actually make a meaningful difference in the lives of these dogs.” ^{vs}

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For more on brachycephaly and other extreme conformations, read *Companion Quarterly’s* December 2023 issue on responsible breeding.