Supplementary Appendix

Method of assigning dogs to breed size categories.

With few exceptions, the size category to which a dog was assigned was based on the mean weight of the primary breed recorded in PetWare®. Dogs recorded as purebred and mixed breed were therefore assigned a size using the same process. The default source for weight ranges was the breed standards of the American Kennel Club (AKC), including its Foundation Stock Service®. When there were no AKC data, United Kennel Club (UKC) standards were used. For breeds not in AKC or UKC listings, weights were accessed through available online sources, with preference given to Fédération Cynologique Internationale and Wisdom Panel™ databases.

The size category to which each breed was assigned was looked at in relation to scatterplots of weights recorded during Banfield visits for dogs of each primary breed. Some dogs were assigned a generic breed “type” in PetWare (eg, Spaniel, Retriever, Terrier, Pit Bull, Spitz). Scatterplots were reviewed to confirm the most appropriate size category to assign each breed type. PetWare also assigned some dogs to a breed without specifying size (eg, Dachshund, Poodle, Schnauzer). Scatterplots were then reviewed to determine the size to which these dogs should most appropriately be assigned. Lastly, scatterplots were reviewed when the mean weight of a dog breed was one pound or less difference from another size category. Based on scatterplot weights, dogs recorded as Golden Retrievers and Boxers were categorized as Large, despite their mean weights being one pound under the threshold. This made their assigned breed size categories consistent with the Dog Aging Project. Sample scatterplots for four breeds/breed types (Yorkshire Terrier, Pit Bull, Dachshund, and Boxer) are below. Points are colored by sex (male =
blue, female = red). Points for dogs checked as mixed breed in the PetWare software are slightly transparent; all others were recorded as purebred. To avoid any effects from gonadectomy, points denote a dog’s weight at index visit and are therefore concentrated at early ages.
REFERENCES

   https://www.akc.org/dog-breeds/.

   https://www.akc.org/dog-breeds/foundation-stock-service/.

