

S2 Table. Information about hunting breeds gathered from different scientific papers.

| Breed | n | H _E | H _O | N _A | F _{IS} | Ar | Author |
|-----------------------------|-----|----------------|----------------|----------------|-----------------|-----|-----------------------------|
| German Wirehaired Pointer | 50 | 0.71 | 0.69 | 6.94 | nd | nd | (DeNise et al., 2004) |
| | 11 | 0.73 | 0.72 | 5.10 | nd | nd | (Pedersen et al., 2013) |
| German Shorthaired Pointer | 148 | 0.69 | 0.68 | 7.35 | nd | nd | (DeNise et al., 2004) |
| | 30 | 0.70 | 0.69 | nd | 0.018 | 5.4 | (Leroy et al., 2009) |
| | 36 | 0.72 | 0.71 | 6.2 | nd | nd | (Pedersen et al., 2013) |
| Wirehaired Pointing Griffon | 33 | 0.57 | 0.62 | 4.94 | nd | nd | (DeNise et al., 2004) |
| | 27 | 0.69 | 0.71 | nd | -0.027 | 5.0 | (Leroy et al., 2009) |
| Pointer | 50 | 0.68 | nd | nd | nd | nd | (Parra et al., 2008) |
| | 20 | 0.62 | 0.57 | nd | 0.080 | 4.8 | (Leroy et al., 2009) |
| | 78 | 0.64 | 0.60 | 5.82 | nd | nd | (DeNise et al., 2004) |
| English Setter | 66 | 0.62 | nd | nd | nd | nd | (Parra et al., 2008) |
| | 20 | 0.66 | 0.64 | nd | 0.027 | 5.1 | (Leroy et al., 2009) |
| | 125 | 0.48 | 0.45 | 5.29 | nd | nd | (DeNise et al., 2004) |
| English Setter (show) | 36 | 0.46 | 0.43 | 3.7 | nd | nd | (Pedersen et al., 2013) |
| English Setter (field) | 13 | 0.66 | 0.69 | 4.7 | nd | nd | (Pedersen et al., 2013) |
| Irish Red White Setter | 30 | 0.7 | 0.65 | nd | 0.069 | 5.3 | (Leroy et al., 2009) |
| Irish Setter | 132 | 0.65 | 0.63 | 6.12 | nd | nd | (DeNise et al., 2004) |
| | 17 | 0.63 | 0.62 | 4.8 | nd | nd | (Pedersen et al., 2013) |
| Gordon Setter | 149 | 0.57 | 0.55 | 5.18 | nd | nd | (DeNise et al., 2004) |
| Vizsla | 116 | 0.68 | 0.67 | 6.00 | nd | nd | (DeNise et al., 2004) |
| Weimaraner | 24 | 0.64 | 0.66 | nd | -0.033 | 4.3 | (Leroy et al., 2009) |
| | 36 | 0.61 | nd | nd | nd | nd | (Irion et al., 2003) |
| | 50 | 0.72 | 0.65 | 6.90 | 0.059 | nd | (Streitberger et al., 2012) |
| | 88 | 0.54 | 0.54 | 5.24 | nd | nd | (DeNise et al., 2004) |
| Labrador Retriever | 16 | 0.56 | 0.54 | nd | 0.042 | 3.3 | (Björnerfeldt et al., 2008) |
| | 22 | 0.60 | 0.58 | nd | 0.021 | 4.4 | (Leroy et al., 2009) |
| | 50 | 0.48 | 0.35 | 3.30 | nd | nd | (Zajc et al., 1997) |
| | 52 | 0.66 | 0.65 | 5.76 | nd | nd | (DeNise et al., 2004) |
| | 44 | 0.64 | nd | nd | nd | nd | (Irion et al., 2003) |
| Bracco Italiano | 72 | 0.64 | 0.59 | 6.43 | 0.060 | nd | (Ciampolini et al., 2011) |
| Brittany Spaniel | 16 | 0.66 | nd | nd | nd | nd | (Parra et al., 2008) |
| | 44 | 0.66 | nd | nd | nd | nd | (Irion et al., 2003) |
| | 64 | 0.64 | 0.64 | 5.65 | nd | nd | (DeNise et al., 2004) |
| | 30 | 0.68 | 0.71 | nd | -0.032 | 5.0 | (Leroy et al., 2009) |
| | 72 | 0.65 | 0.63 | 6.50 | nd | nd | (Pedersen et al., 2013) |
| Dachshunds | 632 | 0.74 | 0.67 | 7.60 | 0.047 | nd | (Přibáňová et al., |

| | | | | | | | 2009) |
|---------------|-----|------|------|------|--------|----|-------------------------|
| | 130 | 0.72 | 0.64 | 7.88 | nd | nd | (DeNise et al., 2004) |
| Hanover Hound | 92 | 0.66 | 0.67 | 6.44 | -0.012 | nd | (Lüpke and Distl, 2005) |

References:

- Björnerfeldt, S., Hailer, F., Nord, M., Vilà, C., 2008. Assortative mating and fragmentation within dog breeds. *BMC Evol. Biol.* 8, 28. <https://doi.org/10.1186/1471-2148-8-28>
- Ciampolini, R., Cecchi, F., Bramante, A., Casetti, F., Presciuttini, S., 2011. Genetic variability of the Bracco Italiano dog breed based on microsatellite polymorphism. *Ital. J. Anim. Sci.* 10, e59. <https://doi.org/10.4081/ijas.2011.e59>
- DeNise, S., Johnston, E., Halverson, J., Marshall, K., Rosenfeld, D., McKenna, S., Sharp, T., Edwards, J., 2004. Power of exclusion for parentage verification and probability of match for identity in American kennel club breeds using 17 canine microsatellite markers. *Anim. Genet.* 35, 14–17. <https://doi.org/10.1046/j.1365-2052.2003.01074.x>
- Irion, D.N., Schaffer, A.L., Famula, T.R., Eggleston, M.L., Hughes, S.S., Pedersen, N.C., 2003. Analysis of Genetic Variation in 28 Dog Breed Populations With 100 Microsatellite Markers. *J. Hered.* 94, 81–87. <https://doi.org/10.1093/jhered/esg004>
- Leroy, G., Verrier, E., Meriaux, J.C., Rognon, X., 2009. Genetic diversity of dog breeds: within-breed diversity comparing genealogical and molecular data. *Anim. Genet.* 40, 323–332. <https://doi.org/10.1111/j.1365-2052.2008.01842.x>
- Lüpke, L., Distl, O., 2005. Microsatellite marker analysis of the genetic variability in Hanoverian Hounds. *J. Anim. Breed. Genet.* 122, 131–139. <https://doi.org/10.1111/j.1439-0388.2005.00501.x>
- Parra, D., Méndez, S., Cañón, J., Dunner, S., 2008. Genetic differentiation in pointing dog breeds inferred from microsatellites and mitochondrial DNA sequence. *Anim. Genet.* 39, 1–7. <https://doi.org/10.1111/j.1365-2052.2007.01658.x>
- Pedersen, N., Liu, H., Theilen, G., Sacks, B., 2013. The effects of dog breed development on genetic diversity and the relative influences of performance and conformation breeding. *J. Anim. Breed. Genet.* 130, 236–248. <https://doi.org/10.1111/jbg.12017>
- Přibáňová, M., Horák, P., Schröffelová, D., Urban, T., Bechyňová, R., Musilová, L., 2009. Analysis of genetic variability in the Czech Dachshund population using microsatellite markers. *J. Anim. Breed. Genet.* 126, 311–318. <https://doi.org/10.1111/j.1439-0388.2008.00772.x>
- Streitberger, K., Schweizer, M., Kropatsch, R., Dekomien, G., Distl, O., Fischer, M.S., Epplen, J.T., Hertwig, S.T., 2012. Rapid genetic diversification within dog breeds as evidenced by a case study on Schnauzers. *Anim. Genet.* 43, 577–586. <https://doi.org/10.1111/j.1365-2052.2011.02300.x>
- Zajc, I., Mellersh, C.S., Sampson, J., 1997. Variability of canine microsatellites within and between different dog breeds. *Mamm. Genome* 8, 182–185. <https://doi.org/10.1007/s003359900386>