



THE
THOROUGHBRED
BREEDERS'
ASSOCIATION

British Horse Council

Summer Meeting 2026

Championing the future of the British Thoroughbred





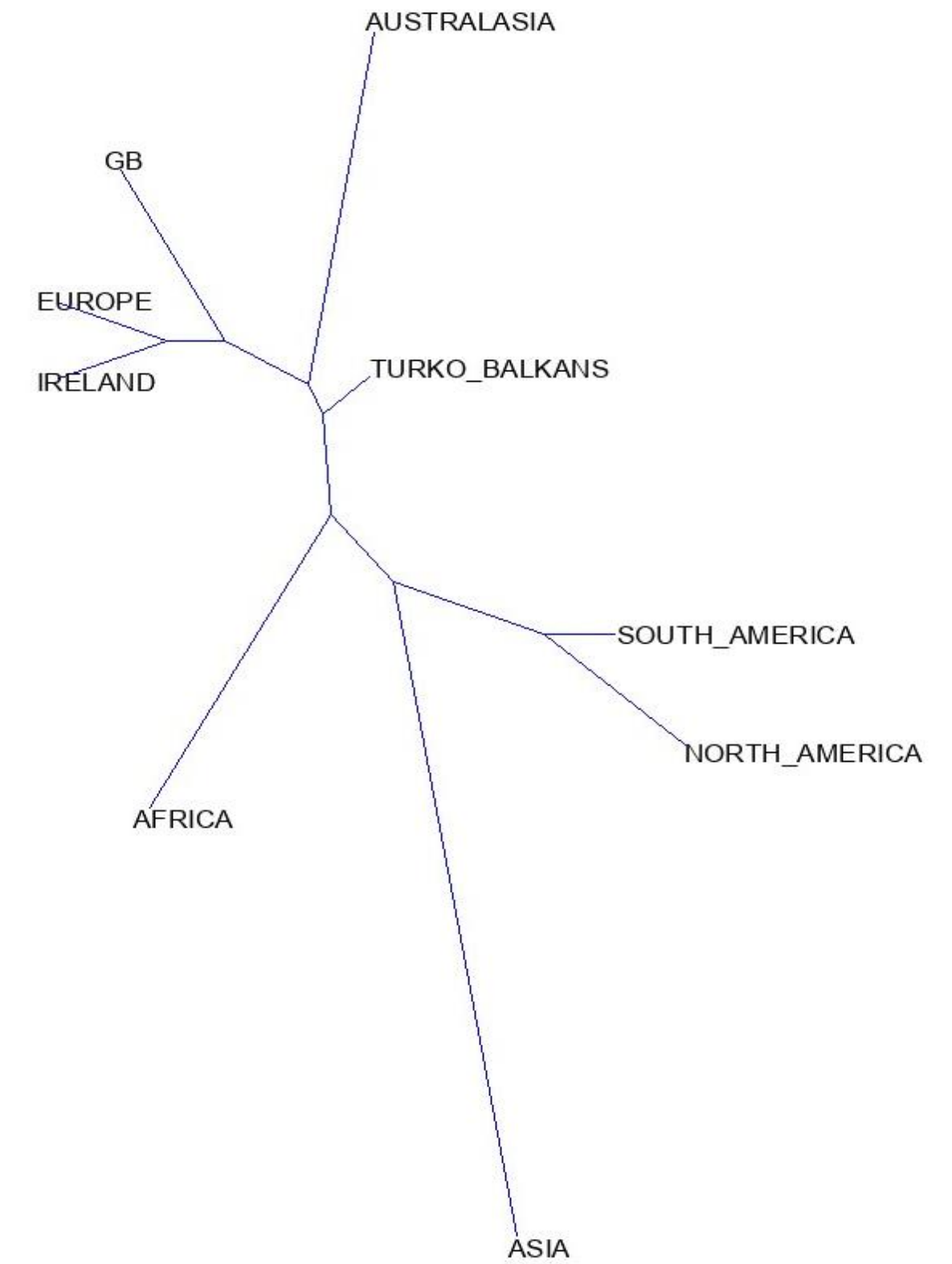
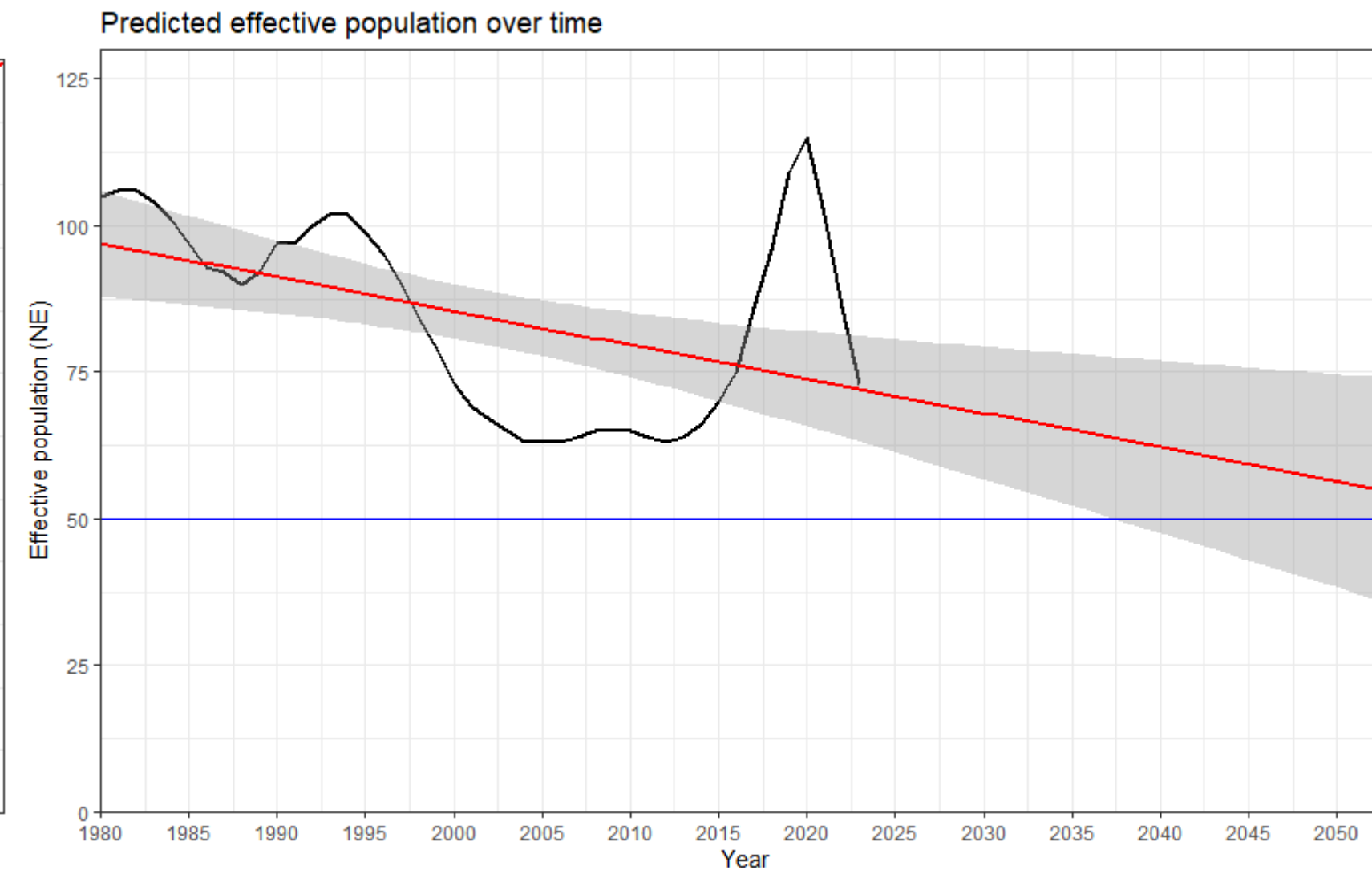
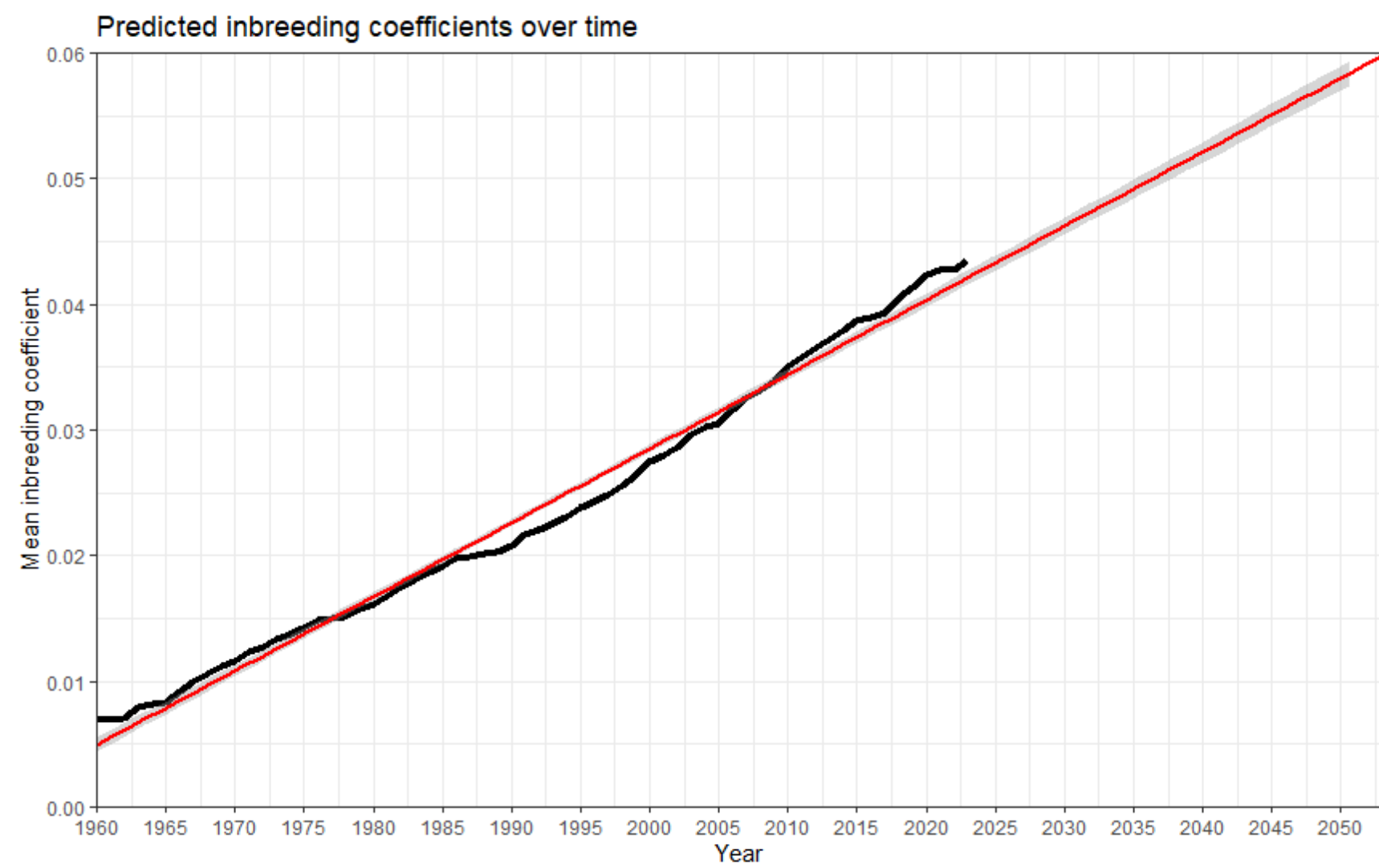
GENETIC DIVERSITY OF THE THOROUGHBRED

Is reduced genetic variance in the thoroughbred population a problem?

- Inbreeding identified as a contributing factor to mid and late term pregnancy loss ([Jessica Lawson, 2024](#))
- Inbreeding linked to reduced likelihood of racing ([Emmeline Hill, 2022](#))
- Inbreeding associated with reduced racecourse performance metrics in Australia ([Evelyn Todd, 2018](#)), such as prizemoney, race starts, career length and winning strike rate

MEASURING GENETIC DIVERSITY

Genealogical study of the General Stud Book (GSB) performed to measure the average inbreeding coefficient; rate of loss of genetic diversity; effective population size; and pedigree divergence by continent of birth



SPARKS PILOT

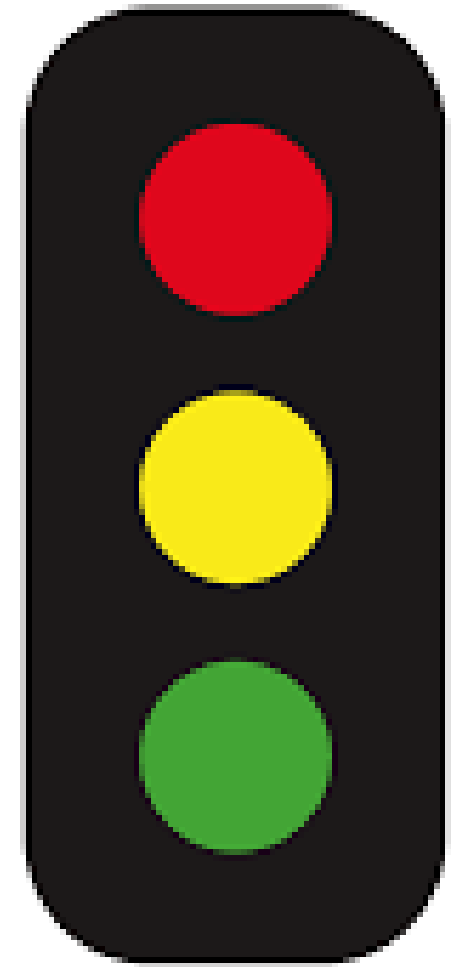
Software trial

Understanding mean kinship – how related one horse is to another (recent and historic common ancestors)

Focusing minds on the projected inbreeding coefficient of the progeny – protecting anonymity of stallion data

Encourage breeding like to like – ideally mating horses who have a similar inbreeding coefficient (traffic light system)

AIM: Informing and shaping a broader industry awareness and education strategy





TRACEABILITY

- Analysis of the 2018 and 2019 foal crops at six years of age – understanding pathways, outcomes and performance metrics – **robust data to inform industry communications and shape future strategy.**
- **Ambition of 100% lifetime traceability** – greater education and enforcement – **requires collaboration across the equestrian sector and between international racing jurisdictions.**
- **What next?** – broodmare traceability – **ten-year data capture from the General Stud Book.**