A GOOD LIFE FOR EVERY GREYHOUND

THE GREYHOUND BOARD OF GREAT BRITAIN'S NEW STRATEGIC VISION TO FURTHER PROMOTE AND PROTECT WELFARE ACROSS ALL STAGES OF A GREYHOUND'S LIFE





Greyhounds deserve the highest level of care not only during their racing career but also in their retirement that follows.

The Government recognises the genuine concerns some people have about parts of the sport and I'm pleased to see this five year plan set out how everyone involved in greyhound racing has a role to play in improving welfare. The Government welcomes the Good Life for every Greyhound strategy and the positive progress the Greyhound Board are continuing to make. ??

The Rt Hon Lord Goldsmith, Animal Welfare Minister

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ACRONYMS

- **ADCH** Association of Dogs and Cats Homes
- AI Artificial Insemination
- APHA Animal and Plant Health Agency
- AWAG Animal Welfare Assessment Grid
- **BEVA** British Equine Veterinary Association
- **BGRF** British Greyhound Racing Fund
- **BHS** British Horse Society
- **BVA** British Veterinary Association
- **CPD** Continuing Professional Development
- **CPS** Crown Prosecution Service
- **CWAS** Cumulative Welfare Assessment Score
- **DSMP** Disease and Surveillance Monitoring Programme
- **GBGB** Greyhound Board of Great Britain
- **GSB** Greyhound Stud Book
- **GRB** Greyhound Regulatory Board
- **GRS** Greyhound Retirement Scheme
- **IRS** Injury Recovery Scheme
- KC Kennel Club
- **RCPA** Racecourse Promoters Association
- **RCVS** Royal College of Veterinary Surgeons
- **SCI** Supply Chains Insights
- **STRI** Sports Turf Research Institute
- UCD University College Dublin
- **UKAS** United Kingdom Accreditation Service
- **WVSC** Welfare and Veterinary Standing Committee

EXECUTIVE SUMMARY

INTRODUCTORY COMMENTS

This document sets out the Greyhound Board of Great Britain's (GBGB) strategic vision of the improvements to welfare needed to guarantee 'A Good Life for Every Greyhound' and our detailed work plans for delivering upon that vision. GBGB's determination to prioritise and safeguard animal welfare is not new. In 2018, we published our 'Greyhound Commitment', which has been updated annually. Work delivered within that commitment has included enhancing track safety by partnering with the Sports Turf Research Institute (STRI) to provide ongoing support for all GBGB-licenced tracks in their track preparation and maintenance, developing and funding the Injury Recovery Scheme (IRS), implementing independent inspections of residential kennels to PAS 251:2017 standards and launching the Greyhound Retirement Scheme (GRS), which so far has made more than £1.8 million available to homing centres. Details of these and of many other existing workstreams relating to welfare are provided below. However, the board of GBGB believe that there is much more to be done. As the regulator of GBGB-licenced greyhound racing in Great Britain, we are required to assume responsibility for welfare only during the period of a greyhound's life when it is racing. However, the GBGB Board unanimously feel that it is our moral obligation to share responsibility for greyhound welfare across all stages of a greyhound's life. This strategy explains the ways in which we will provide national and international leadership in fulfilling that responsibility. The responsibility, however, is not ours alone. The moral responsibility for safeguarding greyhound welfare lies with everyone involved in the sport, whether as an individual or an organisation. This strategy therefore also makes clear the ways in which, as the regulator, we expect and require all such stakeholders to fully engage in protecting and optimising the welfare of the greyhounds under our care.

THE STRUCTURE OF THIS DOCUMENT

This Executive Summary presents 'headlines' of themes and workstreams within the welfare strategy. To understand the prior work, evidence and ambitions which have provided the rationale for the development of these themes and workstreams and the details of the actions which will be undertaken to deliver upon them, it is necessary to read the following chapters fully.

The strategy is presented in terms of short-, medium- and long-term actions within a five-year plan. These will inform a clear timetable of work (Chapter 6). Nonetheless, we accept that as the outputs of short-term actions inform longer-term actions, as evidence increases, and as unforeseen opportunities and priorities develop, some flexibility in the enactment of the strategy will be necessary. Through the reporting mechanisms outlined in Chapter 6, we will work with our partners on the Greyhound Forum to ensure that the need for such flexibility and the need to deliver measurable outcomes in a timely fashion are both protected.

CONTEXT OF THE STRATEGY

In recent years, there has been increasing public discourse in the UK and many other countries about the use of animals in competitive sport. The 'social licence' for such use has been challenged by some sectors of society. Discussion of animal rights and animal welfare has become confounded. GBGB believes that animals' best interests are served by focusing clearly on welfare rather than on rights. We share the majority societal view that the use of animals in sport is ethically justified providing that welfare is appropriately protected. This holistic welfare strategy explains exactly what we think adequate protection of greyhound welfare looks like and how we will deliver upon that vision. Its scope extends across all phases of a greyhound's life – breeding, rearing, racing years and retirement – and incorporates consideration of all 'Five Domains' of animal welfare: nutrition, behaviour, health, environment and mental state^{1,2}.

OUR APPROACH

This strategy was initiated and has been developed by GBGB, led by Independent GBGB Director Professor Madeleine Campbell, who is an EBVS® European Veterinary Specialist and RCVS Specialist in Animal Welfare Science, Ethics and Law. In developing the strategy, GBGB has sought, received and listened to a wide range of views and comments on current and aspirational welfare through engagement with stakeholders from within and beyond the sport of greyhound racing. These have included canine welfare charities (members of the Greyhound Forum), academics, owners, breeders, trainers, promoters, stewards, veterinary surgeons, and stakeholders in processes such as breeding, registration and retirement. We have reviewed the literature, and we have also, to identify opportunities for translation of best practice, engaged with the sport of horseracing and with international counterparts in greyhound sport.

STRATEGIC OBJECTIVE AND AIMS

The objective of this welfare strategy is to deliver 'A Good Life for Every Greyhound' in which each greyhound's overall welfare experience across its lifetime is a substantially positive one.

We will achieve this through a work plan designed to fulfil the following aims:

- (i) To minimise potentially negative welfare effects and maximise positive welfare effects in all Five Domains across greyhounds' lifetimes.
- (ii) To identify and mitigate preventable, avoidable risks.

ENGAGEMENT TO DELIVER THIS STRATEGY

Throughout this strategy document, we have identified where engagement with various stakeholders within the sport will play an important role in delivering the strategy's

²Mellor, D. J. (2017). Operational Details of the Five Domains Model and Its Key Applications to the Assessment and Management of Animal Welfare. Animals 7(8): 60. aims and how that will be facilitated. GBGB has also sought out and incorporated into this strategy engagement with external partners to maximise impact through making use of recognised expertise in animal welfare, behaviour and veterinary science. Ways in which this will be done are detailed throughout the following chapters. We also requested an external peer review of a draft version of this strategy and are most grateful to Dr Barry Johnson and Professor Siobhan Mullan for having kindly undertaken that work.

REPORTING AND MEASURING IMPACT

Impact will be measured in terms of delivery of actions against the timeline, viewed alongside data on injuries, euthanasia, traceability and homing (Chapters 2–6 and Table 1). This will be reported upon at six monthly intervals to the main GBGB Board. The Greyhound Forum will be updated on a six-monthly basis, and interested stakeholders will be updated annually via the GBGB website. Additionally, GBGB will provide reports to the Greyhound Forum on overall delivery against this strategy at 18 months, 3 years and 5 years after its launch (Chapter 6).



¹Mellor, D. J. and N. J. Beausoleil (2015). Extending the 'Five Domains' model for animal welfare assessment to incorporate positive welfare states. Animal Welfare **24**: 241–253.

KEY ACTIONS

Key actions within this strategy are summarised here in terms of lifetime themes and actions relating to the early years (including breeding), racing years and retirement phases of a greyhound's life. Details behind each of these headlines are provided in the following chapters.

LIFETIME THEMES

GBGB has identified a number of overarching themes which apply across all stages of a greyhound's lifetime. These are:

- Shared responsibility for greyhound welfare
- Education
- Evidence and the need for research
- International collaboration
- Monitoring of welfare
- Nutrition
- Preventative medicine
- Traceability
- Physical and psychological resilience
- Promoting positive experiences for greyhounds

KEY ACTIONS IN RELATION TO LIFETIME THEMES MAY BE SUMMARISED AS FOLLOWS:

SHARED RESPONSIBILITY FOR GREYHOUND WELFARE

GBGB believes that the welfare of greyhounds is the moral responsibility of everyone involved with the sport, whether acting in an individual capacity or as a member of a body such as a business, committee or organisation.

- GBGB will provide training programmes and enhanced communication between GBGB and stakeholders to ensure that everyone involved in greyhound sport understands that welfare is their responsibility and is suitably trained to fulfil that responsibility.
- GBGB has worked and will continue to work closely with local authorities, external agencies or governmental bodies to share responsibility for greyhound welfare in line with legal and practical requirements to do so.

EDUCATION

GBGB will provide comprehensive training and knowledge-sharing programmes for all stakeholders within the sport of greyhound racing.

For trainers and kennelhands:

- A programme of Stipendiary Stewards and Regional Regulatory Veterinary Surgeons providing brief regular updates on welfare matters for trainers and kennel hands at each track will be instigated.
- Practical continuing professional development (CPD) knowledge sharing workshops for trainers and kennelhands will be developed and delivered in collaboration with external experts from academia, veterinary medicine and industry.

Subjects will include nutrition, detection of early injuries/ gait abnormalities and when to seek veterinary assistance, physiotherapy, general greyhound husbandry (including dental care), behaviour (with a particular focus on optimising a dog's chance of successful homing at the end of its racing career) and basic track safety knowledge. The emphasis will be both on trainers and kennelhands sharing best practice and experience and on providing accessible opportunities to learn from external experts. As part of this programme, trainers will receive training on how to fulfil their responsibility for ensuring that each kennelhand undergoes appropriate training once they are licenced. Completion of specified knowledge-sharing courses (for example, on nutrition and husbandry) will become a prerequisite for application to hold and renew a trainer's licence.

- Annual CPD 'refresher welfare workshops for trainers' will be developed. Biennial certified attendance at those will become a necessary part of demonstrating competence and a mandatory requirement of holding a training licence.
- GBGB will develop an online training module in greyhound welfare for kennelhands, the completion of which will become a condition of being licenced.

For Veterinary Surgeons:

- Training on prerace assessments including standardised clinical examinations and 'trot ups' (Chapter 4).
- Externally provided CPD on trackside first aid, including a focus on stabilisation of injured dogs for transportation to optimise chances of successful treatment via referral.
- CPD for Regional Regulatory Veterinary Surgeons.
- Regular attendance at CPD refresher courses will become a requirement for working as a track veterinary surgeon and as a Regional Regulatory Veterinary Surgeon.
- A rolling provision of clinical CPD for licenced greyhound veterinary surgeons focused on evidence-based best trackside practice informed by current veterinary science will become an integral part of the sport.

For Stipendiary Stewards:

- In addition to the continuation of existing training programmes, communication training will be provided for Stipendiary Stewards.
- GBGB will work with Supply Chains Insights (SCI) to design and deliver a joint training programme for auditors of the United Kingdom Accreditation Service (UKAS) inspection schemes (Chapter 4) and Stipendiary Stewards.
- Once the Animal Welfare Assessment Grid for greyhounds has been developed (see below), Stipendiary Stewards will be provided with training in how to use that tool.

For owners of racing greyhounds:

- A 'welcome pack' for owners will be developed by GBGB. This will elucidate owners' legal and moral responsibilities in terms of greyhound welfare and will point owners to sources of support and information.
- In collaboration with external experts where appropriate, GBGB will develop and deliver knowledge-sharing workshops for owners of racing greyhounds.

Subjects will include nutrition, preventative healthcare and preparing a greyhound for the transition to retirement.

 In collaboration with external experts where appropriate, GBGB will develop an ongoing welfarefocused knowledge-sharing programme for owners of racing dogs.

This will include cross-linking with other programmes described in this strategy, e.g. programmes for breeders and discussions around sourcing racing greyhounds responsibly.

For owners of retired greyhounds:

- GBGB will work with the Greyhound Forum to provide a 'welcome pack' for new owners of retired greyhounds which will be available via all GBGBapproved homing centres (Chapter 5). The pack will include information on legal and moral responsibilities of ownership, basic healthcare and behavioural needs and sources of support and information.
- GBGB will work with the Greyhound Forum to consider the development of a 'greyhound welfare roadshow' which could be delivered in conjunction with existing attendance at county shows and similar events by homing charities and would be used to disseminate information about homing and the physical and behavioural needs of retired greyhounds.

For breeders of greyhounds:

 In collaboration with external experts where appropriate, GBGB will develop and deliver knowledge-sharing workshops for breeders of racing greyhounds. Subjects will include nutrition (see below), the importance of early socialisation to later homing success, the impact of exercise regimes during early life on long-lasting soundness and health, genetics (Chapter 3) and husbandry.

- In collaboration with external experts including academics and veterinary specialists in canine reproduction where appropriate, GBGB will develop and facilitate knowledge-sharing workshops for breeders of racing greyhounds to establish what current practices are and where there is a lack of evidence about welfare impacts.
- GBGB will aim to work with equivalent organisations in the Republic of Ireland and Northern Ireland to promote education and knowledge transfer for breeders (see 'International collaboration' below).

For track maintenance staff:

- GBGB's Track Liaison Officer and the GBGB Track Sub-Committee will develop and deliver workshops for those responsible for track maintenance.
- GBGB's Track Liaison Officer (Chapter 4) and the GBGB Track Sub-Committee will produce an online video version of the track maintenance manual and reference resource materials.
- GBGB's Track Liaison Officer and the GBGB Track Sub-Committee will develop a knowledge base to allow those responsible for track maintenance to readily access best practice, guidance and support with the intention of improving consistency of delivery across all GBGB-licenced racetracks.
- GBGB's Track Liaison Officer will work with external providers of vocational education to develop and deliver an educational programme for those responsible for track maintenance.
- The increased frequency of STRI visits to tracks (Chapter 4) also provides enhanced opportunity for knowledge-sharing around track maintenance and preparation.

For other track staff:

 GBGB's Track Liaison Officer and the GBGB's Welfare and Veterinary Standing Committee (WVSC) will work to develop and deliver an ongoing educational programme on welfare for paddock and track staff.

EVIDENCE AND THE NEED FOR RESEARCH

GBGB believes that welfare policymaking should be based on scientific evidence and that where a relevant lack of evidence is identified, research should be undertaken to provide it.

• A list of prior research undertaken or supported by GBGB is provided in Appendix 2.

- Some data-gathering programmes and research projects within this strategy (for example, around euthanasia and decision-making or reasons for homing failure) have already begun or are scheduled to begin within the next 12 months, supported by internal funding. These are detailed in the full chapters below.
- GBGB will engage with expert independent academic partners to design, deliver and analyse data-gathering and research programmes. These are detailed in the full chapters below and include:
 - research on nutrition (Chapter 2).
 - research on inbreeding and possible correlations with predisposition to injury (Chapter 3).
 - research to identify and mitigate against causes of injuries (Chapter 4).
 - research on early detection of injuries (Chapter 4).

INTERNATIONAL COLLABORATION

Collaboration between international greyhound authorities and particularly between the Republic of Ireland, Northern Ireland and Great Britain is an important aspect of safeguarding welfare.

- GBGB will build on the success of our initiative which harmonised doping and medication control to internationally harmonise core welfare values and procedures.
- GBGB will work with international regulators to co-operate and pool research and knowledge on welfare standards and practices.



 In 2022, an inaugural meeting of international greyhound regulators (with invitees including Greyhounds Australasia, Greyhound Racing Victoria, Irish Coursing Club, Greyhound Racing Ireland, Greyhound Racing New Zealand and the Hungary Racing Club) will be hosted by GBGB.

The aim of the meeting is to establish the foundations for collaborative thinking on current and future welfare strategies for the benefit of greyhounds globally.

- GBGB will aim to work specifically with Irish counterparts to encourage and promote equivalent high welfare standards across borders.
- GBGB will also be taking direct unilateral steps to promote breeding and rearing of greyhounds within Great Britain and encourage owners and trainers to acquire puppies from reputable British breeders and rearers with high welfare standards (Chapters 3 and 4).
- The international regulators' information portal will be expanded to share welfare-related research studies and educational materials.
- GBGB will lead an effort by international greyhound regulators to together develop harmonised welfare policies and strategies.

MONITORING OF WELFARE

To facilitate shared responsibility for greyhound welfare, promote proactive consideration of negative and positive welfare impacts by those responsible for greyhound welfare and increase knowledge-sharing and data collection, a more developed system of monitoring greyhound welfare is required (Chapter 4).

 GBGB has partnered with Professor Sarah Wolfensohn and her team at Surrey University and commissioned the development of a greyhound-specific Animal Welfare Assessment Grid (AWAG).

The AWAG is an easy-to-use tool which measures an animal's level of welfare in physical and psychological domains over time. Use of the AWAG will enhance greyhound welfare by enabling users to more readily identify changes in an animal's welfare status, understand negative and positive welfare impacts and adapt practice accordingly to deliver 'good lives' for greyhounds.

- GBGB is already working with Professor Wolfensohn's team and the associated IT team.
- The bespoke greyhound AWAG will be trialled in pilot and larger-scale studies.
- Use of the bespoke greyhound AWAG will be rolled out throughout the sport in (i) breeding (ii), racing and (iii) retirement settings.

NUTRITION

Canine nutrition has a direct impact on health, both physical and psychological, in the short and longer terms.

- GBGB has partnered with Dr Teresa Hollands, Senior Teaching Fellow in Veterinary Nutrition at the University of Surrey, to address the whole area of nutrition within this welfare strategy.
- Dr Hollands will facilitate a series of knowledgesharing nutrition workshops with greyhound trainers, breeders and owners.
- Dr Hollands will convene and chair a working group of external experts to review greyhound nutrition.

This nutrition review panel will make recommendations for appropriate nutrition at each stage of a dog's lifetime; identify where further research needs to be undertaken; make recommendations around feeding practices, e.g. feed restriction, frequency of feeding and the relationships between nutrition and injury and nutrition and dental health; and review the possible relationship between the feeding of non-human-grade meat and the introduction of antimicrobial-resistant bacteria into the kennel environment.

PREVENTATIVE MEDICINE

GBGB has already undertaken significant work in this area (detailed in Chapter 2) along with requirements for preventative healthcare plans for every greyhound.

- Standardised dental disease scoring at the time of annual vaccination will be included as part of the veterinary training programme.
- GBGB will incorporate British Veterinary Association (BVA) guidance on antimicrobial stewardship into the training of trainers, owners and veterinary surgeons and into the GBGB Code of Practice.

TRACEABILITY

This strategy includes workstreams to reduce the risk of greyhounds exiting the tracing system and to improve methods of identification.

- GBGB will aim to work with Irish counterparts and government to improve information gathering about greyhounds being transported between the Republic of Ireland or Northern Ireland and the UK.
- GBGB has previously made it clear that exportation of greyhounds to jurisdictions where welfare standards cannot be verified is unacceptable.
 Where GBGB becomes aware that licensees may be involved in such activities, that will be investigated as a disciplinary matter.

- GBGB will work with international regulators to establish harmonised systems for monitoring and deterring exportation of greyhounds to jurisdictions where welfare standards cannot be verified.
- GBGB will work with the British government to promote enforcement of relevant national legislation around the issue of greyhound exportation.
- GBGB does not find it acceptable that greyhounds should be leaving a GBGB regulated environment with clear safeguards around environmental standards and kennel inspections to enter an unregulated environment in which such protections are not required and where welfare standards cannot be verified. GBGB believes that all tracks, schooling tracks and greyhound trainers should be regulated to a standard equivalent to GBGB regulation.

GBGB will therefore remove from the Retirement Form the option of a greyhound exiting GBGB-regulated racing to enter independent/unregulated British racing.

- GBGB will work with the Greyhound Stud Book (GSB), breeders, owners and trainers to build an evidence base around dogs which were earmarked but never presented for racing.
- GBGB will aim to work with the Irish studbook and regulator to encourage them to undertake similar work as part of their own welfare programmes.
- GBGB will review whether the current Retirement Form system could be refined to further optimise welfare during retirement (Chapter 5) and implement any such refinements where agreed.
- GBGB will streamline the process for 'releasing' a microchip from the GBGB database system for it to be registered with a pet microchip database when a greyhound exits racing.
- GBGB will work with the government to support phasing out earmarking as a method of identification and to replace it with a more welfare-friendly identification method which will also maintain adequate identification from an integrity point of view.

PHYSICAL AND PSYCHOLOGICAL RESILIENCE

Resilience increases the chances of greyhounds living long, happy, healthy lives and coping successfully with potentially stressful situations.

- GBGB will commission research to understand the genetic basis of resilience and enable selection for long-lasting soundness and health (Chapter 3).
- GBGB will work with breeders, rearers, trainers and owners of greyhounds to smooth greyhounds' transition to retirement (Chapters 3, 4, 5).
- GBGB will work to prevent, reduce and treat injuries (Chapter 4).

EARLY YEARS

Key actions in relation to breeding and early years may be summarised as follows:

- GBGB has partnered with the Kennel Club (KC) to develop and implement a high-welfare-standard 'Assured Breeders Scheme' for greyhounds.
- GBGB will promote high-standard British breeding through this KC Assured Breeders Scheme including encouraging owners and trainers to purchase greyhounds from British breeders who are members of that scheme.
- GBGB will incentivise early joining of the KC Assured Breeders scheme by funding application fees for the first two years of the scheme being available to breeders of greyhounds for racing.
- GBGB will aim to use the KC Assured Breeders Scheme and the Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations (2018) as a basis for working with Greyhound Racing Ireland and the Irish Coursing Club to encourage them to support a harmonised set of standards and code of practice of breeders in the UK, Northern Ireland and the Republic of Ireland (ROI).
- GBGB will work with the GSB and the British Greyhound Breeders Forum to further develop schemes of incentivisation for British-bred greyhounds.
- GBGB will work with the GSB to identify breeders of racing greyhounds who fall under the scope of the Breeding of Dogs Regulations (for example, those breeding three or more litters per year) and/or the Selling Animals as Pets Regulations and to ensure that such breeders are compliant with legal requirements.
- GBGB will work with the GSB to identify breeders of racing greyhounds who do *not* fall under the scope of the Breeding of Dogs Regulations and/or the Selling Animals as Pets Regulations.
- GBGB will collaborate with the Greyhound Forum to consider and make recommendations around how traceability of greyhounds bred for racing but not entering racing can be improved.
- GBGB will commission Professor Emmeline Hill to undertake research to elucidate genetic influences (including inbreeding) upon resilience and longevity in greyhounds and ultimately to provide tools which breeders and owners can use to select for resilience.

RACING YEARS DATA COLLECTION, ANALYSIS AND REPORTING

GBGB already publicly publishes not only fatality data but also injury data which includes details, for example,

about the type of injury. To build on this existing system of data collection and reporting:

- GBGB will conduct an ongoing review and analysis of injury data to identify how best to collate, publish and interpret the causes of injury and improve accountability through its publication. GBGB, led by the Track Liaison Officer and its newly appointed data analyst, will work both with individual tracks and trainers and through analysis of the macro data to address the multifaceted causes of injuries.
- GBGB will work to increase the granularity of the GBGB injury database.
- GBGB will refine internal systems so that a 'spike' in injuries at an individual track or region within data collection systems automatically triggers an immediate visit to that track by the Track Liaison Officer/ a Track Sub-Committee member.
- GBGB will appoint a professional data analyst to assist in facilitating and managing work streams around data reporting and analysis.
- GBGB will develop best practice for facilitating access to anonymised data for independent research purposes.
- GBGB will review and refine how it makes internal use of data which it currently gathers.
- GBGB will use data to establish possible correlations between training methods and injuries.
- GBGB will develop systems for regularly publicly reporting upon
 - doping offences (Chapter 1).
 - kennel inspections (Chapter 4) (anonymised).
 - UKAS track inspections (Chapter 4) (anonymised).

INJURIES

Preventing and identifying causes of injury

- The frequency of STRI visits to tracks will be increased to quarterly.
- GBGB will commission Dr Richard Payne, Associate Professor of Veterinary Anatomy, School of Veterinary Medicine and Science, University of Nottingham, and scientific and veterinary advisor to the WVSC of GBGB, to undertake a review of where an evidence base already exists and where further research is needed on identifying the causes of injuries in greyhounds.
- GBGB will commission necessary research based on that review.
- Internal research led by the Track Liaison Officer, directed by and reporting to the Track Sub-Committee and run in

conjunction with STRI will assess the effects of materials and maintenance variables on track condition and safety.

- GBGB will continue (Chapter 2) to collaborate with international partners to learn from innovations in track design, surface and maintenance.
- In conjunction with appropriate experts, GBGB will establish an international centre of excellence for research and training in track maintenance and preparation.

Early detection of injuries

- In collaboration with external experts in veterinary medicine and physiotherapy, GBGB will provide CPD for trainers on detecting early injuries/gait abnormalities and recognising when to seek help from the veterinary team (Chapter 1).
- GBGB will facilitate research guided by Dr Richard Payne, Associate Professor of Veterinary Anatomy, School of Veterinary Medicine and Science, University of Nottingham, and scientific and veterinary advisor to the WVSC of GBGB, assessing whether the adoption of new technologies to detect early injury could help prevent greyhound injuries.

Promotion to reward long-lasting soundness

Welfare is optimised by breeding and care aimed at selecting for resilience and keeping greyhounds sound.

 GBGB will work with promoters to encourage promotional activities which recognise and reward breeding and care which result in long-lasting soundness of greyhounds.

Euthanasia relating to track injuries

- GBGB will facilitate an undergraduate research project at the Royal Veterinary College to investigate nonclinical factors which affect track veterinary surgeons' decisions to recommend euthanasia.
- GBGB will work with international colleagues (Chapter 2) to learn from their efforts to reduce euthanasia rates and adopt successful practices where they have been identified.
- GBGB will work with track veterinary surgeons, promoters and trainers to establish and implement best practice around the logistics of transporting injured greyhounds for veterinary treatment at a referral centre.
- GBGB will consider the identification of a network of 'preferred providers' of veterinary expertise in orthopaedic surgery.

PROVISION OF VETERINARY CARE

• GBGB has developed and appointed a new role of 'Executive Veterinarian'.

The Executive Veterinarian will play a pivotal part both in directing the implementation of this strategy and in providing support for veterinary surgeons caring for greyhounds.

- GBGB will enhance enforcement of trainers' preparation and delivery of preventative health plans.
- GBGB will undertake an audit of presentation for further treatment at a local or referral veterinary surgeon of greyhounds who were issued with a veterinary certificate to travel following an injury at a track.
- The Veterinary Director of GBGB, reporting to the WVSC, will review current requirements of the prerace veterinary inspection and make recommendations for enhancements (Chapter 4).
- GBGB will provide CPD for veterinary surgeons around standardised preracing veterinary inspections (Chapter 2).
- GBGB will work with stakeholders to encourage the development of centres of excellence for greyhound veterinary services focused on prevention as well as treatment.
- GBGB will introduce a system to record veterinary advice around general health issues when offered at a track, follow up compliance with the advice and introduce penalties (e.g. veterinary withdrawal from running on health grounds) if necessary improvements are not made.
- GBGB will build upon the ongoing success of the IRS to further refine provision for the treatment of injuries occurring at tracks.
- The GBGB Executive Veterinarian will monitor veterinary attendance at tracks and will provide support and advice to veterinary surgeons attending tracks.
- GBGB will introduce a requirement for all track veterinary surgeons to have at least two years of post-qualification experience and certified attendance under the supervision of a licenced veterinary surgeon for five meetings before adopting sole responsibility at a track.
- GBGB will develop, employ and provide a field force of Regional Regulatory Veterinary Surgeons.

Regional Regulatory Veterinary Surgeons will be a point of reference and support for track veterinary surgeons in respect of their regulatory functions; act as an additional point of referral and support for Stipendiary Stewards; work with track veterinary surgeons, Stipendiary Stewards and trainers in establishing causes of and preventing injuries; and carry out the annual veterinary inspection at a trainer's kennels and random inspections of vehicles being used to transport greyhounds to tracks in relation to the Hot Weather Policy. The Regional Regulatory Veterinary Surgeons will also be specifically tasked with checking retired greyhounds who are retained by trainers in kennels and will be given responsibility for oversight of their welfare.

TRANSPORTATION

- GBGB will continue to promote uptake of the existing grant to provide air-conditioning in all of their vehicles as soon as possible and before the alreadyestablished 1st April 2023 deadline.
- GBGB will make provision of documentation relating to the legal transportation of a greyhound into Great Britain a condition of registration of Irish-bred greyhounds to race in Great Britain.
- GBGB will update its own requirements on transportation in line with alterations to national animal import requirements.
- GBGB Stipendiary Stewards will continue to routinely inspect vehicles involved in the transportation of greyhounds to tracks as part of the Hot Weather Policy and at tracks and trainers' kennels.
- Random inspections of vehicles will also be carried out by the new Regional Regulatory Veterinary Surgeons.

MANAGEMENT OF GREYHOUNDS AT TRACKS

- GBGB will review the requirements for racecourse kennels under the UKAS accreditation scheme and make recommendations for updates to reflect current scientific knowledge if appropriate.
- GBGB's Fireworks and Hot and Cold Weather Policies will continue to be reviewed annually before distribution to greyhound trainers and kennel hands, racecourse promoters, racing managers, track veterinary surgeons and track welfare officers.
- GBGB will continue to work with promoters to encourage sympathetic rescheduling of racing to avoid high-risk firework periods.
- GBGB will join with welfare charities in lobbying government to ban the sale of over-the-counter fireworks and ban the use of fireworks except for professionally organised displays.

MANAGEMENT OF GREYHOUNDS AT RESIDENTIAL KENNELS

• GBGB will continue to work with SCI to achieve UKAS accreditation for the inspection of residential kennels.

- GBGB will work with the Greyhound Forum to update PAS 251:2017 to bring it in line with Association of Dogs and Cats Homes (ADCH) standards.
- GBGB will work to maintain annual UKAS accreditation for the inspection of residential kennels.
- GBGB will undertake regular reviews of PAS 251:2017 to update it if/as necessary to ensure that it continues to reflect best current welfare practice in environment, husbandry and health.
- GBGB will work with the Greyhound Forum to keep abreast of any changes to the schedules and guidance of the Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018 when it is reviewed (scheduled for 2023) and to update the PAS 251:2017 as necessary against any such changes.
- Once UKAS accreditation for the inspection of residential kennels is achieved, GBGB will publish annually, in anonymised form, details of levels of compliance against PAS 251:2017 as assessed by the independent auditors.
- GBGB will provide training programmes and encourage the use of the AWAG to promote welfare-focused practice by all those responsible for greyhounds in residential kennels (Chapter 2).

MANAGEMENT OF GREYHOUNDS AT SALES

- GBGB will review current practices, transportation and facilities at sales against welfare needs.
- GBGB will publish recommendations for best practice at greyhound sales.



RETIREMENT YEARS

GBGB is committed to the principle that, wherever possible, every greyhound should have a long, happy and healthy retirement. Successful homing upon retirement from racing (or if a greyhound has never entered racing) requires a greyhound to be suited to retirement in both physical and behavioural senses. A successful retirement for a greyhound is the product of cumulative effects in the greyhound's earlier life – hence the importance of the lifetime themes discussed in Chapter 1 and of the holistic approach to welfare on which this strategy is based. In 2020, GBGB launched the Greyhound Retirement Scheme, which, by the end of 2021, has made more than £1.8 million available to homing centres. Details are provided in Chapter 5.

GBGB will build on the successful Greyhound Retirement Scheme and the existing network of approved homing centres to:

- Continue to develop relations and support with owners, trainers, stadia and prospective homing centres who wish to become approved under the GRS.
- Continue and provide additional support of individual approved homing centres in the form of grants for welfare improvements.
- Engage with canine charities to understand the evidence arising from their existing programmes around behavioural modification and preparing greyhounds for the transition to a domestic environment.
- Work with charities with expertise in canine (particularly sighthound) behaviour to develop educational programmes for breeders, owners and trainers around preparing greyhounds for retirement (Chapter 2).
- Develop and deliver educational programmes for owners of retired greyhounds, for example, around nutrition and preventative healthcare (Chapter 2).
- Work with members of the Greyhound Forum to draw on their existing expertise and publications and collaborate with them to provide a 'welcome pack' for new owners of retired greyhounds which will be made available via all GBGB-approved homing centres.
- Facilitate an undergraduate research project based at the Royal Veterinary College and undertaken in collaboration with major homing charities which will investigate reasons for failure of homing processes (including greyhounds failing to find a home and being returned to homing centres) and make recommendations for methods of mitigation against those failures.
- Work to promote responsible homing of greyhounds to identify opportunities to maximise the number of greyhounds homed each year and reduce the cost burden on homing organisations.

- Provide free, long-term support for owners of retired greyhounds by developing and hosting an online portal containing information and signposting to appropriate advice.
- Develop and commission a programme of research aimed at identifying common health problems in greyhounds being presented for homing and investigating possible correlations with management in earlier life, e.g. nutrition and preventative healthcare.
- Work with the Greyhound Forum to establish a harmonised programme of behavioural assessments, where required, for greyhounds retiring from racing, to be undertaken by qualified canine behaviourists.
- Work with the Greyhound Forum to consider the development of a 'greyhound welfare roadshow' which would be used to disseminate information about homing and the physical and behavioural needs of retired greyhounds.
- Develop a set of standards to be applied specifically to the long-term kennelling of retired greyhounds who are 'retained' by their trainer or owner and kept at licenced premises.
- Work with the Greyhound Forum to annually review the standards of GBGB's GRS homing scheme against ADCH standards and update standards where necessary.
- GBGB will extend the GRS to cover British-bred puppies, bred for racing, that have never been registered/entered racing where the breeder makes their required contribution to the bond.
- GBGB will continue to oppose the export of greyhounds to jurisdictions where welfare standards cannot be verified. Where GBGB becomes aware that GBGB-licenced trainers or GBGB-registered owners may be involved in such activities, that will be investigated as a disciplinary matter.
- GBGB believes that all tracks, schooling tracks and greyhound trainers should be regulated to a standard equivalent to GBGB regulation. To prevent greyhounds exiting a GBGB-regulated environment with clear safeguards around environmental standards and inspection of trainer kennels from entering an unregulated environment in which such protections are not required and where welfare standards cannot be verified, GBGB will remove from the Retirement Form the option of a greyhound exiting GBGB-regulated racing to enter independent/ unregulated British racing.
- The Regional Regulatory Veterinary Surgeons will be specifically tasked with checking retired greyhounds who are retained by trainers in kennels and will be given responsibility for oversight of their welfare.

REPORTING OF RETIREMENT DATA

GBGB already gathers and publishes data about the number of greyhounds homed annually and where those greyhounds have been homed (e.g. with the owner or trainer, via a charity, or via private homing) (Chapter 5). The following actions have been identified to facilitate enhanced reporting around retirement destinations of greyhounds:

- GBGB will work with stakeholders to gather evidence around greyhounds who exit recording systems early in their lives (Chapters 2 and 3).
- GBGB will review whether the current 'green' retirement form system could be refined to further optimise welfare during retirement (Chapter 5) and to implement any such refinements where agreed.
- GBGB will streamline the process for 'releasing' a microchip from the GBGB database system for it to be registered with a pet microchip database when a greyhound exits racing.



CHAPTER 1: INTRODUCTION

CONTEXT

In recent years, there has been increasing public discourse in the UK and many other countries about the use of animals in competitive sport. The 'social licence' for such use has been challenged by some sectors of society. Such discourse relates not only to the use of dogs (greyhounds and sled dogs) but also to the competitive use of horses in horseracing and in a range of other equestrian sports including but not limited to eventing, dressage, showjumping, endurance and polo.

Discussions around the use of animals in sport have been engaged in by those interested in making both animal rights and animal welfare arguments, and the two have sometimes become confounded. They are in fact distinct. For those who hold a deontological, absolutist animal rights point of view in which animals have rights including the right not to have their freedom of behaviour interfered with and rights not to be harmed or killed, any human use of animals is ethically unacceptable because all such uses necessarily violate at least some of those rights. This applies equally well to the use of animals as companions (pets), food sources, in medical science and in competitive sport. Such an ethical point of view (which is of course philosophically valid and is respected as such by GBGB) can never permit the use of any animal in any sport or indeed any use of animals by humans. The majority of members of British society, however, do not currently hold such an absolutist point of view. Society and the law generally continue instead to allow the use of animals by humans including as pets, for food, for education and in medical science. What has shifted in recent years is that society as a whole has become much more aware of and concerned about how the welfare of animals being used for such permitted purposes is protected. Increasingly, society's preparedness to continue allowing the human use of animals is predicated on animal welfare (both physical and psychological) being appropriately safeguarded. This currently prevalent attitude is an animal welfarist as distinct from an animal rights point of view. It is consistent both with the continuation of animal sport and with the optimisation of welfare for the animals involved in it.

In equine sport, this societal shift in public attitudes towards human uses of animals has been reflected in a recent and very positive engagement between academia, industry and other stakeholders to establish a welfare-focused ethical framework for the use of horses in competitive sport. For example, research in this area has been initiated and funded by the equine charity World Horse Welfare, and there have been a series of related publications and conferences/seminars (for example, ^{3,4,5,6,7}). Similar interest in welfare-focused use of sporting animals has been shown in sled dog sport (for example, ⁸).

³ Campbell, M. L. H. (2021). 'An Ethical Framework for the Use of Horses in Competitive Sport: Theory and Function'. Animals (Basel) 11(6).

⁴ https://www.worldhorsewelfare.org/news/world-horse-welfare-funded-research-project-with-the-royal-veterinary-college-produces-ethicalframework-for-competitive-horse-sports Last accessed 3.2.22.

⁵ https://www.racingfoundation.co.uk/storage/app/media/uploaded-files/Horseracing%20Industry%20Conference%20Programme.pdf Last accessed 5.3.22.

⁶ Butler, D., Valenchon, M., Annan, R., Whay, H.R., Mullan, S. Living the 'Best Life' or 'One Size Fits All'—Stakeholder Perceptions of Racehorse Welfare. Animals 2019, 9, 134. https://doi.org/10.3390/ani9040134

⁷ https://ebevahosting.org/wp-content/uploads/2021/04/Accountability-for-Equine-Welfare-Programme.pdf Last accessed 5.3.22.

⁸ https://isdvma.org/wp-content/uploads/2021/04/MushPRIDE_-Guidelines-rev-4-1.pdf Last accessed 3.2.22

GBGB has long been committed to safeguarding greyhound welfare and thus engages fully with the swell of public interest in how (not whether) animals should be used in sport and in the application of evidencebased science to optimise animal welfare. We share the majority societal view that the use of animals in sport is ethically justified providing that welfare is appropriately protected. In this context, GBGB proactively decided in 2021 to build upon its 'Greyhound Commitment' (first published in 2018 and reviewed annually since then) and develop the overarching welfare strategy which is presented here. It is a strategy which deliberately challenges all stakeholders within the sport not only to face and address external criticisms but also to proactively recognise where welfare issues might or do occur and to act to resolve them. We have included in this strategy (and take very seriously) considerations of 'iceberg indicators'⁹ of greyhound welfare which are very much in the public eye – such as injury rates, euthanasia and the future of retired greyhounds. But this strategy also presents a much further-reaching, holistic consideration of greyhound welfare than is encapsulated by such iceberg indicators, by delving down into detail about aspects of a greyhound's life which may be far from the public consciousness but which are nonetheless at least as important in welfare terms.

The scope of this strategy extends well beyond both the welfare standards which GBGB as the regulator of licenced greyhound racing is required to deliver and the requirements made of GBGB by Defra in their most recent (2015/16) review of the sport¹⁰. GBGB is obliged to regulate only the period of a greyhound's life for which it is racing. However, we have chosen in this strategy to broaden our consideration of welfare to all stages of a greyhound's life. Furthermore, we have included in the work plans explained within this document not only matters relating to the physical and psychological domains of a greyhound's welfare but also programmes designed to ensure that all those who are responsible for safeguarding greyhound welfare understand their responsibilities and are suitably trained to deliver upon them.

OUR APPROACH

This strategy was initiated and has been developed by GBGB, led by Independent GBGB Director Professor Madeleine Campbell, who is an EBVS® European Veterinary Specialist and RCVS Specialist in Animal Welfare Science, Ethics and Law. In developing the strategy, GBGB has sought, received and listened to a wide range of views and comments on current and aspirational welfare through engagement with stakeholders from within and beyond the sport of greyhound racing. These have included canine welfare charities (members of the Greyhound Forum), academics, owners, breeders, trainers, promoters, stewards, veterinary surgeons and stakeholders in processes such as breeding, registration and retirement. We have reviewed the literature, and we have also, in order to identify opportunities for translation of best practice, engaged with the sport of horseracing and with international counterparts in greyhound sport.

In alignment with the decision of the Horse Welfare Board in the development of their 2020 strategic plan for the welfare of horses bred for racing¹¹, we have deliberately not attempted within this strategy to define welfare but have focused instead on actions designed to deliver outcomes which minimise negative and maximise positive welfare effects. To facilitate this, we have applied the widely accepted 'Five Domains' model of animal welfare originally expounded and subsequently developed by Mellor, Reid and coworkers^{2,3,12}. This model considers four physical domains (nutrition, behaviour, health and environment), each of which impact upon the fifth, psychological domain of an animal's experience (mental state). An animal's overall state of welfare depends upon impacts in all five domains, with positive as well as negative experiences contributing to an animal's wellbeing.

In using this model, we have conceptually divided a greyhound's life into three stages - early years (including breeding), 'racing years' (but also accounting for those greyhounds who for various reasons never race) and retirement. However, in making these conceptual divisions for the purposes of analysis, we are aware that what happens in one stage of a greyhound's life often impacts upon future stages - for example, how a greyhound is handled during the rearing and training processes can influence that greyhound's ability to be successfully homed upon retirement (Chapter 5). Throughout this strategy, we have woven and 'flagged up' such interdependence, and in Chapter 2, we present a number of overarching, 'lifetime themes' which apply across a greyhound's lifetime.

^o Farm Animal Welfare Council (2009). Farm animal welfare in Great Britain - past, present and future. London: 9. Available at: https://www.gov.uk/government/ publications/fawc-report-on-farm-animal-welfare-in-great-britain-past-present-andfuture Last accessed 3.2.22.

¹⁰ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/ attachment_data/file/553016/greyhound-racing-post-implementation-review.pdf. Last accessed 3.2.22.

¹¹ http://media.britishhorseracing.com/bha/Welfare/HWB/WELFARE_STRATEGY.pdf Last accessed 3.2.22.

¹² Mellor, D. J. and C. S. W. Reid (1994). Concepts of animal well-being and predicting the impact of procedures on experimental animals. Improving the Well-Being of Animals in the Research Environment. Glen Osmond, Australia, Australian and New Zealand Council for the Care of Animals in Research and Teaching: 3–18.

We have considered impacts upon the Five Domains across each of the three life stages which we have used (whilst also openly accepting comments and views from stakeholders who chose to frame them in a different manner). We have also adopted as principles underlying the development of this strategy the conditions recently proposed as requirements for the ethical use of horses in sport³, as follows: (a) minimisation of negative welfare effects and maximisation of positive welfare effects; (b) identification of and mitigation against avoidable, unnecessary risk; and (c) compliance with governing body regulations and the law. Principles (a) and (b) are applied and referred to throughout this strategy document. The relevance of principle (c) to greyhound welfare is briefly explained in the next section.

THE RELATIONSHIP BETWEEN WELFARE AND REGULATION

It has become clear in gathering views and information to inform this strategy that there exists a very genuine enthusiasm within the sport for improving and optimising greyhound welfare. As will be apparent to the reader of this strategy document, delivering optimal greyhound welfare depends upon a commitment to shared responsibility for it (Chapter 2). Part of that responsibility involves ensuring that those who fail to deliver expected welfare standards for the greyhounds under their care are held appropriately and properly to account. GBGB recognises that regular review of its regulatory aims and processes is an important part of ensuring that welfare (as well as sporting integrity and the future prosperity of the sport) is safeguarded. GBGB has recently (2021) appointed a new Director of Regulation who is accordingly currently conducting a review of the following:

- 1. The process for handling potential offences under the Animal Welfare Act (2006) and cooperation with external agencies.
- 2. The process of imposing and enforcing improvement notices.
- 3. Sanctions for breaches of the Rules of Racing, including the need for increased deterrent sanctions, maximum sanctions and sanctions of repeat offenders.

Depending on the outcomes of those reviews, the Director of Regulation may prepare policies or recommendations for rule changes for consideration by the Greyhound Regulatory Board.

GBGB has a robust antidoping policy that is regularly reviewed by the Doping and Medication Review Panel, reporting to the Greyhound Regulatory Board. The panel has amongst its members independent antidoping specialists and representatives from the LGC Laboratory. To aid the reader of this document, a summary of legislation relevant to greyhound welfare is provided in Appendix 1.

WIDER WELFARE CONSIDERATIONS

This strategy focuses on the welfare of greyhounds bred for racing. We are also cognisant, however, of the welfare needs of the humans associated with greyhounds. Within the sport, many people work long, unsociable hours in sometimes inclement weather. To deliver good welfare for greyhounds, the people responsible for their care need support. We have incorporated within this programme the development of training programmes (Chapter 2) which will enhance CPD for those working within the sport of greyhound racing and will provide them with clearer pathways for career progression through the development of recognised and transferrable skills. The sport of greyhound racing is also committed to the principles of equality, diversity and inclusion and to widening participation in the sport. That commitment will be reflected in one of the directors of the GBGB main board assuming specific responsibility for this area. GBGB will also partner with local communities, local stakeholders and external organisations and individuals experienced in equality, diversity, inclusion and widening participation to relaunch the existing apprenticeship scheme and increase access to roles within the sport, supported by educational opportunities (Chapter 2). Through the work of the GBGB Governance Working Group and its recommendations to the GBGB main board, GBGB is currently working also to provide further support for the roles of practitioner representative directors, to enhance the representation of owner, trainer and breeder groups in decision-making within the sport and in sharing responsibility for greyhound welfare (Chapter 2).

Finally, given that greyhound sport provides a medium for betting and against the context of societal concern about adverse welfare effects on people who become addicted to gambling, GBGB will continue to work with bookmaker stakeholders in the sport, with charities and with the government to support programmes promoting responsible gambling.

AIMS AND OBJECTIVE OF THE STRATEGY

Professor Christopher Wathes, writing in 2010, expounded his vision for animals having lives the experience of which involved more than simply the minimisation of negative welfare effects but also incorporated a high ratio of positive impacts which resulted in animals having 'good lives' overall¹³. This theme was also developed by Professor David Mellor¹⁴. Importantly, the work of both Wathes and Mellor

recognised that a 'good life' is not one in which there is a complete absence of negative welfare effects but rather one in which negative effects are outweighed across the animal's lifetime by positive effects, resulting in an overall positive welfare experience. Intuitively, as humans, we can recognise that a life with a complete absence of negative effects is impossible and that a life 'as free as possible from' negative effects (as described by Mellor¹²) is a much more realistic ambition. Indeed, as Mellor¹² points out, temporary negative effects sometimes have a lasting positive impact – thus, one feels thirsty (a negative experience) and drinks, with the positive consequence that one does not become clinically dehydrated. Mellor's 'as free as possible from negative effects' approach to animal welfare is incorporated throughout this strategy. GBGB recognises that animal sport, like human sport, necessarily exposes athletes to some risks of injury. We also recognise that, without careful management informed by an up-to-date evidence base, the daily routines of athletes can expose them to other physical and psychological stresses. The aims of this strategy are - through the programmes which are outlined in the following chapters and which will be constantly reviewed against new evidence as it becomes available -

- (i) To minimise potentially negative welfare effects and maximise positive welfare effects in all Five Domains, across a greyhound's lifetime.
- (ii) To identify and mitigate preventable, avoidable injuries.

Through fulfilling these aims, we will fulfil the **overarching objective** of the strategy, which is to provide at least 'A Good Life for Every Greyhound', in which each greyhound's overall welfare experience across its lifetime is a substantially positive one.

STRUCTURE OF THIS STRATEGY DOCUMENT

Based on GBGB's analysis of greyhound welfare using the approach described above, the remainder of this document is presented as follows: in Chapter 2, we discuss 'lifetime themes', i.e. those aspects of welfare which span all phases of a greyhound's life. In subsequent chapters, we discuss welfare issues relating to breeding and the early years (Chapter 3), racing years (Chapter 4) and retirement years (Chapter 5) of a greyhound's life. Finally, in Chapter 6 we outline a timetable for the work proposed in this strategy and explain how delivery of that work will be organised and reported upon. For each section in the chapters which follow, we have presented some background information, work undertaken by GBGB in that area prior to this strategy ('prior work'), actions which have already been initiated within this strategy and actions which will be undertaken within this strategy. Time frames for actions are identified as short (up to 18 months), medium (18 months–3 years) and long term (3–5 years).

Appendix 1 provides a summary of current British legislation relevant to greyhound welfare.

Appendix 2 provides a reference list of existing GBGB research relevant to this strategy.

Appendix 3 provides a summary of research projects proposed within this strategy.

BUDGET

A strategy as ambitious as this one necessarily requires appropriate funding through the British Greyhound Racing Fund (BGRF) Voluntary Levy. Within each of the chapters which follow, we have identified 'prior work', actions which have already been initiated within this strategy, and actions which will be undertaken within this strategy. We have also identified which of those actions are covered by existing budgetary arrangements ('current funding') and which require additional funding through the voluntary levy. This is summarised in Table 1 of Chapter 6.

ENGAGEMENT TO DELIVER THIS STRATEGY

Throughout this strategy document, we have identified where engagement with various stakeholders within the sport will play an important role in delivering the strategy's aims, and how that will be facilitated. GBGB also decided to seek and incorporate into this strategy engagement with external partners to maximise impact through making use of recognised expertise in animal welfare, behaviour and veterinary science. Ways in which this will be done are detailed throughout the following chapters.

¹³ Wathes, C. (2010). 'Lives worth living?' Veterinary Rec **166**(15): 468–469.

¹⁴ Mellor, D. J. (2016). 'Updating animal welfare thinking: Moving beyond the "Five Freedoms" towards "A life Worth Living". Animals 6(21).

CHAPTER 2: LIFETIME THEMES

In listening to stakeholder views and comments and reviewing the literature whilst preparing this strategy, some overarching welfare themes have emerged which apply throughout the strategy and across a greyhound's lifetime. These are presented in this section and then cross-referenced in the chapters which follow relating to each stage of a greyhound's life.

SHARED RESPONSIBILITY

BACKGROUND

An overarching theme which is central to this strategy is one of shared responsibility. The 'person responsible' for a greyhound is identified in law through the Animal Welfare Act (2006). GBGB believes that the welfare of greyhounds is the moral responsibility of everyone involved with the sport, whether acting in an individual capacity or as a member of a body such as a business, committee or organisation. This applies across all stages of the lifetime of a greyhound bred for racing - from breeding through 'early years', 'racing years', and retirement. Throughout this strategy, we detail areas where specific responsibilities upon particular members of the greyhound community apply. Below, we explain how lines of communication between GBGB and trainers will be used to foster a culture of shared responsibility via Stipendiary Stewards and Regional Regulatory Veterinary Surgeons providing regular trackside updates on welfare and regulatory matters. In the final chapter, we explain how responsibility for delivery of the work proposed in this strategy will be organised and how impact will be reported to external stakeholders, including (via the Greyhound Forum) charities who also share in the responsibility for greyhound welfare.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• Through training programmes and improved communication between GBGB and stakeholders (see below) GBGB will ensure that everyone involved in greyhound sport understands that welfare is their responsibility and is suitably trained to fulfil that responsibility.

LIMITATIONS OF JURISDICTION IN RELATION TO RESPONSIBILITY

BACKGROUND

The limitation of GBGB's jurisdiction to Great Britain and to activities relating to GBGB regulated (as opposed to unregulated) greyhound racing within Great Britain necessarily constrains the sphere in which we are able to act on welfare matters. This is discussed in the section about international collaboration below in relation to the Republic of Ireland and Northern Ireland, and in the section on traceability in relation to unregulated greyhound racing in Great Britain. Some of the information supplied to us whilst developing this strategy relates to welfare concerns around greyhounds not within GBGB-regulated greyhound racing and/ or not within Great Britain. As explained in the section on international collaboration, even where GBGB has no formal responsibility or power to act, we seek to inform and influence welfare matters on an international basis through leadership and collaboration (and

also ourselves to learn from others). Nonetheless, responsibility for enforcing certain aspects of welfare rests with other agencies (such as local authorities, the police/Crown Prosecution Service (CPS) and governmental agencies), for example, prosecutions under the Animal Welfare Act (2006) or proceedings relating to the illegal export of greyhounds.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• GBGB has worked and will continue to work closely with local authority, external agency or governmental bodies to share responsibility for greyhound welfare in line with legal and practical requirements to do so.

EDUCATION

BACKGROUND

In the course of preparing this strategy, we received from a trainer replying to the question 'If you had a pot of money to spend on welfare what would you spend it on?' the answer: 'Knowledge'. The GBGB is encouraged by such enthusiasm. We strongly believe that in order for the theme of shared responsibility for greyhound welfare to be delivered upon, all those involved with the care of greyhounds need to be adequately educated and informed about what constitutes good welfare, how to identify and mitigate against negative welfare impacts and promote positive impacts, how to monitor welfare, and also about current best practice relating to their particular role within the sport. Practical training is as important as theoretical training, and careful consideration will be given to the learning needs of different stakeholders and to how education may be best delivered using a range of modalities to maximise impact.

Details of the programmes are provided below. Delivery will be via internal and external experts skilled in the provision of CPD. Also, importantly, we will include facilitated opportunities for those undertaking particular roles to share experiences, opinions and examples of practice – a collaborative approach which some stakeholders who fed into this strategy felt is needed and currently lacking and which will reinforce the theme of shared responsibility. Through such a collaborative, knowledge-sharing approach GBGB aims to maximise engagement with training programmes, the content of which will be developed with stakeholders in each of the groups mentioned below. Oversight of educational programmes will be the responsibility of the newly appointed Executive Veterinarian (Chapters 1 and 6), working closely with Professor Madeleine Campbell (Independent GBGB Board Member and experienced educator).

PRIOR WORK

• Since 2018, GBGB has been running an apprenticeship scheme providing training in animal care and welfare.

This scheme was developed in collaboration with several prominent animal welfare organisations. It is delivered by an independent training provider.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• Through this strategy, we will relaunch this apprenticeship scheme and will significantly expand educational opportunities to facilitate knowledge transfer, practical skill acquisition and certification/ qualifications where appropriate for all stakeholders within the sport.

TRAINING THE TRAINERS

BACKGROUND

The principle of 'training the trainers' has long been established in the equestrian world (see, for example, www.ttttrust.com). In the greyhound world, entry into a trainer's role has traditionally come via either time spent as a kennelhand and promotion, or the existing involvement of a family member as a trainer being passed on. There is a current requirement for prospective trainers to have two years' experience as a senior kennelhand before they may apply for a training licence themselves. GBGB acknowledges trainers' existing expertise and knowledge. However, it is also true there are currently neither requirements for nor many opportunities for trainers to undertake welfare-specific CPD, nor mechanisms for trainers to formally discuss and share best practice with each other. GBGB intends to address that deficit in the following ways, in a manner which enhances career pathways for kennelhands and trainers through equipping them with transferrable skills and enabling them to prove (through certification) that they have received training in the various areas specified.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• A programme of Stipendiary Stewards and Regional Regulatory Veterinary Surgeons providing brief regular updates on welfare matters for trainers and kennelhands at each track will be instigated.

These updates will enhance communication between 'The regulator and the regulated'. They will provide an easily accessible method of trainers and their assistants staying abreast of current scientific developments and policies relating to welfare. Simultaneously, such sessions will enable trainers to easily 'flag up' to Stipendiary Stewards any areas of welfare concern to them. The delivery of this programme will be supported via the provision of educational opportunities for Stipendiary Stewards (see below) including, for example in communication methods. The logistics of delivering such updates will be agreed at a local level by the Stipendiary Steward and trainers, with oversight from the Trainers' Representative on the GBGB Board and the Executive Veterinarian managing implementation of this welfare strategy (see Chapter 6).

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

 Knowledge-sharing workshops for trainers and kennelhands will be developed and delivered in collaboration with external experts from academia, veterinary medicine and industry.

Subjects will include (1) nutrition; (2) detection of early injuries/gait abnormalities and when to seek veterinary assistance; (3) physiotherapy; (4) general greyhound husbandry; (5) behaviour, with a particular focus on optimising a greyhound's chance of successful homing at the end of its racing carrier; and (6) basic track safety and maintenance principles. As part of this programme, trainers will receive training on how to fulfil their responsibility for ensuring that each kennelhand undergoes appropriate training once they are licenced.

• GBGB will produce an online training module in greyhound welfare for kennelhands, the completion of which will become a condition of being licenced.

Medium term

- Attendance at specified knowledge-sharing courses (for example, on nutrition and husbandry) will become a prerequisite for application to hold and renew a trainer's licence.
- Annual 'refresher welfare workshops for trainers' will be developed. Biennial certified attendance at those will become a necessary part of demonstrating competence and a mandatory requirement of holding a training licence.

The trainers' representative on the GBGB Board will input into designing the content, structure and delivery of knowledge-sharing opportunities for trainers. Such advice will be informed by feed-in from trainers suggesting which areas of knowledge they would like to see included in the programme and how it might be most effectively delivered (including options for face-to-face and remote/recorded delivery). The trainers' representative on the GBGB Board will also be important in encouraging and promoting uptake of such opportunities by trainers and trainers' assistants.

VETERINARY CONTINUING PROFESSIONAL DEVELOPMENT (CPD)

BACKGROUND

Matters of veterinary provision are dealt with primarily within the 'Racing years' section of this report (Chapter 4) and additionally interspersed throughout other chapters. Here, we focus on training and knowledge-sharing.

The training and induction of GBGB-licenced veterinary surgeons are currently directed on a track-by-track basis by the lead veterinary surgeon at each track. GBGB recognises the need to continue enhancing the central role played by veterinarians in safeguarding greyhound welfare originally identified in the Donoughue Report¹⁵. Within this strategy, GBGB, in collaboration with external partners where appropriate, will therefore develop and provide centralised clinical veterinary CPD as explained below:

Prior work

- GBGB already provides for GBGB-licenced veterinary surgeons a document entitled 'Duties of a Track Veterinary Surgeon', which details the specific duties of a track veterinary surgeon set against the relevant Rule of Racing or where applicable the Animal Welfare Act (2006).
- GBGB also provides licenced veterinary surgeons with a 'Resource Folder' which includes advice and guidance on a wide range of issues such as blood sampling, microchipping, how to manage a sudden death etc.

These documents are available through the online GBGB Veterinary Surgeons' Portal and should be available in each veterinary surgeon room at each stadium as a hard copy. These documents will be regularly reviewed.

¹⁵ Donoughue, B. (2007) Review into the Regulation of Greyhound Racing. London. Horseracing Levy Board.



ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• Training on prerace assessments including standardised clinical examinations and 'trot ups' (Chapter 4).

The delivery of this programme will be led by GBGB Veterinary Director Dr Simon Gower.

• CPD on trackside first aid, including a focus stabilisation of injured greyhounds for transportation to optimise chances of successful treatment via referral.

The delivery of this programme will be led by accredited external CPD providers through the School of Veterinary Medicine and Science, Nottingham University.

• CPD 'refresher courses for track veterinary surgeons'.

These will take the form of (a) annual online theoretical refreshers focused on updating best practice with reference to scientific advances and (b) practical training to update clinical skills every three years. The delivery of this programme will be led by accredited external CPD providers through the School of Veterinary Medicine and Science, Nottingham University.

• CPD courses for Regional Regulatory Veterinary Surgeons

These will be provided by GBGB led by the Director of Regulation, the Executive Veterinarian, and the Veterinary Director.

Medium term

• Regular attendance at the CPD refresher courses will become a requirement of working as a track veterinary surgeon and Regional Regulatory Veterinary Surgeon.

This is similar to the model used by the British Equine Veterinary Association (BEVA) for veterinary surgeons wishing to be maintained of the BEVA Artificial Insemination List¹⁶.

¹⁶ https://www.beva.org.uk/Guidance-and-Resources/Stud-Medicine/AI-List. Last accessed 3.2.22. • A rolling provision of clinical CPD for licenced greyhound veterinary surgeons and Regional Regulatory Veterinary Surgeons focused on evidence-based best trackside practice informed by current veterinary science will become an integral part of the sport.

In the provision of all the veterinary CPD opportunities described above, GBGB will work closely with relevant veterinary organisations.

TRAINING FOR STIPENDIARY STEWARDS

BACKGROUND

New stipendiary stewards undergo a UKAS-approved full induction programme, and their completion of this training is recorded. Existing stipendiary stewards are provided with internal training seminars, for example around amendments to rules or the inspection process.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

 GBGB will work with Supply Chain Insights (SCI) to design and deliver a joint training programme for auditors of UKAS inspection schemes (Chapter 4) and Stipendiary Stewards.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• In addition to the continuation of existing training programmes, communication training will be provided for Stipendiary Stewards.

This will enable Stipendiary Stewards to engage more effectively in welfare knowledge-sharing with trainers and owners (see above and below).

Medium term

 Once the Animal Welfare Assessment Grid (AWAG) for greyhounds has been developed (see below), Stipendiary Stewards will be provided with training in how to use that tool.

This will facilitate use of the AWAG during kennel inspections and to build an evidence base about individual greyhounds' welfare over time.

EDUCATION AND KNOWLEDGE TRANSFER FOR OWNERS OF GREYHOUNDS

BACKGROUND

GBGB believes that owners' voices and expertise are important within the sport and that owners play a pivotal role in safeguarding and promoting good greyhound welfare. Under the Animal Welfare Act (2006), the person who owns an animal is always regarded as being responsible for it.

ACTIONS

Actions already initiated within this strategy.

• GBGB is currently reviewing the role of the owners' representative on the GBGB Board and considering ways in which that might be enhanced and supported to increase its effectiveness.

The following programmes have been developed and will be implemented against this background of understanding within GBGB about the important role which owners play in greyhound welfare and the need to support owners in understanding and accepting their responsibilities.

(i) Owners of racing greyhounds

BACKGROUND

GBGB is very conscious of the pivotal role which owners play within the sport of greyhound racing and in safeguarding welfare. One example of the way in which owner responsibility for greyhound welfare is executed is via the operation of the GRS to which owners are required to contribute (Chapter 5).

ACTIONS

GBGB will further facilitate effective adoption of responsibility by owners through providing opportunities for education and knowledge-sharing as follows:

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

- A 'welcome pack' for owners will be developed by GBGB, which will set out owners' legal, GBGB and moral responsibilities in terms of greyhound welfare, and will point owners to sources of support and information.
- In collaboration with external experts where appropriate, GBGB will develop and deliver knowledge-sharing workshops for owners of racing greyhounds.

Subjects will include nutrition, preventative healthcare and preparing a greyhound for the transition to retirement. The owners' representative on the GBGB Board will play an integral part in providing inputs to the design and content, structure and delivery of knowledge-transfer opportunities for owners. Such advice will be informed by feed-in from owners suggesting which areas of knowledge they would like to see included in the programme and how it might be most effectively delivered (including options for face-to-face and remote/recorded delivery). The owners' representative will also play an important role in encouraging and promoting uptake of such opportunities by owners.

Medium term

• In collaboration with external experts where appropriate, GBGB will develop an ongoing welfarefocused knowledge-sharing programme for owners of racing greyhounds.

This will include cross-linking with other programmes described in this strategy, e.g. programmes for breeders and discussions around sourcing racing greyhounds responsibly.

(ii) Owners of retired greyhounds

BACKGROUND

Work around welfare issues related to retirement is detailed elsewhere in this strategy (Chapter 5). We concentrate here on knowledge-sharing programmes for owners of retired greyhounds. Further detail is also provided in Chapter 5.

ACTIONS

GBGB will work with the Greyhound Forum, approved homing partners and 'greyhound ambassadors' to (i) provide knowledge-sharing opportunities for people taking on ownership of retired greyhounds and (ii) encourage involvement of racing owners and trainers in the education of potential owners of retired greyhounds and in actively promoting responsible homing process.

Prior work

Many of the canine charities that are members of the Greyhound Forum are very active in educating potential and actual owners of retired greyhounds. GBGB is grateful to those organisations for their suggestions around the development of this part of the strategy.

ACTIONS

Short term

Actions which will be undertaken within this strategy for which additional funding is needed.

• GBGB will work in collaboration with external experts where appropriate to organise and deliver knowledgesharing workshops for owners of retired greyhounds. Subjects will include training in areas such as nutrition, managing the transition from kennel to home life, basic preventative healthcare (e.g. dental care, parasite control, how to deal with separation anxiety and the implication of a greyhound's lean fat reserves for temperature regulation across seasons).

 GBGB will work with members of the Greyhound Forum to provide a 'welcome pack' for new owners of retired greyhounds which will be available via all GBGB homing centres.

Details are provided in Chapter 5. The pack will include information, for example, on legal and moral responsibilities of ownership, basic healthcare and behavioural needs and sources of support and information.

Medium term

• GBGB will work with the Greyhound Forum to consider the development of a 'greyhound welfare roadshow'.

This would be used to disseminate information about homing and the physical and behavioural needs of retired greyhounds and about greyhound welfare more generally. This might be delivered, for example, in conjunction with existing attendance at county shows and similar events by homing charities.

EDUCATION AND KNOWLEDGE-SHARING FOR BREEDERS OF GREYHOUNDS

BACKGROUND

New welfare programmes being developed under this strategy relating to the breeding of greyhounds are specified under the 'Early years' section (Chapter 3). Here, we focus on education and knowledge-sharing. Greyhound breeding is one of the areas in which there is a general lack of evidence about current practice to inform training and research. GBGB will be working with the Greyhound Studbook (GSB), the Greyhound Forum and with external stakeholders to correct these deficits (Chapter 3).

GBGB is very aware of the lasting impact which practices around breeding have on welfare (see the section on 'long-lasting soundness and health' below) and also aware that a considerable volume of greyhound breeding currently takes place outside GBGB's scope of regulation, in the Republic of Ireland or Northern Ireland.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• In collaboration with external experts where appropriate, GBGB will develop and deliver welfare knowledge-sharing workshops for breeders of racing greyhounds.

Subjects will include, for example, nutrition (see below), the impact of exercise regimes during early life on longlasting soundness and health, genetics (Chapter 3) and husbandry. The breeders' representative on the GBGB Board (Chapter 3) will play an integral part in advising upon and designing the content, structure and delivery of knowledge-transfer opportunities for owners. Such advice will be informed by feed-in from breeders suggesting which areas of knowledge they would like to see included in the programme and how it might be most effectively delivered (including options for face-to-face and remote/ recorded delivery). The breeders' representative will also be important in encouraging and promoting uptake of such opportunities by breeders.

This will include promotion of and encouragement to use the Assured Breeders Scheme (Chapter 3).

 In collaboration with external experts including academics and veterinary specialists in canine reproduction where appropriate, GBGB will develop and facilitate knowledge-sharing workshops around current practices for breeders of racing greyhounds.

These workshops will be used to establish what current practices are and where there is a lack of evidence about the welfare impacts of common breeding practice. Outputs of these breeder workshops around current practice will be used to inform datagathering programmes (see 'AWAG' below) and recommendations for future research.

Medium term

- GBGB will aim to work with equivalent organisations in the Republic of Ireland and Northern Ireland to promote education and knowledge transfer for breeders across jurisdictions (see 'International collaboration' below).
- GBGB will aim to collaborate with colleagues in the Republic of Ireland and Northern Ireland to facilitate harmonisation and international elevation of welfare standards for greyhounds (see 'International collaboration' below).

EDUCATION AND KNOWLEDGE TRANSFER FOR TRACK MAINTENANCE STAFF

BACKGROUND

Optimal track maintenance is a key component of injury prevention (Chapter 4). Standardised, certified training for track maintenance staff is a necessary prerequisite for good track maintenance.

ACTIONS

Actions already initiated within this strategy

• GBGB's Track Liaison Officer and the GBGB Track Sub-Committee will develop and deliver workshops for those responsible for track maintenance. These will focus on encouraging uptake of services which GBGB currently makes available to these stakeholders, e.g. sand testing and on-track setup criteria. This programme was previously in development, but the COVID pandemic prevented delivery.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

- GBGB's Track Liaison Officer (Chapter 4) and the GBGB Track Sub-Committee will produce an online video version of the track maintenance manual and reference resource materials.
- GBGB's Track Liaison Officer and the GBGB Track Sub-Committee will develop a knowledge base to allow those responsible for track maintenance to readily access best practice, guidance and support with the intention of improving consistency of delivery across all GBGB-licenced racetracks.
- The increased frequency of STRI visits to tracks (Chapter 4) also provides enhanced opportunity for knowledge -sharing around track maintenance and preparation.

Medium term

• GBGB's Track Liaison Officer (Chapter 4) will work with external providers of vocational education to develop and deliver an educational programme for those responsible for track maintenance.

The aims of this programme are (a) to improve welfare through enhancing knowledge and promoting best practice and (b) to equip those working in greyhound track maintenance with transferrable, certified skills. The programme will incorporate collaborative sharing of best practice and education around recent scientific developments and evidence. Consideration will be



given to the method(s) in which this programme might be best delivered – face-to-face and online elements are likely to be incorporated.

EDUCATION AND KNOWLEDGE TRANSFER FOR OTHER TRACK STAFF

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB's Track Liaison Officer (Chapter 4) and the WVSC will work to develop and deliver an ongoing educational programme for those responsible for working around greyhounds at tracks.

This training will be delivered to stakeholders including starters and parade and local officials to ensure that best practice is understood and followed, for example, whilst loading greyhounds into starting traps.

EVIDENCE AND NEED FOR RESEARCH

BACKGROUND

GBGB aims always to make evidence-based decisions about welfare. Since GBGB was formed in 2009, we have commissioned and supported/ participated in a wide range of research in areas including medication, disease control, antidoping measures, track safety, inheritance, dental hygiene, medication and nutrition (https://www.gbgb.org.uk/welfare-care/researchguidance/). Details of publications arising from this research activity are provided in Appendix 2, whilst a summary of research proposed within this strategy is provided in Appendix 3. The WVSC in particular has in recent months focused on understanding the pyramid of evidence types¹⁷ and on prioritising the use of scientific evidence where it is available whilst also considering other types of evidence which have been shown to have value in policymaking¹⁸. We are grateful to academic colleagues who have helped us to identify the literature on greyhound welfare and in some cases have been kind enough to share with us other materials such as reports. Such evidence we have used to inform this strategy, along with other types of evidence to which we have access (for example, injury data) and evidence offered to us by nonacademic stakeholders (including anecdotal evidence).

However, it is clear that in matters of greyhound welfare, an evidence base for decision-making is often lacking. This is highlighted throughout the sections below in relation to particular issues. This apparent lack of an evidence base for decision-making around welfare policy underwrites the proposals for data gathering and publication (below and Chapter 4) and for research incorporated within this strategy.

ACTIONS

Actions already initiated within this strategy.

Short term

• Some data-gathering programmes and research projects have already begun or are scheduled to begin within the next 12 months, supported by internal funding. These are detailed in the following chapters.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short and medium term

• GBGB will engage with expert independent academic partners to design, deliver and analyse data-gathering and research programmes – such partnerships are detailed in the sections below (some in this chapter, some in following chapters). Details of a research programme to gather and analyse data about inbreeding and possible correlations with predisposition to injury are described in Chapter 3, and details of research into the causes and early detection of injury are in Chapter 4.

INTERNATIONAL COLLABORATION

BACKGROUND

GBGB only regulates licenced greyhound racing within Great Britain. However, collaboration between international greyhound authorities and particularly between the Republic of Ireland, Northern Ireland and Great Britain¹⁵ is an important aspect of safeguarding welfare. GBGB is keen both to learn from the experience of international counterparts in relation to best practice surrounding greyhound welfare and to maximise the impact of the work within this welfare strategy in international as well as national terms.

Part of the impetus behind the development of this programme of international collaboration within this welfare strategy comes from the particular relationship between the sport of greyhound racing in Great Britain and the equivalent sport and the breeding/rearing sector in the Republic of Ireland and Northern Ireland. GBGB is keen to foster collaborations on welfare with Irish counterparts, as we are with all involved in greyhound sport internationally. Nonetheless, the link between licenced British greyhound racing for which GBGB has regulatory responsibility and the greyhound industry in the Republic of Ireland and Northern Ireland over which GBGB has neither regulatory jurisdiction nor any control can sometimes be problematic for GBGB.

Prior work

- A meeting hosted by GBGB in July 2019 brought together the main greyhound international racing regulators with a view to developing, harmonising and integrating scientific research, technical standards and procedures to support and reinforce doping standards internationally.
- Since then, the development of international thresholds, screening, and residue limits for therapeutic treatments has been established, as well as a guide to withdrawal times for veterinary and practitioners.
- Shared research and administration studies have not only reduced costs between regulators but have also developed knowledge, credibility and laboratory methodology in each jurisdiction.
- GBGB has established an international regulators' information portal which provides a wealth of knowledge on both technical and regulatory considerations and has helped and continues to help develop a more harmonised, consistent and stronger set of antidoping policies for greyhound racing worldwide.

¹⁷ Holmes, M. A. (2009). 'Philosophical foundations of evidence-based medicine for veterinary clinicians'. J Am Veterinary Med Assoc 235(9): 1035–1039.

¹⁸ Bowen, S. and A. Zwi (2005). 'Pathways to 'Evidence-Informed' Policy and Practice: A Framework for Action'. PLoS Medicine 2: e166.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

- GBGB will build on the success of their initiative to internationally harmonise doping and medication control to internationally harmonise core welfare values and procedures.
- GBGB will work with international regulators to co-operate and pool research and knowledge on welfare standards and practices.

The sharing of research, intelligence, policies and procedures within key functions such as injury detection; track design, preparation and management; breeding; exports; animal husbandry; homing; diet and nutrition are all areas where such international collaboration will help establish and drive policy and standards across greyhound racing.

 In 2022, an inaugural meeting of international greyhound regulators (with invitees including Greyhounds Australasia, Greyhound Racing Victoria, Irish Coursing Club, Greyhound Racing Ireland, Greyhound Racing New Zealand and the Hungary Racing Club) will be hosted by GBGB.

The aim of the meeting is to establish the foundations for collaborative thinking on current and future welfare strategies for the benefit of greyhounds globally.

Medium term

• The international regulators' information portal will be expanded to share welfare-related research studies and educational materials.

This will include results from studies described within this strategy and will cover subjects such as common injuries, trainer education, diet and supplements, injury detection, veterinary training, hydration and enrichment.

Long term

• GBGB will lead an effort by international greyhound regulators to together develop harmonised welfare policies and strategies.

Actions which will be undertaken within this strategy for which additional funding is needed.

• GBGB will aim to work specifically with Irish counterparts to promote equivalent high welfare standards across borders.

For example, GBGB will aim to work with Irish counterparts to encourage use in the Republic of Ireland and Northern Ireland of an 'assured breeders scheme' similar to that which GBGB will be promoting (Chapter 3) and to establish a harmonised Code of Practice for greyhound breeders. To maximise impact in this area, GBGB will be consulting with Professor Alison Hanlon (University College Dublin) on how the methods which she has employed for stakeholder engagement around welfare in horse racing sport in Ireland might be applicable to the sport of greyhound racing.

In parallel with this international collaboration, GBGB will also be taking direct unilateral steps to promote breeding and rearing of greyhounds within the UK (where GBGB is and will be able to monitor welfare standards as described in Chapter 2) and to encourage owners and trainers to acquire puppies from reputable British breeders and rearers with high welfare standards.

Programmes enabling this include development of the Assured Breeders Scheme (Chapter 3), maintenance and further development of races and awards for British-bred greyhounds (Chapter 4) and education for owners about welfare responsibilities and obligations when sourcing racing greyhounds (Chapter 2).

MONITORING OF WELFARE – THE ANIMAL WELFARE ASSESSMENT GRID

BACKGROUND

To facilitate shared responsibility for greyhound welfare, promote proactive consideration of negative and positive welfare impacts by those responsible for greyhound welfare (Chapter 4) and increase knowledge-sharing and data collection, a more developed system of monitoring greyhound welfare is required.

ACTIONS

Actions already initiated within this strategy.

- GBGB has partnered with Professor Sarah Wolfensohn and her team at Surrey University and commissioned the development of a greyhoundspecific Animal Welfare Assessment Grid (AWAG).
- GBGB is already working with Professor Wolfensohn's team and the associated IT team to develop a bespoke AWAG within which the appropriate assessment factors are being specified to make the tool specific to greyhound welfare.

The AWAG¹⁹ is a web-based software application designed for capturing, storing and visualising animal welfare assessment data. It is an easy-to-use tool which facilitates measurement of an animal's level of welfare using 'cumulative lifetime experience'^{20,21}. The AWAG was originally developed to be applied to animals being used in science but has subsequently been adapted for use in other species^{22,23}, most recently dogs (https://awag.org.uk/about). The way in which the AWAG works is described by Ryan et al (2021)¹⁹. Briefly, the AWAG measures impacts in four parameter areas based on the Five Domains model of welfare: physical, behavioural/psychological, environmental and procedural. Various factors are specified for assessment within each of those areas. Importantly, the design of the AWAG and its associated software enable tracking of these impacts on individual animals across time through scoring each factor and then averaging those factor scores to give a score for each of the four parameter areas. The parameter scores are then plotted on a cruciform grid, and the area of the grid is calculated to give an objective score of the animal's welfare state at that point in time, known as the Cumulative Welfare Assessment Score (CWAS). 'The CWAS scores for each lifetime event' (including, for example, any veterinary procedures, and any contingent events such as transport or injury) 'can then be plotted on a graph to show an animal's welfare over a lifetime'¹⁹. The visual outputs generated by inputting factor scores into the grid enable users to readily identify changes in an animal's welfare status, and the information recorded behind those outputs enables the user to 'drill down' to identify individual factors which are responsible for a change in status. This provides a method of identifying both negative impacts (for example, prolonged transportation) which can be mitigated against and positive impacts (for example, behavioural enrichment) which can be promoted. It also enables users to assess whether a greyhound's overall welfare status at any point in time and across time is positive. Thus, the greyhound-specific AWAG relates directly to the concept of a 'good life' in which positive welfare experiences outweigh negative experiences, as described in Chapter 1.

Use of the AWAG will enable all those caring for greyhounds, through regular and objective monitoring, to assess and adjust management in order to deliver 'good lives'. The act of routinely so doing will promote

¹⁹ https://awag.org.uk/about Last accessed 3.2.22.

- ²⁰ Honess, P. and Wolfensohn, S. (2010) The extended welfare assessment grid: a matrix for the assessment of welfare and cumulative suffering in experimental animals. Altern Lab Anim 38(3) pp. 205–212.
- ²¹ Wolfensohn, S.E., Sharpe, S., Hall, I., Lawrence, S., Kitchen, S. and Dennis, M. (2015) Refinement of welfare through development of a quantitative system for assessment of lifetime experience. Animal Welfare 24(2) pp. 139–149.
- ²² Wolfensohn, S., Shotton, J., Bowley, H., Davies, S., Thompson, S. and Justice, W. (2018) Assessment of Welfare in Zoo Animals: Towards Optimum Quality of Life, In: Animals 8(7) pp. 110-126.

²³ Ryan, M., Waters, R. and Wolfensohn, S. (2021) Assessment of the Welfare of Experimental Cattle and Pigs Using the Animal Welfare Assessment Grid, In: Animals (Basel) 11 (4) p. 999. regular consideration of negative and positive welfare impacts, and of necessary mitigations. Data handling within the use of the tool is being structured so that individual users will have access to their own and to anonymised benchmarking data, which can be used to inform good practice, but will not have access to others' attributable data.

GBGB envisages the AWAG being used by trainers, stewards, veterinary surgeons and ultimately owners and breeders to provide a comprehensive assessment of each greyhound's welfare over time, and a source of data which could be usefully mined to inform the development of welfare practice and policy. The tool can be used with minimal training, on a phone, iPad or laptop/computer. Its regular employment by stakeholders across the sport will bring the additional benefit of fostering shared responsibility for and information sharing about welfare through making welfare assessment a routine and familiar part of greyhound care.

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• The bespoke greyhound AWAG will be tested in a pilot trial with a small number of trainers to (a) establish ease of interface use and (b) refine the factors being included in welfare assessment.

Medium term

• After refinement according to the results of the pilot trial, a larger-scale trial will be undertaken.

This trial will include with trainers, stewards, veterinary surgeons, breeders and owners in (i) breeding (ii), racing and (iii) retirement settings.

Long term

- After further refinement according to the results of the large-scale trials, the use of the bespoke greyhound AWAG will be rolled out throughout the sport.
- The tool and will become a key method of monitoring welfare and collecting data to inform welfare policy.

NUTRITION

BACKGROUND

Canine nutrition has a direct impact upon health, both physical and psychological in the short and longer terms. As recent work on sled dogs has shown^{24,25,26,27}, nutrition is directly related to athletic performance with some basic work established around greyhounds' requirements²⁸. Nutrition also impacts upon development during the early stages of a greyhound's life, susceptibility to injury (see Chapter 4 and 'Resilience' below) and general welfare during retirement. The need for a suitable diet is one of the five welfare needs specified within the Animal Welfare Act (2006), and provision of suitable nutrition is thus the shared responsibility of all those owning or caring for greyhounds.

There is currently significant variation in feeding practices amongst breeders, trainers and owners of greyhounds outside of racing (retired or never raced). The way in which greyhounds are fed, particularly during their racing years, currently tends to be based on habit, perceived wisdom and economic considerations. Whilst some breeders, trainers and owners exclusively feed commercially prepared diets, others incorporate meat (including some nonhuman-grade meat) from various sources into their dogs' nutritional regimes. The Greyhound Regulatory Board advises trainers considering feeding any animal by-products to the dogs under their care to feed only category 3 (i.e. low risk) meat. Notwithstanding that advice, positive drug tests which are attributed by trainers to contaminated meat sources continue, disappointingly, to be a leading cause of disciplinary hearings within GBGB.

There is a general lack of scientific evidence about what constitutes optimal nutrition for a greyhound at each stage of its life, and thus what constitutes good feeding practice. GBGB agrees with the views of some of the welfare charities that a review of greyhound nutrition is needed to identify where research needs to be undertaken to rectify this lack of evidence, and to make science-based recommendations for best practice. We also support the request from some

- ²⁵ Burr, J. R., Reinhart, G. A., Swenson, R. A., Swaim, S. E., Vaughn, D. M., & Bradley, D. M. (1997). Serum biochemical values in sled dogs before and after competing in long-distance races. Journal of the American Veterinary Medical Association, 211 (2), 175–179.
- ²⁶ Templeman, J. R., Thornton, E., Cargo-Froom, C., Squires, E. J., Swanson, K. S., & Shoveller, A. K. (2020). Effects of incremental exercise and dietary tryptophan supplementation on the amino acid metabolism, serotonin status, stool quality, fecal metabolites, and body composition of mid-distance training sled dogs. Journal of Animal Science, 98(5), skaa 128. https://doi.org/10.1093/jas/skaa 128
- ²⁷ Vrbanac, Z., Bottegaro, N. B., Skrlin, B., Bojanic, K., Kusec, V., Stanin, D., & Belic, M. (2020). The effect of a moderate exercise program on serum markers of bone metabolism in dogs. Animals, 10(9), 1481. doi:http://dx.doi.org/10.3390/ ani10091481
- ²⁸ Hill, R. C., Bloomberg, M. S., Legrand-Defretin, V., Burger, I. H., Hillock, S. M., Sundstrom, D. A., & Jones, G. L. (2000). Maintenance energy requirements and the effect of diet on performance of racing Greyhounds, American Journal of Veterinary Research, 61 (12), 1566–1573

trainers for provision of education and knowledge transfer around nutrition.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

 GBGB has partnered with Dr Teresa Hollands, Senior Teaching Fellow in Veterinary Nutrition at the University of Surrey, to address the whole area of nutrition within this welfare strategy.

Dr Hollands is an internationally renowned clinical nutritionist, who has decades of experience in industry, in academia and in delivering continuing professional education. She has particular expertise both in canine nutrition and (of relevance to greyhounds as distinct from pet dog breeds) in equine nutrition across all stages of a horse's life, including the relationship between nutrition, performance and resilience.

Short term

• Dr Hollands will facilitate a series of nutrition workshops with greyhound trainers, breeders and owners.

The workshops will elucidate current feeding practices, the reasons behind them and concerns around them, and will provide opportunities for sharing experience and education for stakeholders about nutritional matters.

• Dr Hollands will convene and chair a working group of external experts to review greyhound nutrition.

This nutrition review panel will

- make recommendations for appropriate nutrition at each stage of a greyhound's lifetime based on currently available evidence.
- identify where further research needs to be undertaken.
- make recommendations on issues such as restriction of feed intake²⁹, changes in the frequency of feeding and feeding in relation to the requirement to maintain a greyhound's weight within certain parameters during racing (GBGB Rule 52), the importance of timing of feeding after exercise and the relationship between nutrition and injury and nutrition and dental health.
- review the possible relationship between the feeding of non-human-grade meat and the introduction of antimicrobial-resistant bacteria into the kennel environment.

²⁴ Baumhover, J. D. (1993). Influence of diet composition and training on energy utilization by greyhound skeletal muscle (Order No. 9321119). Available at: https://dr.lib.iastate.edu/entities/publication/a1ba3b17-3840-4b34-9468-130e22bd5016 Last accessed 9.5.22.

²⁰ Hill, R. C., Lewis, D. D., Randell, S. C., Scott, K. C., Omori, M., Sundstrom, D. A., Jones, G. L., Speakman, J. R., & Butterwick, R. F. (2005). Effect of mild restriction of food intake on the speed of racing Greyhounds, American Journal of Veterinary Research, 66(6), 1065–1070.

Medium term

• Dr Hollands will facilitate a second series of workshops with greyhound trainers, breeders and owners.

These will focus on sharing the results of the working group review and promoting best nutritional practice based on those recommendations.

• The findings of the nutrition review panel will be used as an evidence basis for considering whether current Greyhound Regulatory Board advice to trainers regarding the permissibility of feeding category 3 meat need to be updated to recommend no feeding of animal by-products to racing greyhounds.

Long term

- Nutrition workshops for breeders, trainers and owners providing updates on research and best practice will become an integral part of GBGB welfare policy and a regular and annual feature of the greyhound calendar.
- Research recommended by the nutrition review panel will be prioritised and undertaken in collaboration with academic partners.

PREVENTATIVE MEDICINE

BACKGROUND

Closely allied to the issue of nutrition is the area of preventative medicine. This is particularly true of dental health, which has been an ongoing area of concern in greyhounds³⁰.

Prior work

- The GBGB Code of Practice requires trainers to have a preventative healthcare plan in place for every greyhound. GBGB provides templates.
- The Code of Practice also provides advice about sourcing and responsibly handling medicines.
- As part of the inspection of residential kennels, in relation to the preventative healthcare plan, an annual inspection of every greyhound is made by a veterinary surgeon.
- GBGB has already provided for trainers and owners an instructional video on caring for greyhounds' dental health (https://www.gbgb.org.uk/welfarecare/research-guidance/).

- The GBGB website also houses information for homers of retired greyhounds on dental care (https://www.gbgb.org.uk/homing-blog-theimportance-of-dental-care/) and a veterinary blog about dental hygiene (https://www.gbgb.org.uk/ keeping-on-top-of-dental-hygiene/).
- GBGB has also recently supported independent academics at Bristol University to undertake investigations into optimal dental care regimes for the prevention of dental calculus and periodontal disease in greyhounds³¹.

The published results of this work will be used to inform training of all stakeholder groups providing care for greyhounds across their lifetimes (Chapter 2).

• Visual inspections for dental disease are already a routine part of the annual health check.

Where a veterinary surgeon diagnoses poor dental health, they may withdraw the greyhound from a race or may issue a warning that the greyhound should not compete until it has received veterinary dental treatment.

Indications for issuing a warning/withdrawing a greyhound because of poor dental health will be included as part of the veterinary training in the standardisation of prerace veterinary checks (see above).

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

 GBGB will incorporate BVA guidance on antimicrobial stewardship³² into the training of trainers, owners and veterinary surgeons and into the GBGB Code of Practice.

TRACEABILITY

BACKGROUND

The sport of horseracing has been recently concerned about the traceability of equine athletes across their lifetimes³³. GBGB is also focused on being able to trace the ownership, location and future of greyhounds involved in GBGB-regulated greyhound racing. Currently, the sires and dams of all British-bred litters of racing greyhounds must be registered with the Greyhound Stud Book (GSB).

³⁰ Rooney, N.J. (2011) Welfare of racing greyhounds—Prioritisation of issues. In Proceedings of the UFAW International Animal Welfare Symposium, Portsmouth, UK, 28–29 June 2011.

³¹ Rooney, N. J., et al. (2021). Weekly and Daily Tooth Brushing by Care Staff Reduces Gingivitis and Calculus in Racing Greyhounds. Animals 11(7): 1869.

³² https://www.bva.co.uk/take-action/our-policies/responsible-use-ofantimicrobials/ Accessed 25.2.22.

³³ https://www.britishhorseracing.com/press_releases/improved-traceability-forretired-racehorses-due-to-new-simpler-online-process/ Accessed 12.2.22.

On registering the stud dog, the GSB supplies the stud dog owner or registered agent with GSB paperwork to register the mating (which also includes sheets for the breeder to register the subsequent litter). When a mating intended to produce a British-bred litter takes place – whether or not any litter does ensue - it is the duty of the stud dog owner or authorised agent to register this mating with the GSB. The GSB receives the Mating Certificate and inputs the mating information onto the database. Within a month of the puppies being born, a veterinary surgeon must examine the puppies and certify a form on which the number of puppies, their sex and their colours are recorded. The veterinary surgeon also certifies that the appearance of the puppies is consistent with them having been born on the date supplied by the breeder. This form and a form requesting earmarking (which also describes the puppies) are returned to the GSB by the breeder within three months of whelping. The GSB registers the litter and sends the earmarking order form to GBGB. This is the first time GBGB is informed about the litter. The GSB sends the breeder or rearer a set of naming forms - one for each puppy - and a copy of the Certificate of Whelping.

Puppies will get microchipped by a veterinary surgeon by eight weeks of age in accordance with national legislation (The Microchipping of Dogs (England) Regulations 2015, Microchipping of Dogs (Scotland) Regulations 2016, and Microchipping of Dogs (Wales) Regulations 2015). All puppies which were entered into the studbook as having been born in a litter must be earmarked whether or not they are destined to be raced. This usually occurs between 12 and 16 weeks of age, is organised by GBGB, and undertaken by a steward who knows (via the information provided by the GSB) how many puppies should be in each litter to be earmarked. The steward is thus able to identify any greyhounds which were entered in the studbook but not subsequently presented for earmarking (e.g., due to death), and such information is reported back to the GSB. The steward stamps the earmark of each pup onto one of the naming/registration forms. This form is then unique to that puppy. The steward completes a diagram of each puppy's markings on the back of the pink earmarking order form for that puppy, including the colours and markings of each puppy. The steward returns the earmarking form to GBGB, who logs the composition of the litter, the earmark, the microchip number and the puppy's colours/markings. GBGB keeps a copy of this pink form and sends the original pink form back to the GSB along with the puppy's microchip details.

The naming of each greyhound takes place during the first couple of years of life. The form onto which the steward stamped the greyhound's earmark is signed by the breeder, and details of the owner and the name requested for the greyhound are completed. The naming/registration form is sent to the GSB, which (assuming that the name is allowed) registers the dog. The GSB then sends a 'mark-up certificate' to the greyhound's owner (or to the trainer if requested). The greyhound's markings are filled in on this form by a trainer experienced in 'marking up' or by a track official, and the marked-up sheet is sent back to the GSB for making into the Stud Book ID card. This sheet becomes the inside pages of the greyhound's unique Stud Book Identity Card, which also includes details of the greyhound's earmark, details of whelping, registration date, stud book number, breeder and owner details.

Upon entry to a licenced trainer's kennels, greyhounds get entered in the trainer's 'Blue book', which records the greyhounds under their care and greyhound movements in and out of their care. When the trainer feels that the greyhound is ready to start trialling (not before 15 months of age), the greyhound is taken to a track along with its Stud Book Identity Card. No greyhound can be registered by GBGB to run without first being registered fully with its Stud Book and having its full Stud Book ID card. At the track, the greyhound's earmarks and microchip are checked, and a (second) visual/pictorial identification ('marking up') is made by a local official. (At that time, the local official will also take a urine sample for analysis and require evidence of up-to-date vaccination.) This information is registered on the GBGB database along with the greyhound's racing name and ownership details. From then on, the dog's microchip number is linked to this registration, and anyone scanning the greyhound using a GBGB-provided scanner will have access to the information associated with the greyhound's microchip number in its GBGB database entry.

When a greyhound finishes racing, a GBGB Retirement Form is completed by the owner or trainer and returned to GBGB. If a greyhound does not race for three months or longer, GBGB has a system in place whereby the greyhound is flagged up as 'inactive' on the database, and enquiries will be made with the trainer as to its status and reminders to complete a Retirement Form issued as necessary. The Retirement Form contains information about ownership of the dog and its destination after racing, e.g. retained by owner or trainer, pet, passed to a homing centre/charity (in which case, a representative will countersign the GBGB Retirement Form), sold/given to a new owner (in which case details are attached), or continued racing but outside GBGB-regulated racing, e.g. abroad or in unlicenced racing. We note here that if a greyhound moves to race abroad or in British unregulated racing, the jurisdiction of GBGB to trace it and thereby to monitor its welfare is lost - this is a good example of an area in which greyhound welfare becomes the legal responsibility of an individual or agencies outside GBGB, as described in Chapter 1.

In the event that a greyhound has died or has been euthanised, the Retirement Form is countersigned by the attending veterinary surgeon, who provides details of the cause of death or euthanasia. At the point at which greyhounds retire from racing, GBGB 'releases' the microchip number from the GBGB database so that a new owner may register that microchip with a pet microchip service. The reason for this is welfare-based since it enables owners to access the 24/7 services for reuniting missing dogs and their owners, which such pet databases provide and which veterinary practices commonly contact.

Prior work

• For most parts of the life of a racing greyhound born in Great Britain the greyhound's identity and whereabouts are already traceable via the comprehensive system and the two-way communication between the Greyhound Studbook and GBGB as described above.

Nonetheless, there are some areas in which GBGB, in preparing this strategy, has identified the need to improve traceability. These relate both to possible risk points for exit of a greyhound from the tracing system and to methods of identification, as follows:

RISK POINTS FOR A GREYHOUND EXITING THE TRACING SYSTEM

- In the case of greyhounds born outside Great Britain (including the Republic of Ireland and Northern Ireland) the greyhound is not known to GBGB until such time as it is first presented at a track for 'marking up' and entered onto the GBGB database.
- Furthermore, the Animal and Plant Health Agency (APHA) (the agency responsible for animal importation) does not record the information necessary to provide the data on the numbers of greyhounds commercially imported from the Republic of Ireland and Northern Ireland to the UK. Therefore, there is currently no verifiable way to ascertain the number of greyhounds entering Great Britain.
- There is a risk of greyhounds exiting the tracing system if they are exported.
- There is a risk of greyhounds exiting from the tracing system if they leave GBGB-regulated greyhound racing to enter other racing environments.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Medium term

- GBGB will aim to work with Irish counterparts ('International collaboration' above) to make it a requirement for racing on GBGB tracks that every greyhound can be traced to its breeder irrespective of its breeding location.
- GBGB, in collaboration with the Greyhound Forum, will work with the government to improve data capture by APHA at the border and thus provide an evidence base on international movements of greyhounds.
- In relation to exportation, GBGB has previously made it clear that exportation of greyhounds to jurisdictions where welfare standards cannot be verified is unacceptable^{34,35}. Where GBGB becomes aware that licensees may be involved in such activities, that will be investigated as a disciplinary matter.
- GBGB will work with international regulators ('International collaboration' above) to establish harmonised systems for monitoring and deterring exportation of greyhounds to jurisdictions where welfare standards cannot be verified.
- GBGB will work with the British government to promote enforcement of relevant national legislation around the issue of greyhound exportation.
- GBGB does not find it acceptable that greyhounds should be leaving a GBGB regulated environment with clear safeguards around environmental standards and kennel inspections to enter an unregulated environment in which such protections are not required and where welfare standards cannot be verified. GBGB believes that all tracks, schooling tracks and greyhound trainers should be regulated to a standard equivalent to GBGB regulation.
- GBGB will therefore remove from the Retirement Form the option of a greyhound exiting GBGBregulated racing to enter independent/ unregulated British racing.
- GBGB will work with the GSB, breeders, owners and trainers to build an evidence base around greyhounds which were earmarked but never presented for racing.

The current system enables the identification of these greyhounds, whose future is a matter of welfare interest.

• GBGB will review whether the current Retirement Form system could be refined to further optimise welfare during retirement (Chapter 5) and to implement any such refinements where agreed.

This might involve, for example, developing additional ways of further verifying the information provided on Retirement Forms or (as one charity suggested to us)

³⁵ Available at https://api.worldanimalprotection.org/. Last accessed 14.2.22.

³⁴ Available at https://www.gbgb.org.uk/gbgb-statement-sunday-mirror-and-theexport-of-greyhounds-740/. Last accessed 14.2.22.

providing a second step of information gathering about the ultimate future of greyhounds which the Retirement Form indicates have been 'retained by owner' or gone from racing to breeding.

In this context, GBGB was interested to learn from the canine charitable sector, in the course of preparing this strategy, that the scope of responsibility for tracing animals seems currently aligned between GBGB and the charities since the charities typically do not trace a greyhound beyond its first homing.

• GBGB will streamline the process for 'releasing' a microchip from the GBGB database system for it to be registered with a pet microchip database when a greyhound exits racing.

This will make the process easier to execute.

Actions which will be undertaken within this strategy for which additional funding is needed.

Medium term

 GBGB will aim to work with the Irish studbook and regulator to encourage them to undertake similar work around building an evidence base around greyhounds which were earmarked but never presented for racing as part of their own welfare programmes.

METHODS OF IDENTIFICATION

BACKGROUND

Earmarking is still used as an adjunct to microchipping, as it provides an externally visible method of identifying a greyhound, which may be useful in the absence of a microchip reader or if the reader fails to work. However, in common with recent discussion about methods of identifying horses (for example hot branding), concerns exist around harms (pain and stress) caused by the earmarking process. Earmarking is anyway not infallible as the marks may become hard to read.

ACTIONS

Actions already initiated within this strategy.

Short term

• In 2021, GBGB set up an 'earmarking working group'.

The working group seeks to find a welfare-friendly identification method to replace earmarking which will provide adequate identification from an integrity point of view. To date, our research has led us to consider several options with digital imaging being the most likely solution. The working group will report in 2022.

Actions which will be undertaken within this strategy for which additional funding is needed.

Medium term

• GBGB will engage with the government to lobby to remove earmarking from the Welfare of Racing Greyhounds Regulations (2010) to phase out earmarking as a method of identification and replace it with a more welfare-friendly identification method which will also maintain adequate identification from an integrity point of view.

RESILIENCE

BACKGROUND

Greyhound resilience, both physical and psychological, is an important theme across this strategy. Advances in both veterinary and welfare science demonstrate that what happens to an animal in early life (even before birth) has lasting impacts upon physical and psychological welfare across an animal's lifetime. Thus, topics to which we refer in this chapter (such as nutrition) or, for example, in Chapter 3 on early years (such as behaviour and management or genetics) impact upon topics referred to in later chapters (such as resilience to injury and suitability for homing).

Every breeder, owner and trainer dreams of being associated with an elite greyhound. Yet the reality is that only one greyhound can win the Greyhound Derby each year. Every breeder, owner and trainer therefore has an interest in being involved with a greyhound who they can enjoy running regularly, even if he/she never wins the Derby. For that to be possible, greyhounds need to stay healthy, fit and sound enough to train and run consistently and regularly for a long time. They must also be temperamentally suited to being happily homed after their racing career.

Early retirement and even euthanasia of greyhounds as a result of racing injuries are two of the 'iceberg indicators' of greyhound welfare. The causes of such injuries are multifactorial and include genetic predisposition, early management, nutrition, training, racing management and racing conditions including surfaces and frequency of racing. Each of these factors and others is relevant to developing resilience. The importance of nutrition and the ways in which that is addressed within this strategy are discussed above. All of the other areas are discussed in following chapters, along with proposals for work in each area to improve physical resilience.

Psychological resilience is closely related to mental state and thus to behaviours and behavioural needs. The way in which these manifest themselves at various stages of a greyhound's lifetime may be influenced by management and experiences at other stages.

ACTIONS

Recognition of such interdependence is woven throughout the following chapters, where actions are presented: for example, in relation to the importance of socialisation in early years (Chapter 3), preparing a greyhound whilst it is still in its racing years for the expected behaviours and environmental challenges of retirement ('Training the trainers' above and Chapters 4 and 5) and projects to identify reasons for homing failure and methods of mitigating those reasons (Chapter 5).

Although the chapters which now follow are divided into stages of a greyhound's life for reasons of analysis and presentation, as is evident from the introduction in Chapter 1 our approach is one of a 'wholelife' consideration of welfare. Thus, the reader is encouraged to keep the overarching themes presented in this chapter in mind when reading the following chapters. As described at the start of this chapter, the interdependence of welfare matters across different stages of a greyhound's lifetime is reflected in the imperative for responsibility for welfare to be shared by all of those various individuals and organisations who care for a greyhound during each of those stages.



CHAPTER 3: EARLY YEARS

INTRODUCTION

The general welfare impact of the lifetime themes of shared responsibility, training, evidence/ research, welfare monitoring, nutrition, traceability, resilience and promoting positive experiences are explained in Chapter 2. In this chapter, we provide additional details relating to the application of a number of those themes to the early years of a greyhound's life. We then go on to consider additional areas of proposed work which are specific to the 'early years' of a greyhound's life, including matters around breeding.

The way in which a greyhound is bred, cared for and managed in its developmental stages ('early years') has a profound impact on its medium and long-term physical health, behaviour and chances of being homed successfully and happily at the end of its racing career. The environment, opportunities to socialise with other dogs and interactions with humans are particularly important. Recognition of the importance of breeding decisions and early-years husbandry to lifetime welfare is one of the reasons that GBGB chose to extend this strategy across greyhounds' lifetimes rather than to concentrate exclusively on the period of a greyhound's racing career.

APPLICATION OF LIFETIME THEMES DURING THE EARLY YEARS

SHARED RESPONSIBILITY

ACTIONS

Actions already initiated within this strategy

Short term

- Members of the GBGB Board are already engaging with British breeders via the Stipendiary Stewards and other routes to better understand potential pinch points for welfare during the breeding and raising process, to identify and promote good welfare practice where it already exists and to build communication between breeders and the GBGB Board.
- In recognition of the importance of such communication and of the pivotal role which breeders play in welfare, GBGB will co-opt an individual with expertise in greyhound breeding onto the main board.

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Medium term

• Shared responsibility for welfare will be promoted through the assured breeders' scheme (see below).

Breeders are responsible for breeding and raising greyhounds in appropriate, welfare-orientated ways whilst owners and trainers are responsible for sourcing greyhounds from reputable breeders who behave in these ways.

INTERNATIONAL COLLABORATION

BACKGROUND

A substantial number of greyhounds who ultimately race in Great Britain are bred and raised outside Great Britain (primarily in the Republic of Ireland). This necessarily involves substantial international transportation of greyhounds which, given that transportation is known to be stressful for all animals, GBGB would like to see reduced. Additionally, breeding and rearing activities which occur outside Great Britain present something of a dilemma for GBGB: on the one hand, we recognise the integral importance of breeding and early-years stages to this welfare strategy and, on the other hand, we are only
able ourselves to implement the substantial proposals presented in this and earlier chapters within Great Britain. GBGB has a two-pronged approach to this dilemma: (1) work with international counterparts to harmonise core welfare values and procedures (Chapter 2), and (2) actively work to further promote breeding of greyhounds within Great Britain, with the aims of bringing breeding and early-years activities increasingly under the sight of GBGB and framework of this strategy, and of reducing international transportation of greyhounds.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

- GBGB will aim to use the Kennel Club Assured Breeders Scheme (below) and the Animal Welfare Regulations (2018) (England) (Licensing of Activities Involving Animals) as a basis for working with Greyhound Racing Ireland and the Irish Coursing Club to agree on a harmonised set of standards and Code of Practice of breeders in the UK, the ROI, and Northern Ireland.
- GBGB will promote high-standard British breeding through the KC Assured Breeders Scheme (see below), including encouraging owners and trainers to purchase greyhounds from British breeders who are members of that scheme.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB will work with the GSB and the British Greyhound Breeders Forum to further develop schemes of rewards for British-bred greyhounds.

Prizes and race series for 'British Bred Greyhounds' already exist (https://britishgreyhoundbreedersforum. co.uk/latest-news/). GBGB will work with the GSB, the British Greyhound Breeders Forum, promoters and potential sponsors to further extend this programme of visible rewards for those breeding, owning and training greyhounds bred within Great Britain.

NUTRITION

Nutrition of breeding animals and during the early years of a greyhound's life is crucially important to long-term health and welfare. Ways in which training around nutrition will be provided for breeders are described in Chapter 2. Gathering evidence of and making research recommendations around nutrition during breeding and the early years will be part of the remit of the nutrition review panel (Chapter 2).

TRACEABILITY

Work around traceability in the early years is described in Chapter 2. Of particular relevance to the consideration of 'early years' is the future of those greyhounds which are bred for but never enter racing. A prerequisite to establishing an evidence base around the future of those greyhounds is being able to accurately identify everyone who is breeding racing greyhounds in Great Britain.

Since greyhounds must be registered in the relevant stud book to be eligible to race under GBGB rules, the British GSB holds records of all puppies born in Great Britain.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

To enhance traceability,

- GBGB will work with the GSB to identify breeders of racing greyhounds who fall under the scope of the Breeding of Dogs Regulations³⁶ (for example, those breeding three or more litters per year) and/or the Selling Animals as Pets Regulations and to ensure that such breeders are compliant with legal requirements.
- GBGB will work with the GSB to identify breeders of racing greyhounds who do not fall under the scope of the Breeding of Dogs Regulations and/or the Selling Animals as Pets Regulations.

Medium term

• GBGB will consider and make recommendations around how traceability of greyhounds not entering racing can be improved.

Such considerations will include how reporting of greyhounds' futures by those responsible for dogs in their early years could be enhanced (currently, if a greyhound never enters racing, a GBGB Retirement Form will never be associated with it) and how better coordination between GBGB microchip database systems and pet microchip database systems can be achieved.

Traceability of greyhounds imported from the Republic of Ireland and Northern Ireland is discussed under the 'transportation' section of Chapter 4.

³⁶ https://www.gov.uk/guidance/dog-breeding-licence-england Last accessed 3.2.22.

RESILIENCE

PSYCHOLOGICAL RESILIENCE

BACKGROUND

Adaptability to new environments and to stressful situations is important to welfare through enabling greyhounds to express normal behaviours and to be free of distress. Impacts within the lifetime theme of positive experiences (for example, early socialisation, lead training, interaction with humans and preparation for the transition from kennel to home environment) accustom greyhounds to dealing with unfamiliar and potentially stressful situations and help them to be adaptable.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB will work with external experts in canine behaviour to provide training around this issue for breeders and those responsible for the early years of a greyhound bred for racing (see above).

PHYSICAL RESILIENCE

BACKGROUND

Resilience to physical injury relates directly to nutrition (Chapter 2) and to methods of rearing, training and racing management (Chapter 4). Scientific developments since the discussion around resilience in the Donoughue Report¹⁵ now inform us that resilience is also to some extent genetically determined. Determining the genetic basis of resilience and persuading owners and breeders to select for that rather than simply for speed are important aims in optimising welfare. Below, we explain how the first of those aims will be fulfilled. Ways in which GBGB will incentivise owners and breeders to select for resilience/long-lasting soundness and health are explained in Chapter 4: 'Promotion to reward longlasting soundness and health'.

BREEDING FOR RESILIENCE: RESEARCH AND DEVELOPMENT TO INFORM SELECTION IN FAVOUR OF HIGH WELFARE

BACKGROUND

GBGB presents below in collaboration with Professor Emmeline Hill (University College Dublin (UCD) and Plusvital) a programme which will not only provide understanding of genetic influences upon resilience and longevity in greyhounds but will also ultimately provide tools which breeders and owners can use to select for resilience when breeding. This programme is built on work which Professor Hill has already undertaken on Thoroughbred racehorses and involves the translation of science originally designed to identify favourable performance characteristics into a welfare application in which it is used to promote robustness. It is an ambitious and cutting-edge programme which puts greyhound sport at the forefront of applying modern technologies to animal welfare challenges.

It is increasingly understood in relation to Thoroughbred racehorses that genetics play an important role not only in performance but also in predisposition to injury and disease (for example^{37,38}). Furthermore, inbreeding is likely to encourage the expression of deleterious genes. The sequencing of the dog genome³⁹ confers the scientific possibility of identifying both inbreeding and, ultimately, genes which are associated with predisposition to injury and disease. A key theme of this welfare strategy is to promote resilience in greyhounds, and the use of modern genetic technologies provides a tool for doing so through enabling breeders and owners to avoid high levels of inbreeding.

Professor Emmeline Hill of UCD has led worldwide research efforts to understand genetic impacts upon performance and welfare traits in Thoroughbred racehorses. Professor Hill has kindly provided a summary of the current understanding of greyhound genetics and of the ways in which research into greyhound genetics could be used to inform breeding decisions in favour of high welfare as follows:

Dogs have been selectively bred for a vast range of diverse roles leading to more than 500 breeds with breed-defining characteristics underpinned by genetic features that vary among populations. The availability of the canine genome sequence has resulted in the development of technologies that can aid in assessing genetic differences between breeds and among individuals within a breed. Genome-wide SNP (pronounced 'snip') arrays allow for the generation

- ³⁸ Welsh, C.E., Lewis, T.E., Blott, S.C., Mellor, D.J., Stirk, A.J. and Parkin, T.D. (2014). Estimates of genetic parameters of distal limb fracture and superficial digital flexor tendon injury in UK Thoroughbred racehorses. Veterinary Surgeon J 200(2): 253–256.
- ³⁹ Lindblad-Toh, K. et al (2005) Genome sequence, comparative analysis and haplotype structure of the domestic dog. Nature. 2005 Dec 8;438(7069):803–19. doi: 10.1038/nature04338. PMID: 16341006.

³⁷ Blott, S.C., Swinburne, J.E., Sibbons, C., Fox-Clipsham, L.-Y., Helwegen, M., Hillyer, L., Parkin, T.D., Newton, J.R. and Vaudin, M. (2014) A genome-wide association study demonstrates significant genetic variation for fracture risk in Thoroughbred racehorses. BMC Genomics 15: 147.

of individual genetic profiles, providing scientists with information to understand breed history, the genetic makeup of specific breeds and genes and mutations that contribute to traits of interest.

Within breeds, the relatively small number of founder individuals coupled with selective breeding for certain traits (size, morphology, temperament, performance) can lead to reduced variation in the gene pool, or high levels of inbreeding. Inbreeding can lead to inbreeding depression, the reduced biological fitness of a population, in part due to the accumulation of deleterious recessive mutations that can be exposed and negatively impact on the individual when inherited from both parents. In dogs, there is evidence that high levels of inbreeding negatively affect health traits; there is a significant difference in morbidity between breeds with low and high inbreeding and, within breeds, inbreeding has been found to negatively impact on lifespan at the individual level.

Greyhound breeding has led to genetic differences among animals bred for racing / sport and those bred for showing / companion or other purposes. Such subpopulation differentiation can contribute to higher inbreeding. Among dog breeds, the English greyhound has an above average level of inbreeding, ranking in the >70th percentile among 227 breeds. Understanding how inbreeding may affect individual and population fitness is critical to improve breed management and may have both economic and welfare implications. This can be achieved by measuring inbreeding among individuals in a population and assessing the relationship with traits of concern measured in individual animals.

Inbreeding has historically been assessed using pedigrees, but this requires complete pedigree information and generally underestimates the actual extent of inbreeding. Inbreeding in an individual can now be evaluated using SNP array genetic profiles generated from DNA retrieved from a blood, hair or saliva sample, which can be anonymised following collection. SNP arrays are widely used in dogs and other species to assess inbreeding levels and understand the impact of inbreeding on health and welfare traits.

For greyhounds, where the breeding goal is to produce viable dogs that will have productive racing careers, the application of new genetic technologies to assess inbreeding is likely to have a positive impact on population welfare in the future. For example, both positive and negative genetic features in the population may be identified and genetic breeding and selection tools may be developed to guide decision making to increase or reduce the occurrence of these features. The generation of baseline data will also enable population genetic monitoring of the breed over time. The application of science-based approaches is expected to lead to the production of more robust animals and safeguard the future welfare of the breed.

Prior work

PhD research by Dr Ruth Dockerty⁴⁰ which GBGB supported, established an initial archive of British racing greyhound DNA samples and identified 'a number of single nucleotide polymorphisms which may be associated with the pathogenesis of Greyhound stress fracture and that warrant further investigation'.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed

Short term

• GBGB will commission Professor Hill to undertake research to map inbreeding levels and understand the impact of inbreeding on health and welfare traits and longevity in greyhounds.

This work will use single nucleotide polymorphism (SNP) array genetic profiles and will be undertaken in partnership with owner and breeder stakeholders via their representatives on the main board.

Medium term

• Dependent upon the results of that initial research, GBGB will commission Professor Hill to undertake further work to develop an easily useable tool which breeders and owners could use to make breeding decisions aimed at optimising welfare, long-lasting soundness and health.

This tool would work through providing information to breeders and owners about inbreeding indices and genetic traits. Crucially, such a tool will be designed (as similar tools which Professor Hill has designed for use within horseracing have been) to protect commercial sensitivities through anonymisation.

• Under the Kennel Club Assured Breeders Scheme (below) GBGB will work with the GSB to enhance the recording of the genetics of breeding greyhounds and make this readily available to breeders to inform their breeding choices.

METHODS OF BREEDING

In common with other dog breeds, breeders of greyhounds have gradually adopted the use of artificial insemination (AI) (although the GSB reports that it is not as popular now as it was a few years

⁴⁰ Dockerty, R (2016) A multifactorial approach to improving welfare in the racing greyhound. PhD Thesis. Available at: https://livrepository.liverpool. ac.uk/3012340/1/200161464_Jan2016.pdf Last accessed 3.2.22.

ago). Legally, AI must be performed by a veterinary surgeon in the UK, which affords welfare protection around this activity. Furthermore, in 2019, the Royal College of Veterinary Surgeons (RCVS) issued guidance to veterinary surgeons not to undertake surgical canine AI, as the RCVS believes doing so to be in contravention of British animal welfare legislation (RCVS Code Section 27.30). This means that veterinary regulation and national legislation in the UK combine to afford some of the tightest protections of canine welfare with regard to AI in the world.

ACTIONS

Actions already initiated within this strategy.

- Members of GBGB's WVSC with veterinary and ethical expertise in animal reproduction are already keeping a 'watching brief' on scientific publications around welfare and breeding methods.
- The WVSC will review relevant policies against any new scientific publications.

DEVELOPMENT AND PROMOTION OF AN 'ASSURED BREEDERS' SCHEME

BACKGROUND

Welfare-based reasons for encouraging British breeding and choice of British-bred greyhounds by owners and trainers have been described above. Ensuring that British breeders meet and maintain high welfare standards is a necessary part of such a strategy. The development of a bespoke greyhound AWAG tool and the way in which its use will be piloted by and then rolled out to breeders has been discussed in Chapter 2.

To support high welfare standards in British breeding and the easy identification of such standards by those purchasing young greyhounds, GBGB has partnered with the Kennel Club to develop and implement an Assured Breeders Scheme. This will be built on the Kennel Club's own Assured Breeders Scheme⁴¹ under which the Kennel Club is accredited by the United Kingdom Accreditation Service (UKAS) to certify dog breeders as having reached specified welfare standards in terms of facilities and practices. The scheme 'promotes good breeding practice and gives recognition to those breeders who are prioritising the health and welfare of their breeding stock and the puppies they produce'²⁶. By developing the Assured Breeders Scheme in association with the Kennel Club, GBGB will provide a system of promoting good welfare around breeding, which incorporates an independent assessment of welfare standards (through the Kennel Club, a member of the Greyhound Forum). Furthermore, the implementation of this system alongside the existing UKAS-accredited kennel inspection scheme (Chapter 4) will mean that UKASaccredited oversight of greyhound welfare standards is available for all stages of a greyhound's life from breeding until they retire from racing.

ACTIONS TO DEVELOP THE SCHEME

Actions which will be undertaken within this strategy for which additional funding is needed

Short term

• GBGB will work with the Kennel Club and a small number of breeders to pilot the scheme to test its applicability to greyhound (as opposed to pet dog) breeding for racing.

If necessary, based on results of that pilot trial, the Kennel Club will undertake modifications to their standard protocols (for example, addition or modification of relevant criteria) to enable Kennel Club Breeder Assessors to undertake assessments which are optimally applicable for greyhound breeding.

• The Kennel Club Assured Breeders Scheme, as modified in this way if necessary, will be opened to all British greyhound breeders to apply to and promoted as described below.

Application and widespread use of this scheme by breeders and greyhound purchasers across the short, medium and long terms will drive up welfare standards within greyhound breeding.

ACTIONS TO PROMOTE THE SCHEME

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

The Kennel Club Assured Breeder's Scheme is a voluntary one. To encourage uptake of this scheme by greyhound breeders and use of it by those purchasing greyhounds,

- GBGB will include information about the Assured Breeders Scheme in the owners' 'welcome pack' (Chapter 2).
- Owners', trainers' and breeders' representatives on the GBGB Board will work with those whom they represent to share information about and

⁴¹ https://www.thekennelclub.org.uk/dog-breeding/the-kennel-club-assuredbreeders/ Last accessed 3.2.22.

encourage uptake of membership of the scheme and to encourage purchasers of greyhounds to seek out assured breeders.

• The scheme will be promoted at breeder, owner and trainer workshops (Chapter 2).

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

GBGB will incentivise early joining of the KC Assured Breeders Scheme by funding application fees for the first two years of the scheme being available to greyhound breeders.



CHAPTER 4: RACING YEARS

INTRODUCTION

The general welfare impact of the lifetime themes of shared responsibility, training, evidence/ research, welfare monitoring, nutrition, traceability, resilience and promoting positive experiences are explained in Chapter 2. In this chapter, we provide additional details relating to the relevance of each of those themes to the active years of a greyhound's life.

We have defined the phase of life before retirement and after puppyhood as 'racing years' for the purposes of this strategy. The vast majority of greyhounds spend this middle period of their lives racing. However, there are some who never enter racing – issues around tracing those greyhounds and safeguarding their welfare across their lifetimes are discussed in Chapters 2 and 3. Even for those greyhounds who do enter racing, the length of time which they spend racing is hugely variable and is usually determined by how long they remain uninjured. Ways of preventing injury, treating injury and identification and mitigation against causes of injury are major welfare considerations during greyhounds' racing careers. Collection of data to inform welfare policy and facilitate research is also important, as is identifying where a lack of evidence exists and research is needed. Other areas of relevance to welfare during the racing phase of a greyhound's life include transportation, provision of veterinary care and management of greyhounds in licenced racing kennels. All of these we consider in this chapter.

DATA COLLECTION

BACKGROUND

Data collection and sharing is one of the areas on which we received most comment during the preparation of this strategy. Generally, stakeholders are supportive of GBGB's current practice but question whether it could be extended to include areas other than those on which we currently report.

INJURY AND EUTHANASIA DATA

BACKGROUND

Since 2018, GBGB has annually published national injury and retirement data for GBGB-licenced stadia⁴², including details of injury types and euthanasias. This published data comes from injury database

⁴² https://www.gbgb.org.uk/welfare-care/injury-and-retirement-data/ Last accessed 3.2.22. numbers submitted by track veterinary surgeons. The injury data is independently verified by accountancy and auditing company Barnes Roffe LLP. As part of this verification process, the track injury database numbers are compared with the track veterinary surgeon's daily diary sheets (which are maintained by the track veterinary surgeon and held at the racecourse). One racecourse is selected randomly each year for a full audit, while all other racecourses have a sample basis audit, and where any discrepancies are discovered then the sample range is broadened.

The WVSC of GBGB currently receives reports/data from independent veterinary academic Dr Richard Payne, Associate Professor of Veterinary Anatomy, School of Veterinary Medicine and Science, University of Nottingham, and scientific and veterinary advisor to the WVSC of GBGB, arising from two sources:

(1) The Disease and Surveillance Monitoring Programme (DSMP). This programme is run by Dr Payne and funded by the greyhound industry and provides a mechanism for surveying and monitoring sudden deaths and contagious disease. This programme covers both residential kennels and tracks. (2) A secure GDPR-compliant database of track injuries, collated by Dr Payne with GBGB permission.

Dr Payne reports back to the WVSC regularly and also additionally in the event of an unusual pattern in the data, e.g. an increased incidence of contagious disease detection. Because Dr Payne's work in these areas is applied across kennels and tracks, he is able to advise WVSC on trends and also on the populationlevel significance of an individual occurrence, e.g. one sudden death.

GBGB has engaged with the sport of horseracing (which annually publishes fatality numbers) in considering how we might enhance data collection and reporting to further protect welfare through evidence provision. As explained above, GBGB already publicly publishes not only fatality data but also injury data, which includes details, for example, about the type of injury. We believe that the availability of detailed anonymised injury data is an important prerequisite to facilitating research which identifies factors contributing to injuries and makes recommendations for mitigating them.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

 GBGB will refine internal systems so that a 'spike' in injuries at an individual track or region within data collection systems automatically triggers an immediate visit to that track by the Track Liaison Officer/a Track Sub-Committee Member.

GBGB has recently created a new role of Track Liaison Officer and appointed to it someone with extensive expertise in track surfaces and design within the sport of horseracing (see below). Where 'spikes' in injuries occur, the Track Liaison Officer will work immediately with the track management on identifying possible causes of injury and mitigating them.

Short and medium term

• Over the next three years, GBGB will conduct an ongoing review and analysis of injury data to identify how best to collate, publish and interpret the causes of injury and improve accountability through its publication. GBGB, led by the Track Liaison Officer and its newly appointed data analyst (see below), will work both with individual tracks and trainers and through analysis of the macro data to address the multifaceted causes of injuries both on and off the racecourse.

Medium term

- GBGB will consult with academic stakeholders about best practice for facilitating access to anonymised data for independent research purposes and will follow those recommendations.
- GBGB will review and refine how it makes internal use of data which it currently gathers.
- GBGB will work with trainers to use internal data to establish possible correlations between training methods and injuries.

GBGB will develop systems for collaborating with trainers to mine data available through the Injury Recovery Scheme (see below) to identify such possible correlations. Results will be used to direct future research and also to inform discussion at trainers' educational workshops (Chapter 2).

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

 GBGB will work with the Racecourse Promoters Association (RCPA), with all racecourse owners who are not members of the RCPA, with trainers via the trainers' representative on the GBGB Board and with Dr Payne to increase the granularity of the GBGB injury database.

The aim of this increase in granularity is to enhance identification of trends and so facilitate early interventions to understand and mitigate underlying causes.

REPORTING OF OTHER DATA

BACKGROUND

Data of relevance to welfare includes not only data about injuries and euthanasia but also data about the futures of greyhounds who never race (see 'Traceability', Chapters 2 and 3), homing of retired greyhounds (reported upon annually²⁸ and Chapters 2 and 5) and various strands of GBGB's existing welfare and integrity programmes.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Medium term

- GBGB will develop systems for regularly publicly reporting upon
- doping offences (see 'Welfare and regulation', Chapter 1)
- kennel inspections, on an anonymised basis (see below)
- annual UKAS track inspections, on an anonymised basis (see below)

GENERAL ISSUES AROUND DATA REPORTING

BACKGROUND

GBGB is very aware (partly as a result of discussion with the horseracing industry) that data can sometimes be misleading where small numbers are involved or where effects occur in the short term which are not in fact correlated with long-term trends although they may initially appear alarming. Rigorous analysis of data suitable for use in research and policymaking therefore requires expert skills.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB will appoint a professional data analyst to assist in facilitating and managing work streams around data reporting and analysis.

INJURIES

BACKGROUND

Injury causes pain and distress and thus impacts upon welfare in the short term. Ongoing lameness also has a medium- to long-term negative effect, whilst environmental challenges associated with retirement are also relevant to well-being (Chapter 5). Injury to greyhounds is also distressing for owners, trainers, everyone at racing tracks, veterinary surgeons and members of society more widely. For all of these reasons, GBGB aims always to reduce injury rates as explained in the Greyhound Commitment.

Reducing injuries requires a two-pronged approach – identification of the causes of injury and the development of systems to mitigate them. These two prongs combine to fulfil the necessary ambition of reducing avoidable harms (Chapter 1). The causes of injury are multifactorial and are referred to throughout this strategy – for example, genetics (Chapter 3), nutrition (Chapter 2), training methods (see above) and husbandry. The multifactorial causes of injury mean that (a) a holistic programme of research incorporating all these elements, as described across the chapters of this strategy, is necessary to drive down injury rates, and (b) injury prevention is the shared responsibility (Chapter 2) of all those involved in the sport of greyhound racing, in whatever role.

In this chapter, we concentrate on causes of injury which are associated with track design, preparation and

management. Such factors are of international concern, and sharing information about them and research and best practice around them with international partners forms an integral part of the lifetime theme of international collaboration (Chapter 2).

ACTIONS

Prior work

GBGB has since 2009 had a Track Sub-Committee of the WVSC whose remit is to consider all elements of welfare policy relating to greyhound tracks.

Since 2018, GBGB has worked with STRI's (formerly known as the Sports Turf Research Institute) team of scientific advisers. STRI visits each GBGB track once a year to inspect tracks and to advise ground staff on how best to prepare and maintain the racing surface.

In 2021, GBGB created the new position of Track Liaison Officer and appointed to that role Mark Peacock. Mark's background is in racehorse track safety: he joined GBGB from Godolphin Horseracing Stable, where he was the Gallops Manager. Mark holds a distinction in Racecourse Management from the Institute of Groundsmanship and is experienced in preparing and maintaining a range of racing surfaces. The Track Liaison Officer not only makes regular visits and undertakes regular inspections of tracks; he is also available to provide advice to tracks at their request and is a specific point of call for track managers within GBGB. In his first six months in post, Mark worked with STRI to review track standards and make evidencebased refinements to them.

IDENTIFYING CAUSES OF INJURY

LEARNING FROM INTERNATIONAL EXPERIENCE ON CAUSES OF INJURY

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• GBGB, through the Director of Welfare, Executive Veterinarian and WVSC, will collaborate with international regulators (Chapter 2) to share from the GBGB knowledge base and to learn from global research into causes of injuries in greyhounds and use that information to inform best practice.



Research on causes of injury

Prior work

• Details of research already undertaken and published on the causes of injury are included in Appendix 2.

ACTIONS

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

- GBGB will commission research guided by Dr Richard Payne, Associate Professor of Veterinary Anatomy, School of Veterinary Medicine and Science, University of Nottingham, and scientific and veterinary advisor to the WVSC of GBGB to review where an evidence base already exists and where further research is needed on identifying the causes of injuries in greyhounds, with particular reference to the following areas:
- length of race
- the effect of age at the start of racing on injury rates
- design of track
- hurdles
- number of runners
- trap number of greyhounds
- warm up/warm down
- fitness programmes for individual greyhounds

Medium term

- Based on this research, recommendations will be made to the WVSC on:
- areas for which a sufficient evidence base already exists and policy consideration is required
- necessary areas of further research, which will be undertaken and guided by Dr Payne

INJURY PREVENTION

BACKGROUND

In addition to the importance of breeding, education, nutrition and husbandry discussed in earlier sections of this report, GBGB believes that an effective programme of injury prevention must incorporate the following elements: effective training of those responsible for track maintenance; implementation of existing knowledge to improve track conditions; a well-directed programme of research and international information-sharing which informs track design, surfacing and maintenance; detection of early injuries/ gait abnormalities to facilitate rest and treatment and thus prevent serious injury; and reward for long-lasting soundness. Workstreams within this strategy for training of track maintenance staff are discussed in Chapter 2. All other aspects are discussed below.

ACTIONS

Implementation of existing knowledge to improve track conditions.

Actions already initiated within this strategy.

- The Track Liaison Officer is already working to improve track conditions using the current evidence base, for example, by use of 'Verti drain machines'⁴³.
- The Track Liaison Officer is also currently working to develop an online track maintenance record tool.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• The frequency of STRI visits to tracks will be increased to quarterly.

Research to inform future track design, surfacing and maintenance

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

- Internal research led by the Track Liaison Officer, directed by and reported to the Track Sub-Committee and run in conjunction with STRI will assess the effects of the following on track condition and safety:
- surfactants
- water
 - machinery
 - salt
 - number of maintenance days
 number of maintenance staff
 - ⁴³ https://www.gbgb.org.uk/a-track-blog-mark-peacock-gbgb-track-liaison-officer/ Last accessed 3.2.22.

- This research will be used to inform priority setting around track improvement programmes.
- GBGB will continue to collaborate with international partners to learn from innovations in track design, surface and maintenance (Chapter 2).

Long term

• In collaboration with appropriate experts, GBGB will establish a centre of excellence for research and training in track maintenance and preparation.

This will provide an international focus for such applied academic endeavour. An old track or schooling track could be adapted for this purpose. The provision of such a facility will enable research not only into the current areas of short-term interest described above, but also into the impact upon injuries of factors such as lighting, track diameter, sightlines, background paint colours and lure colours. Such research will be undertaken subject to external clinical ethical approval process.

Early detection of injuries.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• In collaboration with external experts in veterinary medicine and physiology, GBGB will 'train the trainers' to detect early injuries and gait abnormalities and seek help from the veterinary team (Chapter 1).

Medium term

- GBGB will work via the trainers' and owners' representatives on the GBGB Board to facilitate research guided by Dr Richard Payne, Associate Professor of Veterinary Anatomy, School of Veterinary Medicine and Science, University of Nottingham, and scientific and veterinary advisor to the WVSC of GBGB, assessing whether the adoption of technologies to detect early injury could help prevent greyhound injuries.
- Recommendations for best practice will be made based on this research and conveyed to veterinary surgeons through the regular CPD programme (Chapter 2).

GBGB has been following with interest developments in technology to detect changes in horses' stride length and gait patterns, which are being used as 'early warning systems' for injury detection. Ultrasonography to detect early tearing of the iliopsoas muscle could also potentially help prevent sudden deaths due to exercise-induced acute abdominal haemorrhage in greyhounds⁴⁴.

PROMOTION TO REWARD LONG-LASTING SOUNDNESS AND HEALTH

BACKGROUND

Welfare is optimised by breeding and care aimed at selecting for long-lasting soundness and health.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• GBGB, led by the Commercial Director, RCPA Directors and the owners', breeders' and trainers' representatives on the main board will work with promoters to encourage promotional activities which recognise and reward breeding and care which result in long-lasting soundness and health of greyhounds.

EUTHANASIA RELATED TO INJURIES AT TRACKS

BACKGROUND

Euthanasia is not in itself a welfare issue since it is by definition humane. However, the euthanasia of greyhounds due to injury is by many sectors of society considered to be an ethical issue, and GBGB shares that concern. Hence, a consideration of the subject is included in this strategy. In 2019, GBGB set itself a challenging target, based on 2018 data, namely, that in the following three years after 2018, it wanted to see the sport reduce the number of trackside euthanasias by half. The 2021 GBGB data confirms that this challenging target has been met. GBGB remains committed to driving down the number of euthanasias relating to injuries during racing as low as possible.

The programme of injury prevention described above will be an important part of this continuing work. In addition to scientific work around preventing lifethreatening injuries, GBGB wishes also to consider and address non-scientific factors influencing euthanasia rates. Research from Nottingham University⁴⁵ and the British Horse Society's (BHS) REACT campaign⁴⁶

⁴⁴ Morey-Matamalas, A., Corbetta, D., Waine, K., Payne, R. M., Grau-Roma, L., & Baiker, K. (2020). Exercise-induced Acute Abdominal Haemorrhage due to Iliopsoas Trauma in Racing Greyhounds. J. Comp. Path., 177, 42–46.

⁴⁵ Bowden, A, Burford, J.H., Brennan, M.L., England, G.C.W and Freeman, S.L (2019) Horse owners' knowledge, and opinions on recognising colic in the horse Equine Veterinary Journal. 53(2), 262–267.

⁴⁰ https://www.bhs.org.uk/our-work/welfare/our-campaigns/react Last accessed 3.2.22.

demonstrated benefits from horse owners having considered in advance what their wishes would be should their horse develop (potentially fatal) colic. Similarly, owners having thought in advance about the costs of treatment and the need to have injured greyhounds referred for surgery might reduce euthanasia rates through clarifying decisionmaking during stressful emergency situations when the owner is not necessarily present to have discussions with the attending veterinary surgeon. The vast majority of injuries which greyhounds sustain at a track can be treated with appropriate first aid care, transportation and referral. Very few injuries are so severe that they are untreatable. However, it is possible (not proven) that stakeholders' anxiety to relieve injured greyhounds of pain, and uncertainty about transportation and referral options may be contributing to euthanasia decisions.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• GBGB will facilitate an undergraduate research project at the Royal Veterinary College investigating nonclinical factors which impact upon track veterinary surgeons' decisions to recommend euthanasia.

Arising from the results of that research, GBGB will implement further actions to reduce euthanasia rates relating to track injuries. These might include, for example, covering management of decision-making around treatment or euthanasia options in veterinary CPD training (Chapter 2), providing information on owner responsibility for the welfare of injured greyhounds in the new owners' pack (Chapter 2) and making recommendations for environmental conditions during discussions at tracks.

• GBGB will work with international colleagues (Chapter 2) to learn from their efforts to reduce euthanasia rates and adopt successful practices where they have been identified.

Medium term

• Through establishment of a WVSC working group (including co-opted members), GBGB will work with track veterinary surgeons, track management, promoters and trainers to establish and implement best practice around the logistics of transporting injured greyhounds for veterinary treatment at a referral centre.

Recommendations will be made relating to

- best practice for transporting injured greyhounds
- possible establishment of a network of 'preferred providers' of veterinary expertise in orthopaedic surgery

The aim of establishing such a network is to enable each track to have a formal, specific arrangement with a particular practice within a reasonable distance to receive and treat greyhounds injured during races or trials and for all greyhounds requiring immediate treatment to be sent there. (Such providers might be existing veterinary practices or might be new veterinary collaborations.)

PROVISION OF VETERINARY CARE

The role of the veterinary surgeon

BACKGROUND

The importance of veterinary surgeons in safeguarding greyhound welfare was a central theme of the Donoughue Report¹⁵, which has since that time been reinforced by the British Veterinary Association's promotion of veterinary surgeons as champions of animal welfare⁴⁷. GBGB is committed to supporting and developing the welfare-protecting role of veterinary surgeons within the sport.

ACTIONS

Actions already initiated within this strategy.

• To further that commitment and in support of the delivery of this strategy (Chapter 6), GBGB has developed and appointed to a new role of 'Executive Veterinarian'.

The Executive Veterinarian will play a pivotal part both in directing the implementation of this strategy and in providing support for veterinary care for greyhounds (see below).

Veterinary functions

BACKGROUND

The veterinary care of greyhounds is provided by track veterinary surgeons and by local veterinary surgeons with whom trainers must be registered. In preparing this strategy, GBGB has reviewed the role and responsibilities of veterinary surgeons on and off the track and listened to the views of all stakeholders including veterinary surgeons themselves. Proposals within this strategy for CPD for veterinary surgeons (Chapter 2) and for use of the AWAG by veterinary surgeons inspecting and caring for greyhounds at residential and breeding kennels (Chapter 2 and below) have already been described. In this chapter,

⁴⁷ The British Veterinary Association (2016). Veterinary surgeons speaking up for animal welfare: BVA animal welfare strategy. Available at: https://www.bva. co.uk/media/3124/bva-animal-welfare-strategy-final-version.pdf Last accessed 3.2.22.

we focus on the provision of local veterinary care, veterinary inspections at tracks, veterinary care of track injuries and the dual functions which veterinary surgeons at tracks fulfil.

Provision of local veterinary care

BACKGROUND

All trainers must be registered with a local veterinary surgeon (GBGB Rule 212). The GBGB Code of Practice⁴⁸ requires health plans for control of endemic diseases (including, for example, parasites and respiratory disease). It is also the local veterinary surgeon to whose care greyhounds are often returned following immediate treatment by track veterinary surgeons or referral to specialist veterinary surgeons for injuries which occur during racing.

GBGB is keen to promote continuity of care and to ensure that the standards set in the Code of Practice are adhered to, both to protect the welfare of greyhounds during their racing years and also to ensure that their health is optimal when they become ready for homing.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

- GBGB will enhance enforcement of trainers' preparation of and delivery upon preventative health plans.
- GBGB will undertake an audit of presentation for further treatment at a local or referral veterinary surgeon of greyhounds who were issued with a veterinary certificate to travel following a track injury.

Should the audit reveal that greyhounds are not being presented for follow-up treatment, immediate further education around this issue will be provided for trainers – accompanied by a clear message that noncompliance is not acceptable – and enforcement actions will be undertaken.

Veterinary inspections at tracks

BACKGROUND

GBGB has been following with interest reports of the recent introduction of prerace veterinary 'trot ups' for horses in certain races⁴⁹. The GBGB Rules of Racing

⁴⁸ https://s3-eu-west-1.amazonaws.com/gbgb-prod-assets/wp-content/ uploads/2020/02/27114106/GBGB-Code-of-Practice.pdf Last accessed 3.2.22.

^{4º} For example, https://www.britishhorseracing.com/press_releases/pre-raceexaminations-runners-2019-randox-health-grand-national-festival/ Last accessed 3.2.22. already mandate two prerace veterinary inspections of all greyhounds either trialling or running: one before kennelling and one before running. Greyhounds are further inspected as they return to the kennels after racing. The scope of veterinary oversight of greyhounds running at tracks is therefore already considerable and facilitates detection both of injuries or illness which should cause a greyhound to be withdrawn from running and of injuries which occur during running.

Nonetheless, having listened to stakeholder views, GBGB believes that these inspection procedures could be further refined to promote positive welfare. The prekennelling inspection in fact provides two slightly separate opportunities to safeguard welfare. First, it provides an opportunity for veterinary review of the greyhound's fitness. In line with the rationale behind prerace inspections of racehorses, this can protect against serious injury during trialling/racing by facilitating detection of minor injuries/gait abnormalities and consequent withdrawal of the greyhound from running that day and appropriate rest and/or treatment. Educating trainers to identify such concerns and seek proactive veterinary attention is also important in such an injury prevention programme (Chapter 2). Second, veterinary inspections provide an opportunity for the provision of veterinary advice around general health matters, aimed at improving preventative healthcare practice and greyhound welfare.

ACTIONS

To strengthen provision around both of these aspects:

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• The Veterinary Director of GBGB, reporting to the WVSC, will review current requirements of the prerace veterinary inspection and make recommendations for enhancements (including those relating to dentistry – see Chapter 2 above).

Medium term

 GBGB will work with stakeholders to encourage the development of centres of excellence for greyhound veterinary services, to which trainers can bring greyhounds on a proactive basis to seek care aimed at prevention as well as treatment.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB will provide CPD for veterinary surgeons around standardised preracing veterinary inspections (Chapter 2).

Medium term

• GBGB will introduce a system to record veterinary advice around general health issues when offered at a track, for Regional Regulatory Veterinary Surgeons to follow up compliance with the advice and to introduce penalties (e.g. veterinary withdrawal from running on health grounds) if necessary improvements are not made.

In order for such a system to be delivered effectively, systems of collaboration between track veterinary surgeons, veterinary surgeons caring for greyhounds at racing kennels, Regional Regulatory Veterinary Surgeons, Stipendiary Stewards and trainers/owners will be necessary and will be established. Use of the AWAG (Chapter 2) by stakeholders will provide an objective means of supporting this work and of monitoring improvement in healthcare.

Veterinary treatment of track injuries

BACKGROUND

Required veterinary facilities and attendance at tracks are specified in GBGB's Rules of Racing and have been developed since the time of the Donoughue Report¹⁵ consistent with the recommendations within it.

Where a serious injury occurs at a track, first aid is provided by the track veterinary surgeon, and then, where necessary, referral to a veterinary practice for further treatment (e.g. surgery) or to the trainer's local veterinary surgeon for further assessment is made. The programme of CPD for veterinary surgeons around best practice in managing and stabilising track injuries has been described in Chapter 2.

Prior work

• In 2018, GBGB introduced the 'Injury Recovery Scheme' (IRS).

The purpose of the scheme is to promote successful transition to appropriate retirement of greyhounds through providing financial assistance to owners, trainers and racecourses for veterinary costs associated with a career-ending orthopaedic injury sustained at a GBGB-licenced racecourse. There are three tiers of funding available ranging from £400 to £2,000 depending on the type and extent of the repair required. Since September 2018, 1,104 successful applications have been processed, and over £450,000 of assistance funding has been made available. In 2021, based on the success of the scheme to that point, GBGB increased the funding available to include the following:

 a grant of 50%, up to a maximum of £400 per greyhound, for any career-ending injury that requires remedial veterinary treatment

- a grant of 50%, up to a maximum of £1,000 per greyhound, for a career-ending hock injury that requires specialist surgery
- a grant of 50%, up to a maximum of £2,000 per greyhound, for a career-ending long bone injury that requires specialist surgery

Grants are paid to the applicant upon completion of an IRS application form and the production of a fully paid veterinary invoice. Racecourses that currently provide their own injury recovery scheme may apply for IRS funding on behalf of their owner or trainers. As a condition of funding, each greyhound for which a grant is paid must be retired.

ACTIONS

Led for this purpose by the GBGB Veterinary Director and the newly appointed Executive Veterinarian (above and Chapter 6), GBGB will build upon the ongoing success of the IRS to further refine provision for the treatment of injuries occurring at tracks. This will include work plans around veterinary CPD (Chapter 2), transportation of injured animals (above and below) and the possible development of a network of nominated referral centres (above).

Division of veterinary duties

BACKGROUND

Individual track veterinary surgeons currently perform a dual function: (a) a regulatory function which serves the integrity of the sport and (b) a clinical function providing treatment for greyhounds. Track veterinary surgeons are employed by the track which they attend and are also paid by the track although GBGB provides funding to tracks to help support that expense. This arrangement is in line with recommendations made in the Donoughue Report¹⁵.

The integrity and independence of veterinary surgeons are key parts of the RCVS Code of Practice and of veterinary surgeons' professional ethics, and we have found in the course of preparing this strategy that this is generally well recognised and respected by all stakeholders. Nonetheless, there is amongst some stakeholders a perception that a situation whereby the veterinary surgeon is responsible for making decisions which have an operational and financial impact upon track management (for example, deciding whether a greyhound should run or not) and is also paid by the track management has the potential at least to put veterinary surgeons under pressure when decisionmaking around such issues is required. GBGB has no evidence that this is in fact the case but accepts that the perception of a (possible) conflict of interest exists amongst some stakeholders.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• The GBGB Executive Veterinarian will monitor veterinary attendance at tracks and will provide support and advice to veterinary surgeons attending tracks.

Medium term

 GBGB will introduce a requirement for all track veterinary surgeons to have at least two years of postqualification experience and certified attendance under the supervision of a licenced veterinary surgeon for five meetings before adopting sole responsibility at a track.

Actions which will be undertaken within this strategy for which additional funding is needed.

Long term

• GBGB will develop, employ and provide a field force of Regional Regulatory Veterinary Surgeons.

The Regional Regulatory Veterinary Surgeons will support track veterinary surgeons in their regulatory functions, act as an additional point of referral and support for Stipendiary Stewards and work with track veterinary surgeons, Stipendiary Stewards and trainers in establishing causes of and preventing injuries. They will also carry out annual veterinary inspections at trainers' kennels and random inspections of vehicles being used to transport greyhounds to tracks as part of the Hot Weather Policy.

TRANSPORTATION

BACKGROUND

Transportation of greyhounds is an important area of welfare concern, described in the GBGB Rules of Racing as follows: 'The Transport of Greyhounds is an intrinsic element of the Greyhound Racing industry; greyhounds rarely live and race at a single location. Furthermore, the frequency of transport is likely to be greater than for most other greyhounds and takes place when the animal is likely to be subject to significant physiological stress resulting from Racing or Trialling. It is therefore important that transport conditions are optimal. In addition, Greyhounds are one of the few non-farmed species where there is significant national and international trade. This results in some long-distance transport when it is also important that adequate conditions are provided for the greyhounds'. Appendix II of the GBGB Rules of Racing provides detailed guidelines on requirements and considerations relating to the transportation of greyhounds. Legislation relevant to the transportation of greyhounds is described in Appendix 1 of this strategy. Reducing transportation times to veterinary practices for injured greyhounds (above) and minimising the transportation of greyhounds born in the Republic of Ireland and Northern Ireland to the UK (Chapter 2) are both addressed elsewhere within this strategy.

Prior work

GBGB has recently been working actively to improve welfare during transportation.

• In 2020, an 'air-conditioning working group' was established by the GBGB's WVSC as part of a wider assessment of risk factors associated with racing in hot weather.

The working group focused on transport as the highest risk factor and, therefore, made recommendations based on the results of a trainer survey and available scientific evidence.

- An 'Air-conditioning policy' has been agreed by the WVSC and main GBGB Board.
- from 1 April 2023, all vehicles used in the transportation of racing greyhounds will be required to be air-conditioned to ensure greyhounds' comfort and well-being as they travel to and from the track
- the cargo area of a vehicle must be able to maintain a temperature within a greyhound's thermo-neutral zone (between 10°C and 26°C)
- Appendix II of the GBGB Rules of Racing (Transportation) is in the process of being amended to reflect the air-conditioning requirements along with any other alterations to the current animals in transit legislation (Defra)
- the conditions of a training licence will also be updated to reflect these requirements
- GBGB is funding compliance with the airconditioning policy.

To assist trainers in meeting this requirement, GBGB in 2021 launched an internally funded scheme which will provide a one-off grant payment up to a maximum of £2,000 per vehicle (capped at a maximum of two vehicles per trainer) towards replacement vehicles or a one-off payment of £1,000 towards insulation/airconditioning repairs or modifications. Just under forty applications for such funding were received in 2021.

- GBGB also provides a separate fund to which trainers may apply for grants to fund 50% of the cost of replacement travel cages (excluding VAT) in vehicles used to transport greyhounds.
- GBGB has developed a partnership with a supplier of vans, saving trainers up to 35% in outlay costs.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

- GBGB will continue to promote uptake of the grant scheme described above to enable trainers to provide air-conditioning in all their vehicles as soon as possible and before the 1st April 2023 deadline.
- GBGB will make provision of documentation relating to the legal transportation of a greyhound into Great Britain a condition of registration of Irish-bred greyhounds to race in Great Britain.
- The WVSC of the GBGB will consider whether the 10% of track kennels that do not currently have air conditioning should be required to do so by 1st April 2023.

Short, medium and long term

- GBGB will update its own requirements on transportation in line with future alterations to national animal import requirements (currently under the Balai Directive).
- GBGB Stipendiary Stewards will continue to routinely inspect vehicles involved in the transportation of greyhounds to tracks as part of the Hot Weather Policy. Such inspection includes assessment of compliance with air-conditioning requirements and enforcement of those where necessary.
- Random inspections of vehicles aimed will be part of the function of the new Regional Regulatory Veterinary Surgeons.*
- * Funding will come from the budget for the Regional Regulatory Veterinary Surgeons, specified elsewhere in this document.

MANAGEMENT OF GREYHOUNDS AT TRACK KENNELS

BACKGROUND

The inspection and licencing of racecourses have been UKAS accredited since 2010. Track kennels are inspected as part of the annual UKAS-accredited racecourse inspection. Stipendiary Stewards visit one of their designated racecourses twice monthly to ensure continuing compliance with the certification inspection. Each visit is recorded on the GBGB registry database, and areas of noncompliance are identified and brought to the attention of the management for corrective action. Failure to make the corrective actions can result in disciplinary findings. Around 90% of all stadia kennels are air-conditioned. Water in kennels has been a requirement since 2014, and details/recommendations around this have been regularly updated by GBGB's WVSC. The maintenance of track kennels is the responsibility of the track management and a condition of licencing. They may apply directly to the BGRF for welfare funding relating to kennel improvements.

Prior work

• GBGB's evidence-based policies on racing in hot and cold weather extremes⁵⁰ have been a key component of its Greyhound Commitment.

The policies are reviewed annually to ensure that they are based on the latest veterinary and scientific research. Provision under these policies includes, for example, cooling baths at racetrack kennels and reduced parade times and guidance to tracks about when racing can continue and should be abandoned in hot environmental conditions.

• Fireworks policy

In 2021, GBGB published a Fireworks Policy⁵¹ the key points of which were as follows:

- There will be no conventional fireworks displays at GBGB Licenced Racecourses whilst greyhounds are present at the racecourse.
- Measures shall be put in place to reduce the risk and impact of greyhounds being exposed to fireworks while at stadiums.
- Measures shall be put in place to reduce the risk of greyhounds being exposed to firework noise whilst in transit.
- GBGB will join with welfare charities in lobbying government in the banning of the sale of over-thecounter fireworks and banning the usage of fireworks except for professionally organised displays.
- During High-Risk Periods racecourses should look to schedule racing times and meetings to avoid any local major displays or exposure.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• GBGB's WVSC will establish a working group to which representative members of the Greyhound Forum will be invited to review the requirements for

⁵⁰ https://gbgb-prod-assets.s3.eu-west-1.amazonaws.com/wp-content/ uploads/2020/06/22144751/GBGB-Hot-Weather-Policy-2020-1.pdf Last accessed 3.2.22.

⁵¹ https://gbgb-prod-assets.s3.eu-west-1.amazonaws.com/wp-content/ uploads/2021/11/05151411/GBGB-Firework-Policy-2021-1.pdf) Last accessed 3.2.22.

racecourse kennels under the UKAS accreditation scheme and make recommendations for updates to reflect current scientific knowledge if appropriate.

- GBGB's Fireworks Policy will be reviewed annually before distribution to greyhound trainers, owners and kennel hands, racecourse promoters, racing managers, track veterinary surgeons and track welfare officers.
- GBGB will continue to work with promoters to encourage sympathetic rescheduling of racing where fireworks could have an impact.
- GBGB will join with welfare charities in lobbying government to ban the sale of over-the-counter fireworks and ban the use of fireworks except for professionally organised displays.

MANAGEMENT OF GREYHOUNDS IN LICENCED RACING (RESIDENTIAL) KENNELS

BACKGROUND

During the racing years of their lives, greyhounds are kept and spend a considerable amount of time in licenced kennels. Kennelling is of course also a common management system not only for greyhounds but also for other working dogs such as police and military dogs and indeed for dogs awaiting homing at charity centres. GBGB accepts that for all working dogs, being kennelled has the potential to compromise canine welfare if care is not taken to provide an environment which is suitable in both physical and psychological terms. The following paragraphs explain existing practices, policies and enforcement regimes relating to residential kennels and lay out further work which will be undertaken within this strategy to better understand a greyhound's environmental and behavioural needs in relation to kennel facilities and management.

Facilities

A 2016 review by the British government of the Welfare of Racing Greyhounds Regulations (2010) required GBGB to improve conditions at trainers' kennels.

Prior work

• In response to that request from government and in collaboration with canine charities, in 2020, GBGB launched a new Code of Practice designed to be a helpful and practical tool for all those working in residential kennels. This 'living document' goes beyond PAS 251:2017 standards (see below) and covers all aspects of caring for a greyhound's mental and physical health. It includes, for example, recommendations on the construction, maintenance and management of kennels as well as guidelines on environmental enrichment, exercise, nutrition and dental care.

• Since 2021, all GBGB trainers' residential kennels have been subject to audit by independent auditors, and UKAS accreditation is being sought for this process.

As requested by Defra in their 2016 review, the independent inspections of residential kennels are based on 'PAS 251:2017 Specification for greyhound trainers' residential kennels'. PAS 251:2017 was developed by the British Standards Institution (BSI) and provides an independent standard for trainers' kennels based upon best welfare practice and the experience of animal welfare organisations, veterinary surgeons, government and industry specialists. Trainers have 90 days to comply with any nonconformance notice issued by the auditor. Once an auditor is satisfied that a trainer is compliant with the requirements of PAS 251:2017, the details are forwarded to GBGB towards the renewal of that trainer's licence. Should the trainer fail to comply with requirements for improvement made by the auditor, GBGB will be notified and the status of the trainer's licence will be reviewed by the GRB.

These independent UKAS-accredited inspections are carried out in addition to a minimum of two unannounced visits by GBGB officials (Stipendiary Stewards) each year and an annual veterinary inspection. Concerns raised during such internal inspections may lead to improvement notices and/or possible disciplinary action.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

• GBGB will continue to work with SCI to achieve UKAS accreditation for the inspection of residential kennels.

Medium term

- GBGB will work to maintain annual UKAS accreditation for the inspection of residential kennels.
- GBGB will regularly review PAS 251:2017 to make recommendations for updating if/as necessary to ensure that it continues to reflect best current welfare practice in environment, husbandry and health.
- Once UKAS accreditation for the inspection of residential kennels has been achieved, GBGB will publish annually, in anonymised form, details of levels of compliance with PAS 251:2017 as assessed by the independent auditors.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB will work with the Greyhound Forum to update PAS 251:2017 to bring it in line with ADCH standards.

Medium term

• GBGB will work with the Greyhound Forum to keep abreast of any changes to the schedules and guidance of the Animal Welfare Regulations 2018 (Licensing of Activities Involving Animals) (England) when it is reviewed (scheduled for 2023) and to update the PAS 251:2017 as necessary against any such changes.

WELFARE-FOCUSED PRACTICE

BACKGROUND

GBGB recognises that welfare in residential kennels is a function not only of facilities but also of management practice. That is why the Code of Practice, first published in 2019, goes beyond the requirements of the PAS 251:2017 and includes guidelines on environmental enrichment, exercise, nutrition and dental care.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short, medium and long term

- The development of the bespoke greyhound AWAG (Chapter 2) will further enable those caring for greyhounds to monitor welfare and benchmark themselves against their peers and will enhance recognition of both negative and positive welfare effects.
- The AWAG (Chapter 2) will provide an objective method of comparison and welfare tracking over time for the veterinary surgeons, trainers, owners and Stipendiary Stewards working together to provide the care of any individual greyhound.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• GBGB will further develop knowledge-sharing and training opportunities for all those responsible for the care of greyhounds (Chapter 2).

Such training will focus not only on physical welfare needs but also on behavioural needs and on identification and mitigation against the possible negative impact of currently common practices, e.g. muzzling greyhounds to facilitate paired housing.

MANAGEMENT OF GREYHOUNDS AT SALES

BACKGROUND

Approximately 10% of greyhounds being sold in the UK go through sales held at licenced greyhound tracks. GBGB registers the organisers to hold these sales meetings, and licences each vendor as a sales agent.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

- GBGB will review current practices and facilities at sales and transportation to and from sales against welfare needs. This work will be undertaken by a working group within the WVSC which other relevant stakeholders (for example vendor and track representatives) will be invited to join.
- The output of this work will be the publication by GBGB of recommendations for best practice at greyhound sales.



CHAPTER 5: RETIREMENT

INTRODUCTION

Like racehorses, racing greyhounds typically retire from racing some years before the end of their natural lifespan. GBGB is committed to the principle that, wherever possible, every greyhound should have a long, happy and healthy retirement. Successful homing upon retirement from racing (or if a greyhound has never entered racing, Chapter 3) requires a greyhound to be suited for retirement in both physical and behavioural senses. The physical and psychological condition of a greyhound at the point at which it is ready for homing outside the racing environment is strongly influenced by welfare impacts upon it until that point – such as the genetic influences, experiences of socialisation, management during life in licenced training kennels and preventative health measures described in Chapter 1-4. A successful retirement for a greyhound is the product of cumulative effects in the greyhound's earlier life – hence the importance of the lifetime themes discussed in Chapter 1 and of the holistic approach to welfare on which this strategy is based. Successful retirement is also dependent upon clear and transparent knowledge exchange between those responsible for the greyhound – for example, trainers and homing centres making new owners aware of any possible long-term implications if a greyhound has previously had an injury/surgery.

BACKGROUND

Greyhound owners have a duty to arrange homing of their greyhounds upon retirement, or if they never race. Explanations around that duty and signposting to sources of support will be provided in the new owners' pack being developed within this strategy (Chapter 2). Nonetheless, GBGB shares responsibility (Chapter 2) for homing and also plays an active role in facilitating appropriate homing processes and providing oversight of them. The management of this function within GBGB sits within the welfare department and with the Greyhound Retirement Scheme Coordinator – a position which GBGB created in 2020.

Reporting of retirement data is discussed below. The percentage of greyhounds coming out of GBGBregulated racing and being homed or retained has risen from 87.4% in 2017 to 94.4% in 2021. GBGB welcomes this improvement but remains committed to every greyhound leaving racing enjoying a long and happy retirement wherever possible. The ways in which GBGB is already working to achieve this aim and the ways in which we will expand our efforts to do so within this strategy are explained in the following sections.

Prior work

GBGB retirement scheme

• In September 2020, GBGB launched its 'Greyhound Retirement Scheme' (GRS).

The GRS is a step-change in the way retired greyhounds are homed, as it seeks to ensure the financial costs of homing a greyhound are met before a greyhound even begins their racing career. Under the GRS, a £400 bond – paid for jointly by owners and GBGB – is attached to each newly registered racing greyhound when they first enter racing. The full bond gets unlocked when the greyhound enters an approved homing centre (see below) to assist with costs associated with homing. Owners are required to pay a £200 GRS payment at the same time as registering their greyhound (in the early stages of the scheme up to 31 March 2022, this was reduced to £100, with the owner paying the final £100 payment by/on the greyhound's retirement). This contribution is matched by GBGB, who contributes £200 upon the greyhound's retirement to create a £400 bond that follows the greyhound throughout its career. Owners of greyhounds which were registered before 2020 can opt to make a £200 GRS payment anytime until or

on the greyhound's retirement, and GBGB will match that payment to create a bond for the greyhound. For British-bred greyhounds, the owner is currently required to pay £100 on registration, and currently GBGB contributes £300 to the GRS bond. This will continue until 2025, subject to funding. The retirement bond can currently be used by the homing centre to cover costs associated with kennelling, feeding and caring for the greyhound until a home is found. Veterinary costs associated with homing which are incurred prior to the greyhound entering the centre or charity, e.g. neutering and/or dental work, are deemed to be the responsibility of the greyhound's owner. The GRS is administered via GBGB's registry team and the Greyhound Homing Coordinator. The Greyhound Homing Coordinator also works with animal welfare charity partners and independent homing centres and assists owners, trainers and stadia in finding available homing spaces.

 As of the end of 2021, over 13,000 owner payments have been made to the GRS. Approximately a third were made on a voluntary basis by owners whose greyhounds were registered prior to September 2020. These represent a value of almost £2 million. GBGB has already made more than 4,000 GRS bond payments since the scheme started in 2020, and so far, a total of more than £1.8 million has been made available to GBGB-approved homing centres to use as described above between September 2020 and December 2021.

Approved homing partners

• GBGB has a network of approved homing partners,

All partners are inspected by GBGB staff prior to inclusion on the list to ensure that they meet GBGBspecified requirements in the following areas:

- homing policy
- returns and euthanasia policy
- kennel environment: suitable kennel size, bed, bedding material, cleaning and disinfectant policy
- daily exercise routine
- environmental enrichment
- food diet, preparation and food storage facility
- sufficient monitoring practice of behaviour, health and welfare
- veterinary healthcare practice linked to the homing centre
- suitable temperature and weather condition control
- emergency plan/isolation facility
- kennel security arrangements

The standards applied to homing centres seeking approval to becoming an approved GRS partner are in line with ADCH standards and also incorporate PAS 251:2017 standards.

• As of the end of 2021, GBGB had 125 approved homing partners.

GBGB makes grants available to homing centres for making welfare improvements. Since these grants were first made available in April 2021, £25,300 has been provided in this way.

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

GBGB will build on the GRS and the existing network of approved homing centres to

- Continue to develop relations and support with owners (Chapter 2), trainers, stadia and prospective homing centres who wish to become approved under GRS.
- Work with charities with expertise in canine (particularly sighthound) behaviour to develop educational programmes for breeders, owners and trainers around preparing greyhounds for retirement.

Topics covered will include the need for socialisation during early life and the need to teach greyhounds to walk on the lead and to come when called and familiarisation with items commonly found within a domestic environment etc (Chapter 2).

- Facilitate an undergraduate research project at the Royal Veterinary College and undertaken in collaboration with major homing charities and approved homing centres which will investigate reasons for failure of homing processes (including greyhounds failing to find a home or being returned to homing centres) and will make recommendations for methods of mitigation against those failures.
- Work to promote responsible homing of greyhounds, to identify opportunities to maximise the number of greyhounds homed each year and to reduce the cost burden on homing organisations.
- Work with the Greyhound Forum to annually review standards for the GBGB GRS homing scheme against ADCH standards and update them where necessary.

Actions which will be undertaken within this strategy for which additional funding is needed.

Short term

• Develop and deliver educational programmes for owners of retired greyhounds, for example, around nutrition and preventative healthcare (Chapter 2).

- Work with the Greyhound Forum charities to draw on their existing expertise and publications and collaborate with them to provide a 'welcome pack' for new owners of retired greyhounds which will be made available via all GBGB-approved homing centres.
- GBGB will provide additional support for individual approved homing centres in the form of grants for welfare improvements.
- GBGB will engage with canine charities to understand the evidence arising from their existing programmes around behavioural modification and preparing greyhounds for their transition to a domestic environment.
- The Regional Regulatory Veterinary Surgeons will also be specifically tasked with checking retired greyhounds who are retained by trainers in kennels and will be given responsibility for oversight of their welfare.

Funding will come from the budget for the Regional Regulatory Veterinary Surgeons, specified elsewhere in this document.

Medium term

- GBGB will work to develop and commission a programme of research aimed at identifying common health problems in greyhounds being presented for homing and investigating possible correlations with management in earlier life, e.g. nutrition and preventative healthcare.
- GBGB will work to provide free, long-term support for owners of retired greyhounds by developing and hosting an online portal containing information and signposting to appropriate advice.
- GBGB will work with the Greyhound Forum to establish a harmonised programme of behavioural assessments, where required, for greyhounds retiring from racing, to be undertaken by qualified canine behaviourists.
- GBGB will work to develop a set of standards to be applied specifically to the long-term kennelling of retired greyhounds who are 'retained' by their trainer or owner and kept at licenced premises.

These standards will supplement PAS 251:2017 standards for racing greyhounds to optimise the longterm welfare of greyhounds staying in a kennelled environment after retirement.

Long term

• GBGB will extend the GRS to be applicable to Britishbred puppies, bred for racing, that have never been registered/entered racing where the breeder makes their required contribution to the bond.

REPORTING

BACKGROUND

As described in Chapter 4, reporting of data is important to greyhound welfare to inform evidence-based policymaking and best practice and to provide a source for research. This extends also to data relating to the retirement phase of a greyhound's life and to information relating to those greyhounds which are homed as young greyhounds having never entered racing.

Prior work

GBGB already gathers and publishes data about the number of greyhounds homed annually and where those greyhounds have been homed (e.g. with the owner or trainer, via a charity, or via private homing).

ACTIONS

Actions which will be undertaken within this strategy, covered by current funding arrangements.

Short term

- The ways in which GBGB will work with stakeholders including the canine charities to gather evidence around greyhounds who exit recording systems early in their lives have been explained in Chapters 2 and 3.
- The way in which the unacceptable risks to greyhounds who exit GBGB-regulated racing and are exported to countries with lower welfare standards will be dealt with within this strategy has been explained in Chapter 2.
- The way in which the unacceptable risks to greyhounds who exit GBGB-regulated racing to enter non-GBGB-regulated racing will be dealt with within this strategy has been explained in Chapter 2.
- GBGB will review whether the current Retirement Form system could be refined to further optimise welfare during retirement and to implement any such refinements where agreed.

Medium term

• GBGB will streamline the process for 'releasing' a microchip from the GBGB database system for it to be registered with a pet microchip database when a greyhound exits racing.

CHAPTER 6: DELIVERY

Finally, we outline a timetable for the work proposed in this strategy, and explain how delivery of that work will be organised and reported upon and how impact will be assessed.

INTRODUCTION

This strategy is deliberately ambitious in its scope. It includes short-term, medium-term and long-term objectives, some of which are based in fairly simple changes; many of which involve collaborations with external partners expert in animal welfare, behaviour and veterinary medicine; and a few of which require the use of cutting-edge science. As outlined in the introduction, GBGB believes that interests within the sport and within society in optimising welfare to facilitate the continuation of the social licence to use animals in sport are now aligned. This far-reaching strategy which encompasses all five welfare domains of a greyhound's experience across all phases of each greyhound's lifetime is thus not only appropriate but also necessary.

TIMETABLE

Below, we provide a tabulated summary of actions which will be undertaken in the short, medium and long terms. also necessary.

TABLE 1: ACTIONS AND FUNDING STATUS

LIFETIME THEMES								
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS		
SHARED RESPONSIBILITY	GBGB will provide training programmes and improved communications between GBGB and stakeholders to ensure that everyone involved in greyhound sport understands that welfare is their responsibility and is suitably trained to fulfil that responsibility.	Current funding			All of the programmes described under 'Education' (short and medium term, funding required) for each stakeholder group will become regular features of the greyhound calendar and so on-going annual funding will be needed to deliver this programme of training.	Funding required		
	GBGB will work closely with local authority, external agency or governmental bodies to share responsibility for greyhound welfare.	Current funding						

LIFETIME THEM	ES					
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
EDUCATION	For Stipendiary Stewards		For Stipendiary Stewards			
	A programme of Stipendiary Stewards and Regional Regulatory Veterinary Surgeons providing brief regular updates on welfare matters for trainers and kennel hands at each track will be instigated.	Current funding	Once the Animal Welfare Assessment Grid for greyhounds has been developed (see below) Stipendiary Stewards will be provided with training in how to use that tool.	Funding required		
	Communication training will be provided for Stipendiary Stewards.	Funding required				
	GBGB will work with SCI to design and deliver a joint training programme for auditors of UKAS inspection schemes (Chapter 4) and Stipendiary Stewards.	Current funding				
	For Trainers and Kennel hands		For Trainers and Kennel hands			
	GBGB will develop and deliver CPD knowledge sharing workshops for trainers and kennel hands.	Funding required	Attendance at specified CPD knowledge sharing courses (for example on nutrition and husbandry) will become a prerequisite requirement for application to hold a trainer's licence.	Funding required		
	For Kennel hands Apprenticeship Scheme.	Funding required	Annual CPD 'refresher welfare workshops for trainers' will be developed. Biennial certified attendance a those will become a necessary part of demonstrating competence and a mandatory requirement of holding a training licence.	Funding required		
			GBGB will produce an online training module in greyhound welfare for kennelhands, the completion of which will become a condition of being licenced.	Funding required		
	For Veterinary surgeons		For Veterinary surgeons			
	GBGB will develop and deliver CPD training on pre- race assessments including standardised clinical examinations and 'trot ups' (Chapter 4).	Funding required	Regular attendance at the CPD refresher courses will become a requirement of working as a track veterinary surgeon and as a Regional Regulatory Veterinary Surgeon.	Funding required		
	Externally provided CPD on trackside first aid will be developed and delivered.	Funding required				

LIFETIME THE							
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS	
EDUCATION	GBGB, working where appropriate with external providers, will develop and deliver CPD 'refresher courses for track veterinary surgeons'. Available annually.	Funding required					
	GBGB will develop and deliver CPD courses for Regional Regulatory Veterinary Surgeons.	Funding required					
	For Track Maintenance staff		For Track Maintenance staff				
	GBGB's Track Liaison Officer and the GBGB Track Safety Committee, working with relevant providers, will develop and deliver workshops for those responsible for track maintenance.	Funding required	With external providers, GBGB will develop and deliver an educational programme for those responsible for track maintenance.	Funding required			
	GBGB will produce an online video version of the track maintenance manual and reference resource materials.	Funding required					
	The Track Liaison Officer and the GBGB Track sub- committee will develop a knowledge base to allow those responsible for track maintenance to readily access best practice, guidance and support with the intention of improving consistency of delivery across all GBGB licensed racetracks.	Funding required					
	The increased frequency of STRI visits to tracks (Chapter 4) also provides enhanced opportunity for knowledge sharing around track maintenance and preparation. One visit per year per track covered by current funding, three more visits per track required.	Funding required					
	For other Track Staff						
	GBGB will develop and deliver an ongoing educational programme on greyhound welfare for those responsible for handling greyhounds at tracks.	Funding required					
	For Owners of racing greyhounds		For Owners of racing greyhounds				
	A 'welcome pack' for owners will be developed by GBGB.	Funding required	In collaboration with external experts where appropriate GBGB will develop an ongoing welfare-focused knowledge sharing programme for owners	Funding required			

LIFETIME THEM	ES					
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
EDUCATION	GBGB will develop and deliver knowledge sharing workshops for owners of racing greyhounds.	Funding required				
	For Owners of retired greyhounds		For Owners of retired greyhounds			
	GBGB will develop and deliver knowledge sharing workshops for owners of retired greyhounds.	Funding required	GBGB will work with canine charities to consider the development of a 'Greyhound welfare roadshow'.	Funding required		
	GBGB will work with the Greyhound Forum to develop a 'welcome pack' for new owners of retired greyhounds which will be made available via all GBGB approved homing centres.	Funding required				
	For Breeders of greyhounds		For Breeders of greyhounds			
	GBGB will develop and facilitate welfare knowledge sharing workshops and workshops around current practices for breeders of racing greyhounds.	Funding required	GBGB will aim to work with equivalent organisations in The Republic of Ireland and Northern Ireland to promote education and knowledge transfer for breeders.	Current funding		
EVIDENCE AND THE NEED FOR RESEARCH						
Details are provided in all of the life-stages and at Appendix 4 of proposed research projects.						
INTERNATIONAL COLLABORATION	GBGB will work with international regulators to co-operate and pool research and knowledge on welfare standards and practices.	Current funding	The international regulators' information portal will be expanded to share welfare- related research studies and educational materials.	Current funding		
	During 2022 an inaugural meeting of international greyhound regulators will be hosted by the GBGB.	Current funding				
	GBGB aims to work specifically with Irish counterparts to promote equivalent high welfare standards across borders.	Funding required				
	GBGB will also be taking direct unilateral steps to promote breeding and rearing of greyhounds within Great Britain and to encourage owners and trainers to acquire puppies from reputable British breeders and rearers with high welfare standards (Chapters 3 and 4).	Current funding				

	SHORT TERM	FUNDING	MEDIUM TERM	FUNDING	LONG TERM	FUNDING
INTERNATIONAL COLLABORATION	(up to 18 months) GBGB will lead an effort, working with International greyhound regulators, to develop and harmonise welfare policies and strategies.	STATUS Current funding	(18 months – 3 years)	STATUS	(3 – 5 years)	STATUS
MONITORING OF WELFARE	GBGB has partnered with Professor Sarah Wolfensohn and her team at Surrey University and commissioned the development of a greyhound-specific Animal Welfare Assessment Grid (AWAG).	Current funding				
	The bespoke greyhound AWAG will be trialled in pilot studies.	Current funding	The bespoke greyhound AWAG will be trialled in large scale studies.	Current funding	Use of the bespoke greyhound AWAG will be rolled out throughout the sport in (i) breeding (ii) racing (iii) retirement settings.	Current funding
NUTRITION	Dr Hollands will facilitate a series of knowledge sharing nutrition workshops with greyhound trainers, breeders and owners.	Funding required	Annual nutrition workshops for trainers, owners and breeders.	Funding required		
	Dr Hollands will convene and chair a working group of external experts to review and make recommendations around greyhound nutrition practice and research required.	Funding required	Dr Hollands will facilitate a second series of workshops with greyhound trainers, breeders and owners. These will focus on sharing the results of the working group review and promoting best nutritional practice based on those recommendations.	Funding required		
			Research recommended by the nutrition review panel to be funded.	Funding required		
PREVENTATIVE MEDICINE	The GBGB will incorporate BVA guidance on antimicrobial stewardship into the training of trainers, owners and veterinarians and into the GBGB Code of Practice.	Current funding				
TRACEABILITY			GBGB will aim to work with Irish counterparts, the Greyhound Forum and government to improve information gathering about greyhounds being transported between the ROI, Northern Ireland and the UK.	Current funding		
			GBGB will work with international regulators to establish harmonised systems for monitoring and deterring exportation of greyhounds to jurisdictions where welfare standards cannot be verified.	Current funding		
			GBGB will work with the British government to promote enforcement of relevant national legislation around the issue of greyhound exportation.	Current funding		

LIFETIME THEM	ES					
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
TRACEABILITY			GBGB will support that all tracks, including schooling and greyhound trainers should be regulated to a standard equivalent to GBGB regulation.	Current funding		
			GBGB will remove the option of a greyhound exiting GBGB regulated racing to enter independent/unregulated British racing from the GBGB Retirement Form.	Current funding		
			GBGB will work with the Greyhound Stud Book, breeders, owners and trainers to build an evidence base around dogs which were ear marked but never presented for racing.	Current funding		
			GBGB will aim to work with the Irish studbook and regulator to encourage them to undertake similar work as part of their own welfare programmes.	Funding required		
			GBGB will consider whether the current GBGB Retirement Form system could be refined to further optimise welfare during retirement (Chapter 5) and will implement any such refinements where agreed.	Current funding		
			GBGB will streamline the process for 'releasing' a microchip from the GBGB database system for it to be registered with a pet microchip database when a greyhound exits racing.	Current funding		
			GBGB will work with government to phase out ear marking as a method of identification and to replace it with a more welfare-friendly identification method which will also maintain adequate identification from an integrity point of view.	Funding required		
PHYSICAL AND PSYCHOLOGICAL RESILIENCE						
Funding requirements for actions under this theme are detailed in each of the relevant life stages.						

EARLY YEARS						
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
	GBGB will commission Professor Hill to undertake research to map inbreeding levels and understand the impact of inbreeding on health and welfare traits and long lasting soundness and health in greyhounds.	Funding required	Dependent on results of prior research, GBGB will commission Prof. Hill to undertake work to develop an easily-useable tool which breeders and owners could use to make breeding decisions aimed at optimising welfare, long-lasting soundness and health.	Funding required		
	GBGB will aim to use the KC Assured Breeders Scheme and the Animal Welfare (licensing of Activities involving Animals) (England) regulations (2018) as a basis for working with Greyhound Racing Ireland and the Irish Coursing Club to promote a harmonised set of standards and Code of Practice of breeders in the UK and the ROI.	Current funding	GBGB will collaborate with the Greyhound Forum to consider and make recommendations around how traceability of greyhounds not entering racing can be improved.	Current funding		
	GBGB will promote high standard British breeding through the KC Assured Breeders' Scheme including encouraging owners and trainers to purchase greyhounds from British breeders who are members of that scheme.	Current funding	GBGB will work with the Greyhound Stud book to enhance the recording of the genetics of breeding greyhounds and make this information readily available to breeders.	Funding required		
	GBGB will work with the Greyhound Stud Book to identify breeders of racing greyhounds who fall under the scope of the Breeding of Dogs regulations and/or the Selling Animals as Pets regulations, and to ensure that such breeders are compliant with legal requirements.	Current funding				
	GBGB will work with the Greyhound Stud Book to identify breeders of racing greyhounds who do not fall under the scope of the Breeding of Dogs regulations and/or the Selling Animals as Pets regulations.	Current funding				
	GBGB will work with the Kennel Club and a small number of breeders to pilot the Kennel Club Assured Breeders Scheme to test its applicability to greyhounds.	Funding required				
	GBGB will promote and incentivise early joining of the KC Assured Breeders Scheme by funding application fees for the first 2 years of the scheme being available to greyhound breeders.	Funding required				
	GBGB will work with the Grey- hound Stud Book and the British Greyhound Breeders Forum to further develop schemes of reward for British bred greyhounds.	Funding required				
	GBGB will work with external experts in canine behaviour to provide training for breeders and those responsible for the early years of a greyhound's life.	Funding required				

RACING YEARS								
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS		
	The frequency of STRI inspections will be increased to quarterly.	Funding required	GBGB will conduct an ongoing review and analysis of injury data to identify how best to collate, publish and interpret the causes of injury and improve accountability through its publication. The GBGB, led by the Track Liaison Officer and its newly appointed data analyst, will work both with individual tracks and trainers and through analysis of the macro-data to address the multifaceted causes of injuries.	Current funding	GBGB will develop, employ and provide a field force of Regional Regulatory Veterinary Surgeons.	Funding required		
	GBGB will appoint a professional data analyst to assist in facilitating and managing work streams around data reporting and analysis.	Funding required	GBGB will consult with academic stakeholders about best practice for facilitating access to anonymised data for independent research purposes and follow those recommendations.	Current funding	Random inspections of vehicles involved in the transportation of greyhounds to tracks as part of the Hot Weather Policy will be one of the functions of the new Regional Regulatory Veterinary Surgeons.	Funding required		
	GBGB will increase the granularity of the GBGB injury database.	Funding required	GBGB will review and refine how it makes internal use of data which it currently gathers.	Current funding	GBGB will establish a Centre of Excellence for research into greyhound tracks.	Funding required		
	GBGB will refine internal systems so that a 'spike' in injuries at an individual track within data collection systems automatically triggers an immediate visit to that track by the Track Liaison Officer / Track Safety Committee member.	Current funding	GBGB will work with trainers to use data to establish possible correlations between training methods and injuries.	Current funding				
	GBGB will collaborate with international regulators to learn from global research into causes of injuries in greyhounds and to use that information to inform best practice.	Current funding	GBGB will work with track vets, track management and promoters to establish and implement best practice around the logistics of transporting injured greyhounds for veterinary treatment at a referral centre.	Current funding				
	The Track Liaison Officer is already working to improve track conditions using the current evidence base for example by use of 'Verti drain machines'.	Current funding	GBGB will work with stakeholders to encourage the development of centres of excellence for greyhound veterinary services.	Current funding				
	The Track Liaison Officer is also currently working to develop an online track maintenance record tool.	Current funding	GBGB will introduce a system to record veterinary advice around general health issues when offered at a track; to follow up compliance with the advice, and to introduce penalties (e.g. veterinary withdrawal from running on health grounds) if necessary improvements are not made.	Funding required				

RACING YEARS	5					
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
	Internal research led by the Track Liaison Officer run in conjunction with STRI will assess the effects of variables on track condition and safety.	Funding required	GBGB will introduce a requirement for all track veterinary surgeons to have at least 2 years post- qualification experience and certified attendance under the supervision of a licensed veterinary surgeon for 5 meetings before adopting sole responsibility at a track.	Current funding		
	GBGB will continue to collaborate with international partners to exchange information about and learn from innovations in track design, surface and maintenance.	Current funding	GBGB will work to maintain annual UKAS accreditation for the inspection of residential kennels.	Current funding		
	GBGB will work with promoters to reward breeding and care which result in long-lasting soundness and health in greyhounds.	Current funding	With input from the Greyhound Forum and veterinarians, GBGB will regularly review PAS 251: 2017 to make recommendations for updating if / as necessary.	Current funding		
	An undergraduate research project at the Royal Veterinary College to investigate non-clinical factors which impact upon track vets' decisions to recommend euthanasia.	Current funding	GBGB will work with the Greyhound Forum to keep abreast of any changes to the schedules and guidance of the Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018 and to update the PAS 251: 2017 as necessary against any such changes.	Funding required		
	GBGB will work with international colleagues to learn from their efforts to reduce euthanasia rates and adopt successful practices where they have been identified.	Current funding	Once UKAS accreditation for the inspection of residential kennels has been achieved, GBGB will publish annually, in anonymised form, details of levels of compliance against PAS 251: 2017 as assessed by the independent auditors.	Current funding		
	GBGB has developed and appointed to a new role of 'Executive Veterinarian'.	Current funding	GBGB will develop systems for regularly publicly reporting upon doping offences, kennel inspections (anonymised) and track inspections (anonymised).	Funding required		
	GBGB will enhance enforcement of trainers' preparation of and delivery upon preventative health plans.	Current funding	GBGB will commission necessary areas of further research identified by Dr Payne's review of the evidence base about injuries.	Funding required		
	GBGB will undertake an audit of presentation for further treatment at a local or referral vet of greyhounds who were issued with a veterinary certificate to travel following a track injury.	Current funding	GBGB will commission research guided by Dr Richard Payne to assess whether the adoption of technologies to detect early injury could help to prevent greyhound injuries.	Funding required		

RACING YEARS	5					
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
	The Veterinary Director of the GBGB will review current requirements of the pre-race veterinary inspection and make recommendations for enhancements.	Current funding				
	GBGB will continue to promote uptake of the grant scheme to enable trainers to provide air-conditioning in all of their vehicles as soon as possible and before the April 1st 2023 deadline.	Current funding				
	GBGB will make provision of documentation relating to the legal transportation of a greyhound into Great Britain a condition of registration of Irish-bred greyhounds to race in Great Britain.	Current funding				
	GBGB Stipendiary Stewards will continue to routinely inspect vehicles involved in the transportation of greyhounds to tracks as part of the Hot Weather Policy.	Current funding				
	GBGB's Welfare and Veterinary Standing Committee will establish a working group to which representative members of the Greyhound Forum will be invited to review the requirements for racetrack kennels under the UKAS accreditation scheme and make recommendations for updates to reflect current scientific knowledge if appropriate.	Current funding				
	GBGB's Fireworks Policy will be reviewed annually before distribution to greyhound trainers, owners and kennel hands; racecourse promoters; racing managers; track veterinary surgeons; and track welfare officers.	Current funding				
	GBGB will continue to work with promoters to encourage sympathetic scheduling of racing to avoid High Risk Firework Periods.	Current funding				
	GBGB will continue to work with SCI to achieve UKAS accreditation for the inspection of residential kennels.	Current funding				
	GBGB will work with The Greyhound Forum to update PAS 251: 2017 to bring it into line with ADCH standards.	Funding required				
	GBGB will review current practices and facilities at sales against welfare needs.	Current funding				

RACING YEARS						
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
	GBGB will make recommendations for best practice at greyhound sales.	Current funding				
	GBGB will commission Dr Richard Payne to undertake a review of where an evidence base already exists and where further research is needed on identifying the causes of injuries in greyhounds.	Funding required				
	In collaboration with external experts in veterinary medicine and physiology, GBGB will provide CPD for trainers on detection of minor gait abnormalities and seeking help from the veterinary team.	Funding required				

RETIREMENT YE	RETIREMENT YEARS								
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS			
	GBGB will continue to develop relations and support with owners, trainers, stadia and prospective homing centres who wish to become approved under GRS.	Current funding	GBGB will develop and host an online support/ information portal for owners of retired greyhounds.	Funding required					
	Additional grant support of individual approved homing centres for welfare improvements.	Funding required	GBGB will develop and commission research identifying common health problems in greyhounds being presented for homing and investigating possible correlations with management in earlier life.	Funding required					
	Work with charities with expertise in canine (particularly sighthound) behaviour to develop educational programmes for breeders, owners and trainers around preparing greyhounds for retirement.	Current funding	The development of a 'Greyhound welfare roadshow'. Annual cost.	Funding required					
	Develop and deliver educational programmes for owners of retired greyhounds.	Funding required	GBGB will streamline the process for 'releasing' a microchip from the GBGB database system for it to be registered with a pet microchip database when a greyhound exits racing.	Current funding					
	Work with the Greyhound Forum to develop a 'welcome pack' for new owners of retired greyhounds which will be made available via all GBGB approved homing centres.	Funding required	GBGB will work with the Greyhound Forum to establish a harmonised programme of behavioural assessments, where required, for greyhounds retiring from racing, to be undertaken by qualified canine behaviourists.	Funding required					

RETIREMENT Y	(
	SHORT TERM (up to 18 months)	FUNDING STATUS	MEDIUM TERM (18 months – 3 years)	FUNDING STATUS	LONG TERM (3 – 5 years)	FUNDING STATUS
	Engage with the canine welfare charities to understand the evidence arising from their existing programmes around behavioural modification and preparing greyhounds for the transition to life in a domestic environment.	Funding required	GBGB will work to develop a set of standards to be applied specifically to the long-term kennelling of retired greyhounds who are 'retained' by their trainer or owner and kept at licenced premises.	Funding required		
	Facilitate an undergraduate research project at the Royal Veterinary College and undertaken in collaboration with major homing charities investigating reasons for failure of homing processes.	Current funding				
	Work with the members of the Greyhound Forum to promote responsible homing of greyhounds, to identify opportunities to maximise the number of greyhounds homed each year and to reduce the cost burden on homing organisations.	Current funding				
	Annually review standards for the GBGB GRS homing scheme against ADCH standards and update them where necessary.	Current funding				
	GBGB will review whether the current GBGB Retirement Form system could be refined to further optimise welfare during retirement and to implement any such refinements where agreed.	Current funding				
	GBGB will continue its subsidised support for the GRS Bond for British Bred greyhounds until 2025, subject to funding.	Funding required				
	The Regional Regulatory Veterinary Surgeons will be specifically tasked with checking retired greyhounds who are retained by trainers in kennels and will be given responsibility for oversight of their welfare.	Funding required				

RESPONSIBILITY FOR DELIVERY

Delivery of this strategy will be the shared responsibility of the entire GBGB Board, led for this purpose by Professor Madeleine Campbell, with lines of reporting from the CEO and hence the Executive Veterinarian. The Executive Veterinarian is a new post within GBGB which has been internally funded and created specifically to provide dayto-day executive management and implementation of this welfare strategy (and additional veterinary matters).

GBGB's WVSC will review progress of the strategy against the timeline included in this document and welfare key performance indicators (KPIs) at each of its meetings (six per year).

IMPACT AND REPORTING

Impact will be measured in terms of delivery of actions against the timeline, viewed alongside data on injuries, euthanasia, traceability and homing (Chapters 2–5). The WVSC will report to the main GBGB Board at six monthly intervals on progress of the strategy against the timeline included in this document and against key welfare KPIs. The Greyhound Forum will be updated by GBGB on a six-monthly basis, and interested stakeholders will be updated annually via the GBGB website. Additionally, the WVSC will report to the main GBGB Board and provide reports to the Greyhound Forum on overall delivery against this strategy 18 months, 3 years and 5 years after its launch.

CONCLUDING COMMENTS

This strategy document explains the way to delivering 'A Good Life for Every Greyhound'. Much work has been done to develop the strategy, and even more will be necessary to deliver upon it. GBGB enthusiastically welcomes that challenge. We are grateful to all those who have helped us develop this strategy, particularly our charity partners within the Greyhound Forum and the external experts who have agreed to make their expertise available to help us deliver our work plan. The Board of GBGB is excited about the moment of opportunity which this strategy offers us to holistically optimise the welfare of the greyhounds about whom we are all passionate. We hope that stakeholders within and without the sport will collaborate now with us to fund, develop and implement the proposals laid out in this document and to maximise the impact of the strategy by keeping it under constant, constructive review.

APPENDIX ONE LIST OF BRITISH LEGISLATION RELEVANT TO GREYHOUND WELFARE

ENGLAND

The Animal Welfare Act (2006) https://www.legislation.gov.uk/ukpga/2006/45/contents

Welfare of Animals (Transport) (England) Order (2006) https://www.legislation.gov.uk/uksi/2006/3260/article/4/made

Welfare of Racing Greyhounds Regulations 2010 https://www.legislation.gov.uk/uksi/2010/543/contents

The Microchipping of Dogs (England) Regulations 2015 https://www.legislation.gov.uk/ukdsi/2015/9780111125243

The Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations 2018 https://www.legislation.gov.uk/uksi/2018/486/contents/made

The Anti-social Behaviour, Crime and Policing Act 2014 https://www.legislation.gov.uk/ukpga/2014/12/contents/enacted (amends the Dangerous Dogs Act 1991 https://www.legislation.gov.uk/ ukpga/1991/65/contents)

WALES

The Animal Welfare Act 2006 (Commencement No. 1) (Wales) Order 2007 https://www.legislation.gov.uk/wsi/2007/1030/article/1/made

The Welfare of Animals (Transport) (Wales) Order 2007 https://www.legislation.gov.uk/wsi/2007/1047/article/4/made

The Animal Welfare (Breeding of Dogs) (Wales) Regulations 2014 https://www.legislation.gov.uk/wsi/2014/3266/contents/made

The Microchipping of Dogs (Wales) Regulations 2015 https://www.legislation.gov.uk/wsi/2015/1990/made

The Animal Welfare (Licensing of Activities Involving Animals) (Wales) Regulations 2021 https://www.legislation.gov.uk/wsi/2021/416/contents/made?regulation-1-2

SCOTLAND

The Pet Animals Act 1951, Breeding of Dogs Act 1973 and the Breeding and Sale of Dogs (Welfare) Act 1999, Breeding of Dogs Act 1991 (inspections)

Breeding and Sale of Dogs (Welfare) Act 1999 https://www.legislation.gov.uk/ukpga/1999/11

The Animal Health and Welfare (Scotland) Act 2006 https://www.legislation.gov.uk/asp/2006/11/contents

Welfare of Animals (Transport) (Scotland) Order 2006 https://www.legislation.gov.uk/ssi/2006/606/contents/made

Licensing of Animal Dealers (Young Cats and Young Dogs) (Scotland) Regulations 2009 https://www.legislation.gov.uk/sdsi/2009/9780111002469/contents

The Microchipping of Dogs (Scotland) Regulations 2016 https://www.legislation.gov.uk/sdsi/2016/9780111030127

Animals and Wildlife (Penalties, Protections and Powers) (Scotland) Act 2020 https://www.legislation.gov.uk/asp/2020/14/contents/enacted

The Animal Welfare (Licensing of Activities Involving Animals) (Scotland) Regulations 2021 https://www.legislation.gov.uk/sdsi/2021/9780111048474

APPENDIX TWO GBGB RESEARCH PROJECTS AND PAPERS (2010-2022)

Biddle, S and Hudson, S H. (2010) Screening and confirmation of stanozolol administration to the greyhound. Proceedings of the 18th International Conference of Racing Analysts and Veterinary Surgeons, Queenstown, New Zealand.

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Gray, B., Tuckley, L., Cutler, C., Schiller, R., Hudson, S., Biddle, S., Gower, S., Gibson, D. and Vanhaecke, L (2018) Investigations into the analysis of intact drug conjugates in animal sport doping control – development and assessment of a rapid and economical approach for screening greyhound urine. Proceedings of the 22nd International Conference of Racing Analysts and Veterinary Surgeons, Dubai.

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Hudson, S, Jennings, S., Gower, S. and Scarth, J. (2014) The detection of the misuse of 5-hydroxy tryptophan based nutritional supplements in the greyhound. Proceedings of the 20th International Conference of Racing Analysts and Veterinary Surgeons, Mauritius.

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APPENDIX THREE SUMMARY OF RESEARCH PROPOSED WITHIN THIS STRATEGY

NUTRITION

• The working group of external experts who will review greyhound nutrition will make recommendations for research which needs to be undertaken in the area of greyhound nutrition. Such work will subsequently be prioritised and undertaken in collaboration with academic partners.

BREEDING FOR RESILIENCE

- GBGB will commission Professor Hill's research to map inbreeding levels and understand the impact of inbreeding on health and welfare traits and longevity in greyhounds.
- Dependent upon the results of that initial research, GBGB will commission Professor Hill to undertake further work to develop an easily useable tool which breeders and owners could use to make breeding decisions aimed at optimising welfare, long-lasting soundness and health.

DATA ANALYSIS

Reporting of data is important to greyhound welfare, to inform evidence-based policymaking and best practice and to provide a source for research.

 GBGB will consult with academic stakeholders about best practice for facilitating access to anonymised data for independent research purposes and follow those recommendations.

CAUSES OF

The causes of injuries are multifactorial, and thus research in areas such as nutrition and breeding also forms part of the research into injuries. Additionally,

- GBGB will commission Dr Richard Payne, Associate Professor of Veterinary Anatomy, School of Veterinary Medicine and Science, University of Nottingham, and scientific and veterinary advisor to the WVSC of GBGB, to undertake a review of where an evidence base already exists and where further research is needed on identifying the causes of injuries in greyhounds, with particular reference to the following areas:
- length of race
- the effect of age at the start of racing on injury rates
- design of track
- hurdles
- number of runners
- trap number of greyhounds
- warm up/warm down
- fitness programmes for individual greyhounds

Based on his review, Dr Payne will make recommendations to the WVSC on necessary areas of further research.

GBGB will commission necessary areas of further research identified by Dr Payne's review.

FUTURE TRACK DESIGN, SURFACING AND MAINTENANCE

- Internal research led by the Track Liaison Officer, directed by and reported to the Track Sub-Committee and run in conjunction with STRI will assess the effects of the following on track condition and safety:
- surfactants
- water
- machinery
- salt
- number of maintenance days
- number of maintenance staff
- In collaboration with appropriate experts, GBGB will establish a centre of excellence for research and training in track maintenance and preparation.

EARLY DETECTION OF INJURIES

• GBGB will facilitate research guided by Dr Richard Payne assessing whether the adoption of technologies to detect early injury could help prevent greyhound injuries.

EUTHANASIA RELATING TO TRACK INJURIES

• An undergraduate research project at the Royal Veterinary College will investigate nonclinical factors which impact upon track veterinary surgeons' decisions to recommend euthanasia.

RETIREMENT

- An undergraduate research project at the Royal Veterinary College undertaken in collaboration with major homing charities and approved homing centres will investigate reasons for failure of homing processes (including greyhounds failing to find a home or being returned to homing centres) and will make recommendations for methods of mitigation against those failures.
- GBGB will work with the Greyhound Forum and approved homing charities to develop and commission a programme of research aimed at identifying common health problems in greyhounds being presented for homing and investigating possible correlations with management in earlier life.



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