

## **INTERNATIONAL STUD BOOK COMMITTEE SUMMARY REPORT 2021**

### **1. Genetics & Gene Doping**

The ISBC is providing advice and guidelines to all Stud Books on what to include in their Stud Book Rules in preparation for gene doping screening for breeding horses, drawing from expert advice from Natasha Hamilton and Teruaki Tozaki. Each Stud Book Authority determines its own timelines, gene-doping screening processes, and policy on how it will conduct screening. The ISBC is working closely with both the IFHA and IHSC Gene-doping Committees.

### **2. Micro Satellite to SNPs Parentage Verification**

An ISBC Working Group is working alongside ISAG (International Society for Animal Genetics) to manage the transition from micro-satellite equine parentage verification to SNPs (Single Nucleotide Polymorphism) based on a potential 'go live' date of 2024/25 for those laboratories in a position to do so. Meetings have been held with ISAG, which determines a list of SNPs for a core panel.

It has been agreed that Stud Books, which are using SNPs parentage verification, importing horses temporarily from Stud Books using micro satellite parentage verification will accept the DNA profile of the exporting Stud Book. However, in the case of permanent imports, the importing Stud Book will re-profile the imported horses using SNPs.

### **3. Thoroughbred Breeding Minimum Welfare Standards**

In 2020 the IFHA Executive Council invited the ISBC to set up a group to draft Breeding Welfare Standards as companion standards to the [Race]Horse Minimum Welfare Standards. A panel of 10 breeders, vets, administrators, regulators and others closely involved in breeding and welfare met for the first time on 19 April 2021 to agree on its working approach, understand where there might be different interpretations and settle on the tone and level of content. It has drafted the first two chapters (Covering and Foals) and is now working on Chapter 3 (Mares).

### **4. Implications of the ISBC Placing Stud Books 'Under Assessment'**

While Stud Books placed 'Under Assessment' are not prevented from operating, there are implications for Stud Books and Racing Authorities, and it has always been made clear that countries importing horses from a Stud Book Under Assessment should put in place extra checks.

The extent of failing is very rarely clear at the point of placement and it is usually impossible to provide other Stud Books and Racing Authorities with precise errors or lists of horses under review at the outset of a review. Any actions a Racing Authority might take, including disallowing horses to compete, is at its own discretion.

In discussions with the IFHA's Technical Advisory Committee, the ISBC has agreed additional steps to ensure as much detail is provided to Stud Books and Racing Authorities as it is able, and any revisions following the start of the review. This might include prioritising a horse which is due to race.

## **5. Inbreeding Research**

Several Stud Books are analysing their breeding stock to identify the level of inbreeding within their population for the long-term health and welfare of the breed, using molecular and genealogical tools.

Several peer reviewed population genetics studies published within the last 20 years have supported the position that the Thoroughbred has increased levels of inbreeding and reduced levels of genetic diversity compared with some other domestic horse breeds. The addition of timeline analysis has demonstrated a steady increase of inbreeding over the last three decades coinciding with a smaller number of stallions and an increase in the size of stallion books, together with selection towards favourable athletic traits.

## **6. Stud Book Compliance**

The ISBC has conducted its annual review of the status of all 69 Stud Books (with the invaluable assistance of its 16 Regional Reviewers across the world): 18 in the Asia and Oceania Region, 35 in the Europe and Africa Region, 7 in the North America and Central America Region, and 9 in the South America Region.

Three Stud Books are currently 'Under Assessment': Panama, Portugal and Uzbekistan.

Two Stud Books remain 'No Longer Approved': Kazakhstan and Thailand. The draft of Stud Book Volumes 4, 5, 6 and 7 and the Return of Mares 2018 and 2019 of the Thailand Stud Book have now satisfied their Regional Reviewers. Foals registered in Volume 7 were parentage tested at the laboratory in New Zealand. The next step will be to check documents regarding foals registered, i.e. covering certificates and identification documents and this will be carried out when the Regional Reviewers conduct their inspection. A remote inspection is an option, however, this will be in person.

There are 12 Emerging Stud Books.

## **7. Thoroughbred Foal Crops (2005-2019) for SBAs Registering 1,000+ Foals**

Within the global decline in the Thoroughbred foal crop, of 35,391 foals in the past 15 years, the most dramatic period of change across all these countries was around the financial crisis in 2009-2010 and the most change in that 3-year period was seen in:

1. Ireland: 2008 (13,062) and 2010 (7,986) -40%
2. USA: 2008 (32,179) and 2010 (23,045) -30%
3. GB: 2008 (6,032) and 2010 (4,699) -23%

However, the global foal crop has not recovered since then, falling a further 18% from 2010 to 2019.

	<b>Stud Books Registering more than 1,000 foals per annum</b>	<b>2005<sup>1</sup></b>	<b>2010</b>	<b>2015</b>	<b>2019</b>	<b>Movement 2005-19</b>	<b>% Movement 2005-19 (rounded)</b>
1.	USA	34949	23045	21158	<b>18057</b>	-16892	-48%
2.	Australia	18447	15543	13025	<b>12856</b>	-5591	-32%
3.	Ireland <sup>2</sup>	12408	7986	8780	<b>9295</b>	-3113	-23%
4.	Japan	7456	6664	6701	<b>7188</b>	-338	-5%
5.	Argentina	6787	8437	7673	<b>6256</b>	-531	-8%
6.	France	4822	5052	5238	<b>5718</b>	+896	+17%
7.	GB <sup>2</sup>	5863	4699	4569	<b>4748</b>	-1115	-22%
8.	NZ	4518	3888	3373	<b>3110</b>	-1408	-32%
9.	South Africa	2730	3305	2947	<b>2330</b>	-400	-15%
10.	Turkey	1526	1500	1768	<b>1926</b>	+400	+25%
11.	Chile	1731	1754	1630	<b>1753</b>	+22	+1%
12.	Saudi Arabia	791	1172	1748	<b>1669</b>	+878	+110%
13.	Brazil	3034	2971	2133	<b>1643</b>	-1391	-45%
14.	Uruguay	1670	1913	1698	<b>1525</b>	-145	-8%
15.	South Korea	958	1363	1288	<b>1340</b>	+382	+40%
16.	Russia	638	644	871	<b>1246</b>	+608	+95%
17.	India	1429	1804	1385	<b>1133</b>	-296	-20%
	<b>All Totals (All 69 Stud Books)</b>	<b>123,467</b>	<b>107,798</b>	<b>94,871</b>	<b>88,076</b>	<b>-35,391</b>	<b>-29%</b>

*Note 1: Global Statistics before 2002 are not fully inclusive of all Stud Books.*

*Note 2: Although GB and Ireland are incorporated into one Stud Book, they are separated for this exercise.*

## **8. ISBC 2022**

It is planned that the ISBC Annual Meeting (following our quarterly meetings) will be held in 2022 in Paris over one day immediately before the International Conference.

## **9. ISBC Recognition**

The ISBC Chairman, Sir Johnny Weatherby, thanked two people who have given an enormous amount of time and expertise to the ISBC over the years and who have retired from the ISBC at a time when we haven't had the opportunity to thank them formally:

- a) Peter Webbon, who chaired both our Welfare and Genetics Committees, and
- b) Paul-Marie Gadot, who represented France on the ISBC for a number of years and sat on both the Welfare and Genetics Committees.

**Simon Cooper**

ISBC Vice-Chairman

25 September 2021