



# **WBFSH Survey conducted on impact of the Covid-19 Pandemic on the WBFSH studbooks / sport horse breeding industry**



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## **INTRODUCTION: WHAT IS THE WBFSH?**

The WBFSH (**World Breeding Federation for Sport Horses**) is an international umbrella federation of sport horse studbooks breeding horses for the Olympic disciplines. It has 76 members worldwide, with 58 members originating from Europe and 49 of those members originating from EU countries.

The WBFSH believes that sport horse breeding is an important economic and social activity worldwide which should be nurtured, protected, and advanced. Therefore, the aim of the organisation is to stimulate sport horse breeding globally, by serving the interests and professional needs of its studbook members and their breeders, to secure and improve their breeding practice.

This is achieved through collaboration with public authorities, sport federations, and all relevant stakeholders in the industry. The WBFSH is a member of the EHN (European Horse Network) and is represented on the board of the EHN.

With such a large proportion of its members originating from Europe and the European Union, many of the WBFSH activities are focussed on European guidelines. Globalisation, international trade and movement of horses internationally for breeding and sport imply that European guidelines and regulations are relevant also to non-European WBFSH members.

## **PURPOSE OF THE WBFSH COVID-19 SURVEY:**

With the 2020 breeding season of the Northern hemisphere having just started when the Covid-19 pandemic took hold of Europe, it is early days for the breeding industry to give concrete feedback on the impact of Covid-19.

With an immediate impact being measurable in other sectors of the equine industry, the WBFSH decided to gather preliminary feedback of the impact of the crisis through a survey distributed to its members. It must be noted that the findings of this survey are strongly biased and based on preliminary impressions. Concrete and verified figures for 2020 will only be available early in 2021, when studbooks carry out their reconciliation of the past season. This normally happens the following year and that is why the WBFSH normally collects studbook foal and member statistics one year in arrears. Therefore, a follow-up survey will have to be carried out in 2021 and 2022.

As a result of concrete figures not being available at this time, many WBFSH members opted to not submit responses to this initial survey, in order to prevent reporting “hear-say” rather than facts. However, interpretation of the survey responses did reveal a general trend within the sport horse breeding sector, as a result of changes in trends and patterns compared to 2019 that have been observed by WBFSH studbook members and other stakeholders in the sector – e.g. breeders, fertility veterinarians, breed event organisers.

Feedback was received from a total of 14 European studbook organisations (13 EU-based and one non-EU) from 11 different countries:

- Arbeitsgemeinschaft für Warmblutzucht in Österreich Austrian Working Group for the Breeding of Warmblood Horses (AWÖ)
- Association Nationale Anglo-Arabe (ANAA)
- Bulgarian Sport Horse Association (BSHA)
- Dansk varmblod / Danish Warmblood Society (DWB)
- Hannoveraner Verband e.V. (HANN)
- Irish Sporthorse Studbook (ISH)
- Koninklijk Warmbloed Paardenstamboek Nederland Royal Dutch Sport Horse (KWPN)
- Polish Warmblood Breeders Association (PZHK)
- Stud-book Selle Francais (SBSF)
- Studbook for Slovenian Warmblood horses (SSW)
- Swedish Warmblood Association
- Verband der Züchter und Freunde des Ostpreußischen Warmblutpferdes Trakehner Abstammung e.V. / Trakehner Verband (TRAK)
- Sport Horse Breeding of Great Britain (SHBGB)

## **STRUCTURE OF THE SURVEY**

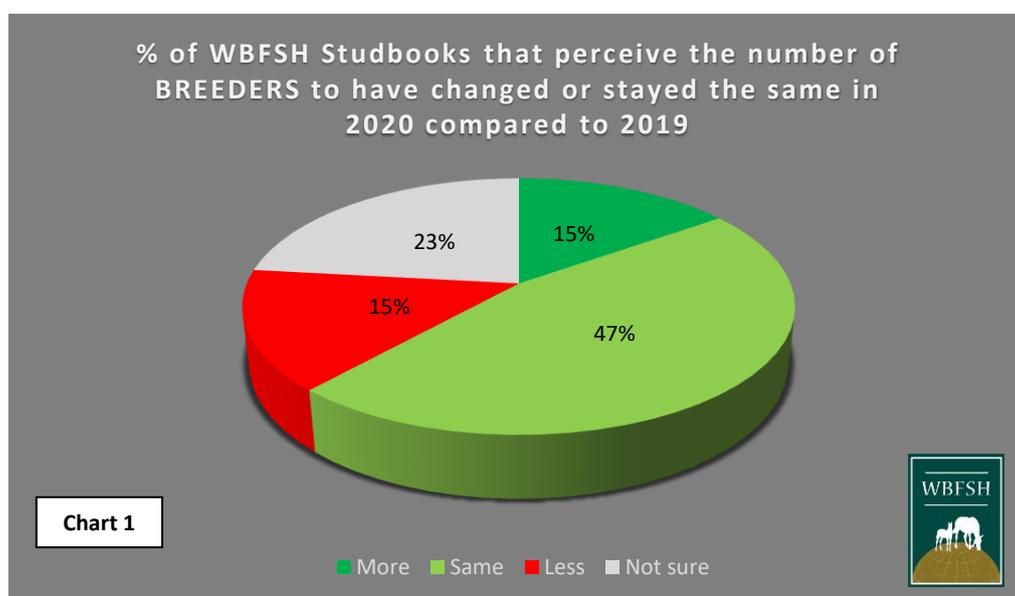
The survey was designed to collect data that is likely to be measurable according to trend, even if not through concrete numbers at this time. Obvious measures for studbooks are the number of breeders, the amount of coverings and types of covering and breeding techniques used, as well as annual studbook events. A general impression of the impact on the breeding program and financial impact on the studbook organisation could be estimated using these parameters.

## REPORT FINDINGS & DISCUSSION

### 1. NUMBER OF BREEDERS:

The number of breeders and number of foals registered can be considered a primary measure used to classify the size of a studbook. Therefore, the impact on the sector was examined by collecting data on the perceived number of breeders to date in 2020 compared to 2019.

Breeders can be distinguished into those that are registering foals born in the current year and conceived last year, as well as breeders renewing their studbook memberships for active breeding during the current season. A differentiation of these two types was not possible from the data collection method of this survey. Often studbooks are not able to report the difference, and in many cases, there are overlaps. Therefore, the general trend in numbers was considered the best way to estimate the impact on whether breeders are continuing to breed according to their usual habits or not, during the Covid-19 pandemic.



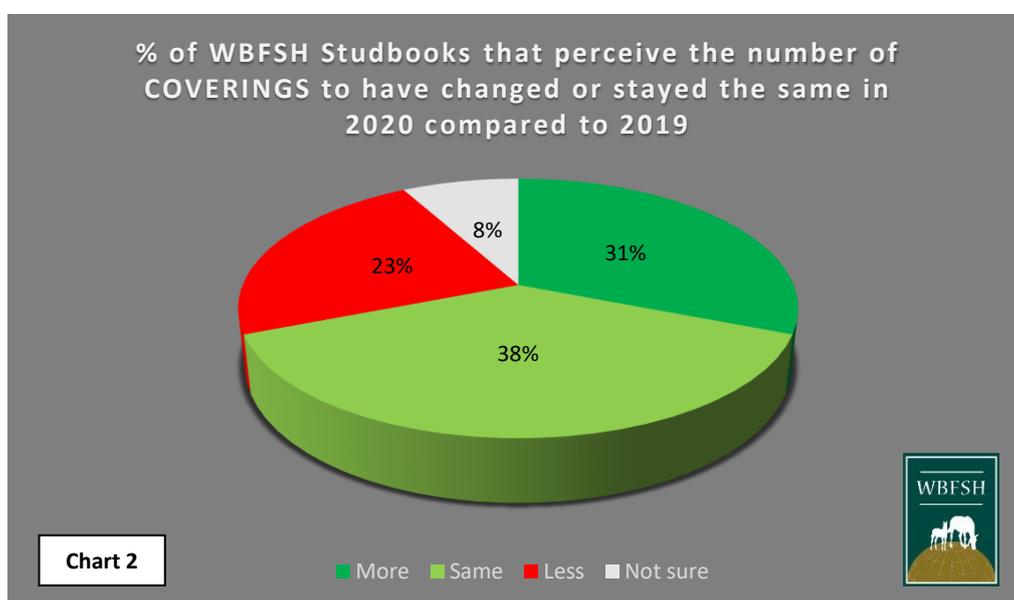
Referring to Chart 1, almost half of the studbook respondents perceived the number of breeders to have remained the same as in 2019, whereas 15% perceived the number of breeders to have decreased. About a quarter of respondents felt unsure as to how the breeder numbers have changed. A positive trend in terms of the number of breeders is assumed from this observation, with 62% of studbooks perceiving that the numbers have either stayed the same or even increased.

### 2. NUMBER OF COVERING:

The number of coverings will not directly translate into the number of foals that will be registered the following year, as not every covering leads to a pregnancy and a viable foal. However, the trend in the number of coverings and covering certificates requested from

studbooks are considered a good indication of the intension of the breeders – are they confident to breed foals they can sell next year?

Naturally, the number of foals born this year will be unrelated to the impact of Covid-19, since these pregnancies were conceived prior to the pandemic. But a measure of sales is considered an indication of the health of the industry. Breeding and sport are closely connected. The breeder is the source of the equine athlete that ends up competing at the top level of sport. Therefore, a shift in supply and demand is considered a valuable indicator. It must be kept in mind however, that breeding takes place in generations. Foals conceived this year, and which will be born next year, will reach the level of the top sport only in 10-12 years. With many breeders carrying out their activities with an eye on the distant future, as long as current risk versus benefits to investing in breeding can be justified and managed, breeders are likely to try and push through the pandemic and continue with their normal operations.



The WBFSH expects that contrary to other sectors of the industry, where an immediate impact was felt, the impact to the breeding sector may be subject to a lag phase. Only long-term collection and interpretation of data will be able to confirm or confute this.

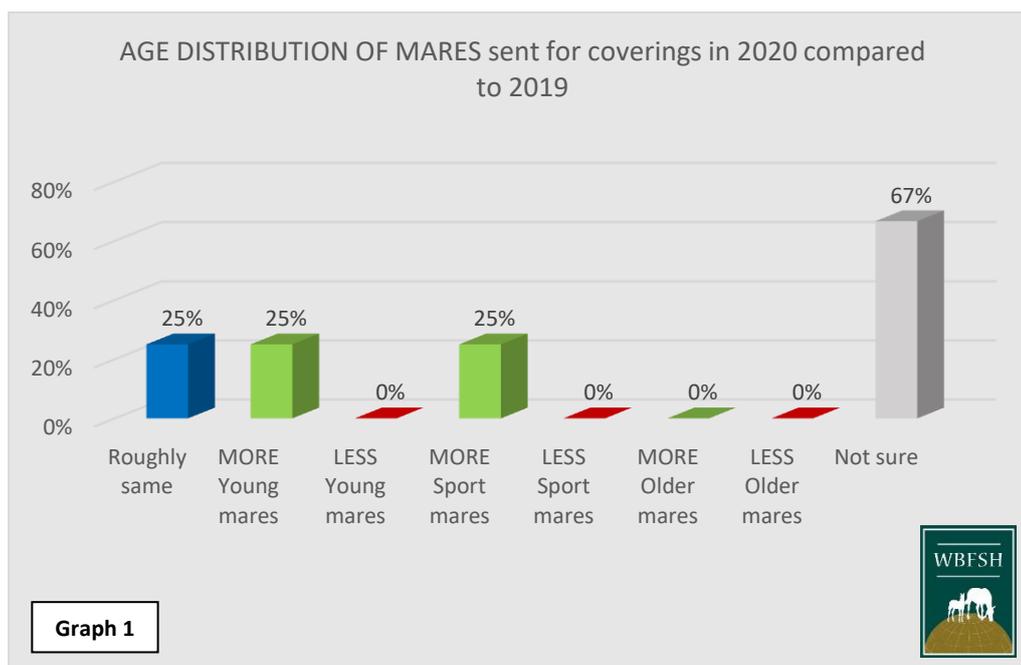
The WBFSH survey results indicate that almost 70% of WBFSH studbook respondents perceive coverings to have stayed the same or to have decreased. One studbook (ISH) reported that despite anecdotal evidence of numbers remaining the same, they are budgeting for 12% decrease to be prudent. Furthermore, the ISH studbook reported despite covering numbers appearing to be stable compared to 2019, a trend in delayed (later in the season) coverings was observed.

### **3. DESCRIPTION OF THE MARES THAT WERE COVERED:**

At the outset of this survey it was expected to observe an increase in coverings of the number of mares that are ready to compete, or already competing in sport.

Studbooks were therefore asked which types of mares they perceived were covered more often, less often or the same as in 2019. The mares were classified according to the following descriptions in terms of age distribution, which was felt could be extrapolated to the potential use of the mare in sport:

- Roughly the same age distribution
- Young mares (three and four years old)
- Sport mares (five years and over)
- Older mares



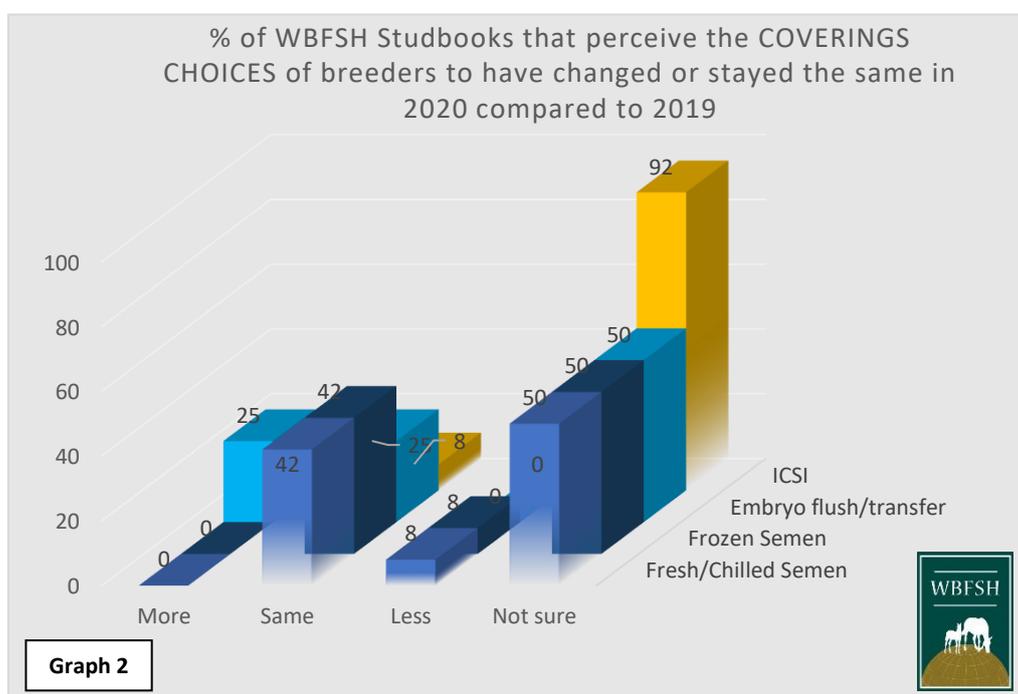
67% of studbooks were unable to answer this question. This is understandable considering that many studbooks will only collect these figures in the year that the foals are registered, not in the year that the foals are conceived. However, where there is close interaction with breeders, fertility veterinarians and stallion owners, it is possible for studbooks to get an impression of a trend. No change in the trend of using older mares was recognised, compared to 2019. Where a trend was remarked on by studbook respondents, it correlated with the original assumption of the WBFSH that more sport mares (aged three-four years old and over five years old) were sent for covering. Young mares (three and four years old) would under normal circumstances often have been put into training and prepared for sport and young horse circuits. Sport mares (five years and over) would normally be competing in young horse circuits or at higher levels. Due to the pause in competitions across Europe during the height of the pandemic, these mares were more frequently used for breeding during the 2020 season. Specifically, studbooks from the countries Germany, France and the Netherlands reported on this, where close interactions between the studbooks and the national federations exist. Furthermore, the WBFSH expected the trend of more of these mares being covered to reflect with certain breeding techniques used, as per the next section of the survey.

As with the breeder numbers, these figures can be confirmed and reported more accurately in 2022, when foal registrations of foals born in 2021 (conceived in 2020) will be completed and reconciled, and the identities of the dams is recorded.

#### 4. BREEDING CHOICES IN 2020 COMPARED TO 2019:

Breeding choices that were considered in the survey as more easily measurable according to trend were listed as:

- Use of fresh/chilled semen
- Use of frozen semen
- Embryo flushing and transfer
- ICSI (intra-cytoplasmic sperm injection)



92% of studbooks were not able to comment on the change in trend of the use of ICSI, which is still a relatively new technique in sport horse breeding and is not readily carried out everywhere, due to high level of expertise required. For many breeders ICSI is also cost prohibitive. Many mares for ICSI are sent to Italy which is recognised as the leading centre for ICSI in Europe. Frequently studbooks do not have access to information regarding the extent to which breeders are using ICSI on their mares. SWB reported "not applicable" since ICSI is not permitted in Sweden

Half of the studbook respondents were also not able to comment on the change in the use of the first three categories mentioned above. However, of the respondents that were able to estimate a change the trends of the breeders' covering choices, five out of six studbooks reported both the use of fresh/chilled and frozen semen seemed to remain the same (SBSF, AWÖ, SWB, KWPN, and ISH). Six studbooks reported that use of embryo flushing and transfer either remained the same or increased (SBSF, HANN, SWB, KWPN, ISH, AWÖ).

“Embryo flushing and transfer” was recognised as an interesting breeding technique to consider, due to the immediate effect of the pandemic on sport. With the pause of competitions across Europe during the height of the breeding season of the Northern hemisphere, mares that are normally active in sport became available for breeding. Embryo flushing and transfer may be a technique that breeders, owners and riders do not wish to use while a mare is in training or competing. Associated hormone treatment can increase stress to the mare, which breeders, owners and riders want to avoid while the mare is in training or sport. Furthermore, keeping a mare in training or sport while trying to conceive and flush, can potentially add stress to the mare, which can impact negatively in conception rates. It was therefore expected that an increased use of this technique would be observed and that it could potentially correlate to the age group of mares defined as “Young Mares (three and four years old)” and “Sport Mares (five years and older)” in section 3 above (Description of the Mares covered) and Graph 1.

## 5. STUDBOOK EVENTS IN 2020 COMPARED TO 2019:

### a. Frequency of events:

Studbook events are possibly the largest source of income for the many studbooks. Although for many smaller studbooks, the cost of running large, centrally organised events is prohibitive, in terms of the cost of running the event versus the number of participating horses.

Studbooks may collect fees for breeder memberships, registration and inspections of mares and foals and licensing of stallions, without associated additional organised events such as breeding competitions and studbook auctions. Therefore, in the section of the survey focusing on events, some questions were not relevant to all respondents.

Referring to Graph 3, no studbooks reported that no further events will take place in 2020. Only 30% of respondents reported that all their planned events will take place (ANAA, SBSF, DWB, SWB), either according to the originally scheduled dates, or by postponing all or some of their events. 62% of respondents reported that some events will not be held at all.

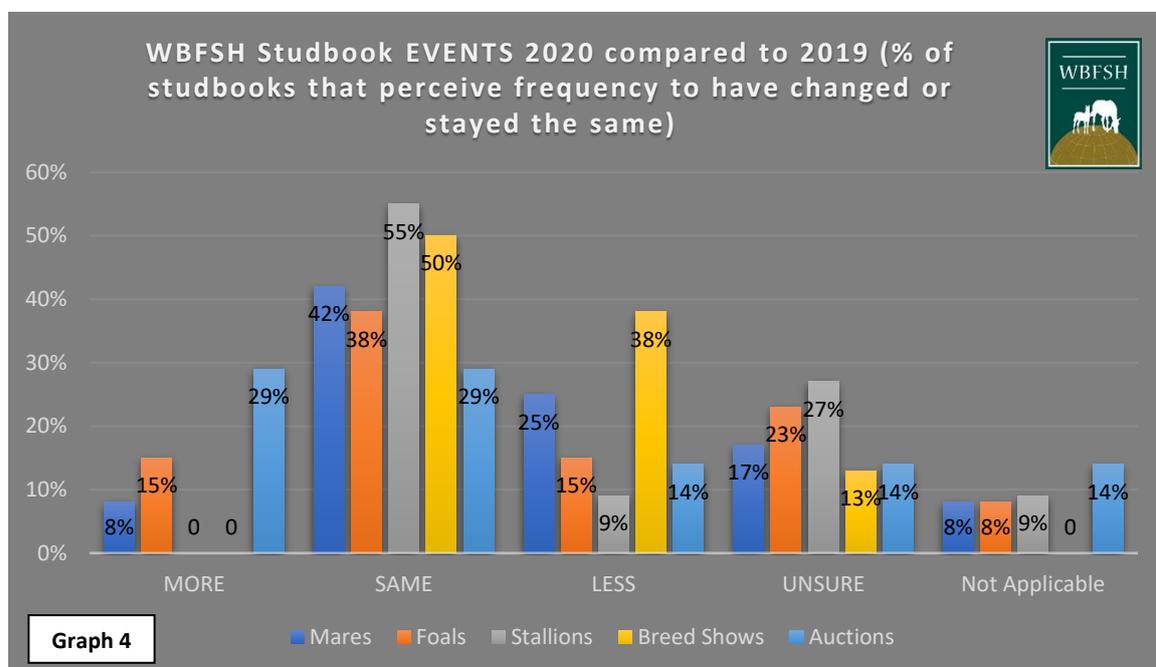


Specific studbook events that were defined in this survey were foal, mare, and stallion events, as well as breed competitions and auctions:

- Foal registrations & gradings (FOALS)
- Mare gradings & inspections (MARES)
- Stallion selections & licensings (STALLIONS)
- Breed competitions & shows
- Auctions

Foal registration, mare gradings and stallion selections are the staple of most studbooks. A complete cancellation of these events would have a significant impact on a studbook's breeding program. Studbooks aim to foster breed improvement. Scores assigned and gradings carried out provide vital data for the calculation of breeding values and evaluation of the breed population.

Studbooks that reported "not applicable" in any of the categories, do not hold events in these categories (Graph 4).



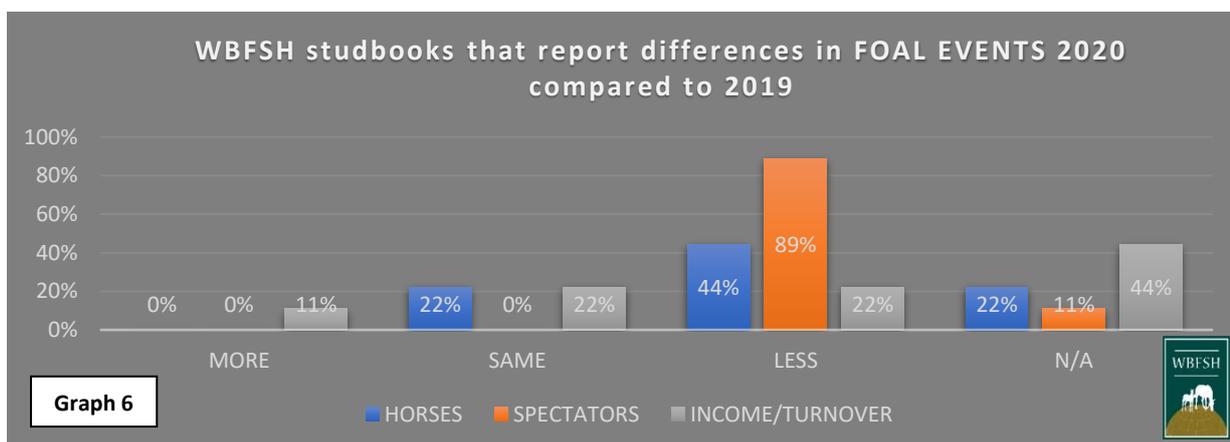
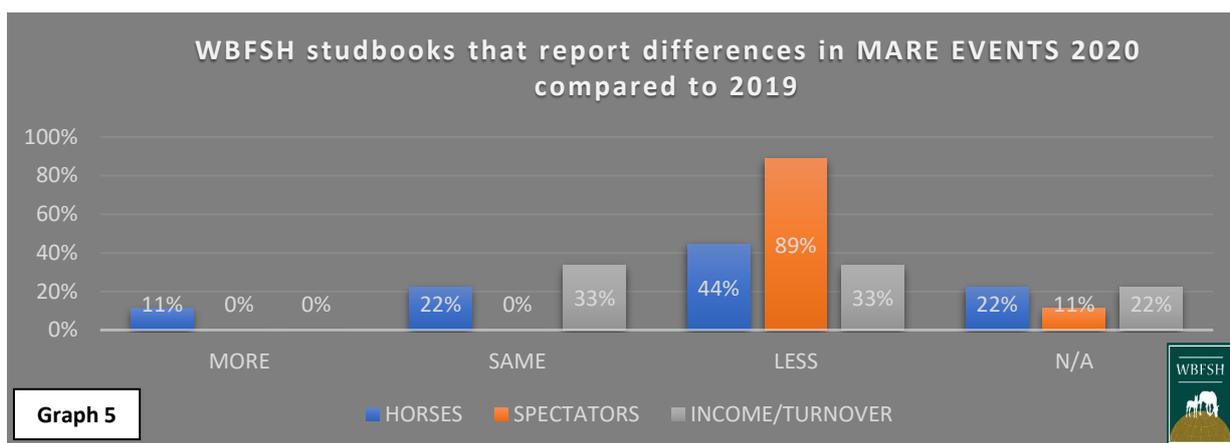
For all event categories defined for this survey, 50% of respondents or more reported that the events would take place as frequently or more often than in 2019. Specifically, there was feedback from TRAK (GER) that for the same number of mares they needed to hold more events, in order to comply with restrictions placed on the size of events permitted during the pandemic. Although it sounds positive that more events could be held, in reality it is a financial burden for a studbook to have to budget for more events, specifically when spectators are not permitted, the overheads are bigger, but the number of participating horses remains the same. A similar trend was noted for foal events – 52% of studbooks reported that foal events would take place the same or more than in 2019.

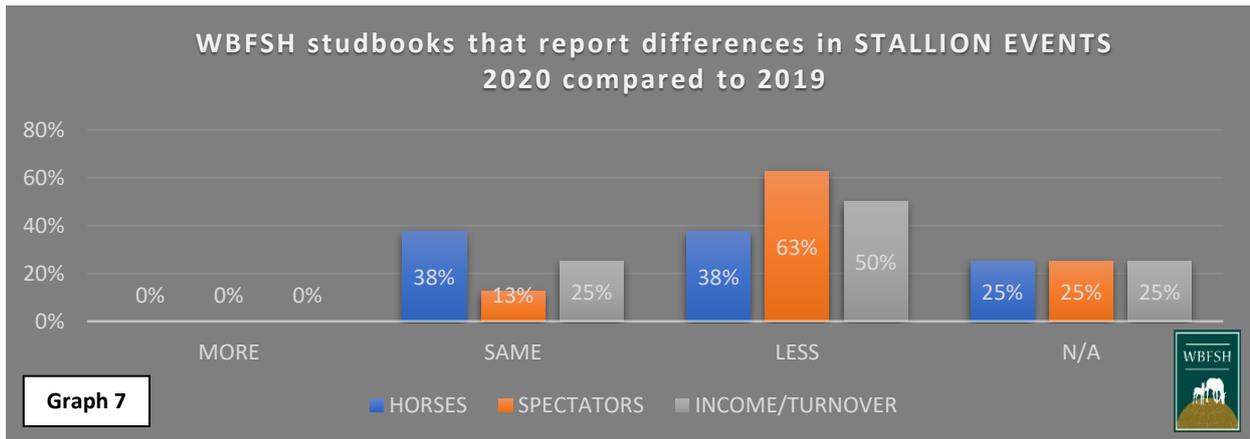
Some studbooks reported more events took place, counting small informal foal inspections and registrations as “events” (SBSF). Whereas other studbook reported less foal events and excluded small informal foal registrations from the definition of “event”. When reconciling this feedback, the outcome is the same – larger costs for the studbooks to coordinate the same number of horses in smaller groups but on more occasions.

Although 27% of studbook respondents reported that they were uncertain if their stallion events would take place, 55% reported that they would hold the same number of stallion events as in 2019. Collectively, stallion events include the main stallion selection or show of a studbook, but also include pre-selection events for young stallions. Pre-selections are mostly smaller, regional events, that are likely to proceed as normal, except without spectators.

**b. Evaluation of MARE, FOAL and STALLION events:**

The impact on MARE, FOAL and STALLION events was measured by estimating the trends of elements such whether events could take place or not (discussed above and illustrated in Graph 4), the number of participating horses, the attendance of spectators, income/turnover from tickets sales and/or hiring out vendor space for trade.





Across all events classified as FOAL, MARE or STALLION events, the biggest visible knock that was experienced was in the spectators that were permitted to attend events. The loss of income at these events does not necessarily seem to be linked to the spectators. A more detailed investigation would need to be made to draw clear conclusions. For the stallion events a similar number of studbooks reported less income and less spectators. The stallion shows for many European studbooks are the highlight of their event calendar. DWB (DEN), KWPN (NED) and SWB (SWE) reported that their stallion events were able to take place before the height of the pandemic.

The KWPN (NED) held their stallion show at the end of January, with an approximate number 22.500 spectators over five days. DWB (DEN) held its stallion show in the first week of March. with around 65.000 spectators over the five days of their stallion show. This is a massive source of income for these studbooks that the organisations rely on heavily. In 2020, Covid-19 restrictions in Denmark first came into place on Friday 6<sup>th</sup> March, which was in the middle of the stallion event. Many ticket holders opted not to attend the remainder of the event and were offered free tickets for the corresponding days for next year’s event. DWB is already concerned about the impact of Covid-19 on its stallion show in 2021 as ticket sales usually start in October the year before, with indications that a second wave of the pandemic is likely to have an impact on next year’s event.

SWB (SWE) and AWÖ (AUT) also reported that their stallion selection was completed before the corona-lockdown measures were put into place.

Other studbook respondents will have their 2020 stallion selections from September onwards into the winter months, and there is much uncertainty at present about how these events will be carried out. At present studbooks can only say for certain, that the events are most likely to take place without any spectators.

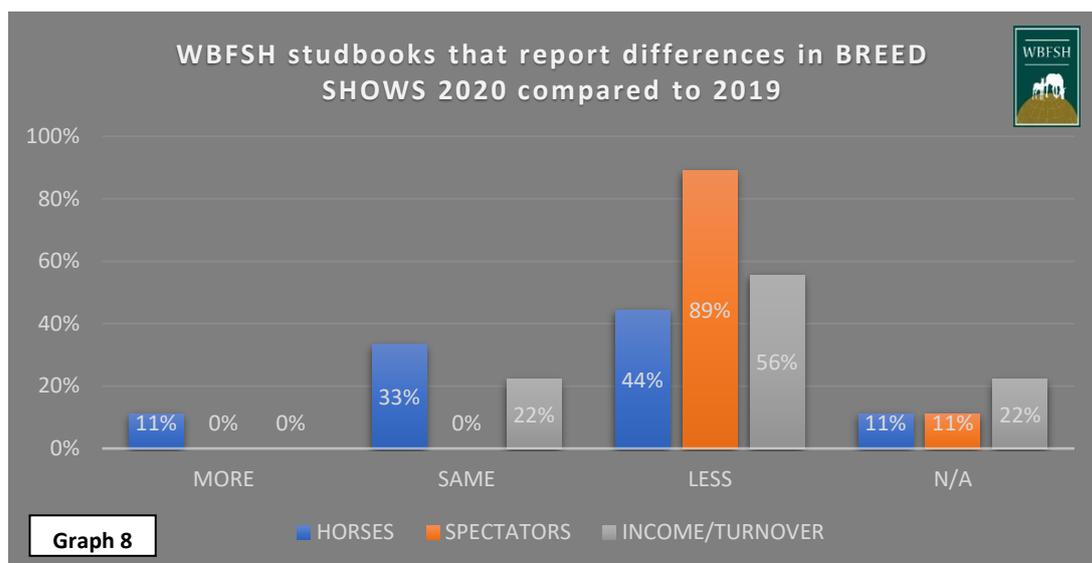
**c. Evaluation of BREEDING events and shows:**

Nine studbook respondents reported that they normally hold breeding competitions and breed shows. Referring back to Graph 4, 50% of studbooks expect to hold the same number

of breed shows as in 2019, and 38% of respondents anticipate that their organisation will hold fewer breed events.

Breed competitions can include in-hand shows, loose movement or free-jumping, or young horse competitions under saddle. These are often carried out through regional qualifiers with a national final. Many of these final events for 2020 for young horses under saddle have yet to take place.

89% of respondents anticipate a decreased number of spectators and 56% anticipate a decrease in turnover. 44% of studbooks also expect fewer horses to participate.



#### d. Evaluation of AUCTIONS:

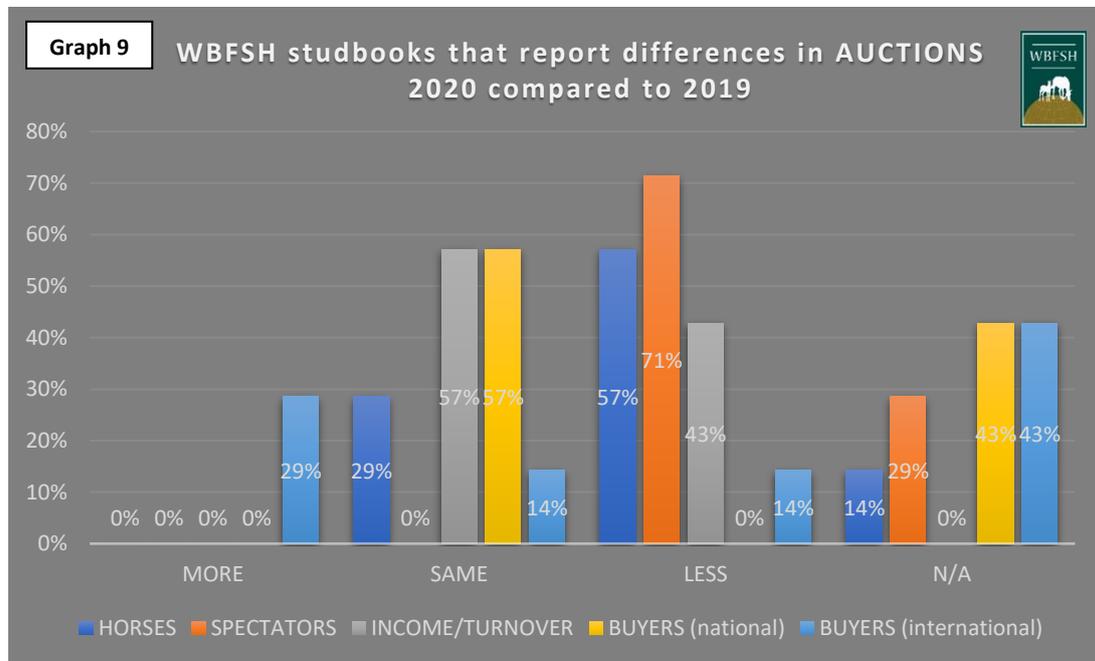
Seven studbook organisations reported that they hold studbook auctions. All of these organisations carry out foal auctions. Other studbook auctions may be held to sell young stock (under three years old), riding horses, stallions, or combinations of the above-mentioned groups.

Only 14% of studbooks feel they are likely to hold fewer auctions this year. 58% reported that they anticipate the same number of auctions or more to be held (29% - same; 29% - more). The KWPN (NED) reported that they have had a big demand for more online auctions. A new auction format has emerged called the “hybrid-auction” which is run live, with a limited number of spectators, but is offered primarily for internet bidding, unlike a traditional online auction which runs virtually over a period of days, and horses or foals can be viewed on pre-recorded videos. In the hybrid auction the horses or foals are live at the venue, and bidding takes place similarly as in a traditional live auction, where online bids are also possible.

This new auction format has proven to be remarkably successful. Figures are not yet available from the studbooks comparing auction results to previous auctions in terms of:

- Average prices
- Number of horses sold/not sold
- Demographic of the buyers (national/international)

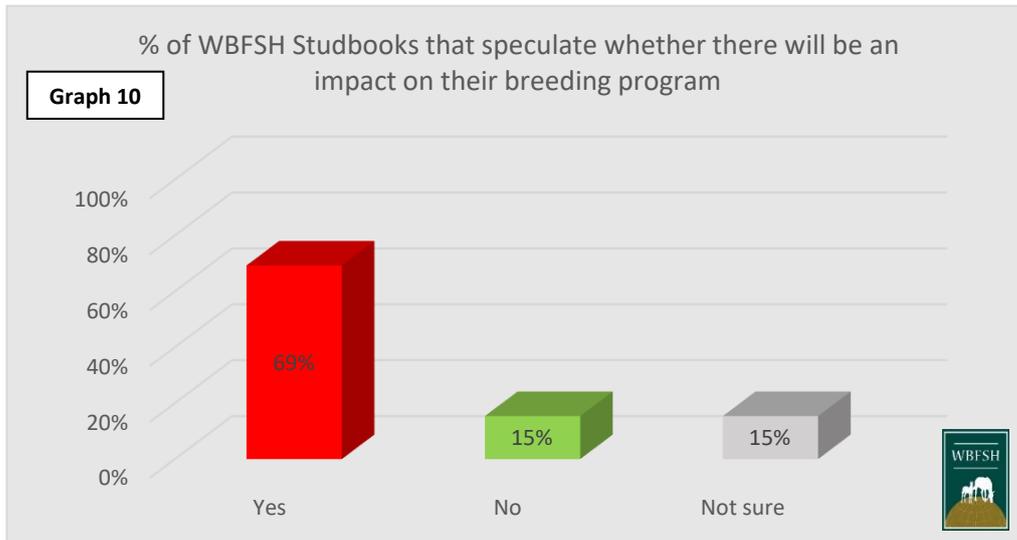
However, despite the majority of studbook respondents (71%) acknowledging the reality of a decreased number of spectators, and 57% respondents anticipating that fewer horses will be available on auction (possibly due to decreased possibilities to carry out auction selections), 57% of studbooks believe that the turnover will stay and the number of national buyers will stay the same. 29% of studbooks anticipate that there will be more international buyers as a result of a bigger reach from online and hybrid auctions.



Studbooks that still rely on the traditional auction format with spectators, entertainment, and the creation of an atmosphere to encourage bidding, have experienced that sales decreased in terms of number of horses and prices when moving to the online format. SBSF is running an online auction for the first time and cannot compare performance of the auction to previous years.

## 6. ANTICIPATED IMPACT ON STUDBOOK BREEDING PROGRAM

Almost 70% of the WBFSH studbooks that participated in the survey anticipate that the Covid-19 pandemic will have a negative impact on their breeding program.



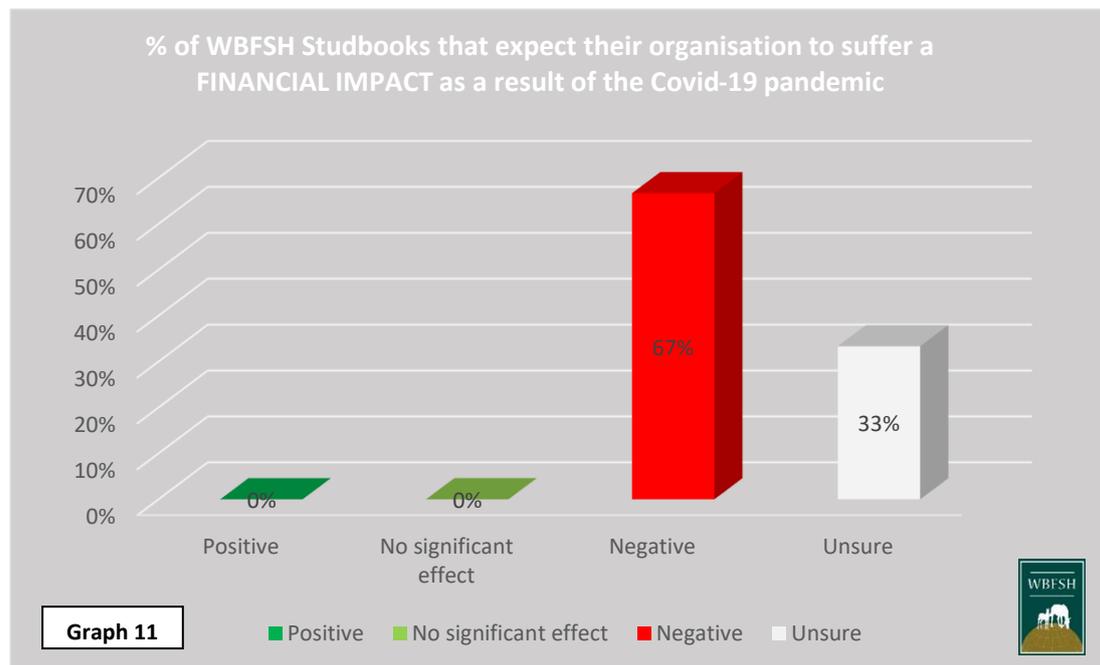
The impact on the breeding program of the WBFSH studbooks may not be immediate, since foals born this year will not reach the competition circuit for many years. However, as the worldwide economic impact of Covid-19 is far reaching, and many people have suffered job losses or losses of income, studbooks fear that the demand for horses will decrease. The knock-on effect of breeders not being able to sell their horses is that they will breed less. If this negative cycle persists, over an extended period of time, breeding populations of the studbooks will decrease, which implies a regression of breeding progress and development, putting the future of the studbooks at risk. This is a long-term concern reported by DWB (DEN).

SBSF (FRA) reported that they are uncertain how the breeding values they calculate from breed evaluations and sport competitions will be influenced by the worldwide pause of equestrian sporting events. At present it is only possible to hypothesise. But there is the concern that if fewer of the top horses compete, there could be a statistical shift in the way the breeding indices are usually calculated. This also would result in an effect that is expressed only in the long term.

HANN (GER) reported that as a result of stallion performance tests not having been able to take place, a decision had to be made as to whether to register these young stallions or not for breeding permission. The cancellation of a number of the centrally run stallion performance tests that are conducted by the German Equestrian Federation will therefore have impacted similarly on all the German WBFSH studbooks, of which there are 14. Many studbooks in other European countries have opted to give young stallions a “wildcard” for breeding without a license this year, to avoid that none of these young stallions can breed. The effect this decision will have on each studbook’s breed improvement program cannot be estimated at this time.

## 7. ANTICIPATED FINANCIAL IMPACT ON STUDBOOK

67% of studbooks anticipate a negative financial impact and 33% of respondents were not able to make a judgement at this time.



At first glance the negative impact comes from decreased spectators at events. This includes a loss in ticket sales. But the effect of decreased spectators is more far-reaching. Sponsors are attracted to support events where they get visibility in return. Therefore, a loss of sponsors is a very real risk, specifically since many sponsors are suffering from the crisis themselves.

The long-term effect, if horse sales decrease due to a decreased demand, means that fewer breeders will have their mares covered. This translates directly into a loss of income and growth of the studbook organisation: loss of breeder membership fees, loss of horse registration fees (mares, foals, stallions), loss of income from gradings, inspections and selections.

## CONCLUSION:

The number of breeders and coverings are perceived as having remained largely the same or having increased. But this measure is not necessarily an indicator of the overall financial well-being of a studbook organisation, nor can a conclusion be drawn of the impact on the breeding program of a studbook.

Events for mares, foals and stallions are crucial for many studbooks as a form of income, as well as a method of collecting data to calculate breeding values which are an essential element of any breed improvement program.

The cancellation of large events and having to hold smaller events with little or no spectators, results in financial shortfalls for the studbooks. Trade of vendors at events, as well as the support of sponsors rely on spectators attending events. Studbook have tried to be proactive in dealing with the pressures they were facing as a result of the crisis. Instead of cancelling events completely, events were moved, or bigger events were broken up into a series of smaller events. Although this allowed for the needs of the breeders and horses to be met, in terms of registrations and gradings being able to take place, the financial burden on the studbooks was likely to have increased. More events had to be organised for the same number of horses, often with less staff due to restrictions set in place for minimising social contacts also in the workplace.

Data collected during the grading of horses at the various studbook events are used for the calculation of breeding values and to make breed estimations which shape the breed improvement program of a studbook. No concrete conclusions can be drawn at this time on the long-term impact of the Covid-19 pandemic on the breeding programs of the WBFSh studbooks.

Auctions could be partially saved through a new format the "hybrid auction", and by moving live auctions to an online platform. Some studbooks have had greater success with the hybrid and online auction than other studbooks, and were able to reach a wider spectrum of potential buyers. Concrete figures in the numbers of horses sold/not sold compared to previous years, average sales prices and demographic of the buyers was not available to the WBFSh at this time.

The findings of this survey are based on WBFSh studbooks' perception of the current situation they are in. As stated at the beginning of this report, some concrete figures will only be available as early as next year. But foal numbers of foals conceived this breeding season and born in 2021, will only be confirmed in the annual reports of the members submitted in 2022. Related to these foal numbers will be the types of mares that were bred to produce these foals and the covering methods used.

For an accurate estimation of the market, a broader survey would be useful, that compares studbook auctions to other auction platforms or companies, as well as private sales. Furthermore, exchange of covering data with stallion owners, AI centres and fertility veterinarians would also provide additional useful information.