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Breeding objectives and practices of sport horse studbooks: results of a worldwide inventory

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The breeding of sport horses is carried out by many breeding organizations worldwide. Common breeding goals and well developed logistics for the exchange of genetic material across countries have created an internationalized and highly competitive situation. Recent economic development and structural changes have increased pressure on the studbooks, implying reconsidering and possible adjusting of strategies and practices in the international sport horse scene. This motivated the 2015 studbook survey of the Interstallion working group on key determinants of breeding programs. Questions related to consideration and relative importance of traits, sources of phenotypic data, future developments and strategies for collecting data. Organizations were asked to assess the role of performance tests, national and international competition results and provide information on current and prospective selection methods and their acceptance by breeders. When compared to 2002, there were fewer changes in the trait groups relevant for selection than in the role of individual traits. Major challenges of the studbooks were seen regarding phenotypes and methodology, and the need for refined trait definitions and new traits (health, behavior, international sport performances) for routine genetic and future genomic evaluations was obvious. To meet these demands and comply with the broad interest in using genomic tools, improved international collaboration will be crucial to strengthen and develop sport horse breeding within and across countries.