



Outcomes of 560 Bull Breeding Examinations performed in the United Kingdom

Walters, A. J. & Thomson, H.

Westpoint Veterinary Group, Dawes Farm, Warnham, West Sussex RH12 3SH United Kingdom

Findings

- 30.1% of Pre-Breeding and Pre-Purchase Examinations performed resulted in the animal failing
- In 47.7% of these animals, the abnormalities demonstrated were undetectable from a clinical examination alone
- Pre-Breeding and Pre-Purchase Examinations have proven to be a valuable service for clients



A 4 year old, polled Sussex bull with Premature Spiral Deviation of the Penis (PSDP) demonstrated during mating.

Introduction

Fertility is a key driver of profitability within both the beef and dairy industries. Sub-fertile breeding bulls, particularly in beef enterprises, can be the source of substantial economic loss. This survey summarises the results of 560 bull breeding examinations performed on 528 breeding bulls within the United Kingdom between January 2007 and September 2011.

Methods

The examinations performed were classified as i) Pre-Breeding Examinations, ii) Pre-Purchase Examinations, iii) Assessments of Problematic Breeders or iv) Animals presented for Re-testing. The examinations were structured upon guidelines outlined by the Society for Theriogenology (Hopkins and Spitzer, 1997) including a general physical examination, reproductive system examination and finally assessment of a semen sample attained through electro-ejaculation. Examinations were conducted by eight veterinary surgeons trained in a standardised application of these procedures.



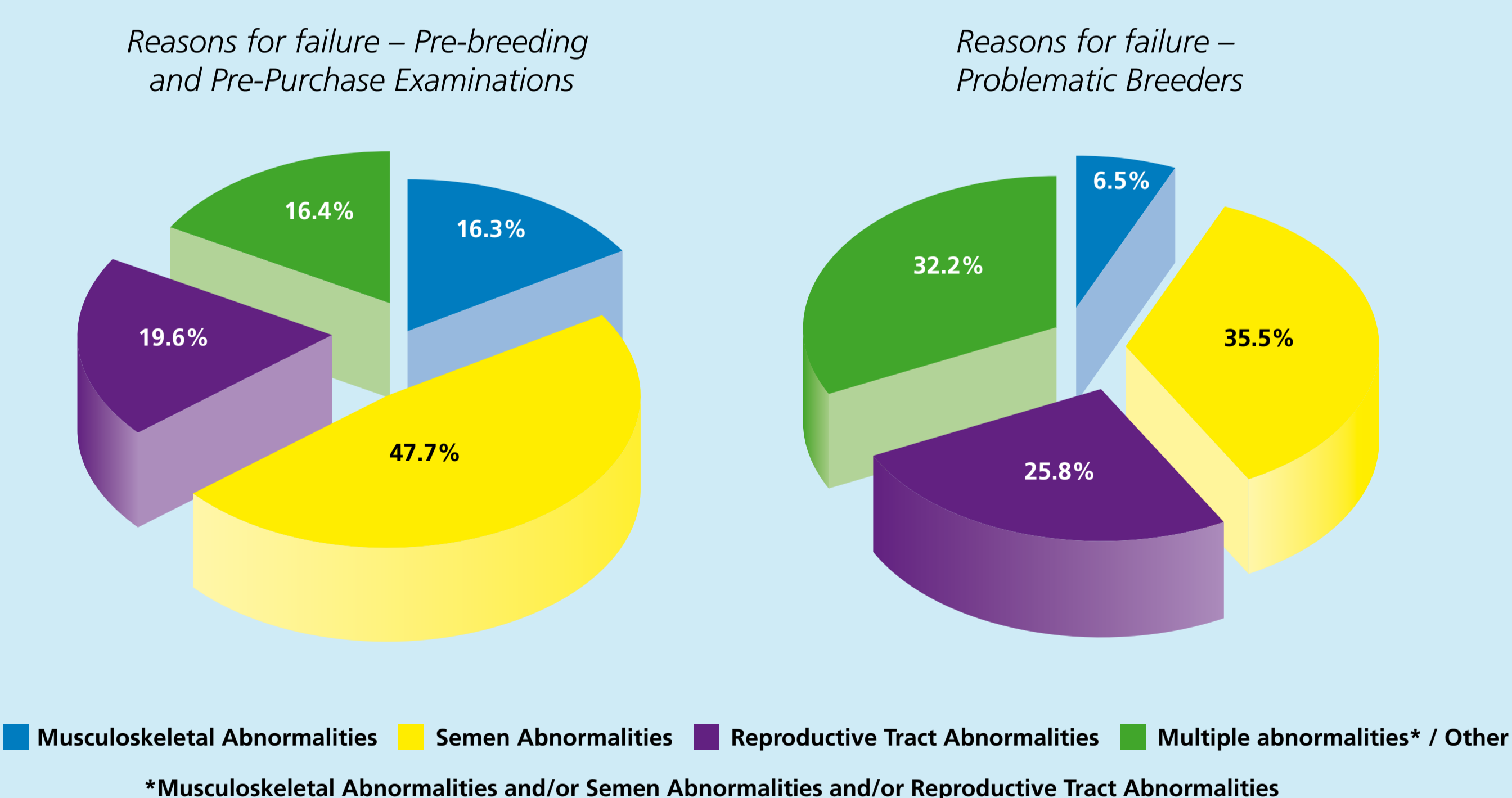
Semen collection as part of a bull breeding examination.

Results

A total of 560 examinations were performed over a 57 month period. The outcomes of these examinations are presented in the table below.

Test Type	No. of Bulls	No. Tests Performed	No. (%) Satisfactory	No. (%) Unsatisfactory	No. (%) Deferred
Pre-Breeding Examination	411	443	306 (69.0%)	84 (19.0%)	53 (12.0%)
Pre-Purchase Examination	65	65	49 (75.3%)	4 (6.2%)	12 (18.5%)
Problematic Breeders	39	39	8 (20.5%)	26 (66.7%)	5 (12.8%)
Re-Test	13	13	5 (38.5%)	7 (53.8%)	1 (7.7%)

Of the 153 assessments in which an animal failed either a Pre-Breeding or Pre-Purchase examination (i.e. Unsatisfactory and Deferred results), 47.7% demonstrated defects not detectable by general physical examination alone, in addition it should be noted that 52.3% were deemed not suitable for breeding on clinical examination alone. Reasons for failure in this combined group are presented below, along with reasons for failure in bulls presented as Problematic Breeders.



Discussion

A substantial proportion of bulls tested pre-purchase or pre-breeding were found to be unfit for the intended purpose, and their (prospective) owners were spared the economic consequence of using sub/infertile bulls as breeding animals.

The results of this review are consistent with similar data collected from other surveys, (Eppink 2005, Barth & Waldner 2002, McGowan *et al.* 2002). In

conclusion, this review reinforces the value of performing clinical and reproductive examinations in bulls, whilst reiterating the necessity of semen analysis as part of Pre-Breeding and Pre-Purchase Examinations.

References

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