

The American College of Theriogenologists

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Beginning about 20 years ago, at most AVMA meetings, there were usually informal "bull" sessions involving veterinarians interested in reproduction. In the late 50's the Rocky Mountain Bull Testing Society got under way, evolving subsequently into the American Veterinary Society for the Study of Breeding Soundness. This Society has been sponsoring annual or semi-annual educational programs separately and in conjunction with the AVMA.

When the AVMA began to encourage specialty groups within veterinary medicine by helping them to organize and then recognizing them as Colleges or Boards, it was quite logical for the breeding soundness group to request recognition by petition to the Board on Veterinary Specialties of the Council on Education of the AVMA. However, proposed constitutions were found not acceptable and recognition was not granted, repeatedly, over a period of several years for a variety of reasons. It became apparent that the differences were irreconcilable.

In the spring of 1970, an organizing committee formed to determine what would be necessary to gain AVMA recognition for a specialty group in animal reproduction and to endeavor to bring such an organization into being.

After accepting that the established recognition standards of the Board on Veterinary Specialties were very high and recovering from a challenge as to whether reproduction constituted a definable area of clinical veterinary medicine of sufficient magnitude to justify recognition (as do pathology, public health, laboratory animal medicine, radiology, microbiology, toxicology, surgery and ophthalmology), the status of this area of veterinary medicine was analyzed.

What to call the specialty group was a problem. A proposed name was: The American Veterinary College of Animal Reproduction. Both the words "veterinary" and "animal" appeared, accomplishing the essential clarity at a cost of redundancy. Additionally, the phrase "animal reproduction" had been substantially preempted by our colleagues in animal science. There are "Laboratories of Animal Reproduction" within several animal science departments of universities. A "Biennial Symposium on Animal Reproduction"

has been sponsored by the animal scientists for two decades.

It was recognized that our area of veterinary medicine needed a new identity. We weren't any longer veterinary obstetricians. The words "gynecology" and "andrology" have been used in the veterinary colleges of Europe. But, the validity of these terms is open to question because in the original Greek, *andros* means man and not male and *gynos* means woman and not female, especially not male and female animals, respectively. Consultation with an expert on medical terminology whose expertise derives from the classical languages, resulted in proposal of the term "theriogenology." This isn't a very hard word to say and it is really quite a useful word. It is a precise word and a word soundly founded in its Greek roots.

If you search medical dictionaries you'll find the word "theriatrics" as a synonym definition of veterinary medicine.

"Theriotherapy" is defined as treatment of animals. The word "therioanthromorphic" illustrates very nicely the meaning of the "therio" root because the Greeks applied the term in describing the centaur, which was half man and half animal. The Greeks used the root "therio" to differentiate beast from man. Of course, the word "gen" means creation or reproduction. Theriogenology readily rolls off one's tongue after saying it ten times and it really is no more difficult than, for example, anesthesiology.

Curricula vitae were prepared by each elected Charter Diplomate and they were submitted early in 1971 to the Board on Veterinary Specialties along with a revision of Constitution. These documents were passed to the Council on Education for action and reaction and ultimately, in August 1971, at Detroit, The American College of Theriogenologists received probationary approval by the AVMA's House of Delegates.

Following is a section of the Constitution of special interest to the American Association of Bovine Practitioners:

"Section 1. The purposes of the College shall be the advancement of knowledge, undergraduate, graduate and postgraduate education, research, and service in theriogenology by: (1) the establishment of a certifying agency to recognize veterinarians as

specialists in theriogenology, (2) the encouragement of scientific investigation and research and the reporting of these, (3) the development of continuing education methods and programs for disseminating information to and increasing knowledge of all veterinarians, especially practitioners, (4) the development of graduate study and residency programs, (5) the establishment of high standards and guidelines for professional attainment and specialization.

“Section 2. The College shall evince a dedicated commitment toward the practitioner of veterinary medicine and shall develop special procedures for evaluation, recognition, and certifica-

tion of competence of veterinary practitioners in theriogenology.”

Special attention is called to the very specific constitutional commitments toward the practitioner of veterinary medicine which are intended to fulfill the intent and desire of recognition and certification of competence of veterinary practitioners in theriogenology.

It is the sincere hope of the Charter Diplomates that the College can be made a useful and actively functioning organization, that it will unify our area of veterinary medicine, and that “theriogenology” will become a more readily recognizable and definable specialty within veterinary medicine.

The Future of A.I.

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Artificial insemination of all species has a future of continual expansion and enlargement from what we have today. Since this is a “bovine practitioner” conference, we will confine our thoughts of the future to the bovine species. The first 35 years of progress have provided a firm foundation on which future changes and improvements can be made. The relatively new science of cryobiology will make possible the storage of germ plasm in different ways than we know today. The only reason for A.I. and its main objective is bringing about genetic improvement of larger numbers of herds than can be accomplished by natural service, due to the relatively limited number of females that can be mated to the few genetically superior males. Here is what I see as some of the developments.

Future superior germ plasm will be located by means of blood type records and analysis. Future matings will be made by matching blood type patterns to concentrate the desirable characteristics for type and/or production. This “tool of the future” will eliminate the transmission of undesirable recessive characteristics if the A.I. industry and the breed organizations will recognize and exercise their responsibilities. The information necessary to accomplish this will be computerized and available to all people involved. This is in contrast to our present day “hit and miss” or “personal preference” methods that result in relatively few superior individuals and thus results in slow genetic progress.

Sex ratio control of the sperm accompanied by super-ovulation of the female will further

increase the number of offspring produced by the superior parents. Fertilized eggs from these matings will be recovered from the superior female’s oviduct and preserved for future transplant into less desirable females who serve only as incubators.

Estrus synchronization and/or ovulation control will be a common practice. Fertility of these inseminations will be equal to present day fertility at natural estrus; thus, a more economical and efficient use of A.I.

The emphasis for the future will be on performance records and economically important characteristics, with minor emphasis on breed lines or bloodlines. Crossbreeding will become more common and will be based on blood type records and sound genetic principles rather than our present day “printer’s ink,” “pie in the sky” promises and “eyeballing.” New breeds economically superior to the ones we know today will result.

Artificial insemination must provide equal fertility to natural service, with semen containing relatively few sperm, with semen readily available regardless of the location of the donor sire, and be produced by a sire known to be free of diseases transmissible by the semen.

Fertility of sperm produced by a given bull will be tested chemically or cytologically to predict the fertility of each ejaculate before it is used. This will make possible the culling of substandard samples with the result of higher fertility per insemination.

Freeze dried sperm, for resuspension prior to insemination, will utilize fewer sperm for each