

ABC's of Dog Breeding

Study Guide

Lesson 3, The Pedigree

1. UNDERSTAND THE CONCEPT OF THE DOG VERSUS THE PEDIGREE

- Many breeders place too much emphasis on the pedigree when planning a mating – “Kitchen Table Breeding”.
- The pedigree is never more important than the dog itself.

2. KNOW WHY THERE IS A REDUCED GENETIC IMPACT ON A LITTER FROM VERY DISTANT RELATIVES

- Unless there has been a lot of inbreeding among them, multiple appearances of ancestors far back in a pedigree have little genetic impact on a litter.

3. UNDERSTAND WHAT DETERMINES PEDIGREE VALUE AND HOW TO ESTIMATE THE LIKELIHOOD A DOG WILL PASS ON A TRAIT

- Pedigree value depends on heritability, inbreeding degree, progeny records, up close ancestors and relatives of common ancestors.
- The individual dog is more reliable than ancestors in a pedigree in predicting the likelihood of passing on a trait.
- A dog's offspring is the best indicator of its breeding value.

4. SOME MISCONCEPTIONS

- **Galton's Law:** Each parent passes on 50% of its genes; each grandparent, 25%; each great grandparent, 12.5%, etc. Although in general the theory is more or less valid, the only for sure percent is the parent generation.
- **Tail Male/Tail Female Theory:** Ancestors on top and bottom lines of pedigree are principal players. There is no scientific support to disregard ancestors in the center of a pedigree.
- **Belief that a Dog is Related to Every Ancestor in its Pedigree:** There may be some ancestors from which no genes were inherited and to which the dog is not related.

5. BE ABLE TO EXPLAIN THE CONCEPTS OF THE PEDIGREE VERSUS THE DOG

- Explain how to view a mediocre dog with a great pedigree and a great dog with a mediocre pedigree.

6. BE ABLE TO TELL IF A DOG IS LINEBRED OR OUTCROSSED AND BE ABLE TO DESCRIBE A DOG'S DEGREE OF INBREEDING OR LINEBREEDING USING THE NUMBER SYSTEM

- Know what a description like the following means: "Mary is linebred on Barry 4,4/3"