

Dog Paternity DNA Testing

There are many reasons to breed dams to more than one sire. Now DNA testing answers the paternity question.

D. Caroline Coile, Ph.D.

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The existence of DNA parentage testing made it possible for the AKC to randomly inspect large-scale breeding operations to determine if their pedigrees were accurate. By 2002 more than 13,000 litters had been tested. In 2002, 94 percent of the litters tested had correct parentage, and of those that were incorrect, 27 percent were corrected using DNA parentage testing. DNA testing also allowed the AKC to respond to customer complaints regarding suspicions that parents or sires were not as alleged; either that a breeder misrepresented the parents of a puppy or a stud owner misrepresented the sire of a litter. To discourage frivolous allegations, a written complaint and \$500 deposit (returned if the charges are validated) must be submitted by the complainant.

DNA parentage testing also allowed breeders to register litters accidentally sired by more than one male, a significant step in removing the temptation to risk falsifying registrations in such cases. But while the registration of puppies from accidental multiple-sired breedings was welcomed, registration of puppies from planned multiple-sired breedings met with more skepticism.

Good reasons exist to breed a single litter with multiple sires. Shirley Rehberg explains: We chose to use multiple sires with Maddie because she was 8 years old and we felt her age would preclude any future breedings; in addition, she would not breed naturally, and although she had been bred unsuccessfully by artificial insemination several times, we decided to try a uterine implant. Since this was our last attempt, we elected to use multiple sires as well.

The Rehbergs used three males, all of whom were collected by Beverly Brimacombe, DVM, of Lakeland, Fla., who also performed the implant. They were rewarded with a litter of all solid-color pups plus one tri-color pup. One sire was solid color, one sire was tri-color, and one sire, as well as the dam, was white with spots. The Rehbergs could give educated guesses about each puppy's sire based on color, but only DNA profiling could verify it. Shirley Rehberg says that determining the sire of each puppy with the DNA profiles was simple and the results were what they predicted based on colors: the tri-color pup was sired by the tri-color sire and the rest were sired by the solid-color sire, with the spotted sire not fathering any pups.