

For a large breed, such as a Rottweiler, training is very important, but it should be about mutual respect and calm authority. It should never be about fear," says National Moon Rottweiler breeder Linda Draper of Charlotte, North Carolina.



According to research by behaviorists Scott and Fuller,<sup>1</sup> a dog's behavioral makeup is 35 percent genetic and 65 percent due to socialization, nutrition, health care, training, and management. In other words, socialization cannot change temperament, but it certainly plays a role in behavior modification.

Recent research at the Wolf Science Center in Ernstbrunn, Austria,<sup>2</sup> has shown that dogs likely inherited the ability to be socially tolerant and attentive, characteristics that are crucial for cooperation, from wolves, their closest wild living relative. The researchers socialized dogs and wolves to humans and their respective species and found that wolves are highly socially attentive and tolerant and thus highly cooperative. They proposed a canine cooperation hypothesis suggesting that wolves provided a good basis for the evolution of dog-human cooperation and dogs' ability to accept humans as social partners.

### ENRICHMENT MATTERS

Although puppies are born with the ability to be cooperative social partners with humans, socialization is the key to success in helping them develop confidence and the ability to handle new situations. Opportunities that are missed during the critical socialization period puts puppies at risk of becoming shy, fearful, defensive adult dogs.

Animal behaviorist Fox<sup>3</sup> showed that puppies exposed to increasingly complex stimuli, or enrichment, sought out complex environments and were dominant over "stimulus-poor" puppies. Those that lacked enrichment were inhibited, fearful and looked for less complex environments, and often compensated with self-destructive behaviors such as chewing and licking.

Puppy socialization sets the stage for a dog's entire life. The socialization periods that Hastings identifies in "Another Piece of the Puzzle: Puppy Development" are:

**Curiosity Period (5 to 7 weeks):** Now weaned, puppies are virtually fearless and thus ready to explore the world. They want to climb, crawl, investigate, and taste everything. Their acceptance of people peaks at this time as they are becoming increasingly mobile. New challenges, such as first baths, grooming and trips outside the house, are ideal because puppies bounce back quickly if frightened by something new.

**Behavioral Refinement (7 to 9 weeks):** Puppies are capable of learning anything despite their short