



Reduce Strays: Keep Owned Dogs Owned



Nearly 23 years ago, the Italian parliament approved a law providing for government protection and assistance for free-roaming dogs (FRDs) and forbidding euthanasia of unwanted dogs unless incurably ill or proven dangerous. This presented a challenge to management systems, as kennels have become overcrowded. Owned dogs (ODs) are often allowed to roam free, and there is a significant population of

stray dogs (SDs), partially as a result of abandoned ODs. Some groups have been converted into block dogs (BDs) that are captured, microchipped, sterilized, and released.

This study described a cost-benefit model for different management options in 2 Italian provinces for 4 groups of dogs: ODs, SDs, BDs, and kennel dogs (KD). The model addressed welfare, nuisance, and direct costs to the municipality responsible for the management of these dogs. Welfare for each group was quantified based on freedom from hunger and thirst; freedom from discomfort; freedom from pain, injury, or disease; freedom to express normal behavior; and freedom from fear and distress. Public nuisance included dog bites, disease transmission, property and wildlife damage, waste, and noise pollution.

Results indicated that optimal management decisions are complex, but the most favorable outcomes would be achieved by focusing on dog ownership patterns to reduce the number of

FRDs. Increasing sterilization rates, decreasing abandonment, and increasing adoptions are key.

■ Global Commentary

Shelter and municipality veterinarians are key to ensuring efficient, welfare-friendly systems of managing FRD populations. However, as exposed by the model described in this study, veterinarians treating owned dogs also contribute significantly to population management. Promoting sterilization, identification, and registration; enlightening owners with realistic expectations of dog behavior; and providing empathetic euthanasia when needed as an alternative to abandonment are ways in which veterinarians reduce ODs in the FRD population. Application of the proverb *prevention is better than cure* to population management has global relevance, as there are few situations in which owned dogs will not be the principle source of FRDs.

During my recent work in Panama, I worked with a local organization (ie, Spay Panama, spaypanamasanimals.com) that provides their contribution to population management through low-cost surgical sterilization and basic veterinary care of ODs as opposed to sheltering stray animals. This study supports their assertion that their work to prevent unwanted litters and illnesses that lead to abandonment is highly significant in reducing future strays.—Elly Hiby, PhD

■ ■ Source

Free-roaming dog populations: A cost-benefit model for different management options, applied to Abruzzo, Italy. Høgåsen HR, Er C, Di Nardo A, Dalla Villa P. *PREV VET MED* doi:10.1016/j.prevetmed.2013.07.010.

FOCUS

RESEARCH NOTE: Dosing Anesthesia for Overweight Dogs

The objective of this study was to determine if BCS influences the sedative effect of IM premedication or the dose of IV propofol needed for intubation in dogs. For IV dosing of lipid-soluble medications (eg, propofol), dose based on lean body mass may be more appropriate, whereas calculation according to actual body mass may be preferred for IM medications.

Dogs were allocated into a normal-weight group (NG; BCS 4–5; $n = 25$) or overweight group (OG; BCS >6 ; $n = 21$). Dogs received an IM injection of medetomidine

(5 µg/kg) and butorphanol (0.2 mg/kg), calculated on actual body weight and were sedation-scored before injection and 20 minutes later. The degree of sedation after IM premedication was not different between the groups.

Anesthesia was induced by IV infusion of propofol (1.5 mg/kg/min). The infusion was stopped when there was near-ablation or loss of palpebral reflexes, loss of jaw tone, and no or minimal gagging such that endotracheal intubation was achievable.

Mean propofol doses were 2.24 mg/kg for NG dogs and 1.83 mg/kg for OG dogs. Although BCS does not affect sedation levels from IM dosing of α_2 -agonists and opioids, overweight and obese dogs have lower dose requirements for IV propofol.

■ ■ Source

The effect of body condition on propofol requirement in dogs. Boveri S, Brearley JC, Dugdale AHA. *VET ANAESTH ANALG* 40:449–454, 2013.

MORE ►