

SUPPLEMENTARY MATERIAL

Space use by resident and transient coyotes in an urban–rural landscape mosaic

Numi Mitchell^{A,F}, Michael W. Strohbach^B, Ralph Pratt^C, Wendy C. Finn^D and Eric G. Strauss^E

^AThe Conservation Agency, 67 Howland Ave, Jamestown, RI 02835, USA.

^BHumboldt-Universität zu Berlin, Department of Geography, Landscape Ecology Lab, Unter den Linden 6, 10099 Berlin, Germany.

^CWest Greenwich Animal Hospital, 14 Victory Hwy, West Greenwich, RI 02817, USA.

^DDepartment of Natural Resources Science, University of Rhode Island, Kingston, RI 02881, USA.

^ELoyola Marymount University Center for Urban Resilience, 1 LMU Drive, Los Angeles, CA 90045, USA.

^FCorresponding author. Email: numimitchell@gmail.com

We captured coyotes using Victor 3.5 Softcatch traps (Cleveland, OH), or similar foot-hold traps with rubber closure pads. Commercial coyote lures or small animal carcasses were used in standard ‘dirt hole’ or scent-post sets (Legget and Legget 1988). Traps were tended daily at or just after dawn. We identified trapping sites by searching suitable habitats (woods, shrublands, fields) for heavy recent coyote traffic (tracks of different size and age) or areas with abundant coyote scats. To avoid catching more than one representative per pack, we tracked each newly collared coyote for several weeks to establish its home range and then set traps outside the home range.

Trapped coyotes were restrained with a net and tranquilised with 45–60 mg kg⁻¹ of intramuscular medetomidine (Domitor, Zoetis, Florham Park, NJ) and with 0.3–0.4 mg kg⁻¹ butorphanol (Torbugesic, Zoetis, Florham Park, NJ). Standard measurements were taken, sex was determined, and the coyote was weighed. Age estimates were made based on size, weight, testicular development or signs of breeding (lactation, vaginal bleeding) in females, amount of tartar and tooth wear, or reduced transparency, or clouding, of the eye (pups or subadults <1 y, maturing adults ≥1 y, older adults >>1 y). Passive integrated transponder tags (Trovan, Melton, East Yorkshire, UK) were inserted subdermally at the nape, giving each coyote a permanent, unique identification number. Each coyote was fitted with a GPS collar and given 1.0 mL of reversal agent containing 5 mg mL⁻¹ atipamezole (Antisedan, Zoetis, Florham Park, NJ).