

SESSION OVERVIEW

Moderator: Dr. Stephen Zawistowski

Panelists: Dr. John Boone, Dr. Phil Miller, Dr. Margaret Slater

**FOCUS ON FELINES:
TOOLS TO HELP YOU PLAN YOUR PROGRAMS AND MEASURE YOUR SUCCESS**

Dr. Stephen Zawistowski
Science Advisor, ASPCA; Board Chair, ACC&D

This session focused on free-roaming cats and shared best practices for counting, monitoring, and managing their populations. ACC&D, with a grant from the ASPCA, convened a team of experts to conduct what is arguably the most comprehensive free-roaming cat modeling work available to date. All speakers in this session were members of the population modeling team.

Using the Vortex computer simulation model, the team used stochastic demographic simulation modeling to evaluate the dynamics of populations associated with different interventions. The project was motivated by the belief that initiatives to humanely reduce free-roaming cat populations can benefit from a) engaging tools long used in wildlife management, and b) moving from an individual-based to population-based management approach.

Dr. Phil Miller (Senior Program Officer, Conservation Breeding Specialist Group (SSC/IUCN)) and **Dr. John Boone** (Senior Biologist, Great Basin Bird Conservatory; Board of Directors, SCPA of Northern Nevada) shared results of the modeling. The model projected free-roaming cat numbers for over 550 different scenarios associated with:

- Different population control methods (permanent sterilization, two types of temporary contraception, and removal);
- Different population control intensities (the percentage of a given population treated, and the frequency with which treatment occurs)
- Different “groups” of cats targeted (male versus female, kitten versus adult); and
- Different geographies (large urban, small urban, rural).

Significantly, the model assumed that a target population of free-roaming cats will have “demographic connectivity” with the surrounding environment, meaning that cats can enter the population from outside the original target population, either through dispersal or abandonment. This feature is one that has not been accounted for in prior modeling efforts, and the study found that it can have dramatic impacts on population control efforts.

Dr. Miller provided an in-depth look at the model design, data, and outcomes and shared key findings from the model. Dr. Boone took the model into the “real world,” addressed several guidelines that can be drawn from and put into practice using the model’s findings, and noted ways of employing an “adaptive management” approach to improve the population model and management approaches.

Dr. Margaret Slater (Senior Director of Veterinary Epidemiology, Shelter Research and Development, ASPCA) provided best practices and important principles for counting free-roaming cats as part of population monitoring programs. She then shared a case study of how these counting and monitoring mechanisms were used in four New York City neighborhoods, and the data that were collected as a result. Dr. Slater offered several compelling reasons to count free-roaming cats, one of which is to estimate the size of a population and how that population changes over time. This is a critical complement to adaptive management strategies and modeling of free-roaming cat populations.

Interested in learning more about these projects? We invite you to visit ACC&D's [website](#) to access related documents and reports.