



Urban raccoon populations may require modified vaccination programs to prevent the spread of raccoon-strain rabies.



School of Environment and Natural Resources

Urban Raccoon Populations

SITUATION

Raccoon-strain rabies is a viral disease that threatens the health and welfare of humans. Wild raccoon populations are vaccinated via distribution of fish-meal polymer baits containing a vaccine packet that is orally ingested by target animals. Oral rabies vaccine (ORV) baits have been aerially distributed 1-2 times per year over eastern Ohio since 2000 to prevent the westward spread of raccoon rabies. The efficiency of this process has never been evaluated.

RESPONSE

OARDC/OSU researchers have teamed with scientists and veterinarians from the USDA/AIPHIS Wildlife Services National Wildlife Research Center, the Center for Disease Control (CDC) and Prevention, and the Ohio State University Department of Veterinary Medicine to conduct research on prevention and monitoring of raccoon rabies. The group recently completed a study that experimentally tested the ORV aerial distribution program.

Collaborating Agencies/Individuals

USDA/AIPHIS (Dr. Bradley Blackwell and Dr. Andy Monteney); OSU Dept. of Veterinary Preventive Medicine (Dr. Richard Slemmons); Center for Disease Control and Prevention (Dr. Kathleen Hanlon and Dr. Charles Rupprecht); Ohio Department of Natural Resources, Division of Wildlife.

IMPACT

The research team found that distribution of the standard bait density to urban raccoon populations was inadequate to confer herd immunity. It was also determined that background, non-specific rabies antibody titers exist in unvaccinated raccoon populations, a discovery that must be considered in any operational evaluation of the ORV program by USDA/AIPHIS Wildlife Services. This is a multi-million dollar program designed to control or possibly eliminate rabies as a wildlife-vectored disease.

SENR Contact

Robert Gates
Associate Professor
210 Kottman Hall
2021 Coffey Rd.
Columbus, OH 43210
614.292.9571
gates.77@osu.edu
<http://senr.osu.edu>



— We Bring Knowledge to Life —