SUMMARY
Over 5.1 million people engage in wildlife-based recreation in Ohio, contributing $3.3 billion to the economy. Wildlife also promotes physical and spiritual well-being and is a sensitive indicator of environmental quality and ecosystem capacity. As wildlife management increases in size and complexity, School of Environment and Natural Resources scientists fulfill the need for scholars, managers, and stakeholders to share information and collaborate; ensuring sustainable wildlife populations and habitats that are valued and conserved now and in the future.

SITUATION
Human-wildlife relationships arise from interactions of natural and social systems. Problems develop as natural and cultural environments change. Government agencies and NGOs are challenged by competing interests of stakeholders, and scientific uncertainties about the systems they manage. Among the most pressing issues facing wildlife conservation are: biodiversity loss, invasive species, species endangerment, changing climate, sustainable uses of wildlife resources, human-wildlife conflicts, and public support. Fulfilling the land-grant mission of The Ohio State University, we provided science-based research and training for current and future wildlife professionals, community leaders, and private landowners. We focused in 2016 on impacts of energy and resource development, sustainable use of natural resources, human-wildlife conflicts, and conservation of wildlife diversity on public and private lands across Ohio.

RESPONSE
The Terrestrial Wildlife Ecology Laboratory, Ohio Biodiversity Conservation Partnership, and Wildlife Extension support science-based conservation via partnerships with agencies and stakeholders. We engaged industry to test best practices to improve management of energy right of ways for pollinators and other wildlife. We supported development of socially and ecologically sustainable deer harvest management. We studied river otters, a former extirpated species that recovered to a level that now sustains recreational harvest, to manage human-wildlife conflict. We addressed ecologically sustainable forest management with research on timber.
rattlesnakes, amphibians, and forest birds where fire and tree harvest are used for restoration. We studied effects of water quality on aerial insect-eating birds in rivers and streams. We disseminated information to stakeholders through an endangered species workshop and Extension programs like The Ohio Community Wildlife Cooperative.

IMPACT
Adopting best practices for managing energy right of ways would improve habitat for pollinators and promote biodiversity on more than 360,000 acres, helping achieve national pollinator conservation goals. Responsive management of deer management units affects approximately 500,000 hunters that contribute $853 million to the Ohio economy. River otter management seeks to balance population and harvest goals while minimizing human-wildlife conflicts in 42 counties. Considering impacts of forest restoration on timber rattlesnakes and other wildlife will affect use of fire and tree harvest on 3.3 million acres of public land in southeast Ohio. Studies of aerial insect-eating birds in seven central Ohio counties demonstrated effects of land use and water quality on an imperiled bird group. Research impacts were magnified by disseminating findings through OSU Extension. The Wildlife Extension team delivered 67 presentations on human-wildlife conflicts to a cumulative audience of 5,916 professionals, volunteers, and homeowners. Multimedia pertaining to rattlesnakes and coyotes received 289,900 views. The Ohio Community Wildlife Cooperative facilitates networking and communicates science-based knowledge through an annual conference attended by community leaders, city planners, and resource managers representing 90 different Ohio municipalities and park districts. Over 2,000 visitors to the Olentangy River Wetland Research Park learn about human impacts on rivers and wetlands inhabited by aerial insect-eating birds.