



Promoting Positive Relationships between Human and Wildlife Communities through Partnerships, Stakeholder Engagement, and Science

Impact Statement 2019

INVESTIGATORS

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SUMMARY

Over 5.1 million people engage in wildlife-based recreation in Ohio, contributing \$3.3 billion to the economy. Wildlife promote physical and spiritual well-being and are sensitive indicators of environmental quality and ecosystem health. As wildlife conservation increases in scope and complexity, SENR faculty and staff **provide research and facilitate collaborations that help ensure sustainable wildlife populations and habitats are valued and conserved now and in the future.**



Photo credit: Jeff Nelson

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. Biodiversity loss, invasive species, species endangerment, a changing climate, sustainable use of wildlife resources, human-wildlife conflicts, and changes in public demand for wildlife-based recreation are among the most pressing concerns faced by wildlife managers. Fulfilling the land grant mission of The Ohio State University requires science-based research and training for current and future wildlife professionals, community leaders, and private landowners, and strong collaborations and partnerships between researchers, management agencies, and stakeholders.



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RESPONSE

Through the Terrestrial Wildlife Ecology Lab, Ohio Biodiversity Conservation Partnership, and OSU Extension, we focus on public access to private lands, human-wildlife conflicts, and conservation of wildlife diversity on public and private lands within Ohio and across the United States. We worked with the Ohio Division of Wildlife to **improve the state's private lands recreational access program**, and to **develop a socially and ecologically sustainable plan for deer harvest management**. Our research on river otters, a former extirpated species, was used to **set sustainable harvest levels**. We identified more **ecologically sustainable approaches to forest management** that use fire, and studied tree harvest to **restore habitat** for rattlesnakes, amphibians, and woodland birds. We also **informed managers** of 35 national wildlife refuges administered by the U.S. government. We **disseminated information** through extension programs, websites and multimedia, workshops and conferences, and other publications.

Studied recreational preferences and economic impact of
>6,000 visitors
to **35** national wildlife refuges

48 presentations made by the Wildlife Extension team to **4,100** professionals, volunteers, and homeowners

>250,000 views of multimedia pertaining to rattlesnakes and coyotes

IMPACT

The recreational access program opens 250,000 acres to Ohio users, and we are evaluating policies to retain critical habitat and increase public access. Our research assists managers in **striking a balance** between ~500,000 deer hunters that contribute >\$800 million to the Ohio economy, and farmers who are losing crops to deer depredation. Our river otter research balances population and harvest goals while **minimizing human-wildlife conflicts** in almost half of Ohio's counties. Our studies of impacts of forest restoration on rattlesnakes and other wildlife has **informed forest management** on ~3.3 million acres of public land in southeast Ohio. We led a nation-wide study of federal public lands in the National Wildlife Refuge System to inform managers about the **recreational preferences and economic impact** to local communities of over 6,000 people who visited 35 national wildlife refuges during 2019 (see go.osu.edu/NVSresults). The impact of our research was amplified by disseminating findings through OSU Extension and other outreach efforts. The Wildlife Extension team delivered 48 presentations on human-wildlife conflicts to 4,100 professionals, volunteers, and homeowners. Multimedia pertaining to rattlesnakes and coyotes received >250,000 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 from 103 Ohio municipalities and park districts.

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