



HUMAN WILDLIFE CONFLICT WORKING GROUP

Chair: Brian Wakeling (Montana)

Vice-Chair: Doug Brimeyer (Wyoming)

Tuesday, September 26th, 2023

1:00 – 3:00 PM (MDT)

Glen 204 – Upper Level

[113th AFWA Annual Meeting](#)

Agenda

- **Call to Order/Review Agenda/Introductions (B. Wakeling/D. Brimeyer)**
 - ~ 40 members and guests attended the meeting representing 15 state agencies, 1 US federal agency, 3 NGOs, and the Canadian Wildlife Service.

- **Approval of Minutes from the previous meeting (B. Wakeling)**
 - **Vote of Acclamation:** A motion to approve the [minutes](#) from the meeting during the North American Wildlife and Natural Resources Conference was made by Chairman Wakeling, seconded by Josh Avey (AZGFD), and unanimously carried by membership present. Vote of acclamation with unanimous consent **carries**.

- **AFWA Multistate Conservation Grant Update: National survey of how agencies manage and fund wildlife conflicts (Lou Cornicelli/Bryant White)**
 - **Multi-state Conservation Grant Project Overview:**
 - Human-wildlife conflicts (HWCs) are increasing across the United States. State Wildlife Agencies (SWA) under the Public Trust Document have been given the authority to manage wildlife to include most of the species implicated in HWCs. Concomitantly, each SWA has different authorities, policies, levels of species protection, and most importantly, unique ways of funding and managing HWC mitigation programs. Little information is available summarizing how SWA fund and staff their programs. Given increased demands for a finite pool of funding, wildlife managers often compete for funds that could otherwise be used for other higher priority conservation needs. In essence, the HWC programs have largely become a SWA unfunded mandate.
 - In many cases, delegated authorities to manage HWCs are passed to local units of government or private individuals who are contracted to solve problems. In other cases, SWAs organize and participate directly in HWC mitigation programs. Some SWAs even compensate individuals financially for wildlife damage. As there is no 'one size fits all' approach to HWC management, it is critical for SWAs to learn from each other and develop programs that alleviate conflict in their respective jurisdictions. There is also a need to work with wildlife conflict managers to consolidate information into a single source.

- **Support Needs:**
- National list of Agency conflict managers so we can field a survey. We recognize this list

may cross disciplines within the same Agency, so we are seeking as comprehensive accounting of staff as possible.

- **Outcomes:**

- A final report with the analysis of the current status of human wildlife conflict authorities and obligations (such as, staffing and financial) will be prepared for distribution to all 50 state wildlife agencies. The document will follow the format like the WMI/Southwick Associates feral swine report.

- Research Team: Association of Fish and Wildlife Agencies, Southwick Associates, Wildlife Management Institute, Montana Department of Fish Wildlife and Parks

- **Study Contact Information:**

- Bryant White, AFWA, bwhite@fishwildlife.org
- Lou Cornicelli, Southwick Associates, Lou@SouthwickAssociates.com
- Bill Moritz, Wildlife Management Institute, bmoritz@wildlifemgt.org
- Brian Wakeling, Montana Department of Fish Wildlife and Parks, brian.wakeling@mt.gov

- **Motion for approval of the outline on human-wildlife conflicts with beavers (B. Wakeling)**

- The Working Group was asked to review the outline. Comments are being accepted until November 1. Comments should be sent to Brian Wakeling (Brian.Wakeling@mt.gov). **The outline is attached in the Appendix.**

- **Update on the urban coyote conflict manuscript (B. Wakeling)**

- The manuscript has been submitted and “accepted with minor revisions”. Those revisions have been made and the document is awaiting final acceptance.

- **USDA-APHIS-Wildlife Services (Janet Bucknall, Deputy Administrator)**

- Collective Accomplishments of the Wildlife Services (WS) Field Workforce helped people, protected resources and human health and safety, and conserved wildlife populations.
- During FY 2023, WS Specialists, Technicians and Wildlife Biologists protected agriculture, human health and safety, natural resources, and property by providing wildlife damage management services in 50 States, 3 Territories and at Department of Defense airbases in 15 other countries.
- WS field staff: taught semester-long courses and lectures at 54 universities;
- delivered more than 300 staff years of wildlife hazard reduction actions at more than 800 airports;
- detected and removed 3 newly-established nutria colonies in northern Virginia;
- protected Hawaii and the Indo-Pacific region from brown treesnake range expansion by conducting more than 186,000 canine inspections of departing cargo and removing more than 7000 snakes from areas around Guam exit ports;
- conducted collaborative feral swine control programs in more than 30 states, including 34 Farm Bill projects in 12 states;
- strategically delivered Oral Rabies Vaccine baits in 14 states to maintain the nation’s canine rabies free status and to halt the westward spread of the raccoon rabies variant;
- provided field-based assessments and mitigation to protect resources from vultures, fish-eating birds, white-tailed deer, beaver, and a host of other wildlife species;
- In furtherance of the wildlife conservation profession’s priority of wise use of natural resources, WS field staff donated approximately 163 tons of meat from wildlife taken in WS actions, for charitable donation to food banks in locations across the United States.
- WS Public Service to Protect Livestock from Predation helped support ranchers and rural communities. The WS mission to protect livestock from predation is a legacy, and it is carried out today by a dedicated and talented field-focused workforce that implements damage management actions, develops methods, and communicates with a wide variety of stakeholders.

- During FY 2023, this team of WS professionals helped people understand and reduced impacts of predation in 50 states and in the U.S. Territories, by:
 - delivering operational predation damage management services in many states;
 - advancing research to better understand livestock producers' perspectives on non-lethal methods and on use of unmanned aerial systems (UAS, drones) as a predation damage management method;
 - increasing and optimizing use of range riding, livestock protection dogs, and innovative fencing systems in 12 states;
 - developing written Standards of Evidence for use in livestock loss investigations and completing an OIG inspection on WS Mexican wolf work;
 - conducting a responsive and integrated grizzly damage management program in Montana;
 - delivering integrated wolf damage management programs to protect livestock in 7 states;
 - researching vulture ecology and predation damage management;
 - and collaborating with Federal agency partners to expand vulture depredation permit options in 14 states.
 - WS Contributions to Wildlife Disease and One Health Issues protected human and animal health and conserved the environment and natural resources.
- The WS Program significantly contributed to development of the APHIS One Health position and advancement of zoonotic disease priorities through coordination, collaboration, sharing knowledge, and disease surveillance and management.
- The WS program substantially participated in emergency responses related to HPAI (1400 deployed days in 12 states) and ASF (more than 2000 deployed days);
- developed the WS Wildlife Disease Diagnostics Laboratory at NWRC;
- co-hosted and shared scientific and program information at the 4th International CWD Symposium;
- engaged as USDA participants in the development of the Federal Government's One Health Framework for Zoonotic Diseases;
- established the WS One Health Committee;
- developed, with partners from more than 50 organizations and agencies, the U.S. National Plan for Wildlife Rabies Management;
- responded to a rabies outbreak in Nome, AK;
- advanced strategic partnership with USGS on emerging and zoonotic diseases;
- collected nearly 5000 samples for ASF testing of feral swine and of 31,500 samples for HPAI testing of wild migratory birds in 4 flyways including Puerto Rico and the US Virgin Islands;
- WS leadership participated in the AFWA President's Task Force on One Health and the National Fish and Wildlife Health Initiative.
- WS conducted cross-border collaborations with Canada and Mexico for disease surveillance and sample collection for program monitoring and to inform management.
- **Wildlife Management Institute (Chris Smith)**
- No report
- **Human Health and Ecological Risk Assessment for the Use of Wildlife Damage Management Methods by APHIS-Wildlife Services (Bryant White)**
 - AFWA began assisting Wildlife Services with these risk assessments in 2019. To date 25 methods have been reviewed by state fish and wildlife agency personnel.
 - 2 additional methods are currently being reviewed; Diphacinone and Minimum Risk Pesticides. 3 reviews of each method are needed. AFWA is seeking qualified state agency personnel to assist in these reviews.
 - If your agency can assist, please contact Bryant White (bwhite@fishwildlife.org)
- **USGS National Climate Adaptation Science Center: Impacts of Climate Change to Wildlife Conflicts (Kate Malpeli)**

Contact: Kate Malpeli (kmalpeli@usgs.gov)

Since the last working group meeting, we have completed and submitted for publication a manuscript synthesizing the effects of climate variability and change on black and brown bears in North America, and implications for human-bear conflict.

A few findings from this synthesis:

- We synthesized 120 articles and found that climate primarily impacts bears indirectly, through effects on habitat quality and food availability. Variables such as wildfire, flooding, and temperature can also directly impact bears.
 - The most commonly measured climate variables in the literature were temperature, precipitation, snow depth, and drought.
 - The impacts of climate on bears identified in the literature can be categorized into five themes: diet; body size; habitat selection, space-use, and activity; denning chronology; and population demographics and dynamics. Across each theme, implications for human-bear conflict were identified. The primary mechanism by which climate affects conflict is through changes in habitat, particularly changes in natural food availability.
 - Bears often responded to shortages in natural food availability by seeking alternative food sources in areas of human development. This has resulted in increased conflict. We found examples of this pattern in the U.S., Canada, and Mexico and with both black and brown bears. For example:
 - In Utah, a drought-caused natural food failure was accompanied by a 16- to 17- fold increase in human-black bear conflict.
 - In British Columbia, grizzly bear attacks on humans increased approximately 20% for each 50% reduction in annual salmon biomass.
 - Beyond impacts to habitat and food availability, additional mechanisms by which climate can affect conflict were identified.
 - For example, changes in climate can result in shorter hibernation periods and more frequent den abandonment. This could increase the risk of conflict in multiple ways: (1) if delayed onset of hibernation extends the period of hyperphagia, which is when conflicts are already most likely to occur, and (2) if early den emergence results in phenological mismatch and reduced natural food availability, leading bears to search for alternative food sources.
 - Additionally, rising temperatures are anticipated to increase bear use of water sources to thermoregulate. This can congregate bears and livestock at water sources, and lead to increased livestock predation.
 - Overall, our synthesis showed the general adaptability of bears to various conditions, but identified some of the challenges bears, the public, and managers may face as the climate continues to change.
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- **Roundtable: State/Federal/Tribal/Provincial/Regional Associations/AFWA Members**
 - **US FWS**
 - **will finish a status assessment of wolves in 2024**
 - **Colorado**
 - **wolf reintroduction**
 - **Washington State**
 - **recently started a new division to deal with wildlife conflicts**
 - **California**
 - **developing a comprehensive beaver management plan**
 - **elk depredation**
 - **black bears**
 - **wolves have expanded into the Sequoia National Forest**

- wild pigs redefined as an exotic game animal
- urban coyotes are a big issue
- recently got some new funding for dedicated wildlife control
- **Montana**
 - recently had a river otter attack on a person
- **Arizona**
 - Person was killed by a black bear in an unprovoked attack recently for the first time in 20 years; also had a coyote attack on a human
- **Canadian Wildlife Service**
 - May urban wildlife issues with mountain lions, elk, coyotes, bobcats
- **Manitoba**
 - Feral swine
 - Coyote attacked two children; animals were not rabid
- **Texas**
 - Black bears
 - Coyote attacks
 - Appreciate the work of Wildlife Services to assist with damage management
 - Mountain lions; working on a status assessment and discussing how lions should be managed going forward
- **Missouri**
 - Agricultural damage from black bears
 - Black vultures are an issue
 - Urban coyote
- **Oregon**
 - Removed some black bears and mountain lions for damage control
 - Removed 5 Stellar sea lions for fisheries; males can weigh 1500-2000 pounds
 - Wolf depredation; removed 6 animals so far in 2023
- **Alberta**
 - Wolves and grizzly bears; depredation and human attacks are an issue; kikers have been killed recently by GBs
- **Minnesota**
 - Whitetail deer depredation
 - Feral swine
 - Canada geese not as big of a problem due to lower nest success
 - BearWise program has been helpful in dealing with black bear complaints
- **Parks Canada**
 - Fatal coyote attack on a human at Cape Breton years ago, but sets a precedent that coyotes can attack and kill humans
 - White sharks are coming into the Bay of Fundy
- **Colorado**
 - Received a grant for managing human black bear conflicts
 - Focused on securing trash
 - Municipalities must develop ordinances
- **Nova Scotia**
 - Obligated to look at black bear rehabilitation
- **Northwest Territory**
 - Polar bears
 - Grizzly bears
 - Black bears
 - Arctic fox-rabies
 - Muskox on airstrips
 - Wolves
- **Tennessee**
 - Black bears removed each year for conflicts (~35-50)
 - Issues in the Great Smoky Mountains

- Lots of visitors
 - Food storage and trash
- City of Gatlinburg has an ordinance to help alleviate bear issues
- Feral swine depredation

- **Wrap-up Discussion and Assignments for Next Meeting (B. Wakeling/D. Brimeyer)**
 - We need agencies to volunteer staff to complete to ongoing Risk Assessment Reviews
 - Following completion of the Beaver Conflict Management Paper, the HWC WG will begin development of a conflict paper on wolves (will this focus only on gray wolves or will it include the Mexican gray wolf and red wolf?)

Appendix:

- Managing Conflicts with Beaver: Outline
- State Reports Submitted
 - Washington
 - North Carolina

Potential Title: **Best Practices for Managing Conflicts with Beavers in the United States**

Author list: (lead author TBD)

Altermatt, Jerry ?*

(need full name)

Brimeyer, Doug ?

Broman, Derek J.

Duquette, Jared ?

Mosby, Cory ?

Owens, Falyn

Paulson, John D.

Rossler, Shawn ?

Ruid, David ?

Wakeling, Brian F.

White, H. Bryant

1. Acknowledgments: (Bryant)

2. Table of Contents: (Bryant)

3. Preface: (Bryant)

4. Abstract: (Bryant)

5. Introduction:

- a. A brief historical perspective on beaver
- b. Biology and population dynamics
- c. Ecological role
- d. Beaver management history

☐ In North Carolina, beavers were extirpated through unregulated trapping, with a last beaver harvest reported in the state in 1897. Eventually, public demand for beaver restoration led to release of 29 beavers (originating from Pennsylvania) onto what would become Sandhills Game Land. Supplemental releases on private lands by request of landowners succeeded in restoring beaver populations across the state. Today the North Carolina beaver population is estimated to be over 1,000,000 and supports the take of roughly 30,000-40,000 beavers annually through regulated trapping and damage control activities.

- e. Population assessment....how is the North American beaver population doing; regionally, nationally, etc.
- f. Restoring beaver populations
- g. Document purpose/objective (and what it isn't)

6. The Role of Wildlife Agencies in Managing Beavers (Rossler)

- a. Beaver control is becoming very controversial. We should probably address that upfront. This document could become a reference for agencies etc., dealing with NEPA, biologists dealing with publics. Localized conflict management does not have a broad scale population effect. Should we have some case studies to illustrate this point and others?

7. Challenges for Wildlife Agencies in Managing Beaver Populations (Duquette, Rossler)

- a. The Benefits and Challenges of Beavers on the Landscape
- b. Benefits of Beavers
 - ☐ They can do very productive things in various ecosystems.
 - ☐ Beaver as a resource/castoreum/food/fur
 - ☐ Used to create firebreaks
 - ☐ Beaver-trout relationship; ecological and social components. There is big difference between the Eastern and Western US in the impacts of beavers.
 - ☐ Beaver flooding of sensitive habitats; can be good or bad
- c. Challenges: Catalysts for Conflicts with Beavers
 - ☐ Damages caused by dam building
 1. Infrastructure
 - a. Roads/railroads/bridges John and Dave
 - b. Culverts and water control structures John and Dave
 - c. Contamination of water sources
 2. Natural Resources
 - a. Wild rice
 - b. Habitat changes; upland forest to wetland
 - c. Sensitive wetland/riparian habitats
 - d. Trout
 - e. Loss of recreational uses or changes in use
 - f. Timber (could be covered in AG or Natural Resources)
 - g. Sedimentation and erosion effects on natural habitats
 - h. Invasive Species (reed canary grass, bullfrogs)
 - i. T & E Species and detrimental effects (mussels, etc.)
 3. Agricultural damage John Paulson and Dave Ruid
 - a. Crops
 - b. Timber
 - ☐ In North Carolina, beaver damage management activities prevented the loss of \$3,463,193 worth of timber from beaver-related flooding in 2022.
 - c. Ornamental and landscapes
 - d. Create water sources/but remove trees
 - ☐ Loss of trappers.... Duquette
 - ☐ Mutualistic mind set.... Duquette
 - ☐ Some issues with beavers are created by human population growth
 - ☐ Diseases associated with beaver (suggest support from agency wildlife vet)
 1. Giardia
 2. Tularemia

3. Potential for rabies?

8. Methods for Managing Conflicts

(Tools to address beaver conflicts (In this section we should discuss benefits/challenges/pros/cons of each method without being prescriptive. Essentially, we want to provide a list of options that are considered efficacious. We should cite peer reviewed publications, agency produced documents, and other credible sources where available.)

- a. Need to address the fact that what works in one place may not work in another for either practical reasons or social acceptance (not a “one size fits all” solution).
- b. Discuss differences among what agencies, municipalities, contractors, and individuals can or should do...
- c. Public education (and human dimensions?) is important in managing conflicts
- d. Adjusting expectations for land use... - Falyn Owens
- e. Habitat manipulation
- f. Trapping (Shawn Rossler)
 - ☐ Lethal
 - ☐ Live capture
 - ☐ Specific trap types and pros and cons related to beaver/otter populations (cage and suitcase traps, bodygrips, footholds, cable devices) Reference BMPs for trapping.
- g. Relocation; many issues to consider related to relocations...potential impacts.
- h. Exclusion
 - ☐ Fencing
 - ☐ Tree protection devices
 - ☐ Electric fencing at culverts....
 - ☐ floating exclusion device (NWRC?)
- i. Beaver baffles
- j. Clemson beaver pond leveler
- k. Beaver deceiver
- l. Shooting
- m. Dam removal methods
 - ☐ Generally, removal of animals must be done prior to dam removal, for dam removal to be efficacious - Falyn Owens
 - ☐ Rakes - Falyn Owens
 - ☐ Explosives - Falyn Owens & John Paulson
 - ☐ Heavy equipment
 - ☐ High pressure water pump to remove dams from culverts
 - ☐ Block and tackle (plunger or "snake")to remove dams and debris from culverts (where explosives can't be used) John Paulson
- n. Using shallow bank slopes (<3:1) to prevent burrowing into earthen pond dams etc.
- o. Forestry bmps
- p. Predation...(?)....example: puma did not control the population of beaver. Wisconsin wolf population has had no effect on the beaver population
- q. Repellents....not sure if we should mention this..... but not known to be effective? - Falyn Owens
- r. Sand in paint on trees (NWRC?) John Paulson
- s. Incentive programs/bounty/subsidies; pros and cons - Falyn Owens, Shawn Rossler

9. Summary

- a. Potential impacts to beaver populations of management actions; should this be in the intro/conclusion/or addressed with each method. Primarily addressing local populations.
- b. Differences between east and west and research gaps
- c. Important to have a balanced approach to beaver management.

Next Steps:

What literature do we have; post that in the Teams files

Writing: section authors could provide detailed outlines in the form of bullet points (including reference materials) and then one person could "write" the document to help reduce editing

Think about how the outline could be improved as we go through that process.

Report to AFWA Human Wildlife Conflict Working Group

AGENCY: Washington Department of Fish and Wildlife

DATE: August 31, 2023

STATE/PROVINCE/FEDERAL/TRIBAL: State

Submitted by: Jim Brown, Wildlife Conflict Section Manager

Telephone: (360) 701-6261 **E-mail:** jim.brown@dfw.wa.gov

1. MOST SIGNIFICANT ISSUES

a. On-Going

- Continued implementation of the Spillman-Flex RMS for use in conflict incident reporting (adapted from our Law Enforcement Program).
- Wolf recovery and wolf-livestock conflict reduction—ongoing work.
- New Black Bear commercial timber damage regulation is under development.
- Continuing black bear conflict in suburban areas and our effort to get human behavior changes and engage HOAs and waste removal providers to use better equipment and practices to reduce conflict.
- Inadequate staffing to handle conflict work in key geographic areas.
- Review of existing conflict regulations and planning for needed regulation amendments.

b. Emerging

- Wolf population expansion into areas where livestock is not likely to be the principal conflict. What new issues will arise?
- Funding for wolf conflict prevention has been by geographic region, we are trying to get that funding expanded to allow for better prevention work in areas where wolves are expanding.
- Excess commercial crop damage from elk and insufficient funding to comply with the program requirements.

2. CONFLICT INCIDENT REPORT BY SPECIES

September 1, 2022-August 31, 2023:

Incidents which were called-in by a complainant and handled in some fashion (includes human

conflict and injured wildlife). Includes received by phone calls, emails, and staff generated.

BLACK BEAR	2701
COUG	1486
DEER	1007
GRAYWOLF	201
ELK	186
MOOSE	159
RAPTOR	148
COYOTE	112
OTHER SPECIES	99
RACCOON	78
UNKNOWN CAUSE	71
BOBCAT	68
GEESE	29
OTHER CAUSE	29
DUCKS	16
TURKEY	14
BEAVER	13
BEARGR	13
SQUIRREL	10
OPOSSUM	10
SKUNK	9
FOX	6
WATERFOWL	6
OTTER	5
SEALS	4
BIGHORN SHEEP	3
BADGER	2
SNAKE	2
PRONGHORN	2
MUSKRAT	2
Grand Total	6491

3. SIGNIFICANT REGULATORY OR POLICY CHANGES OR ISSUES?

- A proposal is being sent to the Governor and Legislature to provide additional resources

due to excess commercial crop damage from elk and insufficient funding to comply with the program requirements.

- A proposal is prepared for the next budget session to be sent to the Governor and Legislature to address inadequate staffing to handle conflict work.
- We are engaged in a review of existing conflict regulations and are planning for needed regulation amendments.

4. RESEARCH/SPECIAL PROJECTS

- We are partners in a Utah State University study on the effectiveness of wolf-livestock non-lethal deterrents (primarily Range Riding).
- We are also working to partner with USFS in the Okanogan-Wenatchee NF to use *Vence* livestock collar technology to better separate livestock from wolf dens and rendezvous sites.

5. OTHER

- N/A

Report to AFWA Human Wildlife Conflict Working Group

AGENCY: North Carolina Wildlife Resources Commission (NCWRC)

DATE: Sept. 11, 2023

STATE: North Carolina

Submitted by: Falyn Owens, Extension Wildlife Biologist

Telephone: 919-616-2208

E-mail: falyn.owens@ncwildlife.org

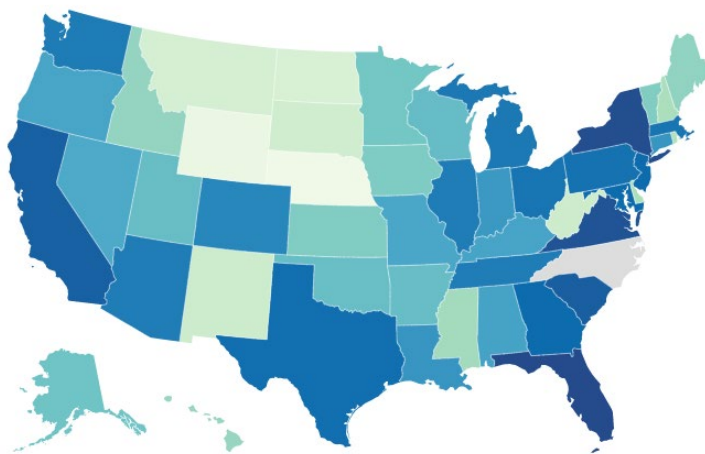
MOST SIGNIFICANT ISSUES

On-Going

Recent population growth in North Carolina is largely attributed to migration from other regions of the country (see [map](#) below). Growing lack of familiarity with North Carolina's fauna, wildlife regulations, and coexistence practices continue to pose a challenge. A significant number of wildlife-related complaints made to NCWRC involve sightings of a wild animal where its presence is unexpected, such as in a residential neighborhood, regardless of whether that species is common in the area or the animal is causing damage or posing a realistic threat. Fear-based complaints often involve common rabies vector species (e.g., red/gray foxes and raccoons) or larger, locally common carnivores/predators (black bear, coyote, alligator). Efforts to promote conflict prevention and coexistence continue via multiple communications platforms, including online [Have a Wildlife Problem?](#), social media posts, press releases, newsletters, webinars, in-person outreach events, and NCWRC's statewide Wildlife Helpline.

Where are our new residents moving from?

FL, NY, VA, SC, and CA are the top sending states to NC



Emerging

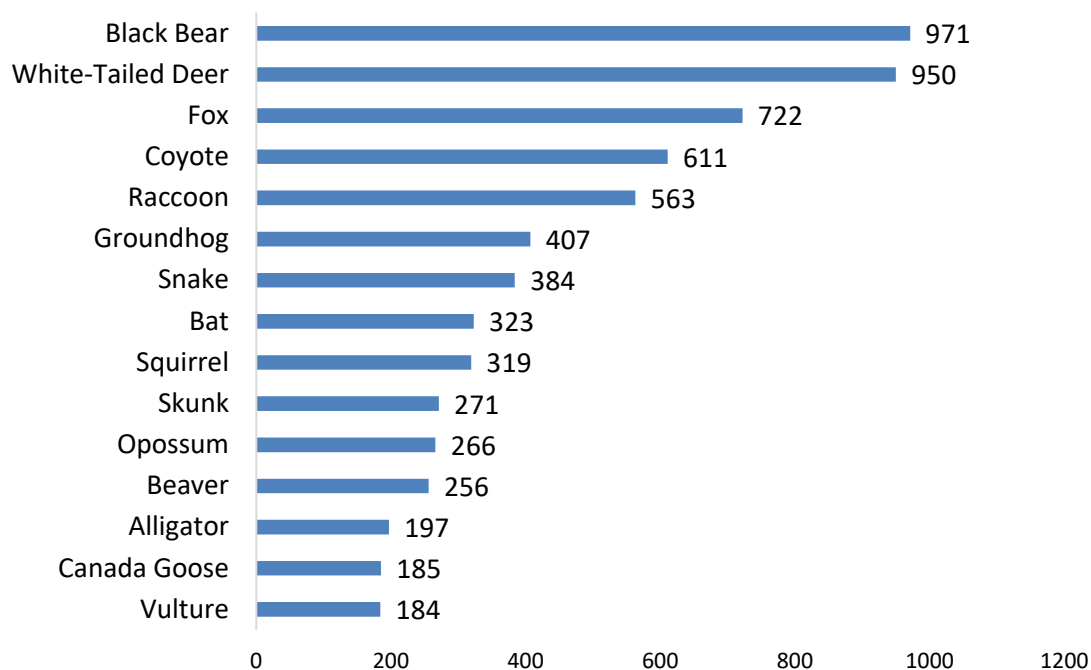
In 2022, there were nearly twice as many white-tailed deer complaints reported to NCWRC as the year previous, aligning with a similar increase in reported health-related concerns involving deer. North Carolina reported its first confirmed case of Chronic Wasting Disease in March 2022. A subsequent awareness campaign led to an overall increase in concerns about the disease and likelihood for the public to report encounters with deer. Over half of reported complaints about white-tailed deer in North Carolina typically involve deer carcasses found on the landscape (e.g., roadkills). It remains to be seen whether this recent uptick in deer-related complaints will continue once public awareness of Chronic Wasting Disease in the state stabilizes.

CONFLICT INCIDENT REPORT BY SPECIES

General

The following figure shows the 15 most common species associated with complaints reported to the NC Wildlife Resources Commission in 2022. We define a human-wildlife conflict as any situation where an interaction was reported as negative or unwanted, regardless of whether the animal was causing damage or posing a realistic threat. These data reflect complaints made to the NC Wildlife Helpline as well as to field staff.

Most Reported Human-Wildlife Conflicts by Species in 2022



SIGNIFICANT REGULATORY OR POLICY CHANGES OR ISSUES?

City of Asheville Feeding Ordinance

In recent years, 35% of all human-bear interactions reported to NCWRC originate in Buncombe County (the greater City of Asheville). Lack of regulations prohibiting wildlife feeding and increasing human-bear conflicts caused or exacerbated by abundant anthropogenic foods prompted the City of Asheville to pass an ordinance prohibiting feeding or attracting “wild, feral, or domesticated” animals in cases that threaten public health and safety. The ordinance will empower the city’s animal control division to issue civil penalties for residents that provide food attractants where human-bear conflicts are an ongoing issue.

Wildlife Control Technician Certification

Wildlife damage control services in North Carolina are primarily provided by private Wildlife Control Agents that have been trained and licensed by NCWRC. Effective October 1, 2022, anyone conducting wildlife control services under a licensed Wildlife Control Agent must be certified as a Wildlife Control Technician. Certification requires basic training and passing a test that covers relevant wildlife regulations and safe handling techniques. Certain tasks such as setting traps and euthanasia may only be conducted under direct supervision of a licensed Wildlife Control Agent and only Wildlife Control Agents may issue depredation permits (other than NCWRC staff).

RESEARCH /SPECIAL PROJECTS

BearWise

North Carolina continues to promote BearWise and successfully recognized Lees McRae College, the first BearWise Campus in the United States, last year. With the new addition of the Town of Black Mountain, NCWRC has achieved BearWise recognition in 5 communities, 1 campus, 1 business, and 1 campground. In 2022, we conducted approximately 30 BearWise outreach events with an estimated 7,000 people in attendance, in addition to larger outreach events such as regional and state fairs where engagement is harder to calculate.

The Western North Carolina Nature Center is now an official testing facility for the SEAFWA-funded bear-resistant products testing program (implemented by WMI). Special focus will be on identifying effective modifications to existing trash carts that could be more cost-effective than typical bear-resistant trash carts.

We continued to support the city of Asheville’s sanitation department in launching their pilot bear-resistant garbage can program. Because Buncombe County (the greater Asheville area) is the source for 30-60% of all complaints NCWRC receives about black bears, this is a significant step toward reducing human-bear conflict in North Carolina. The initial deployment was 340

bear-resistant cans (\$82,000), and due to demand the city provided \$94,000 in additional funding for another 300 bear-resistant cans. A private donor provided \$30,000, which allowed for the purchase of 112 additional bear-resistant trash cans. Asheville is examining whether they can increase budgeting for these cans in the coming fiscal years to meet the demands of their extensive waiting list and contend with the rising manufacturing and shipping costs for these carts.

NC Bear Attack Response Training

Increasing populations of black bears and humans in close proximity create the need for training opportunities that prepare wildlife authorities to appropriately respond to a suspected bear attack on a human. When they occur, bear attacks can draw national media attention and wildlife agencies must be prepared to respond effectively in the event of an attack. Adequate preparation requires both a well-tested plan and field-level training in the implementation of a response plan. In May 2022, the NCWRC conducted the agency's second NC Bear Attack Response Training. Fifty students participated from the NCWRC, US Forest Service, Blue Ridge Parkway, and NC State Parks, with instruction provided by experienced staff from NCWRC, Great Smoky Mountains National Park, and Florida Wildlife Commission. The training lasted 2.5 days and covered several unique suspected bear attack scenarios (e.g., urban vs. remote settings, defensive vs. aggressive scenarios, non-bear attack scenarios). The training culminated in live training scenarios involving role players (e.g., media, victims, medical staff, witnesses) and props. Students were tasked with investigating the situation using techniques learned over the previous 2 days.

OTHER