HARVARD LAW SCHOOL ANIMAL LAW & POLICY CLINIC

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April 11, 2024

Katie S. Dykes Commissioner Connecticut Department of Energy and Environmental Protection

Via email: katie.dykes@ct.gov

Re: Request for Review of Connecticut's Policies Related to the Use of Leghold and Body-Gripping Traps

Dear Commissioner Dykes:

On behalf of Harvard Law School's Animal Law & Policy Clinic, we submit the following request that the Connecticut Department of Energy and Environmental Protection (DEEP) conduct a review of its policies and practices related to the use of leghold and body-gripping traps in accordance with the Connecticut Environmental Policy Act (CEPA), Conn. Gen. Stat. § 22a-1b(a).

Leghold and body-gripping traps inflict extreme suffering; endanger non-target species, including companion animals and state- and federally-protected birds; fail to effectively control many wildlife populations; and harm species critical to ecosystems and climate change mitigation. They are cruel, indiscriminate, and cause "unintended and undesirable consequences" throughout the state of Connecticut. *See* Conn. Gen. Stat. § 22a-1a(b)(3).

This problem was brought to our attention by Connecticut resident Dr. Nan Zyla-Wisensale, who has spent decades working to protect Connecticut wildlife and companion animals from these cruel devices. We also interviewed several wildlife rehabilitators in Connecticut, all of whom oppose these traps and have seen firsthand the pain and suffering they inflict.

We have heard dozens of stories of needless suffering caused by trapping, including instances where federally-protected bird species, such as red-tailed hawks and barred owls, have been fatally wounded by leghold traps. For example, in March 2023, a wildlife rehabilitator treated a red-tailed hawk with gruesome injuries consistent with being caught in a leghold trap in East Haven. The hawk's bone was severed above the foot, leaving the foot dead and necrotic. The hawk's other foot was also affected, as the hawk had survived long enough to overuse it, leading to severe infection and swelling. Ultimately, the hawk had to be euthanized. This situation is not uncommon; raptors are especially vulnerable to leghold traps.

Even beloved companion animals are not safe from the harms trapping can cause. In November 2021, a dog named Ginger was caught in a legally-placed leghold trap while on a walk with her family in Barkhamsted, and needed veterinary treatment for her injuries. In 2020, a small cat was caught in a leghold trap for days before being found by an animal control officer and brought to a veterinarian in Norwich. The cat's leg was mangled beyond repair; the bone was exposed and the fur, skin, and muscle had been necrotized off. The cat's condition was so poor that the only option was euthanasia.

Regardless of species, the impacts of these traps are the same. Even animals intentionally caught in lawfully-set traps face severe injuries and prolonged terror as they struggle to free themselves in their last moments.

The inherently non-selective nature of these traps means that trapping is an ineffective wildlife control strategy over the long term. Indeed, there is growing evidence that the trapping and removal of species like beavers—who are ecosystem engineers—causes more environmental harm than good. Finally, safe, humane, and effective alternatives exist that better achieve the goals of mitigating human-wildlife conflicts and otherwise managing wildlife.

Therefore, a review of DEEP's existing trapping regime that fully accounts for the environmental policy considerations set forth in CEPA is necessary. The continued recreational and commercial use of leghold and body-gripping traps in Connecticut is harming the state's vulnerable wildlife populations, causing needless suffering, and is not aligned with modern environmental protection practices and values.

It is part of DEEP's responsibility to "manage the basic resources of air, land and water to the end that the state may fulfill its responsibility as trustee of the environment for the present and future generations." Conn. Gen. Stat. § 22a-1. We doubt that future generations will look kindly on the barbaric practice of trapping.

Thank you for your time and consideration—we look forward to your response. You may reach the Clinic at <u>MHollingsworth@law.harvard.edu.</u>

Sincerely,

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Request by the Harvard Law School Animal Law & Policy Clinic for Review of Connecticut's Policies Related to the Use of Leghold and Body-Gripping Traps

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I. Introduction

We request that DEEP fulfill its "continuing responsibility . . . to use all practicable means" to protect the public trust in wildlife by "review[ing] its policies and practices" governing trapping and revising them to prohibit the commercial and recreational use of leghold and body-gripping traps.¹ Leghold (also known as foothold traps, steel-jaw traps, padded metal traps, or unpadded metal traps) and body-gripping traps (also known as conibear or smooth wire traps) are currently used in Connecticut for fur trapping, recreation, and removal of purported "nuisance" animals.²



Images of Leghold traps. Public Domain Images from Matthew Lovallo et al., Welfare Performance of Three Foothold Traps for Capturing North American River Otters, 12 J. of Fish and Wildlife Mgmt. 513, 515 (2021).

Leghold traps are spring-operated traps designed to slam shut on an animal's leg or foot with tremendous force when triggered.³ Leghold traps can be set underwater—to kill captured animals by drowning—or on land—to restrain animals without killing them.⁴ However, both leghold traps set on land and those set underwater cause horrific injuries and even deaths. Animals caught in leghold traps are extremely vulnerable and endure prolonged panic; they cannot eat, drink, seek shelter from the elements, avoid predators, or care for their young.⁵ These animals—including an unknown number of animals whom trappers never intended to capture—sustain grievous injuries in their desperate attempts to escape and may chew or rip off their own limbs, tear ligaments, break bones, and crack teeth.⁶

² Illustrations of Leghold/Foothold Traps, NJ DIVISION OF FISH & WILDLIFE, https://www.nj.gov/dep/fgw/traps.htm. ³ Leghold Traps, AGRICULTURE VICTORIA, Feb. 7, 2024, https://agriculture.vic.gov.au/biosecurity/pest-

¹ Conn. Gen. Stat. §§ 22a-1a(b), 22a-1b(a).

animals/trapping-pest-animals/leghold-traps; Tara Zuardo, How the United States was Able to Dodge International Reforms Designed to Make Wildlife Trapping Less Cruel, 20 J. OF INT'L WILDLIFE L. & POL'Y 73, 74 (2017).

⁴ *How Do Traps Work?*, MISS. DEP'T OF CONSERVATION, https://mdc.mo.gov/hunting-trapping/trapping/how-do-traps-work.

⁵ See Donald M. Broom, *The Welfare of Vertebrate Pests in Relation to Their Management, in* ADVANCES IN VERTEBRATE PEST MANAGEMENT 323 (P.D. Cowan and C.J. Feare eds. 1999).

⁶ See Gilbert Proulx & Dwight Rodtka, Steel-Jawed Leghold Traps and Killing Neck Snares: Similar Injuries Command Change to

Agreement on International Humane Trapping Standards, 20 J. APPLIED ANIMAL WELFARE SCI. 198, 199 (2017); AMERICAN VETERINARY MEDICAL ASSOCIATION, LITERATURE REVIEW ON THE WELFARE IMPLICATIONS OF LEGHOLD TRAP USE IN CONSERVATION AND RESEARCH 1 (2008).



Image of body-gripping trap sourced from <u>Rebecca Kagan</u>, <u>Jessica Elbert</u> & <u>Max Juriga</u>, *Examining the effects of bodygrip 330 traps on domestic cat (Felis catus) cadavers*, 1 J. of Veterinary Forensic Sci., 11, 12 Fig. 1 (2020), <u>https://doi.org/10.32473/jvfs.v1i2.128636</u>. Licensed under <u>CC BY-NC-ND 4.0</u>.

Body-gripping traps are "mechanical powered killing traps" equipped with two powerful springpowered jaws.⁷ They are "composed of two metal rectangles with a scissor-like hinge in the center," and they close so tightly around a target that they can only be opened with a special tool once triggered, making it difficult for guardians of unintentionally trapped companion animals to free them.⁸ These traps are meant to kill the target animal on impact "when the jaws forcefully close and crush a vital region of the body[.]"⁹ The idea that body-gripping traps kill their targets on impact is often fiction. Certain species such as martens and otters can partially circumvent body-gripping traps, leading to gruesome—but not instantly fatal—injuries to the abdomen and legs.¹⁰ Many of these trapped animals consequently experience "long, agonizing" deaths, which is a far cry from the body-gripping trap's aspirations of a quick and humane end.¹¹

These devices inflict unimaginable suffering on animals who experience prolonged stress and fear while struggling to free themselves. They are also highly non-specific, unintentionally capturing countless non-target species, including state- and federally-protected birds and companion animals. Moreover, leghold and body-gripping traps fail to effectively control many wildlife populations and even harm species critical to ecosystems. We therefore request that the Commissioner conduct a review of the Department's trapping policies in accordance with CEPA, Conn. Gen. Stat. § 22a-1b(a), which requires that state agencies "review [their] policies and practices to insure that they are consistent with the state's environmental policy as set forth in sections 22a-1 and 22a-1a."¹²

A review of the existing trapping regime that fully accounts for the environmental policy considerations set forth in CEPA—as well as the principles of the Connecticut Environmental

⁷ Thomas L. Serfass et al., *Animal Welfare Issues Pertaining to The Trapping of Northern River Otters: A Review of the Adequacy of the River Otter BMP, in* MAMMAL TRAPPING: WILDLIFE MANAGEMENT, ANIMAL WELFARE & INT'L STANDARDS 23, 26 (Gilbert Proulx ed., 2022).

⁸ Zuardo, *supra* note 3, at 77.

⁹ Thomas L. Serfass et al., *Animal Welfare Issues Pertaining to the Trapping of Otters for Research, Conservation, and Fur, Marine Mammal Welfare, in* MARINE MAMMAL WELFARE: HUMAN INDUCED CHANGE IN THE MARINE ENVIRONMENT AND ITS IMPACTS ON MARINE MAMMAL WELFARE 543, 549 (Andy Butterworth ed. 2017).

¹⁰ Serfass, *supra* note 7, at 37–38, 43–44.

¹¹ See id. at 38.

¹² Conn. Gen. Stat. § 22a-1b(a).

Protection Act and the Commissioner's overarching duty to protect wildlife—is necessary because the continued recreational and commercial use of leghold and body-gripping traps in Connecticut is harming Connecticut's vulnerable wildlife populations, causing needless suffering, and is not aligned with modern environmental protection practices and values.



Red-Tailed Hawk with Suspected Leghold Trap Injuries in East Haven

II. Statutory and Regulatory Background

A. CEPA and the Environmental Protection Act

CEPA declares it the environmental policy of the state of Connecticut "to conserve, improve and protect its natural resources and environment."¹³ The Act recognizes the natural resources of the state, which include its wildlife,¹⁴ as "finite and precious."¹⁵

¹³ Conn. Gen. Stat. § 22a-1.

¹⁴ See Paige v. Town Plan & Zoning Commission of Town of Fairfield, 668 A.2d 340, 347 (Conn. 1995) (interpreting the phrase "natural resources" in the Connecticut Environmental Protection Act, Conn. Gen. Stat. § 22a-19, to include wildlife); see also Manchester Env't Coal. v. Stockton, 441 A.2d 68, 77 (Conn. 1981), abrogated by City of Waterbury v. Town of Washington, 800 A.2d 1102 (Conn. 2002) (stating that "the Environmental Policy Act was intended to be supplemental to the [Environmental Protection Act]").

¹⁵ Conn. Gen. Stat. § 22a-1.

Through the passage of CEPA, the General Assembly declared that "human activity must be guided by and in harmony with the system of relationships among the elements of nature," and therefore established that the state must also:

- "improve and coordinate the environmental plans, functions, powers and programs of the state, in cooperation with the federal government, regions, local governments, other public and private organizations and concerned individuals"; and
- "manage the basic resources of air, land and water to the end that the state may fulfill its responsibility as trustee of the environment for the present and future generations."¹⁶

Thus, "[e]ach state department, institution or agency *shall review its policies and practices to insure that they are consistent with the state's environmental policy*" as set forth in CEPA.¹⁷

"[I]t is the continuing responsibility of the state government to use *all practicable means*, consistent with other essential considerations of state policy, to improve and coordinate state plans, functions, programs, and resources to the end that the state may," *inter alia*, "[f]ulfill the responsibility of each generation as trustee of the environment for succeeding generations;" "assure for all residents of the state safe, healthful, productive, and esthetically and culturally pleasing surroundings;" and "attain the widest range of beneficial uses of the environment *without degradation, risk to health or safety, or other undesirable and unintended consequences.*"¹⁸

Moreover, the Environmental Protection Act—the statute CEPA was enacted to supplement¹⁹—provides that "there is a public trust in the air, water and other natural resources of the state of Connecticut and that each person is entitled to the protection, preservation and enhancement of the same."²⁰ The Act also declares "that it is in the public interest to provide all persons with an adequate remedy to protect the air, water and other natural resources from unreasonable pollution, impairment or destruction."²¹ Thus, both the Environmental Protection Act and CEPA serve to ensure that state agencies, including DEEP, protect the natural resources of the state.

DEEP's power to regulate trapping must thus be read in light of the Commissioner's general statutory duty to, "*consistent with the environment policy of the state*, . . . provide for the protection and management of . . . wildlife and other animal life of all types."²² DEEP's powers should thus also be read in light of Connecticut's environmental policy, as outlined in CEPA, to "conserve, improve and protect its natural resources and environment."²³

¹⁶ Conn. Gen. Stat. § 22a-1.

¹⁷ Id. § 22a-1b(a) (emphasis added).

¹⁸ Conn. Gen. Stat. § 22a-1a(b) (emphases added).

¹⁹ Manchester Env't Coal. v. Stockton, 441 A.2d 68, 77 (Conn. 1981), abrogated by City of Waterbury v. Town of Washington, 800 A.2d 1102 (Conn. 2002) ("... [CEPA] was intended to be supplemental to the [Environmental Protection Act].").

²⁰ Conn. Gen. Stat. § 22a-15.

²¹ Id.

²² Conn. Gen. Stat. § 22a-5 (emphasis added).

²³ Conn. Gen. Stat. § 22a-1.

B. Current Trapping Regime

Under Connecticut law, "no person shall take, hunt or trap" any wild bird or mammal "without first having obtained a license" from DEEP.²⁴ DEEP has broad authority to "issue regulations governing and prescribing the taking of all species of furbearing animals by use of traps within the state," and may "prescribe the legal methods that may be used, including size, type and kind of traps and the type and kind of bait and lures."²⁵ DEEP may also designate "the conditions under which the placing and setting of traps will be legal."²⁶

DEEP allows a limited range of furbearing animals²⁷ to be taken by deadfall, box trap, live trap, leghold traps below a certain size (described as "unpadded metal traps" and "padded metal traps" in DEEP's regulations), and body-gripping traps below a certain size (described as "smooth wire traps" in DEEP's regulations).²⁸ Enclosed foothold traps (referred to as "species specific traps" in DEEP's regulations) may also be used.²⁹ Similarly, DEEP allows licensed nuisance wildlife control operators (NWCOs) to use "cage traps, box traps, padded leg-hold traps in the burrow of a wild animal, other nonlethal methods, or shooting to alleviate nuisance situations caused by" certain species.³⁰ DEEP's instruction forms for NWCOs show that they may also use "kill traps," though this term is not precisely defined.³¹

DEEP's trapping regulations generally require leghold and body-gripping traps to be set underwater to ensure that trapped animals drown to death.³² Padded leghold traps may also be set in the burrow of a wild animal.³³ Additionally, trappers who have completed a DEEP-approved course may, for a limited season, set padded leghold traps on the ground to trap coyotes on certain private lands.³⁴ Trapping is generally only from November to March.³⁵ Any trap used in Connecticut must be stamped with the name of the trapper and must be checked at least every 24 hours, though the statute permits more than 24 hours to elapse if the 24-hour period expires before sunset, at which point the trapper has until sunset to check the trap.³⁶

²⁴ Conn. Gen. Stat. § 26-27(a).

²⁵ *Id.* § 26-72; *see also* Conn. Agencies Regs. § 26-66-6 (DEEP may "at any time . . . restrict the types of traps and their placement").

²⁶ Conn. Gen. Stat. § 26-72.

²⁷ Furbearers include river otters, beavers, minks, muskrats, weasels, coyotes, gray foxes, red foxes, raccoons, opossums, skunks, and fishers. *2024 Connecticut Hunting and Trapping Guide*, DEP'T OF ENERGY & ENV'T PROTECTION,

https://portal.ct.gov/DEEP/Hunting/2024-Connecticut-Hunting-and-Trapping-Guide/Furbearer-Trapping-Seasons (last visited Mar. 31st, 2024).

²⁸ Conn. Agencies Regs. § 26-66-5(a).

²⁹ Id.; see CONN. DEP'T OF ENERGY & ENV'T PROTECTION, Connecticut Trapper Education Manual 37 (2005) [hereinafter DEEP Trapper Education Manual].

³⁰ Conn. Agencies Regs. § 26-47-1(d).

³¹ See NWCO Activity Report Instructions, CONN. DEP'T OF ENERGY & ENV'T PROTECTION, https://portal.ct.gov/-/media/DEEP/wildlife/pdf_files/nwco/NWCOActivityReportInstructionspdf.pdf (last visited Mar. 31st, 2024). ³² See Conn. Agencies Regs. § 26-66-5(b).

³³ Id.

³⁴ Id.

³⁵ Id.

³⁶ Conn. Gen. Stat. § 26-72.

While Connecticut's legal trapping methods are designed to limit the accidental capture of nontarget animals, the state does not actually monitor or track the efficacy of these methods by requiring trappers to report instances of non-target capture.

III.Arguments in Favor of Reviewing the Impacts of Leghold and Body-Gripping Traps on Wildlife and the Environment

CEPA establishes a "continuing responsibility" of state agencies "to use all practicable means" to "improve and coordinate state plans, functions, programs, and resources" in order to, *inter alia*, "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."³⁷ Leghold and body-gripping traps inflict extreme suffering, endanger non-target species, fail to control wildlife populations, and harm species critical to ecosystems. DEEP has adopted regulations limiting the types of traps that may be used and where they may be set in an effort to mitigate some of these "undesirable and unintended consequences."³⁸ However, the existing trapping regime continues to allow for cruelty and harm to critical species and their environments. "Practicable means" are available to DEEP to avoid such undesirable consequences, including banning the recreational and commercial use of these cruel and indiscriminate devices and encouraging the use of less destructive means to mitigate human conflicts with wildlife. We urge DEEP to fulfill its responsibilities under CEPA "as trustee of the environment for the present and future generations" by using these means to improve and coordinate its programs related to wildlife.³⁹

A. Traps are cruel.

A growing body of scientific evidence demonstrates that leghold and body-gripping traps inflict prolonged fear and suffering. The fact that DEEP places certain limitations on the types of traps that may be used and where they may be placed—such as only allowing unpadded leghold traps to be set underwater⁴⁰—indicates that DEEP is aware animals caught in these traps suffer immensely. However, *all* leghold and body-gripping traps cause immeasurable pain and suffering. DEEP's current regulations fail to adequately mitigate this cruelty, particularly in light of several existing practicable alternatives to trapping.⁴¹ Thus, a review of the existing trapping regime is warranted to assess this cruelty as an "undesirable and unintended consequence"⁴² of trapping under CEPA.

³⁷ Conn. Gen. Stat. § 22a-1a(b)(3).

³⁸ See Conn. Gen. Stat. § 22a-1a(b)(3).

³⁹ *Id.* § 22a-1.

⁴⁰ Conn. Agencies Regs. § 26-66-5(b).

⁴¹ For a discussion of humane alternatives to leghold and body-gripping traps, see Section III.C.1 below.

⁴² Conn. Gen. Stat. § 22a-1a(b)(3).

1. Cruelty of leghold traps

The cruelty of leghold traps is widely known.⁴³ As a 2003 report from the Office of Legislative Research to the Connecticut General Assembly acknowledges, "[t]arget and nontarget animals caught in leghold traps may experience prolonged pain and sometimes debilitating injuries."⁴⁴ According to Dick Randall, a former acting District Supervisor of the U.S. Fish and Wildlife Service's predator control program, "The leghold trap . . . is a direct cause of inexcusable destruction and waste of our wildlife."⁴⁵ Famed biologist Charles Darwin stated that "[f]ew men could endure to watch for five minutes, an animal struggling in a [leghold] trap with a crushed and torn limb. . . . Some who reflect upon this subject for the first time will wonder how such cruelty can have been permitted to continue in these days of civilisation."⁴⁶

Leghold traps inflict gruesome physical injuries on their victims.⁴⁷ First, the traps grievously injure animals when their jaws initially close around the animals' feet or legs.⁴⁸ Then, animals are often further injured by pulling and moving their trapped leg during escape attempts.⁴⁹ Injuries caused by leghold traps and corresponding escape attempts include "major subcutaneous soft tissue lacerations or erosions; tooth fractures; joint dislocations, partial dislocations, and hemorrhages; severe internal organ damage; and bone fractures."⁵⁰ Since animals captured in leghold traps are typically restrained by the trap jaws rather than killed on impact, they "endure severe pain and suffering for the duration of the capture until they are dispatched by the trapper,"⁵¹ which, under Connecticut law, may be 24 hours or more.⁵² Generally, the longer an animal remains in a leghold trap, the worse their physical injuries become.⁵³

So-called "padded" leghold traps, which feature a thin strip of rubber covering their metal jaws,⁵⁴ still lead to severe injury and suffering for the animals who are caught. One study comparing injuries

⁴³ Gilbert Proulx, *Veterinarians and Wildlife Biologists Should Join Forces to End Inhumane Mammal Trapping Technology*, 11 WORLD'S VETERINARY J. 317, 317 (2021) (stating that there is "decades of research showing that [leghold traps] are inhumane, and cause serious injuries and distress in captured animals.")

⁴⁴ Matthew Ranelli, *Leghold Trap Alternatives*, OLR RESEARCH REPORT, https://cga.ct.gov/PS98/rpt%5Colr%5Chtm/98-R-0052.htm (Oct. 2, 2003).

⁴⁵ Act to Discourage the Use of Painful Devices in the Trapping of Animals and Birds: Hearing on H.R. 66, H.R. 790, H.R. 5429, H.R. 6651, H.R. 8367, H.R. 9918, H.R. 10099, H.R., 10316, H.R. 10369, H.R. 10586, H.R. 10652, and H.R. 10770 Before the H. Comm. on Merchant Marine and Fisheries, 94th Cong. 273 (1975) (statement of Dick Randall, Wyoming Field Representative, Defenders of Wildlife) [hereinafter Statement of Dick Randall].

⁴⁶ CHARLES DARWIN & EMMA DARWIN, AN APPEAL 3 (1863), http://darwin-

online.org.uk/converted/pdf/1863_Appeal_F1931.pdf). Darwin also expressed dismay at the fact that some trappers left their traps unvisited for as long as twenty-four hours. *Id.*

⁴⁷ Proulx & Rodtka, *supra* note 6, at 199 (listing myriad injuries to canids caught in leghold traps).

⁴⁸ See Broom, *supra* note 5, at 324.

⁴⁹ Id.

⁵⁰ Proulx & Rodtka, *supra* note 6, at 199.

⁵¹ Id.

⁵² See discussion *supra* Section II.B.

⁵³ See Serfass, *supra* note 7, at 39–40 (discussing this issue for otters specifically and finding that trauma scores—which are based on the International Organization for Standardization trauma scale—drastically increased for otters left in traps for longer periods of time.)

⁵⁴ See 2024 CONNECTICUT HUNTING AND TRAPPING GUIDE, CONN. DEP'T OF ENERGY AND ENV'T PROTECTION 38-39 (2024), https://portal.ct.gov/-/media/DEEP/hunting_trapping/pdf_files/2024-CT-Hunting-Guide.pdf.

in covotes captured with padded and unpadded leghold traps found that padded traps still resulted in frequent cutaneous lacerations and fractures.⁵⁵ The study also found that 30 percent of legs caught in padded legholds experienced ligament injuries, and 40 percent and 43 percent of legs caught in two specific brands of padded legholds exhibited partial and full dislocations, compared to 38 percent of those caught in unpadded legholds.⁵⁶ Another study outlining animal responses to being restrained suggested that when animals struggle to break free from padded leghold traps-during which time they experience intense anxiety and fear without access to food, water, or protection from predators-they can sustain severe injuries including leg fractures, leg amputations, limb dislocations, tooth and mouth damage, lacerations, and hormone disruption from stress.⁵⁷ Finally, in a 21-year study on trapping, out of 565 raccoons trapped in padded leghold traps, an "average of 32% of the raccoons sustained severe injuries in padded-jaw models,"58 as compared to the "40% of animals captured in standard-jaw footholds sustained severe injuries," a meager 8 percent reduction.⁵⁹ The study also concluded that "moderate injuries (in the form of chipped or broken teeth) were more common in padded-jaw models."60 Combining such a marginal reduction with the fact that *more* injuries occurred overall using padded leghold traps suggests that padded leghold traps are just as inhumane, if not more so, than traditional leghold traps for some species.

Animals caught in leghold traps suffer even more injuries when they try to escape. For example, some animals will chew off their own legs.⁶¹ Self-mutilations are frequently found in raccoons caught in leghold traps.⁶² Paw- or leg-chewing in these circumstances results in "severe injuries" which can include "dislocation of a digit, severance of a tendon, and the exposure of digit bones."⁶³ Moreover, another study found that 19 percent of trapped animals "showed lesions attributable to biting or chewing during capture or confinement."⁶⁴ A study of the Canadian fur industry demonstrated that, between 1986 and 1987, "4.85 million animals were caught in leghold traps" and about 600,000 of these animals "chewed off their own limbs in desperate attempts to escape."⁶⁵ It should also be noted that self-directed chewing or biting is not a result of stress from being captured generally; in a study comparing box traps and leghold traps, only one racoon caught in a box trap exhibited self-chewing, as compared to the hundreds of raccoons trapped in leghold traps who engaged in self-

⁵⁵ Glenn H. Olsen et al., *Injuries to Coyotes Caught in Padded and Unpadded Steel Foothold Traps*, 14 WILDLIFE SOCIETY BULLETIN 219, 221 (1986). While we take issue with the methodology of this study, as we find it unjustifiably cruel to capture and kill coyotes in order to remove their legs to study their injuries, the study does provide insight into the significant harm that padded legholds in particular can cause. ⁵⁶ *Id.*

⁵⁷ *See* Ngaio Beausoleil et al., *Scientific Assessment of the Welfare of Trapped Mammals – Key Considerations for the Use of the Sharp*

and Saunders Humaneness Assessment Model, 12 ANIMALS (BASEL) 402, 408-9 (2022).

⁵⁸ H. Bryan White et al., *Best Management Practices for Trapping Furbearers in the United States*, 207 WILDLIFE MONOGRAPHS 3, 28-29 (2020).

⁵⁹ Id.

⁶⁰ Id.

⁶¹ Broom, *supra* note 5, at 324.

⁶² Gilbert Proulx et al., *Injuries and Behavior of Raccoons (Procyon Lotor) Captured in the Soft Catch*TM and the EggTM Traps in Simulated Natural Environments, 29 J. WILDLIFE DISEASES 447, 451 (1993).

⁶³ Id. at 450.

⁶⁴ Jesus Fernández-Morán et al., Reintroduction of the Eurasian Otter (Lutra Lutra) in Northeastern Spain: Trapping, Handling, and Medical Management, 33 J. ZOO & WILDLIFE MED. 222, 224 (2002).

⁶⁵ Peter V. Michaud, *Caught in a Trap: The European Union Leghold Trap Debate*, 6 MINN. J. GLOBAL TRADE 355, 358 (1997).

chewing.⁶⁶ Likewise, none of the skunks caught in box traps engaged in self-directed biting, whereas 44 percent of the skunks caught in leghold traps attempted to bite off their legs in order to escape.⁶⁷

The physical pain of trapped animals' injuries is not the only factor that causes them distress; animals caught in leghold traps experience intense fear responses that result in poor welfare because the animals are "unable to control [their] interactions with [the] environment in the normal way."⁶⁸ Studies of foxes caught in leghold traps reveal substantial increases in heart rate and plasma cortisol, indicating high levels of stress and fear.⁶⁹ In general, leghold traps result in high levels of cortisol in trapped animals, particularly when compared to cage or box traps.⁷⁰ In a study on trapped river otters, a young otter died after being trapped and refusing to eat, likely due to severe stress from the capture process.⁷¹ Another otter died "because of severe capture myopathy."⁷²

Capture myopathy is "a non-infectious disease of wild and domestic animals in which muscle damage results from extreme exertion, struggle, or stress."⁷³ The onset of symptoms for capture myopathy can be significantly delayed, up to several days after being trapped, and may lead to death despite an absence of observable clinical signs at time of trapping.⁷⁴ This means that non-target animals caught in traps may appear fine and thus be released back into the wild, only to succumb to capture myopathy hours or days later. Capture myopathy affects many vertebrate species, but mammals and birds—including bald eagles⁷⁵—are the most frequently affected.⁷⁶

The distress experienced by animals caught in leghold traps is compounded by the fact that trapped animals are vulnerable to predation and severe weather conditions. Trapped animals are vulnerable to predation, especially if they are caught in an open or conspicuous space.⁷⁷ Predators sometimes even learn where traps are set and "regularly visit them to kill and eat trapped animals."⁷⁸ In addition to predation concerns, "[a]nimals caught in leg-hold traps are often more exposed to extreme weather conditions than they would be normally and they may freeze in very cold conditions or die

⁶⁶ H. Bryan White et al., supra note 58, at 46.

⁶⁷ Id. at 33, 46.

⁶⁸ Broom, *supra* note 5, at 324.

⁶⁹ See Broom, supra note 5, at 324.

⁷⁰ P.J. White et al., *Pathological Responses of Red Foxes to Capture in Box Traps*, 55 J. WILDLIFE MGMT. 75, 75 (1991) (comparing cortisol levels in foxes caught in box and leghold traps). *See also* Martin L. Cross, et al., *Effect of Field Capture on the Measurement of Cellular Immune Responses in Wild Ferrets (Mustela Furo), Vectors of Bovine Tuberculosis in New Zealand*, 30 VETERINARY RSCH. 401, 408 (1999) (comparing cortisol levels in ferrets caught in cages and leghold traps).

⁷¹ Fernández-Morán et al., *supra* note 64, at 224.

⁷² Id.

⁷³ Wildlife Futures Team, *Capture Myopathy*, PENNVET: UNIVERSITY OF PENNSYLVANIA (Jul 1., 2020) (on file with the Harvard Animal Law & Policy Clinic).

⁷⁴ Id.

⁷⁵ *Capture Myopathy*, PENN. GAME COMM'N,

https://www.pgc.pa.gov/Wildlife/WildlifeHealth/Pages/CaptureMyopathy.aspx.

⁷⁶ Dorothy Breed et al., Conserving Wildlife in A Changing World: Understanding Capture Myopathy-A Malignant Outcome of Stress During Capture and Translocation, CONSERVATION PHYSIOLOGY vol. 7 2019, at 12.

⁷⁷ Broom, *supra* note 5, at 324.

⁷⁸ Id.

because of exposure to hot sun."⁷⁹ Moreover, since trapped animals are stuck in place as long as the trap remains secured to the ground, they cannot easily access food and water.⁸⁰

While there are Best Management Practices (BMPs), which are a series of guidelines developed by and state wildlife agencies designed to ensure that trapping practices meet a minimum standard of animal welfare, efficiency, and selectivity, a recent 21-year long multistate study of trapping found that "40% of the trap-species combinations . . . evaluated failed BMP standards."⁸¹ For several species, including muskrats, striped skunks—both of which may be trapped in Connecticut⁸²—and swift or kit foxes, the severity of injuries lead the researchers to conclude that leghold traps are altogether precluded from being included in the BMPs.⁸³

Leghold traps set underwater—as is generally required by DEEP's regulations—are of particular ethical concern, as they are used to drown their victims, who suffer for many minutes before their deaths.⁸⁴ Animals drowning in leghold traps suffer immensely and sometimes do not lose all sensory perception until at least 5-7 minutes have passed.⁸⁵ Drowning causes stress, anxiety, and discomfort and is *not* considered a humane method of euthanasia, according both to the scientific community and the American Veterinary Medicine Association (AVMA).⁸⁶

Another cruel aspect of leghold trap use is that trapping seasons may overlap the period of parturition and newborn rearing of a furbearers; trapping a mother may cause newborns to starve or become vulnerable to predation in the absence of parental care.⁸⁷ In Connecticut, the open seasons for furbearers end in either late or mid-March,⁸⁸ which overlaps with the birth of some furbearer pups, including red foxes,⁸⁹ opossums,⁹⁰ and fishers.⁹¹ These species may start breeding in December or January ⁹²and have short gestation periods,⁹³ or otherwise have delayed gestation cycles

Performance Criteria, Techniques, and Common Sense, 44 ILAR J. 259, 266 (2003).

⁷⁹ Id.

⁸⁰ Gilbert Proulx & Dwight Rodtka, *Killing Traps and Snares in North America: The Need for Stricter Checking Time Periods*, 9 ANIMALS 1, 2 (2019).

⁸¹ H. Byran White et al., *supra* note 58, at 43.

^{82 2024} Connecticut Hunting and Trapping Guide, supra note 27.

⁸³ H. Byran White et al., *supra* note 58, at 43.

⁸⁴ Roger A. Powell & Gilbert Proulx, Trapping and Marking Terrestrial Mammals for Research: Integrating Ethics,

⁸⁵ Frederick F. Gilbert & Norman Gofton, *Terminal Dives in Mink, Muskrat, and Beaver*, 28 PHYSIOLOGY & BEHAVIOR 835, 838 (1982).

⁸⁶ John W. Ludders et al., *Drowning Is Not Euthanasia*, 27 WILDLIFE SOC'Y BULL. 666, 669 (1999); AVMA GUIDELINES FOR THE EUTHANASIA OF ANIMALS: 2020 EDITION 112 (2020).

⁸⁷ Serfass, *supra* note 7, at 41.

⁸⁸ Conn. Agencies Regs. § 26-66-7(b).

⁸⁹ Paolo Cavallini & Simona Santini, Timing of reproduction in the Red fox, Vulpes vulpes, 60 INT'L J. OF MAMMALIAN BIOLOGY 337, 337 (1995).

⁹⁰ Robert J. Hossler et al., *Maternal Denning Behavior and Survival of Juveniles in Opossums in Southeastern New York*, 75 J. OF MAMMALOGY 60, 63 (1994).

⁹¹ Rebecca E. Green et al., *Reproductive parameters of the fisher (Pekania pennanti) in the southern Sierra Nevada, California*, 99 J. OF MAMMALOGY 537, 542-543 (2018) (finding that some fishers give birth as early as March 3 in some regions).

⁹² Cavallini & Santini, supra note 89, at 337; William G. Shelden, Reproductive behavior of foxes in New York State, 30 J. of Mammalogy 236, 237 (1949).

¹³² Oliver Griffith et al., *Endometrial recognition of pregnancy occurs in the grey short-tailed opossum (Monodelphis domestica)*, 286 PROCEEDINGS OF THE ROYAL SOC'Y. B: BIOLOGICAL SCI., Issue 1905 June 2019, at 1.

which result in their young being born up to a year after mating, meaning that it is possible for them to give birth to pups near the end of the trapping season.⁹⁴ While the period of overlap between trapping season and the birth of these species' pups is brief, there is nonetheless a risk that some newborn pups will be separated from their mothers and will subsequently die due to lack of parental care.

A number of scientific studies have focused on the impacts of leghold traps by specifically examining the injuries sustained by otters, one of the animals allowed to be trapped in Connecticut.⁹⁵ The studies overwhelmingly detail the physical injuries, often severe, suffered by otters caught in these traps. Generally, injuries to teeth and feet were the most common for trapped otters, with the animals suffering teeth "broken to the 'base," along with punctured footpads, lost toenails, and torn digit pads.⁹⁶ Such injuries can be extremely painful, particularly when dental injuries expose the pulp of the tooth.⁹⁷ In one study, 16 percent of the captured otters suffered broken toes,⁹⁸ and another study detailed how 55 percent of river otters suffered injured teeth from leghold traps, most commonly losing the top third of one of their canines or sustaining broken incisors.⁹⁹ Some of these otters also required amputations of both toes and entire feet.¹⁰⁰ These "[i]njuries . . . were much more frequent and severe in river otters caught in leghold traps by trappers—as opposed to scientists—are more severely injured.¹⁰¹ A third study found that seventy percent of otters trapped in leghold traps "sustained some form of injury."¹⁰²

Numerous organizations and political entities have taken a stand against these barbaric devices. The AVMA opposes the use of conventional unpadded leghold traps and advises that "[w]hen the capture of wildlife must occur (e.g. for management or research purposes), humane traps and techniques should be employed that minimize injury, stress, pain, and suffering to wildlife while also seeking to avoid capture of non-target animals."¹⁰³ It further "encourages active research on improvement of capture devices and trapping methods for wildlife, taking into regard the provision of good welfare."¹⁰⁴ These traps are also condemned by the American Animal Hospital

⁹⁴ Green et al., *supra* note 91, at 538.

⁹⁵ 2024 Connecticut Hunting and Trapping Guide, supra note 27. The Animal Law & Policy Clinic has deep concerns about the ethics of this research. We do not support setting traps to measure the already obvious pain and suffering that animals caught in leghold traps endure. However, we acknowledge that these studies can help to show the immeasurable cruelty of leghold traps.

⁹⁶ Serfass, *supra* note 7, at 31.

⁹⁷ See, e.g., Brook A. Niemic, Oral Pathology, 23 TOPICS COMPANION ANIMAL MED. 59, 60-61 (2008).

⁹⁸ Serfass, *supra* note 7, at 29.

⁹⁹ Id.

¹⁰⁰ Id. at 30.

 $^{^{101}}$ Id. at 29–30.

¹⁰² *Id.* at 30.

¹⁰³ Trapping and Steel-jawed Leghold Traps, AMERICAN VETERINARY MEDICAL ASSOCIATION,

https://www.avma.org/resources-tools/avma-policies/trapping-and-steel-jawed-leghold-traps (last visited Jan. 8, 2024). ¹⁰⁴ *Id.*

Association¹⁰⁵ and the National Animal Care & Control Association.¹⁰⁶ At least 88 countries and several states—including Massachusetts,¹⁰⁷ Rhode Island,¹⁰⁸ New Jersey,¹⁰⁹ Arizona,¹¹⁰ Colorado,¹¹¹ California,¹¹² New Mexico,¹¹³ Washington,¹¹⁴ and Hawaii¹¹⁵—have banned or significantly limited the use of leghold traps, with several of the bans applying to body-gripping traps as well.¹¹⁶

2. Cruelty of body-gripping traps

Body-gripping traps are exceptionally cruel. Despite their promise of a quick death, animals caught in body-gripping traps may nonetheless "take hours or even days to die."¹¹⁷ One review of "killing traps," which included an analysis of both body-gripping traps and neck snares, found that greater than 30 percent of animals captured by "killing traps" in the wild were struck in non-vital regions, with some of them remaining alive for hours after they were caught.¹¹⁸ This number was not skewed by the inclusion of neck snares; the study cited research on the frequency of non-vital strikes in martens that showed that they were struck by body-gripping traps in non-lethal regions in 30 percent of cases.¹¹⁹

Some species are particularly at risk for being harmed by body-gripping traps in this manner; one study reported that "American martens . . . will circumvent the trigger . . . when initially entering [body-gripping] traps, contributing strikes to the abdomen and hind legs."¹²⁰ "Studies demonstrated that one popular type of body-gripping trap does "*not have the potential to quicky render martens irreversibly unconscious.*"¹²¹ Similarly, there are several scientific assessments of the impacts of body-gripping traps on otters. For example, two of the body-gripping traps approved for river otters in the 2021 *Best Management Practices for Trapping Furbearers in the United States* fail to cause unconsciousness within 300 seconds (5 minutes),"¹²² an especially concerning finding given that river otters can hold their breath for up to eight minutes.¹²³ In addition, "[t]he river otter swims rapidly," has a large muscular head,

¹¹¹ Colo. Rev. Stat. § 33-6-203(1).

¹⁰⁵ Leghold Traps, AM. ANIMAL HOSP. ASS'N (Nov. 2014), www.aaha.org/about-aaha/aaha-position-statements/leghold-traps/.

¹⁰⁶ NAT'L ANIMAL CARE & CONTROL ASS'N, NACA GUIDELINES 7 (2014), https://www.nacanet.org/wp-content/uploads/2019/03/NACA_Guidelines.pdf.

¹⁰⁷ Mass. Gen. Laws ch. 131 § 80A.

¹⁰⁸ 20 R.I. Gen. Laws § 20-16-8(a).

¹⁰⁹ N. J. Stat. § 32:4-22.1.

¹¹⁰ Ariz. Rev. Stat. § 17-301(d).

¹¹² Cal. Fish & Game Code § 3003.1.

¹¹³ N.M. Stat. § 17-11-3.

¹¹⁴ Wash. Rev. Code § 77.15.194.

¹¹⁵ Haw. Rev. Stat. § 711-1109.37.

¹¹⁶ Ranelli, *supra* note 44.

¹¹⁷ Proulx & Rodtka, *supra* note 80, at 2.

¹¹⁸ Id.

¹¹⁹ Id.

¹²⁰ Serfass, *supra* note 7, at 43–44.

 ¹²¹ Gilbert Proulx, *Modifications to Improve the Performance of Mammal Trapping Systems, in* MAMMAL TRAPPING: WILDLIFE MANAGEMENT, ANIMAL WELFARE & INTERNATIONAL STANDARDS 174 (Gilbert Proulx ed., 2022) (emphasis added).
 ¹²² Serfass, *supra* note 7, at 26–27.

¹²³ 12 Facts About Otters for Sea Otter Awareness Week, U.S. DEP'T OF THE INTERIOR, https://www.doi.gov/blog/12-facts-about-otters-sea-otter-awareness-week (last visited Mar. 31, 2024).

and "is narrow in diameter, which increases the likelihood of a river otter . . . being captured with a non-lethal strike to the torso in a body-grip trap."¹²⁴ Thus, studies postulate that one of the most popular sizes of body-gripping traps is "particularly incapable of consistently killing an adult river otter within time limits defined as humane, even if the trap strikes" the correct area of the body.¹²⁵

Placement of the trap also impacts the level of suffering experienced by trapped animals. For example, if the body-gripping trap is partially, but not fully, submerged, a river otter could suffer a "long, agonizing" death as a consequence.¹²⁶ Connecticut's regulations allow partial submersion of smaller body-gripping traps.¹²⁷ When fully submerged, body-gripping traps have reduced striking force in water, thus "potentially resulting in a captured river otter struggling for up to 5 min[utes] underwater if not killed by the trap."¹²⁸ The ethical implications of this are particularly concerning for states, like Connecticut, that allow traps to be checked only once every 24 hours.¹²⁹ This means that "captures in failed submersion sets (i.e., [where the] animal does not drown) or in non-drowning water sets could result in trapped river otters being retained in the water alive" for up to 24 hours.¹³⁰ Such scenarios enhance the potential for hypothermia and capture-induced physical trauma.¹³¹ When fully-submerged body-gripping traps fail to kill otters via trap strike, drowning over "an extended period of pain and suffering" becomes their primary form of death.¹³² As previously discussed, drowning is not a humane form of euthanasia.¹³³

There are also several studies showing that body-gripping traps are cruel to beavers, something of special concern since body-gripping traps are much more commonly used to trap beavers than leghold traps.¹³⁴ When a trap fails to instantly kill a beaver, the animal may struggle for up to 15 minutes before they drown, a length of time that far exceeds the five-minute time limit set by the BMPs.¹³⁵ One study found that, because traps exert less force when set underwater, many beavers caught in body-gripping traps die due to drowning, not due to the snapping shut of the trap on animal's neck or thorax.¹³⁶ Another study found that body-gripping traps are *mechanically incapable* of generating enough force to kill beavers if the trap strikes their abdomen.¹³⁷ This research paints a grim picture of how body-gripping traps kill beavers; body-gripping traps often do not kill beavers

¹²⁴ Serfass, *supra* note 7, at 37–38.

¹²⁵ Id. at 38.

¹²⁶ Id.

¹²⁷ Conn. Agencies Regs. § 26-66-5(b) ("[S]mooth wire traps having an opening of four and three quarters inches or less may extend above the surface of the water provided a portion of the trap frame must remain in contact with the water.").

¹²⁸ Serfass, *supra* note 7, at 38.

¹²⁹ Conn. Gen. Stat. § 26-72.

¹³⁰ Serfass, *supra* note 7, at 40.

¹³¹ Id.

 $^{^{132}}$ Id. at 41.

¹³³ See supra notes 84-86 and accompanying text.

¹³⁴ H. Bryan White et al., *supra* note 58, at 14.

¹³⁵ Broom, *supra* note 5, at 320; Proulx, *supra* note 121, at 174.

¹³⁶ Broom, *supra* note 5, at 320.

¹³⁷ Samuel Zelin et al., *Evaluation of Humane Traps: Momentum Thresholds for Four Furbearers*, 47 J. OF WILDLIFE MGMT. 863, 866 (1983).

instantly, and indeed are potentially mechanically incapable of doing so, creating a high likelihood that many beavers are dying only after a protracted drowning.

B. Traps cause "undesirable and unintended consequences" by killing and injuring non-target animals.

The inadvertent capture of non-target species is inconsistent with CEPA's directive "to conserve, improve and protect [Connecticut's] natural resources and environment."¹³⁸ The state's wildlife is neither conserved nor protected by DEEP's trapping regulations; instead, many species are harmed and maimed by traps, including state- and federally-protected species. Likewise, the "health, safety, and welfare of the people of the state" is also harmed, in contravention of CEPA's goals, when companion animals are inadvertently captured in traps. Because leghold and body-gripping traps are set in the environment and left unattended, it is very difficult to ensure that a specific animal is caught, even when best practices are followed.

In Connecticut, leghold and body-gripping traps may be used to capture only a limited range of animals: river otter, beaver, mink, muskrat, weasel, coyote, gray fox, red fox, raccoon, opossum, skunk, and fisher.¹³⁹ DEEP has adopted restrictions on where and how traps may be used in order to decrease the trapping of non-target species.¹⁴⁰ Yet these restrictions have been ineffective at preventing the trapping of non-target animals.

Moreover, DEEP cannot assess the efficacy of these measures because it does not monitor the rates of non-target animals trapped in the state or require trappers to report any non-target species trapped. For example, the *Connecticut Trapper Education Manual* suggests that improperly covered "flesh baits" may attract birds of prey, and advises trappers that "[i]f by chance you do catch one of these birds, examine it closely for injury."¹⁴¹ If the animal appears uninjured, the Manual encourages trappers to release him or her without reporting it to DEEP; the trapper should only contact a wildlife officer if he detects an injury.¹⁴² Yet, as discussed in Section III.A.0 above, animals experiencing capture myopathy due to being caught in a trap might not display outward symptoms until they succumb to the condition hours or days later. Similarly, as discussed below, soft tissue damage in raptors caught in leghold traps can go unnoticed for several days.

The Manual advises trappers to take a similar approach to domestic animals.¹⁴³ Though "[n]o one wants to lose an animal or have it live with a permanent injury," the Manual encourages trappers to contact the animal's owner or landowner *only* if a trapped dog or cat appears to be injured.¹⁴⁴ It does not encourage trappers to report such instances to DEEP.¹⁴⁵ These materials, along with DEEP's own Environmental Conservation (EnCon) Police records, demonstrate that leghold and body-

¹³⁸ Conn. Gen. Stat. § 22a-1.

¹³⁹ 2024 CONNECTICUT HUNTING AND TRAPPING GUIDE, supra note 54, at 36.

¹⁴⁰ *Id.* at 37-39.

¹⁴¹ DEEP Trapper Education Manual, supra note 29, at 99.

¹⁴² Id.

¹⁴³ Id.

¹⁴⁴ Id.

¹⁴⁵ Id.

gripping traps have the "undesirable and unintended consequence[]"¹⁴⁶ of frequently capturing non-target wildlife, including birds protected by federal and state law.

1. Traps kill and injure birds protected by the Migratory Bird Treaty Act and Connecticut's Wild Bird statute.

The Migratory Bird Treaty Act (MBTA), 16 U.S.C. § 703, is a sweeping federal statute that makes it a criminal offense "at any time, by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird without a permit.¹⁴⁷ "Take" means "to pursue, hunt, shoot, *wound*, kill, *trap*, capture, or collect" migratory birds.¹⁴⁸ The U.S. Fish and Wildlife Service and many courts have interpreted this phrase to include the inadvertent "take" of protected birds incidental to otherwise lawful activities.¹⁴⁹ Thus, even the unintended death, injury, or capture of a protected bird in a leghold or body-gripping trap constitutes a violation of the MBTA.

Similarly, Connecticut's Wild Bird statute makes it a criminal offense to "catch, kill or purchase or attempt to catch, kill or purchase," wild birds other than game birds, regardless of intent.¹⁵⁰ Likewise, "[n]o person shall trap, net or snare any bird for which a closed season is provided or which is protected by statute[.]"¹⁵¹ Consequently, any capture or kill of a state- or federally-protected bird due to trapping is a violation of both the MBTA and the Connecticut's Wild Bird statute.¹⁵²

There have been repeated instances of protected birds, such as hawks, owls, and vultures, being trapped in both ground and underwater leghold or body-gripping traps in Connecticut.¹⁵³ Notably, the birds documented in Connecticut were all trapped during the winter furbearer trapping seasons, which run between November and March.¹⁵⁴ Raptors are attracted to the meat used as bait for traps, including to underwater sets baited with fish, and "are also attracted to traps where no exposed bait is used if there is activity from other animals at the set."¹⁵⁵

This is especially concerning because raptors, who fall under the protection of the MBTA and Connecticut's Wild Bird statute,¹⁵⁶ are especially vulnerable to leghold traps. Leg and foot injuries

¹⁵⁶ See 50 C.F.R. § 10.13(c)(1).

¹⁴⁶ Conn. Gen. Stat. § 22a-1a(b)(3).

¹⁴⁷ 16 U.S.C. §§ 703, 704; see 50 C.F.R. § 10.13(c)(1) (listing MBTA-protected species).

¹⁴⁸ Id. § 10.12 (emphasis added).

¹⁴⁹ See FWS Director's Order No. 225, Incidental Take of Migratory Birds (Oct. 5, 2021),

https://www.fws.gov/guidance/sites/guidance/files/documents/do225.pdf ("The U.S. Fish and Wildlife Service (Service) interprets the Migratory Bird Treaty Act (MBTA) to prohibit incidental take of migratory birds and will enforce the statute accordingly."); LINDA TSANG & ERIN WARD, CONG. RSCH. SERV., R44694, THE MIGRATORY BIRD TREATY ACT: SELECTED LEGAL ISSUES 9 (2022); United States v. FMC Corp., 572 F.2d 902, 908 (2d Cir. 1978); Natural Res. Def. Council v. U.S. Dep't of the Interior, 478 F. Supp. 3d 469 (S.D.N.Y. 2020).

¹⁵⁰ Conn. Gen. Stat. § 26-92.

¹⁵¹ Id. § 26-95.

¹⁵² See Conn. Gen. Stat. §§ 26-92; 26-95; 16 U.S.C. § 703.

¹⁵³ See Section III.b.1; Katherine Durham, *Injuries to Birds of Prey Caught in Leghold Traps*, 2(6) INT'L J. FOR THE STUDY OF ANIMAL PROBLEMS 317, 317, 321 (1981).

¹⁵⁴ See 2024 Connecticut Hunting and Trapping Guide, supra note 27 (listing Connecticut's furbearer trapping seasons, which generally run from November through December and January through March).

¹⁵⁵ Durham, supra note 153, at 317; see also DEEP Trapper Education Manual, supra note 29, at 99.

from traps are devastating to raptors, as they rely on the full use of both their feet to grab, subdue, and asphyxiate prey.¹⁵⁷ It is challenging to treat raptors for the injuries caused by these traps, as they usually cause irreversible soft tissue damage which can lead to the loss of the raptors' toes and legs.¹⁵⁸ One study of raptors caught in leghold traps found that about 93 percent of the raptors admitted for leg injuries suffered irreversible soft tissue damage or had their legs fractured or completely severed.¹⁵⁹ When a raptor's leg is constricted by a leghold trap, the vascular supply to the limb is easily cut off.¹⁶⁰ The limb is then likely to freeze overnight in cold weather.¹⁶¹ Soft tissue damage from traps can also result in thrombosis or laceration of the blood vessels.¹⁶² Soft tissue damage to a raptor's foot initially causes the foot to shrivel, turn black, and eventually, snap off.¹⁶³ Because soft tissue damage can go unnoticed for several days, any raptor caught in a leghold trap should be considered seriously injured.¹⁶⁴ Raptors also have a decreased ability to heal fractures and fight infections of the foot due to their specific anatomy.¹⁶⁵ Because fractures require immobilization for the bone to heal, raptors with leg fractures are not expected to survive unless given treatment.¹⁶⁶ Raptors caught in traps may also exhibit wing injuries because of their desperate attempts to escape the traps, rendering them unable to fly.¹⁶⁷ These injuries include bruising of the wrist joints, broken feathers, and broken bones.¹⁶⁸

While a leghold trap may not kill a raptor on impact, a leghold trap injury is usually a death sentence. Raptors left with the use of only one foot struggle with hunting and must rely more on scavenging, putting them at greater risk of death from eating poisoned bait, being hit by a car while eating roadkill, or being trapped again.¹⁶⁹ One-footed raptors with limited hunting experience have virtually no chance of survival.¹⁷⁰ Moreover, the change in a one-footed raptor's weight distribution leads to deterioration of the remaining foot pad and causes difficult-to-treat infections.¹⁷¹ For these reasons, federal migratory bird rehabilitation regulations generally require euthanasia of any bird who has "sustained injuries that would require amputation of a leg, a foot, or a wing at the elbow or above."¹⁷²

Legal, licensed trapping in Connecticut has caused takes of state- and federally-protected birds. These deaths likely would not have occurred but for DEEP's policy of allowing the use of leghold

¹⁵⁹ Id. at 325.
¹⁶⁰ Id. at 322.
¹⁶¹ Id.
¹⁶² Id. at 324.
¹⁶³ Id.
¹⁶⁴ Id. at 327.
¹⁶⁵ Id.
¹⁶⁶ Id. at 324.
¹⁶⁷ Id. at 325.
¹⁶⁸ Id.
¹⁶⁹ Id.
¹⁷⁰ Id.
¹⁷¹ Id.
¹⁷² 50 C.F.R. § 21.76(e)(4)(iii).

 ¹⁵⁷ Durham, supra note 153, 322–25 (1981); see Denver W. Fowler, et al., Predatory Functional Morphology in Raptors: Interdigital Variation in Talon Size Is Related to Prey Restraint and Immobilisation Technique, 4 PLOS ONE 1, 7–8 (2009). See also Nicholas Lun, Birdist Rule #93: Understand How Different Raptors Are Built to Hunt Their Prey, AUDUBON, Jan. 19, 2017, https://www.audubon.org/news/birdist-rule-93-understand-how-different-raptors-are-built-hunt-their-prey.
 ¹⁵⁸ Durham, supra note 153, at 317, 324.

and body-gripping traps in the state. Moreover, because traps are indiscriminate, DEEP's restrictions on how and where traps may be used cannot fully exclude the capture of non-target species. Thus, trapping is reasonably likely to cause continued "takes" of protected species in the future unless DEEP's regulations are reviewed and amended.

The exact number of birds harmed by traps is unknown, as DEEP does not require the reporting of non-target trapping. However, trapped birds have been reported to DEEP's Environmental Conservation Police, taken to Connecticut wildlife rehabilitators, and documented in the media. Below are a few illustrative examples of protected birds who were caught in leghold or body-gripping traps in Connecticut and other states:¹⁷³

Date	Location	Victim	Trap	Description
			Туре	_
March 2023	East Haven,	Red-tailed	Leghold	A hawk was brought to A Place
	СТ	hawk	(likely)	Called Hope Birds of Prey
				Rehabilitation Center. The hawk's
				bone was severed above the foot,
				leaving the foot dead and necrotic. ¹⁷⁴
				The hawk's other foot was also
				affected, as the hawk had survived
				long enough to overuse it, leading to
				severe infection and swelling. ¹⁷⁵ The
				hawk had to be euthanized. ¹⁷⁶
				According to the rehabilitator who
				cared for the hawk, these injuries
				indicate that the hawk was likely
				caught in a leghold trap. ¹⁷⁷
November	Seymour, CT	Tukey	Leghold	A homeowner, working with another
2020		vulture		person, caught a turkey vulture in a
				leghold trap while trying to catch
				raccoons. ¹⁷⁸
February	Plainfield, CT	Mallard	Body-	A trapper with a valid 2017 trapping
2017			gripping	license was attempting to trap an otter
				but unintentionally killed a female
				mallard in his body-gripping trap

¹⁷³ Some of these incidents involve illegally placed traps. Additionally, the reporting on several of the incidents involving leghold traps does not specify whether they were padded. However, incidents involving illegally-placed traps are indicative of the cruel consequences of these traps, as well as their tendency to capture non-target animals—especially state- and federally-protected birds. Regardless of padding, both leghold and body-gripping traps are cruel, indiscriminate devices that cause immense suffering.

¹⁷⁷ Id.

¹⁷⁴ E-mail from Christine Cummings, President, A Place Called Hope, to authors (Mar. 30, 2023, 03:015 PM EST) (on file with authors); Personal communication with Christine Cummings President, A Place Called Hope, to authors (Nov. 29, 2023).

¹⁷⁵ Id.

¹⁷⁶ Id.

¹⁷⁸ Ex. C, CFS# 2000033050, DEEP Environmental Conservation Police Call Summary Reports, Nov. 2020.

November	Middlesov	Parrod out	Lashald	instead. ¹⁷⁹ A DEEP officer advised the trapper that he could not be in possession of the mallard and told the trapper to dispose of the bird. ¹⁸⁰
2009	County, CT	barred owi	Legnoid	An owl was found emaciated after being caught in a leghold trap. ¹⁸¹ A veterinarian determined that the owl's leg had to be amputated, and the owl would never be able to be released, so she euthanized the owl in accordance with federal law. ¹⁸²
January 2009	Wallingford, CT	Great horned owl	Leghold	An owl was caught in a steel leghold trap. ¹⁸³ Within three months, the bird had to be euthanized due to an infection caused by the rusty trap, which mangled the bird's leg. ¹⁸⁴
March 2024	WI	Bald Eagle ¹⁸⁵	Leghold	A mature male bald eagle was caught and then released by a trapper, only to be found with severe injuries to one talon at least one week later. ¹⁸⁶ The wildlife rehabilitator noticed that the eagle had a mate and a "brood patch," which indicates that the eagle "had nest responsibilities to help incubate and raise the next generation of Bald Eagles." ¹⁸⁷ The eagle had to be euthanized, because he was "suffering" and had "experienced excruciating pain." ¹⁸⁸
September 2022	Foxborough, MA	Hawk	Leghold	A hawk was caught in an illegally placed leghold trap. ¹⁸⁹ The hawk was

¹⁷⁹ Ex. C, *CFS# 1700002751*, DEEP ENVIRONMENTAL CONSERVATION POLICE CALL SUMMARY REPORTS, Feb. 2017. ¹⁸⁰ *Id.*

¹⁸¹ [Permittee name redacted], U.S. Fish & Wildlife Service - Migratory Bird Permit Office Rehabilitation Permit Annual Report -Year 2010 (USFWS FOIA Production) (on file with authors); Lauren Garrison, Animal advocates push for ban on traps after owl found snared in Moodus, THE MIDDLETOWN PRESS (Dec. 1, 2009)

¹⁸³ Susan Haigh, *Conn. Activists Seek Ban on Leghold Traps*, TELEGRAM & GAZETTE (Mar. 10, 2009, 12:31 AM), https://www.telegram.com/story/news/local/north/2009/03/10/conn-activists-seek-ban-on/52070025007/.
¹⁸⁴ See id.

¹⁸⁵ The "take" of bald eagles is also prohibited by the Bald and Golden Eagle Protection Act, 16 U.S.C. §§ 668–668d. ¹⁸⁶ Winged Freedom Animal Hospital, FACEBOOK, Mar. 30, 2024, 7:35 P.M.,

https://www.facebook.com/WingedFreedomRaptorHospital/posts/pfbid02ngDwQ5iyeYKnQHPFk7gt6H8dYGmQ1 q8ayK804cYZQBjU3nQJSSkHi531NLFzvGM2l.

¹⁸⁷ Id.

¹⁸⁸ Id.

¹⁸⁹ Emily Sweeney, *Injured Hawk Saved From Illegal Trap*, BOSTON GLOBE (Nov. 3, 2022, 11:10 AM) https://www.bostonglobe.com/2022/11/03/metro/injured-hawk-saved-illegal-trap/.

https://www.middletownpress.com/news/article/Animal-advocates-push-for-ban-on-traps-after-owl-11912637.php. ¹⁸² Garrison, *supra* note 181.

February	PA	Bald Eagle	Lephold	suffering with a raw, wounded leg from the leghold trap and had to be brought to a wildlife clinic for treatment. ¹⁹⁰ A bald eagle was spotted struggling to
2017		Daile Dagie	Legnold	fly with a leghold trap stuck to the bird's talons. ¹⁹¹ The trap posed a serious risk of infection and hampered the eagle's ability to eat and perch. ¹⁹² The eagle was expected to die if not found soon. ¹⁹³
August 2016	PA	Bald Eagle	Leghold	A 3-month-old bald eagle was debilitated after being caught in a leghold trap. ¹⁹⁴ She had lost a talon on each foot and was so dehydrated and starving that she could not fly. ¹⁹⁵ The veterinarians caring for her had to cut away dead skin and bone from her feet. ¹⁹⁶ The eagle would have died a slow death if released back into the wild, and, despite the veterinary care she received, she may never again be able to perch properly or defend herself against other eagles. ¹⁹⁷

2. Traps harm non-target wildlife and domestic companion animals.

In addition to the many birds captured, maimed, and killed by leghold and body-gripping, countless companion animals and wildlife have been inadvertently caught in these traps as well.

Leghold traps regularly capture "under-sized animals or unintended species,"¹⁹⁸ and this "often result[s] in very poor welfare in non-target species."¹⁹⁹ Exact statistics of captures of non-target animals are difficult to obtain as "many studies do not fully report non-target catches and outcomes."²⁰⁰ Likewise, DEEP does not track (or require reporting of) the trapping of non-target

¹⁹⁰ Id.

¹⁹¹ Bald eagle with leg-trap on talons will die, warn experts, BBC (Feb. 8, 2017), https://www.bbc.com/news/world-us-canada-38902572.

¹⁹² Id.

¹⁹³ Id.

¹⁹⁴ Liz Evans Scolforo, Trapped bald eagle needs permanent home to survive, YORK DISPATCH, Aug. 25, 2016,

https://www.yorkdispatch.com/story/news/2016/08/25/trapped-eagle-york-leader-heights/89259682/.

¹⁹⁵ Id.

¹⁹⁶ Id.

¹⁹⁷ Id.

 $^{^{198}}$ AMERICAN VETERINARY MEDICAL ASSOCIATION, $\it supra$ note 6, at 1.

¹⁹⁹ Broom, *supra* note 5, at 324.

²⁰⁰ AMERICAN VETERINARY MEDICAL ASSOCIATION, *supra* note 6, at 1.

species.²⁰¹ However, studies that have recorded capture of non-target animals demonstrate that nontarget catch rates often exceed catch rates of target species. A study of otter trapping only trapped 55 otters (the target species) but accidentally caught *111 animals* of 15 other species, including the striped-necked terrapin (a turtle which accounted for 32 percent of non-target captures), mallards (a species protected under the MBTA²⁰²) (21 percent of non-target captures), moorhens (a species protected under the MBTA²⁰³) (14 percent of non-target captures), brown rats (12 percent of nontarget captures), and white storks (10 percent of non-target captures).²⁰⁴

Beaver trappers also often accidentally capture otters as a non-target species.²⁰⁵ One nationwide survey even found that "*river otters were reportedly caught secondarily (i.e., non-target captures) by about 30% of beaver trappers.*"²⁰⁶ The *Best Management Practices for Trapping Beaver in the United States* advise that "no method can completely eliminate accidental river otter captures" when attempting to trap beaver because these animals share a habitat.²⁰⁷ This is of particular concern in Connecticut where there is a strict bag limit of 8 river otters while an unlimited number of beavers may be trapped,²⁰⁸ and the Connecticut beaver trapping season ends later in spring than the season for river otters,²⁰⁹ which increases the opportunity to capture female river otters raising their pups.²¹⁰

Dick Randall, former acting District Supervisor of the U.S. Fish and Wildlife Service's predator control program, stated that "[e]ven though I was an experienced, professional trapper, *my trap victims often included non-target species* such as bald and golden eagles, a variety of hawks and other birds, rabbits, sage grouse, pet dogs, deer, and antelope, badger, porcupine, sheep, and calves. The leg-hold is inherently nonselective . . . My trapping records show that *for each target animal I trapped, about two unwanted individuals were caught*. Because of trap injuries, these non-target species usually had to be destroyed."²¹¹

There are numerous documented instances of leghold traps injuring or killing companion animals and other non-target animals in Connecticut, in addition to the state- and federally-protected birds listed above. For example, Allyson Halm, who recently retired after serving as an animal control officer in New Canaan, encountered multiple animals caught in leghold and body-gripping traps throughout her career. Several of these animals were likely inadvertent trapping victims or subject to some trapping mishap, such as the trap becoming untethered from the ground. Because of the gruesome nature of trapping, all of these incidents caused distress to the people who witnessed their

²⁰¹ See 2024 CONNECTICUT HUNTING AND TRAPPING GUIDE, supra note 54, at 36-43.

²⁰² 50 C.F.R. § 10.13(c)(1) (Table).

²⁰³ Id.

²⁰⁴ Fernández-Morán et al., *supra* note 64, at 224.

²⁰⁵ Serfass, *supra* note 7, at 42.

²⁰⁶ Serfass, *supra* note 7, at 43 (emphasis added).

²⁰⁷ ASS'N OF FISH & WILDLIFE AGENCIES, BEST MANAGEMENT PRACTICES FOR TRAPPING BEAVER IN THE UNITED STATES 3 (2016), <u>https://portal.ct.gov/-/media/DEEP/hunting_trapping/pdf_files/CEFS/Beaver_BMP.pdf</u>.

²⁰⁸ See 2024 CONNECTICUT HUNTING AND TRAPPING GUIDE, supra note 54, at 36.

²⁰⁹ Conn. Agencies Regs. § 26-66-7(b).

²¹⁰ Serfass, *supra* note 7, at 42.

²¹¹ Statement of Dick Randall, *supra* note 45, at 273 (emphasis added).

suffering.²¹² In 2018, Ms. Halm received a call about a deer caught in a leghold trap in New Canaan but was unable to capture the animal to render aid.²¹³ In 2017, she received a call from a homeowner who found a raccoon drowned in a body-gripping trap at the bottom of their pool.²¹⁴ The trap, which had not been set by the homeowner, had broken the raccoon's front foot, and the animal likely fell into the pool while dragging it along.²¹⁵ In 2016, she handled the case of a coyote reportedly dragging a leghold trap around New Canaan for days; animal control officers were unable to locate the animal to alleviate his or her suffering.²¹⁶ That same year, she was contacted by a New Canaan resident distressed by the sight of a fox struggling in a leghold trap on a neighbor's property; the neighbor had hired an NWCO to trap coyotes.²¹⁷

Ms. Halm also encountered trapped animals while working as an animal control officer in Greenwich earlier in her career. She received a complaint from an individual whose puppy had been injured in a leghold trap set by a NWCO at a private school in Greenwich.²¹⁸ And in a particularly gruesome incident that made headlines in 2003, a coyote suffered for around six days while dragging a leghold trap attached to his or her mangled leg.²¹⁹ Eventually, animal control officers were able to track the coyote by following a trail of pawprints and blood; they had to shoot the animal to alleviate his or her suffering because the trap had cut off circulation to the paw and caused serious tissue damage.²²⁰ Ms. Halm's experience with traps drove her to create a coyote hazing kit to give to residents to discourage them from hiring trappers.²²¹ The kits include an air horn, a bear bell, a whistle, reflective tape, and a soda can filled with coins that the resident can throw in the direction of a coyote to scare them off.²²²

Body-gripping traps pose similar threats to non-target species. For example, one advocacy group has estimated that up to 100 dogs have been killed in one state alone—Minnesota—by body-gripping traps.²²³ Body-gripping traps intended for beavers also frequently catch river otters instead.²²⁴ Additional examples of non-target trapped animals include the following:²²⁵

²¹² See generally Ex. A, Allyson Halm Decl., Nov. 21, 2023.

²¹³ *Id.* ¶ 13.

²¹⁴ *Id.* ¶ 12.

²¹⁵ Id.

²¹⁶ Id. ¶ 11; Michael Dinan, *'This Is Just Legal Animal Cruelty': Coyote Seen Dragging 'Leg Hold' Trap in New Canaan*, NEW CANAANITE (Dec. 22, 2016), https://newcanaanite.com/this-is-just-legal-animal-cruelty-coyote-seen-dragging-leg-hold-trap-in-new-canaan-46400.

²¹⁷ Ex. A, Allyson Halm Decl. ¶ 10; Michael Dinan, Unintended 'Leg Hold' Trapping of Fox on Briscoe Road Prompts Concerns, NEW CANAANITE (Jan. 13, 2016), https://newcanaanite.com/unintended-leg-hold-trapping-of-fox-on-briscoe-road-prompts-concern-from-neighbors-advocates-34962.

 $^{^{218}}$ Ex. A, Allyson Halm Decl. \P 8.

²¹⁹ Id. ¶ 7; Martin B. Cassidy, Trapped Coyote Tracked to Beach and Shot, GREENWICH TIME, Mar. 8, 2003, at A1.

²²⁰ Ex. A, Allyson Halm Decl. \P 7.

²²¹ Id. ¶ 17.

²²² Id..

²²³ DogLovers4SafeTrappingMN, Understanding the Problem (Feb. 23, 2022),

https://www.doglovers4safetrappingmn.org/understanding-the-problem.

²²⁴ See Serfass, *supra* note 7, at 43.

²²⁵ Some of these incidents involve illegally placed traps. Additionally, the reporting on several of the incidents involving leghold traps does not specify whether they were padded. However, incidents involving illegally placed traps are

Date	Location	Victim	Trap	Description
			Туре	
July 2022	Canton, CT	Skunk	Leghold	A skunk was caught in an untagged leghold trap. ²²⁶
June 2022	Lisbon, CT	Cat	Leghold	A cat required veterinary attention after being caught in an illegal, untagged leghold trap. ²²⁷
February 2022	Winchester, CT	Domestic cat	Leghold	A cat was caught in an untagged leghold trap with teeth. ²²⁸
December 2021	Thompson, CT	Dog	Leghold	A dog was caught in a leghold trap legally placed in water to catch beavers. ²²⁹
December 2021	Barkhamsted, CT	Raccoon	Leghold	A raccoon was caught in an unpadded leghold trap. ²³⁰ The next day, the raccoon and trap were gone, but blood was left on the ground. ²³¹
November 2021	Barkhamsted, CT	Family dog	Leghold	A dog, Ginger, was caught in a legally-placed leghold trap. ²³² She required veterinary treatment. ²³³
September 2021	Tolland, CT	Bobcat	Leghold	A bobcat "got hung up in woods" and died after being caught in an untagged leghold trap. ²³⁴
December 2020	West Haven, CT	Cat	Leghold	A cat was caught in an unpadded and untagged leghold trap. ²³⁵ The cat was left stuck under a fence and lying belly-up after struggling to escape the trap. ²³⁶ The cat was still stuck in the trap when transported to a veterinary hospital. ²³⁷
August 2020	Norwich, CT	Cat	Leghold	A stray cat was found dragging an unpadded and untagged leghold

indicative of the cruel consequences of these traps, as well as their tendency to capture non-target animals. Regardless of padding, both leghold and body-gripping traps are cruel, indiscriminate devices that cause immense suffering.

²²⁶ Ex. C, *CFS# 2200011436*, DEEP Environmental Conservation Police Call Summary Reports, Jul. 2022.

²²⁷ Ex. C, *CFS# 2200009845*, DEEP Environmental Conservation Police Call Summary Reports, Jun. 2022.

²²⁸ Ex. C, *CFS# 2200002601*, DEEP Environmental Conservation Police Call Summary Reports, Feb. 2022.

²²⁹ Ex. C, *CFS# 2100024117*, DEEP Environmental Conservation Police Call Summary Reports, Dec. 2021.

 ²³⁰ Ex. C, *CFS# 2100023346*, DEEP Environmental Conservation Police Call Summary Reports, Dec. 2021.
 ²³¹ Id.

 ²³² Ex. C, *CFS# 2100022117*, DEEP ENVIRONMENTAL CONSERVATION POLICE CALL SUMMARY REPORTS, Nov. 2021.
 ²³³ *Id.*

²³⁴ Ex. C, *CFS# 2100019965*, DEEP Environmental Conservation Police Call Summary Reports, Sept. 2021.

²³⁵ Ex. C, *CFS# 2000035372*, DEEP ENVIRONMENTAL CONSERVATION POLICE CALL SUMMARY REPORTS, Dec. 2020. ²³⁶ *Id.*

²³⁷ Id.

				trap. ²³⁸ The cat ultimately had to be
November 2019	Branford, CT	Opossum	Leghold	An opossum suffered snout lacerations and a possible broken jaw after being caught in an unpadded and untagged leghold trap. ²⁴⁰
April 2019	Middletown, CT	Skunk	Body- gripping	A daycare employee found a skunk caught in a body-gripping trap. ²⁴¹ The skunk had dragged himself and the trap under a deck, indicating that the trap did not kill the skunk instantly. ²⁴²
October 2018	Meriden, CT	Raccoon	Body- gripping	A raccoon suffered a broken leg after being caught in a Conibear 110 body-gripping trap. ²⁴³ The raccoon fled under a porch with the trap still attached and was ultimately killed by the responding officer. ²⁴⁴
February 2017	Columbia, CT	Cat	Body- gripping	A cat's head was caught in an untagged Conibear 110 body- gripping trap. ²⁴⁵ The cat required veterinary attention. ²⁴⁶
2022	California	Raccoon	Leghold	A young racoon was spotted trying to climb a tree with a leghold trap clamped onto her front leg. ²⁴⁷ An animal medical team determined that swelling and loss of blood flow required the raccoon's foot to be amputated. ²⁴⁸ However, female raccoons need both paws to climb while carrying babies, so the team ultimately made the decision to euthanize her. ²⁴⁹

²³⁸ Ex. C, *CFS# 2000024812*, DEEP Environmental Conservation Police Call Summary Reports, Aug. 2020. ²³⁹ *Id.*

²⁴⁸ Id.

²⁴⁹ Id.

 ²⁴⁰ Ex. C, *CFS# 1900017445*, DEEP Environmental Conservation Police Call Summary Reports, Nov. 2019.
 ²⁴¹ Ex. C, *CFS# 1900006858*, DEEP Environmental Conservation Police Call Summary Reports, Apr. 2019.

²⁴² Id.

 ²⁴³ Ex. C, *CFS# 1800021627*, DEEP Environmental Conservation Police Call Summary Reports, Oct. 2018.
 ²⁴⁴ Id.

 ²⁴⁵ Ex. C, *CFS# 1700002681*, DEEP Environmental Conservation Police Call Summary Reports, Feb. 2017.
 ²⁴⁶ Id.

²⁴⁷ Alison Hermance, *Leg-Hold Traps are Inhumane and Ineffective*, MARIN INDEPENDENT JOURNAL (Nov. 7, 2022, 12:00 PM), https://www.marinij.com/2022/11/07/leg-hold-traps-are-inhumane-and-ineffective/.

2022	Canada	Family dog	Body- gripping	Cathy Gagnon's dog, Ruby, was killed by a body-gripping trap. ²⁵⁰ Ms.
		0	8-118	Gagnon struggled for thirty minutes
				to pry open the device and save her
				beloved dog while Ruby slowly
				died. ²⁵¹
2021	Illinois	Dog	Leghold	A mother dog was caught and
				severely injured by a leghold trap. ²⁵²
				The dog suffered a compression
				laceration and, due to her attempts
				to escape the trap, created bone
				tragments that became embedded in
2021	A.1 1	E '1	D 1	the skin beneath her paw.
2021	Ліаѕка	ranniy dog	body-	body gripping trap in Anchorage ²⁵⁴
		uog	gripping	L olo's family was upable to release
				her neck from the heavy trap ²⁵⁵
2019	Canada	Family	Leohold	A family dog was caught and badly
2017	Ganada	dog	Legnole	injured by a legally placed leghold
		1 08		$trap.^{256}$ In addition to sustaining leg
				injuries, the dog destroyed a number
				of teeth by biting at the trap in a
				futile attempt to remove it. ²⁵⁷
2018	Montana	Cat	Leghold	A cat was found with his or her front
				paws caught in a leghold trap. ²⁵⁸ The
				cat's leg was badly mangled, and the
				cat was in urgent need of veterinary
				attention. ²⁵⁹
2015	New Mexico	Dog	Leghold	A dog was found hobbling along
			(likely)	with exposed ends of bones where

²⁵⁰ Dog Killed in Spring Loaded Trap, ANIMAL DEFENCE AND ANTI-VIVISECTION SOCIETY (Jan. 23, 2022), https://adavsociety.org/dog-killed-in-spring-loaded-trap/.

²⁵¹ Id.

²⁵³ Id.

²⁵⁵ Id.

²⁵⁶ Dominika Lirette, *Dog Owner Calls Leghold Traps 'Inhumane' After His Labrador Injured in B.C. Forest*, CBC NEWS (Dec. 18, 2019, 11:36 PM), https://www.cbc.ca/news/canada/british-columbia/cranbrook-man-leg-hold-traps-inhumane-dog-caught-1.5401429.

²⁵⁷ Id.

²⁵⁸ Karl Puckett, Leghold Trap Catches Domestic Cat in Great Falls, GREAT FALLS TRIBUNE (Mar. 12, 2018),

https://www.greatfallstribune.com/story/news/2018/03/12/domestic-cat-leghold-trap-great-falls-hanging-animal-shelter-trapping-trap-free-montana/416573002/.

²⁵⁹ Id.

²⁵² Momma Dog Injured in Coyote Trap, WRIGHT-WAY RESCUE (Feb. 10, 2021), https://wright-

wayrescue.org/stories/2021/2/10/momma-dog-injured-in-coyote-trap.

²⁵⁴ Lex Treinen, *Anchorage Dog Dies in Trap On Glenn Highway, Reigniting Debate About Regulations*, ALASKA PUBLIC MEDIA (Apr. 25, 2021), https://alaskapublic.org/2021/04/25/anchorage-dog-dies-in-trap-on-glen-highway-reigniting-debate-about-regulations/.

				his hind legs used to be—injuries that are consistent with being caught in a leghold trap. ²⁶⁰ Veterinarians guessed that he had been walking on the bones for weeks. ²⁶¹ He had also suffered from shotgun pellet injuries, likely from a trapper who found the dog and attempted to put him out of his misery. ²⁶² The dog ultimately needed both rear limbs to be amputated. ²⁶³
2014	Oregon	Family dog	Body- gripping	Mark Johnson's 7-year-old dog, Bronco, was killed in a half- submerged body-gripping trap while they were grouse hunting. ²⁶⁴ Johnson and his friend tried their best to remove the trap, but the dog died on the riverbank. ²⁶⁵
2013	Canada	Family dog	Body- gripping	A family's collie, Arielle, was killed by a body-gripping trap. ²⁶⁶ The dog was found dead, tossed aside in a dike, with the trap removed from her neck. ²⁶⁷
2012	Minnesota	Family dog	Body- gripping	A six-year-old girl witnessed family dog Schatzie, a 2-year-old chihuahua mix, die after being caught in a body- gripping trap. ²⁶⁸ Schatzie and the child were walking on public hunting land. ²⁶⁹

²⁶⁰ Stephen Messenger, 'Miracle' Dog Exposes America's Shameful Use of Leghold Traps, THE DODO (Mar. 3, 2015, 8:17 PM) https://www.thedodo.com/miracle-dog-expose-trap-horror-1022299525.html.

²⁶¹ Id.

²⁶² Id.

²⁶³ Id.

²⁶⁴ Hunter Asks for More Trapping Regulations After Dog Dies in Conibear, CBS MINNESOTA (Dec. 18, 2014, 10:46 PM), https://www.cbsnews.com/minnesota/news/hunter-asks-for-more-trapping-regulations-after-dog-dies-in-conibear/. ²⁶⁵ Id.

²⁶⁶ Family Dog Killed in Conibear Trap, THE FUR-BEARERS (Jun. 10, 2013), https://thefurbearers.com/blog/family-dog-killed-in-conibear-trap/.

²⁶⁷ Id.

 ²⁶⁸ Dave Orrick, Weekend Dog Death Highlights Dangers Of Small Traps, Too, TWIN CITIES PIONEER PRESS (Oct. 24, 2012, 11:01 PM), https://www.twincities.com/2012/10/24/weekend-dog-death-highlights-dangers-of-small-traps-too/.
 ²⁶⁹ Id.

2011	Minnesota	Family dog	Body- gripping	A Minnesota man has been advocating to change Minnesota trapping laws after the death of his dog, Penni, at the hands of a body- gripping trap in 2011. ²⁷⁰ From 2012 to 2020, per the Minnesota Department of Natural Resources, at least 35 dogs have been killed in traps. ²⁷¹
2011	Oregon	Family dog	Body- gripping	A dog died in a body-gripping trap set out to catch nutria (large, non- native rodents) in 2011. ²⁷²
Unknown date	Canada	Family dog	Body- gripping	Kimberly Villeneuve is the co-author of a Canadian study on companion animals caught in traps. ²⁷³ Her husky, Yukon, "has a shorter front right leg because, as a puppy, he was captured in a body-gripping trap." ²⁷⁴ Yukon can no longer properly bend his leg as it was broken in two different locations. ²⁷⁵

As demonstrated by the above examples, leghold and body-gripping traps pose serious threats to companion animals and non-target wildlife, and consistently result in severe injuries and even death.

C. Traps fail to control animal populations effectively.

DEEP has previously justified trapping as a means of suppressing wildlife populations and removing "problem animal[s]," particularly coyotes.²⁷⁶ However, the literature demonstrates that for several

²⁷⁰ John Myers, *After Trapping Death of His Favorite Hunting Dog, Man Working to Change Minnesota Laws*, PARK RAPIDS ENTERPRISE (Dec. 18, 2020, 6:00 PM), https://www.parkrapidsenterprise.com/sports/northland-outdoors/after-trapping-death-of-his-favorite-hunting-dog-man-working-to-change-minnesota-laws. ²⁷¹ Id.

²⁷² Eric Mortenson, *Gresham Dog Dies in Conibear Trap Set Out To Catch Nutria*, THE OREGONIAN (Dec. 1, 2011, 5:05 PM), https://www.oregonlive.com/environment/2011/12/gresham_dog_dies_in_trap_set_o.html; *Maggie's Story: Save Our Pets*, YOUTUBE, https://www.youtube.com/watch?v=fMECC-_wx30 (last visited Apr. 1, 2024).

²⁷³ Kimberly A. Villeneuve & Gilbert Proulx, *Impact of Wild Mammal Trapping on Dogs and Cats: A Search Into an Unmindful and Undisclosed World, in* MAMMAL TRAPPING: WILDLIFE MANAGEMENT, ANIMAL WELFARE & INT'L STANDARDS 141, 148, Fig. 9 (Gilbert Proulx ed., 2022).

²⁷⁴ Id.

²⁷⁵ Id.

²⁷⁶ Hearing on H.B. 5566, An Act Concerning Leg-Hold Traps and Children's Safety, Before the Joint Committee Children 2013 Leg. (Conn. 2013) (testimony of Daniel Esty, Commissioner of DEEP),

https://www.cga.ct.gov/2013/kiddata/TMY/2013HB-05566-R000221-

Commissioner%20Daniel%20Esty,%20CT%20Department%20of%20Energy%20&%20Environmental%20Protection-TMY.PDF.

species, such as coyotes and many furbearers, lethal trapping is ineffective in achieving either aim.²⁷⁷ For example, despite decades-long, large-scale efforts to kill coyotes, the species' range has significantly expanded.²⁷⁸ Moreover, this justification fails to acknowledge the ecological importance of species subject to trapping, particularly in the face of a growing climate crisis, and the harm that removing them from the environment subsequently causes. These "undesirable and unintended consequences" of trapping underscore the need for DEEP to fulfill its "continuing responsibility" under CEPA to "use all practicable means" to "attain the widest range of beneficial uses of the environment" while avoiding such consequences.²⁷⁹

As a consortium of international wildlife control experts has written, "declining populations of many wildlife species and increases in the kind and number of human-wildlife conflicts in urbanizing areas raise serious questions about traditional wildlife control actions" such as "exclusion, trapping, hunting, poisoning, or otherwise destroying animals."²⁸⁰ Moreover, "a lack of efficacy of control methods in achieving desired outcomes, and changes in how people value animals have triggered widespread acknowledgment of the need for ethical and evidence-based approaches to managing such conflicts."²⁸¹ Rather than defaulting to traditional methods of lethal control, these experts encourage wildlife officials to follow seven guiding principles:

[E]fforts to control wildlife should begin wherever possible by altering the human practices that cause human-wildlife conflict and by developing a culture of coexistence; be justified by evidence that significant harms are being caused to people, property, livelihoods, ecosystems, and/or other animals; have measurable outcome-based objectives that are clear, achievable, monitored, and adaptive; predictably minimize animal welfare harms to the fewest number of animals; be informed by community values as well as scientific, technical, and practical information; be integrated into plans for systematic long-term management; and be based on the specifics of the situation rather than negative labels (pest, overabundant) applied to the target species.²⁸²

In many ways, CEPA's directives align with these principles. For example, CEPA instructs that "human activity must be guided by and in harmony with the system of relationships among the elements of nature,"²⁸³ and requires the state government to "attain the widest range of beneficial

²⁷⁹ Conn. Gen. Stat. § 22a-1a(b)(3).

²⁷⁷ William R. Clark & Erik K. Fritzell, *A Review of Population Dynamics of Furbearers, in* WILDLIFE 2001: POPULATIONS, 899–910 (Dale R. McCullough & Reginald H. Barrett eds., 1992).

²⁷⁸ See DEEP, Coyote, https://portal.ct.gov/DEEP/Wildlife/Fact-Sheets/Coyote (last visited Apr. 1, 2024) ("Coyotes were not originally found in Connecticut, but have extended their range eastward during the last 100 years from the western plains and midwestern United States, through Canada and into the northeastern and mid-Atlantic states. Coyotes were first reported in Connecticut in the mid-1950s. For the next 10 years, most coyote reports were from northwestern Connecticut. Coyotes eventually expanded their range throughout the entire state and are now a part of Connecticut's ecosystem."); Robert L. Crabtree & Jennifer L. Sheldon, *Coyotes and Canid Coexistence in Yellowstone, in* CARNIVORES IN ECOSYSTEMS: THE YELLOWSTONE EXPERIENCE, 155 (Tim W. Clark et al. eds., 1999),

https://www.projectcoyote.org/wp-content/uploads/2017/02/Crabtree-Sheldon.-1999.-Coyotes-in-Carnivors-in-Ecosystems.pdf (stating that coyote populations have tripled, in spite of "ineffective and costly and" efforts to control their populations).

²⁸⁰ Sara Dubois, et al., *International Consensus Principles for Ethical Wildlife Control*, CONSERVATION BIOLOGY 753, 754 (2017), https://conbio.onlinelibrary.wiley.com/doi/epdf/10.1111/cobi.12896.

²⁸¹ *Id.* at 753.

²⁸² Id.

²⁸³ Conn. Gen. Stat. § 22a-1.

uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."²⁸⁴ Trapping falls short by each measure, including the principle that efforts to control wildlife be "clear, achievable, monitored, and adaptive." As the following sections demonstrate, lethal control of species like coyotes and beavers fails to effectively reduce populations yet has serious ecological impacts.

1. Failure to Control Coyote and Furbearer Species Population Size and Density Over Time

Trapping is not an effective way to control the populations of many wild animals, including furbearers and coyotes. Both coyotes and furbearers exhibit "density-dependent responses," meaning that these species are often able to "bounce-back" from lethal control mechanisms, such as trapping, within a few months or seasons. As a result, trapping can backfire when used as a population control mechanism, either by resulting in an increase of an unwanted species in an area due to compensatory responses, or at the very least by providing no meaningful benefits over the long term, as compensatory responses balance out any mortalities from trapping.

The density-dependent responses that allow for animal populations to recover from lethal trapping—known colloquially as "the bounce-back effect"—include compensatory reproductive abilities and immigration.²⁸⁵ Populations with high trapping rates see increased litter sizes due to decreased competition for food, and these species are also able to begin reproducing at younger ages when lethal control efforts remove older animals in the population who would have prevented, via social dynamics, the younger animals from reproducing.²⁸⁶ Immigration from areas with less intense removal efforts also balances out any trapping related mortalities, since the gap in population left by trapping opens a spot for nearby animals to fill.²⁸⁷ For these reasons, a comprehensive review on the scientific literature on furbearer populations concluded, "[t]he combination of density-dependent effects in reproduction, mortality, and dispersal make it nearly impossible to 'control' populations of pest species by recreational/commercial harvest, or even intensive control efforts."²⁸⁸

Density-dependent compensatory responses are well-documented in coyote populations that have been subjected to lethal control mechanisms, leading scientists to conclude that "[c]oyote populations are able to maintain themselves, under considerable human-induced mortality, through behavioral adaptations and biological compensatory mechanisms such as increased rates of reproduction, survival, and immigration."²⁸⁹ Studies show that reduced coyote population size leads to increased pregnancy rates and litter sizes and reduced natural mortality.²⁹⁰

²⁸⁴ *Id.* § 22a-1a(b)(3).

²⁸⁵ See Elizabeth M. Kierepka, Effect of Compensatory Immigration on the Genetic Structure of Coyotes, 81 J. WILDLIFE MGMT. 1394, 1405 (2017).

²⁸⁶ See id. at 1404; Liaan Minnie, et al., Compensatory Life-History Responses of a Mesopredator May Undermine Carnivore Management Efforts, 53 J. OF APPLIED ECOLOGY 379 (2016).

²⁸⁷ Kierepka, *supra* note 285, at 1405.

²⁸⁸ William R. Clark & Erik K. Fritzell, *A Review of Population Dynamics of Furbearers, in* WILDLIFE 2001: POPULATIONS, 899–910 (Dale R. McCullough & Reginald H. Barrett eds., 1992).

²⁸⁹ William F. Andelt, *Coyote Predation, in* WILD FURBEARER MANAGEMENT AND CONSERVATION IN NORTH AMERICA 128, 136 (Milan Novak, et al. ed., 1988).

Likewise, density-dependent responses have been well-documented in various furbearer species.²⁹¹ One study showed that, despite efforts to remove striped skunks from a wildlife management area, skunk density and the desired ecological outcome (increased duck egg hatching) did not change from the pre-trapping baseline when measured one year after the trapping took place, meaning that the ecological impacts of the skunk removal were short-term, if significant at all.²⁹² In muskrats, the birth-to-trapping survival rates have been proven to increase dramatically after a corresponding increase in trapping and harvest of muskrats in the previous season, meaning that more young muskrats are able to survive to compensate for the loss of animals killed by trapping.²⁹³ Beavers also exhibit compensatory density-dependent responses;²⁹⁴ for this reason, trapping beavers is considered a short-term solution because new beavers will usually quickly relocate to the area where trapping has been conducted.²⁹⁵

Thus, based on the science of density-specific compensatory responses, trapping is not currently an effective means of wildlife population control for coyotes and furbearers.

2. Harm to Species Critical to Ecosystems and Climate Change Mitigation

CEPA's emphasis on the importance of conserving Connecticut's natural resources and environment is especially important in the face of the increasing threats posed by climate change.²⁹⁶ DEEP prides itself on being "[a] longtime leader on climate change" that "strives to develop and support forward-thinking climate-related policies and legislation."²⁹⁷ Yet its continued authorization of trapping undermines this goal, as trapping is frequently used to kill two species key to healthy ecosystems and mitigation of the impacts of climate change: beavers and coyotes. Trapping also often inadvertently harms bird species who are similarly ecologically important.

While, as shown in the previous section, trapping is largely ineffective as a means of wildlife control due to density-specific compensatory responses, trapping can still cause short-term decreases in these species' populations, since compensatory responses take some time to return species' populations to their baselines. During these periods of temporarily depressed populations, harm to the ecosystem may occur, since at least some ecologically significant animals are not present to play their role in the complex web of interactions that make up ecosystems. And the current regulations bring the risk that removal of beavers and coyotes will end up reducing populations beyond what compensatory responses can balance out.²⁹⁸ The current regulations do not set season limits, except

²⁹¹ Clark & Fritzell, *supra* note 288, at 899–910.

²⁹² Raymond J. Greenwood, *Influence of Striped Skunk Removal on Upland Duck Nest Success in North Dakota*, 14 Wildlife Society Bulletin 6, 9 (1986).

²⁹³ William R. Clark, Effects of Harvest on Annual Survival of Muskrats, 51(2) J. WILDLIFE MGMT. 265, 270 (1987).

²⁹⁴ Neil F. Payne, *Reproductive Rates of Beaver in Newfoundland*, 48(3) J. WILDLIFE MGMT. 912, 914 (1984); Mark S. Boyce, et al., *Seasonal Compensation of Predation and Harvesting*, 87 OIKOS 419, 420 (1999).

²⁹⁵ Michael Callahan, *Best Management Practices for Beaver Problems*, 53 ASS'N MASS. WETLAND SCIENTISTS NEWSL. 12, 12 (2005).

²⁹⁶ See Conn. Gen. Stat. § 22a-1.

²⁹⁷ DEEP, Climate Change, https://portal.ct.gov/DEEP/Climate-Change/Climate-Change (last visited Apr. 1, 2024).

²⁹⁸ As a clarifying matter, it should be noted that compensatory responses are only able to sustain wildlife populations up to a certain point; this means that, "for most wildlife species, hunting and trapping are compensatory to a threshold

for river otters and fishers.²⁹⁹ DEEP's trapping regulations therefore create an unacceptable risk that a particularly active trapping season reduces the population of ecologically significant species, causing harm to the ecosystem at large and reducing the state's resilience to climate change. And, even in the event that DEEP continues to hold, contrary to the evidence provided in this request, that the trapping of beavers is an effective population control tool, trapping still leads to many "undesirable and unintended consequences"³⁰⁰ for the following ecological reasons.

"[A]s climate change increases the frequency of sudden, heavy rainstorms here in New England, there's a role for beavers to play in mitigating flooding and runoff pollution."³⁰¹ Trapping beavers can have detrimental ecosystem impacts, especially in fragile wetlands. Maintaining and protecting Connecticut's wetlands is of critical importance; more than a third of endangered and threatened species in the United States live in wetlands, and almost half of endangered and threatened species rely on them in some way.³⁰²

Beavers have been recognized by ecologists as "ecosystem engineers," and the removal of beavers from an ecosystem can have serious deleterious impacts on the ecosystem as a whole.³⁰³ Conversely, when beaver-based structures are left alone or encouraged, there are countless benefits to ecosystems; for example, beaver dams help recharge aquifers and reduce waterborne particles and toxins.³⁰⁴ Additionally, beaver-managed floodplains are biodiversity hotspots and major carbon sinks.³⁰⁵ Beavers help to create well-connected floodplains, which are dynamic hydrologic systems that have a number of diverse flow pathways for water to move through at different rates, are "inherently more resilient to disturbance than impaired streams," and are "more productive than disconnected floodplains in part because of their ability to retain and extract the chemical potential energy of the watershed's biotic (organic) components."³⁰⁶ Connected floodplains are "more diverse and productive, not only for aquatic species, but across the entire floodplain" and help make the entire floodplain region both better able to mitigate climate change and more resilient.³⁰⁷

But, "[w]hen we remove beaver from streams and rivers, or prevent them from re-establishing in their ancestral watersheds, the stream-floodplain system falls into disrepair."³⁰⁸ One major

point and additive thereafter, which means that below a certain level, hunting or trapping mortality has little effect on populations but as it increases past that level, it will reduce populations." Michael R. *Conover, Effect of Hunting and Trapping on Wildlife Damage*, 29 WILDLIFE SOCIETY BULLETIN 521, 523 (2001); Boyce, *supra* note 294.

²⁹⁹ Regulations of Connecticut State Agencies, Sec. 26-66-7 (2020).

³⁰⁰ Conn. Gen. Stat. § 22a-1a(b)(3).

³⁰¹ Miriam Wasser, *Getting A-Log: More in Mass. Seek Coexistence with Beavers*, WBUR (Oct. 15, 2019) https://www.wbur.org/news/2019/10/15/beaver-solutions-flow-devices-mike-callahan.

³⁰² *Why are Wetlands Important?*, UNITED STATES ENVIRONMENTAL PROTECTION AGENCY (Mar. 22, 2023) <u>https://www.epa.gov/wetlands/why-are-wetlands-important</u>.

³⁰³ Richard E. Brazier et al., Beaver: Nature's Ecosystem Engineers, 8 WIRES WATER 1, 1 (2021).

³⁰⁴ Callahan, *supra* note 295, at 12.

³⁰⁵ Chris E. Jordan & Emily Fairfax, *Beaver: The North American Freshwater Climate Action Plan*, 9 WILEY INTERDISCIPLINARY REVIEWS: WATER 1, 8 (2022); *see also* Brazier et al., *supra* note 303, at 10, 12-16.

³⁰⁶ Jordan & Fairfax, *supra* note 305, at 3.

³⁰⁷ *Id.* at 4.

³⁰⁸ Id. at 7 (emphasis added).

consequence of this disrepair is that it causes waters to warm and become eutrophic.³⁰⁹ Eutrophic waters are waters that become overly enriched with microorganisms, bacteria, and algae, which triggers severe ecological degradation once they begin to decompose.³¹⁰ This decomposition uses up the dissolved oxygen in the water, changes the pH of the water, blocks light, and may even release toxic byproducts into the water.³¹¹ For these reasons, eutrophic waters can no longer sustain their previous fish and wildlife populations.³¹²

The removal of beavers may also result in drier landscapes that become prime fuel for wildfires. Additionally, disconnected floodplains have reduced capacity to accommodate flood waves, since disconnected floodplains lack the diversity of flow pathways found in connected floodplains that would allow water to disperse throughout the ecosystem during inundation.³¹³ Simply put, killing beavers results in the loss of many wetland benefits including "aquifer recharge; decreased erosion; reduction of waterborne particles, toxins, and excess nutrients; decreased downstream flooding; maintenance of the water table; sustaining downstream flows during dry periods; and the preservation of open space."³¹⁴

Coyotes, another common target of trapping, are also important to supporting climate-resilient ecosystems. Predators such as coyotes generally play an important role in ecosystems, since interactions between predators and prey species may ripple through the food web.³¹⁵ Research indicates that coyotes can play a key role in reducing the population of mesopredators, small carnivores that are principal predators of birds and other small vertebrates.³¹⁶ Absent a strong coyote population to keep them in check, smaller mesopredators can significantly reduce bird and small mammal diversity in a given area.³¹⁷ As mesopredator populations increase as a result of the loss of the top-down predator pressure, biodiversity also decreases.³¹⁸ Coyotes also help keep rodent and lagomorph populations under control,³¹⁹ as these animals are an important part of coyotes' diets.³²⁰

Wild birds also play an important role in many ecosystems, which is part of the reason they are protected by both state and federal law. Mallards and other waterfowl help to maintain the biodiversity of wetlands, as they disperse plant seeds and aquatic invertebrates throughout the

³¹¹ Id.

³¹⁹ See Jose M. Fedriani et al., Does Availability of Anthropogenic Food Enhance Densities of Omnivorous Mammals? An Example with Coyotes in Southern California, 24 ECOGRAPHY, 325, 325 (2001).

³⁰⁹ Id. at 8.

³¹⁰ Chislock et al., *Eutrophication: Causes, Consequences, and Controls in Aquatic Ecosystems*, 4 NATURE EDUC. KNOWLEDGE (2013).

³¹² Jordan & Fairfax, *supra* note 305, at 7.

³¹³ *Id.* at 4-5.

³¹⁴ Callahan, *supra* note 295, at 12.

³¹⁵ Scott Henke, *Ecosystem Impacts of Predators, in* The Role of Predator Control as a Tool in Game Management 39, 39 (2001) (symposium publication).

³¹⁶ Kevin R. Crooks & Michael E. Soulé, *Mesopredator Release and Avifaunal Extinctions in a Fragmented System*, 400 NATURE 563, 563 (1999).

³¹⁷ Id.

³¹⁸ Thomas M. Newsome et al., Top predators constrain mesopredator distributions, 8 NATURE COMMC'NS, May 2017, at 1.

³²⁰ Edward B. Mondor et al., The Ecology of Carrion Decomposition, NATURE EDUC. KNOWLEDGE (2012).

ecosystem when they travel from one area to another.³²¹ This dispersal and transport function is critical to fragile wetland ecosystems.³²² Even though wetlands are increasingly fragmented and, therefore, more vulnerable to biodiversity loss due to development,³²³ mallards and other waterfowl may nonetheless ensure that fragmented wetland habitats are able to maintain a degree of bioconnectivity,³²⁴ even if the wetlands otherwise have become geographically isolated from one another.³²⁵ Mallards also have extraordinarily predictable movements as they move from one wetland to another.³²⁶ This "suggests that other organisms such as prey, predator and dispersed species, may adapt to optimize their interactions with – and hence, dependency on – these animals," meaning that mallards may "be more of a wetland keystone species than previously thought."³²⁷

Raptors, also known as birds of prey, "provide critical ecosystem services based on their role in natural food chains."³²⁸ They are "key predators and scavengers," and they serve as an important natural rodent control mechanism.³²⁹ Vultures in particular have "highly specialized digestive systems [that] efficiently eradicate diseases when consuming carrion," curbing the spread of diseases between wildlife and humans.³³⁰ "Globally, 18% of raptors are threatened with extinction and 52% have declining populations," despite being considered a "species of particular importance in conservation."³³¹ Human-induced mortality is a major factor in raptors' decline, as raptors' high placement in the food chain and slow life history make them "sensitive to anthropogenic threats."³³²

3. Humane alternatives to trapping exist.

The seven guiding principles of wildlife control, discussed above, instruct that wildlife control efforts should "predictably minimize animal welfare harms to the fewest number of animals."³³³ The use of alternatives to leghold and body-gripping traps—including box traps, cage traps, flow management devices, proper fencing, one-way doors that allow an animal to leave a building and not re-enter the same way, and public education—constitute "practicable means"³³⁴ that would manage wildlife populations and interactions while avoiding the "undesirable and unintended consequences"³³⁵ of leghold and body-gripping traps. These alternatives are superior to leghold and

³³⁵ *Id.* § 22a-1a(b)(3).

³²¹ Erik Kleyheeg et al., *Movement patterns of a keystone waterbird species are highly predictable from landscape configuration*, 5 MOVEMENT ECOLOGY, Feb. 2017, at 2.

³²² See *id*.

³²³ Bradley J. Cosentino & Robert L. Schooley, *Dispersal and Wetland Fragmentation*, in THE WETLAND BOOK 1, 1 (Springer eds. 2016).

³²⁴ Erik Kleyheeg et al., supra note 321, at 12.

³²⁵ See generally Cosentino & Schooley, *supra* note 323.

³²⁶ Erik Kleyheeg et al., supra note 321, at 12.

³²⁷ Erik Kleyheeg et al., supra note 321, at 12.

³²⁸ Dobromir Dobrev et al., Conservation and Ecology of Raptors: Introduction to the Special Issue, 15 DIVERSITY 1, 1 (2023).

³²⁹ Raptors at the Wildlife Center, GEORGIA SOUTHERN UNIVERSITY, CTR. FOR WILDLIFE EDUC., Mar. 21, 2022

https://academics.georgia southern.edu/wildlife/animals/raptors/.

³³⁰ Evan R. Buechley and Çağan H. Şekercioğlu, *The avian scavenger crisis: Looming extinctions, trophic cascades, and loss of critical ecosystem functions*, 198 BIOLOGICAL CONSERVATION 220, 220 (2016).

³³¹ Dobrev et al., *supra* note 328, at 1.

³³² Christopher J.W. McClure et al., *State of the world's raptors: Distributions, threats, and conservation recommendations*, 227 BIOLOGICAL CONSERVATION 390, 391 (2018).

³³³ Dubois, *supra* note 280, at 753.

³³⁴ Conn. Gen. Stat. § 22a-1a(b).

body-gripping traps because they are less injurious to the trapped animals, causing significantly less suffering. Many of them can be more readily tailored to specific species, meaning protected birds and companion animals are less likely to be caught.

In many situations, box and cage traps provide a more humane and effective method of capturing target animals when placed in a suitable location and checked frequently. Various trapping resources have discouraged the use of padded leghold traps to catch beavers.³³⁶ Instead, they champion the use of the Hancock live trap, a cage-style trap, due to its increased efficacy and the fact that it can be set in "many more locations."³³⁷ Moreover, a study comparing cage traps to leghold traps found that, while injuries suffered by animals in cage traps were generally minor and involved mostly self-inflicted abrasions to the face," animals caught in leghold traps "were more seriously injured."³³⁸

Beaver populations can be effectively managed with flow management devices, which prevent flooding by providing a mechanism through which water can pass without the beavers "noticing or being able to stop it."³³⁹ These devices allow communities to reap the benefits of a thriving beaver population without being subject to excessive flooding. The simple device is protected by an underwater cage that keeps beavers away so they do not realize water is being diverted.³⁴⁰ These long-lasting devices save communities money; an analysis of 43 flow devices installed in one town revealed that taxpayers saved nearly \$8,000 annually.³⁴¹ A typical flow device installation costs about \$1800, including parts, and lasts 7–10 years, if not longer.³⁴² This is more cost-effective than hiring trappers every year. Trappers can charge roughly \$300 to set up their equipment and an additional \$200 per beaver caught.³⁴³ These costs quickly add up each year, as there are normally between 4 and 8 beavers in a family,³⁴⁴ and new beavers are quick to relocate to areas where other beavers have been trapped.³⁴⁵

When it comes to coyotes, many nonlethal control methods can be used to protect people, companion animals, and farmed animals. These methods include fencing, livestock guards, and hazing devices that emit stimuli like strobe lights, sirens, and repellant chemicals.³⁴⁶ Additionally, one of the best ways to combat unwanted coyote interactions is public education. Instead of relying on the killing of individual members of a population who will easily be replaced through the bounce-back effect, communities would be better served by promoting the use of wildlife-proof garbage

³³⁹ Miriam Wasser, Getting A-Log: More In Mass. Seek Coexistence With Beavers, WBUR (Oct. 15, 2019),

https://www.wbur.org/news/2019/10/15/beaver-solutions-flow-devices-mike-callahan.

³³⁶ See Milan Novak, Beaver, in WILD FURBEARER MANAGEMENT AND CONSERVATION IN NORTH AMERICA 282, 301 (Milan Novak, et al. ed., 1988).

³³⁷ Id.

³³⁸ Robyn Molsher, *Trapping and Demographics of Feral Cats (Felis Catus) in Central New South Wales*, 28 WILDLIFE RSCH. 631, 632 (2001).

³⁴⁰ Id.

³⁴¹ Id.

³⁴² Ex. B, Diane Honer Decl, ¶ 8, Nov. 29, 2023.

³⁴³ Id.

³⁴⁴ Id.

³⁴⁵ Callahan, *supra* note 295, at 12.

³⁴⁶ See William F. Andelt, *Coyote Predation, in* WILD FURBEARER MANAGEMENT AND CONSERVATION IN NORTH AMERICA 128, 130-132 (Milan Novak, et al. ed., 1988).

containers and encouraging residents to keep fruit and birdseed off the ground, keep barbecue grills clean, clear brush near buildings, and close off crawl spaces under decks.³⁴⁷ Coyote hazing kits, described above in Section III.B.2, can also be effective tools for deterring attacks by coyotes.³⁴⁸

IV. Conclusion

Leghold and body-gripping traps inflict extreme suffering; endanger non-target species, including companion animals and state- and federally-protected birds; fail to effectively control many wildlife populations; and harm species critical to ecosystems and climate change mitigation. DEEP's current trapping regulations are failing to prevent these "undesirable and unintended consequences" or meet modern environmental protection practices and values.

Therefore, we request that the Commissioner conduct a review of the DEEP's trapping policies in accordance with CEPA's requirement that state agencies "review [their] policies and practices to insure that they are consistent with the state's environmental policy[.]"³⁴⁹We urge DEEP to fulfill its "continuing responsibility" under CEPA "to use all practicable means" to "improve and coordinate state plans, functions, programs, and resources" in order to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences."³⁵⁰

³⁴⁷ See Coexisting with Coyotes, PROJECT COYOTE (2015), HTTPS://WWW.PROJECTCOYOTE.ORG/WP-

 $^{{\}rm content/uploads/2015/10/Coexisting_Brochure_oct2015.pdf}.$

³⁴⁸ Ex. A, Allyson Halm Decl., ¶ 17, Nov. 21, 2023.

³⁴⁹ Conn. Gen. Stat. § 22a-1b(a).

³⁵⁰ *Id.* § 22a-1a(b).