White Buffalo Inc.
Conserving Native Species and Ecosystems

White Buffalo Inc., founded in 1995, is a 501(c)(3) nonprofit wildlife management and research organization dedicated to conserving native species and ecosystems through damage and population control. We also sponsor, support, and conduct scientific research and educational efforts to improve the understanding of natural resources for the purpose of conservation. Our approach is unique, in that we generate funding for conservation research by providing management alternatives in non-traditional settings.

## Contact Information

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## Population Reduction Programs

To date, White Buffalo Inc. personnel have lethally removed over 10,000 deer. As a result of these programs more than 200,000 pounds of venison have been donated to various food shelters.

**Brookhaven National Laboratory, Upton, NY:**
February 2015 - 300 deer harvested over 3.5 days
March 2017 - 202 deer harvested over 6 days
April 2019 - 250 deer harvested over 7 days

**Burnsville, Minnesota** (38 square miles)**:**
November 2001 - 21 deer harvested in 2 days
November 2002 - 67 deer harvested in 7 days
January 2003 - 24 deer harvested in 7 days
March 2004 - 36 deer harvested in 4 days

**Catoctin Mountain Park, Thurmont, Maryland** (8 square miles):
February 2021 - 67 deer harvested in 5 days
February 2022 - 57 deer harvested in 7 days
February 2023 - 86 deer harvested in 10 days
February 2024 - 83 deer harvested in 9 days
February 2025 - 79 deer harvested in 9 days

**Crystal Airport, Minnesota:**
October 2000 - 11 deer were removed regional airport, over 2 days, to eliminate the chance of deer strikes on the runway.

**Des Peres, Missouri:**

January 2023 - 55 deer harvested over 11 days
January/February 2024 - 37 deer harvested over 5 days
January/February 2025 - 27 deer harvested over 7 days

**Dune Acres, Indiana** (1 square mile)**:**

February 1998 - 50 deer harvested over 5 days

**Eden Prairie, Minnesota** (36 square miles)**:**

November 1997 - 160 deer harvested over 15 days
November 1998 - 124 deer harvested over 11 days
November 1999 - 125 deer harvested over 8 days
November 2001 - 125 deer harvested over 7 days
November 2002 - 154 deer harvested over 14 days
March 2004 - 135 deer harvested over 11 days
November 2004 - 115 deer harvested over 8 days
November/December 2005 - 115 deer harvested over 14 days
November 2007 - 106 deer harvested over 11 days
November 2010 - 115 deer harvested over 14 days
November 2012 - 110 deer harvested over 14 days
November 2014 - 120 deer harvested over 12 days

**Edina, Minnesota:**

December 1999 - 40 deer harvested in 1 day
November 2001 - 30 deer harvested over 3 days
November 2002 - 26 deer harvested over 4 days

**Elk Mills, Maryland (FMC Stine Research Center):**

March 2023 - 50 deer harvested in 2 days

**Fairfax County, Virginia:** (Pilot program - 2 County-owned Parks)

January - February 2014 - 98 deer harvested, reduced densities below 20/mile$^2$
February 2015 - 40 deer harvested, reduced densities below 20/mile$^2$

**Fire Island National Seashore, New York:**

February 2020 - 230 deer harvested in 8 days
February 2021 - 98 deer harvested in 6 days
February 2022 - 113 deer harvested in 7 days
February 2023 - 112 deer harvested in 5 days
February 2024 - 98 deer harvested in 6 days
February 2025 - 75 deer harvested in 5 days

**George Reserve (University of Michigan), Pinckney, Michigan** (2 square miles enclosed)**:**
March 2001 - 103 deer harvested over 3 days for tuberculosis testing.

**Greenwich, Connecticut:** (Pilot program - 3 town-owned parcels)
March 2005 - 80 deer harvested over 4 days

**Iowa City, Iowa** (6 square mile area)**:**
January 2000 - 360 deer harvested over 10 days
December/January 2001 - 340 deer harvested over 21 days
December 2001 - 250 deer harvested over 18 days
November 2003 - 200 deer harvested over 14 days
February 2005 - 154 deer harvested over 9 days
January/February 2006 - 150 deer harvested over 11 days
January 2007 - 199 deer harvested over 14 days
January 2008 - 89 deer harvested over 8 days
February 2009 - 69 deer harvested over 15 days (2 Biologists only)
February 2010 - 57 deer harvested over 11 days (2 Biologists only)
December 2019 - February/March 2020 – 500 deer harvested over 38 days

**Long Island, New Hampshire** (2 square mile peninsula)**:**
November 1996 - 90 deer harvested over 3 days

**Lower Makefield, Pennsylvania** (Pilot program - 6 town-owned parcels)
February/March 2010 - 94 deer harvested over 9 days

**Monhegan Island, Maine** (1 square mile)**:**
April 1997 - 52 deer harvested over 3 days
April 1998 & March 1999 - remaining 27 deer harvested*
* Successful eradication of all deer on the island

**Mount Lebanon, Pennsylvania** (6 square mile)**:**
February/March 2016 - 115 deer harvested over 13 days
February 2017 - 55 deer harvested over 7 days
February 2018 - 57 deer harvested over 9 days
February 2019 - 44 deer harvested over 11 days
February 2020 - 35 deer harvested over 12 days

**National Park Service, Northeast Region:** We won this grant through a competitive process with the National Park Service to help address the ecological impacts of overabundant white-tailed deer in northeastern parks. Our duties include collaborating on deer management plans, supporting deer population monitoring, designing multi-acre exclosures to protect sensitive habitats, and implementing deer population reduction where needed. Throughout the project, we will coordinate closely with NPS staff, adaptively manage our activities, and provide annual progress and financial reports to ensure the project's conservation objectives are achieved over the full five-year period (2005–2009).

**Northern Indiana Public Service Company, Wheatfield, Indiana:**

March 1996 - 100 deer harvested over 4 days from a 2500-acre enclosed facility*

* Population estimated at 130 deer prior to reduction.

**Peaks Island, Maine** (1 square mile)**:**

February/March 2000 - 223 deer harvested over 8 days*

* Population was estimated at 240 before reduction.

**Princeton Township, New Jersey:**

February/March 2001 - 322 deer harvested over 15 days
January/February 2002 - 303 deer harvested over 27 days
February/March 2003 - 280 deer harvested over 21 days
January/February 2004 - 276 deer harvested over 27 days
January 2005 - 124 deer harvested over 13 days
February 2006 - 150 deer harvested over 15 days
February 2007 - 126 deer harvested over 14 days
February 2008 - 107 deer harvested over 15 days
January/February 2009 - 154 deer harvested over 19 days (2 Biologists only)
February/March 2010 - 148 deer harvested over 16 days (2 Biologists only)
February/March 2012 - 116 deer harvested over 16 days (2 Biologists only)
February/March 2013 - 159 deer harvested over 17 days (2 Biologists only)
February/March 2014 - 127 deer harvested over 18 days (2 Biologists only)
February/March 2015 - 250 deer harvested over 28 days (2 Biologists only)
February/March 2016 - 119 deer harvested over 21 days (2 Biologists only)
February/March 2017 - 63 deer harvested over 11 days (2 Biologists only)
February/March 2018 - 196 deer harvested over 21 days (3 Biologists)
February/March 2019 - 263 deer harvested over 26 days (3 Biologists)
February/March 2020 - 143 deer harvested over 20 days (3 Biologists)
February/March 2021 - 142 deer harvested over 20 days (3 Biologists)
February/March 2022 - 147 deer harvested over 15 days (3 biologists)
February/March 2023 - 125 deer harvested over 17 days (3 biologists)
February 2024 - 123 deer harvested in 17 days (3 biologists)
February 2025 - 124 deer harvested in 17 days (3 biologists)

**Ramsey County, Minnesota (Maplewood, St. Paul):**

November/December 2005 - 200 deer harvested over 12 days

**Rancho Santa Fe, California (SDRE Investments LLC):**

Lethal removal of coyotes, including site assessment, planning, and execution of removal operations using firearms. 2025 (pending)

**Roanoke, Virginia:**

January 2005 - 109 deer harvested over 7 days

**Solon, Ohio:**

March 2005 - 602 deer harvested over 37 days.
January/March 2006 - 400 deer harvested over 40 days
January/February 2007 - 150 deer harvested over 15 days
March 2008 - 175 deer harvested over 22 days
January/March 2009 - 250 deer harvested over 33 days (2 Biologists only)

**Swarthmore College, Swarthmore, Pennsylvania:**

December 2009/January 2010 - 31 deer harvested over 4 days
December 2010/January 2011 - 21 deer harvested over 4 days
December 2011/January 2012 - 9 deer harvested over 4 days
January-March 2013 - 21 deer harvested over 8 days
January-March 2014 - 19 deer harvested over 8 days
January-March 2015 - 28 deer harvested over 10 days
January-March 2016 - 19 deer harvested over 11 days
January-March 2017 - 21 deer harvested over 8 days
March 2018 - 15 deer harvested over 7 days
January-March 2019 - 20 deer harvested over 8 days
January-March 2020 - 21 deer harvested over 9 days
January-March 2021 - 31 deer harvested over 7 days
January-February 2022 - 19 deer harvested over 7 days
January-February 2023 - 20 deer harvested over 6 days
January-February 2024 - 22 deer harvested over 6 days
February-March 2025 - 23 deer harvested over 7 days

**Tega Cay, South Carolina:**

October-November 2024 - 200 deer sterilized via ovariectomy in 14 days

**Town and Country, Missouri:**

December 2009 - 112 deer harvested over 7 days
December 2010 - 75 deer harvested over 7 days
December 2011- Jan 2012 - 288 deer harvested over 28 days
December 2012 - 115 deer harvested over 11 days
January 2014 - 87 deer harvested over 8 days
January 2015 - 100 deer harvested over 9 days
January 2016 - 210 deer harvested over 21 days
January 2017 - 225 deer harvested over 19 days
January 2018 - 361 deer harvested over 35 days
January 2019 - 150 deer harvested over 18 days
January 2020 - 134 deer harvested over 19 days
January 2022 - 51 deer harvested over 7 days
January 2023 - 50 deer harvested over 7 days
January 2024 - 89 deer harvested over 11 days
January 2025 - 79 deer harvested over 11 days

**Tuxedo Park, New York:**
February 2012 - 98 deer harvested over 9 days

**Vassar College, Poughkeepsie, New York:**
January 2010 - 64 deer harvested over 2 days

**Wildwood, Missouri:**
January/February 2024 - 300 deer harvested over 26 days
January/February 2025 - 361 deer harvested over 31 days

## Capture

We are experienced and fully equipped to provide capture services (i.e., drop-nets, rocket-nets, remote immobilization equipment). Using various techniques, White Buffalo Inc. personnel have captured over 4,000 deer as well as feral pigs, water buffalo, feral goats, and elk.

**Bald Head Island, North Carolina:** We captured 18 deer using darting techniques for a GonaCon research project. In addition, we trained employees of the Conservancy and local volunteers in deer capture and handling techniques (January–March 2014).

**Bedford and Lewisboro, New York, USDA-ARS 4 Poster Lyme Disease Research*:**
May 1998 - 8 deer captured using darting techniques over 3 days
October 1998 - 12 deer captured using darting techniques over 3 days
Oct. /November 1999 - 40 deer captured using darting techniques over 8 days
*All deer captured were checked for number and distribution of ticks.

**Bluff Point/Mumford Cove, Groton, Connecticut:** Urban white-tailed deer habitat use and home range study - We volunteered our service and equipment to assist in capturing white-tailed deer as part of a state-conducted research project. Deer were captured using darting equipment (Winter 1995–96).

**Bridgeport, Connecticut:** We captured 18 deer using a combination of drop nets and darting techniques to apply an experimental Amitraz-impregnated collar to control ticks as part of a CDC Lyme disease research project (March 1999).

**Carlisle, Massachusetts:** We captured 27 deer using darting techniques and applied radio transmitter collars as part of a state organized research project to assess mortality rates of suburban deer populations in eastern Massachusetts (March 1999).

**Connecticut Agricultural Experiment Station, New Haven, Connecticut:** Genesis Laboratories is leading a two-year field trial in partnership with the Connecticut Agricultural Experiment Station to evaluate an oral fipronil-laced bait for controlling blacklegged and lone star ticks on white-tailed deer. The study will be conducted at large, wooded sites in and around Bridgeport and Norwalk, Connecticut, including Lake Success Business Park and Manresa Island.

**Connecticut Agricultural Experiment Station, New Haven, Connecticut:** The CDC-funded study aims to optimize and standardize the suppression of host-seeking Ixodes scapularis (blacklegged tick) and interrupt pathogen transmission by administering systemic acaricides orally to white-tailed deer and Peromyscus species across high-risk sites in the Northeast. The research is scheduled over five years, with Year 1 (baseline) beginning in 2023 and intervention years spanning 2024–2026, potentially extending into 2027 for final analyses and publication.

**Connecticut Agricultural Experiment Station, New Haven, Connecticut:** We captured 38 deer using darting techniques for researchers to assess the effectiveness of oral delivery of the systemic acaricide Moxidectin to white-tailed deer in the management of the pathogen vectors *Amblyomma americanum* and *Ixodes scapularis*. Part of a Connecticut Agricultural Experiment Station research project (Summer and Fall 2021–2022).

**Connecticut College Arboretum:** We removed deer completely to prevent damage to native plant collections and research plots. We inspected and repaired the perimeter fence to ensure it was deer-proof. We then captured the 3 remaining deer enclosed in the 100-acre arboretum using darting techniques. Deer were released outside the fence on Connecticut College property (January 1996).

**Fort Indiantown Gap, Pennsylvania:** We captured, tagged, and radio-collared 61 deer for a research project for the National Guard Training Center (March 2019, February 2021).

**George Reserve, Pinckney, Michigan:** We captured 25 deer over 3 days using darting techniques for a doctoral research project (University of Michigan). In addition, we trained a doctoral student and technician in deer capture and handling techniques (November 1997).

**Lake Gaillard Reservoir, Connecticut, Connecticut Agricultural Experiment Station:**
We captured, tagged, and radio-collared 35 deer for a research project (November 2000).

**Michigan DNR, Midland, Michigan**: Captured feral pigs to deploy GPS collars to assess their movements and habitat usage (August 2015).

**Old Lyme, Connecticut, USDA-ARS 4 Poster Lyme Disease Research:**
We captured 11 deer using darting techniques to apply radio-transmitter collars and to assess the number and distribution of ticks (April 1999).

**Point Reyes National Seashore, California**: Captured elk to deploy GPS collars to assess elk movements relative to conflicts with ranches (October 2012).

**Staten Island, New York:** Captured over 2,500 white-tailed deer as part of an intensive sterilization program for New York City Parks and Recreation (2016–2023). Captured an additional 60 deer to deploy GPS collars in 2021/2022 and 2022/2023 to determine the behavioral impact of the sterilization program.

**Staten Island, New York (Columbia University):** Captured 45 white-tailed deer to deploy GPS collars (March 2023). Captured 30 and 16 deer for a SARS CoV2 study in January and March 2024, respectively. Captured 47 deer for a SARS CoV2 study (August 2025).

**Towson, Maryland, USDA-ARS 4 Poster Lyme Disease Research**:
We captured 11 deer using darting techniques over 3 days to assess the number and distribution of ticks (November 1998).

## Research

We are committed to further understanding causes and solutions to wildlife/human conflicts. We assess alternative management techniques for a variety of species.

## Fertility Control Research

**"South Euclid, Ohio White-Tailed Deer Combined Surgical Sterilization and Sharpshooting Program", South Euclid, Ohio**: This study is designed to compare the combination of sharpshooting and surgical sterilization to sharpshooting only zones within South Euclid, Ohio.

December 2021 - Captured and sterilized 61 deer over 9 days
January 2023 - Captured and sterilized 43 female deer over 6 days
January 2024 - Captured and sterilized 24 female deer over 5 days
January 2025 - Captured and sterilized 40 female deer over 5 days

**"Demographic and behavioral impacts of an intensive male sterilization program for free-ranging white-tailed deer", Staten Island, New York:** We captured >2,400 male deer (≥98% of the male population) using darting techniques and performed vasectomies on these animals (September 2016–February 2025).

**"Examining the effectiveness of surgical sterilization and sharpshooting as a combined approach for managing suburban white-tailed deer populations", Ann Arbor, Michigan:** We captured 54 females over 7 days using darting techniques and performed ovariectomies. We also culled 96 deer over 7 days in select open spaces (January/February 2017 - Year 1 of a five-year project). We captured 18 females over 5 days using darting techniques and performed ovariectomies. We also culled 115 deer over 13 days in select open spaces (January 2018 – Year 2). We captured 6 females over 3 days using darting techniques and performed ovariectomies. We also culled 112 deer over 16 days in select open spaces (January 2019). In the final year we culled 109 deer over 17 days in select open spaces (January 2020).

**"Field sterilization of white-tailed deer", Mt Storm Park, Cincinnati, Ohio:** We captured 41 females over 6 days using darting techniques and performed ovariectomies (December 2015). We captured 10 females over 3 days using darting techniques and performed ovariectomies (January 2017). We captured 11 females over 6 days using darting techniques and performed ovariectomies (January 2018). We captured 4 females over 3 days using darting techniques and performed ovariectomies (August

2018). We captured 7 females over 4 days using darting techniques and performed ovariectomies (January 2019). In the final year we captured 9 females over 7 days using darting techniques and performed ovariectomies resulting in >98% of the females sterilized (November 2019 – February 2020).

**"Field sterilization of white-tailed deer", Village of East Hampton, New York:** We captured 114 females over 12 days using darting techniques and performed ovariectomies (January 2015). We captured 46 females over 8 days using darting techniques and performed ovariectomies. We also performed 50 vasectomies on males (November 2015).

**"Field sterilization of white-tailed deer", National Institutes of Health, Bethesda, Maryland:** We captured 24 females over 3 days using darting techniques and performed ovariectomies (December 2014). We captured 5 females in 1 day using darting techniques and performed ovariectomies (December 2015). We captured 8 females in 1 day using darting techniques and performed ovariectomies (December 2016). We captured 2 females in 1 day using darting techniques and performed ovariectomies (December 2017). We captured 3 females in 1 day using darting techniques and performed ovariectomies (February 2019).

**"Field sterilization of white-tailed deer", Fairfax City, Virginia:** We captured 18 females over 6 days (January/February 2014), 18 females over 5 days (January 2015), 6 females over 3 days (December 2015), 5 females over 3 days using darting techniques and performed ovariectomies/tubal ligations (December 2016), and 5 females over 3 days using darting techniques and performed ovariectomies/tubal ligations (January 2018).

**"Field sterilization of black-tailed deer", The Villages Golf and Country Club, San Jose, California:** We captured all females (99) over 9 days using darting techniques and performed ovariectomies/tubal ligations (January/February 2013). We captured 9 females using darting techniques and performed ovariectomies (October 2013). Population estimates were derived using local demographics and the known number of females in conjunction with Distance sampling surveys. Detailed data on immigration and survival rates also were collected (November 2014).

**"Field sterilization of white-tailed deer", Cayuga Heights, New York:** We captured 137 females (>97% of females present) over 14 days using a combination of drop nets and darting techniques and performed ovariectomies (December 2012). We captured all remaining females (n = 12) using darting techniques and performed ovariectomies (December 2013). We captured 6 females over 2 days using darting techniques and performed ovariectomies (March 2016). Population estimates were derived using local demographics and the known number of females in conjunction with camera surveys at baited locations. Detailed data on immigration and survival rates also were collected.

**"Field sterilization of white-tailed deer", Wildlife Rescue, Phoenix, Maryland:** We captured 32 dogs over 8 days using darting techniques and performed ovariectomies (February 2011). We captured 14 does over 5 days using darting techniques and performed ovariectomies (February 2012). We captured 9 does over 3 days using darting techniques and performed ovariectomies (February 2013 and 2014). We captured 11 does over 4 days using darting techniques and performed ovariectomies (February 2015). We captured 14 does over 6 days using darting techniques and performed ovariectomies (February

2022). We captured 15 does over 6 days using darting techniques and performed ovariectomies (February 2023). Population estimates were derived using local demographics and the known number of females in conjunction with direct observations at baited locations. Data on immigration and survival rates also were collected.

**"Evaluation of hand-injection versus dart administered GonaCon in female white-tailed deer", Bridgeport, Connecticut:** A research project to determine the relative efficacy of the GonaCon vaccine when administered via two different approaches (Jan 2013–Feb 2014).

**"Field sterilization of white-tailed deer", Town and Country, Missouri:** We captured 100 does using a combination of drop nets and darting techniques and performed ovariectomies (December 2009). We captured 30 doings over 6 days using darting techniques and performed ovariectomies (December 2010). Population estimates were derived using Distance sampling methods.

**"Feasibility and efficiency of field sterilizations via tubal ligation/ovariectomy in female white-tailed deer", Bridgeport, Connecticut:** A research project to determine the relative efficiency of sterilization procedures compared to Immunocontraceptive vaccines (2008–2011).

**"Efficacy evaluation of the GonaCon immunocontraceptive vaccine in fallow deer: an EPA pivotal field study", Point Reyes National Seashore, California:** This study is to be conducted as a requirement of the EPA authorization process for a New Animal Drug. The primary objective is to verify the magnitude and duration of a single shot of GonaCon™ on female fallow deer. Seventy did were captured and treated (July 2007–2009).

**"Efficacy evaluation of the GonaCon Immunocontraceptive vaccine in white-tailed deer: an EPA pivotal field study", Giralda Farms, Madison, New Jersey:** This study is to be conducted as a requirement of the EPA authorization process for a New Animal Drug. The primary objective is to verify the magnitude and duration of a single shot of GonaCon™ on female white-tailed deer. Sixty-six dogs were captured and treated (July 2005–2009).

**"Experimental density maintenance using infertility agents of a suburban population of white-tailed deer following a reduction using sharpshooting techniques", Newark, Delaware:** A research project to assess the utility of combining fertility control methods with lethal management options within a 600 acre privately owned facility. Twenty-one deer were captured and 100 harvested (August 2005–2008).

**"Experimental control of a suburban population of white-tailed deer using immunocontraception", Princeton Township, New Jersey:** A research project to assess the practicality and feasibility of reducing, then maintaining the local deer population, within a 3-mile$^2$ area of town, at approximately 40/deer/mile$^2$ using SpayVac and GonaCon™. To date, 105 have been captured and treated. The first year's funding was provided by White Buffalo Inc. (March 2003–2008).

**"Evaluation of alternative PZP immunocontraceptive formulations in female white-tailed deer", Bridgeport, Connecticut:** A research project to determine the relative efficacy and longevity of various formulations of the PZP vaccine (June 2000–2007).

**“Cost-effectiveness of maintaining an enclosed deer population using antifertility agents after an initial population reduction using sharpshooting techniques”, Duke Farms, Hillsborough, New Jersey:** A research project to assess the utility of combining fertility control methods with lethal management options within a 2700 acre privately owned facility. Forty deer were captured and 221 harvested (November 2004–2006).

**“Experimental control of an urban population of white-tailed deer using contraception”, Cleveland, Ohio:** A research project to assess the feasibility and practicality of using a contraceptive agent to reduce herd size in the Ohio and Erie Canal Reservation. Over 300 deer were captured. Funding provided by the Cleveland Metroparks (March 2001–2005).

**“Experimental control of an enclosed suburban population of white-tailed deer using contraception”, Bridgeport Connecticut:** Designed and implemented a research protocol to assess the feasibility and practicality of using a contraceptive agent to maintain herd size (June 1999–June 2000).

## Lyme Disease Research

**"An Integrated and Individual Tick Management Program to Reduce Risk of Lyme Disease in a Residential Endemic Area", Redding, Connecticut**: A collaborative effort between White Buffalo Inc. and the Connecticut Agricultural Experiment Station to evaluate whether localized deer population reductions can reduce *Ixodes* tick abundance and subsequent risk of Lyme disease. Funding provided by the Center for Disease Control (September 2012–August 2015).

**"Control of the tick, Ixodes scapularis Say, on white-tailed deer at a suburban Lyme disease focus", Old Lyme, Connecticut:** A collaborative effort between White Buffalo Inc., the Connecticut Agricultural Experiment Station, Yale University, and the United States Department of Agriculture-Agricultural Research Service to evaluate a four-poster feeder system to control deer ticks on free-ranging white-tailed deer in a suburban community. Funding provided by the United States Department of Agriculture (USDA) (August 1997–July 2002).

**"Control of the tick, *Ixodes scapularis* Say, on white-tailed deer at an urban Lyme disease focus", Bridgeport, Connecticut**: A collaborative effort between White Buffalo Inc. and the Connecticut Agricultural Experiment Station to evaluate an experimental Amitraz-impregnated collar to control ticks on an enclosed white-tailed deer population. Funding provided by the Center for Disease Control (March 1999–February 2000).

**"Control of the tick, *Ixodes scapularis* Say, on white-tailed deer at an urban Lyme disease focus", Bridgeport, Connecticut:** A collaborative effort between White Buffalo Inc. and the Connecticut Agricultural Experiment Station to evaluate a four-poster feeder system to control deer ticks on an enclosed white-tailed deer population. Funding provided by the Center for Disease Control (CDC) (May 1997–February 1999).

## Other Research

**"Lana'i: A comparison of sUAS (drone), camera trap, and helicopter ungulate population estimates in Hawaii".** With the assistance of a grant from the National Fish and Wildlife Foundation, we partnered with Island Conservation and Hawaii Division of Forestry and Wildlife to estimate axis deer and mouflon sheep density and distribution, and developed a monitoring program in the Kuahiwi a Kai program area on Lana'i, Hawaii. The main activities to accomplish these goals included 1) estimating distribution and density of ungulates using sUAS (drone) with infrared sensors and trail-camera technology that can be extrapolated to the rest of Lana'i, 2) comparing these efforts with traditional helicopter estimates, and 3) developing a repeatable monitoring program for assessments in future years by Pūlama Lana'i resource managers.

**"Model-Guided Animal Prevalence Surveillance ("Project GAPS")", The Pennsylvania State University, State College, Pennsylvania:** A USDA-funded research project designed to detect Covid-19 in 58 North American species of wildlife. White Buffalo Inc. collected or made available samples from 30–50 white-tailed deer at up to 5 locations annually (2023–2025).

**"Infant survival and den site selection of female raccoons following removal and exclusion from residences", Hartford County, Connecticut**: A research project designed to assess the management implications of on-site release of female raccoons during the infant-rearing season (April 1998–2000).

**"White-tailed deer herd health assessment", Purdue University:** We coordinated and conducted deer harvest and capture operations and data collection to assess morphological and physiological parameters as indicators of individual deer condition. These data were then used to assess herd health of deer in hunted versus unhunted areas in Indiana. Research sites included Brown County State Park, Crane Naval Surface Warfare Center, Pigeon River State Fish and Wildlife Area, and Pokagon State Park (March 1996).

## International Research/Management Programs

**Dededo, Guam:** Successfully removed 311 feral pigs from Dededo, Guam to reduce feral pig damage and immigration to Marine Corps Base Camp Blaz (MCBCB). Work completed as part of the Readiness and Environmental Protection Integration (REPI) Challenge 2023: Landscape-scale feral pig control in northern Guam grant (2023–2025).

**Piti, Guam:** With a grant received from the U.S. Department of the Interior, Office of Insular Affairs (OIA), our objective is to control wild pigs in Piti, Guam with the help of local landowners at the landscape scale using a novel and affordable pig trapping system that focuses on synchronized removal across a network of traps. We will collect new trapping data from field trials, including pig sign, the proportion of pigs captured, and staff/landowner hours per pig removal. We hypothesize that a high percentage of pigs will be captured, significantly reducing local pig populations. We also hypothesize reduced environmental damage from wild pigs post-trapping efforts (2022–present).

**Sépaq Montreal National Parks, Quebec:**
November/December 2023 - 400 deer harvested over 5 days

**Sidney Island, British Columbia:**
December 2023 - 84 deer harvested over 11 days

**Guam:** Successfully completed a pig and Philippine deer eradication on Andersen Air Force Base (AAFB), Navy Base Guam (NBG), and Marine Corps Base Camp Blaz (MCBCB). A total of 63 deer and 26 feral pigs were removed from NBG properties (November 2024). A total of 115 deer and 74 feral pigs were removed from AAFB (August–November 2024). A total of 208 deer and 51 feral pigs were removed from MCBCB (August 2024–April 2025).

**Guam:** Successfully completed a pig and Philippine deer eradication on Andersen Air Force Base (AAFB), Navy Base Guam (NBG), and Marine Corps Base Camp Blaz (MCBCB). A total of 206 deer and 25 feral pigs were removed from NBG properties (September–November 2023). A total of 155 deer and 75 feral pigs were removed from AAFB (July–November 2023). A total of 50 deer and 5 feral pigs were removed from MCBCB (September–November 2023).

**Guam:** Successfully completed a pig and Philippine deer eradication on Andersen Air Force Base (AAFB), Navy Base Guam (NBG), and Marine Corps Base Camp Blaz (MCBCB). A total of 206 deer and 25 feral pigs were removed from NBG properties (September–November 2023). A total of 155 deer and 75 feral pigs were removed from AAFB (July–November 2023). A total of 50 deer and 5 feral pigs were removed from MCBCB (September–November 2023).

**Guam:** Successfully completed a pig and Philippine deer eradication on AAFB and NBG. A total of 307 deer and 121 feral pigs were removed from AAFB (July–September 2022). A total of 22 deer and 18 feral pigs were removed from NBG properties (September–October 2022).

**Guam:** Successfully completed a pig and Philippine deer eradication on AAFB and NBG. A total of 310 deer and 165 feral pigs were removed from AAFB (September–December 2021). A total of 41 deer and 73 feral pigs were removed from NBG properties (October–November 2021).

**Guam:** Successfully completed a pig and Philippine deer eradication project on ~260-acres of MCBCB. Forty-five feral pigs and 321 deer were removed using dog-supported ground shooting (August 2021–October 2021).

**Guam:** Successfully completed a pig and Philippine deer eradication project on ~400-acres of MCBCB. 75 feral pigs and 256 deer were removed using dog-supported ground shooting (April 2020–November 2020).

**Guam:** Conducted feral pig eradication monitoring on NBG and ungulate control on the Naval Munitions Site. Thirty-six re-migrant feral pigs were removed from NBG using dog-supported ground shooting. A total of 300 ungulates (191 Philippine deer; 109 feral pigs) were removed from the Naval Munitions Site in 13 days using ground shooting techniques (August 2019–October 2019).

**Guam**: Implemented a water buffalo (Carabao) management project on NBG - Naval Magazine. Twenty-three male water buffalo were captured and vasectomized to control reproduction in the local herd (May 2018). Twelve male carabao were sterilized resulting in a reproductively defunct residual population (August 2019). Five additional yearling males were captured and sterilized in October–November 2021.

**Guam:** Successfully captured 9 feral pigs and 9 Philippine deer on AAFB. Animals were released with GPS collars to monitor their movement patterns on the installation (July 2019).

**Guam:** Performed lethal feral pig removal from NCTMS using a combination of UXO-compliant corral traps and ground shooting techniques. One hundred and forty-one pigs were removed in 13 days (March 2019).

**Guam**: Successfully completed a pig eradication project on NBG (November 2017 – March 2018). We also successfully eradicated pigs and Philippine deer in an 80-acre fenced exclosure on the Naval Munitions Site (April 2018).

**Quebec, Canada**: Implemented a white-tailed deer sampling and depopulation program for the Quebec Ministry of Forests, Wildlife, and Parks to address a CWD outbreak in a captive deer farm. We euthanized 750 white-tailed deer and sampled for CWD. We also trained Wildlife Officers to professional cull free-ranging deer (September–December 2018).

**Haida Gwaii, British Columbia**: Participated in an international workshop to evaluate the feasibility of non-native deer eradication from isolated islands in the archipelago (May 2015). Designed an eradication program for non-native black-tailed deer and provided Parks Canada staff training (September 2015). Implemented eradication program for non-native black-tailed deer for Parks Canada (April–May 2017).

**Guam**: Developed a research project to assess the impacts and optimal control/eradication methods for non-native ungulates on AAFB and NBG (Philippine deer and feral pigs) (September 2014–May 2015).

**Botswana:** Assisted the Denver Zoological Society in capturing vultures to study their ecology and to determine causes of their decline. Vultures were captured with remotely launched nets and GPS units were attached (June 2012).

**Japan:** Consulted for the Japanese Ministry to establish a program to address Sika deer overpopulation issues. Designed a management and training program for government and university biologists (July 2010).

**Mongolia:** Assisted the Denver Zoological Society and the Mongolian Academy of Sciences in capturing threatened Argali Sheep and Ibex. The intent of the research is to study Argali ecology and to determine feasibility of repopulating areas where numbers have declined. Argali were remotely captured with darting equipment and drive nets, and radio-collars were attached (September 2002, April 2003, September 2003, 2004, and 2006).

**Bhutan:** Consulted for the Bhutan Ministry of Agriculture and the Bhutan Trust Fund to assess techniques and equipment used for wild pig control. Designed a research program that incorporated lethal components to address subsistence agricultural damage in remote villages (May 2003, October 2003).

**Galapagos National Park, Ecuador**: Participated in an international workshop to design a program for the eradication of feral goats on Isabela Island (9–18 September 1997).

## Miscellaneous Management Programs

**Cayuga Heights, Ithaca, New York:** Given statutes, the only remaining lethal option for deer population mitigation was to opportunistically capture deer using remote immobilization equipment from roadways, then euthanize them via lethal injection while they were under anesthesia. During the first year (2018) of capture and euthanasia efforts 45 deer were removed from the Village. In 2019, 15 deer were removed. In 2020, no deer management efforts were conducted due to the Covid-19 pandemic. In 2021, 2022, 2023, 2024, and 2025, 21, 19, 14, 11, and 16 deer were removed, respectively.

**National Institute of Standards and Technology, Gaithersburg, Maryland:** We collaborated with The Humane Society of the United States (HSUS) to captured 61 females over 8 days using darting techniques and performed ovariectomies (February 2016).

**General Motors Campus, Milford, Michigan:** We conducted a wildlife mitigation program to minimize risks associated with vehicles impacting wildlife during testing operations. These efforts included lethal removal of turkeys, coyotes, and deer using firearms (2021–2025).

**Andersen Air Force Base and Navy Base, Guam**: Efficiently and safely completed an intensive non-native ungulate (Philippine deer and feral pigs) control program. We removed over 600 deer and feral pigs using ground–based shooting techniques. To assess deer behavior, we capture and administered GPS collars. We also sampled 200 animals for disease surveillance research (March–May 2015).

**Channel Island National Park, Santa Rosa Island, California**: Successfully completed an island-wide non-native ungulate (mule deer and elk) eradication program. We removed deer and elk using ground and aerial shooting techniques. Some deer were captured from a helicopter using a net gun to serve as Judas animals (October 2011–November 2013).

**Point Reyes National Seashore, California**: Successfully completed a Park-wide non-native deer (Fallow and Axis deer) eradication program. We first implemented an EPA pivotal study using the GonaCon vaccine on 80 female Fallow deer. Deer were then live-trapped followed by euthanasia to reduce large group sizes. We then removed deer using ground and aerial shooting techniques. Some deer then were captured from the ground and from a helicopter using a net gun and dart rifle to serve as Judas animals. Finally, Fallow deer were captured and sterilized using ovariectomies (females) and vasectomies (on males) (June 2007–April 2009).

**Desecheo Island, Puerto Rico**: Participated in an island wide rhesus macaque eradication program. Feral macaques were removed using ground-shooting techniques during the day and at night (March 2009, April 2010, March 2011).

**Santa Cruz Island, California:** Implemented in an island wide turkey eradication program. Turkeys were removed using trapping, as well as ground and aerial shooting (Nov – Dec 2006).
Assisted in an island wide feral pig eradication program. Pigs were removed using trapping, as well as ground and aerial shooting techniques (May–July 2005).

**Catalina Island, California**: Participated in an island wide feral pig and goat eradication program. Feral goats were captured from the ground and from a helicopter using a net gun and dart rifle to serve as Judas goats. Pigs were live-trapped followed by euthanasia. Feral goats and pigs were removed using ground-shooting techniques (June–September 1998).

## Population Assessments

White Buffalo Inc. regularly conducts estimates of population size using sUAS (drone), spotlight surveys (distance sampling), or mark/re-sight techniques.

**Bedford and Lewisboro, New York:** We conducted helicopter snow counts to determine deer densities in study sites as part of the USDA-ARS 4-poster Lyme disease research project (March 1999, February 2000, February 2001).

**Chatham, New Jersey:** Distance sampling estimates to determine deer densities
(January 2007).

**Chesterfield, Missouri:** We conducted Distance sampling estimates to determine deer densities (January 2018, 2020).

**Des Peres, Missouri:** We conducted Distance sampling estimates to determine deer densities (January 2016, 2017, 2018, 2019, 2020, and 2022).

**Dune Acres, Indiana:** We conducted a white-tailed deer population estimate using spotlighting techniques and consulted with the community regarding the feasibility of implementing a white-tailed deer population reduction program (December 1996).

**Ellisville, Missouri:** We conducted Distance sampling estimates to determine deer densities (January 2015 and 2017).

**Fenton, Missouri:** We conducted Distance sampling estimates to determine deer densities (January 2020).

**Helena, Montana:** Distance sampling estimates to determine deer densities (October 2009).

**Howard County, Maryland:** We estimated deer density and distribution via a sUAS (drone) survey (March 2025–2027).

**Howard County, Maryland (Columbia Association HOA):** We estimated deer density and distribution via a sUAS (drone) survey (March 2025).

**Iowa City, Iowa:** We estimated deer density and distribution via a sUAS (drone) survey (February 2025).

**Kingston, Rhode Island:** We conducted helicopter snow counts to determine deer densities in study sites as part of the USDA-ARS 4-poster Lyme disease research project (February 1999, January 2001).

**Ladue, Missouri:** We conducted Distance sampling estimates to determine deer densities (January 2016, 2017, and 2018). Estimated deer abundance data (2025).

**Lana'i, Hawaii:** We estimated axis deer and mouflon sheep density and distribution via sUAS (drone) and camera trap methods (July 2024).

**Manchester, Missouri:** Distance sampling estimates to determine deer densities (March 2014).

**New Canaan, Connecticut:** We conducted a white-tailed deer population estimate using helicopter snow counts to determine deer densities throughout the community (February 2001).

**Old Lyme and Old Saybrook, Connecticut:** We conducted helicopter snow counts to determine deer densities in study sites as part of the USDA-ARS 4-poster Lyme disease research project (February 1999).

**Polson, Montana:** Distance sampling estimates to determine deer densities (January 2024).

**Princeton Township, New Jersey:** A helicopter snow count was conducted to determine deer densities throughout the community (December 2002). We conducted distance sampling estimates to determine deer densities (February 2011, April 2014, December 2015, March 2018).

**San Jose, California:** We conducted distance sampling estimates to determine deer densities in a private association - The Villages Golf and Country Club (September 2010, October 2012, November 2014).

**St. Albans, Missouri:** Distance sampling estimates to determine deer densities (January 2024).

**Sunset Hills, Missouri:** Distance sampling estimates to determine deer densities (December 2012, January 2014).

**Town and Country, Missouri:** We provided an assessment of deer management options for potential implementation in the community. We also conducted a white-tailed deer population estimate using spotlighting techniques (February 1997, December 2009–January 2020 annually, February 2022, February 2024).

**Ulster County, New York (Scenic Hudson):** We estimated deer density and distribution via a sUAS (drone) survey (February 2025).

**Upper Makefield, Pennsylvania:** We conducted Distance sampling estimates to determine deer densities (March 2010).

**Westport and Weston, Connecticut:** We conducted helicopter snow counts to determine deer densities in 2 communities as part of a CDC Lyme disease research project (February 2000).

**Wildwood, MO:** Estimated deer abundance from data produced by city (2024–2025).

## Consultations, Training and Hunt Management

Initial consultations are conducted to provide site-specific cost and feasibility assessments for all management/research options. In addition, a comprehensive report can be prepared that details all organizational aspects (social, legal, and technical) necessary for implementation of any management technique. We design sharpshooting programs, specify equipment requirements, and train participants in sharpshooting methods. We also design, organize, and oversee suburban hunting programs. Other consultations include deer browse surveys and human dimensions inquiry via focus groups and survey research to assist communities in assessing deer impacts and social carrying capacity for possible mitigation efforts.

- **Bloomington, IN** - 2019–2025
- **Montgomery, NJ** - February 2020
- **Edison, NJ** - April 2018
- **Catalina Island Conservancy** - June 2015
- **Mt Lebanon, PA** - August 2013; June 2015
- **NYSDEP; New York City watershed** - June 2015
- **North Haven, Long Island, NY** - August 2013
- **Binghamton University, NY** - January 2012
- **Village of Cayuga Heights, NY** - November 2011
- **The Villages Golf and Country Club, San Jose, California** - September 2010/October 2012/November 2014
- **Hudson, Ohio** - July 2010
- **Warrensburg, Missouri** - February 2009
- **Town and Country, Missouri** - July 2008
- **Shawnee Mission Parks, Kansa City, Kansas** - March 2008
- **Locust Hill Association, Cincinnati, OH** - January 2007
- **Chatham, New Jersey** - January 2007
- **Milburn, NJ** - August 2005

- **Bryn Gweled, Pennsylvania -** April 2005
- **Lake Metroparks, Concord Township, Ohio** - March 2004
- **Columbia Heights, Minnesota** - November 2003
- **Summit County Metroparks, Akron Ohio** - July 2003
- **Roanoke, Virginia** - March 2003
- **Bald Head Island, Wilmington, North Carolina** - December 2002
- **Ramsey County, Minnesota** - November 2002
- **Hamilton County Parks, Cincinnati, Ohio** - July 2002
- **Five Rivers Metroparks, Dayton Ohio** - July 2002
- **Biltmore Forest, North Carolina** - May 2001 and July 2002
- **Armand Bayou Nature Center, Houston, Texas** - October 2000
- **Maryland National Capital Park and Planning Commission** - July 2000
- **Barton Creek, Texas** - June 2000
- **Lakeway, Texas** - June 2000
- **Westport, Connecticut** - May 2000
- **Silver Springs, Maryland** - February 2000
- **Marinette, Wisconsin** - January 2000
- **George Reserve, Pinckney, Michigan** - November 1999
- **Goddard Space Flight Center, NASA, Greenbelt, Maryland** - November 1999
- **Iowa City, Iowa** - August 1999
- **Massachusetts Water Resource Authority, Weston, Massachusetts -** June 1999
- **Peaks Island, Maine** - June 1999
- **Detroit Metroparks, Michigan** - December 1998
- **Princeton, New Jersey** - September 1998
- **Reeves-Reed Arboretum, Summit, New Jersey** - September 1998
- **Amherst, New York** - May 1998
- **Fairmount Park, Philadelphia, Pennsylvania** - May 1998
- **Kinnelon, New Jersey** - February 1998
- **Edina, Minnesota** - December 1997
- **Gaithersburg, Maryland** - November 1997
- **Darien, Connecticut** - October 1997
- **Block Island, Rhode Island** - August 1997
- **Groton Long Point, Connecticut** - August 1996

**Arlington, Virginia:** Conducted deer browse surveys, focus groups, and online public surveys for Arlington County Parks and Recreation Department to inform future deer mitigation efforts (2022–2024)**.**

**Bluff Point/Mumford Cove, Groton, Connecticut**: Collaborated with Connecticut DEP to design and oversee a community-based controlled archery/shotgun hunt (November/December 2000).

**Burnsville, Minnesota**: Designed a deer population reduction program using sharpshooting techniques. Trained law enforcement personnel in field methods including shot selection and proper shooting techniques (October 2010).

**Cleveland Metroparks, Cleveland, Ohio**: Designed a deer population reduction program using sharpshooting techniques for the Cleveland Metroparks. Trained Park Rangers in field methods including shot selection and proper shooting techniques (December 1998/January 1999).

**Duke Farms Foundation, Hillsborough, New Jersey**: Designed, organized, and managed a controlled archery/shotgun hunt successfully reducing deer densities from >150 deer /mile squared to ~20 deer/mile squared (Fall 2005–present).

**Island Conservation, Santa Cruz, California**: Developed and administered a professional training program for biologists involved in wildlife population control, particularly non-native species eradication (November 2009/February 2010).

**Maryland National Park and Planning Commission, Maryland**: Designed a deer population reduction program using sharpshooting techniques for the Park Commission. Trained Park personnel in field methods including shot selection and proper shooting techniques (October 2000/January 2001/September 2007).

**Metroparks Serving Summit County, Akron, Ohio**: Designed a deer population reduction program using sharpshooting techniques for the Metroparks serving Summit County. Trained park rangers in field methods including shot selection and proper shooting techniques (November 2003/February 2004).

**Mt Lebanon, Pennsylvania:** Organized and managed a controlled archery hunting program in a 6 mile$^2$ community. Volunteer archers harvested 81 deer without incident (August 2015–January 2018).

**North Haven, New York**: Designed, organized, and managed a deer depredation program in a ~3 mile$^2$ community (Winter 2014).

**New York Police Department, Emergency Service Unit**: Developed and administered a professional training program to safely, humanely, and discreetly immobilize and euthanize wildlife (May 2018).

**Ram Island, New York**: Designed, organized, and trained local hunters for a deer depredation program (Winter 2016).

**Saint Elizabeth, Convent Station, New Jersey**: Designed, organized, and managed a controlled archery hunt on a 180-acre private school campus (Fall 2009).

**Shawnee Mission Park, Kansas**: Designed a deer population reduction program using sharpshooting techniques for the Johnson County Parks. Trained Park and law enforcement personnel in field methods including shot selection and proper shooting techniques. We removed 313 deer in 3 nights using sharpshooting techniques (September/November 2009).

**Teatown Lake Reservation, Ossining, New York**: Designed and organized a controlled archery hunt on an 875-acre private nature preserve (Fall 2014).

**Tokyo and Hokkaido, Japan**: Provided workshops and seminars on wildlife damage management techniques and advised on management options for sika deer. Conducted preliminary training for wildlife professionals on sharpshooting techniques and concepts (July 2010).

**Tuxedo Park, New York**: Designed a deer population reduction program using sharpshooting techniques for the Village of Tuxedo Park. Trained law enforcement personnel in field methods including shot selection and proper shooting techniques. We removed 98 deer in 9 nights using sharpshooting techniques (February 2012).

**Village of Cayuga Heights, New York:** Organized and managed a controlled archery culling program (crossbow only) in a 1.8 mile$^2$ community. Forty-eight deer culled over 8 days with zero deer wounded or lost (March 2015). Twenty-four deer culled over 8 days with zero deer wounded or lost (March 2016). Thirteen deer culled over 6 days with zero deer wounded or lost (February/March 2017).

## Educational Efforts

- NWCOA Sharpshooting training, Chester, CT. May 2023
- NWCOA Sharpshooting training, Chester, CT. March 2021
- Presented at the Northeast Fish and Wildlife Conference. Surgical sterilization of female white-tailed deer in suburbia. April 2019.
- Wild Horse and Burro Workshop, Albuquerque, NM. Applying wildlife management strategies to feral horse and burro fertility control programs. November 2018.
- Presented at the AVMA conference on Humane Endings. Planning for emergency killing of free-range animals. November 2018.
- Presented at the The Wildlife Society 25$^{th}$ Annual Conference. Surgical sterilization of female white-tailed deer in suburbia. October 2018.
- Wildlife Fertility Control Workshop, New York. Surgical sterilization of female white-tailed deer in suburbia. May 2018.
- 8$^{th}$ International Conference on Wildlife Fertility Control, Washington, D.C. July 2017
- Texas Parks and Wildlife Urban Deer Conference. San Marcos, TX. May 2015
- Presented at the AVMA conference on Humane Endings. Considerations when euthanizing wildlife with firearms. November 2014.
- NWCOA Sharpshooting training, Roanoke, VA. September 2014
- Presented at a deer management forum on surgical sterilization for the Village of East Hampton (NY) Preservation Society. July 2013
- Presented at the North American Deer Farmers Association Annual Conference. Chemical immobilization of captive Cervids. March 2011.

- Presented at the The Wildlife Society 17th Annual Conference. Suburban Hunter Education. October 2010.
- Presented at the 46th Annual Northeast Deer Technical Committee Meeting. Suburban Hunter Education. September 2010.
- Participated in a workshop organized by the University of Nebraska, Lincoln focused on sharpshooting training. August 2010.
- Presented at the 66th Annual Northeast Fish and Wildlife Conference. Suburban Hunter Education. April 2010.
- Participated in the Wildlife Society's summer field techniques course providing classroom lecture and field training in wildlife immobilization. June 2009 and May 2010.
- Provided a seminar on career development for high school students at Nonnewaug High School, Woodbury, Connecticut. April 2010.
- Presented for the Newtown, CT Lyme Disease Action Committee on deer management options and the potential effects on tick abundance. January 2010.
- Participated in a workshop organized by the University of Nebraska, Lincoln focused on immobilization and sharpshooting training. August 2009.
- Presented at the 65th Annual Northeast Fish and Wildlife Conference. Usage of a digital aerial sketch mapper for conducting aerial snow counts of deer. April 2009.
- Presented at the 64th Annual Northeast Fish and Wildlife Conference. GonaCon in Perspective. April 2008.
- Presented at Trinity College's Senior Biology Major Seminar. Discussions focused on contraception technologies and career options for Biology Majors. September 2007.
- Presented at the 63rd Northeast Fish and Wildlife Conference on the present status of infertility technology for deer. April 2007.
- Presented 2 seminars at Texas State University that summarized management techniques and the human dimensions of suburban deer management. October 2006.
- Spoke at 3 lectures for the "Connections Committee" of Cedar Rapids, Iowa. Discussed urban deer management, and the development and application of fertility control. October 2004.
- Presented data from the on-going fertility control research project in Princeton, N.J. to the Northeast Deer Technical Committee. September 2004.
- Guest lecturer, Rutgers University, Animal Sciences Department Seminar Series. Presented "*The Future of Fertility Control in White-tailed Deer Management*". Feb 2004.
- Presented at the 10th Annual Wildlife Society Conference held in Burlington, Vermont September 2003.
- Guest lecturer at Yale School of Forestry and Environmental Studies. Discussed the social, biological, technical, and political issues involved when managing wildlife populations. New Haven, Connecticut. April 1998, 1999, 2000, and 2001.
- Presented data from the 3-year urban raccoon study entitled *"Den site selection and movement patterns of female raccoons following removal and exclusion from residences"*, conducted in Hartford County, CT, at the Northeast Fish and Wildlife Conference held in Saratoga Springs, NY. April 2001.

- Presented data from the 3-year urban raccoon study entitled *"Den site selection and movement patterns of female raccoons following removal and exclusion from residences"*, conducted in Hartford County, CT, at the Eastern Wildlife Damage Conference held at the University of Pennsylvania. October 2000.
- Presented *"The Art and Science of Sharpshooting: one professional's perspective after five years"* at the joint Mid-west and Northeast Deer Technical Meeting held in Alpena, Michigan. August 2000.
- Participated in a Coe College Biology Seminar and Issues Discussion regarding the technical and social aspects of deer management. Cedar Rapids, Iowa. November 1999.
- Presented data from the Monhegan Island, Maine eradication program at the Northeast Deer Technical Committee Meeting in Greenville, Maine. September 1999.
- Taught the wildlife euthanasia portion of the Connecticut Nuisance Wildlife Control Operator's training course. Focused on approved euthanasia techniques for use on nuisance wildlife. Burlington, Connecticut. October 1998.
- Supervised 2 Yale University graduate students during internships with White Buffalo Inc. Activities included contraceptive delivery, home range assessment using radio-telemetry equipment, and capture techniques. In addition, 11 deer were captured, radio-collared, and movements monitored as part of the USDA-ARS 4-poster research project in Old Lyme, Connecticut. September 1998 – June 2000.
- Presented data from Long Island, New Hampshire, Eden Prairie, Minnesota, and Monhegan Island, Maine reduction programs at the 5th Annual Wildlife Society Conference held in Buffalo, New York. September 1998.
- Participated in the "Status and Future of Wildlife Fertility Control" Workshop and Panel Discussion at the 5th Annual Wildlife Society Conference held in Buffalo, New York September 1998.
- Presented at the annual National Nuisance Wildlife Control Operator's Conference. Discussed the social and political issues surrounding white-tailed deer population control. Bridgeport, New Jersey. February 1998.
- Presented data from Long Island, New Hampshire, and Monhegan Island, Maine deer reduction programs at the Midwest Fish and Wildlife Conference held in Milwaukee, Wisconsin. December 1997.
- Presented data from Long Island, New Hampshire deer reduction program at the Northeast Fish and Wildlife Conference held in Framingham, Massachusetts. April 1997.
- Presented data from Long Island, New Hampshire reduction program at the Southeast Deer Study Group Meeting held in Charleston, South Carolina. March 1997.

## References – upon request

## Board of Directors

**Mr. Gary Aurora**
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Gary is currently employed by the New Haven Board of Education as a teacher at the Hyde Leadership School. He is certified to teach Social Studies (grades 7–12) and has done so for over 30 years and has served as Dean of Students for numerous years. In addition, Mr. Aurora has coached 4 varsity level sport teams over the last 10 years. He received a BA from Colgate in Political Science and his JD from Quinnipiac School of Law. Gary also has obtained a 6th Year Certificate in Educational Leadership from Southern Connecticut State University (SCSU) and is certified in school administration. He has conducted diversity workshops for the Anti-Defamation League and been a guest speaker in an Anti-Bias course held at SCSU. Gary also is licensed by the State of Connecticut as a foster and adoptive parent.

**Robert Swihart, Ph.D.**
Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907
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Rob conducted undergraduate work at Butler University and Purdue University, obtaining a B.S. in Wildlife Science from Purdue in 1979. He graduated from Minnesota with a M.S. in Wildlife in 1981 and then moved to the University of Kansas to work on a Ph.D. as an Honors Fellow. He received his Ph.D. in Ecology in 1985. In 1986 Rob accepted a position as a research ecologist with the Connecticut Agricultural Experiment Station, where he investigated nonlethal methods for managing crop damage by wildlife in commercial nurseries and orchards. Since joining the faculty at Purdue in 1991, Rob and his students have conducted numerous studies examining the impact of agriculture and habitat loss/fragmentation on vertebrates. Rob has published over 100 manuscripts in scientific journals and served as the Dean of the School Forestry and Natural Resources at Purdue from 2004-2016.

**Robert J. Warren, Ph.D.**
University of Georgia, Athens, GA 30602
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Robert J. (Bob) Warren is a Professor Emeritus at the University of Georgia, where he worked as a Josiah Meigs Distinguished Professor in the Warnell School of Forestry and Natural Resources from 1983 until his retirement in 2016. From 1979–1983, he was on the Wildlife Faculty at Texas Tech University. He received a B.S. from Oklahoma State University and M.S. and Ph.D. from Virginia Tech. Bob's research interests included management of wildlife populations in parks and urban/suburban areas, predator ecology and management, and wildlife physiology. He is a Fellow and Past President of The Wildlife Society (TWS) and received the TWS Excellence in Wildlife Education Award in 2013 and the TWS Aldo Leopold Memorial Award in 2014.

**Anthony DeNicola, Ph.D.**
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Dr. DeNicola is co-founder and President of White Buffalo Incorporated. In 1988, Tony received a B.S. in Biology from Trinity College of Hartford, CT, and an M.S. from the Yale School of Forestry and Environmental Studies in 1990. He completed his Doctorate work at Purdue University in wildlife ecology in 1996. His dissertation was entitled "Control of reproduction in overabundant white-tailed deer populations". He is a member of the National Animal Damage Control Association, the Society for Conservation Biology and The Wildlife Society. He also is certified as a wildlife biologist (CWB) through the Wildlife Society. He has served as a Board member of the National Wildlife Control Operators Association (NWCOA) and is a member of the AVMA Depopulation Committee. Dr. DeNicola has 40+ publications in reputable scientific journals and has presented at numerous professional conferences. Tony's professional interests are behavioral/ecological approaches to wildlife damage control, wildlife reproductive control, and control of introduced vertebrate species. He has been involved with international research efforts assisting colleagues with capturing endangered Argali Sheep in Mongolia and vultures in Botswana and working with the Royal Government of Bhutan to establish a wild pig management program, and the Japanese Ministry to establish a program to address sika deer overpopulation issues.

**Vickie DeNicola**
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Vickie is the CEO/Founder of Field Engine Wildlife Research & Management, LLC, a Women-Owned Small Business, whose mission is two-fold: 1) to bring products to market that help advantage people and animals in the field, and 2) deliver services that bring solutions to problems associated with human-wildlife conflicts. She has participated in numerous wildlife-related field research and management projects. She is currently a Ph.D. student at the University of Trento C3A/Fondazione Edmund Mach studying the movement ecology of white-tailed deer in suburban environments. Vickie brings a unique perspective to WBI with many years of senior leadership experience from well-known organizations, including The Walt Disney Company, Hasbro, and ESPN, where she was focused on innovation with new technology. Her work was featured in the Wall Street Journal and received 2 Primetime Emmy nominations with one win. Vickie received an M.S. in Environmental Science and Policy from Johns Hopkins University. Her research interests include the use of biologging data to answer questions about animal movement, behavior, and resource usage, as well as the application of technology and techniques to address human-wildlife conflict.