New Hampshire
Fish and Game Department

11 Hazen Drive, Concord, NH 03301-6500
(603) 271-3421
FAX: (603) 271-5829

www.wildlife.nh.gov
Email: info@wildlife.nh.gov
TDD Access: Relay NH 1-800-735-2964

Stephanie L. Simek, Ph.D.
Executive Director

23

Her Excellency, Governor Kelly A. Ayotte
  and the Honorable Council
State House
Concord, NH 03301

December 22, 2025   **FEB 11 2026**

REQUESTED ACTION

Authorize the New Hampshire Fish and Game Department (NHFG) to enter into a **Sole Source** Cooperative Project Agreement (CPA) with the University of New Hampshire (Vendor No. 315187), Durham, NH, in the amount of $249,531 to conduct a research project in support of furbearers, moose, and select other big game species effective upon Governor and Council approval through June 30, 2030. Funding is 100% Federal Funds.

Funds are available in the following account for Fiscal Years 2026 and 2027 and are anticipated to be available in Fiscal Years 2028 - 2030, upon the continued appropriation of funds in the future operating budget with the authority to adjust encumbrances between fiscal years within the price limitation through the Budget Office, if needed and justified.

03 75 75 751520-21580000 – Wildlife Program – Game Management

20-7500-21580000-304-500841 Research and Management

FY26	FY27	FY28	FY29	FY30
$124,766	$37,430	$37,430	$24,953	$24,952

EXPLANATION

The NHFG proposes to enter into a CPA with the University of New Hampshire (UNH) to conduct this research. **Sole Source** is requested because of the University's past experience and success conducting research on a variety of species, including two research projects that serve as the foundation for this proposed monitoring project (*Statewide Wildlife Monitoring to Inform Management*). These previous projects validated the use of remote camera arrays to monitor abundance of furbearers and moose at a regional level throughout New Hampshire and has prompted NHFG to utilize the technique for long-term species monitoring and management. Researchers from the University have established and maintained the camera arrays that will be used in this research and have the expertise associated with data collection, analysis, and reporting. Entering into a CPA with anyone other than UNH would add cost to the project (i.e., reestablishing statewide camera arrays). Additionally, another cooperator may collect data in a different format reducing the comparability of results to past findings. The University will conduct the work as a sub-recipient under an approved federal award from the Fish and Wildlife Service and is contributing the required non-federal matching funds for the federal funding received resulting in no financial impact to the NHFG operating budget.

Her Excellency, Governor Kelly A. Ayotte
  and the Honorable Council

Furbearers, including bobcat, coyote, fisher, gray fox, and red fox, and moose are iconic and ecologically important species in New Hampshire. A 2024 survey found residents desire these species to exist just for their inherent value. Further, many of these species are uncommon or secretive and their presence contributes to the "wild" image of New Hampshire and the associated $280+ million annual wildlife viewing economy in the state. The high social interest and value of these species results in strong public opinions about their management. As such, the NHFG needs accurate information on their status to carry out effective management. The proposed research project will provide the abundance data necessary for the management of furbearers and moose, and will be expanded to include other big game species.

Population abundance is a key metric for managing wildlife populations, however collecting this data is challenging due to these species' cryptic nature, low density (i.e., moose, furbearers, bear), and/or tendency to occupy remote areas. In 2022-2025 cooperative work with the UNH, a statewide array of approximately 230 trail cameras was established, used to estimate furbearer and moose density, and tested for effectiveness. Similar to findings from studies across the globe, results indicated the camera array provides population estimates equally or more accurate than those from currently used methods. Additionally, the camera network provides other relevant management information, such as moose age and sex ratios. Reliable population status information from the camera network will enable NHFG to understand appropriate management options.

For these reasons, NHFG desires to continue monitoring furbearers, moose, and other big game species with this statewide array of trail cameras and UNH assistance is the most efficient approach to do so. Camera monitoring generates large volumes of data that need to be sorted and entered in population abundance models. This requires many hours of work and professionals skilled in using mathematical formulas, both of which are available at UNH. This **Sole Source** agreement with UNH is the most efficient approach for NHFG to collect data necessary to manage this diverse suite of species. Thank you for considering this request.

Respectfully submitted,
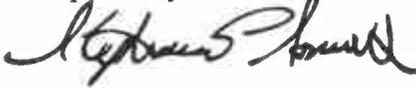
Stephanie L. Simek, Ph.D.
Executive Director
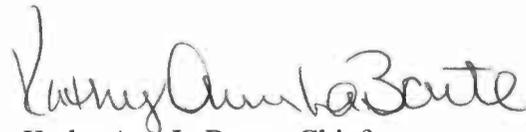
Kathy Ann LaBonte, Chief
Chief of Business Division

<div align="center">

COOPERATIVE PROJECT AGREEMENT
between the
STATE OF NEW HAMPSHIRE, **Fish and Game Department**
and the
University of New Hampshire of the UNIVERSITY SYSTEM OF NEW HAMPSHIRE

</div>

A. This Cooperative Project Agreement (hereinafter "Project Agreement") is entered into by the State of New Hampshire, **Fish and Game Department**, (hereinafter "State"), and the University System of New Hampshire, acting through **University of New Hampshire**, (hereinafter "Campus"), for the purpose of undertaking a project of mutual interest. This Cooperative Project shall be carried out under the terms and conditions of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, except as may be modified herein.

B. This Project Agreement and all obligations of the parties hereunder shall become effective on the date the Governor and Executive Council of the State of New Hampshire approve this Project Agreement ("Effective date") and shall end on **6/30/30**. If the provision of services by Campus precedes the Effective date, all services performed by Campus shall be performed at the sole risk of Campus and in the event that this Project Agreement does not become effective, State shall be under no obligation to pay Campus for costs incurred or services performed; however, if this Project Agreement becomes effective, all costs incurred prior to the Effective date that would otherwise be allowable shall be paid under the terms of this Project Agreement.

C. The work to be performed under the terms of this Project Agreement is described in the proposal identified below and attached to this document as Exhibit A, the content of which is incorporated herein as a part of this Project Agreement.

Project Title: **Statewide Wildlife Monitoring to Inform Management**

D. The Following Individuals are designated as Project Administrators. These Project Administrators shall be responsible for the business aspects of this Project Agreement and all invoices, payments, project amendments and related correspondence shall be directed to the individuals so designated.

State Project Administrator	**Campus Project Administrator**
Name: Kathy LaBonte	Name: Gretchen Swain
Address: NH Fish and Game Department 11 Hazen Drive Concord, NH 03301	Address: University of New Hampshire Sponsored Programs Administration 51 College Road Durham, NH 03824
Phone: 603-271-2741	Phone: N/A

E. The Following Individuals are designated as Project Directors. These Project Directors shall be responsible for the technical leadership and conduct of the project. All progress reports, completion reports and related correspondence shall be directed to the individuals so designated.

State Project Director	**Campus Project Director**
Name: Andrew Timmins	Name: Remington Moll
Address: NH Fish and Game Department 11 Hazen Drive Concord, NH 03301	Address: University of New Hampshire Natural Resources James Hall Rm 266 Durham, NH 03824
Phone: 603-271-1742	Phone: 603-862-3054

Campus Authorized Official DH
Date 11/24/25

F. Total State funds in the amount of **$249,531** have been allotted and are available for payment of allowable costs incurred under this Project Agreement. State will not reimburse Campus for costs exceeding the amount specified in this paragraph.

Check if applicable
☒ Campus will cost-share **26.68** % of total costs during the term of this Project Agreement.

☒ Federal funds paid to Campus under this Project Agreement are from Grant/Contract/Cooperative Agreement No. **F25AF02424 (W-89-R-22)** from **Department of Interior/Fish and Wildlife Service** under CFDA#**15.611**. Federal regulations required to be passed through to Campus as part of this Project Agreement, and in accordance with the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002, are attached to this document as Exhibit B, the content of which is incorporated herein as a part of this Project Agreement.

G. Check if applicable
☐ Article(s)   of the Master Agreement for Cooperative Projects between the State of New Hampshire and the University System of New Hampshire dated November 13, 2002 is/are hereby amended to read:

H. ☒ State has chosen **not to take** possession of equipment purchased under this Project Agreement.
☐ State has chosen **to take** possession of equipment purchased under this Project Agreement and will issue instructions for the disposition of such equipment within 90 days of the Project Agreement's end-date. Any expenses incurred by Campus in carrying out State's requested disposition will be fully reimbursed by State.
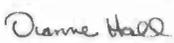
This Project Agreement and the Master Agreement constitute the entire agreement between State and Campus regarding this Cooperative Project, and supersede and replace any previously existing arrangements, oral or written; all changes herein must be made by written amendment and executed for the parties by their authorized officials.

IN WITNESS WHEREOF, the University System of New Hampshire, acting through the University of New Hampshire and the State of New Hampshire, have executed this Project Agreement.

By An Authorized Official of:
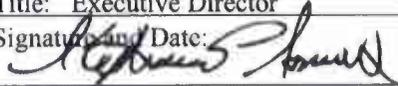**University of New Hampshire**
Name: Dianne Hall
Title: Manager of Pre-award Compliance
Signature and Date: _Dianne Hall_   Digitally signed by Dianne Hall Date: 2025.11.24 16:04:48 -05'00'

By An Authorized Official of:
NH Fish and Game Department
Name: Stephanie L. Simek, Ph.D.
Title: Executive Director
Signature and Date:

By An Authorized Official of: the New Hampshire Office of the Attorney General
Name: Joshua Harrison
Title: Assistant Attorney General
Signature and Date: 1/22/2026

By An Authorized Official of: the New Hampshire Governor & Executive Council
Name:
Title:
Signature and Date:

As to form, substance, and execution.

Campus Authorized Official__DH__
Date__11/24/25__

A. Project Title: Statewide Wildlife Monitoring to Inform Management

B. Project Period: December 1, 2025 – June 30, 2030

C. Objectives:

The overarching goal of this project is to use a statewide array of camera traps to camera traps to 1) act as a monitoring approach for multiple furbearer and big game (i.e., moose, deer, and bear), and 2) provide an independent data source for harvested species to help ensure the accuracy of harvest-based monitoring while increasing the precision of population parameters relevant to management. In addition, this proposed research will quantify wildlife-habitat relationships through geospatial analysis to inform management in a spatially explicit framework.

OBJECTIVE 1: To monitor medium- and large-bodied mammals across the state of New Hampshire.

OBJECTIVE 2: To estimate annual density or a reliable proxy thereof for species of management interest, including moose and furbearer species.

OBJECTIVE 3: To quantify species-habitat relationships and use them to build spatially explicit predictive species distribution maps.

OBJECTIVE 4: To compare outputs from Objectives 2 and 3 with other monitoring metrics such as harvest per unit effort.

OBJECTIVE 5: To provide ancillary data relevant for moose management.

D. Scope of Work:

OBJECTIVE 1: To monitor medium- and large-bodied mammals across the state of New Hampshire.

A statewide network of research sites (~250) established during previous cooperative Fish and Game and UNH research ("Evaluating Furbearer Monitoring Methods in New Hampshire", CPA #: F21AF01526; "Developing and Evaluating Novel Techniques for Moose Monitoring in New Hampshire", CPA #: F22AF00929) will be used for this work.

Wildlife will be monitored at these sites using camera traps in the field for the duration of this project. Methods will be used that maximize detection rates for wildlife. Previous work in this system has shown that sites monitored with a single camera produce adequate seasonal detection probabilities for population modeling.

To facilitate density estimation (described in Objective 2), two field camera checks will be employed per year, with the first in late spring to early summer and the second in fall. For the summer period, cameras will be programmed to take images continuously which creates data suitable for the current top performing density model (Random Encounter and Staying Time model). For the winter period, cameras will be programmed to have a five-minute delay between pictures. Different density models will be used in the winter and continuous images are not necessary.

Image processing will entail trained humans identifying wildlife in images to species and using algorithms or artificial intelligence to increase efficiency of processing images without compromising

accuracy. If a proxy of density can be used in place of direct density, field checks may be reduced to one check per year to increase efficiency.

OBJECTIVE 2: To estimate annual density or a reliable proxy thereof for species of management interest, including moose and furbearer species.

Camera image data from the summer will be used to estimate species-specific densities via the Random Encounter and Staying Time (REST) model. The REST model provides spatially explicit densities, but requires a continuous stream of images, which reduces battery operation time of cameras and carries a high cost of image processing. Therefore, alternatives to the REST model for estimating both density and relative abundance will be considered. It is possible that estimates for some low-density species, such as gray fox, might not be feasible or might have unacceptably high uncertainty. In such cases, simpler models will be considered such as occupancy models.

Camera image data from the winter will also be used to estimate density when possible. Winter density will be calculated using models other than the REST model because they are more robust to the variable animal movement rates observed during this time. These models do not require continuous images.

Density estimation methods that minimize data processing should be investigated and employed when likely to have reasonable precision.

OBJECTIVE 3: To quantify species-habitat relationships and use them to build spatially explicit predictive species distribution maps.

The density models used for Objective 2 estimate density at each site. These models will have habitat variables added to them and then used to estimate density, or a proxy thereof, across the landscape. Estimates will be calculated at the WMU, region, or statewide scale depending on sample size.

OBJECTIVE 4: To compare outputs from Objectives 2 and 3 with other monitoring metrics such as harvest per unit effort.

The spatially explicit estimates of species' density, relative abundance, or occupancy will be compared to similar values collected by NHFG. For furbearers, density will be compared with harvest per 100 trap nights at a regional level. For moose, density will be compared with the density index calculated using deer hunter observation rates at the WMU scale. Monitoring values used for comparison for bear, deer, and turkey vary and include an index to density or other indices such as a adult buck kill.

OBJECTIVE 5: To provide ancillary data relevant for moose management.

Adult moose sex ratio and calf to cow ratio will be estimated by fitting the density models described in Objective 2 to each sex and class (cows with calves and cows without calves). Sex and class will be determined during image analysis of summer data. The onset of permanent snow cover, which is used by NHFG for monitoring winter tick questing season length, will be estimated. Also, moose hair loss, a sign of winter tick parasitism, will be estimated using image data during late winter and early spring.

E. **Deliverables Schedule:**
Campus shall submit annual reports (by January 1) in a format acceptable to the State that includes data specific to Objectives 1-5 specified in Section C. Additionally, Campus shall provide

Campus Authorized Official DH
Date   11/24/25

the following on an annual basis:

a) For moose, estimates of density by WMU and estimates by WMU or region (as sample sizes allow) of adult sex ratio, calf to cow ratio, date of snow cover onset (3 days with snow), and a hair loss index; and

b) For furbearers, estimates of density, relative abundance, or occupancy by WMU for each species (bobcat, coyote, fisher, gray fox, and red fox).

Reports shall include a comparison of actual accomplishments during the reporting period against the established project objectives and include any significant developments that either result in problems, delays, or adverse conditions or which favorably impact the project. Campus shall submit an overall final report detailing activities and results of the project no later than 60 days after the Project Period end date (06/30/30). The final report shall also include: camera trap locations and the models used to derive density estimates and ancillary moose data. Campus shall also provide the State with any graduate thesis completed as a result of the project. Articles, publications, or media regarding the project and project results shall reference the funding support provided by the New Hampshire Fish and Game Department and the Wildlife Restoration program under federal grant F25AF02424 (NH W-89-R-22).

F. Budget and Invoicing Instructions:

Campus will submit invoices to State on regular Campus invoice forms no more frequently than monthly and no less frequently than quarterly. Invoices will be based on actual project expenses incurred during the invoicing period, and shall show current and cumulative expenses by major cost categories, and shall document cumulative cost sharing through the end of the invoicing period. State will pay campus within 30 days of receipt of each invoice. Campus will submit its final invoice not later than 75 days after the Project Period end date.

Budget Items	State Funding	Cost Sharing	Total
1. Salaries & Wages	119,526	42,164	161,690
2. Employee Fringe Benefits	1,094	16,992	18,086
3. Travel	28,138	0	28,138
4. Supplies and Services	13,803	0	13,803
5. Equipment	0	0	0
6. Facilities & Admin	86,970	31,648	118,618
7. F&A Under-recovery as Match	0	0	0
Subtotal Subaward Costs	**249,531**	**90,804**	**340,335**

Campus Authorized Official DH

Date 11/24/25

Budget Justification Narrative:

1. Salaries and Wages: $119,526
The budget provides 0.25 weeks of annual summer support each year for Dr. Moll to oversee and manage the project.

The budget provides 5 years of support for undergraduate field and laboratory technicians to perform field work and process image data, which entails approximately 750 hours per year in the field (two camera checks per year) and 500 hours per year to process images at an average rate of $16/hour.

2. Fringe Benefits: $1,094
Fringe benefits will be charged according to UNH's current federally approved benefits rates for the project period, at the "partial fringe benefits" rate for faculty and graduate student summer salary, and at the "full fringe benefits" rate for other full-time staff. Rates are 8.2% for partial benefits and 40.3% for full benefits (7/01/25 - until amended).

3. Travel: $28,138
The travel value reflects travel throughout New Hampshire required to conduct field work to perform two camera checks per year (approximately 7,500 miles per year for 5 years at the federal mileage rate assuming a 3% annual escalation).

4. Supplies & Services: $13,803
The budget provides for the replacement of approximately 12 camera setups annually at a cost of approximately $260 per set up, as follows: camera: $140; batteries: $12; security box: $35; cable lock: $21; 32 GB SD card: $7.

5. Equipment: $0

6. Facilities and Administrative Costs: $86,970
Facilities and Administrative Costs are calculated using modified total direct costs at the UNH federally negotiated rate, which is 53.5% at the writing of this proposal.

7. F&A Under-recovery as Match: $0

Total Campus Matching Costs: $90,804
Matching funds are provided via 0.79 months/year of the PI's academic year salary annually ($42,164) with associated UNH full fringe rate of 40.3% ($16,922) and F&A rate of 53.5% ($31,648).

G. Federal Award and Subaward Information:

The State, through New Hampshire Fish and Game Department (NHFG), is the recipient of federal grant award F25AF02424, titled "NH W-89-R-22," from the Department of the Interior, Fish and Wildlife Service. The approved grant incorporates the Campus proposal for research desired by NHFG and provides for a subaward of grant funds to Campus to conduct the project, as implemented through this Project Agreement. The following federal grant information and associated subaward information is included for reference and to comply with requirements for pass through entities in the federal assistance regulation at 2 CFR 200.332.
Through execution of this Project Agreement, Campus acknowledges that it is a subrecipient of federal funds through the State to complete the project.

Campus Authorized Official__DH__
Date__11/24/25

NHFG Subrecipient Agreement #:	NHFG-2026-02
Subrecipient Name:	University of New Hampshire
Subrecipient SAM UEI #:	GBNGC495XA67
Amount this Subaward:	$249,531
Budget Period of Subaward:	December 1, 2025 – June 30, 2030
Subaward is for R&D (yes/no):	No
Total Active Subawards to UNH:	$2,794,227.00
Prime Federal Grant Number:	F25AF02424
Federal Grant /Project Title:	W-89-R-22 Wildlife Research and Management
Federal Funding Agency:	United States Fish and Wildlife Service
Assistance Listing Number (ALN):	15.611 Wildlife Restoration
Prime Federal Grant Recipient:	State of New Hampshire, Fish and Game Department
Federal Award Date:	8/14/2025
Period of Performance:	July 1, 2025 – June 30, 2030
Budget Period:	July 1, 2025 – June 30, 2030
Total Award to NHFG:	$2,653,431.00

Campus Authorized Official DH
Date 11/24/25

EXHIBIT B

This Project Agreement is funded under a Grant/Contract/Cooperative Agreement to State from the Federal sponsor specified in Project Agreement article F. All applicable requirements, regulations, provisions, terms and conditions of this Federal Grant/Contract/Cooperative Agreement are hereby adopted in full force and effect to the relationship between State and Campus, except that wherever such requirements, regulations, provisions and terms and conditions differ for INSTITUTIONS OF HIGHER EDUCATION, the appropriate requirements should be substituted (e.g., OMB Circulars A-21 and A-110, rather than OMB Circulars A-87 and A-102). References to Contractor or Recipient in the Federal language will be taken to mean Campus; references to the Government or Federal Awarding Agency will be taken to mean Government/Federal Awarding Agency or State or both, as appropriate.

Special Federal provisions are listed here: ☒ None or as indicated below.

The federal regulations applicable to Department of the Interior (DOI), Fish and Wildlife Service recipients, subrecipients and contractors are incorporated by reference. DOI Financial Assistance Standard Terms and Conditions are available on the Internet at https://www.doi.gov/grants/doi-standard-terms-and-conditions. These requirements include, but are not limited to, the following, as applicable:

a. Program Authorization / Legislation: Wildlife Restoration (ALN # 15.611)

b. 2 CFR Part 200 Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards

c. 2 CFR Part 25, Universal Identifier and Central Contractor Registration

d. 2 CFR Part 170, Reporting Subawards and Executive Compensation

e. 2 CFR Part 175, Award Term for Trafficking in Persons (Term is applicable to private entity subrecipients)

f. 2 CFR Part 200.322, Procurement of Recovered Materials

g. 2 CFR Part 200, Appendix XII—Award Term and Condition for Recipient Integrity and Performance Matters (Applicable to awards with a total Federal share of more than $500,000)

h. 2 CFR Part 1400, Government-wide Debarment and Suspension (Non-procurement)

i. 2 CFR Part 1401, Requirements for Drug-Free Workplace (Financial Assistance)

j. 2 CFR Part 1402, Federal Assistance Interior Regulation, supplementing 2 CFR 200 Parts A-D

k. 43 CFR Part 17, Nondiscrimination in Federally Assisted Programs of the Department of the Interior

l. 43 CFR 18, New Restrictions on Lobbying.

m. Executive Order 13513, Federal Leadership on Reducing Text Messaging while Driving

Campus Authorized Official_DH___
Date_11/24/25___