



New Hampshire Fish and Game Department

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Scott R. Mason
Executive Director

November 7, 2023

His Excellency, Governor Christopher T. Sununu
and the Honorable Council
State House
Concord, New Hampshire 03301

REQUESTED ACTION

Authorize the New Hampshire Fish and Game Department 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 \$1,239,855 to conduct a research project in support of furbearer management (i.e., fishers) effective upon Governor and Council approval through June 30, 2027. Funding is 100% Federal Funds.

Funds are available in the following account for Fiscal Years 2024 and 2025, and are anticipated to be available in Fiscal Years 2026 and 2027, 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	<u>FY2024</u>	<u>FY2025</u>	<u>FY2026</u>	<u>FY2027</u>
	\$585,508	\$293,614	\$306,163	\$54,570

EXPLANATION

The Department proposes to enter into a CPA with the University of New Hampshire 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 ongoing furbearer research, and working with the Department. The University will be conducting 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.

The purpose of this project is to collect critical data related to fisher population dynamics in New Hampshire to aid in science-based decision-making necessary to manage for the long-term viability of the species while meeting the expectations of the state’s diverse users. Fisher populations have fluctuated between periods of decline and stability over the past 30 years and current abundance is notably lower compared to densities observed during the 1990s. Fisher harvest via regulated trapping and hunting have been significantly

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

- 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 **6/30/27**. 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: **Survival and Cause-specific Mortality of Fishers in New Hampshire**

- 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

Name: Kathy LaBonte
 Address: NH Fish and Game Department
11 Hazen Drive
Concord, NH 03301

Phone: 603-271-2741

Campus Project Administrator

Name: Dianne Hall
 Address: University of New Hampshire
Sponsored Programs Administration
51 College Road
Durham, NH 03824

Phone: 603-862-1942

- 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

Name: Andrew Timmins
 Address: NH Fish and Game Department
11 Hazen Drive
Concord, NH 03301

Phone: 603-271-1742

Campus Project Director

Name: Remington Moll
 Address: University of New Hampshire
Natural Resouces
James Hall Rm 266
Durham, NH 03824

Phone: 603-862-3054

EXHIBIT A

A. Project Title: Survival and Cause-specific Mortality of Fishers in New Hampshire

B. Project Period: November 1, 2023 – June 30, 2027

C. Objectives:

OBJECTIVE 1. To estimate survival and identify cause-specific mortality factors with broad health impacts on fishers.

Objective 1.1. To estimate fisher survival across multiple regions in New Hampshire.

Objective 1.2. To identify cause-specific mortality and factors with broad health impacts on fishers.

OBJECTIVE 2: To identify and measure home range size, habitat use, and patterns of dispersal and movement of fishers.

Objective 2.1. To quantify fisher space use, habitat associations, and dispersal.

D. Scope of Work:

OBJECTIVE 1. To estimate survival and identify cause-specific mortality factors with broad health impacts on fishers.

Objective 1.1. To estimate fisher survival across multiple regions in New Hampshire.

Fishers will be live-captured in winter (January – March) and equipped with satellite-linked GPS collars to monitor survival and enable detection of field mortalities, which will then be subject to field and clinical methods to determine cause-specific mortality. Prior to project initiation, UNH Institutional Animal Care and Use approvals will be obtained for all work. Fishers will be captured using covered cage traps and will be chemically sedated using approved techniques (e.g., sensu LaPoint et al. 2013). Individuals will be aged in the field and morphometric measurements will be taken following standard protocols (Poole et al. 1994). Fishers of sufficient body mass (approximately 1.5 kg or larger) will be fitted with satellite-enabled GPS collars. These collars will also include VHF transmitters with mortality sensors for field recovery. Multiple bids will be sought to source collars, including models manufactured by Telonics (e.g., model TGW-4170-4) and Lotek (e.g., LiteTrack Iridium 130-150). GPS locations and mortality signals from collars will be monitored in real time using information transmitted via email and cellular towers by Iridium or Globalstar transfer systems. Collars will be equipped with remote release mechanisms to facilitate field recovery when necessary. Upon suspicion of a field mortality, fishers will be located as soon as possible and a field necropsy will be performed (see Objective 1.2 below). Fisher carcasses will be transported to the UNH Veterinary Diagnostics Laboratory (NHVDL) for further processing as soon as possible following recovery, or, if such transport is not immediately possible, frozen at -40o C for later processing.

Individuals will be monitored until mortality, collar loss, or the end of the study period. A minimum target of 100 individuals will be captured and collared. Given annual fisher survival estimates based upon historical work (approximately 0.7), tracking 100 individuals over this study period should result in sufficient samples for survival estimates (minimum target of 50 mortalities;

Dynamic World land cover map (dynamicworld.app/), and USDA LANDFIRE vegetation maps (landfire.gov/). Dispersals will be identified via visual inspection of GPS data as well as dispersal-movement algorithms as needed (Jacobsen et al. 2020). Movement parameters (e.g., movement rates, tortuosity) will be calculated using time-series and temporal kernel analyses (Signer et al. 2019).

E. Deliverables Schedule: Campus shall submit quarterly progress reports in a format acceptable to the State and due within 30 days of the end of each calendar year quarter. 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 (06/30/27). The final report shall also include: sex-age-specific survival estimates; factors that influence survival and causes of mortality; health profiles for study animals including evidence of disease, parasites, and heavy metal and rodenticide bioaccumulation; prey classification; home range size; patterns of dispersal; and habitat selection analysis. Campus shall also provide the State with any graduate thesis completed as a result of the project. Any 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 F23AF03086 (NH W-115-R-1).

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. Invoices shall also document eligible cost share recorded during the period by category (e.g. PI salary, fringe, and cost share portion of F&A), as well as cumulative cost share through the end of the invoicing period. Campus shall provide supporting documentation for the amount of any invoiced payment requests and matching costs upon request by State, which may include invoices for supplies, equipment, or services, and reports of personnel, travel, and Facilities and Administration (indirect) costs. State will pay Campus within 30 days of receipt of each invoice. Campus will submit its final invoice not later than 60 days after the Project Period end date. Payment of final invoice shall be contingent upon receipt of deliverables and the final report. Campus shall permit the State and its auditors to have access to Campus records and financial documentation as necessary for the State to meet the requirements of federal assistance regulations with regard to this project.

Budget Items	State Funding	Cost Sharing	Total
1. Salaries & Wages	404,475	105,155	509,630
2. Employee Fringe Benefits	110,743	34,911	145,654
3. Travel	15,500	0	15,500
4. Supplies and Services	388,700	0	388,700
5. Equipment	63,000	0	63,000
6. Facilities & Admin	257,437	39,219	296,656
7. F&A Under-recovery as Match	0	234,000	234,000
Subtotal Subaward Costs	1,239,855	413,285	1,653,140

The budget provides \$1,000 for page charges for peer-reviewed publications in each of Years 3 and 4.

The budget provides \$6,000 a year in each of the final 3 years for bioinformatics work and genomic processing by the Hubbard Center for Genome Studies at UNH.

5. Equipment: \$63,000

The budget provides for a 4x4 field vehicle capable of transporting supplies and navigating terrain across all conditions required for the field work. Estimate is based upon a 2023 Ford F-150 XLT or equivalent with a 4x4 drivetrain and tow package.

6. Facilities and Administrative Costs: \$257,437

Facilities & Administrative (F&A; indirect) costs are calculated according to UNH's current negotiated rate agreement with the Federal government. The on-campus rate of 53.5% with a Modified Total Direct Costs base is applied to this project. Campus proposed, and will request, reimbursement at a reduced rate of 28% and will waive the balance of allowable F&A costs as part of Campus cost share to provide a portion of the non-federal match required for federal grant funds. This project crosses fiscal years and a composite rate may result, as actual indirect charges will depend on the rate approved and effective when costs are incurred.

7. F&A Under-recovery as Match: \$234,000

Campus is applying a reduced F&A rate of 28% to the reimbursed portion of project expenses. The difference between otherwise allowable F&A costs based on the university's negotiated rate agreement and the amount reimbursed (i.e. unrecovered F&A costs) will provide a portion of the Campus non-federal share of project costs.

Total Campus Matching Costs: \$413,285

Matching funds will be provided through Campus cost-sharing of the PI and Co-PI's salaries plus applicable UNH fringe rates and associated Facilities and Administration costs (F & A). These funds include an estimated 1.0 months/year of Dr. Moll's salary and 1.0 months/year of Dr. Needle's salary. A rate of 28% for F&A is also applied to these matching costs in addition to the F&A under-recovery amount provided as match.

G. Federal Award and Subaward Information:

The State, through New Hampshire Fish and Game Department (NHFG), is the recipient of federal grant award F23AF03086, titled "NH W-115-R-1 Survival and Cause-specific Mortality of Fishers in New Hampshire," 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.

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