

**Environment and Natural Resources Trust Fund
2016 Request for Proposals (RFP)**

Project Title:

ENRTF ID: 093-C

Hunters Choice: Alternative Ammunition

Category: C. Environmental Education

Total Project Budget: \$ 133,054

Proposed Project Time Period for the Funding Requested: 2 years, July 2016 to June 2018

Summary:

We will provide hunters with information on alternative hunting ammunition options and promote voluntary choice to use nontoxic ammunition and protect Minnesota's wildlife.

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Sponsoring Organization: U of MN

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Location

Region: Statewide

County Name: Statewide

City / Township:

Alternate Text for Visual:

Providing hunters information and promoting voluntary choice to use non-toxic ammunition and protect Minnesotas wildlife.

_____ Funding Priorities	_____ Multiple Benefits	_____ Outcomes	_____ Knowledge Base
_____ Extent of Impact	_____ Innovation	_____ Scientific/Tech Basis	_____ Urgency
_____ Capacity Readiness	_____ Leverage	_____ TOTAL	_____ %



PROJECT TITLE: Hunter's Choice: Alternative Ammunition

I. PROJECT STATEMENT

This program will provide hunters with information and hands-on experience involving non-toxic ammunition and promote voluntary change in hunter ammunition choices that will reduce unintended deaths in eagles and other wildlife. To achieve these goals, we will:

- Provide hunters the opportunity to experience the characteristics of different ammunitions
- Develop training materials for youth and adult hunters about making ammunition choices
- Leverage our relationships with retailers, ammunition manufacturers, and conservation groups to make our materials available to a larger audience.

Choice of ammunition by deer hunters has impacts on our environment and wildlife. Deer hunting is popular in Minnesota with almost 200,000 deer taken annually. Investigations on lead toxicity in non-target wildlife such as eagles have demonstrated that lead fragments from bullets disperse widely in the carcass and gut pile of hunter-killed deer, causing toxicity and death in eagles and other wildlife that scavenge on remains left in the field. Copper rifle ammunition is non-toxic and has been demonstrated to be effective with excellent accuracy, weight retention and quick kills, and is increasingly available at a cost comparable to premium grade copper-jacketed lead ammunition. In the past two years, The Raptor Center has convened several meetings to understand stakeholder perspective and define a way forward on this issue. Through these efforts, a broad coalition has come together to promote this grassroots effort, including the Minnesota DNR Non-game, MPCA and MN Deer Hunters Association. This group will collaborate on this project to achieve the following outcomes:

- Hunters will be informed about ammunition choices and the impacts of these choices
- Youth hunters will understand the importance of their ammunition choices for environmental stewardship
- Minnesota will be recognized as a leader among states in protecting bald eagles and other wildlife from lead toxicity while continuing to support hunting traditions of the state.

II. PROJECT ACTIVITIES AND OUTCOMES

Activity 1: Deliver 10 experiential learning opportunities reaching 200 hunters

Budget: \$51,551

Hands-on demonstrations where hunters will be able to experience the different characteristics of ammunitions using a model that shows how bullets fragment will be held throughout the state at shooting ranges and Conservation Officer trainings, as well as at Game Fair and the Governor's Deer Opener. In addition, demonstrations will be performed during youth hunter firearm safety workshops and at youth mentored deer hunts. Participants will be encouraged to draw their own conclusions about ammunition choices..

Outcome	Completion Date
1. Development of demonstration model and materials, including educational display	30 June 2017
2. Delivery of 10 workshops throughout state, goal of reaching 200 hunters	30 June 2018

Activity 2: Develop training materials on ammunition choices for 7,500 hunters

Budget: \$ 49,251

Training materials will be developed and incorporated into Youth Firearm Safety classes and hunter education courses. Print materials designed for project will be translated for non-English speaking populations highly represented among hunters. A team of instructors will be trained on integrating the educational materials into hunter safety and youth firearm courses which will be piloted in the fall of 2016. All materials will provide information relating to the voluntary use of non-toxic ammunition.

Outcome	Completion Date
1. Content developed for training materials	31 Dec 2016
2. Translation of materials	30 June 2017
3. Printed materials received – workshop handouts, pamphlet, signage	30 June 2017



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4. Development and delivery of training program for instructors	30 June 2017
5 Delivery of training via instructors to 7,500 youth and adult hunters	30 June 2018

Activity 3: Expand reach of program through partnerships

Budget: \$ 32,252

Working with partners in agencies, retail, manufacturing, and non-profits, programs will be created to provide opportunities for hunters to “try” copper ammunition. Volunteer-mentored youth hunts where young hunters have the opportunity to use copper ammunition will be piloted. The feasibility of an ammunition exchange program will be evaluated and a plan developed for future implementation. Finally, all participants in workshops, mentored hunts, and hunter education programs will be surveyed at the end of the deer season to determine degree of selection of and satisfaction with alternative ammunition

Outcome	Completion Date
1. Volunteer-mentored youth hunts reaching 100 youth/year	31 Dec. 2017
2 Feasibility analysis for a future ammunition exchange program	30 June 2018
3. Surveys to program participants	30 June 2018

III. PROJECT STRATEGY

A. Project Team/Partners

Julia Ponder – Univ. of MN (5% effort funded): Principle investigator responsible for oversight of overall project, educational curriculum modules and sponsor reporting

Carrol Henderson – MN DNR, Nongame (in-kind): Co-principle investigator responsible for management and facilitation of partnerships (agency, NGO, manufacturing, and retail) and oversight of ammunition workshops

Pat Redig – Univ. of MN (in-kind): Responsible for scientific oversight of materials and curriculum.

John Gilkeson – MPCA (in-kind): Collaborate in development of educational materials and events and evaluate feasibility of ammunition exchange and disposal programs, facilitation of partnerships

Ed Quinn – DNR, Parks and Trails (in-kind): State Park collaboration

Mark Cleveland-DNR Scientific and Natural Areas program (in-kind). SNA Program collaboration.

Minnesota Deer Hunters Association (in-kind): Review of all workshop and educational materials and facilitation of partnerships

Gary Botzek – Minnesota Conservation Federation (in-kind): Review of all workshop and educational materials and facilitation of partnerships

B. Project Impact and Long-Term Strategy

This program is based upon providing hunters with the voluntary choice to use non-toxic ammunition that does not cause collateral damage to wildlife species like bald eagles in the course of deer hunting and in making such choices, gives hunters an opportunity for an expanded definition of their role as conservationists. This is the first part of a multi-year strategy. Promoting the use of copper ammunition will benefit Minnesota's wildlife and its hunters. This project builds on partnerships developed through stakeholder conversations funded by two internal grants from the University of Minnesota. Future phases are proposed to include an ammunition exchange program, expansion of the educational modules to larger audiences and increased opportunities for hunter-to-hunter education and awareness. Ultimately, the risks associated with lead ammunition are a widespread issue and we look to leverage the work done here in Minnesota across the nation. Many hunters are concerned about legal mandates to use non-lead ammunition.

C. Timeline Requirements

This project will be carried out over two years. As late summer/fall is best time for implementation of hunter education programs, we look to develop materials and plans for programs during Year 1, implement during the summer/fall of Year 2 and conduct evaluation/assessment in the second half of Year 2.

2016 Detailed Project Budget

Project Title: *Hunters' choice: Alternative ammunitions*

IV. TOTAL ENRTF REQUEST BUDGET 2 years

BUDGET ITEM	AMOUNT
Personnel: J Ponder, 5% effort for two years (salary \$11,573, benefits \$ 4,385). Principle investigator responsible for oversight of overall project, educational curriculum modules and sponsor reporting	\$ 15,958
Personnel: Graduate student responsible for developing surveys, data analysis and reporting - 20% effort for 2years (salary \$14,976, benefits \$2,512)	\$ 17,448
Personnel: Project manager (to be hired) - two years 50% FTE (salary \$46,307, benefits \$17,041). Manages overall project, conducts post-hunting survey, writes final report on the project	\$ 63,348
Contracts: Development and implementation of shooting clinics and experiential workshops	\$ 19,300
Contracts: Development and production of educational materials, including printed, audio-visual and displays. Selection will be by competitive process	\$ 15,000
Contracts: Translators	\$ 2,000
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST =	\$ 133,054

V. OTHER FUNDS *(This entire section must be filled out. Do not delete rows. Indicate "N/A" if row is not applicable.)*

SOURCE OF FUNDS	AMOUNT	Status
Other Non-State \$ To Be Applied To Project During Project Period:	N/A	<i>Indicate: Secured or Pending</i>
Other State \$ To Be Applied To Project During Project Period:	N/A	<i>Indicate: Secured or Pending</i>
In-kind Services To Be Applied To Project During Project Period: John Gilkeson (\$5,079.35); Pat Redig 5% effort (\$18,132)	\$ 23,211	Secured
Funding History: Two previous grants funded the preliminary work among stakeholders: Institute on Environment Minigrant (\$1056) and the Consortium on Law and Values in Health, Environment and the Life Sciences (\$7602)	\$ 8,658	Secured
Remaining \$ From Current ENRTF Appropriation: <i>Specify dollar amount and year of appropriation from any current ENRTF appropriation for any directly related project of the project manager or organization that remains unspent or not yet legally obligated at the time of proposal submission. Be as specific as possible. Indicate the status of the funds.</i>	N/A	<i>Indicate: Unspent? Legally Obligated? Other?</i>

HUNTER'S CHOICE: ALTERNATIVE AMMUNITION



Project Manager Qualifications and Organizational Description

Dr. Julia Ponder, Principal Investigator. Dr. Ponder is the Executive Director for The Raptor Center and College of Veterinary Medicine faculty member. Dr. Ponder is a veterinary expert in raptor health working in a clinical and research environment devoted to raptors. She has extensive project management experience, as well as international experience working with non-profits and governmental agencies. She has managed projects varying from \$10,000 to \$230,530, addressing issues as diverse as wildlife health surveillance, community partnerships and international field research. She works with contaminants in raptors including heavy metals and rodenticides.

The Raptor Center (TRC) is a University research and outreach center focused on health issues found at the intersection of raptors and humans. TRC provides medical care of over 700 injured and ill raptors each year, trains veterinarians and veterinary students from around the world in conservation medicine and has extensive experience in outreach and environmental education, averaging over 1,000 programs reaching more than 200,000 people throughout Minnesota, Wisconsin, and Iowa annually. For over 30 years, staff at TRC has studied lead poisoning in eagles. Building on this research, staff at TRC has partnered with colleagues in public health, public policy, applied economics, government agencies, conservation organizations and hunting organizations over the past two years to identify ways of addressing the issue in a collaborative manner.