## Environment and Natural Resources Trust Fund 2015 Request for Proposals (RFP)

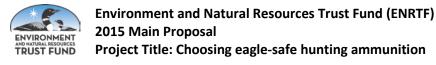
Project Title:	ENRTF ID: 065-C
Hunter's Choice: Alternative Ammunition	
Category: C. Environmental Education	
Total Project Budget: \$ 132,557	
Proposed Project Time Period for the Funding Requested:	2 years, July 2015 - June 2017
Summary:	
We will provide hunters with information on alternative hunting an choice to use nontoxic ammunition and protect Minnesota's wildl	
Name: Julia Ponder	
Sponsoring Organization: U of MN	
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<u>St. Paul</u> <u>MN</u> <u>55108</u>	_
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Location	
Region: Statewide	
County Name: Statewide	

## City / Township:

### Alternate Text for Visual:

An image of a healthy eagle flying free is juxtaposed with images of a successful deer hunter and an eagle feeding on a deer carcass, reflecting the importance of deer hunters using nontoxic ammunition to save eagles. The logos of the partners on this project show the broad diversity of support for this program: Minnesota DNR, Minnesota Deer Hunters Association, Minnesota Pollution Control Agency and The Raptor Center (Univ of MN).

Funding Priorities Multiple Benef	its 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 hunterkilled 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: \$51,065 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	<b>Completion Date</b>	
1. Development of demonstration model and materials, including educational display	30 June 2016	
2. Delivery of 10 workshops throughout state, goal of reaching 200 hunters	30 June 2017	

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

#### Budget: \$ 49,728

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	<b>Completion Date</b>
1. Content developed for training materials	31 Dec 2015
2. Translation of materials	30 June 2016
3. Printed materials received – workshop handouts, pamphlet, signage	30 June 2016



## Environment and Natural Resources Trust Fund (ENRTF) 2015 Main Proposal

Project Title: Choosing eagle-safe hunting ammunition

4	<ol> <li>Development and delivery of training program for instructors</li> </ol>	30 June 2016
5	Delivery of training via instructors to 7,500 youth and adult hunters	30 June 2017

Activity 3: Expand reach of program through partnerships

## Budget: \$ 31,765

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	<b>Completion Date</b>
1. Volunteer-mentored youth hunts reaching 100 youth/year	31 Dec. 2016
2 Feasibility analysis for a future ammunition exchange program	30 June 2017
3. Surveys to program participants	30 June 2017

## **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 (5% effort funded): 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 program, 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.

Mark Johnson – 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.

## 2015 Detailed Project Budget

#### Project Title: *Hunters' choice: Alternative ammunitions* IV. TOTAL ENRTF REQUEST BUDGET 2 years

BUDGET ITEM	<u>A</u>	AMOUNT	
Personnel: J Ponder, 5% effort for two years (salary \$11,573, benefits \$3,888). Principle	\$	15,461	
investigator responsible for oversight of overall project, educational curriculum modules and			
sponsor reporting			
Personnel: P Redig, 5% effort for two years (salary \$13,060, benefits \$ 4,388). Responsible for	\$	17,448	
scientific oversight of materials and technical accuracy of curriculum			
Personnel: Project manager (to be hired) - two years 50% FTE (salary \$46,307, benefits \$17,041).	\$	63,348	
Manages overall project, conducts post-hunting survey, writes final report on the project			
Contracts: Writer for education printed materials	\$	2,500	
Contracts: Designer for published materials	\$	2,500	
Contracts: Instructors for workshops (two instructors each for 10 workshops; \$200	\$	4,000	
Contracts: Translators	\$	2,000	
Equipment/Tools/Supplies: printed materials for training and demonstration displays	\$	4,000	
Equipment/Tools/Supplies: Two portable pop-oup displays (design and development)	\$	6,000	
Equipment/Tools/Supplies: Bullet traps for workshops (2)	\$	3,000	
Equipment/Tools/Supplies: Reusable wax bullet tubes for workshops (30)	\$	3,000	
Equipment/Tools/Supplies: Copper ammunition for workshops	\$	1,200	
Travel: Instructor travel to hold 10 workshops throughout state of Minnesota	\$	4,000	
Travel: Travel for instructor training	\$	600	
Additional Budget Items: Facility rental for demonstrations and training (10@ \$250) - we expect	\$	2,500	
most sites to be donated although some area may require rental fees given needs of facilities			
Additional Budget Items: Local promotion of workshops (10 @ \$100)	\$	1,000	
TOTAL ENVIRONMENT AND NATURAL RESOURCES TRUST FUND \$ REQUEST	= \$	132,557	

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	<u>Status</u>
Other Non-State \$ To Be Applied To Project During Project Period:	N/A	Indicate: Secured or
		Pending
Other State \$ To Be Applied To Project During Project Period:	N/A	Indicate:
		Secured or Pending
In-kind Services To Be Applied To Project During Project Period: Mark Johnson (\$5,000), John Gilkeson (\$5,079.35)	\$ 10,079	Secured
<b>Funding History:</b> 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: Specify dollar amount and year of appropriation	N/A	Indicate:
from any current ENRTF appropriation for any directly related project of the project manager or		Unspent? Legally
organization that remains unspent or not yet legally obligated at the time of proposal submission	1	Leguny
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.		Obligated?

# 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.