



## Environment and Natural Resources Trust Fund

M.L. 2020 Final Work Plan

### General Information

**ID Number:** 2020-079

**Staff Lead:** Rory Anderson

**Date this document submitted to LCCMR:** August 12, 2021

**Project Title:** Workshops and Outreach to Protect Raptors from Lead Poisoning

**Project Budget:** \$133,000

### Project Manager Information

**Name:** Julia Ponder

**Organization:** U of MN - Raptor Center

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### Project Reporting

**Date Work Plan Approved by LCCMR:**

**Reporting Schedule:** April 1 / October 1 of each year.

**Project Completion:** June 30, 2024

**Final Report Due Date:** August 14, 2024

### Legal Information

**Legal Citation:** M.L. 2021, First Special Session, Chp. 6, Art. 5, Sec. 2, Subd. 05j

**Appropriation Language:** \$133,000 the second year is from the trust fund to the Board of Regents of the University of Minnesota, Raptor Center, in cooperation with the Department of Natural Resources and other conservation partners, to provide hunters with outreach and workshops on alternatives to lead hunting ammunition, including copper ammunition as an alternative, and to promote voluntary selection of nontoxic ammunition to protect raptors and other wildlife in Minnesota from accidental lead poisoning caused by ingestion of ammunition fragments.

**Appropriation End Date:** June 30, 2024

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## Narrative

**Project Summary:** This program will provide hunters with information and hands-on experience involving non-toxic rifle ammunition and promote voluntary change in hunter ammunition choices to reduce unintended wildlife deaths.

**Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.**

Choice of ammunition by deer hunters has impacts on our environment and wildlife. Deer hunting is popular in Minnesota with upwards of 200,000 deer taken annually, most with lead hunting ammunition. Typically, deer are field dressed with hunters leaving a “gut-pile” in the field. Investigations on lead toxicity in non-target wildlife have demonstrated that lead fragments in the carcass and gut pile of hunter-killed deer cause toxicity and death in wildlife that scavenge on remains left in the field. While the strongest research available is around the risk to bald eagles, other scavenging wildlife (mammals and birds) would be exposed to lead through gut piles. Although unintentional, the death of these non-game species is avoidable collateral damage that tarnishes the image of hunters and their hunting traditions. Additionally, while not a primary concern for this proposal, there are increasing concerns around the risk to human health of consuming meat harvested with and contaminated by lead ammunition. This proposal will provide the hunting public with information about non-toxic alternatives to lead ammunition with the focus on voluntarily preventing deposition of a highly toxic substance into the environment.

**What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.**

Hunters have long been recognized as strong conservationists and those that have changed to copper ammunition have found an alternative that is both effective for hunting and aligns with their conservation views. Copper rifle ammunition is non-toxic and has been demonstrated to be effective with excellent accuracy, weight retention and capable of quick-kills, and it is increasingly available at a cost comparable to premium grade lead ammunition. In recent years, The Raptor Center convened several workshops to understand stakeholder perspective and define a way forward on this issue. An outcome of these meetings has been a better understanding of the deer hunting public's receptiveness to an education-based voluntary approach around hunting ammunition alternatives. Through these efforts, a broad coalition has come together to promote this grassroots effort, including the Minnesota Department of Natural Resources, Minnesota Pollution Control Agency, Three Rivers Park District, , Minnesota Chapter of The Wildlife Society and The Raptor Center at the University of Minnesota.

**What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?**

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. They will choose to be leaders in ethical decisions that support wildlife conservation and deer hunting traditions.
- Youth hunters will understand the importance of their ammunition choices for environmental stewardship
- Minnesota will be a national leader in advocacy for the use of non-toxic ammunition for big game hunting and in protecting wildlife from lead toxicity, while continuing and strengthening hunting traditions of the state.

## Project Location

**What is the best scale for describing where your work will take place?**

Statewide

**What is the best scale to describe the area impacted by your work?**

Statewide

**When will the work impact occur?**

During the Project and In the Future

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## Activities and Milestones

### Activity 1: Delivery a minimum of 25 learning opportunities reaching 1200 hunters

**Activity Budget:** \$45,470

**Activity Description:**

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. Hunters will bring their own guns and lead ammunition. Non-toxic ammunition will be provided for hunters to try.

The locations for these workshops will be distributed geographically to align with where hunters reside based on license data. While hunters from any part of the state can travel to the rifle zone to hunt deer, there will be an extra effort to deliver workshops in this area as lead bullets from rifles show much greater fragmentation than shotgun slugs, which are used for deer hunting in the southern part of the state. Workshops will be promoted locally and educational displays developed. Recognizing the strong oral tradition of deer hunters, it is expected that each 1:1 experience will be leveraged to additional hunters through personal and media contacts.

In addition, information on the advantages of alternative ammunition choices will be presented at State Park Youth Mentored Deer Hunt orientations; this outreach would include participants (364 in 2020) and adult mentors.

**Activity Milestones:**

Description	Completion Date
Development of demonstration model and materials	June 30, 2022
Delivery of 5 workshops in year 1	June 30, 2022
Delivery of 15 workshops in year 2	June 30, 2023

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

**Activity Budget:** \$31,170

**Activity Description:**

Training materials, both print and multi-media, will be developed and team will collaborate with DNR to incorporate into DNR Youth Firearm Safety classes and hunter education courses. A team of instructors will be trained for integrating the education materials into hunter safety and youth firearm courses which will be piloted in the fall of 2016. Each year, the Minnesota DNR provides hunter education to an average of 24,000 youth, offering a large pool for expansion of messaging. Instructors will provide objective information at training sessions, encouraging hunters to make informed choices around the voluntary use of non-toxic ammunition.

**Activity Milestones:**

Description	Completion Date
Content development for training materials	December 31, 2022
DNR Review and approval of printed material to be distributed to Firearms Safety Training classes	December 31, 2022
Printed materials/handouts developed and received	June 30, 2023

### Activity 3: Expand reach of program through partnerships and supplemental activities

**Activity Budget:** \$56,360

**Activity Description:**

Working with partners in agencies, retail, manufacturing, and non-profits, programs will be created to expand programmatic reach. A pilot incentive program for hunters to use non-toxic ammunition in DNR State Park deer hunts will be developed.

In order to track the impact of this program, new surveys will be developed and delivered to key audiences, including youth hunters participating in mentored hunts, hunters participating in experiential workshops and women participating in Becoming an Outdoors Woman workshops. Minnesota deer hunters already receive a survey designed to track data on deer hunting in the state. New survey questions around types of ammunition used for hunting will be incorporated into the Minnesota Deer Hunter survey and designed so that the incidence of deer killed with non-toxic ammunition will be documented over time. In addition, 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.

**Activity Milestones:**

Description	Completion Date
Development of marketing tools	June 30, 2022
Survey questions (program participants relating to non-toxic ammunition use) developed	June 30, 2022
Survey questions incorporated into annual DNR hunter survey	September 30, 2022
Evaluation of survey results	June 30, 2023

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## Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Ed Quinn	MN Department of Natural Resources	State park collaborations	No
John Gilkeson	MN Pollution Control Agency	Collaborate in development of educational materials and events, facilitation of partnerships promoting the production, availability, and use of non-toxic ammunition products	No
Lori Naumann	MN Department of Natural Resources	Facilitate development of educational materials	No
Brian Hiller	MN Chapter of The Wildlife Society	Development and implementation of shooting clinics and experiential workshops.	No
Carrol Henderson	Retired	Management and facilitation of partnerships (agency, NGO, manufacturing, and retail) and oversight of ammunition workshops	No
Cynthia Osmundson	MN Department of Natural Resources	Review and comment on education materials	No
Jon Pareus	MN DNR	Firearms Safety program review and coordination	No

## Dissemination

**Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.**

Throughout all activities, including shooting clinics/workshops and Youth Mentored Deer Hunts, we will invite media representatives to attend and participate. Announcements, calendar listings and press releases will be sent out statewide and regionally before workshops and provided to project partners for dissemination to their audiences. Each project partner will utilize its social media tools to reach its audience and raise awareness. These efforts will include blogs, Facebook pages, Twitter, and web sites already in use by The Raptor Center, University of Minnesota, and MPCA, among others.

## Long-Term Implementation and Funding

**Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this be funded?**

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 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 and this voluntary approach provides a viable mechanism to avoid such mandates.

## Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
<b>Personnel</b>								
Principal investigator		Responsible for project oversight, sponsor reporting			33.5%	0.1		\$19,001
Naturalist/Project manager		Overall day to day project management, conducting trainings, content development			28.7%	1		\$66,943
							<b>Sub Total</b>	<b>\$85,944</b>
<b>Contracts and Services</b>								
TND	Professional or Technical Service Contract	Delivery of experiential workshops around state				0.4		\$25,000
TBD	Professional or Technical Service Contract	Survey development and evaluation of program impact				0.2		\$5,000
							<b>Sub Total</b>	<b>\$30,000</b>
<b>Equipment, Tools, and Supplies</b>								
							<b>Sub Total</b>	-
<b>Capital Expenditures</b>								
							<b>Sub Total</b>	-
<b>Acquisitions and Stewardship</b>								
							<b>Sub Total</b>	-
<b>Travel In Minnesota</b>								
	Miles/ Meals/ Lodging	Lodging and per diem for 20 workshops around state	Delivery of experiential workshops to hunters around state.					\$5,000



							<b>Sub Total</b>	<b>\$5,000</b>
<b>Travel Outside Minnesota</b>								
							<b>Sub Total</b>	-
<b>Printing and Publication</b>								
	Printing	Printing handouts and display tools for hunter and youth hunter education events	Education around the impacts of ammunition choices on wildlife health.					\$10,000
	Publication	Publication of project	Dissemination of project results.					\$2,056
							<b>Sub Total</b>	<b>\$12,056</b>
<b>Other Expenses</b>								
							<b>Sub Total</b>	-
							<b>Grand Total</b>	<b>\$133,000</b>

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Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
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Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
			Non State Sub Total	-
			Funds Total	-

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## Attachments

### Required Attachments

#### *Visual Component*

File: [19e1feb0-3d3.pdf](#)

#### *Alternate Text for Visual Component*

Map of potential workshop locations throughout the state of Minnesota...

### Optional Attachments

#### *Support Letter or Other*

Title	File
ENRTF Background Check Certification	<a href="#">feb00b41-b99.pdf</a>

### Difference between Proposal and Work Plan

#### *Describe changes from Proposal to Work Plan Stage*

Workplan and budget adjusted from earlier (2017) version to reflect current collaborators, workshop numbers and 2021 expense rates.

7/12/21 Updated to respond to comments.

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## Additional Acknowledgements and Conditions:

The following are acknowledgements and conditions beyond those already included in the above workplan:

**Do you understand and acknowledge the ENRTF repayment requirements if the use of capital equipment changes?**

N/A

**Do you agree travel expenses must follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?**

Yes, I agree to the Commissioner's Plan.

**Does your project have potential for royalties, copyrights, patents, or sale of products and assets?**

No

**Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?**

N/A

**Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?**

N/A

**Does your project include original, hypothesis-driven research?**

No

**Does the organization have a fiscal agent for this project?**

No

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# Hunter's Choice: Alternative Ammunition

Map of potential workshop locations throughout the state of Minnesota

