

## MINI GRANT PROJECT SUMMARY

### MF-0012-11 | PI Patrick Redig

Please complete the project summary and return the completed form to April Snyder, Associate Administrator for the Institute on the Environment at [aprilsnyder@umn.edu](mailto:aprilsnyder@umn.edu). Paper copies will not be accepted. Please also attach any photos, publications, brochures, event agendas or other materials that were a result of the mini grant summary.

<b>Date of Report Submission:</b>	7 December 2012
<b>Project Title:</b>	Spent lead ammunition and bald eagles: A model for dealing with conflicts in ecosystem health

#### Project Context & Purpose

*Please include the original project purpose statement and revise for any changes that occurred in the project after the start date with a short explanation of the changes.*

**Original project purpose:** To develop a proposal for a ‘mock’ congressional hearing with invited stakeholders who will ‘testify’ regarding a ‘mock’ policy considering the use of non-lead ammunition for deer hunting in Minnesota.

In order to develop this ‘mock’ congressional hearing, an interdisciplinary team of experts was recruited and the idea was to use the IonE mini-grant to have several planning meetings.

Also, this project was meant to be used as a model for dealing with conflicts in ecosystem health. In this field, problems are often very complex and require an interdisciplinary team to analyze them from different perspectives and come up with solutions that are more appropriate for each circumstance. The issue of spent lead ammunition and bald eagles is a good example of such complexity, and therefore a good one to use as a model.

#### Changes that occurred in the project after the start date:

The interdisciplinary team of experts had several planning meetings in which the ‘issue’ was analyzed (lead intoxication in bald eagles from spent ammunition and use of non-lead ammunition as an alternative for deer hunting in Minnesota) from different perspectives (cultural, economical, social, scientific, etc), and the stakeholders were laid out. After careful examination of all the variables, and examining the political (upcoming elections) and social (shooting in Colorado) circumstances at that moment, it was decided that a ‘mock’ congressional hearing was not the best approach, and instead, we had to come up with another type of ‘event’ that would not be so provocative for our target audience and stakeholders.

## Work Completed

*Please provide a summary of the work that was completed for the mini grant project.*

### **An interdisciplinary team of experts was recruited:**

- Patrick T. Redig, PhD, DVM (The Raptor Center)
- Dominic Travis, DVM, MS (Associate Professor, College of Veterinary Medicine, Ecosystem Health Initiative, University of Minnesota)
- Carrol Henderson, MS (Department of Natural Resources)
- Steve Polasky, PhD (Fesler-Lampert Professor of Ecological/Environmental Economics, University of Minnesota)
- Steve Kelley (Senior Fellow, Director of Center for Science, Technology and Public Policy, University of Minnesota)
- Mark Martell, MS (Director of Bird Conservation for Audubon Minnesota)
- Michael T. Osterholm, PhD, MPH (Director for Center of Infectious Disease Research and Policy, University of Minnesota)

### **Several meetings took place:**

- January 12<sup>th</sup> 2012
- June 21<sup>st</sup> 2012
- July 26<sup>th</sup> 2012 (Conference call)

**In the first meeting (January 12<sup>th</sup> 2012)**, scientific information regarding the issue of lead intoxication in bald eagles was presented so everybody in the team would have background knowledge to start with. Then, the controversy and complexity of this issue was presented from the different perspectives as well (economical, social, cultural, etc) within the socio-political framework set in Minnesota in 2012. Everybody expressed their opinions about the issue, and the team came up with a list of stakeholders to invite to the 'event'. It was decided that a 'mock' congressional hearing would be too inflammatory, and there was a need to come up with a different 'event'.

**In the second meeting (June 21<sup>st</sup> 2012)**, updates regarding the issue were reviewed. More planning for the 'event' was done, laying out criteria to develop the 'event', key people to invite, and key messages to transmit. At this point it was decided that instead of involving all the original stakeholders going from a 'top-down approach', it would be better to do a 'bottom-up approach'. This would entail engaging the hunters, ammunition companies, retailers, etc., in a conversation with the goal of finding common grounds (a 'win-win' situation). Everybody left the meeting with some 'actions' items to advance this work.

**The 3<sup>rd</sup> meeting** was a conference call in which we exchanged some updates and our 'actions' items. Due to the political situation and due to our previous conversations, it was decided to plan for an 'event' following the 'bottom-up approach', and we had to decide on the venue (preferably a place like DNR building or a outdoor retailer's conference room) and the time (ideally before the start of deer hunting season in the Fall 2012).

## Partnerships & Collaborations

*Please provide a summary of the project personnel, partnerships and collaborations that worked directly on the project or were started as a direct result of the mini grant project.*

### **Project personnel:**

The interdisciplinary team recruited to work on this project is listed in the previous section. The personnel in this team represented different disciplines and specialty areas that had not been taken into account before when examining this issue. Apart from the team itself, other staff from The Raptor Center attended the meetings and participated throughout the entire planning process providing their expertise as well. Michelle Willette, DVM (Staff veterinarian, The Raptor Center), Julia Ponder, DVM (Executive Director, The Raptor Center), Amber Burnette (Program Associate, The Raptor Center), and Irene Bueno, DVM (Veterinary Resident, The Raptor Center. Irene Bueno was the graduate student in charge of the organization of the meetings, the follow-up meeting minutes, correspondence with attendees and other miscellaneous tasks). Also, other personnel were recruited along the process, like Jimmy Pichner (MN Zoo) and Katey Pelican, DVM, PhD (Ecosystem Health Initiative, UMN).

### **Collaborations:**

Apart from the work that this team has done together directly on the project funded by the IonE mini-grant, this collaboration has continued and more funding has resulted from it with the goal of having the 'Event' ('Consortium on Law and Values in Health, Environment and the Life Sciences' grant). Also, the collaboration established with the different experts has lead to partner in other proposals as well (Grant proposal between The Raptor Center and Steve Kelley, bringing policy and science together to analyze immunotoxicity in bald eagles). Irene Bueno, Veterinary Resident at The Raptor Center is currently working on her Master of Public Health project with Carrol Henderson (DNR).

Also, as a result of the collaborations established through the IonE mini-grant, the conversation about lead in bald eagles has progressed to a higher level. The Raptor Center has recently met with ammunition companies, the Minnesota Deer Hunters Association, retailers and outdoor reporters, which is a definite positive evolution in this process.

## Project Outcomes

*Please provide a summary of the outcomes of the mini grant project including future plans for the project.*

### Project Outcomes

- Created an interdisciplinary team of experts that worked to find a solution for the problem of lead intoxication from spent ammunition in bald eagles. After careful examination of the problem, it was decided that a “bottom-up” approach would be the best given all the circumstances (social, political, economical, etc)
- Engaged several stakeholders into the conversation about lead from spent ammunition and eagles (ammunition companies, deer hunters, retailers, outdoor writers, etc)
- Laid out a model to use for solving other ecosystem health conflicts
- Increased awareness of the issue of lead intoxication in bald eagles among the experts, stakeholders and general public
- Motivated seeking other funding to keep working on this issue (Following the IonE mini-grant, The Raptor Center was awarded a grant from the Consortium of Law and Values in Health, Environment and the Life Sciences)
- Created opportunities within the team to collaborate in other projects. For example, Carrol Henderson is working with Irene Bueno in her MPH Project; Steve Kelley is collaborating with The Raptor Center in a proposal combining science and policy studying immunotoxicity in bald eagles.
- Organized an ‘Event’ engaging the community at an outdoor retailer’s store before deer hunting season in the Fall of 2012. The ‘Event’ organized took place at a retailer’s store (Cabela’s) before deer hunting season started in Minnesota (the ‘Event’ was the 20<sup>th</sup> October 2012), and its goal was to have a conversation about lead from spent ammunition and bald eagles with customers going through the store (mainly deer hunters). We are currently analyzing the outcomes of this ‘event’ and working on the next steps towards a solution for this issue.

### Future plans

- Continue educating the general public and the diverse stakeholders about this issue
- Find new ways to engage the community and educate them about their choices (alternatives to lead ammunition)
- Have a conversation with other stakeholders involved in this issue (for example the Minnesota Outdoors Heritage Alliance) and continue the conversation with retailers and hunter’s associations.

### Attachments:

- Meeting’s Agendas
  - 12<sup>th</sup> January 2012
  - 21<sup>st</sup> June 2012



# The Raptor Center

College of Veterinary Medicine

*Dedicated to the care  
and conservation of raptors  
and other avian species  
since 1974*

## **Institute on the Environment 2011 Mini Grant**

**Spent lead ammunition and bald eagles:  
A model for dealing with conflicts in ecosystem health**

### **Agenda**

**The Raptor Center/Conference Room  
12 January 2012**

<b>0900</b>	Pat Redig/Irene Bueno Michelle Willette	Welcome and Introductions (Coffee and juice provided) Agenda/Housekeeping - Parking and travel reimbursements/lunch
<b>0915</b>	Michelle Willette Pat Redig Irene Bueno Juli Ponder	Summary of Background Information  IonE Mini Grant - Statement of problem/goals/deliverables Spent lead ammunition and bald eagles (history/science) Who/what are the issues Discussion - Identify objectives for engaging 'community' - Key stakeholders/barriers
<b>1030</b>		Break (Light refreshments provided)





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### **Tentative Agenda**

**21<sup>st</sup> June 2012**

**(9-12 pm)**

**The Raptor Center/Conference Room**

1. Updates

- Carrol Henderson: Article in 'White-tail deer' magazine
- MN legislative bills concerning hunter harvested venison
- Others?

2. Review of previous meeting notes

3. Discussion and decision regarding upcoming 'Exercise'

- Possible venues/dates

4. Propose dates for future meetings

- Finalize design of 'Exercise'
- 'Exercise' (event)
- Debrief event

Refreshments will be provided

