## **NEAFWA ABSTRACT ARCHIVES: 2014 Information & Education Sessions**

Information & Education		
Monday, April 14, 2014 10:30 am - 4:40 pm		
10:30 am – 10:50 am	<ul> <li>Assembling a Coalition on Wildlife Ballot Initiatives - Maine's 2nd Bear Referendum Don Kleiner, Maine Professional Guides Association; James Cote, Maine Wildlife Conservation Council</li> <li>A brief overview of how the Maine Wildlife Conservation Council supports the Maine Department of Inland Fisheries and Wildlife in the upcoming November referendum on bear hunting, and its role in Maine's campaign.</li> <li>State Agencies may have constituent groups, but it can be difficult to have them all work together. Our group is currently enjoying some success. We'll discuss how we got to this point, what we are facing over the next several months, our strategy to bring diverse groups into one coalition, how state agencies can partner with coalitions like this and what can agency roles be. This report will be directly from the trenches of the current referendum campaign.</li> </ul>	
10:50 am – 11:10 am	<b>(Wildlife) Understanding public support for hunting: insights from a national poll</b> <i>Lincoln Larson, Cornell University; Rich Stedman, Cornell University; Daniel Decker,</i> <i>Cornell University; William Siemer, Cornell University; Meghan Baumer, Cornell</i> <i>University</i> Social acceptability of hunting and trends in hunting participation in the United States have been topics of great concern within the North American hunting and wildlife management communities. Information about these topics is important for hunter recruitment and retention (HRR), a high priority for most hunting organizations and wildlife management agencies. Ongoing socio-demographic changes (e.g., urbanization, shifting racial/ethnic composition) and escalating rates of human-wildlife conflict suggest a need to re-examine the contemporary social atmosphere regarding hunting. To explore current patterns of support for hunting across the United States, we conducted a national telephone survey (part of the 2013 Cornell National Social Survey) of 1,000 randomly selected households across a range of geographic and demographic strata. Responses revealed that although only 17.2% of respondents were regular hunters, 60.5% of Americans surveyed approved of regulated hunting. A logistic regression model revealed several (unsurprising) geographic and socio-demographic variables that were significant predictors of support for hunting, including place of residence (rural areas), gender (male), race/ethnicity (white), and political ideology (conservative). However, attitudinal variables centered on hunting purpose explained a much larger portion of the overall variance in hunting support. Approval of hunting was highest for the following reasons: to control wildlife populations causing problems for people (79.1%), to obtain local, free- range meat (76.4%), and to control wildlife populations damaging forests and ecosystems (74.9%). Results suggest that HRR and public communication efforts about hunting that focus on hunting for civic- and conservation	

	Additional longitudinal data are needed to better understand trends in social support for hunting and the influence of distinct perspectives on overall hunting participation.	
	<b>Freshwater Fish of the Northeast</b> <i>Robert S. Michelson, President, Photography by Michelson</i>	
11:10 am – 11:30 am	We will look at the freshwater fish, and life histories of species found in the Northeastern United States including: Smallmouth & Largemouth bass; Pumpkinseed, Bluegill; Redbreasted sunfish; Rock bass; Landlock salmon; Rainbow, Eastern brook, Brown and Tiger trout; Chain pickerel; Burbot; Fallfish; White sucker; Common shiner; Golden shiner and Rainbow smelt. This is a photography based program showing underwater photographs of each species in natural habitat as seen in the wild.	
	<b>An overview of the collaboration between Kennebec Land Trust and MDIFW</b> <i>Theresa Kerchener, KLT; Lisa Kane, MDIFW</i>	
11:30 am – 11:50 am	For years the Maine Department of Inland Fish and Wildlife (IF&W) and the Kennebec Land Trust (KLT) have found many useful ways to work together to help fulfill their respective missions. Members of the IF&W staff have participated in trainings for KLT stewards, presented as speakers and leaders for educational programs and field trips, and offered advice, contributions and evaluations for KLT programs and potential properties. The Land Trust considers IF&W goals as it negotiates easements and considers acquisitions of lands of mutual interest.	
BREAK 11:50 am - 1:30 pm		
Conservation Engin		
1:30 pm – 1:50 pm	Overview of Maine Department of Inland Fisheries and Wildlife Engineering projects done in the last 10 years <i>Ron Taylor, Chief Engineer MDIFW; Leon Bucher, Federal Aide Coordinator MDIFW;</i> <i>Todd Langevin, Superintendent of Hatcheries MDIFW</i> Non-technical discussion of engineering related projects at the Maine Department of Inland Fisheries and Wildlife that have been completed in the last 10 years. The presentation would be educational in nature, explaining history, applications, and future direction anticipated for IF&W engineering projects. It would be relevant for any fish and wildlife officials interacted in MDIE &W infrastructure age, headquarters facilities, heat	
	wildlife officials interested in MDIF&W infrastructure eg., headquarters facilities, boat access sites, dams, hatchery projects.	
	<b>Effluent / Influent enhancement at Maine State Hatcheries</b> <i>Todd Langevin, Superintendent of MDIF &amp;W Hatcheries</i>	
1:50 pm – 2:10 pm	Semi - technical discussion of engineering projects the Department has done to improve effluent/influent at Maine State hatcheries in the last 10 years. The presentation would be educational in nature, explaining history, technology, applications, and effectiveness. It would be relevant for any fish and wildlife officials interested in MDIF&W hatcheries.	
	Enhanced Stream Crossing Project - Bond Brook Jed Wright, Gulf of Maine Coastal Program, USFWS, Falmouth Maine	
2:10 pm – 2:30 pm	Repairing, removing and retrofitting barriers are seen as some of the most effective and cost-efficient means of habitat restoration available. This presentation will summarize efforts in Maine to increase aquatic connectivity by improving information sharing on barrier removal priorities, technical training, and communicate results from low-cost	

	stream crossing designs. We have developed systematic methods for prioritizing the
	repair or removal of fish passage barriers for native and diadromous fish and developed platforms for sharing data with private landowners and municipalities. These activities assist decision makers with developing management strategies and implementing passage solutions. A second component of the project is to teach road managers the latest techniques on how to build structures that allow streams and the aquatic life they support to function naturally. The presentation will conclude with lessons learned from our experiences with implementation of low-cost stream crossing projects in Maine.
	Alewife Restoration in Coleman Pond, Lincolnville, ME: Novel site identification, design, and construction of a nature-like pool and weir fishway Bjorn Lake, PhD, PE, Kleinschmidt Associates; Matthew Bernier, PE, NOAA Restoration Center; John Burrows, Atlantic Salmon Federation
2:30 pm – 2:50 pm	The alewife (Alosa pseudoharengus) is a migratory fish species native to coastal watersheds in Maine. The Ducktrap River in Lincolnville, Maine has a run of alewives that spawn elsewhere in the watershed, in Pitcher Pond. On the southern portion of the watershed, the alewife migration to Coleman Pond was extirpated due to a barrier at an old mill dam. The mill has long since been removed, but a privately-owned, 5 foot high outlet dam has prevented the re-establishment of alewife spawning in Coleman Pond. This project involved novel approaches to site identification, engineering, and construction that culminated in the construction of a nature-like pool and weir fishway in 2013. The project was identified using statewide, non-FERC dam owner survey completed by Kleinschmidt in 2012. After identifying the willing dam owner, the NOAA Restoration Center and the Atlantic Salmon Federation partnered to administer the fish passage project with Kleinschmidt and Linkel Construction providing the design and construction services, respectively. The hydrology of the site provided a unique design challenge in that limited flows during the migration season precluded the construction of a rock ramp fishway using readily available materials on site. To overcome this obstacle, the design team developed a nature-like pool and weir fishway that met fish passage design criteria while still utilizing the material resources available. The resulting fishway provides a cost-effective example of alewife restoration that can be applied to other outlet dams in coastal watersheds in Maine.
	BREAK 2:50 pm - 3:20 pm
Information & Educa	ation
	An increase in hunting and fishing participation among Americans Mark Damian Duda
3:20 pm – 3:40 pm	After two decades of decline, hunting and fishing participation among Americans increased between 2006 and 2011, and a recent major research study pinpoints 10 major reasons for the increases. Hunting and fishing participation rates are up due to: 1) the economic recession, 2) higher incomes among some segments of the population, 3) hunting for meat and the locavore movement, 4) agency recruitment and retention programs, 5) agency access programs, 6) agency marketing and changes in licenses, 7) current hunters and anglers participating more often, 8) returning military personnel, 9) re-engagement of lapsed hunters and anglers, and 10) new hunters and anglers, including female, suburban, and young participants.
3:40 pm - 4:00 pm	<b>The Council to Advance Hunting and the Shooting Sports Update</b> John Frampton

	The Council is a non-profit, charitable, educational organization (501 (c) 3), incorporated in the District of Columbia. We are a coalition of agencies, companies, organizations and associations who have voluntarily joined together to focus on the recruitment and retention of hunters and shooters, the development of shooting facilities, and the protection and expansion of access for hunting. The presentation will cover current member states, Council funding and current and past projects.
4:00 pm – 4:20 pm	<ul> <li>Social Media- make it work for you Patty Handy, Information &amp; Education Program Manager, MD DNR </li> <li>Are you proud of your good work? Social Media can help you share your accomplishments, come and learn how! Learn the best social media techniques to reach your target audiences (Facebook, Twitter, You Tube, etc). Check out tools of the trade to help you schedule your posts and see what's working and what's not.</li></ul>
4:20 pm – 4:40 pm	<b>Education Trunks: How to Bring Wildlife Into the Classroom</b> <i>Patty Handy, Information &amp; Education Program Manager, MD DNR</i> Check out Maryland's education trunks! These unique hands-on, interdisciplinary teaching tools (PreK-12) while building on fundamental disciplines like math, art, social studies, science, language arts and physical education. Project WILD is integrated into these education trunks and can be easily incorporated into your existing lesson plans.
4:40 pm – 5:00 pm	<ul> <li>Video Producing on a Budget</li> <li>Patty Handy, Information &amp; Education Program Manager, MD DNR</li> <li>Making video interesting with the basics of how to shoot video that people actually want to watch! Check out some inexpensive ways to shoot and edit your videos.</li> </ul>
Information & Educ	ation
Tuesday, April 15, 2 10:30 am - 3:40 pm	014
10:30 am – 10:50 am	Using Analytics to plan programs Samantha Pedder Hunter Outreach Coordinator Where do our customers live? Where are they looking for programs? What programs are
	they looking for? How many of them are interested? Find out how to use Google
10:50 am – 11:10 am	

	details of the initiative and some samples of the products (radio, TV, billboard, website, etc).
11:30 am – 11:50 am	<ul> <li>Suppressor Hunting in the Northeast Knox Williams, President of the American Silencer Association</li> <li>We would like to discuss the legalization of suppressor use for hunting in states in the Northeast where suppressor ownership is permitted. The ASA is working to legalize suppressor hunting in New Hampshire, Vermont, and Maine in 2013/14. Given the many myths and misnomers surrounding suppressors, we would like to make sure that state DNR officials are well educated on the topic.</li> <li>The presentation would be educational in nature, explaining suppressor history, technology, applications, and effectiveness. It would be relevant for all wildlife and LE DNR officials.</li> </ul>
	BREAK 11:50 am - 1:30 pm
Information & Educ	ation
1:30 pm – 3:00 pm	Combat Communications for Conservationists Eric Eckl, Founder, Water Words That Work, LLC Conservation and controversy go hand in hand. Sooner or later, the mud will fly and your work and your reputation will be on the line. In this training, you will hone messaging skills you need to set the record straight and come out on top!
	BREAK 2:50 pm - 3:20 pm
Information & Educ	ation
3:20 pm – 3:40 pm	Challenges to Changing Stakeholder Engagement Processes Emily F. Pomeranz, Dan J. Decker, William F. Siemer – Human Dimensions Research Unit, Cornell University; Jeremy Hurst, New York State Department of Environmental Conservation Participatory approaches have become a common practice for wildlife resource governance, as managers seek to incorporate diverse public values and attitudes towards wildlife while engaging their stakeholders more fully in the decision-making process. Although natural resource management agencies have turned towards participatory processes often organized at the local level, many have found these processes to be time consuming and resource intensive. In addition, some managers may question the appropriateness and functionality of these processes. This has created challenges, particularly for processes that are conducted on a recurring basis and engage numerous communities independently. This may be exacerbated as agencies face changes in available budgetary or personnel resources, or as managerial and/or stakeholder needs change over time. These factors may necessitate a redesign of existing participatory processes, potentially organized at a different spatial scale. While much research has focused on designing collaborative models for natural resource management, comparatively little has been written on formally updating or redesigning an established process in order to accommodate changing needs. This presentation will explore these trends with respect to the New York State?s Department of Environmental Conservation?s (NYSDEC) citizen task forces (CTFs), a stakeholder engagement process that has been used to help inform white-tailed deer (Odocoileus virginianus) management since 1990, which NYSDEC is seeking to redesign. Using both existing literature and

	interviews with CTF facilitators, participants, and NYSDEC managers, we will present a history of the CTFs, current concerns with its effectiveness and functionality, and explore thinking regarding benefits and detriments to successfully guiding a transition to a new participatory process while maintaining inclusivity, representation, and efficacy as valued by both managers and the public.
3:40 pm – 4:00 pm	A Structured Decision-Making Approach to Regulating Fall Turkey Harvest in New York and Pennsylvania Kelly F. Robinson, New York Cooperative Fish and Wildlife Research Unit, Department of Natural Resources, Cornell University; Angela K. Fuller, United States Geological Survey, New York Cooperative Fish and Wildlife Research Unit, Department of Natural Resources, Cornell University; Duane R. Diefenbach, United States Geological Survey, Pennsylvania Cooperative Fish and Wildlife Research Unit, Pennsylvania State University; Mary Jo Casalena, Pennsylvania Game Commission; Michael Schiavone, New York Department of Environmental Conservation Setting fall turkey (Meleagris gallapavo) harvest regulations entails taking into account both biological and social concerns, including turkey population dynamics and the satisfaction of multiple stakeholder groups. These multiple concerns require decision- makers to integrate different sources of information. Based on this need for the integration of multiple objectives, we have engaged wildlife biologists from New York and Pennsylvania, as well as the Cornell University Human Dimensions Research Unit and the New York and Pennsylvania Cooperative Research Units, in a joint structured decision-making effort for setting fall turkey harvest regulations. Structured decision- making is a defensible, transparent, objective way to make complex decisions by breaking decisions into component parts. We are developing a decision framework that evaluates management strategies for providing a sustainable wild turkey population in each state that can provide optimal opportunities for hunters and other stakeholders to enjoy this resource now and in the future. We are using a Bayesian belief network as a formal, quantitative framework that incorporates the output of our turkey population model, structural uncertainty in the system, and stakeholder values. This network will be used to evaluate harvest alternatives, and will result in the management strategy that best achieves the multiple obje
4:00 pm - 4:20 pm	Use of a multi-analyte diagnostic assay for tick-borne pathogens in cervids, Maine, USA Charles Lubelczyk, Vector Ecologist, Maine Medical Center Research Institute, Vector- borne Disease Laboratory; Susan P. Elias - Maine Medical Center Research Institute, South Portland, ME; Brendan Thatcher, IDEXX Laboratories, Inc. Westbrook, ME; Melanie R. Renell, Maine Medical Center Research Institute; Ramaswamy Chandrashekar, IDEXX Laboratories, Inc. Westbrook, ME; Peter W. Rand, Eleanor H. Lacombe - Maine Medical Center Research Institute; John-Paul Mutebi, Marvin S. Godsey - Centers for Disease Control and Prevention. Fort Collins, CO; Robert P. Smith, Jr, Maine Medical Center Research Institute As part of a program using wildlife as sentinels for vector-borne diseases, we examined sera from white-tailed deer Odocoileus virginianus and moose Alces americana harvested in 2012 using a multi-analyte research diagnostic assay using species-specific markers to screen for tick-borne rickettsial and spirochetal agents. Specifically, we tested sera for Borrelia burgdorferi, Anaplasma phagocytophilum, Anaplasma platys, Anaplasma spp.,

	Ehrlichia canis, Ehrlichia chaffeensis, Ehrlichia ewingii, and Ehrlichia spp. Sera from deer were collected in Maine from 13 counties statewide while moose sera were collected from 3 northern counties. In 128 deer, collections showed antibodies to B. burgdorferi (60%), A. phagocytophilum (19%), A. platys (1%), and Anaplasma species (3%). Of the 30 moose samples, only antibodies to B. burgdorferi (3%) and A. phagocytophilum (10%) were found. In the northern six counties, moose and deer were similarly positive for A. phagocytophilum (7% and 10%, respectively), but only deer were positive for Borrelia (36%). Statewide, B. burgdorferi antibody prevalence in deer increased from north to mid-state to south regions of the state (36%, 64%, and 82%, respectively, P < 0.0001). Our results suggest that transmission of Ixodes scapularis-transmitted pathogens is occurring across a wide geographic area in northern New England, corresponding to an increase in human and veterinary cases of Lyme disease and granulocytic anaplasmosis. Transmission of pathogens associated with Amblyomma americanum were not found, indicating that this species is not yet established in Maine.
4:20 pm - 4:40 pm	<b>Target Shooting and Hunting: Engines for the Economy</b> <i>Rob Southwick and Tom Allen, Southwick Associates along with the National Shooting</i> <i>Sport Foundation (NSSF) and the Association of Fish and Wildlife Agencies (AFWA)</i> Target shooting and hunting hold a rich tradition for millions of people, having the power to create connections to the outdoors and to fellow family and friends who share the passion for these sports. In fact more than 20 million people go target shooting each year and more than 13 million people participate in hunting each year. Through this collaborative study, supported by AFWA and NSSF, we explore the characteristics of participation and sport-related expenditures among target shooters and hunters. We also investigate the economic contributions of spending associated with these activities in 2011, both from a national perspective and for the Northeast region. Collectively, these two industries generate \$110 billion in state, local and federal taxes annually. Evidence shows that target shooting and hunting are each, in their own right, multi-billion dollar industries. But jointly they become a huge economic engine for the United States.
4:40 pm - 5:40 pm	Warden Service Chiefs Meeting