FOMB Speaker Bios 2015-2016

October 14, 2015 <u>Voices of the Tidewater Kennebec</u> Bud Warren



Photo - Howland

The character of a region is found in its people, their spirit and the things they accomplish. This presentation focuses on a number of individuals who lived in the lower Kennebec River region from about 1775 to the 1920s. Reading selections from their diaries, journals, personal letters and account books, Warren explores the history of this part of Maine and those who lived here and called it home and finds through their words that we aren't so different from those who preceded us.

Bud Warren, a native of the coast, knows Maine well. For nearly forty years he's led heritage tours of the area for Smithsonian Associates, the National Trust for Historic Preservation, Road Scholar and other significant groups. He's studied, written and lectured about the region's maritime history, its geography, its environment and culture. He works by poking behind the scenes to understand Maine's people and their way of life and then finding ways to share that appreciation with visitors.

As a youth Warren lobstered some. He's climbed Maine's peaks and rowed and sailed along much of its coastline. After Yale, he taught for twenty years in independent schools (Massachusetts, Hawaii, and at Hyde School in Bath), and worked fourteen more at Bath Iron Works. He was active for more than a quarter of a century as a teaching volunteer and staff member at the prestigious Maine Maritime Museum in Bath, where he developed and conducted a successful coastal heritage cruise program. He's researched and lectured extensively on maritime topics such as the 19th century guano trade, the ships of the Sewall fleet of Bath, and the tide mills of New England. He has been active in several archaeological explorations of Maine's colonial sites, including the successful verification of Fort St. George, the first English settlement in New England. He was president of "Maine's First Ship," the effort to build a replica of the 30-ton vessel built in 1607 at the mouth of the Kennebec, and is now president of TIDE MILL INSTITUTE, a research and educational organization dedicated to advancing knowledge about early coastal tide mills.

November 11, 2015 <u>LMF & Public Forests Under Attack</u> Pete Didisheim



Photo: NRCM Staff Directory

Pete Didisheim has served as NRCM's Advocacy Director since 1996. Pete provides overall strategic leadership to NRCM's advocacy staff, assisting in the design and implementation of issue campaigns, legislative initiatives and public education efforts. He is NRCM's senior advocate before the Legislature and has served on task forces and stakeholder groups charged with shaping Maine's environmental policies. Among numerous prior positions, Pete has been chief of staff for U.S. Congressman George Brown, Jr. (D-CA), Deputy Chief of Staff of the House Science Committee, and special assistant to U.S. Department of Energy Secretary Hazel R. O'Leary. Pete holds a B.A. from Williams College in biology and environmental studies, and a master's in public administration from the Kennedy School of Government, Harvard University. Pete serves on the board of Maine Conservation Voters. He lives in Brunswick and enjoys hiking, kayaking, running, and skiing.

For months, Governor LePage has refused to sign off on Land for Maine's Future (LMF) bonding, putting numerous land protection projects in jeopardy. The governor says he'll release the bonds only if lawmakers agree to his plan to increase timber harvesting on state-owned lands. LePage has said that money from selling the timber would go toward heating assistance.

Despite any possible merits of his plan for harvesting timber on state lands, that proposal should be debated on its own. It should certainly not be used to stop land preservation deals, many, years in the making. The Governor already had his bite at the LMF apple when he approved the bond issue after the legislature did. And of course Maine voters as they have always done, voted resoundingly for LMF bonding. The people have spoken.

December 9, 2015 <u>Fishermen, Farmers, and Indians Too: 300 years on Hermit Island 1650-1950</u> Christopher Sewall

Christopher grew up in Bath, spending his first 20+ summers on Hermit Island. He studied anthropology for 2 years at McGill University and finished his BA at Evergreen State College in Olympia, Washington specializing in natural resource policy and contemporary Native American Issues. In his final semester at Evergreen Sewall did an internship/independent study with the Western Shoshone Defense Project, a tribally directed non-profit located in Crescent Valley Nevada. He first volunteered and later worked for the Defense Project 12 years advocating for environmental justice and human rights for the Western Shoshone Nation, before returning home to Maine in 2005.

Back in Maine, Sewall has lived on Hermit Island and participated in several family businesses including Hermit Island Campground and Small Point Lobster Pound. Since his return he has been researching the human and natural history of Hermit Island and Small Point harbor and has also started a small oyster farm. Sewall believes he is the first person to farm American oysters in Phippsburg. For the past 2 years he has been a trustee on the board of the Phippsburg Historical Society.

The talk will focus on the history of Hermit Island, a 250 acre peninsula located in Small Point on the southern tip of Phippsburg. While currently known for its popular family campground, Hermit Island's story can be traced back to the 1600's with some surprising connections to the history of Merrymeeting Bay.

January 13, 2016 <u>Kelping the Earth with a Virtuous Vegetable</u> Paul Dobbins



Photo: Ocean Approved

Paul Dobbins is president and co-owner of Ocean Approved, the first commercial kelp farm in the United States, growing Sugar Kelp, Horsetail Kelp, and Winged Kelp along the clean waters of coastal Maine. In addition to his work with Ocean Approved, Mr. Dobbins serves on the board of the Maine Aquaculture Association, and the advisory and review boards of the Maine Aquaculture Research Institute, Maine Seagrant, and the Maine Technology Institute.

Sugar kelp, or Saccharina, latissima benefits the ocean environment in many ways. It provides nursery habitat and a food source for snails and urchins, while fixing CO2 as a "blue carbon", recycling excessive nutrients like nitrogen and phosphorus and reducing ocean acidification. Kelp has been grown as a food source since before the written record, and can be used for biofuels and pharmaceuticals. According to a report published by the United Nations, almost 23.6 million metric tons of seaweed was farmed in 2014 (UNFAO, 2014). While most of this farming was done in Asia, seaweed is farmed in 30 countries and on every continent except Antartica. The United States became the 29th country to farm seaweed when Ocean Approved seeded its first farm in 2010.

http://www.oceanapproved.com/

http://uniquemainefarms.com/uniquemainefarms.com/Ocean.html https://www.facebook.com/OceanApproved

February 10, 2016 <u>The Mortal Sea</u> Jeff Bolster



Photo: UNH

The following is copy from <u>http://cola.unh.edu/article/2015/02/jeff-bolster-lindberg</u>, an announcement written in honor of Jeff Bolster receiving the Lindberg Award at UNH, given annually to the outstanding teacher-scholar in the College of Liberal Arts.

Professor Bolster earned his undergraduate degree at Trinity College (Hartford), his M.A. from Brown, and his Ph.D. from Johns Hopkins. He was appointed to the UNH faculty in 1991. His research encompasses maritime history, African-American history, environmental history, and Atlantic history. He not only reads and writes about oceans, but also sails them. He spent a decade as master and mate of sailing school-ships and research vessels in the Atlantic, and he's currently licensed by the U.S. Coast Guard as both master and mate of a variety of sailing vessels.

Bolster has written four books on maritime history that have garnered some of the most prestigious awards the field has to offer. His most recent book, *The Mortal Sea: Fishing the Atlantic in the Age of Sail* (Harvard UP, 2012), won the 2013 Bancroft Prize, the North American Society for Oceanic History's John Lyman Book Award for the best book in U.S. Maritime History, the American Historical Association's 2013 Albert J. Beveridge Prize, and the American Historical Association's 2013 James Rawley Prize in Atlantic History. His 1997 book, *Black Jacks: African American Seamen in the Age of Sail* (Harvard UP), won *The New York Times Book Review* notable book of the year, the Wesley-Logan Prize of the American Historical Association, and the Association of American Publishers Professional and Scholarly Publishing Division Best Book in History.

Recognition of Professor Bolster's work extends to the popular press. *The Mortal Sea* was reviewed by major national and international outlets, and, Bolster was commissioned by *The New York Times* to write a related editorial published on January 2, 2015. He's served as public intellectual in film and television, appearing on PBS's *Columbus and the Age of Discovery*, BBC's *Horizon*, NBC's *Revenge of the Whale*, and Discovery Channel's *Slave Ship*, as well as twice providing coverage of the Tall Ships in Boston event for New England Cable Network. *Black Jacks* sold briskly in commercial bookstores and had a major impact on a former Virginia prison inmate who credits the book with turning his life around—the subject of both a

Washington Post article and an NEH short film. Professor and Chair of History Eliga Gould notes, "Most historians can only dream of having that kind of impact on readers."

His UNH students register the positive impact Professor Bolster makes in the classroom. Many doctoral students he mentored have gone on to build highly successful careers in history. One notes that Professor Bolster offered him extraordinary opportunities during which he made some of his most important professional connections and produced some of his best publications: "[Professor Bolster] consistently created situations where I could work on my own scholarship to produce the best results." Undergraduate students, too, have high praise for Professor Bolster, who teaches a number of 400-level surveys as well as advanced courses in maritime and environmental history. A physics major in a Discovery course said, "I was encouraged to do good work not only for a grade, but to hear his feedback . . . Professor Bolster always displayed a personal interest in the progress of each student."

Professor Bolster has demonstrated that he possesses the highest qualities of scholarship and teaching and is most deserving of the Lindberg Award.

The annual Gary Lindberg Award was established by the College of Liberal Arts in 1986 in memory of Professor Gary Lindberg of the Department of English. Professor Lindberg was an exceptional scholar and outstanding teacher whose dedication and service to the University of New Hampshire as well as the wider community exemplified the highest academic standards and ideals. In memory of Professor Lindberg and as a means of publicly supporting superior faculty accomplishment, the College of Liberal Arts annually recognizes one truly outstanding scholar and teacher within the College.

From Amazon.com's summary of The Mortal Sea:

Since the Viking ascendancy in the Middle Ages, the Atlantic has shaped the lives of people who depend upon it for survival. And just as surely, people have shaped the Atlantic. In his innovative account of this interdependency, W. Jeffrey Bolster, a historian and professional seafarer, takes us through a millennium-long environmental history of our impact on one of the largest ecosystems in the world. While overfishing is often thought of as a contemporary problem, Bolster reveals that humans were transforming the sea long before factory trawlers turned fishing from a handliner's art into an industrial enterprise. The western Atlantic's legendary fishing banks, stretching from Cape Cod to Newfoundland, have attracted fishermen for more than five hundred years. Bolster follows the effects of this siren's song from its medieval European origins to the advent of industrialized fishing in American waters at the beginning of the twentieth century. Blending marine biology, ecological insight, and a remarkable cast of characters, from notable explorers to scientists to an army of unknown fishermen, Bolster tells a story that is both ecological and human: the prelude to an environmental disaster. Over generations, harvesters created a quiet catastrophe as the sea could no longer renew itself. Bolster writes in the hope that the intimate relationship humans have long had with the ocean, and the species that live within it, can be restored for future generations.

http://www.amazon.com/The-Mortal-Sea-Fishing-Atlantic/dp/0674283961

March 9, 2016 <u>Maine's Rare and Endangered Invertebrates: Conserving the Little Things</u> <u>That Matter</u> Phillip deMaynadier



Photo: KnoxVillagesoup.com

Dr. Phillip deMaynadier has worked as a wildlife biologist for Maine's Department of Inland Fisheries and Wildlife for 16 years where he currently serves as Leader of the Reptile-Amphibian-Invertebrate Group. He has authored over 30 peer-reviewed scientific publications, is active on several State and national nongame wildlife technical committees, and serves on the Graduate Faculty at University of Maine's Department of Wildlife Ecology. Some of his recent projects include a) co-coordinating completion of the 2015 Maine State Wildlife Action Plan, b) managing the State's program for protecting high value vernal pools, c) conducting a climate change vulnerability assessment of Maine biota, d) coordinating state atlasing efforts for butterflies, dragonflies, amphibians, and reptiles, and e) advising agencies, landowners and land trusts on management guidelines for rare and endangered species. Phillip received his doctorate in Wildlife Ecology from the University of Maine in 1996.

Invertebrates, smaller organisms lacking a backbone, are the dominant form of life on earth both in diversity and biomass (living weight). It is estimated that Maine alone hosts over 16,000 inland species of invertebrates, comprising approximately >95% of the State's animal life. Whether insects (butterflies and bees), crustaceans (crayfish and fairy shrimp), mollusks (snails and mussels), or arachnids (spiders and mites) -- to name a few groups -- Maine's invertebrates are both fascinating in their diversity of form and function, and critically important for sustaining natural ecosystems.

The famous Harvard biologist Edward O. Wilson refers to invertebrates as "the little things that run the world" because of their life-sustaining services in crop pollination, soil enrichment, seed dispersal, waste recycling, biological pest control, and food chain support. On this last point, consider for example, that most of Maine's more conspicuous wildlife -- birds, bats, amphibians, reptiles, and fish -- are insectivorous for at least a portion of their life history. In part because of the essential ecosystem services provided by invertebrates, MDIFW takes its charge to conserve all of Maine's wildlife seriously.

https://www1.maine.gov/ifw/wildlife/species/invertebrates/endangeredInvertebrates.html

April 13, 2016 <u>Royalty of the River: Kennebec Sturgeon Status</u> Tom Squiers



Photo: gulfofmaine.org

Tom Squiers was employed by the Maine Department of Marine Resources (MDMR) for 36 years, retiring in 2009. For many years he directed the Stock Enhancement Division of MDMR. Squiers' responsibilities involved the management and restoration of diadromous fish which includes striped bass, American shad, alewife, blueback herring, rainbow smelt, Atlantic sturgeon, shortnose sturgeon, and American eel. He conducted several studies to assess the status of shortnose sturgeon and Atlantic sturgeon in the Kennebec River. Squiers was a member of the Shortnose Sturgeon Recovery Team which published the <u>Final Recovery Plan for the Shortnose Sturgeon, Acipenser brevirostrum</u> in 1998 and served on the Shortnose Sturgeon Status Review Team for the National Marine Fisheries Service which published the Biological Assessment of Shortnose Sturgeon in 2010. He was also a member of the Atlantic Sturgeon Status Review Team which published the <u>Status Review of Atlantic Sturgeon Acipenser oxyrinchus oxyrinchus</u> in 1998. Squiers received his M.S. Degree in Zoology from the University of Maine in Orono in 1973.

Little was known about the populations of shortnose sturgeon and Atlantic sturgeon in the Kennebec, Androscoggin, and Sheepscot River estuaries (the Kennebec system) in Maine, prompting a series of field studies spanning the years 1977–2001. Although the impetus for these studies varied, common objectives were to estimate population abundances and locate habitat important to the conservation of both species. During 16 years of gill-net sampling, 3,372 shortnose sturgeon and 403 Atlantic sturgeon were captured. On the basis of two mark–recapture studies, the adult shortnose sturgeon population in the Kennebec system was estimated to be 5,117 (95% confidence interval, 4,206–6,279) for the period 1977–1981 and 9,436 (7,542–11,888) from the period 1998–2000.

Gill-net sampling led to the identification of two spawning areas in the Kennebec system. One was an approximately 0.7-km-long reach immediately downstream of Brunswick Dam in the Androscoggin estuary, and the other was an approximately 26-km-long reach immediately downstream of Edwards Dam in the upper Kennebec estuary. Shortnose sturgeon were caught at both locations, while Atlantic sturgeon were documented only in the upper Kennebec estuary. Acoustic telemetry was used to identify a wintering site in Merrymeeting Bay that was used by shortnose sturgeon.

More recent studies have documented the presence of shortnose sturgeon in the Penobscot River. Data collected by University of Maine and MDMR indicate migration between river systems is more extensive than was previously reported. The movement of shortnose sturgeon between the Penobscot River and the Kennebec River and other river systems in the Gulf of Maine has recently been documented based on implanting acoustic tags and the use of passive receiver arrays.

The shortnose sturgeon is smallest of the three sturgeon species that occur in eastern North America; they grow up to 4.7 feet (1.4 m) and weigh up to 50.7 pounds (23 kg). Their growth rate and maximum size vary, with the fastest growth occurring among southern populations. Female sturgeon can live up to 67 years, but males seldom exceed 30 years of age. Thus, the ratio of females to males among young adults is 1:1, but changes to 4:1 for fish larger than 3 feet (90 cm).

Placing the species on the endangered species list in 1967 resulted in a great deal of research on the species in the northern river systems. NMFS published a <u>recovery plan</u> in December 1998 outlining actions that need to be taken in order to recover the species.

Much less information is available for Atlantic sturgeon. Based on the best available science, NOAA Fisheries determined that the Gulf of Maine distinct population segment of Atlantic sturgeon is threatened (i.e., likely to become an endangered species within the foreseeable future) throughout its range.

Sturgeon are among the most primitive of the bony fishes. Their body surface contains five rows of bony plates, or "scutes." Sturgeon are typically large, long-lived fish that inhabit a great diversity of riverine habitat, from the fast-moving freshwater riverine environment downstream and, for some species, into the offshore marine environment of the continental shelf.

Atlantic sturgeon are less plentiful in the Merrymeeting Bay system than the endangered shortnose sturgeon however they are now considered "threatened" in the Gulf of Maine due to:

- (1) significant declines in population sizes and the protracted period during which sturgeon populations have been depressed;
- (2) the limited amount of current spawning; and,

(3) the impacts and threats that have and will continue to prevent population recovery.

Population

Numbers of Atlantic sturgeon in the Gulf of Maine distinct population segment are significantly lower than historical levels and have remained so for the past 100 years. For example: •Population estimates for the Kennebec river system based on the landings from historical fisheries indicated that approximately 10,240 adult sturgeon were present prior to 1843. •Currently, the existing spawning population is estimated to have less than 300 adults spawning each year.

Spawning

In addition to having fewer fish spawning, some spawning populations have been completely eliminated.

•Spawning is known to occur in only 1 river (Kennebec), possibly in one other (Penobscot). •Elimination of possible historical spawning populations in five other main stem rivers within the Gulf of Maine has likely occurred.

Threats

Threats to already depressed populations of Atlantic sturgeon from habitat degradation and accidental capture and potential injury and mortality in fisheries are working in combination to make this distinct population segment likely to become endangered in the foreseeable future (i.e., "threatened").

•Dredging, which occurs in Gulf of Maine rivers (e.g., the Kennebec and Penobscot Rivers), can displace sturgeon while it is occurring and affect the quality of the habitat afterwards by changing the depth, sediment characteristics and prey availability.

May 11, 2016 <u>In the Company of Bears</u> Ben Kilham



Photo: Chelsea Green website

Ben Kilham has been researching and living with black bears for nearly twenty years. He has become an expert in black bear behavior, as well as in rehabilitating orphaned and injured bears and reintroducing them to the wild. He is invited to lecture all over the United States and internationally. His previous book is *Among the Bears, Raising Orphan Cubs in the Wild*.

Kilham and his work with black bears have been featured in five internationally televised documentaries, including National Geographic and Discovery Channel features, and he has appeared on *The Today Show, Good Morning America, ABC Nightly News, ABC Nightly News International, The O'Reilly Factor, Fox News Daytime Edition, Inside Edition, The David Letterman Show, NBC Nightline, CBS Coast to Coast, Canadian Broadcasting Company Nightly News, and various other shows, as well as National Public Radio, and a host of nationally broadcast radio shows. He lives in Lyme, New Hampshire.*

After receiving his B.S. in Wildlife Biology from UNH, Ben Kilham attended the Colorado School of Trades and became a talented gunsmith. He also was a special student at Dartmouth's Thayer School of Engineering. Kilham holds U.S. patents for gun safety design and a jab stick for darting wild animals. Along with his work as an independent biologist and wildlife rehabilitator specializing in bears, he is the owner of Kilham & Company, engaging in gunsmithing and product design. Over the years he has been a product engineer for Colt Firearms and Manager/Gunsmith for Paul Jaeger, Inc., Pistolsmith for Austin Behler, Pistolsmith and Gunsmith for Abercrombie & Fitch/Griffon & Howe.

Kilham has authored: *Among the Bears, Raising Orphan Cubs in the Wild*, published by Henry Holt & Company, New York, NY, March, 2002 and *In the Company of Bears: What Black Bears Have Taught Me about Intelligence and Intuition* published in 2014 by Chelsea Green with a forward by Temple Grandon. While an independent cinematographer himself, Kilham has been widely featured on television and in various films including:

Home Waters, produced by BBC/WGBH TV, 1994; *Coast to Coast*, produced by CBS, July, 1997; *New Hampshire Crossroads*, produced by N.H. Public TV, November, 1997; *Goodwill Hunting*, produced by NBC Dateline, April 3,1998; *Mother Bear Man*, produced by National Geographic Television, Explorer, April 5, 1998; *Bear Man*, produced by National Geographic

Television, Explorer, November 26, 2000; *NBC Today Show*, November, 2002; *Papa Bear*, Discovery Channel, December, 2004; *Ultimate Bear*, National Geographic Television 2006 and *A Man Among Bears*, National Geographic Channel 2008. Also in 2008 Kilham was featured on: Good Morning America ABC, The Today Show NBC, BC Nightly News, Bill O Reilly, FOX and Inside Edition

Be Kilham has given over 450 lectures on black bear behavior to schools and other organizations throughout New Hampshire and New England More than 50,000 people have attended.

Imagine raising an orphaned bear cub, carefully reintroducing her to the wild, then being welcomed back, almost daily, to observe her wild world for more than seventeen years. Imagine visiting her in her feeding spots, watching her with her mates and her young, peering into her den, and, over time, observing the lives of all the other wild bears in her territory and surrounding ones. That is what happened to Ben Kilham, whose long-term study of wild black bears has shattered conventional wisdom about how they live their lives.

In the Company of Bears unveils Kilham's groundbreaking work. Like others, he once thought that black bears were solitary. But he discovered that they actually have extraordinary communication and interaction with each other—creating and enforcing codes of conduct, forming alliances, and even sharing territory and food when supplies are ample.

In the Company of Bears (originally released in hardcover as <u>*Out on a Limb*</u>) is more than a story about bears. It's the story of a scientist once kept from a traditional science career by his dyslexia, only to find that thinking and seeing differently was his greatest gift and his best tool to interpret the non-human world.

Kirkus Reviews—

"The author is a state-sponsored researcher whose work with the black bear population in northern New Hampshire is safe, methodical and sanctioned. Since he does not currently hold a doctorate—he's now working on that—much of his fieldwork has been discounted by the scientific community. On the other hand, his outsider status has allowed him to go his own way and trust in his natural skills rather than bemoan his shortcomings revolving around his dyslexia.

Despite his condition, he is blessed with the ability to recognize patterns and see systems where they are not self-evident. The tone of his presentation allays criticism or hostility with its frankness and generosity, as he plunges into what he has observed: how bears use scent and body language, how they compete and cooperate, how they enforce house rules and exhibit a social code of justice and punishment, and how they communicate.

Though he has interacted with hundreds of black bears, one in particular—Squirty, whom he adopted as a cub and released into the wild—has allowed Kilham to experience an intimate association with him, from comfort to anger and many other emotions in between.

The author presents a solid case for bears as primal actors of social exchange—cooperation, altruism, morality—and their study, a 'gateway' to understanding 'how surplus fitness and an increase in population density have affected human behavior.' A powerfully original study of bears."