

# watermark

Published by Laudholm Trust in support of Wells National Estuarine Research Reserve



## Gifts that Give Back

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**The Wells Reserve at Laudholm is special.** Not a day passes that we don't think of this unique place as a gift to those of us who work here, to the wildlife that abounds here, to the coast of Maine and to the international community of estuaries, and of course to our members and to the public.

Because so much of our operating support comes from you, our members and donors, we believe it is in the best service to you and your gifts that we operate as efficiently and effectively as possible.

This winter, we undertake an experiment to see just how efficient we can be. Every practice and habit we have is under scrutiny. To save on two of our greatest costs (heating oil and electricity), we will close the public areas of the Visitor Center in the farmhouse and the Coastal Ecology Center from December 22 through March 31. During this low-traffic period, our offices will only be open Mondays through Thursdays, with a virtual office reachable by phone and email on Fridays. While we apologize for any inconvenience this may cause, we must balance the privations of austerity with the energy savings and environmental gains from using less fossil fuel during the quiet winter months.

But don't worry: our trails and public restrooms will be open 7am to sunset every day through the winter. We will also be fully open during the February 19-22 school vacation week and hope to see many of you here at our annual Winter Wildlife Day on Thursday, February 21, for animals, hot cocoa, and even sledding (if there's snow).

While we redouble our efforts to conserve energy, we will also be investing \$150,000 in solar power. By next spring, we expect to install the first of many new solar panels on the roof of the Coastal Ecology Center. With support from NOAA, the Davis Conservation Foundation, Consigli Construction, Thornton Tomasetti, and members like you, we are taking this first step on a long-term conservation initiative. We expect this project to yield considerable savings in the coming decades and also to highlight areas for further streamlining.

We do this for you, for the environment, and for our bottom line. Please call the Trust at 646-4521 with questions, comments, and even suggestions for additional conservation measures — we always appreciate hearing from you.

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A newsletter for members of  
Laudholm Trust and supporters of  
the Wells National Estuarine  
Research Reserve

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## upfront

### You Complete Us – Thank You, Volunteers



If you're among the hundreds of volunteers who dedicated your time and talents this year at the Wells Reserve, thank you so much — we couldn't do it without you. We'd also like to thank you in person: please join us **Wednesday, December 5, from 4 to 7pm for our Annual Meeting, Volunteer Reception & Holiday Party.** Please RSVP to 646-1555 — ASAP.

### Silent Spring Essay Contest

*"Those who contemplate the beauty of the earth find reserves of strength that will endure as long as life lasts."*

Those are some of the inspirational words around which the Reserve and Rachel Carson National Wildlife Refuge are sponsoring a contest. We invite Maine 7<sup>th</sup> grade students to write an essay based on one of three quotes taken from Rachel Carson's *Silent Spring*, published 50 years ago this October. First prize is a new iPad, but every participant will receive a copy of Carson's ground-breaking book. The deadline is December 1; details are at wellsreserve.org.

### Filling Big Shoes: Nationwide Search for Research Director

The position description for the Reserve's research director was posted to our website in October and the Reserve is seeing strong interest from the national coastal

community. Interviews are under way; we plan to welcome a new director in early 2013. We'll never find anyone exactly like Dr. Michele Dionne (see page 4), but we always value fresh perspectives.

### New Audio-Visual System for Auditorium

Room-filling sound and bright images are now the norm in Mather Auditorium, thanks to a major upgrade of the sound and projection systems completed late this summer. The improvements got a big financial boost from the Maine Humanities Council and the Charles C. and Rebecca S. Richardson Lifelong Environmental Learning Fund. Come experience the new system December 5 at 4pm.

### Wells Kicks Off Climate Change Study

The Town of Wells has begun a two-year study to understand and prepare for the potential impacts of climate change. Researchers from the Wells Reserve are collaborating with the Massachusetts Institute of Technology and the Consensus Building Institute for the project. The research team will guide public officials and local residents through face-to-face games to clarify climate change risks and reach agreement on adaptation measures. Call Coastal Training Program Associate Annie Cox to learn more: 646-1555 ext 157.

### No Strong Impact from Sandy

Despite strong sustained winds and gusts up to 58 MPH, the Reserve survived superstorm Sandy well. We were without power for 15 hours, lost some shingles on the horse barn and sheep barn, and found a dozen or more trees down. Spring tides and the storm surge reconfigured Laudholm and Crescent Surf beaches, but our boardwalks are in fine shape despite the high water and waves. We're fortunate and grateful.

## nik'snotebook

Nik Charov, President, Laudholm Trust

Truthfully, I'm more of a Thanksgiving person than a Christmas person. I prefer rich food to rich presents; I don't mind gifts but love giving thanks.

In this year-end issue, our gift and thank-you to you, we reflect on recent projects and hint at what's to come. You will read about our new "conservation initiative" to save oil and money this winter and that culminates in new solar panels next year. We share updates and photos on a national monitoring effort, a dramatic local project, and our favorite festivals of September.

We also say goodbye to our colleague, Dr. Michele Dionne, whose body of work, methods, and family are lasting gifts to this corner of Maine and to coastal scientists everywhere.

It struck me that Rachel Carson, another exceptional coastal scientist, succumbed to cancer in her late fifties, too. Carson wrote that if she could give just one gift to every child, she would bestow "a sense of wonder so indestructible that it would last throughout life, as an unailing antidote against the boredom and disenchantments of later years, the sterile preoccupation with things that are artificial, the alienation from the sources of our strength."

Instead of consumer electronics or shiny plastic toys, think of Rachel Carson this season and give the gift of this wondrous, strengthening place. I'll be blunt: we're asking you to give us money so that we can continue bringing the Wells Reserve at Laudholm to you, your children, and your grandchildren. We think it's worth it.

We'll give back, of course: 7 miles of trails for walking, skiing, or snowshoeing; engaging programs throughout the winter and school breaks; perhaps even a symphony concert or two here on the lawn once summer returns. And always, we'll have "endless forms most beautiful" just waiting to be encountered here at the Reserve.

Thank you, friends and members, for such a warm welcome these first four months, and for your ongoing support. Together, we will continue to enjoy and share this greatest gift of all: our Earth. On behalf of all of us at the Laudholm Trust and Wells Reserve, happy holidays, merry Christmas, and happy new year.



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Director, Maine Coastal Program  
Maine Department of Conservation  
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National Oceanic and Atmospheric Administration

Partners in research, education, stewardship, and preservation.



The Wells Reserve is one of 28 National Estuarine Research Reserve sites throughout the country. All reserves require local funding to match federal grants from the National Oceanic and Atmospheric Administration. The Wells Reserve is the only reserve that receives its match from a 501(c)(3) nonprofit organization. Each year, Laudholm Trust contributes private funds and in-kind services to support Wells Reserve operations and capital improvements.

### NEW WINTER HOURS

#### Visitor Center

Through December 22  
M-F 10-4  
December 23 to March 31  
Closed, except Feb 19-22

#### Offices

Through December 22  
M-F 8:30-4:30  
December 23 to March 31  
M-Th 8:30-4:30



*research / coastal science***Dr. Michele Dionne Built the Wells NERR Research Program**

The Wells Reserve lost a defining figure when Research Director Dr. Michele Dionne passed away on July 4.

We knew Michele as a talented scientist with seemingly limitless energy and ideas. She was as practical as she was brilliant, always applying newfound knowledge to environmental issues. Dedicated to local conservation, Michele strove to use Wells Reserve science to make a difference in Maine's coastal communities, stressing that land use practices far from the coast could significantly affect estuarine and ocean systems.

Michele was the Wells Reserve's first research director. Hired in 1991, she began her tenure on the third floor of the then recently renovated Laudholm farmhouse without even a desk or office chair. (She quickly brought in a cot.) Through her passionate devotion to science and tireless work ethic, Michele established a science program that soon gained international recognition. Within a decade, she had assembled a respected staff and built momentum for funding the Maine Coastal Ecology Center, a new science and education facility on the Laudholm campus.

Michele was a valued mentor. She served on committees for 19 master's and doctoral students, supported four post-doctoral fellows, and supervised up to 10 university interns every summer. Ever modest, Michele consistently redirected praise to her staff and represented her program's achievements as those of a team.

She was still in charge, though, and among her directives was this: My cancer

is not a topic for discussion. Her desire for privacy was so well respected that few people knew of her 16-year struggle until it ended early this summer.

At a memorial service held here in September, the Wells Reserve and Laudholm Trust honored Michele by placing her name on her "home away from home," the lab within the Maine Coastal Ecology Center. The dedication of the Michele Dionne Research Laboratory was attended by 150 family, friends, and benefactors, who paid their respects to Michele's husband Michael Wright and teenage daughters Moira and Ciara.

At the dedication, Reserve Director Paul Dest said, "Michele was a powerful force in advancing scientific understanding of coasts and estuaries. She established a top-notch research program at the Wells Reserve and sustained it for more than 21 years. Putting her name on the research lab is one way to remember a person of extraordinary abilities who gave so much to the reserve and its work in science, education, and conservation."

Michele inspired us here and earned respect throughout the reserve system. Her selfless commitment to coastal ecosystems will carry long into the future through the many programs and people who were guided by her wisdom and moved by her passion. We will miss her greatly.

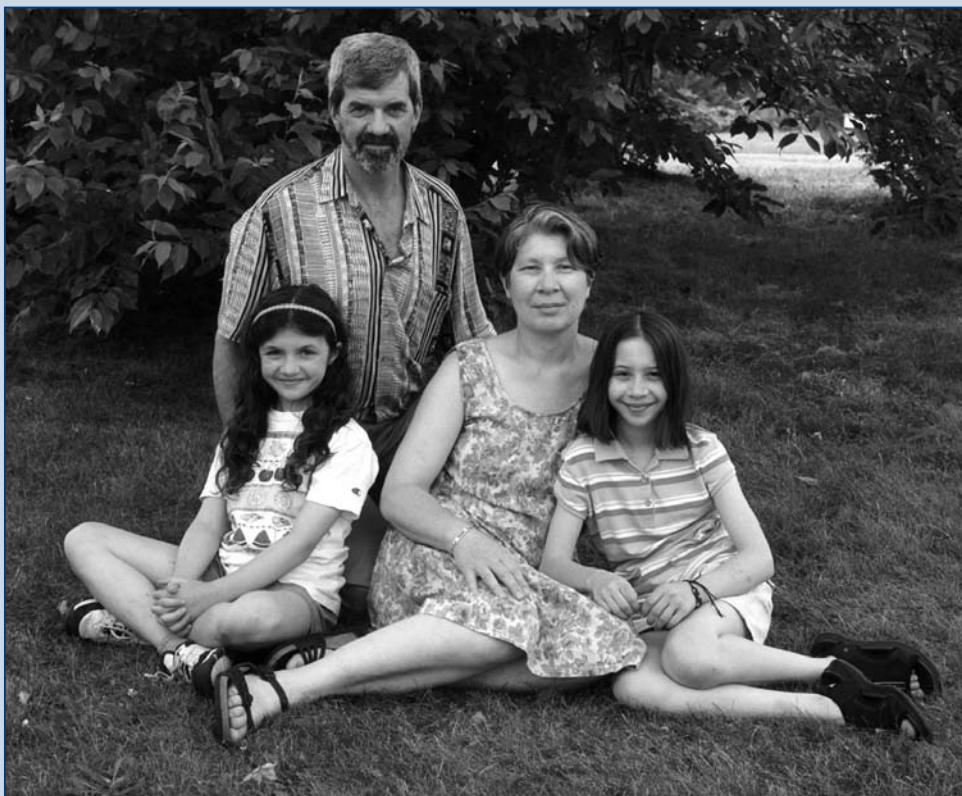
**Michele Louise Dionne**  
**1954–2012**

Bates College  
B.A., Biology 1977

University of North Carolina,  
Chapel Hill  
M.S., Zoology, 1982

Dartmouth College  
Ph.D., Biology 1991





*Michele relaxes with her husband Michael Wright and their daughters Ciara and Moira in a 2006 family portrait. To honor Michele and her wishes, an education fund has been established for her daughters. Contributions may be made to: Wells Reserve, Moira and Ciara Dionne Wright Education Fund, 342 Laudholm Farm Road, Wells, Maine 04090*

*RIGHT: Michele receives the 2008 NERRS/NERRA Award for outstanding contributions to the reserve system. BELOW: President George W. Bush listens to Dr. Michele Dionne on the bank of the Little River during his 2004 visit to the Wells Reserve.*



### *Thoughts shared online after we announced Michele's passing...*

It's a sad day.

Michele was a scientist with compassion and vision.

I was in constant awe of her great intelligence, energy, and enthusiasm.

I will remember Michele for her warmth, humor, intelligence, integrity, and unwavering friendship.

Her legacy will live on through the countless students, scientists, and educators that she has helped shape over the years.

I feel so very lucky to have had years to study and grow under Michele's guidance and will never forget the impact she has had on my life.

I will always remember her engaging manner and commitment to young students, as well as her acceptance of their abilities to participate and contribute to the scientific process.

She will be missed by the Reserve system.

I am grateful for her knowledge, humor, and her unwavering dedication to science, education, and the environment.

I frequently sought information or advice from Michele and she never failed to assist.

She was such a wonderful advocate.

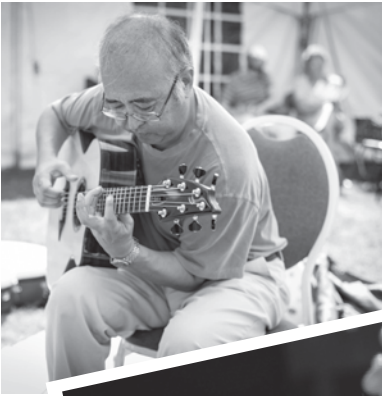
Michele was an inspiration to everyone lucky enough to know her. She made a difference in so many lives.

*Share your remembrance online:*  
[wellsreserve.org/blog/413-michele](http://wellsreserve.org/blog/413-michele)



# NATURE CRAFTS FESTIVAL

Holding our two largest events just 14 days apart might have been crazy, but thanks to the Trust's dedicated staff and trustees and more than 200 amazing volunteers, our 25<sup>th</sup> Laudholm Nature Crafts Festival and 10<sup>th</sup> Punkinfiddle celebration both came off without a hitch. More than 4,000 visitors over three days enjoyed everything the Wells Reserve at Laudholm has to offer.



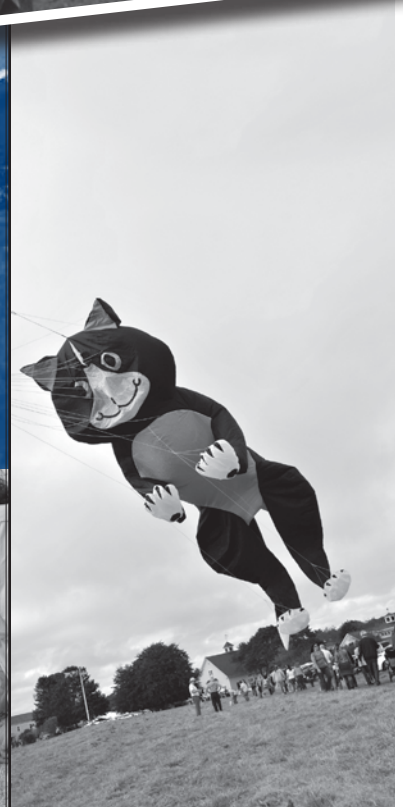


# AND PUNKINFIDDLE

A National Estuaries Day Celebration



Late last year, organizing committees began their planning, but when the gates opened it was the parking attendants, food servers, bakers and runners, clean-up crews, and so many others that made these essential festivals run so smoothly. Thank you so much, volunteers – we couldn't do it without you. To our vendors, exhibitors, and guests – see you next summer!



The National Estuarine Research Reserve System is a network of protected areas established for long-term research, education, and stewardship. This partnership program between NOAA and the coastal states protects more than one million acres of estuarine land and water, which provides essential habitat for wildlife; offers educational opportunities for students, teachers, and the public; and serves as living laboratories for scientists.

#### The 28 Sites in the NERR System

ACE Basin, South Carolina  
 Apalachicola, Florida  
 Chesapeake Bay, Maryland  
 Chesapeake Bay, Virginia  
 Delaware, Delaware  
 Elkhorn Slough, California  
 Guana Tolomato Matanzas, Florida  
 Grand Bay, Mississippi  
 Great Bay, New Hampshire  
 Hudson River, New York  
 Jacques Cousteau, New Jersey  
 Jobos Bay, Puerto Rico  
 Kachemak Bay, Alaska  
 Lake Superior, Wisconsin  
 Mission—Aransas, Texas  
 Narragansett Bay, Rhode Island  
 North Carolina, North Carolina  
 North Inlet/Winyah Bay, South Carolina  
 Old Woman Creek, Ohio  
 Padilla Bay, Washington  
 Rookery Bay, Florida  
 San Francisco Bay, California  
 Sapelo Island, Georgia  
 South Slough, Oregon  
 Tijuana River, California  
 Waquoit Bay, Massachusetts  
 Weeks Bay, Alabama  
 Wells, Maine  
[nerrs.noaa.gov](http://nerrs.noaa.gov)

## research / coastal science

### Reserves Set the Bar for Restoration

Michele Dionne, our late research director, always had a keen interest in salt marsh restoration, so she eagerly involved the Wells Reserve in a 5-year project, just completed, to measure the success of several tidal wetland restoration projects around the country. Here is how it worked and what Michele and her colleagues found.

Five restored coastal habitat sites in Maine (from Kittery to Scarborough) and twelve in Rhode Island, Virginia, North Carolina, and Oregon were compared to undisturbed, healthy, and well functioning sites within nearby estuarine reserves.

For the comparison, scientists used data obtained through the System-Wide Monitoring Program (established by the reserve system in 1995 to track changes in estuaries and coastal areas) combined with a number of specific measurements made for this study at each site.

Researchers found that most restored sites remained in transition, but had achieved an intermediate level of natural health by the time of the study. Two restored sites excelled, though, and were very similar to their paired reference sites.

Two variables — elevation of marsh platform and depth to groundwater — were significantly correlated with the structure of restored plant communities, suggesting they may be important indicators of restoration performance in tidal wetlands.

The study demonstrated that the estuarine reserves can be suitable reference sites for tidal wetland restoration projects in their regions. The relatively pristine habitats within the reserves establish a useful bar for what restoration projects can aspire to achieve.

This project was conducted by the National Estuarine Research Reserve (NERR) System in cooperation with the NOAA Restoration Center, which has funded nearly 700 restoration

projects since 2000. In addition to the Wells Reserve, the other NERR sites involved were Chesapeake Bay (Virginia), Narragansett Bay (Rhode Island), North Carolina, and South Slough (Oregon).



*Tin Smith retrieves a water-quality data logger from a site that was part of the tidal wetland habitat restoration study. Each data logger stayed on the salt marsh for 2½ weeks collecting salinity, temperature, and ground water depth data for comparison to other sites.*



## Yankee Woodlot: Is This What Stewardship Looks Like?



After more than two decades of passive stewardship, the reserve has re-engaged with our Yankee Woodlot site. Through a once-in-a-generation timber harvest this fall, we are modeling sustainable forest management and involving the public in a selective culling that, despite appearances, is indeed what stewardship can look like.

Timbering is typically driven by economic interest; landowners earn income by cutting down trees. The reserve's Yankee Woodlot project has broader interests: we are managing the forest to promote healthy trees, enhance wildlife habitat, maintain clean water, and provide public recreation and education.

This fall's partial cut presented our first training opportunity. The reserve hosted four timber harvest workshops totaling 14 hours over 8 weeks. Thirty-five people — land trust representatives, municipal staffers, resource managers, and private landowners — discussed every step in planning and managing a harvest, from walking the site and hiring a forester to permitting, tree marking, logging, and remediation.

Working with a forest ecologist, the reserve developed a science-based harvest plan to guide the logging. The most dramatic phase of this long-term project occurred in October, when a 42 truckloads of trees, mostly white pines about 50 years old, were removed in a partial cut. The harvest was done in a sustainable way that will serve as a model for other such efforts in the region.

Timber harvesting is akin to the farming of annual crops, but it can only happen on a woodlot like ours once a generation. Our harvest has created an opening that will let in abundant sunshine, both for improved growth of existing trees and for promoting rapid, monitored regeneration in the affected area. Over the coming year, the focus will be on replanting native species, discouraging invasives, re-establishing trails, and developing educational materials.



- For more information and to stay up to date on this project, please visit [wellsreserve.org/yankeewoodlot](http://wellsreserve.org/yankeewoodlot)
- To walk the Yankee Woodlot, start near the Alheim Commons at 100 Laudholm Farm Road



## New Members

Jason Allaire  
John & Dorothy Andrews  
Nargess Ashayeri  
Roger A. Auger  
Chester D. Blackman, Jr.  
Roland Boutwell  
Ms. Sheila Bukowski  
Nik & Xanthe Charov  
Ms. Therese Chart  
Wendy Conley Cyr  
Daniel Downey  
Michael P. Dudley  
Janet Durkee-Prescott  
Larry & Vicky Elbroch  
Dr. Joan Elkins  
Charles & Charlotte Faulkner  
Francis Fay & Alaine Greger-Fay  
Lisa Fournelle  
Rebecca Freeman  
Patricia Gallant  
Haden Gerrish  
Andre Gervais  
Audrey Gostanian  
Robert & Mary Gray and Family  
Erin Haggerty  
Mari Hanby  
Eleanor Haywood  
Shaza Hussein  
Joe & Carol Iannacchino

Barry Jandebeur  
Karen Johnson  
Larry Keefe  
David & Caitlin Kirk  
Elizabeth Knox  
Frank Kramer  
John & Susan Kujawski  
John Lachance  
Ed Lane & Jeannie Antonioni  
Donna Layte  
Janet LeClerc  
Audrey Lemieux  
Ryan & Colleen  
Jennifer Libsack  
Anne Loughlin  
Jim & Linda Mahaney  
Stanley Malko & Judi McGrath Malko  
Jackie Martin  
Nancy L. McNelis  
Dr. Chris Meehl  
Elizabeth Millar  
Janet Henry & Vernon Moore  
Kate Moxham  
Nancy & Joe Mullen  
Louis Munsen  
Caroline Muephy  
Tom & Sheila Nay  
Paul & Kariranne Nolan  
Joseph & Francine Paoloni

Robert Parsons  
Donna Perkins  
Nancy Pierce  
Mark & Ann Pilgrim  
Kathleen Poole  
Patricia Pranger  
Linda Rakiey & Joyce Kozo  
Paul Rehme  
Mary Ross  
Paige Rutherford  
Stephen & Carole Rybczyk  
Richard Swails & Louise Sandmeyer  
George & Patty Shairs  
Ariodante Shaw  
Trish Simas  
Chris Smith & Patricia Coutermarsh  
Laurie & Daniel Soroken  
Steven St. Germain  
Denise Stack  
Jane & Jim Stephenson  
John & Deborah Swallow & Family  
Sandy Tillman  
Bill & Joyce Viecegli  
Daniel & Phyllis Walsh  
Eric, Rachel & Gabe Weinrieb  
Gretchen West  
Madeleine Wright

## Memorial Gifts

Alice F. Muchnic  
John Troy  
Mary Louise Smith  
Michele Dionne  
Paul K. Johnson

## Celebratory Gifts

Carolyn Beecher on her 80th birthday  
Diana Joyner in honor of the great work  
she's done as Laudholm president

## New Business Members

Grain Surfboards  
York Nordic



thankyou

Gifts received June through October 2012



# give a gift get a gift

This holiday season, introduce a friend or relative to the Wells Reserve at Laudholm! Purchase a gift membership and we will send you this amazing 18x24" Wade Zahares poster (retail value \$10). Pass it along or keep it for your own reminder of the place you love to share.



**Call us at 646-4521 or visit [wellsreserve.org/support](https://wellsreserve.org/support) to get started.**

membership levels —	\$25 individual • \$40 family • \$50 business/organization
membership benefits —	free admission 362 days a year • discounts on programs, concerts & festivals • <i>Watermark</i> newsletter • special mailings • knowing you help keep the site beautiful and our programs strong



## key dates for your calendar...

- 12/5/12**      annual meeting, volunteer reception & holiday party  
4–7pm: celebrate a successful year and a great team of volunteers – rsvp asap 646-1555
- 12/11/12**      wassailing for wildlife  
4pm: a festive evening of caroling by moonlight on the wooded trails of the wells reserve at laudholm
- 12/13/12**      climate change lunch ‘n’ learn  
12pm: straight talk on the ocean’s role in climate change from a marine scientist’s point of view
- 12/31/12**      last day of the year  
make a charitable contribution today and it counts for your 2012 tax return. thank you!
- 1/12/13**      naked shrubs  
10am: no leaves? no problem! discover how to identify shrubs even during winter
- 1/24/13**      history of skiing  
12pm: a fascinating glance at the early years of skiing and how the sport has evolved
- 2/21/13**      winter wildlife day  
10am: family activities, live animal presentations, wildlife tracking, and more

**...details at [wellsreserve.org/calendar](http://wellsreserve.org/calendar) or 646-1555**