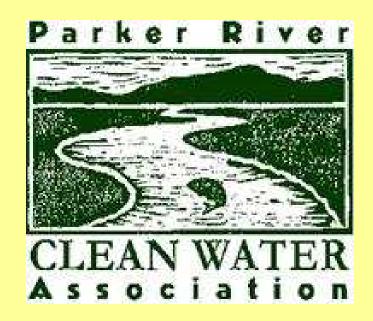
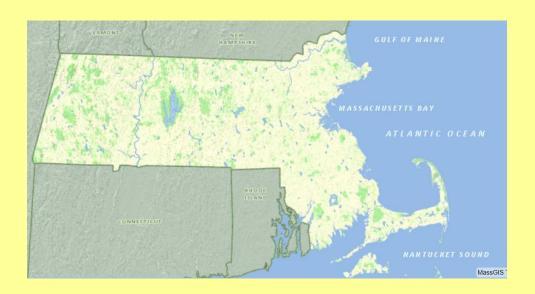
PARKER RIVER CLEAN WATER ASSOCIATION



2019 ANNUAL MEETING

Guest Speaker, Dr. Robert Gilmore Pontius Jr.

Clark University Professor - Graduate School of Geography



Methods for Land Change Science and Geographic Information Science (GIS)



Herring Migration



- Total count 2018 was 31,217. The fish arrived awfully late with the cold weather in March and April, about 2 weeks later than their typical April 7-10 appearance. Led to a lot of overlap between alewife and blueback. See what that means 3 or so years from now.
- 2019 DMF will continue video monitoring
- Transport herring higher into the watershed again this year.
- Some transfer to the Ipswich River to try to restart restoration efforts there.
- DMF working with IRWA and the Town to put in a proposal to the current NOAA Restoration RFP to remove Larkin Dam

TURTLE PROJECT





EDUCATION VOLUNTEERS

River Valley Charter School in Newburyport:

Karen Popken / Debbie Collins Colleen Morrissey / Emily Doulas

Peter McClure / Melanie O'Keefe Jane Noyes / Lynne Taylor

Bagnall School in Groveland:

Laurel Ridge

Hunking School in Haverhill:

Kelly Mansour

Doyon School in Ipswich:

Susan Speak

Our Secret Garden in

Newbury:

Ellie Dawson Kathy Dunfee

Amesbury High School:

Lindsey Miller

Triton Regional High School:

Ellen Moore

<u>Topsfield Massachusetts</u> Audubon Wildlife Sanctuary:

Richard Wolneiwicz

Cashman School in Amesbury:

Julie O'Neill Joanna Dodier Dee Vachon

Amesbury Middle School:

Christine DeNuzzio / Greg Cook Derek Bent / Kristin Fitzgerald

Georgetown Public Library:

Michelle Augeri / Cathy Dewitt

Bresnahan School in

Newburyport:

Julie Malchow John Gangemi Nonie Olson

High School in Newburyport:

Colleen Fallon Erin Hobbs

FIELD VOLUNTEERS

Graeme Buell

Bruce Ericson,

Kim Weaver

Mandy Weaver

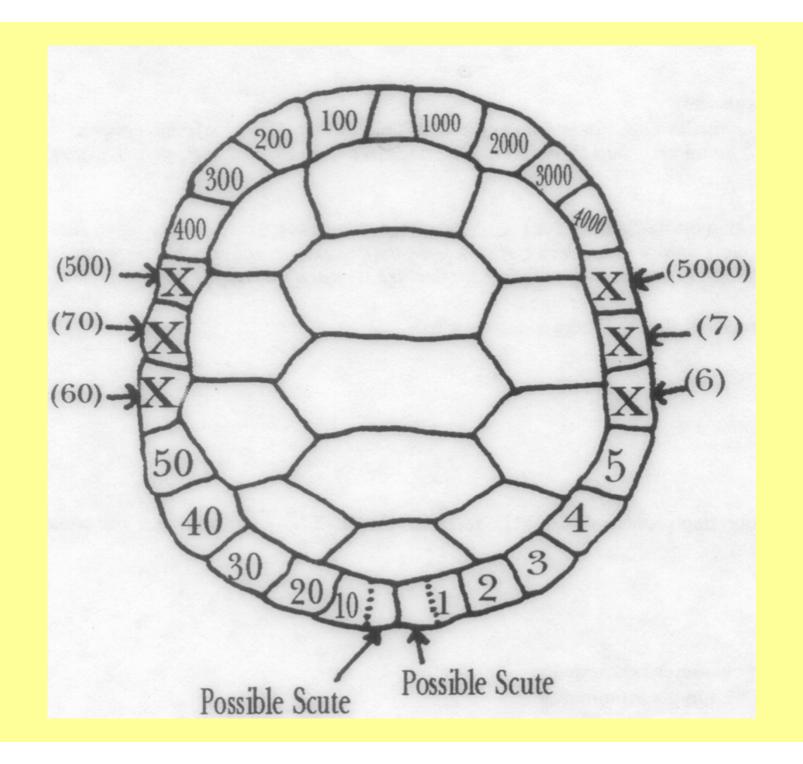
George Comiskey

Chris Rembis

Kelly Mansour

2015 Head-started turtle (#229) with transmitter





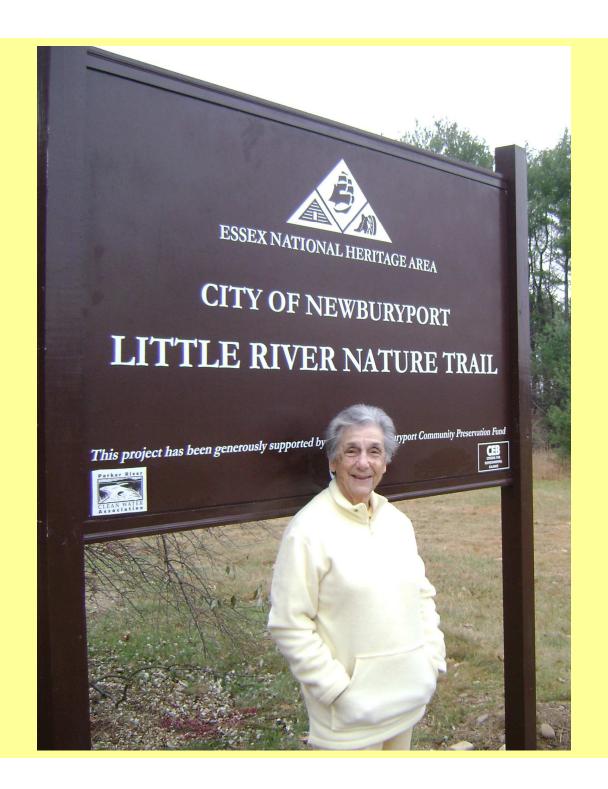
2018 Blanding's Turtle Nesting Season Data:

- Number of protected Blanding's turtle nests protected: 16
- Number of total eggs: 175
- Number of successful hatchlings: 156
- Average clutch size: 10 eggs
- Number of hatchlings released upon hatching: 106
- Number being of turtles being head-started during the 2018-2019 school year: 50
- Planned release for head-started turtles: First week of June 2019
- Before their release, each will be weighed, measured and notched with a unique identifying number. They will then be distributed in the wetlands (vernal pools, scrub shrub swamps and emergent grass wetlands near their respective nests. The classes will be invited to participate via organized field trips, in releasing of their head-started turtles
- From 2015-2016 school year through the end of the 2018-2019 school year, we will have head-started 169 Blanding's turtle hatchlings in the various schools, libraries, Audubon facility, etc.
- The head-starting program has increased awareness of this threatened turtle species, as well as added to the STEM curriculum of the schools, and hopefully encouraged future generations of citizen scientists



Little River Nature Trail













Biography of Marlene Schroeder



Marlene Schroeder (1934-2016) On April 18, 2016, Marlene Schroeder passed from this present world to the world of melted clocks as seen in her favorite surreal painting "Persistence of Memory" by Salvador Dali.

Marlene Schroeder will be remembered for her devotion to education and passion for the environment. Marlene was a 1958 magna cum laude graduate of the University of Illinois, earning their gold scholarship key all four years. Marlene began her teaching career in East Aurora, Ill. When she began teaching in La Grange Park, Illinois, she developed her career-long

interest in teaching early math and began to write math textbooks. Her math teaching was recognized at the local, state and national levels.

Locally, Marlene was proud to be recognized as the Amesbury 1996 Rotary Club Teacher of the Year. More recently she was chosen for the Educator's Wall of Fame in the Amesbury High School Lobby. She recalled her students and families with great joy.

Marlene and her life companion of 36 years Norman Rehn enjoyed many outdoor activities, especially canoeing and traveling out West to see desert wildflowers.

Marlene frequently said, "I am especially blessed to have wonderful friends and I treasure them forever."

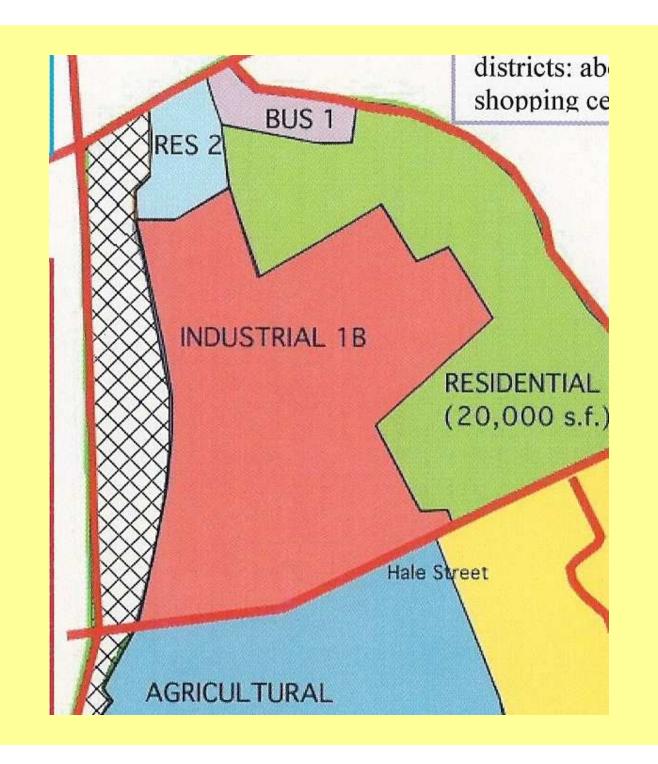
Marlene was an active proponent of environmental education. Her classes enjoyed many lessons on the environmentally-rich school grounds. She often quoted the world-famous biologist Edward O Wilson, who reminded us we are a part of nature, not apart from nature.

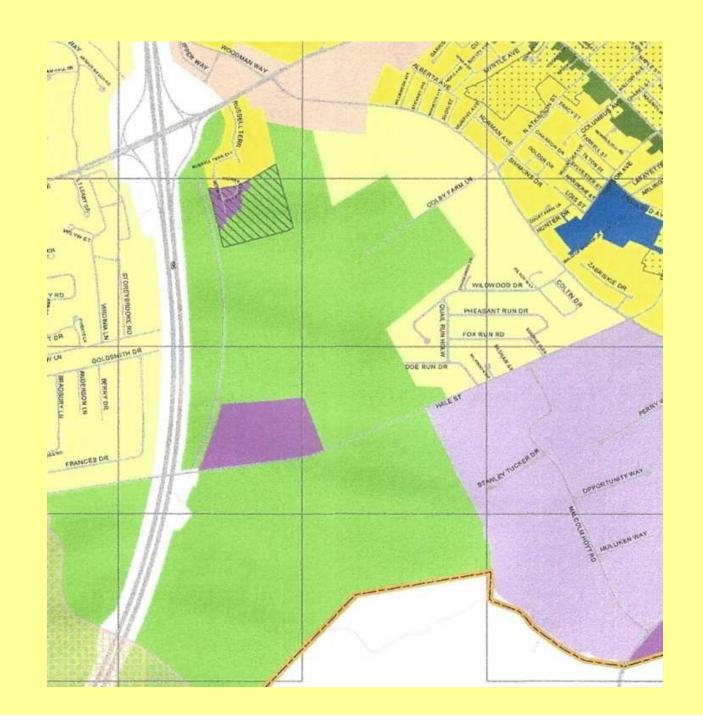
For years, Marlene has been associated with the Parker River Clean Water Association. She has been a member of Essex County Greenbelt Association and Mass Audubon for many years.

As an active member of Parker River Clean Water Association; she advocated aggressively for the protection of the Little River, a significant headwater to the Parker River and a sensitive watershed area. As a member of Essex County Greenbelt, she worked hard to protect the land that covered the Upper Little River Watershed.









PARKER RIVER WATER QUALITY

Provided weekly winter river sampling at two sites on the Parker River.

Drew Robison, PhD Candidate in Will Wollheim's UNH laboratory, PhD Study on Carbon Flux in the Parker River, Ipswich River, Essex River Watersheds and for various other graduate studies

 Invasive Aquatic Weed Pull on the Upper Mill Pond and Lower Mill Pond in the Upper Mill River Subwatershed.

Partners: Essex County Greenbelt and New England Aquarium live blue Ambassadors Special Thanks to PRCWA Organizer – Laura Jones



2019 PRCWA Water Quality Monitoring Program

Marco-invertebrate Study
 In-situ Float Stream Monitoring







Parker River Crane's Pond Wildlife Management Area

- Upper Parker River Watershed Analysis
- Macro Invertebrate Study Comparison and In-situ Float Monitoring on Segments in the Upper Watershed.



Upper Parker River in Byfield

- How does Parker River Watershed communities' water withdrawals affect low flow or no flow along the Parker River?
- How do low flows affect water quality?

BLUEBIRD/TREE SWALLOW NESTBOX PROGRAM



North Pasture - Newburyport, MA



Season	Species	Total # Nest Attempts	First-Egg — Date of Season	Total # of Eggs	Total # of Nestlings	Total # of Fledgling	Nest Attempts with 1 or more Fledglings
2018	EABL Site # 1	1	05/02/2018	3	2	2	1
	Site #2	1	06/15/2018	2	2	2	1

2018 Georgetown Nesting Data

Season	Species	Site	Total # Nest Attempts	First-Egg – Date of Season	Total # of Eggs	Total # of Nestlings	Total # of Fledgling	Nest Attempts with 1 or more Fledglings
2018	EABL	Bailey	3	04/13/2018	20	16	12	3
	TRES	Bailey	1	05/06/2018	6	6	6	1
2018	EABL	West Street	3	04/17/2018	14	13	12	3
	TRES	West Street	7	05/03/2018	28	26	23	5





ISSUES

- MEPA comment letter to Groveland quarry landfill
- MEPA comment letter to Georgetown Transfer Station expansion
- MEPA comment letter to new well field proposal in Rowley River basin
- MEPA comments due March 20th on Ipswich and Georgetown WMA withdrawals

Other issues PRCWA not aware of?

Upcoming Events in 2019

City Nature Challenge end of April

Invasive Weed Pull mid- July

Macroinvertebrate Study – Fall of 2019

ELECTION OF BOARD & OFFICERS

Jerry Mullins – President

George Comiskey – VP

Norm Rehn – Treasurer

Yvonne Buswell - Clerk

Rob Stevenson – Director

Nick Hurlin - Director

Mark Irving - Director

ADJOURNMENT



THANK YOU FOR COMING!!!