



ILLINOIS RIVERWATCH

ANNUAL REPORT 2020



**The National Great Rivers
Research & Education Center**

ILLINOIS RIVERWATCH
NETWORK
NATIONAL GREAT RIVERS RESEARCH AND EDUCATION CENTER

Lewis and Clark Community College // One Confluence Way // East Alton, IL 62024



Changing Times

As we reflect on 2020, the word that comes to mind is “change.” Rather than dwell on the changes that might leave a bitter taste, we focus here on positive changes and those that open new opportunities.

Perhaps most apparent was the change in staff. All of the RiverWatchers have been very kind and welcoming to both Danelle Haake and Hannah Griffis. They bring new perspectives, ideas, and opportunities.

A few new educational programs were initiated:

- the River Watch Speaker Series (catch up on past events on our [YouTube playlist](#))
- a project on [iNaturalist](#) to use as a supplemental means of sharing stream invertebrate data

This year we also introduced the RiverWatch Volunteer Awards. Many very deserving volunteers were nominated, making for some difficult decisions.

Finally, there were changes in monitoring protocols that were initiated in response to the Covid-19 pandemic. These changes, though temporary, reflect on something that has been consistent through the decades – safety will always be the top priority of RiverWatch!

33
Stream Sites

31
Citizen Scientists

57
Additional Untrained Volunteers

2020 RiverWatch Volunteer Award Winners



Volunteer of the Year
Mary Vieregg

Lifetime Achievement
James Pustz

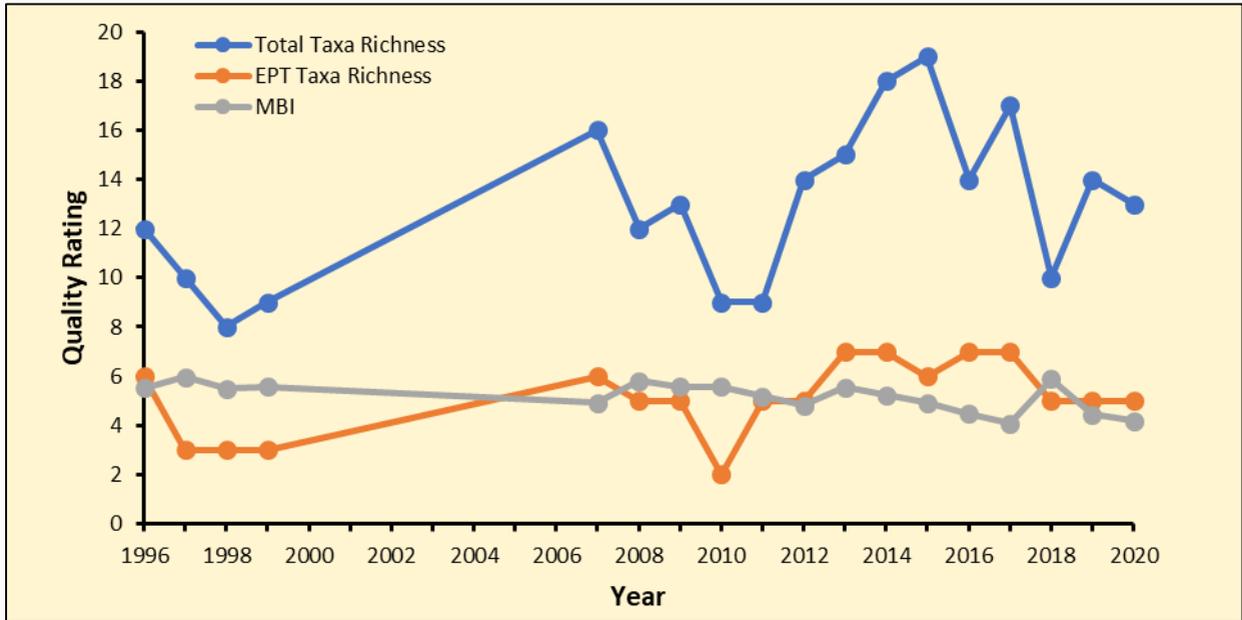


Partner Prize
Upper Sangamon
River Conservancy

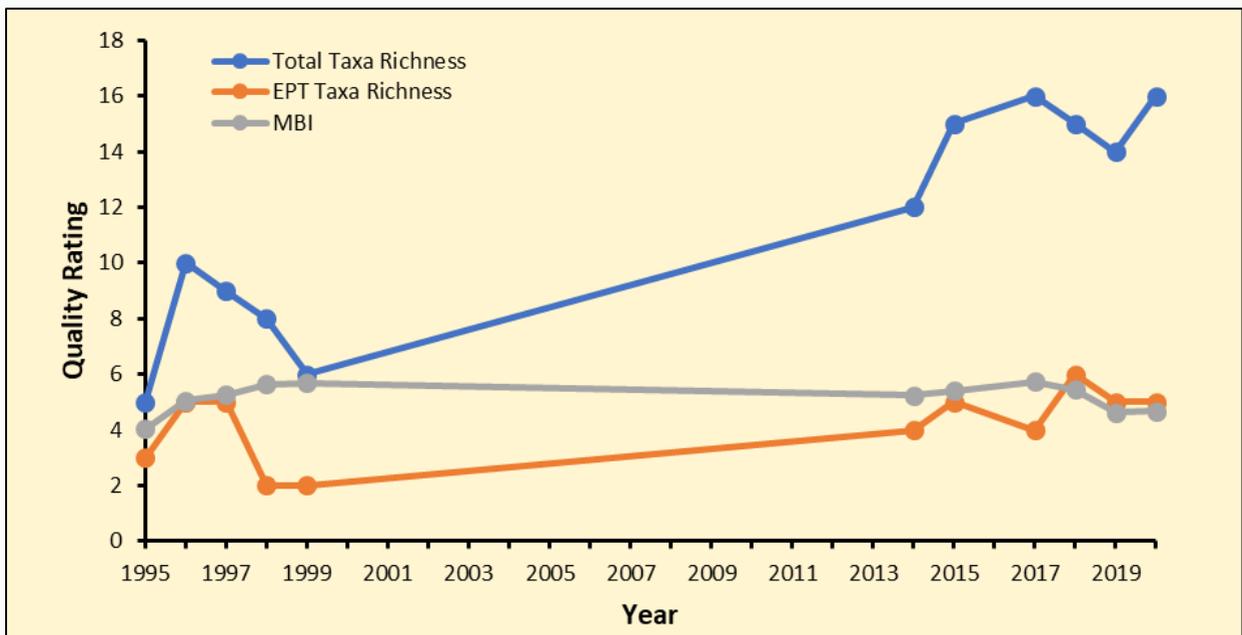


Healthiest Streams of 2020

This year, two streams tied for the best stream quality ratings! It is notable that both of these sites have data through much of the 25-years of the RiverWatch program. The first stream is Ferson Creek (R0203201) monitored by Denis Kania and Renae Frigo. Thanks to their efforts and to the Forest Preserve District of Kane County, we can see gradual improvements in this stream.



The second stream showing exceptional stream quality ratings this year was Jubilee Creek (R0407401) monitored by citizen scientists Emily and Sean Kerwin. This site has shown great improvements in taxa richness. Thank you to our citizen scientists and the Illinois Department of Natural Resources!



*Lower MBI corresponds to better stream quality



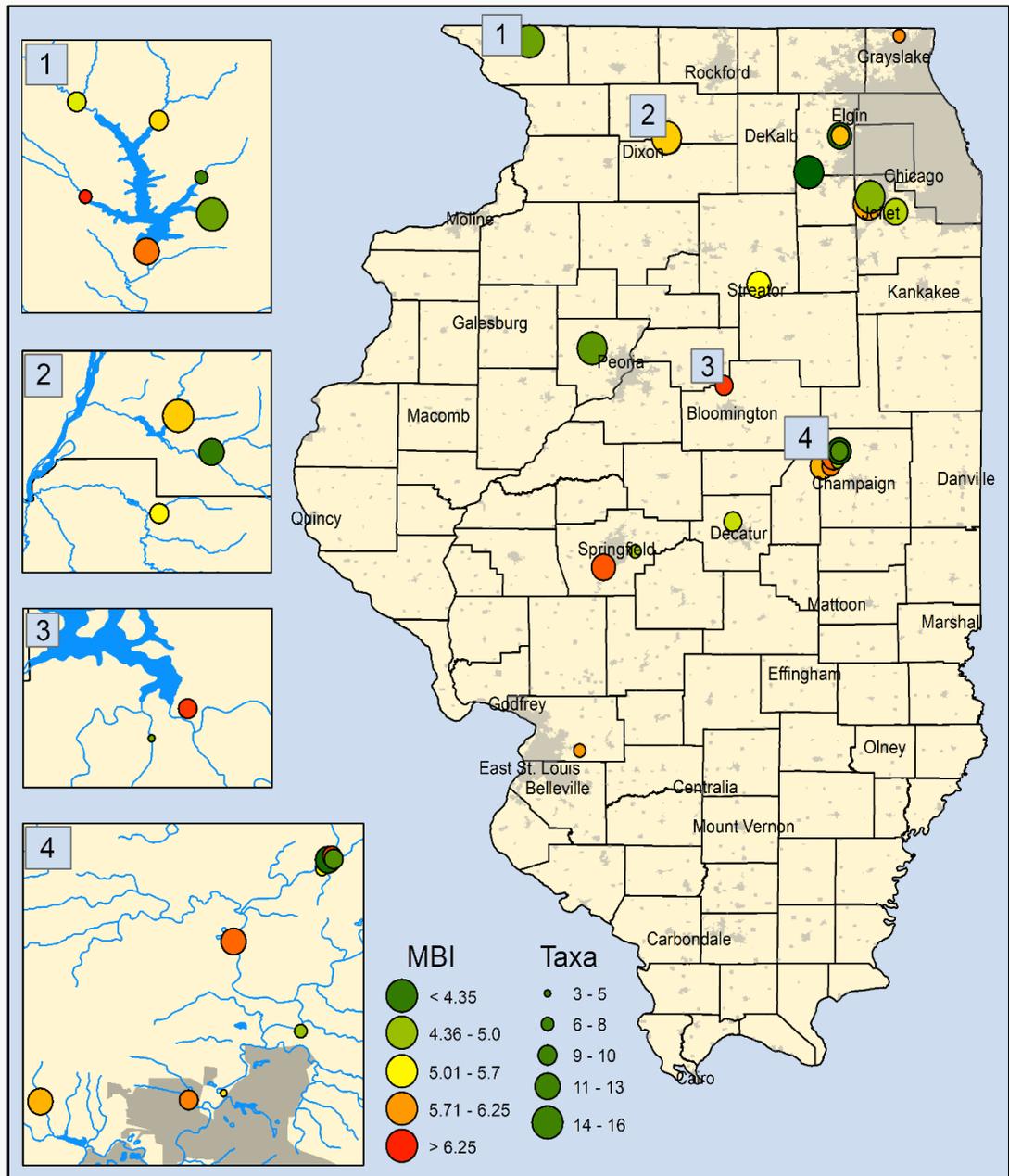
Macroinvertebrate Biotic Index (MBI) and Taxa Richness 2020

The RiverWatch sites sampled in 2020 are shown in the map below. The color of each point is determined by the MBI rating, with the sites dominated by sensitive species shown in green, moderately sensitive in yellow, and least sensitive species in red. The size of the points is related to the total taxa richness (number of types of invertebrate) at the site.

This year, participation was lighter than normal. We attribute this mostly to the impacts of Covid, which caused the cancellation of training workshops, difficulty accessing monitoring kits, and even the closure of many sampling sites. Despite these challenges, groups around Apple River Canyon Lake (inset 1) and the Sangamon River (inset 4) rallied to collect samples at a combined 15 sites!

For 2021, we hope to have samples from several sites that have not been monitored in the past few years. To accomplish this, we have scheduled training workshops in several under-sampled regions.

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ILLINOIS RIVERWATCH NETWORK





25 YEARS OF RIVERWATCH:

970 Monitoring Sites

Over 1300 Citizen Scientists

17,000 Hours of
Citizen Scientists' Effort

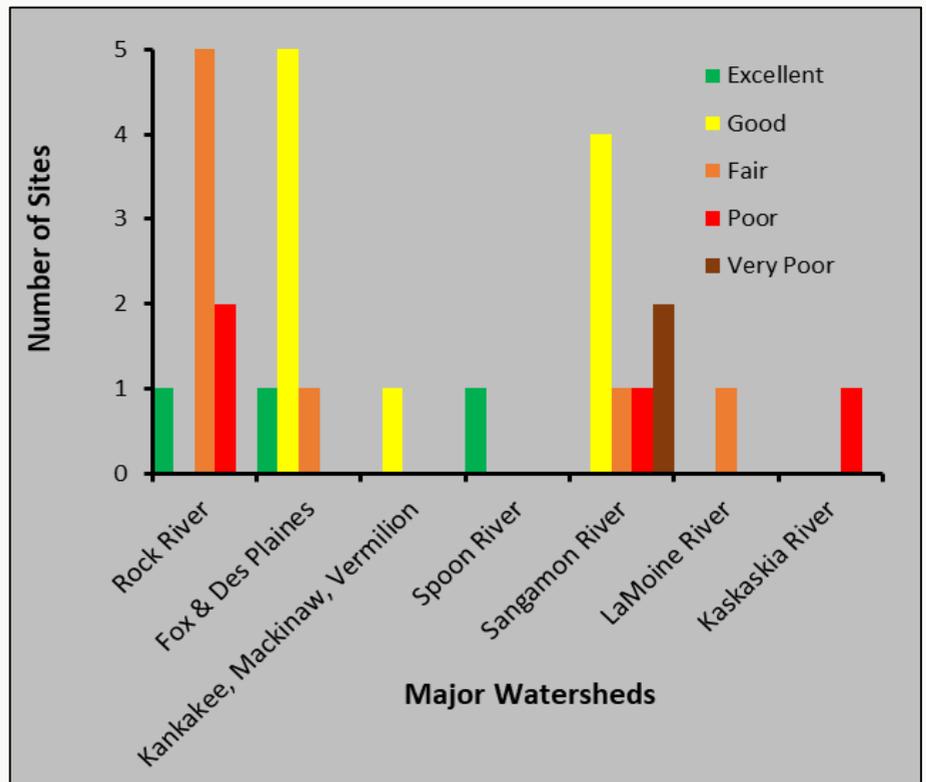
More than 3900 Monitoring Events

120 Training Workshops



Stream Quality in Our Watersheds

This graph shows the number of sites in each watershed that fall into each stream quality category based on MBI scores. There were no sites monitored in the Embarras and Vermilion River, Little Wabash River, or Big Muddy, Saline, and Cache River watersheds.





Thank You, Thank You, Thank You!!

We are grateful to the many RiverWatchers and friends who have been so supportive in this challenging year. We especially thank:

Citizen Science Data Contributors

Jim Bland	Scott Hays	Luna Nino
Cynthia Buchholz	Aren Helgerson	Melissa Parages
Glen Clayton	David Holland	Sandra Perkins
Bruce Colravay	Philip Hult	Arlan Schattke
Mike Comerford	Denis Kania	Nathan Schattke
Kathryn Foster	Emily Kerwin	Robert Steinman
Renaë Frigo	Sean Kerwin	Mary Vieregg
Annie Gegen	Jake Kessel	Patricia Werner
Pete Gegen	Elizabeth Kirby	Don Wilson
John Griffis	Mary Meier	
Brooks Hauser	Joe Niernberger	

New RiverWatchers (trained in October 2020)

Sawyer Abrahamson	Anton Meyen	Curt Sinclair
Jamie Boas	Callia Meyen	Josey Wise
Abby Hammer	Cassandra Meyen	Regina Wise
Scarlet Hammer	Tayanna Meyen	Rylea Wise
Stella Hammer	Thomas Meyen	Sam Wise
Izabella Mallast	Lia Pasquariello	
Adara Meyen	Libby Pasquariello	

Fall Speaker Series Presenters

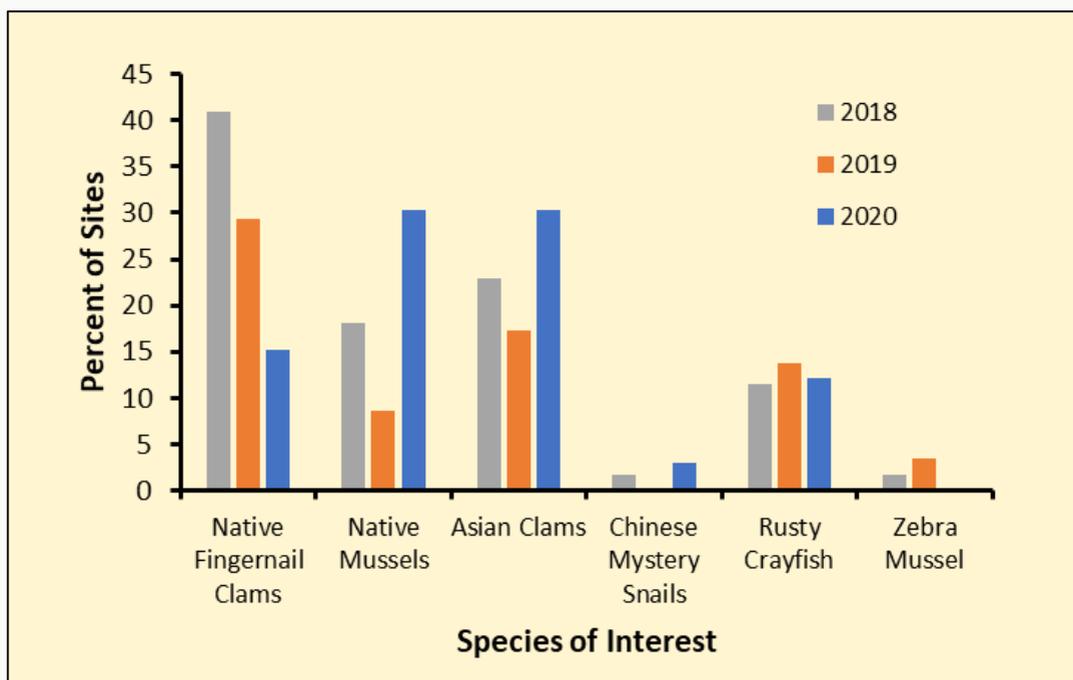
Paul Brunkow	Jason Knouft
Danelle Haake	Megan Pagliaro

Special thanks
to our
Monitoring
Kit Hosts!



Species of Special Interest

The presence and absence of certain species can provide important indications about stream quality. The graph below shows the percent of sites sampled in the last 3 years where species of special interest have been present. The presence of native species, like native mussels and fingernail clams, can indicate good water quality. The presence of invasive species, such as Asian clams, Chinese mystery snails, rusty crayfish, and zebra mussels, can disrupt the natural food chain.



More Positive Changes to Come

As we move into 2021, there are additional changes in the works for RiverWatch. The most important of these is the upcoming revision of our Illinois RiverWatch Stream Monitoring Manual. Key changes include:

- Instructions on how to apply for the required Scientific Collection Permit from IDNR
- Opportunities for Fall RiverWatch monitoring
- Information on joining the RiverWatch iNaturalist project
- Instructions on properly cleaning RiverWatch kits to prevent the spread of diseases and invasive species

In addition, we have a new laminated instruction sheet for citizen scientists to use in the field. The sheet summarizes the field methods to help make sure data collection is consistent while keeping your monitoring manual high and dry!