CREATING A CONNECTED CONSERVATION CONSTITUENCY

Detroit River International Wildlife Refuge 2014 Annual Report

Photos by NASA, U.S. Fish and Wildlife Service, International Wildlife Refuge Alliance, Jake Bonello, and Katie Dennis

Detroit River International Wildlife Refuge

2014 Annual Report

Dear Friends,

This past year has been a big change for me with stepping down from my Congressional seat after 59 years in office, but I will continue to champion my passion for the Detroit River International Wildlife Refuge and look forward to working with all of you. We had another exceptional year in 2014 with construction of the Visitor Center underway, funding secured for a greenway trail linking the Refuge Gateway with Elizabeth Park in Trenton, acquisition of Newport Beach Marina and Tishkof tracts in Monroe County, securing two new visitor services' staff for the Refuge, and expanding our restoration work through the Stewardship Crew, the Cooperative Weed Management Area, and others. It is truly very heartening to see the depth and breadth of partnerships in building our refuge.

This year's annual report continues to demonstrate our leadership in public-private partnerships for conservation and outdoor recreation. Indeed, I am so proud that over 300 public and private partners have worked with us to leverage over $47.6 million to build our refuge since 2001. In 2014, we saw, under the leadership of Refuge staff and its Friends Organization called the International Wildlife Refuge Alliance, 467 volunteers give a total of 5,394 hours of their time to refuge projects. This translates to over $119,000 in labor costs. In 2014, we also either led or partnered on 75 outreach events, open houses, or special events, engaging over 19,500 people in natural resource education, interpretation, or special activities targeted at bringing conservation to cities. I continue to be amazed at how we are working with so many others to help make nature part of everyday urban life.

I want you to know that I will continue to be your champion and help in any way I can, but you must also recognize your important role in inspiring, recruiting, and equipping others to get involved in the refuge, and to help us pass on an incredible conservation legacy to the next generation. We are one of 14 priority urban refuges throughout the United States charged with bringing conservation to cities and cultivating a connected conservation constituency who cares about wildlife. This important effort, under the U.S. Fish and Wildlife Service's Urban Wildlife Refuge Program, is working to find creative ways for urban residents to find, appreciate, and care for nature in their cities and beyond, with an ultimate goal of fostering a sense of stewardship. What a noble mission and worthy challenge. It is my hope that we all aspire to be a national model for bringing conservation to cities.

From the bottom of my heart, thank you for working with me to deliver this mission and to meet this challenge. I look forward to seeing the construction of our Visitor Center at the Refuge Gateway, realizing further growth of the refuge in both the United States and Canada, and inspiring more people to get involved in growing and enjoying North America's only international wildlife refuge.

With every good wish,

John D. Dingell, Former Member of Congress

Photo by Katie Dennis

Introduction

The lower Detroit River and western Lake Erie are located in the heart of the Great Lakes basin and support continentally-significant fish, wildlife, and other natural resources. This ecosystem also links Canada and the U.S. who share a long history of cooperation, including many cooperative conservation initiatives. Out of this international cooperation, the 48 miles of shoreline along the lower Detroit River and western Lake Erie have been designated North America's only international wildlife refuge – the Detroit River International Wildlife Refuge (IWR).

This annual report documents and celebrates refuge accomplishments in 2014, and is intended to inspire more citizens, students, businesses, and communities to become partners in this work. It represents a collaborative effort between the U.S. Fish and Wildlife Service (USFWS) and the International Wildlife Refuge Alliance (IWRA), the nonprofit Friends Organization that builds the capacity of the USFWS to deliver its mission through the Detroit River IWR.

Photos by U.S. Fish and Wildlife Service unless indicated otherwise

Urban Wildlife Refuge Program

Today, 80% of the U.S. population lives in urban areas. To help make sure that this urban population values natural resources and that a priority is placed on developing the next generation of conservationists in urban areas, the USFWS has created a new Urban Wildlife Refuge Program. Under this program, the Service has designated 14 priority urban refuges, 14 urban wildlife refuge partnerships, and many other urban bird treaty cities and other urban refuges to help make nature part of everyday urban life and cultivate a connected conservation constituency who cares about wildlife. The Detroit River International Wildlife Refuge has been designated one of the 14 priority urban refuges working to help develop the next generation of conservationists in cities because that is now where most people live. To learn more about this important work, visit: http://www.fws.gov/refuges/vision/urbanwildliferefugeinitiative.html

"Why I volunteer": Spotlight on the DRIWR Stewardship Crew

"I volunteer not only for my passion of our environment, but to set an example for my son: We must take responsibility for our actions and help in any way to repair what we have for so long allowed to be destroyed."
– Julie Kiczenski

"I like being a part of creating habitat for the local fauna and enjoy the idea of creating hiking trails that are easily accessible to my community. Looking forward to taking my grandchildren to the new visitor's center and hiking the trails."
- Al Jurczyk

"After four years of working with the Refuge biologist on habitat management, I can see the results which regular efforts by a dedicated Stewardship crew can achieve."
– Stewardship crew leader and IWRA Board Member Dick Skoglund

The precious few thousand acres (1 acre is the size of a football field) of land, wetland, and open water of the Detroit River IWR preserves our natural heritage. Stewardship of this natural inheritance in 2014 exemplified projects that kept the long-term health of these places in mind. Our management recognized that often dramatic change can actually result in keeping this inheritance intact in the long-run.

In 1949, Aldo Leopold wrote: "To keep every cog and wheel is the first precaution of intelligent tinkering." In this refuge, we attempt to apply Leopold's wisdom every day in each project. Counter-intuitively, our 2014 projects focused on applying major disturbances (e.g., prescribed fire, cutting, and intentional flooding) and change to natural communities. Through our monitoring we have seen that ecosystems actually re-assemble into much more resilient and diverse networks of habitats for fish and wildlife. As unlikely as this may sound, what we are doing is capitalizing on a key feature of western Lake Erie's wetlands, forests, and prairies – that they are actually dependent upon these types of processes. Communities of plants and animals re-assemble in new ways after recovery from such disturbances as flooding, fire, and wind-throw from storms to match the new existing conditions. It is an opportunity to shuffle the deck and see what species are "winners" in the new environment. The new community will be the most resilient to future stress and that is what we are trying to achieve. We can use these tools in a smart way to build up resiliency in our lands against invasive species, climate change, and habitat degradation.

Knowing when, how often, and how intense to emulate these natural disturbances is the tricky part. First, in 2014, we emphasized continuous learning about what natural communities we have and how healthy they are, and what our management actions are doing to them. You can find this information through a series of field reports at http://driwr.emich.edu/.

A major focus this past year has been taking 43 acres of agricultural land (in soybean production) and reverting it to a natural condition where nature's rules will dominate, not a plow. For these particular areas in 2014, we decided to augment the natural assemblage of plants and animals with species of plants that we felt would add to the diversity, were adapted to site conditions, and reflected the native flora of the local area.

A second major focus was preparing the refuge's first managed "moist soil habitat" at the Brancheau Unit, which resulted in abundant early successional marsh habitat that is used by waterfowl and shorebirds. Third, we entered a new stage in our invasive ***Phragmites*** and cattail management by decreasing broadscale herbicide application of ***Phragmites*** with helicopters and doing more spot-treatment of ***Phragmites*** and invasive cattail, where it still remains. Finally, our 2014 stewardship work has focused a great deal on the Humbug Marsh Unit where we are developing a plan to allow future public hunting for deer on the mainland to reduce the herd to an appropriate number of individuals. Our stewardship crew has been using innovative techniques to completely control invasive shrubs, and by doing so, has discovered an opportunity to manage remnant populations of lakeplain oak openings – an exceedingly rare natural community, indeed.

STEWARDSHIP AND HABITAT MANAGEMENT

Highlights of habitat conservation accomplishments in 2014 include:

- Acquisition of the 30-acre Newport Beach Marina tract in Frenchtown Township of Monroe County and the 17-acre Tiskof tract in Berlin Township of Monroe County
- Conversion of 43 acres of soybean fields to natural habitat by broadcasting native seed with "establishment mowing"
- Establishment of 17-acre moist soil habitat at the Brancheau Unit
- Treatment of 110 acres of ***Phragmites*** on the Refuge via aerial and ground treatments as part of a larger 1,000-acre project undertaken by the Detroit River-western Lake Erie Cooperative Weed Management Area
- Planted 2,200 native plant plugs in 43 acres of reconstructed prairie to augment winter broadcast seeding undertaken through a partnership with the Saginaw Penitentiary
- Rehabilitation of 2.5 acres of constructed prairie at Gibraltar Bay Unit by mowing and disking
- During 2014, progress was made on the Erie Marsh Preserve coastal wetland restoration project through the construction of a water distribution channel and installation of nine water control structures, which will allow independent water management of the wetland units. The Nature Conservancy also secured funding through National Fish and Wildlife Foundation for the second phase of this project. Phase 2 construction will begin in 2015.

Photo by Richard Skoglund

Photo by Jake Bonello

Volunteers from local Lowe's stores build boardwalks reaching between the two cells of the Monguagon Wetland complex. Photo collage by Katie Dennis

"Why I volunteer": Spotlight on the 2014 Youth Conservation Corps

"This internship gave me the freedom to use what I learned at school over the last 5 years. Not only did it let me do that, but it also helped me learn and grow as a leader." -Alexis

"The YCC gave me an opportunity to get out of my comfort zone. I never imagined I'd ever have a job like this. I got to learn many new things like different fish and invasive plants. I'll always be grateful for everything and everyone I worked with these past 8 weeks." -Stacey

"My two years in YCC gave me a better understanding of wildlife conservation while having fun with my peers."
- Devin YCC leader

2014 REFUGE ACCOMPLISHMENTS INCLUDE:

- The refuge continued to work closely with Eastern Michigan University on providing a sound scientific foundation for management (three monitoring field reports were completed in 2014 and are available online at driwr.emich.edu)
- Detroit River Hawk Watch monitoring, representing the 32nd year of consecutive monitoring at the lower Detroit River (all reports available at: www.drhawkwatch.org/publications).
- Common Tern (a "threatened" species in Michigan) monitoring on habitat restored on the Grosse Ile Free Bridge and Belle Isle, in partnership with Detroit Zoological Society.
- Completion of a draft Inventory and Monitoring Plan.

Refuge Biologist Greg Norwood works to transform agricultural land into wildlife habitat. Photo by Jake Bonello

Refuge Biologist Greg Norwood in his native habitat
Photo by Jake Bonello

Refuge Assistant Manager Steve Dushane explains the water control structure at the Brancheau Unit to visitors. Photo by Jake Bonello

RESEARCH & MONITORING

In addition, the USFWS's Alpena Fish and Wildlife Conservation Office – Waterford Substation Fisheries Program annually conducts research and monitoring in the St. Clair-Detroit River ecosystem. Major highlights from 2014 include:

- Fishery biologists collaborated with U.S. Environmental Protection Agency scientists to identify which species of larval fish are found at sites around the Great Lakes using microscopic analyses and molecular genetic techniques.
- Fish biologists took part in a collaborative, multi-agency field exercise in Lake Erie near Monroe, Michigan during September to test the preparedness of the agencies in the event that an invasive species, such as Silver and/or Bighead Carp, were to be found in the Great Lakes, and to take advantage of support to collect Grass Carp, another non-native species.
- Fish biologists used "cutting edge" science to better understand and manage Lake Sturgeon in the St. Clair-Detroit River System, including use of acoustic transmitters to track lake sturgeon movement and a portable ultrasound unit to aid in sexing Lake Sturgeon.
- USFWS and over 30 other agencies received the U.S. Department of Interior's prestigious "Partners in Conservation Award" for its conservation work in the corridor.

Photo by U.S. Fish and Wildlife Service

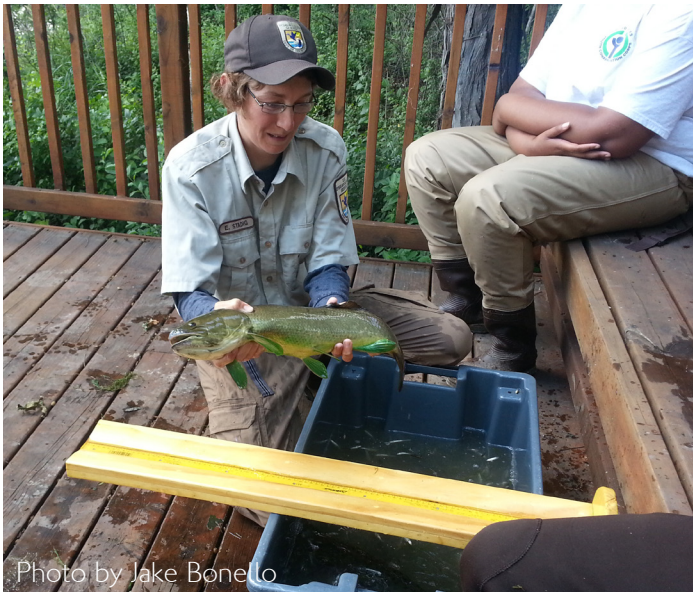


Photo by Jake Bonello

Photo by U.S. Fish and Wildlife Service

Public land is a shared responsibility of the people. This is recognized in the USFWS mission statement – "working with others to conserve, protect and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people." Clearly, much remains to be done to deliver this mission and achieve our goals, and we hope you will join us by becoming a volunteer.

One of our refuge goals is to become part of the community fabric. To accomplish this we are creating "stepping stones" of engagement. For example, in 2014 we led or partnered on 75 outreach events, open houses, or special events, engaging over 19,500 people in natural resource education, interpretation, or special activities targeted at bringing conservation to cities. Good examples are detailed on this page and listed below:

- Over 4,200 people attended Hawk Fest at Lake Erie Metropark where USFWS and IWRA were key partners.
- Other special events included International Migratory Bird Day, Earth Day, Eagle Tours at the Monroe Power Plant, Shiver on the River on Belle Isle, Sundaes on a Sunday at the Brancheau Unit, a "Kayak in the Refuge" event, numerous nature tours by naturalists, tree planting events with schools, an Owl Prowl, and more.
- In June, PNC Bank and the Detroit RiverFront Conservancy, with support from the USFWS, Michigan Department of Natural Resources, Rivertown Detroit Association, Concentra, Wayne County Parks, Sierra Club, IHOP, and Michigan State University Extension, hosted the 4th annual River Days Kids Fishing Fest, a free family fishing festival at the Milliken State Park Detroit. More than 400 children and their families were treated to a day of free fishing and family fun that was a great opportunity to connect with the outdoors.
- IWRA hosted the 9th Annual Benefit Dinner at Silver Shores Waterfront in Wyandotte, attracting 300 guests.
- Detroit River IWR again hosted a successful Youth Conservation Corps crew during the summer.
- A successful volunteer stewardship workshop was convened.
- Weekly stewardship work at Humbug Marsh, the Refuge Gateway, and Gibraltar Bay units was led by Dick Skoglund from the Stewardship Committee and Art Payette of Grosse Ile Nature and Land Conservancy.
- Jake Bonello volunteered year-round to support operations, maintenance, and restoration work.
- In total, 467 volunteers gave a total of 5,394 hours of their time to refuge projects, translating to over $119,000 in labor costs.
- Special outreach efforts focused on Trenton Exchange Club, Taylor Exchange Club, Detroit Exchange Club, AARP, Healthy Downriver Family Expo, St. Cyprian Church, Growing Great Gardens, Monroe Chapter of Ducks Unlimited, Healthy Monroe Expo, National Association of Interpretation Conference in Dearborn, DTE and Southern Wayne County Chamber of Commerce, a Michigan Sea Grant Discovery Cruise, Batfest, and more.

Do you want to make a difference in our community? Would you like to meet like-minded, motivated, positive people? Do you want to learn new skills to build your resume? Do you just have too much time on your hands? If so, a refuge volunteer position may be just right for you. When our Visitor Center is opened, we will be looking for even more volunteers to assist us on a variety of projects. The refuge has a wide variety of volunteer opportunities for every age, skill, and interest. To get involved, visit the refuge's web site (www.fws.gov/refuge/Detroit_River/what_we_do/get_involved.html) or email Visitor Services Manager, Jody DeMeyere, at jody_demeyere@fws.gov.

Finally, we get asked all the time, "When will refuge units be open to the public?" The answer we always give is "soon." Yet the answer is just a bit more complicated. Policy requires the refuge to have a Visitor Services Plan in place to guide public use over the next 15 years. Once approved, units will begin opening up. Some units that already allow hunting will open up quickly. Others will take some time to navigate access concerns, and, due to deed restrictions, some refuge units will never be opened to the public. But get your hiking boots ready because we expect that in the summer of 2015, units will begin to open and visitors like you can start exploring.!

PUBLIC USE & COMMUNITY ENGAGEMENT

Photo by Gibraltar-Carlson High School

Over 2,000 students participated in World Wetlands Day at Gibraltar Carlson High School that included a wetlands expo and educational program.

Photo by International Wildlife Refuge Alliance

Ford Model Teams constructed a wildlife observation deck at the Gibraltar Bay Unit.

Photo by U.S. Fish and Wildlife Service

Over 7,600 people attended the Pointe Mouillee Waterfowl Festival where USFWS and IWRA helped make this event a major success.

Photo by Katie Dennis

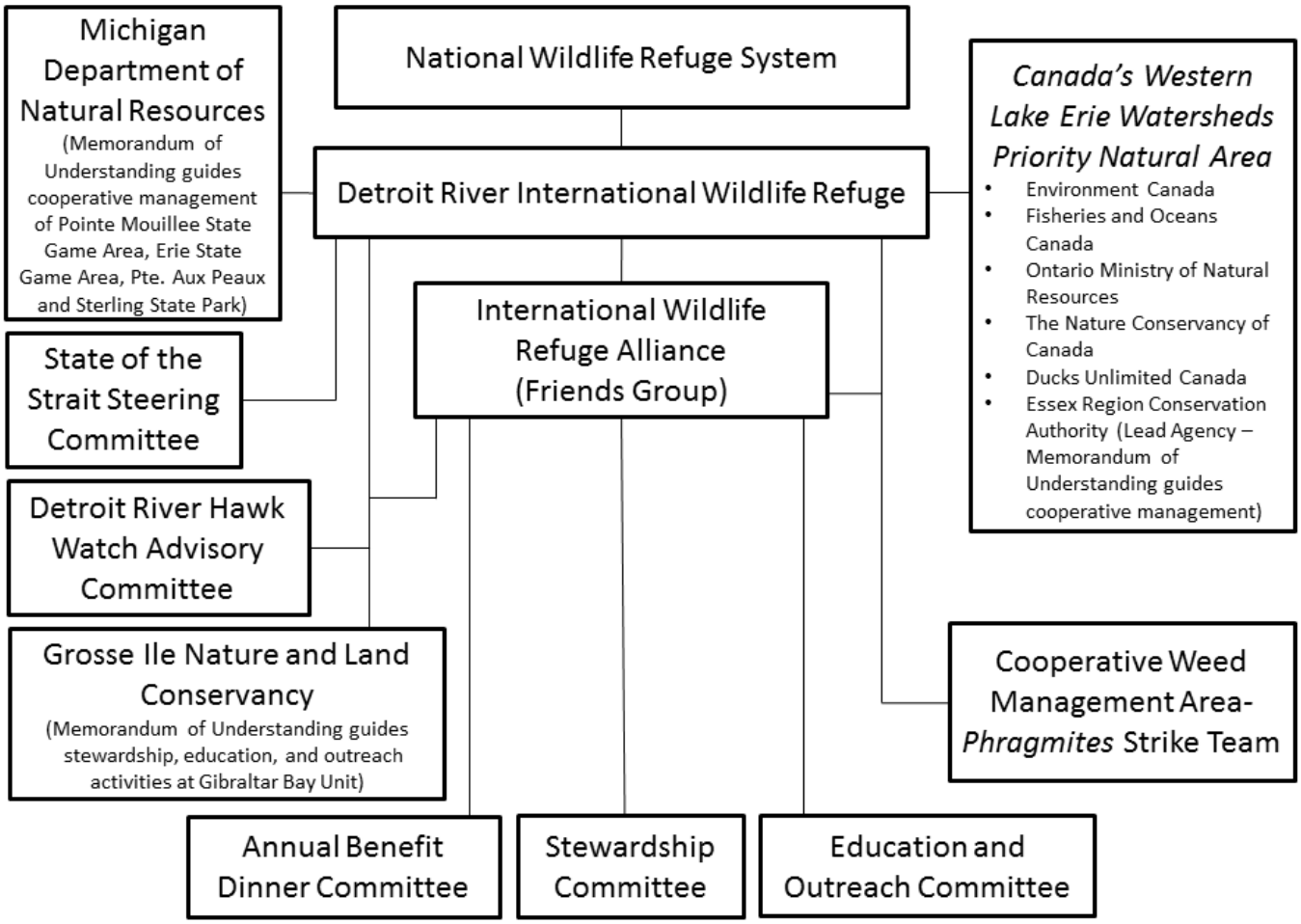
High school students from Summit Academy volunteered for three full days of stewardship work on the refuge, including doing tree maintenance at the Refuge Gateway and pulling invasive species at Humbug Marsh

Photo by Jake Bonello

Photo by Katie Dennis

Photo by U.S. Fish and Wildlife Service

Photo by Jake Bonello



CAPACITY BUILDING

The institutional framework for the refuge continued to mature and expand, reflecting conservation needs and partnership opportunities to build capacity. On the U.S. side, leadership is provided by the USFWS, under the auspices of the National Wildlife Refuge System. Cooperative management agreements are entered into with industries and other organizations to manage lands for conservation purposes. A Memorandum of Understanding has been signed between the USFWS and the Michigan Department of Natural Resources to guide cooperative conservation within the U.S. portion of the Detroit River and western Lake Erie. The International Wildlife Refuge Alliance works with the refuge staff to build capacity, using a series of committees and special teams. The State of the Strait Steering Committee is binational in scope and make-up, whereas Detroit River Hawk Watch Advisory Committee, Grosse Ile Nature and Land Conservancy, and the Cooperative Weed Management Area are focused just on U.S. initiatives. On the Canadian side, partners work through the Western Lake Erie Watersheds Priority Natural Area. USFWS and Essex Region Conservation Authority have signed a Memorandum of Understanding to work collaboratively on transboundary conservation and outdoor recreational initiatives. Clearly, this institutional framework and transboundary cooperation will continue to evolve and improve consistent with an adaptive management philosophy.

Former Congressman John D. Dingell meets with the 2014 Youth Conservation Corps. Photo by Derek Dobies

WHAT'S NEXT?

In 2015, the Detroit River IWR will place a high priority on construction of the Refuge's Visitor Center, while continuing with strategic land acquisitions and habitat restorations. A list of 2015 refuge priorities is presented below:

- Constructing the Visitor Center at the Refuge Gateway
- Constructing the school ship dock and world-class fishing pier at the Refuge Gateway
- Adding at least two tracts to the refuge through purchase, donation, or cooperative management agreements
- Working with Canadian partners to continue to add high quality habitat lands to the Canadian portion of the Detroit River IWR
- Completing a Refuge Visitor Services Plan in preparation of opening the Visitor Center
- Completing and Inventory and Monitoring Plan
- Improving the Refuge's hunting program based on feedback from the 2014 hunting season
- Continuing invasive species management at Refuge units, including undertaking prescribed burns
- Undertaking restorations of Ford Marsh, Fix, and Blanchet units, in partnership with Ducks Unlimited and others
- Constructing a fish spawning reef in the Detroit River upstream and east of Grassy Island
- Continuing monitoring of the fish community response to habitat enhancement projects by Fisheries staff
- Enhancing monitoring for aquatic invasive species, and threatened and endangered species, by Fisheries staff
- Increasing the number of volunteers involved in the Refuge's stewardship efforts
- Completing a conceptual plan for a remedy for containment of contaminants on Grassy Island
- Supporting another IWRA fundraiser in 2015
- Continuing to support established events such as International Migratory Bird Day, World Wetlands Day, Kids Free Fishing Fest, HawkFest, Pointe Mouille Waterfowl Festival, and Eagle Tours, and convening Sturgeon Day on the Detroit RiverWalk
- Sustaining Detroit River Hawk Watch
- Collaborating on necessary research with Eastern Michigan University, University of Windsor, U.S. Geological Survey, and others
- Convening a State of the Strait Conference at Eastern Michigan University

Photo by Jake Bonello and Michael Pucak

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