

# THE REVIEW Newport Aquarium

Did You Know? Sharks can live up to six weeks without eating.

Located in Newport, Kentucky, United States www.sightwordsataglance.com

Writer Carol Lee Brunk



### The Day I Visited The Newport Aguarium

weather in late July to early August- it is still raining and was raining the day I arrived at the Newport Aguarium in the state of Kentucky, United States. As a back seat passenger in a truck, we drove threw the turmoil of clouds with thundering crackles and lightening. A very late spring with the warmth of summer- it rained. We parked in the parking garage on the 'Levee'- that's a raised shopping center with shops above a parking garage. It was a push button elevator ride from the parking garage to the top of the 'Levee'. Upon exit of the elevator at the top of the 'Levee', a quick exit to the left passing small shops while ducking rain drops quickened our pace straight ahead to the Newport Aquarium that over looks the Ohio river. A beautiful day for touring.

### "Where do you find that Turtle?" (Fiction Mixed With Facts)

"Are we there yet? "the boy asked. "We're almost to the aquarium," the boy's grandfather replied with a chuckle... (continued on page 2)

## The Story Of An Aquarium in Newport, KY

Life in an ocean and life in fresh water. Like human beings there are those that can live near both and consume food in both habitats.

## Rating Review 10+and 9

Do you rate an aquarium, if you are going to the 'Newport Aquarium' Newport, Kentucky? Yes, the 'Newport Aquarium' man-made marine habitats rate, on the rating scale of 1 being not very good to 10 being excellent. I rated the Newport Aquarium 9 and a 10+. The water habitats exceed beyond the 10+ rating in excellence. Man-made habitats have room for the animals to live in a simulated habitat that is educational by view instantly. The depth of that the animals that swim in open water is shown with minimal bottom-not all are reef animals. Viewing from the Shark Ray Bay Habitat For the sharks that swim in the open ocean, the tank habitats for the large animals have plenty of room to swim while maneuvering a natural swim pattern of their bodies through minimal cave simulated background of ocean cave stalagmite formations (that is icicle formation rising from the floor of a cave) and stalactite formations (that is large icicle formations hanging from the roof of a cave, cliff, or overhang) with connection of forming a new formation the 10+. The salt water tanks are amazing! ... (continued on page 2)



(continued from page 1) "Where do you find that Turtle?"(Fiction Mixed With Facts) The boy's sister quickly walked ahead of them into another room full of aquariums. "Look?" his sister pointed towards the aquarium glass. Then leaned close to the glass of the aquarium. "He's cute." "The turtle," she said. Do turtles turn into princes? And not frogs? the thought rang through. "You want to take him home with you, huh?" the grandfather asked looking at her look through the aquarium glass reflection. "The turtle's cute." "I'll pretend to give him a kiss," the boy chimed in as he puckered up his lips and moved his body up and down bobbing his head in front of the aquarium glass but not touching the aquarium glass as he followed the swimming turtle behind the aquarium glass.



"Smooch!" noise in the air. The boy pretended to kiss the aquarium glass. "He hid his head. The turtle hid his head," the girl laughed while they watched the turtle swim over and hide his head.

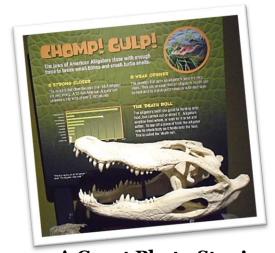


"Will you give the turtle a pretend kiss, grandfather?" the boy's sister asked. "We will wait on the pretend kiss for the turtle." "Ok." "Let's look for the turtle's description and see what kind he is?" his grandfather stated. Then added looking directly at his grandchildren, "What's the turtle look like?" "Describe him and why do we NOT kiss a turtle directly on its head or body?" Then the boy responded delightfully, "He's got trapezoid shapes on its shell with dark spots in them ... (continued to page 3)

(continued from page 1) Rating Review 10+and 9...The fresh water Gator Alley is one of the nicest with the glass bottom bridge where you can see the fish swim underneath your feet as you walk over. The development for more larger tanks is a 9 with a 10+ possible for the future and a larger building! Please make the larger building! The animals are amazing!



The American White Gator At the end of your tour of Gator Alley and educational fact board with display.



A Great Photo Stop!

I watched a guest get a great photo of a young adult sticking her head in the gator's mouth on this display.

...(continued from page 2) "Where do you find that Turtle?"(Fiction Mixed With Facts)

...and yellow oblong rectangles that outline the shell and little bumps on the back," Then the boy's sister chimed in laughing "And his head is hidden in the corner." The grandfather requested, "Lets look for the information board." "Can you find it?" "That will give the answer." ...Let's Help Them Find Out What Kind The Turtle They Looked At At The Newport Aquarium In The Pictures on page 2

Go To Page 4 To Answer

Question #1 And Question #2

**Question #1 -** Is the aquarium? (circle answer)

A. salt water

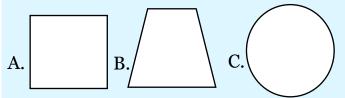
B. fresh water

**Questions #2** Does the turtle swim? (circle one)

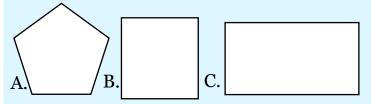
A. Yes

B. No

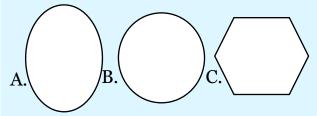
Question #3 Color in what a trapezoid looks like?



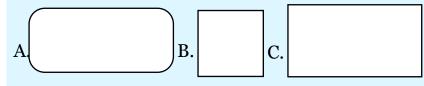
Question #4 Color in what a rectangle looks like?



**Question #5** Color in what an oblong looks like?



**Question #6** Color in what an oblong rectangle looks like?



**Question # 7** Description of the turtle (circle the one in the story)

- A. Hexagon shapes, solid colored hexagon, orange in color
- B. Trapezoid shapes on its shell with dark spots in them and yellow oblong rectangles that outline the shell and little bumps on the back.

What's the Turtle eat? Here's what the turtle eats that we are looking for at the Newport Aquarium:

snails, mussels, fish and worms

**Question #8** Unscramble The Letters To Find What Kind of Turtle

Fill in the blanks to with the list of letters provided.

First Word Letters
o i n a c
r e

 $D \ \_ \ a \ m \ \_\_ \ \_\_ \ d \ b \ \_\_ \ \_\_ \ k$ 

T \_\_\_ r a p i n

Answers on page 19

**Question #9** Find out where the grandfather and his grandchildren found the turtle at the Newport Aquarium. Look at your guest map of the Newport Aquarium. Hint: The tank is near the Fresh Water Falls and beyond?

(continue to page 5)

NEVER KISS A TURTLE
ANYWHERE ON ITS BODY!
Why would it make you sick?
YOU CAN STILL PICK THEM UP!

**Turtle Facts:** 

- a. Turtles are good pets for the right people.
- b. Turtle bodies carry salmonella.
   Definition: Salmonella /sálmonella/n.
   bacterium causing food poisoning.
- c. They can make you sick if you ingest any of the salmonella during or after you pick them up.

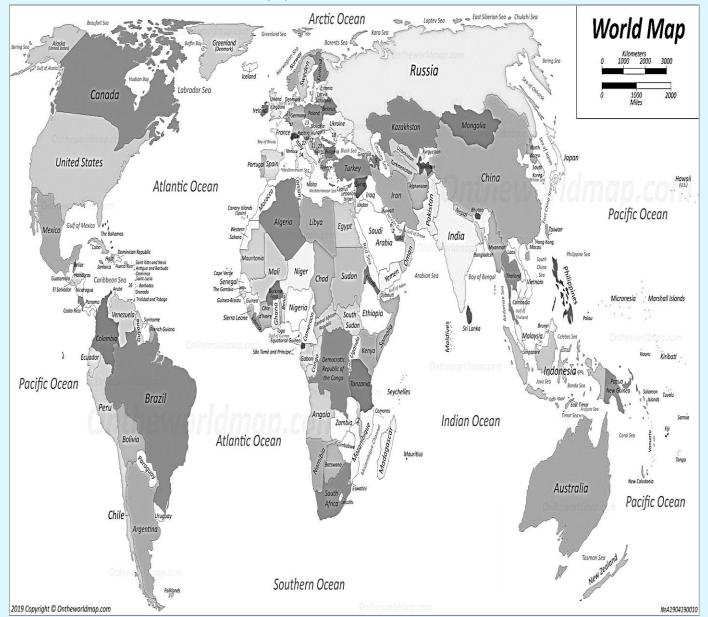
Prevent Sickness of Salmonella:

Wash hands with soap and water after you get done handling the turtle. ...(continued from page 3) "Where do you find that Turtle?"(Fiction Mixed With Facts)

### Color The Water Habitat Location To Find The Turtle

Water Habitats include many oceans: Arctic Ocean, Atlantic Ocean, Pacific Ocean, Indian Ocean and Southern Ocean

Water Habitats also include gulf coasts, coastal marshes, creeks, rivers and lakes.



#### DIRECTIONS TO FIND THE HABITAT ANSWER

- 1) A. Color the ocean word that boarders the United States called Atlanta Ocean.
- 2) B. Color in the Gulf Coast of the United States
- 3) C. Color a line near the boarder of the United States on the side of the Atlantic Ocean from the Gulf Coast to the northern point of the United States. This is where the turtle lives that you are looking.
- 4) Return to page 3 to answer question 1 and question 2 to continue to find out what turtle you are looking for.

Check your Answers
Answers is on page 20



### The Fairy Tale of Under The Sea! Sea Horses and Sea Monkeys

There's no confusion of very small unique creatures that live in the sea- they are real. On display at the Newport Aquarium are salt water sea horses. Sea horses are small fish used in fairy tales. Out of a fairy tale, the stories written come alive in your imagination using the sea horse image for the horse ride through the sea. The real size of sea horses varies from 1.5 to 35.5 (cm) centimeters or equal to 0.6 to 14.0 (in) inches comes alive in a tank for your viewing at the Newport Aquarium. Small unique animals under the sea with the mermaids were fictional and the sea horses are factual fish that are shaped like a horse floating in the ocean. But what about the salt water sea monkeys that you can order or buy on -line for an aquarium. Thought to be fictional and, also, a lot of people did not know if they existed. Sea horses are really sea horses categorized as fish. Sea monkeys are categorized as a brine shrimp from the crustaceans group. That under go a type of freezing state called cryptobiosis that means to stop all metabolic processes until they are in the right conditions of their environment to live and survive. Sea monkeys eat a type of food called spirulina that is a cyanobacterium, a type of bacteria that obtain their energy through photosynthesis and produces oxygen. Unlike, sea horses that eat very small food that floats in the oceans that are categorized at crustaceans, mysid shrimp, and invertebrates and larval. Why would you not put a sea monkey in a sea horse tank when they are both

... salt water animals?

Answer on page 21

## Atlantis Or Is It The Lost City We Have Found Or Star Trek Happening Under The Sea Tunnels for

your science walk or is it our scuba swim without getting wet! This time your experiencing the new frontier of the ocean in an aquarium. The submarine's equipped with tunnels or is it the science research center under the ocean? That resembled a star trek Voyager trip for under the sea instead of outer space. Your walk through tunnels



will give you the visual story looking through the thick glass. Those cave like stalagmite and stalactite of a new formation turn into resemblances of a city or a castle underwater surrounded by sea predators that would be in relation/compared to guard dogs on dry land-sharks- different kinds of sharks! And their not small! Atlantis or is it the Lost City, the fairytale of space is in the aquarium of a simulated ocean habitat. The stay dry observation tower deep below the horizon line of separation of water and atmosphere to the center of the earth... in water to float in between. The observation of science of maintenance of life in salt water ocean...



...(continued on page 6)

...(continued from page 5) Atlantis Or Is It The

Lost City We Have Found Or Star Trek Happening Under The Sea Sharks! There's sharks that swim over your head. And your dry with no wet-suite on.



At the each station or tunnel the detour is in the visual description boards placed on the side



Momentarily, in your pause to look overhead and to the sides to in-take what is <u>naturally</u> swimming in 385 thousand gallons of salt water overhead and around you. The grandeur view. An intimidating life in view in a simulated habitat of the ocean.

## What? There's a pirates walk of the plank without going off the edge at the Newport Aquarium?

The option for a pirates walk off the plank (?) Its really a thin boarded walk bridge that is suspended from the sides from above at the ceiling just so you can enjoy the grandeur view off each side of a drop into a huge pool of sharks inviting you in and NOT FOR A SWIM! The sharks swim rapidly and look hungry. If you take the walk you'll be walking over those enormous Blacktip Reef Sharks that are not friendly that swim along the surface of the water at times looking for that surface meal.

...(continued from page 15)

## **OCEANSPECIFICS**



**OCEANSPECIFICS** the new term used by scientists that defines the oceans condition. No longer used by many scientists is the phrase 'Global Warming'- an over used term used with bad press.



Oceanspecifics includes more than being renamed. It also includes the temperature of the water, climate changes in the atmosphere, climate changes in the fresh water and in the oceans salt water.

Due to the ice bergs being primarily fresh water melting into salt water oceans, fresh water as a fact is diluting the sea salt water- yet, adding other stuff such as dinosaur poop thawing that emits a gas called 'methane gas'. Dinosaur poop from the Mesozoic Era includes 3 time periods that dinosaurs lived that started around 225 million years ago up to more recent around 65 million years ago included: Triassic, Jurassic and Cretaceous periods on forward in time with emissions being emitted with Paleozoic Era climate temperatures- an earlier Era before the dinosaurs.(Paleozoic Era 570 million years ago to 225 million years ago within that time Era life started on earth before the dinosaurs advancement of a latter from single micros, protozoons, fishes, amphibians, and then reptiles that included dinosaurs).

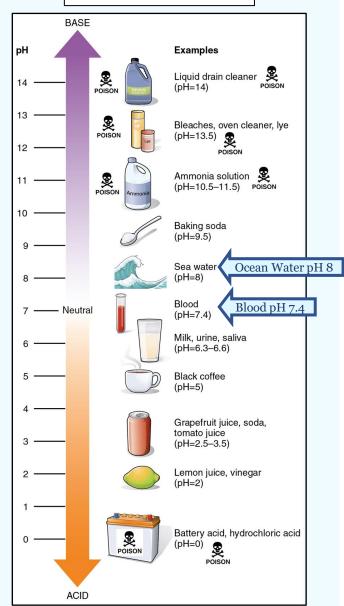
...(continued on page 7)

(continued from page 6) **OCEANSPECIFICS** ... Methane gas is the burn off of what is created in the form of gas released from decaying or decayed matter. The term 'methane gas' is usually referred to as the garbage dumps you so often heard about in the newspapers about the burn off of methane gas into the air. With Paleozoic climate temperatures remains of methane gas emissions, during the ice bergs melting into the water and into the atmosphere this is an example of the elements changing our habitat. What's in the water affected by a melting ice berg diluting the salt water ocean? The element you find in a chemistry book that is one of the basic building block 's for life called 'Hydrogen'. *Its in* what we eat and is what we eat and it becomes part of you and other things. Its one of the basic elements in the building blocks of life that's contained in the ocean – also its what marine life is made of and its in what it eats. To summarize, the salt water habitat sea salt water's element(s) are changing due to the fresh water melting in from the ice bergs along with other elements that are melting into the water. Hydrogen quantities are changing in the fresh water and ocean water. What's Hydrogen quantities have to do with life habitats besides that we eat it AND WE DO NOT EAT IT-both are **true?** Its in the quantities that affects all life. The accumulation of the element 'Hydrogen', when it groups itself together into different quantities it becomes two different classifications that are labeled into groups, 1, Acid and 2, Alkaline. And there's an in between line between both groups called 'Neutral'. Neutral being the turning point to where it can go either way Acid or Alkaline if you add more or less Hydrogen to a group from the Neutral point. Scientists go by a measurement scale call 'pH Scale' that means 'potential of Hydrogen' that refers them to how much or how little the environment of a certain thing in life has and contains. *If a change* happens in the amount of Hydrogen in something it



### Ph Scale 1 thru 14

Ph=(potential hydrogen)



So, why does that affect the ocean's water? The ocean is becoming a different environment for marine life. It depends on a stronger Hydrogen content. The Hydrogen content at times maybe weakening into a different category. When the ice bergs melt to fast fresh water watering down the salt water changes the ocean's environment. Remember the process of circle of life called 'Evaporation'. Why?

Because water of salt water and fresh water enter into the atmosphere and drops into the land and ocean. It also changes the pH in the water. Its still water but the environment is starting to become something different. ...(continued on page 8) (continued from page 7) OCEANSPECIFICS...

'You hear about or heard about the news mentioning pH in almost everything from shampoo to water we swim in at the pools to the skin content of your body.' 'pH that is abbreviated as the acronym is for potential Hydrogen that can change an environment.'

Why does it affect the marine life? Marine life can be endanger. Since the elements that include Hydrogen are changing in quantities that is not the norm (normal consistency/strength) of hydrogen. Why's the ocean's life endanger for some of the marine life that live there? The ocean's pH has changed the environment that they are use to. Some of the marine life is adapting better than others. Those that are not doing so well are put on the endangered list. The pH may change the environment weakening some marine life and making other marine life stronger. New marine life may be created. Round about statement from the scientist on a segment of National Geography 'When the right conditions exist, new life can be created.'

Question: If the pH is changing in the ocean and endangering marine life, what causes the endangered marine life not to survive the change in the pH? Is it the change in pH only in the water or is there another factor(s) that can cause some marine life to disappear?

\_\_\_\_\_

(continue to page 11 answer additional questions...)

Answer on page 21

# The Tide Pool at the Newport Aquarium



**The Tide Pool. What is it?** The sunlight at sunset that illuminates through the waves approaching high inward with the sea mammals of dolphins enjoying the wave high ride reverting toward the ocean before waves of the splash of the ocean in the evening sunset washes up the shorelands rocks. The tide rolls in. Water splashing up high upon the rocks of shore. A calming approach the mornings ripple of waves that laps free from the sanded shore. Ocean's life transferred into a rock crevice puddle shape of concave imbedded in the rock or shallow rock holds new ocean life that's washed upon the shore during high tide of the evening nights before. Your walk in observation of the small puddles of ocean life become what is commonly know as *The Tide Pool*. The waves brought upon the rocks a small environment of their own, a much, much, smaller little ocean that changes when the tide comes in toward the land at sunset on the west coast or other coasts. In the Newport Aquarium, you will experience the simulated replication of an ocean's tide pool habitat. When you take the time at the simulated replicated tide pool you can touch and pet the tide pool marine life in its simulated habitat. Among that marine life you will observe, (optional touch and pet in the simulated salt water tide pool) the Leather Star fish, Horseshoe crab, red urchins, green sea urchins along with a few others. Urchins are classified as bottom feeders of the ocean also classified as an invasive species due to Oceanspecifics (not present in the tide pool the purple urchin). The purple urchins and red urchins both classified as invasive species and bottom feeders are located off the West Coast waters of the United States around California. (continued on page 9...)

'Remember pH has a lot to do with the change in our environment of which we live.'

(continued from page 8) **OCEANSPECIFICS... The Tide Pool at the Newport Aquarium...** 

'In OCEANSPECIFICS the environment for a predator is called an invasive species.'

### What's an invasive species?

The word invasive can mean 'the tendency to spread especially quick in an aggressive manner'. In addition, it can mean 'an organism that is not native to the place it originally lives and grows- has spread into another ecosystem causing the current ecosystem problems'.

'Is it a new environment developing for the invasive species? Or is the current invasive species destroying our current life cycle?

#### What does it have to do with

Oceanspecifics? Icebergs melting, dinosaurs poop, methane gas in the water and atmosphere, pollution, etcetera that include plastics changing the water's pH (potential Hydrogen) in the oceans water to a different environment causing invasive species that are native to the area on the West Coast of California United States to grow in notoriously ravenous in over-growth. Endangered are more than one marine life from disappearing. The oceans floor forest of green kelp endangered by the over-growth of invasive species and also what eats the kelp is endangered is not just the over-growth of small marine life but the fuzziest marine mammal swimmer on its back- the California Sea Otter, United States also has kelp in its diet.





There's an invasive species thriving on the Coasts of California? One of the main invasive species taking over the bottom of the ocean is urchins (Red Sea Urchins, Purple Sea Urchins). The marine animal is eating more of the food source so others do not get a chance to eat and its eating the new arrival of life the babies of some species called larvae that use the sea forests kelp as a nursery that float in the water that eat the same things as the invasive species (Larvae in the example of the off spring of the **Abalone**; a food source on the West Coast of California).

'The environment for a predator. Will you be missing a meal for the future?'

**Oceanspecifics** include the affected pH conditions of the ecosystem of the oceans waters of the West Coast of Northern California United States during the time disease spread in 2013 that nearly wiped out 19 species of sea star. Of the 19 species of sea star almost wiped out, the sunflower sea star that voraciously ate urchins was included and placed on the endangered list. Urchins are known to weather ocean conditions of variations of the waters pH better than other sea animals. Two years 2014 and 2015 urchin numbers became a nuisance to the oceans ecosystem by a free run of the environment eating everything as bottom feeders that include the sea kelp forests-urchins became the goats of the sea bottom. The affected food source for human consumption, Red and White Abalone.

## The Endangered Species became An Endangered Food Source...

the Red Abalone and White Abalone. The nuisance and predator of purple urchins put the Red Abalone and White Abalone on the endangered species list....

...(continued on page 10)

...(continued from page 9) OCEANSPECIFICS...
...The Tide Pool at the Newport Aquarium...
The Endangered Species became An
Endangered Food Source...



Picture: Offshore of Elk, in Mendocino County California United States, a large red abalone climbs a bare kelp stalk in search of food that has already been stripped away. (California Department of Fish and Wildlife)

The Red Abalone and White Abalone are categorized as a type of sea snail in the marine gastropod molluscs in the Haliotidae family. Hard shelled animal in marine life that grows on the oceans bottom that is harvested from the ocean by diving to the bottom of the ocean retrieved to the surface, served cooked (see references for link to cook). The part ate, the muscle called the foot located on the bottom of the shell that moves itself along the bottom of the ocean. In preservation of the marine animals here, for human consumption and life preservation, on the West Coast of California, farming of the White Abalone and Red Abalone are contained in several built facilities for commercial use of sales for consumption and research use.

'The environment for a predator. Could the predator urchin be a meal for you(?)'

Red Sea Urchins, displayed in the tide pool of the Newport Aquarium, and Purple Urchins became the predators known as the invasive nuisance species on the California Coasts of the United States. Can we become the predator for the prickly spiked bottom red and purple urchin ocean bottom feeder? Does it sound yummy to you? A prickly looking spiked bottom feeder? A pin cushion of needles. The sound of the description to those that tasted, not the needles of the Red Sea Urchin but edible part of the inside- it sounds great!



#### The Edible part of the Red Sea Urchin:

Cut the red urchin in half while wearing thick gloves to keep from being pricked by the needles. Once the urchin's scooped out of everything to get to the golden layer of 5 rows of Roe (eggs) that décor's or rims the inside to scoop to eat. Comments by the Cliff Hawk Sea Urchin Diver Video 'YouTube' Title: 3 Ways to Crack an Urchin Website:

https://video.search.yahoo.com/search/video?fr=mcafee&p=red+urchins#id=4&vid=17b4aa501d8279a84f999995f4300602&action=view

Live Red Sea Urchins are displayed in the tide pool at the Newport Aquarium – the invasive nuisance to the California West Coast ecosystem. Both the invasive nuisance Sea Urchins and the endangered species of Red Abalone and White Abalone of the ocean are a food source for humans.

### Picture: Red Sea Urchin

1/2 Gutted Pictured

Shown half gutted *female* Red Sea Urchin with 3 rows 5 of the golden Roe (eggs) edible with or without cooking.) Smaller picture shows a meal prepared with a slice of lemon added to the center.



...(continue to page 11)

	to answer the questions.)  Hydrogen?	
What is	potential Hydrogen?	
	loes pH have to do with specifics?	
	loes pH have to do with the rt Aquarium?	
How do	es pH affect the circle of life?_	
	(cont back to	

Answers on page 22

Scavenger Hunt at the Newport
Aquarium: (You can find the answers at the Newport Aquarium)

What is the name of the ocean seagrass that lives on the salt water coastlines that once was used as stuffing for mattresses before synthetic materials were made that are used now?



Look for the pictured (to the left) in the Newport Aquarium on information boards to find the answer

What is the 68% percent of Icecaps Glaciers a percent of in the World when it comes to all water on the Earth?

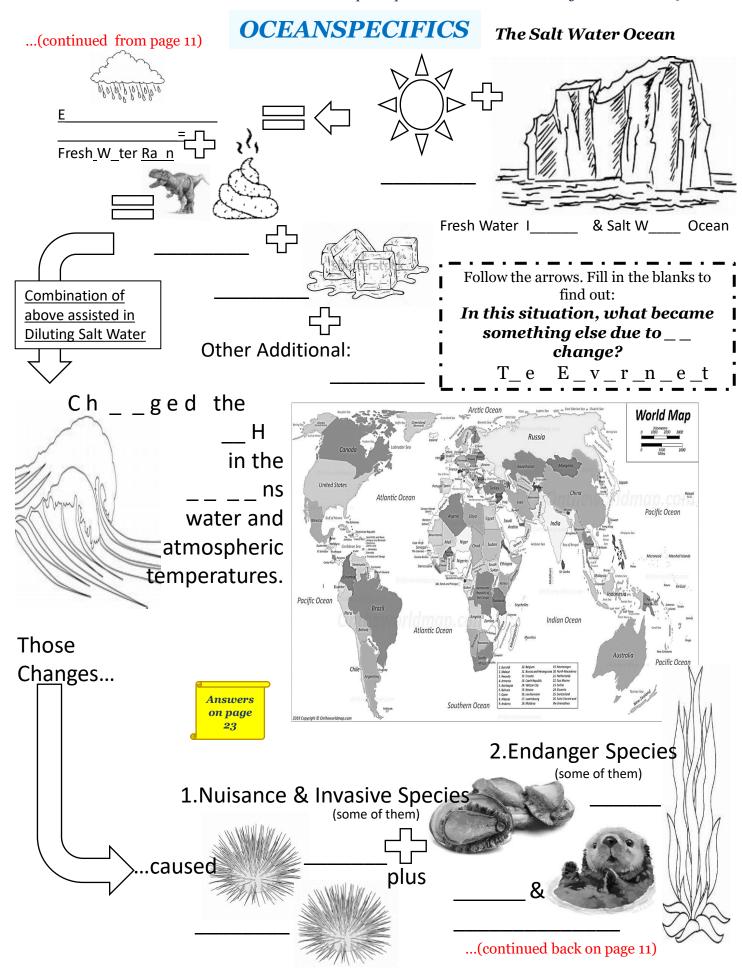
What is the gas that fish thrive on in the water?

What is the gas that fish thrive on at the Kentucky waterfalls located in Corbin Kentucky close to the boarder of Tennessee called?

What is the waterfalls bottom made of in Corbin, Kentucky( located right 'Under The Falls')?

Answers on page 22

...(continue to page 13)

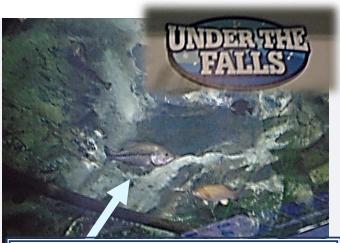


## An Aquarium Streaks Red+ for The Positive Bright of Health That Happens – Not Just For Fish

Eternally For A Cleaner life that provides a healthier environment. It feeds the relief. Oxygen relief for fish, animals and human life. On exhibit the 'Under The Falls' Cumberland Falls simulated habitat. The simulated environment of fresh water overhead surround tunnel habitat tank you can walk through at the Newport Aquarium-no rain coat needed for the dry walk to see the underwater sight. The overhead tunnel aquarium surrounds you with fresh water of under the Cumberland Falls located in and around Corbin, Kentucky United States.



The fresh water tank fills in your imagination, that your at the thunderous fall without the waterfall. The sound is visual with a reality of knowing the Cumberland Falls is known as the 'Niagara of the South' at the height of 65' feet high and 125' feet across that swells to 300' feet across at times when it floods. Water in the fall of gravitational pull from the mountainous cliff height, fresh water drops the 65' feet drop where the speed of water accelerates downward for the instant hit at the bottom to the stop- an instant stop to explode water upon water. In that instant water pounds together with oxygen in the turmoil to create the splash from the heavy thrust of the push of the fast flow of water increased during the drop due to gravity. The splash you see, feel and experience in mist of the look of fog is called the 'aerosol'. Aerosol that is filled with more of what we breath is cleaned and moistened air. For the river water below the falls, the result of more oxygen in the water and is closer to what humans breath in at the atmosphere that is clean oxygenated



'Under The Falls' Fresh Water Tunnel Overhead Aquarium Photograph

What is the fish with the stripe down the middle?

Under what Water Falls does this fish live in in Kentucky, United States?\_\_\_\_\_

gas in the fresh water for fish that swim in a limestone bottom river. Moreover, fish can not breath out of water but the greater the content of freshness of oxygenated gas in fresh H2O water promotes a better environment-fish thrive in growth. According to 'The History of Cumberland Falls' by Jeannie McConnell (pg. 8) 'There are several records of catfish weighing anywhere from 20 to 90 pounds being caught just below the falls.' With growth of larger fish underneath the waterfalls, plant and freshwater life grow larger and healthier in that area due to high oxygenated gas in water content in the ecosystem of the fish environment that includes the air quality out of fresh water. The red blooded life of animals that include human bodies, Erythrocytes, that are the red blood cells, that carry oxygen turn bright red when carrying oxygen. When red blood cells are ready to release carbon dioxide, the red blood cells are a dark deep red that is hard to recognize as the color red. For the red blooded animal that includes the human body, the more oxygen in the blood stream the brighter color of red blood cells. Those that seek(s) the bright of red for positive health of extremely healthy oxygenated gas of air compared to the clean oxygenated gas in a tank of oxygenated air from the hospitals or doctors offices *maybe* close in comparison. ...(continued on page 14)

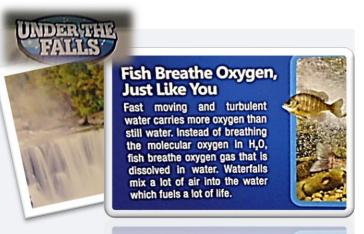


## **Global Awareness Update:**

What are scientists working on? Topic: Ocean Habitats of Basking Sharks Off The Coast Of Scotland There is little known about the 2<sup>nd</sup> largest fish in the ocean -the basking shark. The basking shark that can hold a human on the inside of its open enormous mouth while filter feeding on the oceans plankton. Scientists groundbreaking technology, designed and built by the Oceanographic Systems Laboratory at Woods Hole Oceanographic Institution (WHOI) an autonomous underwater vehicle (AUV)-more than just a video camera. Producing stronger evidence in strengthening a case for creating the world's first protected area in the world's oceans off the west coast of Scotland for I basking sharks. The team of Scientists research team includes colleagues from the University of Exeter, World Wildlife Fund (WWF), Sky Ocean Rescue, Scottish Natural Heritage (SNH). Additional information can be viewed through the Woods Hole Oceanographic Institution. Link: https://www.whoi.edu/press-room/newsrelease/sharkcam-reveals-secret-lives-ofbasking-sharks-in-uk/

## 'The Shark Capitol Of The Midwest'

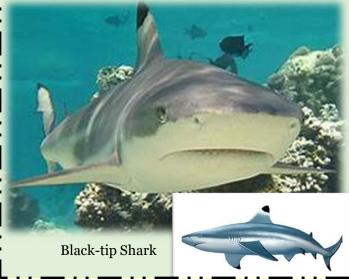
The Newport Aquarium
In Newport, KY United States



Which tuets a lot of life

...(continued from page 13)...An Aquarium Streaks Red + The Positive Bright of Health That Happens – Not Just For Fish Eternally. The stir of turbulent water... Waterfalls. Results of a research clinical trial study showed I improvement of lung function! It also included that I improved psychological parameters results were reported (it helps with thought processes). What's a clinical trial? In this writing and reference to what is being reported, a clinical trial refers to a medical study by scientists that are medical doctors/medical health professionals since the clinical trial report was in the field of medicine. In this study by the scientists/doctors observed volunteers that had certain health conditions that were also workers in the health field. The place they chose for the study was Alpine Falls as the location. Objective is the Question: Was to find out if health conditions improved at a high climate with a waterfall(s) that emitted fresh 'aerosol' that would be breathed in would be beneficial to a person's health. The scientists/doctors study had an • objective, primary conditions that included location, I volunteer medical workers that had certain health I conditions that included other conditions to get an answer to the initial question of the objective. *This* was a study to find an answer to the question 'Does waterfalls help with health conditions?'(though not stated exactly as written) What research **study?** A research clinical trial study at the Alpine Falls waterfalls located in King County, Washington, United States was posted in 2017 in the Journal of Physiological Anthropology's original article 'Does waterfall aerosol influence mucosal immunity and chronic stress? A randomized controlled clinical trial' by Carina Grafetstatter, Martin Gaisberger, Johanna Prossegger, Markus Ritter, Predrag Kolarz, Christina Pichler, Josef Thalharner and Arnulf Harti (2017) 36.10. ...(continued on page 15)

(continued from page 6)... What? There's a pirates walk of the plank without going off the edge at the Newport Aquarium?... The invitation. For your breath to be altered for the thrill of knowing or not- a thrill not advised for your health in a nature walk in ocean water while they swim underneath your feet. The suspended bridge inside the Newport Aquarium keeps you safe for your own thrill in observation.. Will you take the walk if your there?



## AWARENESS OF SCIENCE KNOWLEDGE DID YOU KNOW?

Did you know there is fresh water and salt water phytoplankton. This a true fact. Both fresh water and salt was have phytoplankton that turns into plankton.

...(continued from page 14)...An Aquarium Streaks Red + The Positive Bright of Health That Happens - Not Just For Fish Eternally. The stir of turbulent water ... Health conditions that were under the clinical trial primary affected areas of the body are nerves, blood circulation, heart, lungs, skin and thought processes. Report specified the following medical areas and conditions in technical medical terms that included neurovegetative, cardiovascular or thermoregulation mechanisms, inflammatory diseases and the induction of balancing immunomodulatory effects, respiratory and allergic diseases such as bronchial asthma, atopic dermatitis, psoriasis, or eczema. According, to the clinical trail at Alpine Falls in the end page report under 'Conclusions', page 11 of the report: '... The results of this study also provides a

rational basis for further research with an aim to develop schedules for new and effective prophylactic therapies for high-risk patients suffering from psychological and physiological stress symptoms." Meaning further studies at other waterfalls would be documentation that waterfalls are a positive plus to those that have medical conditions and for general good health. The more documentation the better for referrals from doctors and scientists-additional documentation that would become backup information that there is proof that the waterfalls are a source from nature as a natural relief for some medical conditions symptoms with natural relief waterfalls 'aerosol' that may have long term affects as relief from symptoms but may not be a complete cure. Kentucky verses Washington states for waterfalls: According to 'The History of Cumberland Falls' by Jeannie McConnell (pg. 9) At the Cumberland Falls Inn known as the Brunson Inn around the year of 1902 and further forward into the 20th Century. The Brunson Inn, a 40 room two-story Inn had advertised: 'This beautiful resort in the heart of the Kentucky **mountains has** several fine mineral springs and hay fever is **relieved at once**. No extra charge for bathing. fishing, dancing, bowling and music.' History of the Cumberland Falls past advertised the healthy 'aerosol' benefits on health though no record of clinical medical health trials studies had proved that the waterfall had supported information in documentation in medical trials. BUT, if personal experience of the 'aerosol' had not been documented in the advertisement, you would not find any documentation about current waterfall effects on health as being so positive. Note for your evaluation, personal experience of testimony from 1902 was documented as advertised is still documentation that there were people that reported relief of some health symptoms from diseases. The documentation is the testimony without the lab work that Cumberland Falls has health benefits for those that seek relief from certain medical symptoms knowing that it may not be a cure all but a temporary natural natures relief- for how long? Question remains with the answer for each individual that seeks the relief may find it at a waterfall. It may not be a cure but a relief for some that may seek a natural nature relief from diseases symptoms though it maybe temporary...(continued to page 16)

...(continued from page 15) ... An Aquarium Streaks Red + The Positive Bright of Health That Happens – Not Just For Fish Eternally. The stir of turbulent water ... Note: For the medical clinical trial at the Alpine Falls showed benefits only towards the exposure of the waterfalls 'aerosol' near the waterfalls. **Reduces** the proasthma and inflammation cytokines and induces immunological mechanisms leading to improved positive effects to the lungs and heart. What's exhibited at the Newport Aquarium tank on the Cumberland Falls with surround sides and over the top overhead contents of fish displayed includes: Smallmouth Bass, Yellow Perch, Hybrid Striped Bass, Channel Catfish, Bluegill, Largemouth Bass, Black Crappie. With personal health benefits, fresh water fish that you can fish and consume in Corbin, Kentucky United States

## What is the definition for nuisance invasive species in this case for the zebra mussels?

Can a nuisance species be not a marine animal?

Can humans be the invasive species for fresh water invasive species Zebra Mussels by eating Zebra Mussels?\_\_\_\_

## ARE THERE FRESH WATER NUISANCE SPECIES?

The answer is 'YES'. There are actually more than one fresh water nuisance species that threaten the ecosystem of the lakes, rivers and ponds. In the United States, the Kentucky Department of Fish and Wildlife Resources reports on of the most recent Zebra Mussels. The growth are size of a dime 1/4 to a 1 ½ inches, hard shell, numerous in numbers found on the out skirts toward the shores of the bottom of the rivers and lakes of fresh water is one of the main nuisance species that is causing environmental concerns putting other fresh water species on the fresh water endangered list. The zebra mussels are not native to the fresh water rivers, lakes and ponds of the United States. They threaten the ecosystem by competing for food of the native fish and other marine animals of fresh water. The zebra mussels are native of Black and Caspian Sea regions of Europe thought to of attached themselves to boats, ships that traveled in the great lakes of the United States.

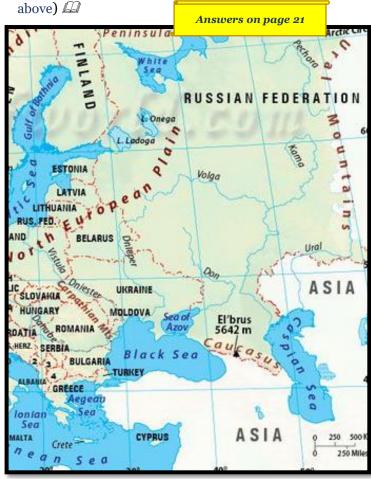
## https://fw.ky.gov/More/Documents/ZebraMussels.pdf

Additional information can be retrieved about zebra mussels on the website

https://files.dnr.state.mn.us/natural\_resources/inv asives/aquaticanimals/zebramussel/fact\_sheetzebra\_mussels.pdfhttps://en.wikipedia.org/wiki/ Zebra\_mussel

## What is the closest ocean to the Black and Caspian Seas?

Notice the travel of the zebra mussels took to get to the United States.(Check page 4 map, circle and write answer

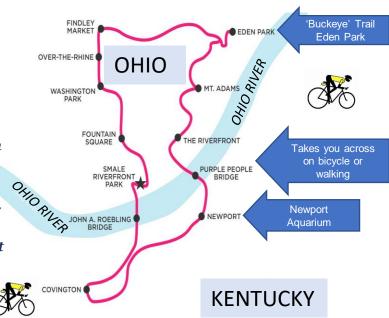




## PEOPLE AND ORGANIZATIONS THAT MAKE A DIFFERENCE

Thank you to 'Friends of Madison County Parks & Trails' for making this article on the 'Newport Aquarium' possible for completion to be posted for promoting education in the United States and World. If it was not for people and organizations like these, education would not be getting better all the time. For those that are enjoying the bicycle trails in OH the Newport Aquarium maybe another spot on your trail ride that you may enjoy. *Thanks to the 'Friends of* Madison Country Parks & Trails' bicyclists have another option in traveling the trails that journey to the boarder of Ohio and enjoy a town easy to access by using the newly renovated bridge called the Purple People Bridge that crosses the Ohio river into the state of Kentucky to view the Newport Aquarium. Enjoy the following information about 'Friends of Madison County Parks & Trails For Those That Tour On A Bicycle that May Visit To and From the states of Ohio and Kentucky An all Volunteer Organization located in London, Ohio a small town northeast of the state of Newport, Kentucky. Wonderful people that care! The 'Friends of Madison County Parks & Trails' organization is an all volunteer organization working with the Madison County parks and recreation on the bicycle path called 'Ohio to Erie Trail' that leads into London, OH. The Friends of Madison County welcomes the sport of bicycling in the community with assisting in updating the bicycle paths now paved. London, Ohio is a wonderful place to stop right off the bicycle path for camping with restroom access once you acquire an access code from the police department, that patrols the area, when you call in your arrival. The 'Ohio to Erie Trail' bicycle trail camping for bicyclist is located on the town edge with easy access of a few blocks to small town shops, bicycle maintenance coffee bar, the London Visual Arts Guild, promoting art and art education in London, OH in the downtown. Fairgrounds not far away that you can cycle to at fair time. And in the summer, if you need a shower, a local pool is available. Entrance fee is required for shower that includes swimming.

Enjoy the bicycle ride of an adventure from Kentucky to Ohio or Ohio to Kentucky! For the professional bicyclist and those that venture forth for a bicycle adventure for <u>a</u> few days ride to and from the Newport, Kentucky.



Here's the path you would take for the bicycle trails that includes the Purple People Bridge in Newport, Kentucky to get across into Ohio.

Starting the town of Newport, Ky
Take the 'Purple People Bridge' across
the Ohio river to Eden Park
In Eden Park the 'Buckeye Tail' northeast
towards Milford, Ohio to take
the 'Little Miami Scenic Trail' North to
town Xenia to get on 'Ohio to Erie Trail'
Northeast goes to London, Ohio

## Websites of interest for bicycle directions to London, OH starting in Newport, KY:

https://cincinnatiusa.com/article/walk-way-walking-guide-cincinnati-usa

http://purplepeoplebridge.com/

https://www.mapquest.com/us/ohio/eden-park-303686266

http://www.buckeyetrail.org/

http://www.littlemiamibiketrail.com/

https://www.ohiotoerietrail.org/2016/03/31/news-from-friends-of-madison-county/

Friends of Madison County Parks & Trails <a href="https://fmcpt.com/rides">https://fmcpt.com/rides</a>

## 2020 Rides on the Ohio to Erie Trail

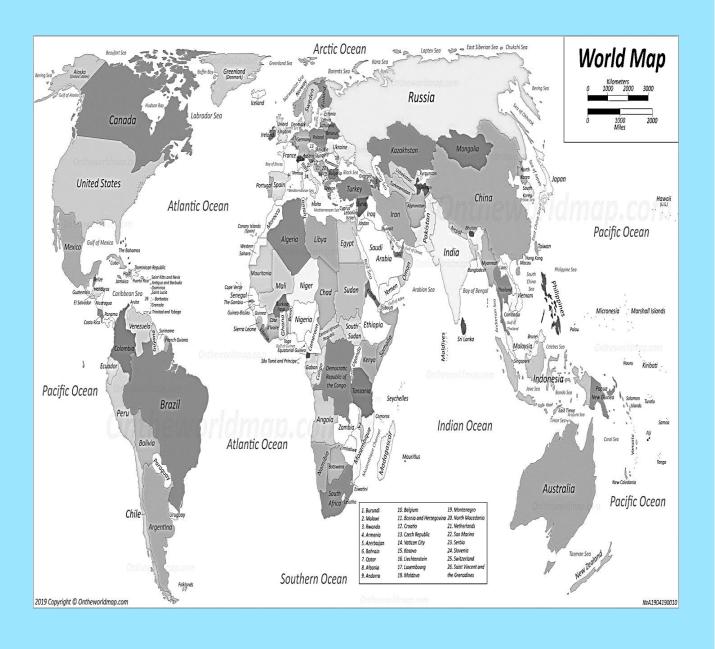


Look for on the website:

- SIX Full Moon Rides! Throughout 2020
  - ❖ Geology Ride
- ${\color{red} \bigstar}$  17th Annual Strawberry Festival Bicycle Tour
  - Prairie Appreciation Ride
  - ❖ 28<sup>th</sup> Annual Ox Roast Bicycle Tour

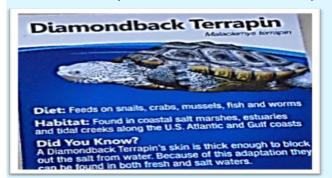
# **ANSWERS**

## **Section**



Answers To Page 3

"Where do you find that Turtle?"(Fiction Mixed With Facts)



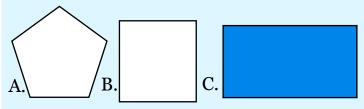
**Question #1 -** Is the aquarium? (circle one) A. salt water fresh water

Questions #2 Does the turtle swim? (circle one) B. No

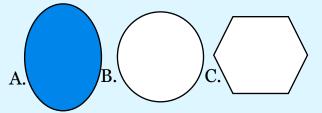
**Question #3** Color in what a trapezoid looks like?



**Question #4** Color in what a rectangle looks like?



**Question #5** Color in what an oblong looks like?



**Question #6** Color in what an oblong rectangle looks like?



A. Hexagon shapes, solid colored hexagon, orange in color

B. Trapezoid shapes on its shell with dark spots in them and yellow oblong rectangles that outline the shell and little bumps on the back.

What's the Turtle eat? Here's what the turtle eats that we are looking for at the Newport Aquarium:

snails, mussels, fish and worms

Question #8 Unscramble The Letters To Find What Kind of Turtle

Fill in the blanks to with the list of letters provided. First Word Letters Second Word Letters o i n a c rie

Diamondback

T e\_rapin

**Question #9** Find out where the grandfather and his grandchildren found the turtle at the Newport Aquarium. Look at your guest map of the Newport Aquarium. Hint: The tank is near the Fresh Water Falls and beyond?

Salt Marsh









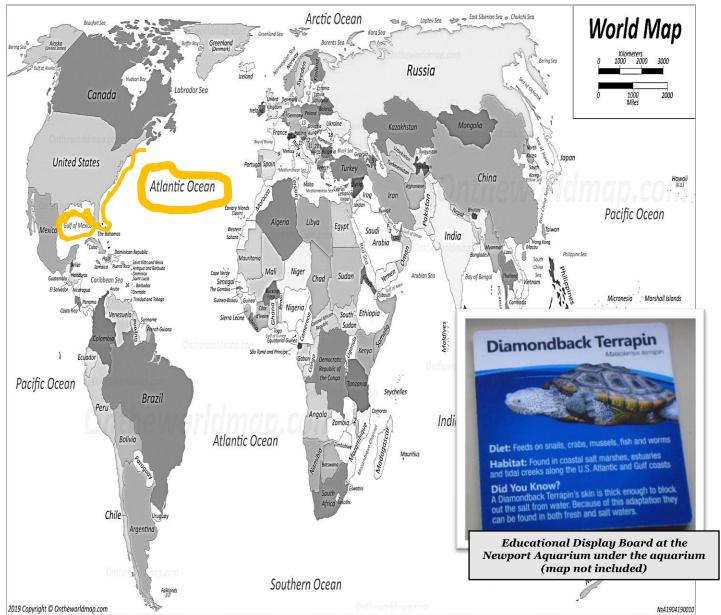
"Where do you find that Turtle?"(Fiction And Facts)

## Answer Answer to page 4

### Answer to Color The Water Habitat Location To Find The Turtle

Water Habitats include many oceans: Arctic Ocean, Atlantic Ocean, Pacific Ocean, Indian Ocean and Southern Ocean

Water Habitats also include gulf coasts, coastal marshes, creeks, rivers and lakes.



#### What is outline and colored in for the Answer to The DIRECTIONS TO FIND THE HABITAT ANSWER

- 1) A. Colored the ocean word that boarders the United States called Atlanta Ocean.
- 2) B. Colored in the Gulf Coast of the United States
- 3) C. Colored a line near the boarder of the United States on the side of the Atlantic Ocean from the Gulf Coast to the northern point of the United States. This is where the turtle lives that you are looking.
- 4) Turn to page 19 in 'Answers' section for the answers to Page 3 for the answers to question 1 and question 2 to continue to find out what turtle you where looking for.

#### Answers to Pages 5, 8



Page 5 Answer to Article: The Fairy Tale of Under The Sea! Sea Horses and Sea Monkeys Question: Why would you not put a sea monkey in a sea horse tank when they are both salt water animals? Sea horses eat a very small food that floats in the oceans that are categorized as crustaceans, Mysid shrimp, and invertebrates and larval. Sea monkeys are categorized as a brine shrimp from the crustaceans group. The Sea horse eats crustaceans and could easily eat the Sea monkey that is categorized at a crustacean. So, no rides for the sea monkey on the sea horse in reality -only in our imagination.

Page 8 Answer to Article Question to Article: OCEANSPECIFICS... Question: If the pH is changing in the ocean and endangering marine life, what causes the endangered marine life not to survive the change in the pH? Is it the change in pH only in the water or is there another factor that can cause some marine life to disappear?

There are factors that cause the marine live not to survive in the change of the pH that changes the environment conditions around the marine life. A new environment has developed with new conditions that include invasive species that take advantage of the pH changes and thrive on eating the small babies of marine life called larvae etc. that use the kelp for nurseries. The kelp goes away the small babies of marine life do not survive well without protection. Other factors are the temperature, oxygen and carbon dioxide levels, etc. are others factors that can change the environment that also includes the ice berg melts of fresh water and dinosaur methane gas.



#### **Answers to page 16**

Page 16 Answers to Article ARE THERE FRESH WATER NUISANCE SPECIES? Questions: What is the definition for nuisance invasive species in this case for the zebra mussel marine animal? The zebra mussels spread especially quick in a aggressive manner and the marine animal is not native to the original place that the zebra mussel grows in their normal ecosystem.

Can a nuisance species be not a marine animal? Yes, A nuisance species can be other animals that becomes aggressive in taking over the ecosystem that can include insects, over population of deer, bears, wild cats or birds.

Can humans be the invasive species for fresh water invasive species Zebra

Mussels by eating Zebra Mussels? Not by eating them, since they are not native to the United States, it is illegal to import, possess, buy, sell, transport or introduce them into state waters.

What is the closest ocean to the Black and Caspian Seas? Atlantic Ocean

Notice the travel of the zebra mussels took to get to the United States. (Check page 4 map the location of

### (pH) potential Hydrogen Awareness

what you circled. The distance is across a vast

A measure of acidity or alkalinity of water soluble substances (pH stands for 'potential of Hydrogen'). A pH value is a number from 1 to 14, with 7 as the middle (neutral) point. Values below 7 indicate acidity which increases as the number decreases, 1 being the most acidic. Values above 7 indicate alkalinity which increases as the number increases, 14 being the most alkaline. This scale, however, is not a linear scale like a centimeter or inch scale (in which two adjacent values have the same difference). It is a logarithmic scale in which two adjacent values increase or decrease by a factor of 10.

#### Read more:

ocean)

http://www.businessdictionary.com/definition/p H-scale.html

## Answers to page 11

### **OCEANSPECIFICS**

(Go to page 12. Fill in the blanks. Then return to answer the questions.)

What is Hydrogen? Hydrogen is one of the Basic building blocks in the chemistry of life. Hydrogen is found in the smallest form in chemistry. Depending on how much Hydrogen in quantities is what Hydrogen becomes.

What is potential Hydrogen? The abbreviation that is the Acronym is 'pH.' Potential refers to how much, in quantities, Hydrogen in chemistry, is possible, to become a certain thing in life.

#### What does pH have to do with

Oceanspecifics? Since potential Hydrogen is how much in quantity is possible to become a certain thing in life, in chemistry, changes can endanger the current life that exist under the current norm of pH. If oceans pH changes, it causes what we call the ecosystem to be endangered for some marine animals that cannot withstand new changes that can become a new ecosystem With a new ecosystem, that is a new environment, extinction of some marine endangered marine animals can happen.

What does pH have to do with the Newport Aquarium? The Newport Aquarium? The Newport Aquarium monitors the potential Hydrogen of the salt water and fresh water tanks to keep the environments of the fish a healthy stable environment. You may wish to ask at the Newport Aquarium how they keep the pH levels accurate at stable healthy conditions to maintain the water in the tanks for their sharks and other fish. Question to ask Newport Aquarium: Does the salt water and fresh water tanks have the same pH for their healthy environment?

#### How does pH affect the circle of life?

Potential Hydrogen in the micro state of chemistry is one of the basic building block of life. Its in what we eat, what we are made of and is in everything around us.

Scavenger Hunt at the Newport Aquarium: (You can find the answers

at the Newport Aquarium)



What is the name of the ocean seagrass that lives on the salt water coastlines that once was used as stuffing for mattresses before synthetic materials were made that are used now? Eelgrass. Grows to be up to four feet in length in saltier tidal waters off the coastlines all over the world.



What is the 68% percent of in Icecaps and Glaciers, the percent of in the World when it comes to all water on the Earth?

Answer is located at the 'Under The Falls' fresh water tanks on the sides. Answer is: 3% of all the water on the Earth is freshwater. The 68% is polar Icecaps and Glaciers that is part of the 3% of freshwater of the whole Earth. With 30% of the 3% of freshwater of the whole Earth is 'ground water'.

What is the gas that fish thrive on in the water? Oxygen dissolved in water.

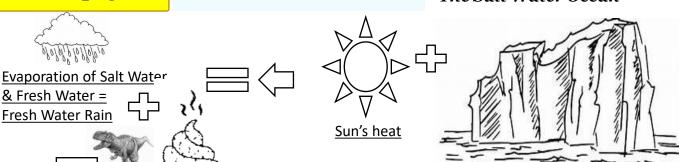
What is the gas that fish thrive on at the Kentucky waterfalls located in Corbin Kentucky close to the boarder of Tennessee called? Oxygen dissolved in water mixed into the water

What is the waterfalls bottom made of in Corbin, Kentucky (located right 'Under The Falls')? limestone bottom river

#### Answers to page 12

#### **OCEANSPECIFICS**

#### The Salt Water Ocean



**Emissions of Dinosau** melted poop called methane gas

Combination of above assisted in **Diluting Salt Water**  Melted Ice Bergs that contained frozen dinosaur poop and fresh water

Other Additional **Factors** 

Fresh Water Iceberg & Salt Water Ocean

Follow the arrows. Fill in the blanks to find out:

In this situation, what became something else due to p Hchange?

Environment

Changed the

рН in the <u>o c e a</u>n s water and atmospheric

temperatures.

World Map Atlantic Ocean Pacific Ocean Pacific Ocean Indian Ocean Pacific Ocean Southern Ocean

Those Changes...

> 1. Nuisance & Invasive Species (some of them)

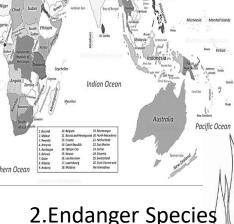
> > Red Urchins [ plus

**Purple Urchins** 

caused.

Abalone &

Salt Water Sea Otters





(some of them)

Sea Kelp

#### Closing Editorial Comment by the writer....Carol Lee Brunk

Upon my visit of the Newport Aquarium, I saw marine life that I never saw before...of course it was the black-tipped sharks. Lots of sharks! Intimidating sharks! First time I saw a ray-shark. Newport Aguarium, an aguarium of large predators for all life in salt water the sharks, along with sharks, fresh water large predators of reptiles that include the white alligators. The Newport aquarium gives you a chance to touch and pet a few of the salt water smaller sharks towards the end of the tour. A shallow pool of several small sharks that include the Japanese Bullhead Shark on display for you to put your hand in carefully under supervision of the aguarium. Its not like the Sting Ray Bays of several zoos, that you can feed the sting rays- you can not



To the right, a list of recommended television broadcasts, books, animated films for educational awareness. Written material- what is recommended. When published, the use of specific animals are used when telling a story. The Newport Aquarium is an excellent source for writers to design a character using factual animals that exist in the world today. Many animals are not known throughout the world or seen until they go to a zoo or aquarium. For example there are more than one species of sharks and the Newport Aquarium is a great source for looking into many different species of salt water animals especially sharks. This article review was designed to expand on adding to the educational experience of the aquarium- Newport Aquarium in Newport Kentucky, USA. Enjoy!

### Recommended Books, Movies & Television Shows

#### **Animated Films:**

'Finding Dory' by Disney (2016) Salt Water 'Finding Nemo' by Disney (2003) Salt Water 'Shark Tale' by (2004) by Dreamworks Salt Water 'Happy Feet' by Warner Brothers (penguins) Salt Water 'The Rescuers' by Disney (1977) Fresh Water 'The Rescuers Down Under' by Disney(1990) Fresh Water **Television Shows & Stations with Awareness** 

## & Exposure & Humor

'Jim Henson's Splash and Bubbles' television series aired by PBS in 2016

'Bubble Guppies' television series aired program premiered on Nickelodeon 2011, renewed 5th season 2019

'Carmon Sandiego' television show aired by PBS children's television game show, (bring it back on air, please with kids solving the clues on geographic places) BBCA & BBC, Discovery, National Geographic National Geographic for Kids

'Don't Let Them Disappear' 12 Endangered Species Across the Globe by Chelsea Clinton & Illustrated by Gianno Marino (The book has a 'Key' with define definition for where the animal is labeled at on the survival scale on the earth)

'Fish' by Steve Parker 2005 Publisher: DK Eyewitness Books (Reference Book) Discover the Amazing World of Fish How They Evolved, How They Live

*'OutdoorIO! Ultimate Fishing Guide Just For Kids!'* by Dave Shellhaas and Steve A. Shellaas 2011

'Manfish A story of Jacques Cousteau' by Jennifer Berne and Eric Puybaret 2015

*Penguins Can't Fly'* Richard Byrne, Publisher Andersen Press

*Poky the Turtle Patrol* by Diane Kanan 2018 (Endangered Animals)

'Shark Lady' by Jess Keating 2017

'The Pout-Pout Fish' by Deborah Diesen and Dan Hanna series of books

'The Rainbow Fish' by Marcus Pfister and J Alison James 1999

'The Three Little Fish and the Big Bad Shark' by Will Grace and Ken Giest 2007

*'The Ultimate Book Of Sharks'* by National Geographic Kids 2018

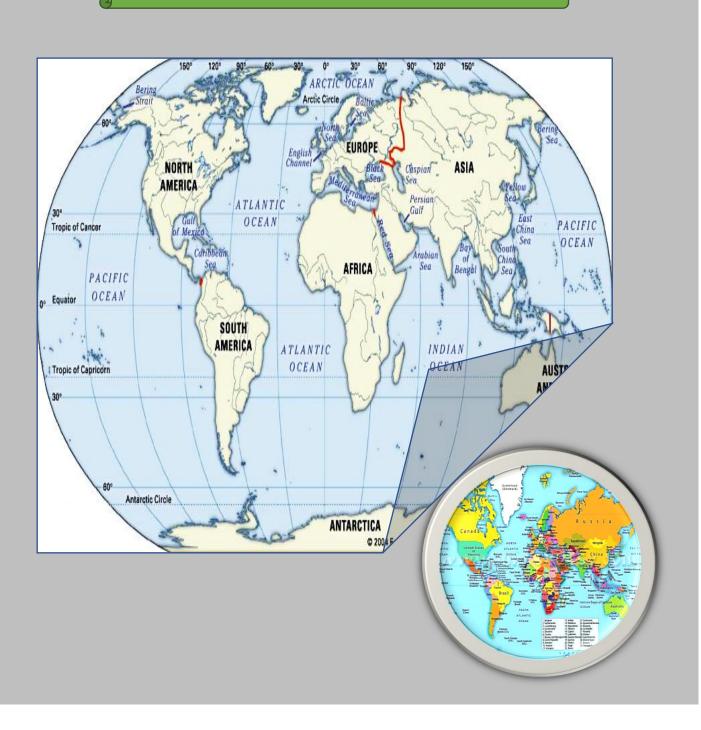
'Quiet Wyatt' by Bill Maynard, Publisher G.P. Putnam's Sons Books for Young Readers (for nocturnal

*'Where's Waldo?'* by Martin Handford, publisher Candlwick Press (interactive illustrations to help in assist in identification)

'Where's Carmon Sandiego?' by Houghton Mifflin Harcourt, With Fun Facts, Cool Maps, and Seek and Finds for 10 Locations Around the World, Paperback, (Coming out in October 1, 2019 Preorders being taken on www.amazon.com)

# REFERENCES

## Section



#### REFERENCES

#### Federal USA, Government Department

US FISH AND WILDLIFE SERVICES, DEPARTMENT OF INTERIOR

Brochure Title: Conserving America' Fisheries ,A Proud Past, A Bright Future; Featured Article Paragraph: Aquatic Nuisance Species: Zebra Mussels WOLF CREEK NATIONAL FISH HATCHERY, 50 Kendall Road, Jamestown, KY 42629

Phone: 270-343-3787

## State USA, OHIO DEPARTMENT OF NATURAL RESOURCES

Caesar Creek State Park, Waynesville, OH Park Office (Cowan Lake): 937-382-1096 in reference of the Little Miami State Park and the Buckeye Trail that's near Newport, Kentucky

#### State USA, KENTUCKY DEPARTMENT OF

**WILDLIFE** Kentucky Department of Parks, www.parks.ky.gov Phone: 800-858-1549

#### Science Research on Niagara of the South:

Cumberland Falls Resort, Corbin, KY Phone: 606-528-4121, Book, Soft Cover, 'The History Of Cumberland Falls' by Jeannie McConnell, 2017, pages 27 Map, (Trail), Cumberland Falls State Resort Park, , Reservations 800-325-0063

## Website articles, WOODS HOLE OCEANOGRAPHIC INSTITUTION,

https://www.whoi.edu

Article: 'SharkCam reveals secret lives of basking sharks in the UK'

https://www.whoi.edu/press-room/news-release/sharkcam-reveals-secret-lives-of-basking-sharks-in-uk/

Article: 'Do Microplastics in the Ocean Affect Scallops?' <a href="https://microplastics.whoi.edu">https://microplastics.whoi.edu</a>

Article: 'Heinrich Events: Massive Late Pleistocene Detritus Layers Of the North Atlantic And Their Global Climate Imprint'

Article: 'Marine Microplastics'

https://www.whoi.edu/know-your-ocean/ocean-

topics/pollution/marine-microplastics/

Article: 'Mechanisms of Abrupt Climate Change of Last Glacial Period'

https://www.whoi.edu/cms/files/clemento8revg 27888 g.pdf

Article: 'Microplastics In The Ocean',

https://microplastis.whoi.edu

Article: 'Microplastics in the Ocean – Separating Fact from Fiction'

https://www.whoi.edu/oceanus/feature/whoi-viewpoint-microplastics-in-the-ocean-separating-fact-from-fiction/

Article: 'North Atlantic Ocean productivity has dropped 10 percent during industrial era' Website:

https://www.whoi.edu/press-room/news-release/north-atlantic-ocean-productivity-has-dropped-10-percent-during-industrial-era/Article: 'Tracking a Snow Globe of Microplastics' https://microplastics.whoi.edu

Article: 'The Decline and Fall of the Emperor Penguin' Climate Change and Shrinking Ice Threatens Polar Birds https://www.whoi.edu/oceanus/feature/the-

decline-and-fall-of-the-emperor-penguin/

Research: Science, Sea URCHINS

## RESEARCH: SCIENCE, ABALONE, MUSSELS & SEA URCHINS

Research: Science, Definition

Term: Abalone

Website: <a href="https://en.wikipedia.org/wiki/Abalone">https://en.wikipedia.org/wiki/Abalone</a> California Department of Fish and Wildlife Title: Invertebrates of Interest: Abalone

*Website*: <a href="https://www.wildlife.ca.gov/Conservation/M">https://www.wildlife.ca.gov/Conservation/M</a> arine/Invertebrates/Abalone

Topic: White Abalone (Videos) Title: How to eat white abalone

Website: https://video.search.yahoo.com/search/video?fr=mcafee&p=how+do+you+eat+white+abalone#id= 2&vid=e8106458a437af72c3f3cb84d4eeb79c&action= view

Title: How to eat white abalone

Website: https://video.search.yahoo.com/search/video?fr=mcafee&p=how+do+you+eat+white+abalone#id=1&vid=fafbbd3bfcdbf25cbec1c80394d374c5&action=view

Topic: Abalone

Title: In bid to save abalone, Sonoma Coast Divers plan huge purple urchin harvest Website:

https://www.pressdemocrat.com/news/8330791-

181/in-bid-to-save-abalone

Research: Invasive, Organization: CDFW Invasive Species Program 1416 Ninth Street, 12th Floor

Sacramento CA 95814

Website: invasives@wildlife.ca.gov

Definition Term: Invasive <u>Website: Merriam-Webster</u> https://www.merriamwebster.com/dictionary/invasiv

**Definition: Mussel** 

Website: https://en.wikipedia.org/wiki/Mussel

Title: 3 Ways to Crack an Urchin Video 'YouTube' 3 years ago Oct 2019

Website:

https://video.search.yahoo.com/search/video?fr=mcafee&p=red+urchins#id=4&vid=17b4aa501d8279a84f999995f4300602&action=view

Title: Sea Urchins Are laying Waste To Kelp Forest and an Entire Ecosystem

Website:

https://www.newsdeeply.com/oceans/articles/2017/1 o/10/sea-urchins-are-laying-waste-to-kelp-forestsand-an-entire-ecosystem

#### REFERENCES

Photo Title: Sea Urchin and Turban Shell Restricted

**Fishery** 

Research: Science

Article: Sea Urchins Are Laying Waste To Kelp Forests

Website:

https://www.newsdeeply.com/oceans/articles/2017/10/10/sea-urchins-are-laying-waste-to-kelp-forests-and-

an-entire-ecosystem *Topic : Red sea urchin* 

Encyclopedia

https://en.wikipedia.org/wiki/Red\_sea\_urchin

Research:

Photo's Description: Red Urchin open anatomy with

Radial Canal in gold showing

www.dpi.nsw.gov.au

https://images.search.yahoo.com/search/images?p=red+urchins+anatomy+pictures&fr=mcafee&imgurl=http%3A%2F%2Fwww.dpi.nsw.gov.au%2Fdata%2Fassets%2Fimage%2F0007%2F631168%2Furchins-3.jpg#id=11&iurl=http%3A%2F%2Fwww.dpi.nsw.gov.a

3.jpg#id=11&iuri=nttp%3A%2F%2Fwww.dpi.nsw.gov.a u%2F data%2Fassets%2Fimage%2F0007%2F631168

<u>%2Furchins-3.jpg&action=click</u> Photo Title: Anatomy of an Urchin/Art/Pinterest/Anatomy

Topic: Red Urchin www.pinterest.com

 $\label{lem:https://images.search.yahoo.com/search/images?p=red+urchins+anatomy+pictures&fr=mcafee&imgurl=http%3A%2F%2Fwww.dpi.nsw.gov.au%2Fdata%2Fassets%2Fimage%2F0007%2F631168%2Furchins-3.jpg#id=41&iurl=https%3A%2F%2Fs-media-cache-ako.pinimg.com%2F736x%2F75%2F25%2Fa3%2F7525a334b54c574771e5666914ff7d13.jpg&action=click$ 

RESEARCH: SCIENCE, GEOGRAPHY

Research: Science, Geography

Website: Nation Master Topics: Comparisons <a href="https://www.nationmaster.com/country-">https://www.nationmaster.com/country-</a>

info/compare/South-Africa/United-States/Geography

Website: Encyclopedia Britannica, Topics: World Maps, Continents Research: Science, Geography Website: Ontheworldmap.com Topics: World Maps, Countries Research: Science, Geography,

Website: Cool Antarctica, Topics: Weather <a href="https://www.coolantarctica.com/index.php">https://www.coolantarctica.com/index.php</a> **RESEARCH: SCIENCE, DEFINITIONS** 

Term: pH scale Website, business:

http://www.businessdictionary.com/definition/pH-

scale.html

#### **RESEARCH: SCIENCE OCEANSPECIFICS**

Article: Ocean Acidifications Illustrations

CO2 absorbed from the atmosphere How will changes in

Ocean Chemistry Affect marine Life?

Website: <a href="http://www.cev.washington.edu/story/Ocean+A">http://www.cev.washington.edu/story/Ocean+A</a> cidification+Illustrations

Definition: <u>pH scale-(pH stands for 'potential Hydrogen')</u>. A measure of acidity(acid content) or alkalinity (alkaline content) of water soluble substances. A pH value is a number from 1 to 14, with 7 as the middle (neutral) point. Website:

http://www.businessdictionary.com/definition/pH-scale.html

#### Geology

Book: Geology , pgs 146-153, a Golden Guide FROM ST. MARTIN'S PRESS,Copyright 1991, 1992

#### <u>Health Research On Waterfalls From University</u> <u>Of Kentucky, Compliments Of Dr. Amy Wolfe</u>

Article: 'Does waterfall aerosol influence muscosal immunity and chronic stress? A randomized Controlled clinical trial' Journal of Physioloical Anthropology 36 (1):10-10 by Grafetstatter, C. et al. (2107)

Article: 'Health Effects Of Alpine Waterfalls' 5<sup>th</sup> Symposium for Research in Protected Areas (10-12 June 2013 by Mittersill, Austria, Hohe Tauern National Park Council. P.265-268. by Hartl, A., Grafetstaetter, C., Prossegger, J., Hahne, P., Bruanschmid, H., And Winklmayr, M.

Article: 'Characterizaation Of Ions At Alpine Waterfalls', Atmospheric Chemistry and Physics, by Kolarz, P., Gaisherger, M., Madl, P., Hofmann, W., Ritter, M., Harti, A., (2012)

Article: 'Waterfalls as sources of small charged aerosol particles' Atmospheric Chemistry and Physics 7 (9): 2271-2275 by Laakso, L., Hirsikko, A., Gronholm, T., M., Luts, A., Parts, T. E. (2007)

Book Chapter:' Knowing a Lakes Healthy Signs' (Chapter 5), bk, In Applied Aquatic Ecosystem Concepts, 2<sup>nd</sup> ed. By Mackie, G.L. (2004) Publisher Dubuque, Iowa, Kendeall/Hunt Publishing Company: 103-142

Article: 'Medical Air' by Moss, E. and Nagle, T. (1996) APSF Newsletter, 11(2) Available: www.apsf.org/article/medical-air/

Article: 'Getting Started with the Water Quality Portal' by National Water Quality Monitoring Council (2017)
Available:https://www.waterqualitydata.us/portal use

rguide/

Article: 'Chemical Composition Of Waterfall-induced Air Ions: Spectrometry Vs. Simulations' by Parts, T., E., Luts, A., Laakso, L., Hirsikko, A., Gronholm, T., and Kulmala, M. (2007) published by Boreal Environment Research, 12 (3): 409-420

#### A GRADITUDE OF THANKS TO THE FOLLOWING FOR ASSISTING IN **FURTHER AWARNESS OF FRESH WATER EDUCATION**

#### PHONE INTERVIEWS & SCIENTIFIC INFORMATION

Question: Zebra Mussels is this an alternate food source for human consumption? An where do I find additional information?

#### **Kentucky Department of Fish and Wildlife**

Paul Wilkes, Assistant Director of the Fishier Division

Email: paul.wilkes@ky.gov Website: www.fw.ky.gov

Brochure: Conserving America's Fisheries, A Proud

Past, A Bright Future

Brochure: Fishing Is Fun For Everyone, It's Easy to

Learn How

Brochure: National Wildlife Refuge System

**Brochure: Wolf Creek National Fish** 

Hatchery/Visitor/Environmental Education Center **Question:** Do you have information on the history of **Cumberland Falls** and what are the health benefits?

Olivia Immitt, Parks Program Services Leader

606-528-4121 Olivia.immitt.ky.gov

Additional information received by mail:

Trail Map, Cumberland Falls State Resort Park Book, The History of Cumberland Falls by Jeannie

McConnell

#### **Question** was to the Geological Department at the **University of Kentucky:**

What is the air content at the waterfall Cumberland Falls compared to the air content in bottled oxygen given at the hospital? And is it comparable for good health?

Kentucky Geological Survey

Lexington, KY

Amy Wolfe, PhD

Geohealth and Environmental Geochemistry Research on Cumberland Falls oxygen content of water at the falls include information on Alpine Falls in the state of Washington, United States West Coast. Cited References In Addition To Enclosed Research Received:

Article: 'Medical Air' by Moss, E. and Nagle, T. published by APSF Newletter, 11(2). Available:

https://www.apsf.org/article/medical-air

Article: Basics of the Carbon Cycle and the Greenhouse Effect' by NOAA (National Oceanic & Atmospheric Administration) 2019 Accessed Portal Aug 14 2019 Available:

https://www.esrl.noaa.gov/gmd/ccgg/basics.html Article Report: 'The Water Quality Portal' Accessed Portal Aug 14 2019 (Data files: Station IDs: 21KY-PRI009 and 21KY\_WQX-PRI009 Available: https://www.waterqualitydata.us/portal/

#### **NEWPORT AQUARIUM WEBSITE & NEWS RELEASES**

EDUCATIONAL INFORMATION AT THE AQUARIUM EXHIBITS INCLUDE: Display Exhibit Signs, Entrance Signs, Educational blocks posted and marine biologists and volunteers stationed throughout several exhibits at the Newport Aguarium on-site with educational question and answer segments- scheduled and unscheduled. Newport Aquarium website: https://www.newportaguarium.com/

Kaneohe Bay is one of the most stable and abundant pupping grounds in the world.

Kaneohe Bay in Hawaii has up to 10,000 Scalloped Hammerhead pups born in its waters each year. This might seem like a large number, but other groups of these hammerheads aren't as stable. These sharks are listed as endangered on the International Union for Conservation of Nature and Natural Resources (IUCN) Red List.

**Board** example

#### EDUCATIONAL & EDITORIAL PRESS

Website: www.sightwordsataglance.com Menu Tab: Look under the Editorial Zoo Reviews for the Newport Aquarium Review, Shark Video and Penguin Video On Film is from the Cincinnati Zoo, African Penguins (website post), photographs, writer, designer, photographer of photographs for of this article Carol Lee Brunk

#### REPRINTS

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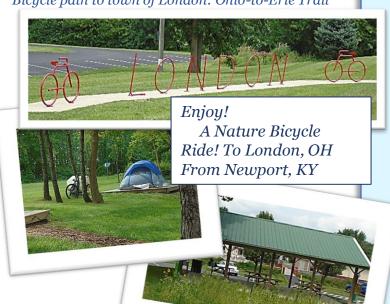
www.sightwordsataglance.com Contact information: Carol L Brunk, Cellular: 224-239-9877, Email:

carol.brunk@yahoo.com

#### **Contributors & Many Thanks**

What Makes Newport Aquarium Stand Out Compared To Other Aquariums? 'The Newport Aquarium is known as the Shark Capitol of the Midwest...Out of a million gallons of water 300 hundred 85 eighty-five thousand gallons are for the shark exhibits...The Newport Aquarium was rated in the TOP 10 for Best Aquariums by USA Today.'- Jennifer Tan, United States

#### Contributor & Many Thanks To OHIO Friends of Madison County Parks and Trails' London, Ohio, 43140 United States Bicycle path to town of London: Ohio-to-Erie Trail



Email: info@fmcpt.com Website: www.FMCPT.com

in coordination with MiamiValleyTrails.org Take the scenic tour bicycling to upper east Ohio to London, Ohio, United States on the paved bicycle path 'Ohio-to-Erie Canal' trail.' Pack for a few days for a bicycle ride. Start at Newport, KY. In Newport, KY cross the bridge called The Purple People Bridge that goes over the Ohio River to get to Eden Park, Ohio where you take the 'Buckeye Trail' east going north towards Milford, OH to get on the Little Miami Scenic Trail' going north towards Xenia, Ohio where you take the 'Ohio-to-Erie Canal Trail' going into London, OH' "Tent the night for an enjoyed rest and check the current events board in the pavilion for town activities, local outdoor pool in the summer and year round bicycle maintenance shop & coffee bar..

# The Newport Aquarium

One Aquarium Way Newport, KY 41071 Phone: 800-406-3474

Website: www.newportaquarium.com

Operating Hours
Open 365 Days A Year Includes
All Holidays
9 a.m. – 7 p.m. Daily
with last entry at 6 p.m.

#### **ENTRANCE TICKET PRICES:**

General Admission (before tax)

13 and Up \$24.99.00 each

2 yrs. to 12 yrs. \$17.99 each

**Under 2 yrs.** Free each

Purchase Tickets In Advance Due To Daily Timed Entries.

### **Military Discount:**

\$3 Off Military & Spouse With \$2 Off Dependent Children Of Age

# Additional Ticket Charges & Time Entries:

**Does not include Admission** 

Penguin Encounter \$26.99 each

**20** min. up close experience 6 yrs. and Up

### Backstage Animal Experience

\$14.99 each
Feeding of the animals backstage

All Exhibits Are Indoors