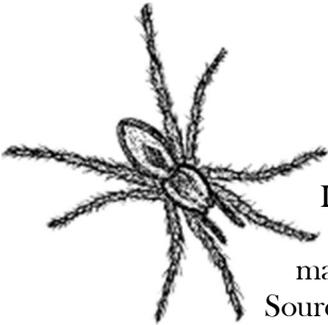


Earthtones

Summer 2015



Being Outnumbered

Once upon a time, when I apparently had less to do, I attempted to list as many mammals as I could.

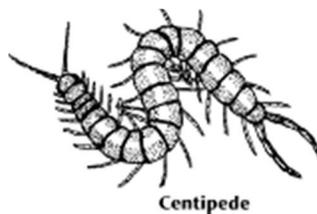
Sources listed over 5,000* different species, and, exempting myself from the 900 bats and over 1,000 rodents, I wondered how close I could get to naming them all. If memory serves, I think I reached roughly a hundred before my attention wandered away.

Often, when we think of animals, it's one of these 5,000 plus species that come to mind. However, scientifically, animals encompass a much larger and diverse group.

Mammals perhaps are the most complex and developed of all the animal divisions. They help form the main group of vertebrates. As animals with spinal chords protected by a backbone, vertebrates tend to be the largest, most visible, and best known in the animal kingdom. Besides mammals, they include over 10,000 birds; 7,000 reptiles; 5,000 amphibians; and 24,000 ray-finned fish.

That gives us over 50,000 vertebrate species, of which mammals are but a tenth.

In science, animals also include a wide assortment of invertebrates as well—those animals that have no backbone. Some are comparable to mammals in diversity, such as the 5,000 known sponges. The 7,000 species of echinoderms include star fish, sea urchins, and sea cucumbers. Genetically, these are the nearest invertebrate family to us vertebrates and science uses them often in research as



a result. However, most dwarf mammals in species numbers easily.

Roundworms, flatworms, and segmented worms each have over 12,000 recorded species, though a hundred thousand more might be waiting to be discovered. Mollusks, which include clams and snails, easily number over 50,000—roughly the same number of all vertebrates combined.

The largest group may be the one most people like the least. The word “arthropod” means jointed leg and includes millipedes, centipedes, arachnids, crustaceans, and insects. Minus the insects, arthropods include over 150,000 species, as many as all those listed previously combined!

Insects alone, with their great diversity from ants to dragonflies, cover over one million species, one-third of which are beetles.

We may prefer the complexity of furry, feathery, or even scaly critters, but obviously the world runs on the backs of those without backbones.



By Pamela Holz

**Author's Note: due to extinctions, discovery of new species, re-classifications through DNA evidence, and scientific guesswork on number of species yet to be discovered, it is difficult to know the exact number of species in any major scientific grouping. The numbers used herein are approximations from several sources.*



Arch located next to the mini-lake, & donated by the Izaak Walton League

From the Director's Desk

The summer of 2015 finds the Washington County Conservation Board staff involved in a myriad of programs, projects, and operations aimed at being your local conservation agency. Here are a few project updates:

- We continue to make great progress towards installing the arches and arch/bench combinations along the trail leading from Marr Park to Ainsworth. These amenities are the one of the results of the planning efforts of local interested citizens, along with trees and a host of other things.

- The roof of the Conservation Education Center, damaged by hail soon after it was completed, has now been upgraded to Decra-steel. Barring a major local disaster, this will be the last roofing project on this great facility in our lifetime! Marr Park patrons are encouraged to take a close look, we are proud of the results!
- Timber management is often debated on the properties with which the WCCB is entrusted. We strive to achieve balance between conservation (wise use and management) and preservation (complete protection). There are many negative pressures on our timbers, from disease to weeds, to old age. Our goal is that your grandchildren and mine will be able to walk in a good mixture of old and young healthy oak forests as a result of our efforts.

- “If you build it they will come” is leading us to expand the parking lot in the vicinity of Mary Marr Lodge. Recently, we added a ceiling and lined the interior of Mary Marr Lodge itself. Additionally, we added a new playground (the first significant one in nearly 35 years) and even created a new structure we named Sarah’s Haven (named after the mother of Mary Marr, whom donated Marr Park). Sarah’s Haven is a beautiful open cedar shelter sitting on a concrete platform over the upper pond here. Many patrons enjoy watching the life in the pond from Sarah’s Haven, possible because we kept the water at 2 feet deep under and around it and lined the bottom with white rock.
- Later this fall, we will be paving another piece of the road here at Marr Park, extending the existing paving back to the ever popular Conservation Education Center.



Sarah Marr's Haven

I hope that everyone out there is having a great summer, and that our agency in some small way is positively contributing to you quality of life.

By Steve Anderson



New roof on Center

Helpful Unhuggable Quiz

We may look down on the many lowly creatures, but their existence has benefited humankind in uncountable ways. Can you match up the methods of usefulness with the invertebrate used? Answers on page 5.

Methods

1. Shares 7,000 genes with humans & is often used in medical research
2. Used to stop the bleeding from serious battlefield wounds
3. Studying this animal's vision is improving medical & underwater photography
4. Used in water treatment plants to improve water quality
5. Used to prepare skeletons for display
6. Feeds on insects harmful to human health and agricultural crops
7. Removes animal waste products from the environment
8. Commercially important but no longer found in wild
9. Unequalled in improving soil fertility in natural and agricultural areas
10. A chemical from this insect assists scientists in studying cells
11. Only three species of this insect and no other would follow humans into extinction
12. These insects have been managed by people for over 15,000 years
13. Eats bedbugs & studied for pesticide resistance
14. Used to solve questionable deaths
15. Would have innumerable applications if could be commercially harvested

Vertebrate

- | | | |
|----------------------------|--------------------|----------------|
| A. Dermestid beetles | B. Dung beetles | C. Earthworms |
| D. Filter feeding mollusks | E. Fireflies | F. Fly larvae |
| G. German cockroach | H. Honeybee | I. Lice |
| J. Mantis Shrimp | K. Praying mantids | L. Sea Urchin |
| M. Shells of Shrimp | N. Silkworm moth | O. Spider silk |

Washington County Conservation Board

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 Pamela Holz, Naturalist
 Fritz Engel, Maint. Technician
 Kathy Dolan, Center Coordinator
 Mark Even, Park Ranger

Washington County Conservation Board meetings are held the second Thursday of each month at 4:30 p.m. at the Conservation Education Center. Visitors are welcome.

The WCCB is an Equal Opportunity Employer.

If you would like a copy of this newsletter in larger print, please contact our office.

This newsletter is printed on recycled paper.

Summer Calendar

The Washington County Conservation Board meets the second Thursday of each month. Meetings are held at the Conservation Education Center in Marr Park at 4:30 p.m. The Conservation Center will be closed the following holiday: Monday, September 7.

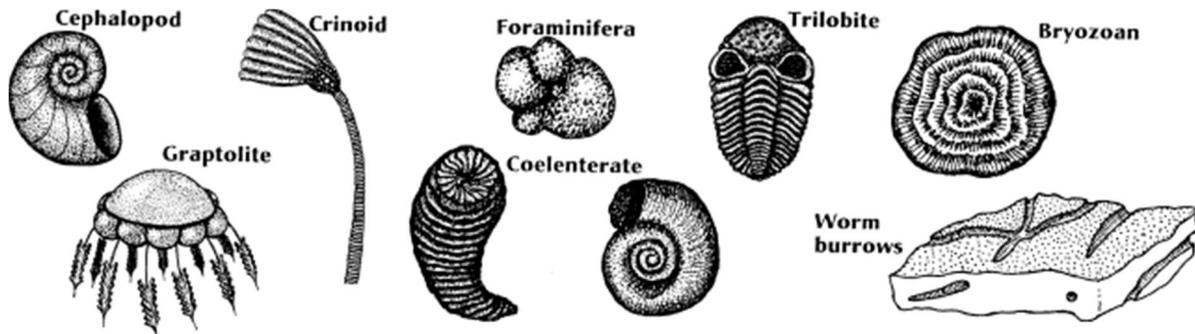


Sat., Aug. 1 9:00 a.m.—10:00 a.m. starting time Marr Park
Treasure Seekers

Up for an adventure and a chance to explore Marr Park? You'll have the opportunity to find and follow a treasure map in search of, you guessed it, treasure. Whether you're out to sharpen map-reading skills, fulfill some creative fancy, or looking to entertain young or young-at-heart pirates, this program will entertain young and old alike. Join the fun anytime between 9:00 and 10:00. Meet at the Lodge between the two ponds to begin your adventure.

Sat., Sept. 12 1:00 p.m. Conservation Education Center
Under the Sea: Fossils in Iowa

For dinosaur hunters, Iowa is a disappointment. However, during the far distant past, some rather amazing non-reptilian creatures lived here. Learn about them and the warm, shallow oceans they lived in during this public program. Discover how these oceans created the limestone under our feet, how the rich fossils found here were formed, and learn to identify what they are. Younger participants will even get a chance to dig for their own fossil to take home.



Sat., Oct. 3 7:00 p.m. Marr Park
Annual Halloween Hike: Shoo Fly!

Compare flies with insects that are called flies but are not true flies in an evening hike of adventure around the mini-lake. Event begins at the Lodge. See the back page for more information about this fun family event.



Thanks to...

Electronic Updates

- Washington United Methodist Church My Life Youth Group
- Mike Vittetoe for work on the Sockum Ridge trail system
- Washington Middle School for Orange and Black Give Back Day, including litter pick up, trail work, brush clean up, and Center cleaning
- Rick Hofer for assisting with surveying the road

Website: The new county website went live at the end of June. The Washington County Conservation Board is included in the new changes. Some information is already up and has been updated and even more will be updated as the summer progresses.

By the time we have finished with the transition, we hope that many of your questions about our areas and services can be answered online at your convenience. This will include: area amenities, maps, activities allowed, calendar of events, fees, links to newsletters, meeting agendas and minutes, and annual reports.



Marr Park Lake

A Poem by Kyleigh Dolan, Age 10

Exquisite robins going tree to tree
 Blazing, red-orange, sunrise
 Birds chirping
 Chirp
 Tweet
 Chirp Tweet
 Why were the birds chirping?
 Calm
 Noiseless
 Graceful geese and their goslings
 Wind blowing in my ear
 Whoosh
 Whoosh
 Whoosh
 Blue, swaying, lake
 Water splashing against the side
 Lofty trees
 Leaves rustling
 Rustle
 Rustle
 Rustle
 Bright green leaves
 Trees casting shadows
 Peaceful



The new website can be found at co.washington.ia.us.

E-mail addresses: Many of you responded with your e-mail address in order to receive this newsletter via e-mail. However, to make the most impact, we still need more of you to respond. Please send us your e-mail address and we will make the switch for you. We appreciate your cooperation.

Answers to page 3.

1. L 2. M 3. J 4. D 5. A 6. K
 7. B 8. N 9. C 10. E 11. I 12. H
 13. G 14. F 15. O

WASHINGTON COUNTY CONSERVATION BOARD
2943 HIGHWAY 92
AINSWORTH, IA 52201

Return Service Requested

Summer Center Hours

Thurs.—Sat., Mon.
10:30—6:30

Sun.
1:00—5:00



Halloween Hike: Shoo Fly!

Saturday, October 3

6:45 p.m.— 8:30 p.m.

Marr Park

Our slightly early Halloween Hike this year will examine the characteristics of flies and then look at how some commonly named “flies” are not really flies at all. This event is a not-so-scary alternative to traditional Halloween activities.

The challenges will begin at the Lodge, head around the mini-lake, and finish at the Conservation Center. At the Lodge, the focus will be on the group of insects called flies. Around the mini-lake, you’ll meet up with butterflies, dragonflies, and fireflies and discover their true relatives. The trail will be lit by luminaries. However, since moonrise won’t occur till hours later, you may wish to bring flashlights to help you on your way.

At the Center at the end of the Hike, you’ll create your own craft and, of course, have refreshments.

*Enter the trail anytime
between 6:45 - 8:00 p.m.*

Center activities will continue till 8:30.

Volunteers are also needed for this event. Call if you would like to volunteer.

For more information, contact 319/657-2400 or wccbnaturalist@iowatelecom.net.



PATTON 1985