



Nature

Latest News

Hello Friends of EON,

Here we are at the start of a new year and the start of the 10th year of EON News. To celebrate we are trying something new with the newsletter. We have this new format for the email which features a listing of the topics along with a link button to the newsletter page. While we are developing this new style, we will still provide the newsletter as an attachment. Let us know what you think by replying to newsletter@EchoesOfNature.org

EON is still looking for a new home and further support from the community to expand our ability to support our Mission. That mission is of course to bring people and the natural world back together to promote understanding, as well as, the preservation of wildlife and the habitats on which they depend. So, if you or someone you know is interested in helping EON please reach out! It is not an exaggeration to say we need the help of caring and dedicated individuals for the many facets of running a not-for-profit organization like Echoes Of Nature. Last year we reached our largest audience yet and provided more nature themed programs than ever before. We are still working on the totals for 2019, and so far, we know we have done over 500 programs. In the meantime, we have already booked over 290 programs for 2020!

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Porcupine, Maine



In this edition of Ambassador Profile it seems fitting to feature the Hedgehog, with the opening of a certain movie in February. When "Finding Nemo" came out in theaters, many families went out and bought clown fish for their kids. As a result, many of these animals had unhappy ends due to impulse purchases. Like many other unusual pet species, hedgehogs are not going to behave like a dog or cat. So it's important to do your homework to determine if this is the species for you, and you can properly take care of them. Since we are on the topic of a species with a special defense mechanism, this leads us naturally to the Nature Posting topic Nature's Defense Strategies.

Check out our summer camps on page 5 and our summer programs at your location on page 6 .

Thank You,
Michael

Ambassador Profile: Hedgehog

Quick: name some prickly animals! Did you name the hedgehog? Sometimes you can see these animals in pet stores. Our ambassador came to us from a family who couldn't take care of their pet anymore.

There are 17 species of hedgehog in the world with 5 main types or genera found in Europe, Asia, Africa and New Zealand (by introduction). There are no living species native to the Americas. The genus *Amphechinus* found the Americas during the Miocene (23-5 mya). Most are nocturnal, but there are a few diurnal species.

The hedgehogs found in the pet trade in North America are often the hybrid of the central African hedgehog and the Algerian hedgehog. Their lifespan can be around 16 years.

A hedgehog's spines are hollow hairs made of stiff keratin. The spines are everywhere, except for the face, legs and belly area. Very strong muscles along the back are used to move the spines, and each spine can be moved independently. When the hedgehog is relaxed the spines lay down in one direction. They can have up to 5,000 to 6,000 spines at a time. {How would you like to move each of the hairs on your head in the direction of your choice?} Unlike a porcupine, the hedgehog doesn't have loose ones that stick to a predator when they get too close.

Hedgehogs are insectivorous carnivores eating many invertebrates, but also frog/toad, snakes, bird eggs, and carrion. We feed ours a diet of hedgehog diet and insects. When we first got him, he ate only cat food. With effort and patience we have transitioned him to the healthy hedgehog diet

Hedgehogs have up to 44 very sharp teeth. They have weak eyesight, but very good sense of smell and hearing. They can run, swim, and climb. They can sleep up to 18 hours/day. When threatened, a hedgehog will roll into a tight ball with the spines sticking outward like a round pin cushion.

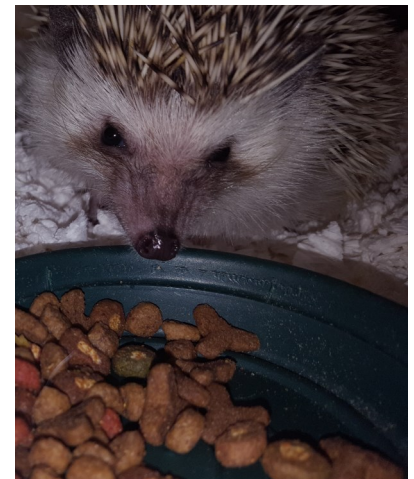
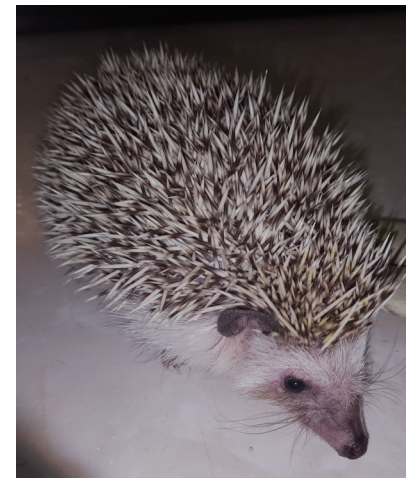
In the wild, some predators to a forest hedgehog (such as the European type) include birds, ferrets, wolves, mongoose, and badgers. In Europe, the hedgehog is a common backyard type animal as the squirrel is for us in the US. They are considered invasive in New Zealand and the islands of Scotland where these animals have caused major damage to native species.

If you are thinking of having one as a pet, please do your research as hedgehogs are prohibited or limited in several states. They are possibly illegal in Washington, DC.

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Photos

- Craft examples

Paper plate hedgehog



Materials: white paper plate, scissors, crayons, staplers

Directions: fold paper plate in $\frac{1}{2}$. Staple to 2 spots. Either mark where they should cut plate for face or pre-cut, depending on time and ability of group. Have them color their hedgehog. Then have them make small cuts to create the spines as shown in top photo.



Literature:

Jan Brett's *The Hat*, *The Snowy Nap*, *Hedgie's Surprise* <https://www.janbrett.com/>

Linda Meuse July 2012 Story based on a drawing by Jan Brett
http://janbrett.com/how_to_draw_a_hedgehog.htm

Notes from the Story Room

Storytelling note: I did not name the animal in the story because I like to have the children guess what I am drawing.

<http://meusenotes.blogspot.com/2012/07/hedgehog-draw-and-tell-story.html>

Activities: dramatic play: *The Hat*

Tie ins with Sonic the Hedgehog Movie: have the "hedgehogs" run a race.

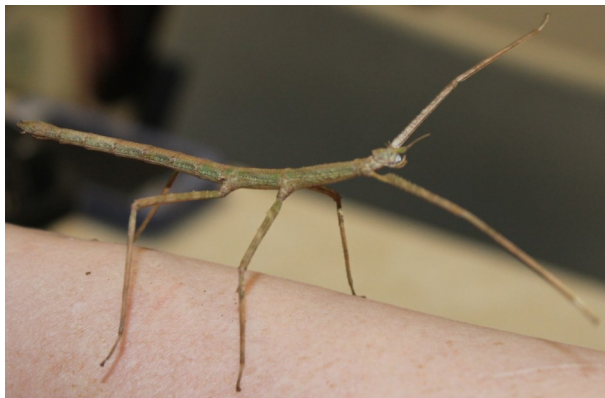
Nature has developed many different ways for species to defend themselves. Some forms are physical, such as a turtle's shell, and some are chemical, like a toad's poison glands. Let's take a quick look at some of the different strategies. Another physical barrier some species use to protect themselves are quills. The North American Porcupine, African Porcupine, and European Hedgehog all use essentially the same defense strategy, even though they come from different continents. The quills are made from keratin, which means they are essentially compressed hair. By the way, this is the same make up as the rhino's horn.

Other species use poison as a defense, which includes different species of insects and amphibians. Sometimes the poison will discourage a potential predator from devouring their prey, others will make the predator very sick afterwards and thus persuade them to look elsewhere for a meal when they come upon another of the same species. In some cases, like the monarch butterfly and poison dart frog species, the defense also includes warning colors that advertise "eat me and die".

The use of body colors can also serve to make the individual blend into their surroundings. This is called camouflage, and some species don't stop at just colors. Stick insects take camouflage to the extreme by including their body design and approach to life into their strategic plan for survival. As their name implies their bodies look exactly like sticks and they spend most of their time staying still or swaying back and forth as if in a breeze.

Of course there are exceptions, such as our rough skin newt ambassador who chemical warfare and disguise in one. This North American species is poisonous and their brownish skin color helps them blend into the muddy bottom of their fresh water habitats.

This brief article does not do this complex and extensive topic justice. So stay tuned to future publications where we will continue our exploration of nature's duplicity!



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Summer Camps

At Howard County Community College

1) Animals Around the World

Ages 6-10. Come with us on a journey around the world of animals. Each day focuses on a different country and some of the animals that live there. Live animal ambassadors are featured each day, along with related crafts, hands-on activities, and games of the country 'visited.' Offered in conjunction with Echoes of Nature Inc. 1 week

Tuition: \$309 (includes \$111 in fees*)

Jul 06-Jul 10 Mon-Fri 08:30-12:00PM XK-524 1222 #1236

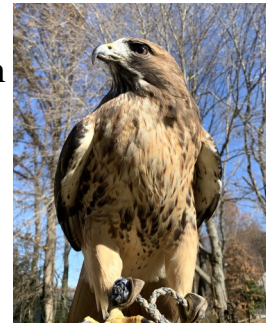


2) Animals Across Maryland

Ages 6-8. Join us on a tour across the diverse habitats found in Maryland and learn about some of the animals that call those environments home. Live animal ambassadors are featured each day, along with related crafts, hands-on activities, and games. Offered in conjunction with Echoes of Nature Inc. 1 week

Tuition: \$309 (includes \$111 in fees*)

Jul 27 - Jul 31 Mon-Fri 08:30-12:00PM XK-527 1223 #1243



Registration & details at:

<https://www.howardcc.edu/programs-courses/continuing-education/courses/kids-on-campus/>

At Chesapeake Arts Center

Animals And Art - Summer Camp

Ages: 6-12

Instructors: Echoes of Nature & Maryanne Daymont



Five days of art and animals! Each day, students will learn about various wildlife, including visits from real animal ambassadors! Students will then take their observations and create their own unique artwork representing the animals and cultures of the world. Students will draw and paint every day! There will be a gallery presentation of the students' artwork for friends and family on the last day of camp!

Days: Monday - Friday

Dates: 8/3/20 - 8/7/20

Time: 8:30am - 4:00pm

Non-Mmember: \$325

CAC Member: \$300



www.chesapeakearts.org

Phone: 410-636-6597

Address: 194 Hammonds Lane
Brooklyn Park, MD 21225

Animal Olympics

We're having our own Animal Olympics show to celebrate the Summer 2020 Olympics. Of our animal ambassadors, who has the record for the high jump, speed or agility? Participants will also try to best the record for the animal chosen for the high jump, broad jump and more.

Amazing Adaptations

What helps an animal climb, fly, live in the water or live on land? Will those adaptations help that animal in a different habitat? Learn how amazing adaptations help an animal survive! Join us as we learn about some animal ambassadors' amazing adaptations and transform some of our audience.

Fairy Tale Animals

We are familiar with the heroes/heroines/villains of many fairy tales.

Some of these characters are animals. But there are also animal sidekicks and characters that add to the richness of the stories. Let's meet a few of these fairy tale animals.

For information and reservations concerning winter, spring, or summer programs, please call **301-860-1306** or email us at **EchoesOfNature@gmail.com**. Check out our website at **www.EchoesOfNature.org**

If you order through Amazon, please consider using **www.smile.amazon.com** to log into your existing Amazon account and select Echoes Of Nature as the non-profit you want them to support with your purchase. At no additional cost to you!

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