

The Pinchot Eagle



Friends of Pinchot State Park

October/November/December 2010

What is that rock?

The Geology of Pinchot

By Rose-Anna Behr, Geologic Scientist at DCNR Bureau of Topographic and Geologic Survey

The rocks under our feet shape the landscape, control what plants and animals live here, and mold the ways humans use the land.

Two hundred and fifty million years ago, all the continents were united into one super continent, Pangea. This super continent did not last. During the Triassic Period, the continents began to tear apart along many rifts. As they pulled apart, basins formed along these zones. Here begins the story of Gifford Pinchot State Park's rocks.

Red sediments, rich in rusty iron, poured from the highlands to the north into a deepening basin, carried by streams and settling in lakes. These sediments were buried and turned to stone (mainly sandstone and mudstone).

As the rift continued to open, cracks formed, allowing hot magma to rise up from below. As the magma met the red rocks of the basin, it baked them



Diabase / ironstone

with its extreme heat, making them even harder than before. Geologists call this baking "contact metamorphism". The magma cooled underground to form diabase, or ironstone. It is called ironstone because it is hard and weathers with a rusty, iron-orange color. Diabase/ironstone is the main rock we see at Gifford Pinchot State Park.

Our rift failed to open any farther. Things quieted down and time passed. Erosion sculpted the landscape, taking advantage of weaker rocks to form stream beds and lowlands, while leaving the stronger rocks to hold up ridges and hills.

Today, along Straight Hill, at the southeast edge

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Ryan Rager

New Assistant Park Manager

Ryan Rager, who grew up in New Wilmington, PA, assumed the position of Assistant Park Manager on July 17th, 2010.

Ryan received his Bachelor of Science degree in Parks and Recreation at Slippery Rock University. His course load focused on areas of park management, wildlife rehabilitation, and environmental education.



Ryan Rager
Assistant Park Manager

Prior to college, Ryan showed an interest in the environment by doing volunteer work with the boy scouts, his church, and at local state parks.

Ryan has worked as a ranger, forester, and wildlife technician at various locations. He obtained his park management training here at Gifford Pinchot State Park during the summer and fall of 2008.

As assistant park manager, some of Ryan's major responsibilities will be to oversee the operations of the campground and day use areas, as well as, manage the staff and volunteers. His goal is to assist the park manager by responsibly balancing between public use recreation and the protection of the park's natural resources.

Ryan looks forward to working with the Friends of Pinchot State Park and helping to turn the group's project ideas into reality. ■

DID YOU KNOW...

There are microbes, including bacteria, fungi, algae, and amoebas, that live inside of rocks? These creatures are called Cryptoendoliths and they live in the tiny pores of the rocks.

What's on that rock?

By Sally Ray, Board Member

"What's on that rock?" or perhaps "Watch out for the rock!" is the cry often heard as boaters navigate the shallow waters of Pinchot Lake. When you take the time to scan the boulders sticking up out of the water, you will notice that a number of critters make use of the rocks that humans may view as obstacles.

Ducks will use these rocks as "loafing" platforms. After feeding they will rest on a rock and may spend time there preening their feathers. Great blue herons and great egrets will occasionally make use of these rocks in much the same way or use them as a fishing spot.

Turtles utilize the rocks for yet another reason. A turtle's body temperature does not remain constant like the human body; but instead, is related to the temperature of the environment they are in. They have to be warm enough for digestive and reproduc-



PHOTO BY JACK RAY

Painted Turtle (*Chrysemys picta*)

tive processes to occur. They can raise and lower their body temperature by moving into warmer or cooler environments. When they are basking, they are raising their body temperature to an appropriate level. This behavior is called thermoregulation. If they become too warm they will move into cooler water. Turtles remain active spring through fall by constantly regulating their body temperature as environmental conditions change.

While turtles sometimes bask along the edge of the lake, the perch on a rock in the open water is a safe one. If they feel threatened, they simply slip into the water and are quickly out of sight. Painted turtles

CALENDAR OF EVENTS

October 23..... Pinchotween, 2:00pm
Environmental Center, Conewago Day Use Area

October 23..... Trick-or-Treat, 6:00pm
Campground, Registered Campers Only

For more information and an updated list of events, please visit our website: www.friendsofpinchot.org/home/calendar

are the ones most frequently seen out on rocks in Pinchot Lake, although snapping turtles will sometimes use them and occasionally stinkpot turtles.

If you are lucky you might watch a dragonfly or damselfly perch on one of the rocks. Next time you are walking along Lakeside Trail, be sure to look out in the coves and check to see what might be on a rock. ■

What's under that rock?

By Pat Sabold, Board Member

When you pick up a rock, board or other flat object that is resting on the ground, you can observe a microhabitat beneath it. A microhabitat is a place where small animals and insects live.

The ground beneath a rock is cool and damp. It can be as much as 20 degrees cooler than the ground exposed to the sun. Small creatures lose water quickly and depend upon this microhabitat to protect them from dehydration. Rocks also provide protection from predators.

The best time to observe this microhabitat is during the dry, hot summer months. Some creatures, which burrow deep into the ground

will come to the surface after a good rain. Many creatures use the rock's habitat during the day, while others use it at night.

When observing a microhabitat, be considerate. Turn rocks back over when you are done looking underneath. It's best to just observe and not pick things up with your bare hands. Some creatures have poison glands, stingers, etc.

Some of the creatures found under rocks are:

Snails and slugs. Snails have shells, slugs do not. In dry months, snails will glue themselves to the undersides of rocks to prevent the water in their bodies

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What's under that Rock?
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from evaporating.

Earthworms. Worms build burrows beneath rocks and come out at night for food.

Ants and termites. Ants and termites build colonies in the ground underneath large rocks.

Beetles. Ground beetles, which are shiny black and 1/2 to 1-inch long, hunt insects and spiders at night.

Crickets. Crickets use rocks for safety and will deposit eggs in the ground beneath.

Grubs. White grubs are the larvae of scarab

beetles. The grubs have shiny brown heads and white bodies. When found, they will probably be curled up.

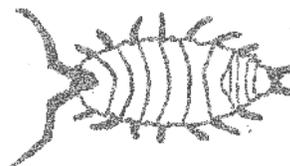
Earwigs. Earwigs are narrow, brownish-black insects 1/4 to 1-inch long, with pincers. After mating, females lay eggs in borrows they dig.

Millipedes and centipedes. Millipedes are brown or black and less than 2 inches long. Each segment has *two pairs of short legs* that curl underneath. Centipedes are flatter than millipedes, reddish-orange or gray in color, and each body segment has a *single pair of long legs* sticking out to the side.

Amphibians. Some salamanders take shelter under rocks and logs. Toads may burrow underground during droughts.

Reptiles. Skinks, which look like lizards with short legs and long tails, will use rocks to hide and lay their eggs beneath. Lizards like to sun themselves on rocks and hide beneath them on cool, overcast days.

Snakes. Various snake species will hide in crevices of rock piles and wood piles, often eating the creatures that live there. ■



Sow Bug (*Isopod*)

ILLUSTRATION BY PAT SABOLD

Sow bugs. Sow bugs are about 1/2-inch long shaped like tiny eggs cut in half long ways. When threatened, they often curl up into a ball. Sow bugs are crustaceans that live on land and breathe through gills. Sow bugs will only be found where there is plenty of moisture.

Spiders. Some spiders, like the wolf spider and jumping spider, hide in silk shelters spun on the underside of rocks.



5th ANNUAL PINCHOTWEEN

HALLOWEEN AT PINCHOT PARK

Saturday, October 23, 2010

2:00pm @ Nature Center
Open to the Public

Games, Pumpkin Decorating, and Scavenger Hunt

Join us for the 5th Annual Pinchotween! The fun begins at the Nature Center at 2:00pm. Play games, decorate a pumpkin, and enjoy a scavenger hunt!



Events for Registered Campers*

Trick-or-treat
6:00pm - Meet at Bathhouse #3

Children must be accompanied by a parent or adult. "Best Costume" awards will go to one winner in each of the following age groups: Ages 1-4, ages 5-8, ages 9-12, and ages 13-adult. Winners will be announced and prizes awarded at the bonfire following trick-or-treat.



Decorate Your Campsite Contest

Judging - 6:00pm

Decorate your campsite for Halloween. Judging will be during Trick-or-treat. The winners of the "Best Campsite" contest will be announced and prizes awarded at the bonfire afterwards.

Pinchotween Bonfire

Bathhouse #7, following Trick-or-treat. Snacks will be served; please bring something to share.

*Participants must be registered at one of the camping facilities available at Gifford Pinchot State Park.



What is that rock?
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of the park, and along Quaker Race Road on the northwest edge of the park, there are low ridges, held up by the hard baked zone of metamorphic rocks.

Outside the park, red rocks can be seen in road cuts and stream banks, and red soil is



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This volunteer advisory board is dedicated to preserving, protecting and enhancing the natural and recreational resources of Gifford Pinchot State Park for present and future generations.

Friends of Pinchot State Park is a chapter of the Pennsylvania Parks and Forests Foundation (PPFF). The PPFF is a 501(c)(3) non-profit organization. Contributions are tax deductible to the fullest extent of the law.

Newsletter Editor: Pat Sabold
psaboldFOPSP@aol.com

Publication deadlines are the 15th of each quarter (March, June, September, December). The Advisory Board reserve publication decisions.

Adopt a Trail: Help Make Hiking at Pinchot Even Better

Do you like to hike at Gifford Pinchot State Park? Are you looking for volunteer opportunities? If so, the Friends of Pinchot State Park's recently formed Trails Committee wants to hear from you as we kick off our Trail Steward Adopt-a-trail program. A few aspects of the program are:

- Walk an adopted section of trail at least 3-4 times per year.
- Pick up litter.
- Note and report locations of trail hazards, such as downed trees across trails and sections in need of maintenance (badly eroded, under water, bridges in need of repair, etc.).
- Comment on the presence of invasive plant species, if the observer is familiar with them.
- Report instances of graffiti or vandalism.

Individuals, groups, or families who wish to adopt a trail are required to fill out a Department of Conservation and Natural Resources (DCNR) *Application to Become a Conservation Volunteer Form* and submit it to the park office. Forms are available at the park office or from the Friends of Pinchot State Park. At least one person from each group or family must be 18 years of age.

For more information on the Trail Steward program, please contact Committee Chair Steve Stroman at stevestroman@hotmail.com or 717-350-0437 (evenings and weekends).

seen in farm fields. Place names, like Red Lands, Red Run, and Red Hill attest to this ubiquitous red.

The diabase underlies the lake and forms most of the boulders you see in the park. It is hard, but not as hard as the metamorphic rocks. It forms poor, thin soils, so farming here was difficult. When selecting a site for the park this was likely considered. The diabase tends to weather in an onion-skin pattern, just like layers of an onion peeling away.

The next time you are walking in the park, note the low ridges on either edge of the park, the stone walls of diabase cobbles, and be glad the rift failed; otherwise, your trip home could be all the way across the Atlantic Ocean! ■

FRIENDS OF PINCHOT STATE PARK

Annual Membership Application

Make checks payable to: PPF
(include FOPSP on the memo line)

Mail form with payment to: Friends of Pinchot State Park, 2200 Rosstown Road, Lewisberry, PA 17339

NEW MEMBERSHIP RENEWAL

- | | | |
|--|----------|---|
| <input type="checkbox"/> Senior (age 65+) | \$5.00 | <input type="checkbox"/> I'd like to make a |
| <input type="checkbox"/> Individual | \$10.00 | tax-deductible |
| <input type="checkbox"/> Family | \$15.00 | contribution of \$ _____ |
| <input type="checkbox"/> Damselfly Sponsor | \$50.00 | <input type="checkbox"/> I'm interested in |
| <input type="checkbox"/> Dragonfly Sponsor | \$100.00 | volunteering |

Name(s) _____

Street _____

City _____

State/Zip Code _____

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I would like to receive my newsletter via email.

Friends of Pinchot State Park was formed in March 2009 as a chapter of the Pennsylvania Parks and Forests Foundation (PPFF). The PPFF is a 501(c)(3) non-profit organization. Contributions to PPFF are tax deductible to the fullest extent of the law. The official registration of the Pennsylvania Parks and Forests Foundation may be obtained from the Pennsylvania Department of State by calling toll free within Pennsylvania 1-800-732-0999. Registration does not imply endorsement.

Memberships are for one year, June 1 through May 31.