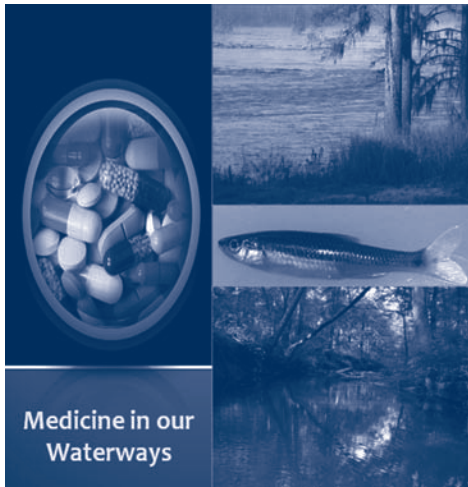


The Resource

A Publication of the City of North Augusta
Stormwater Management Department

Protecting Streams by Properly Disposing of Prescription Drugs



Medicine in our Waterways

For years it was recommended that old medications could be poured or flushed down the drain when they were no longer needed or out of date. That practice is now *not advised!* Studies have shown that some medications or personal care products (shampoo, perfume, sunscreen, detergent, nutritional supplements or animal medicine) contain chemicals that are being found in small quantities in streams, rivers and groundwater. Community water supplies come from fresh

water or groundwater sources. Further studies are being conducted across the country to determine if the treatment process for purifying drinking water is adequate at removing them.

A few of the common medications found in waterways include *carbamazepine, cotinine, ibuprofen, metformin, and sulfamethoxazole* according to a study conducted by the United States Geological Survey (USGS). The concentrations were not extremely high and the effects are not fully known. It is unclear how the presence of medications can affect fish and other wildlife. More studies are underway to determine what is safe and what is not safe to dispose of in sanitary sewers. Until a conclusion is reached, we should be very careful when disposing pharmaceuticals and personal care products.

While not a perfect solution, the Environmental Protection Agency

(EPA) is advising that unneeded medicine be removed from its original container and added to wet coffee grounds, dirty kitty litter, or sticky glue like substances in a margarine tub or other small water tight container with a lid. Before disposal of liquid medications, salt, flour, or cornmeal can be added into the original container. Peel off or mark out the label on containers with an indelible marker. Following these steps will make the waste medicines unappealing to children, pets, or others. Once prepared, dispose of them in your non-recycle household trash (do not place it in the blue-bag). For personal care products, consider reducing the amount that you use or choosing all natural products that are more environmentally safe. To learn more about the problem and how you can help at home, visit the EPA's Pharmaceuticals and Personal Care Products website at www.epa.gov/ppcp.

FEEDING WILDLIFE NOT ALLOWED!

Feeding the wildlife at Brick Pond Park will not only cause harm to the animals, but will also harm the ecosystem. For these reasons, the city is trying to spread the word, **"Do Not Feed Any of the Animals at Brick Pond Park"**. Prior to restoration, the wetland system was impaired due to excessive

nutrient loads. The restoration design is set up to remove pollutants to improve water quality. Feeding the animals increases nutrient loads in the system, thus defeating the design's purpose. The park's natural habitat provides plenty of food for birds, waterfowl and wildlife to eat.

Please share this information with your children, grandchildren, friends and neighbors. If you are at the park, explain it to those that may not understand. Working together, we can protect the wetland and its animals.

Impacts of Feeding Brick Pond Park Wildlife

- Feeding wild animals changes their behavior.
- Feeding human food to wild animals can harm them.
- Wildlife dependent upon hand feeding, especially those that grow to maturity being hand fed, become less able to feed themselves.
- Hand feeding can attract too many animals! They will begin to multiply in the park, causing overpopulation leading to destruction of habitat, pollution, increased disease and eventually starvation.
- Feeding the birds, turtles, and fish is the same as feeding the alligators. Alligators see what is going on and associate people with food. They don't want to miss out on a free meal! Unfortunately for them, an alligator that swims up to people is considered a nuisance and threat. In SC, nuisance alligators are destroyed, not relocated.



Species Profile:

Eastern Box Turtle

(Terrapene carolina carolina)

These beautiful land turtles are common in North Augusta and are possibly one of the city's oldest residents. They can be found within dry woodlands, thickets, fields, moist woodlands and near streams. Eastern Box turtles are primarily a species of the eastern half of the United States although their range extends as far north as lower Maine and Michigan. Habitat loss and its fragmentation is a big problem for these slow moving creatures.

A high domelike shell is the first thing you notice different about the Eastern Box turtle from other turtles. The shell is usually brownish to black with markings that vary in color from pale yellow to reddish orange. The hard shell protects the animal's soft organs from predators. Unlike other turtles, box turtles have a hinged shell underneath (the plastron) which allows them to completely close into their shell. To make room, the turtle may exhale air out of its lungs releasing a hissing sound. Their skin is usually dark brown with yellow, orange, or white spots and streaks. Male Eastern Box turtles are slightly larger than females, have red irises and have shorter curved hind claws. Female's irises are yellowish to brown. They eat plants and animals including snails, insects, berries, and



mushrooms. A male box turtle may mate with one or many females. Interestingly, the female may lay fertile eggs for four or more years after one successful mating. Nesting usually occurs from May through July with nests being dug by the females in sandy or loamy soil, using their hind legs. Eggs are then laid in the nest and then carefully covered up again to hatch out in about three months. The average life span of the Eastern Box turtle is around 40-50 years with some individuals living much longer, up to 100 years or more.

Locally, the Eastern Box turtle is being studied using miniature radio transmitters to track their movements. The Aiken county study is in a suburban neighborhood and its adjoining forest. The data collected tells scientist a lot about

the species including, when and where they hibernate, where they go to forage or mate, and also how they die. Several of the study turtles died from human mistakes such as burning brush/leaf piles where turtles were hiding, hitting them with lawn mower blades while cutting tall grass, and others drowned when falling into backyard goldfish ponds without climb-out ramps. Awareness is very important when it comes to helping this species make it in our ever changing community. Consider them when landscaping or maintaining your yard and discourage children from keeping the long-lived box turtles as pets. If you see one in your environment, it is most likely a life-long neighbor if its habitat needs are met and people are careful.

North Augusta Elementary Students Study Wetlands

In October, over 100 fifth grade students from North Augusta Elementary School took part in North Augusta's Brick Pond Park Outdoor Education pilot project. The students visited the Municipal Center where they learned about Brick Pond Park's development and purpose along with local history during a tour of the North Augusta

Arts and Heritage Center. The students then conducted projects that included water chemistry, plant and animal studies, soil testing and erosion, measuring ponds, and looking at micro and macroscopic creatures that live in the water. They will compile the data they gathered and create presentations to share the

information with their fellow students. A host of volunteers and parent chaperones helped to make the event a success. Local education partners include USC-Aiken, Clemson Extension, Augusta State University and the Arts & Heritage Center. If you would like to learn more about the project, please contact us at (803) 441-4246.

Reminder:

North Augusta's Lawn Mower Exchange program (May 2009 issue) ends December 31, 2009. If you are interested in receiving a discount coupon to purchase an electric mower, please contact us prior to the deadline. More information is available at: www.northaugusta.net.



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