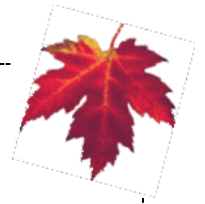


NATURE NOTES



Wilderness Trail Chapter, KSNH

September 2008

September Meeting—A Visit with the Tooles

On Thursday, September 4th we'll travel to the Middlesboro home of Tom and Pam Toole. Meet at the Toole home at 6:30 p.m. (car pool from Pineville Library if convenient). Bring along a dish for the potluck dinner. We'll tour the Toole's new pond and waterfalls, and the program will be "A Member's Potpourri" at which any member or guest shares a bit of nature news, lore, observation or whimsy.

Upcoming programs...

Oct. 2--Nature Crafts

(Ron) Library , 7 p.m. (dinner at 6 p.m.)

Nov. 6—Elks ihe Region

(Dean Henson), Lodge, 7 p.m.

Dec. 4—Holiday Social with the Presnells

(Dinah Presnell), 6 p.m.

Amphibians could be the key to humanity's future

Amphibians may be small and diverse vertebrates, living on the land or sea, but they are ultra sensitive to environmental change. That makes them unique among animals. Their whole lifecycle from larvae, to unshelled eggs, to their very skin sensitively exposes them to every whim of the atmosphere, natural or man-made. They could be our "secret prophets" of future worlds.

Few animals can live on both land and sea. Amphibians are a unique animal that can metamorphose from an aquatic animal with gills to a terrestrial, cold-blooded animal with lungs (except the lungless salamander). But that uniqueness doesn't stop there. You would think this ability would give amphibians an edge on life. But it is a knife edge. "More than 160 species of amphibians may already be extinct. More than 1,800 amphibian species are threatened with extinction - that's 32% of all known amphibian species." <http://www.stlzoo.org/> Frogs, perhaps the most "common", well-known

amphibians are becoming extinct. Why? Is this a sign of a "deadly" world on the horizon?

Air, tainted with greenhouse gases, or water, polluted with heavy metals, pesticides or herbicides at best deforms amphibians, in particular, frog populations. Their thin, moist, permeable skin helps them breathe. So the air passes through every part of their body. It is easy to see how this animal is highly susceptible to any changes in atmosphere. "In 1995, Blaustein and Wake observed that many threatened amphibian species lay their jelly-like egg masses in open, shallow waters at high altitudes. They proposed that increased UVB radiation coming through a thinning stratospheric ozone layer was making the amphibians' eggs more susceptible to fungal infection." <http://www.aveweb.org/Strangely>, only the poison arrow frogs appear to be adopting UVB avoidance behavior. And at lower altitudes, cases of deformed amphibians have been recorded in southern Quebec, where pesticides were used heavily in potato and sweet corn farming.



Amphibians are unique animals because they have initiated a world panic to protect them. In 2006, "a coalition of zoos, aquariums, and botanical gardens announced a \$400 million drive to establish captive breeding programs for the most threatened species. The effort, dubbed the Amphibian Ark, seeks to house 500 individual frogs from each of 500 species in biosecure facilities around the world."

NATURE NOTES



Wilderness Trail Chapter, KSNH

September 2008

What the hail?

Hail is lumps of ice that fall from thunderstorm clouds. Individually, each lump is called a hailstone. Hailstorms occur during warm months in temperate climates, but are rare in the tropics. Hail is formed in the upper part of a cloud. Hailstones are made of concentric layers of hard ice and soft, milky-looking ice. The layers are built up as the hailstone collects water droplets and snow crystals that freeze to it under varying conditions. Hailstones vary in size, but are an average of one-half inch in diameter. Eventually, the hailstones become so heavy that they fall to the earth. Ice pellets called sleet resemble very small hailstones, but are frozen rain. Sleet forms near the ground in cold weather.



Strange Animals: Meet the Aye-Aye

Aye-ayes can be found only on the island of Madagascar. These rare animals may not look like primates at first glance, but they are related to chimpanzees, apes, and humans.



Aye-ayes are dark brown or black and are distinguished by a bushy tail that is larger than their body. They also feature big eyes, slender fingers, and large, sensitive ears. Aye-ayes have pointed claws on all their fingers and toes except for their opposable big toes, which enable them to dangle from branches.

Aye-ayes spend their lives in rain forest trees and avoid coming down to earth. They are nocturnal, and spend the day curled up in a ball-like nest of leaves and branches. The nests appear as closed spheres with single entry holes, situated in the forks of large trees.



While perched aloft, the aye-aye taps on trees with its long middle finger and listens for wood-boring insect larvae moving under the bark. It employs the same middle finger to fish them out. The digit is also useful for scooping the flesh out of coconuts and other fruits that supplement the animal's insect diet.

Many people native to Madagascar consider the aye-aye an omen of ill luck. For this reason they often have been killed on sight. Such hunting, coupled with habitat destruction, have made the aye-aye critically endangered. Today they are protected by law.

2008-2009 Officers:

Tom Toole, Pres.
Scott Woodworth, V.P.
Fran Woodworth, Sec'y.
David Partin, Treas.