

by Scott LaFee

WHAT IS IT? ANSWER

If you're an arachnophobe, this is your worst nightmare: social spiders. Most arthropod sociality is confined to insects like ants and bees, but there are at least 20 known species of spiders that prefer to live in large groups.

Among them: *Delena cancerides*, or huntsmen spiders, that do not reside in webs, but form year-round colonies of as many as 300 individuals living beneath the bark of dead trees. Not to worry, though, *D. cancerides* (which are mildly toxic and can possess a leg spread of up to 5 inches) are indigenous to Australia, not the United States.

PRIME NUMBERS - A reward of \$50,000 is being offered for the best idea to 'tag' Apophis, an incoming 1,200-foot-wide asteroid that some calculations say may collide with Earth in 2036. CNS Photo.ANTHROPOLOGY 101

The Dutch considered it unwise to carry on private conversations in the presence of a cat, which was thought to spread gossip.

PRIME NUMBERS

6 - Ranking of 2006 in terms of warmest years on record (going back to 1861)

2005 - Warmest year on record

\$50,000 - Reward being offered for the best idea to "tag" Apophis, an incoming 1,200-foot-wide asteroid that some calculations say may collide with Earth in 2036

Sources: World Meteorological Organization; NASA; Planetary Society

BRAIN SWEAT

"I just bought some powdered water, but I didn't know what to add," says comedian Steven Wright. It's a joke, but there's actually an answer. What is it?

JUST ASKING

How can there be "self-help groups"?

BRAIN SWEAT ANSWER

Add heat. "Powdered water" is simply pulverized ice.

PATENTLY ABSURD

Bird trap cat feeder

U.S. Patent No. 4,150,505

It's clear Leo O. Voelker wasn't a member of the Audubon Society. In 1979, Voelker patented a device that looked a lot like a birdhouse but was, in fact, built for the benefit of cats. Essentially, it worked like this: A misguided sparrow would enter the birdhouse, looking for a free meal. Instead, the "house" would immediately tilt, thrusting the bird down a long tube into a mesh cage. The mesh was just large enough for a bird to poke its head through, allowing a patiently waiting feline to clamp on and yank out its free meal.

VERBATIM

"I am sitting here 93 million miles from the sun on a rounded rock, which is spinning at the rate of 1,000 miles an hour ... and my head pointing down into space with nothing between me and infinity but something called gravity, which I can't even understand, and which you can't even buy anyplace so as to have some stored away for a gravityless day."

- Russell Baker

SO YOU WANT TO BE A SPY

Former Russian spy Alexander Litvinenko died in December from complications caused by exposure to polonium-210, a radioactive element. Litvinenko, who was living in England, reportedly claimed Russian President Vladimir Putin had ordered his death, an accusation the Kremlin has denied but which Scotland Yard is investigating.

For secret agent wannabes, here are three things to know about polonium:

1. Polonium exists naturally at very low levels, but can also be produced in a nuclear reactor. The element was discovered in 1897 by Marie and Pierre Curie. It's named after Marie's home country, Poland.

2. To be toxic, polonium must be taken internally: inhaled, consumed, absorbed through an open wound. The lethal dosage is quite small, just 0.03 microcuries. That's less than the period at the end of this sentence. Polonium kills by emitting radioactive alpha particles that damage and destroy genetic material inside cells.

3. Trace amounts of polonium-210 can be found in cigarette smoke, absorbed by the tobacco from phosphate fertilizers.

POETRY FOR SCIENTISTS

Big whirls have little whirls,

That feed on their velocity;

And little whirls have lesser whirls,

And so on to viscosity.

- English physicist Lewis Fry Richardson, summarizing his classic 1920 paper, "The Supply of Energy From and To Atmospheric Eddies."

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