

JANUARY 1 - 14, 2018 NATURAL HISTORY NOTES FOR EASTVIEW

By Dick Harlow

WARM CLOTHING



River-Otters-At-Squaw Creek, © USFWSmidwest

We are now in the second month of winter (December, January, February), and our bodies have become acclimated to the cold; although we may gripe about it, we now are far more used to it than when we started in November.

We tend to layer our clothing, being able to take clothes off when the weather warms and put them on as the cold winds make us uncomfortable.

Mammals who live in the north, whether they hibernate or not, also have to change their clothing. But, unlike us humans, most only do it once in the fall and once in the spring regardless of what the weather might bring during the wearing of the new coat. We change clothes as we like dependent on how we feel.

Trappers that wanted the best furs trapped animals when they knew that the fur, the mammal's coat, was at its prime, most dense and pristine. That was the time after the animals shed their summer fur (usually September-October) and put on their winter coat. By the end of November, they had their winter coat. Any other time of year (April-October) the fur would be of poor quality. As a master predator and to insure survival primitive man needed animal fur to stay warm and survive. A fur coat that had dense, prime fur, was warmest and lasted the longest. Of course, today we wear down and synthetic fiber filled clothes as preferred alternatives. I think we in the north can appreciate the appropriateness of having some form of insulation between our skin and the outside cold air.

Birds are warm blooded with a body temperature greater than humans. They need food to generate and release this heat.



A fluffed up Black-capped Chickadee.
© by *Mike Wisnicki* via *Birdshare*.

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Birds molt (lose old feathers and develop new feathers) usually molting in the Spring and again in the Fall. But, unlike mammals, the feathers, although many times are of different colors, and are in layers, they are **NOT** necessarily thicker or have more dense layers between spring and winter.

So, how do birds keep warm when temperatures dip below 32 degrees? Because birds are warm blooded creatures with a body temperature greater than ours, they give off more heat. Fluffing the layers of feathers increases the air pockets between the feathers, thus trapping the expended heat and insulating the bird from the cold. When you see a puffed-up bird like the chickadee above it has simply extended the air pockets under its feathers, making it look larger, but trying to stay warm rather than being aggressive.

CLIMATE CHANGE - SHOULD WE BE CONCERNED?



If we care about the human race, our kids, our grandchildren we should be very concerned! Climate change was not heard of in 1976 when my last child was born. Today we see a shrinking ice cap at the North Pole and melting glaciers in Greenland along with ice shelves breaking away from Antarctica.

Today's technology allows us to look, to visualize into the future, as well as look back into the past. Growing up along the New England coast, being a Captain of a 40-foot lobster boat, I have an appreciation for the sea, the damage water can do to the coastline, to property, all without intent. Water in nature has no purpose other than to follow gravity or the will of wind and current. Pictures of storm damage, beach erosion, buildings falling into the sea are all prevalent in the media. Most of us alive now and even our children will probably not see the predictions for Boston and Manhattan and New York city. We see what happens after a hurricane, but then in time everything seems to go back to normal. We are all too familiar with Miami's flooding problem during a hurricane, but will we see it go under water? We are aware of what water is capable of doing to structures that are built too close to the tide line.

Living on the shore for 40 years and having to leave our house several times due to hurricanes, one is ever mindful of the immediate dangers. Probably one of the reasons why we wanted to move to a safer more reliable state like Vermont. Be that as it may, I can't help but be concerned for all those who either don't have the opportunity or the will, to move away from the shore, especially in the Northeast and along the whole eastern shore to Florida.

"Climate-change sceptics will shrug. Some may even celebrate: an ice-free Arctic ocean promises a shortcut for shipping between the Pacific coast of Asia and the Atlantic coasts of Europe and the Americas, and the possibility of prospecting for perhaps a fifth of the planet's undiscovered supplies of oil and natural gas. Such reactions are profoundly misguided. Never mind that the low price of oil and gas means searching for them in the Arctic is no longer worthwhile. Or that the much-vaunted sea passages are likely to carry only a trickle of trade. The right response is fear. The Arctic is not merely a bellwether of matters climatic, but an actor in them (see [Briefing](#))." Apr 29th 2017 | KIRKENES, TROMSO and WASHINGTON, DC

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BROWN OR NORWAY RAT

EastViews new mammal is the Brown Rat. An English naturalist in 1769 accused Norway for the introduction of the Brown Rat to England, and thus the rodent received the scientific name of *Rattus norvegicus*, and has been known as the Norway Rat, even though it did not originate in Norway. As a matter of fact, this rat is thought to have originated in China.



Brown Rat, AKA Norway Rat, *Rattus norvegicus*
© Dick Harlow, feeding on sunflower seed.

Today you can find this rodent in most places around the globe wherever humans are found except Antarctica. This rat is considered the most successful mammal on this planet beside or alongside humans.

To be that successful it must have adapted well to the changes in the climate, its environment, and to make use of whatever it can within the human sphere. "A study done in 2007 found that brown rats have metacognition which is a mental ability thought to be found only in humans and some primates. Further study suggests that they may have been following simple operant conditioning principles."

A great deal has been written about this rodent, but what concerns me is their ability to dig large interconnecting tunnels in gardens. The brown rat is an omnivore although grains are found to be the main ingredient of its diet.

Plus, a single female can get pregnant while she is weaning young. That does not bode well for keeping their population in check.



Brown Rat, AKA Norway Rat, *Rattus norvegicus*
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OBSERVATIONS

MAMMALS

Fox tracks in snow

Coyote howling and yipping close to cottages and tracks in snow

Eastern Cottontail tracks in snow

Brown Rat large holes in snow