

Surviving the Winter When You Only Weigh Half An Ounce

Having survived yet another night of freezing rain and waking up to ice coating all the trees and grasses, and then watching the finches and pine siskins on the thistle feeder outside my window, I got to wondering: “How do those little ½ oz critters survive nights like that”?

I am well aware that birds and small mammals survive very much colder winters than we have, all over the world, and that our native critters have a relatively easy life. But still, if you only weigh a half ounce and you have to sit on a tree limb all night with rain freezing all around you, and you can't go out and find food until daylight, I would think the nights would seem very long.

Obviously, all of our native animals have evolved to live in this climate and have done so for thousands, maybe hundreds of thousands of years--successfully. So there is nothing surprising about the fact that these little birds survived the freezing rain last night. And yes, their feathers may provide the equivalent insulation of a “down parka”. But, to me, knowing that doesn't keep it from all being somewhat amazing.

Food is, of course, the source of the energy that all warm-blooded animals use to regulate their temperature and keep themselves alive. We sometimes refer to food as the “fuel” that makes our bodies run, and we talk about “burning” food or calories. The reason we use those terms is that what goes on in our bodies is indeed the equivalent of burning fuel. The carbohydrates, proteins, fats and oils that we eat are all ultimately converted into the same by-products that would occur if we literally “burned” our food--carbon dioxide and water. And if we burned our food in a fire, heat would be given off just like burning wood or coal or oil.

So how warm-blooded organisms keep warm in cold weather is not a mystery. It simply requires an adequate intake of food and that all of our body processes are functioning. But I still find it amazing that the half-ounce finches can eat enough tiny thistle seeds during the day to keep them warm all night.

Most of our small mammals tend to have some kind of den that gives them at least some protection from the weather for part of the day. And their “fur coat” presumably helps protect them from the cold as well as the bird's down coat. But without food, neither the birds nor the mammals can survive for as long in the winter as in the other months when their fuel requirements are not as high.

One thing I have always wondered about is that I have never seen any evidence that birds ever seek any “artificial” shelter. One might think that on cold windy nights they might seek places such as on our porch out of the wind, or maybe on a windowsill where they might find some heat. But I have never observed any such behavior nor

heard of anyone else seeing it either. But then even those birds that build nests in cavities or bird boxes don't necessarily use those places for nighttime roosts either, except during the times when they are raising their young. Obviously, their behavior is programmed by their DNA to seek nighttime shelter on a branch away from predators, and maybe in a dense tree such as cedar. Apparently, they didn't evolve to make use of artificial shelters, but they do view bird boxes and other man-made things as places to build nests.

Interestingly, domestic livestock, at least some of them, readily use man-made shelters, especially horses, sheep, goats and chickens. Which is a good thing, because very young lambs and kids can die from exposure on very cold, wet nights.

So to me, the lessons for homeowners and landowners is to do what we can to provide our native critters with the habitat they evolved to live in and that they know how to survive in. The more we alter the habitat by taking away any feature of importance to small animal survival, or by introducing any obstacle to their survival, the more difficult we make their lives and the fewer of our native species that will be able to co-exist with us.

So be nice to our little furry and feathered friends.

Until next time...

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