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Woolly bears are commonly found and brought indoors by curious kids with an eye on “raising” them. Now what?

On Woolly Bears & Bug Jars

Your mom was wrong. So was your mom’s mom, and her mom, and so on. Right or wrong, kids learn from their parents. While, unquestionably, most of what we learned was right (We’re still alive.), some tidbits of erroneous information pass through the generations so broadly, we take their validity for granted. More on that later.

I step into an elementary school classroom on an autumn day. My eye catches a jar and its contents resting on a window sill. I note the requisite holes punched in the lid. A view into it reveals one or more woolly bears in a state of permanent repose on a bed of desiccated grass. The energetic crawlers brought into the classroom the week before have been reduced to shrunken, anemic ghosts of their former selves. Furthermore, the potential for a hands-on lesson, fortuitously initiated by a child’s natural curiosity, dies by the wayside.

Indeed, days are numbered for most wild insects we see on a sunny September day. Autumn’s increasingly colder days lead to inevitable freezes that sporadically, but ultimately kill nearly all of them. However, each species has taken steps to ensure that individuals in another stage of the life cycle (egg, pupa, nymph), survive the rigors of winter to resume the pace next spring.

The woolly bear, or, more accurately, the Isabella Moth larva, is a prominent exception to the rule. The same hyperactive, prickly, black-and-brown banded caterpillar seen scurrying across roads on sunny autumn days will take winter’s coldest punch and emerge alive and kicking on the other side. (BTW, forget that nonsense about the length of its brown mid-section forecasting the severity of the coming winter. File it away permanently - right next to the groundhog-wash.) The overwintering woolly bear will remain curled tightly under a board, a log, under leaf-litter or hidden deeply within the dense tangles of plant roots found in any overgrown field. Once spring has sprung it will spin its cocoon out of sight within any of these locations. Now, fast-forward to a warm night circa July 1. With a bit of purposeful inspection under an outside light through miscellaneous nocturnal winged things, medium-sized, yellowish, Isabella Moths are not hard to find. Females attract males through emission of pheromones. They mate, eggs are laid, and here we go again...

Kids and many adults assume they're rescuing the caterpillar from freezing nights by bringing it indoors. In reality, and with all good intention, they've just placed it on death row. Warm wooly bears expend energy, and, therefore, need to eat. Cold wooly bears don't - and don't. If a wooly bear kept in the house is not going to be fed it is best kept in the fridge! Not a very watchable venue for a curious kid.

Therefore, if one is brought indoors and kept out of the refrigerator it definitely needs to be fed. So, what to feed it? This may be one of the easiest caterpillars for which to find food. One explanation for its abundance is the fact that it will eat the leaves of such a wide variety of herbaceous weeds and shrubs. Field guides don't even bother listing much. After naming a few, they save space by stating "and many more." So, with some careful trial-and-error almost any wild growth in an old field or chemically-untreated lawn may suffice. A few common, lawn-dwelling staples of the wooly bear salad bar are dandelions, and both plantains – Common and English. Recognize, then pick leaves of these, and your captive wooly bear will not go hungry. Be sure to remove droppings and wipe the inside of the jar dry once every day or two as long as the caterpillar continues to eat and digest.



Sometimes, a caterpillar is discovered this time of year that many mistake for an all-black wooly bear. A wooly bear on *steroids*, maybe... The Giant Leopard Moth larva resides in the same lepidopteran family, Arctiidae – the tiger moths, but is markedly beefier than the Isabella. Apparently, since it is less common it is less-well-known, and therefore, has not received the privilege of a special, cute name.

I like this species better than the Isabella Moth – partly because it is less common (I may see 15-20 wooly bears for every leopard moth larva), but also because it is larger, and therefore, more impressive. The moth's wings are white and peppered with black spots and circles. The top of its abdomen, hidden under closed wings when at rest, glistens an iridescent blue-black. By contrast, the skin of the larva beneath stiff, glossy black bristles is bright red. When the caterpillar is picked up or when it is cold, like the wooly bear, it curls up. Red rings of skin now become exposed between the bristled segments creating an interesting pattern of black-and-red bands. Some field guides point to this feature as an identification clincher for the Giant Leopard Moth larva.



It is just as easy to care for this one as the wooly bear. It eats virtually all the same plants. Heck, might as well keep both species in the same jar! As winter approaches and ground-plants become inaccessible, retire the jar to the back corner of a refrigerator shelf or place it in an unheated garage. Once plant growth resumes in April, bring the jar out of its artificial winter, and push some dead leaves into the bottom. Then, add some fresh, green food plants. Within a short period of time the caterpillars should spin cocoons. Now, leave the jar open. Fresh leaves no longer matter. Place a stick or piece of bark vertically into the jar so that it projects upward and above the rim. Then put it in a prominent place where you can look at it every day. On a day in late June - if all goes well - you should be rewarded with the sight of an adult Isabella or Giant Leopard Moth clinging to the stick.

Finally, back to that wrong thing passed on through generations...



Look Ma, no holes!

Do not... Repeat, DO NOT punch holes in the lid of a jar meant for keeping live caterpillars or other insects. Plenty of oxygen is trapped in the jar. Also, if green leaves are placed in the closed jar with the insect, additional oxygen is being emitted as a waste product of plant transpiration. Suffocation is not an issue!

On the flip side, punching holes in the lid opens the door to a much more real problem to survival of the contents – desiccation or dehydration. Just as with any greens we want to keep fresh for our consumption, they are best kept in an air-tight manner. Don't punch holes in *my* Tupperware, please! A caterpillar receives the majority of its water-intake directly from the fresh leaves it consumes. One that tries to consume a desiccating leaf, itself begins to dehydrate - which inevitably leads to death.

Varied forms of bug boxes and bug totes for kids are abundant in today's market. Virtually all are made of screen or netting stretched around a frame. Those made of plastic are riddled with "air holes." The makers and sellers of these products won't

appreciate this advice, but save your money, and save the resources. Nothing you may buy is better for keeping woolly bears, leopard moth larvae or any other insects healthy in captivity than a re-used peanut butter, pickle, or mayo jar... Hold the holes.

-Jim McGrath

Enroll your 2nd -3rd Grader in Creepy Crawlies – Fall Edition Saturdays, Oct 26-Nov 23 at LCC East

Carol is teaching this Lively 5-week class featuring hands-on and up close experiences, inside and outside, with a variety of insects, reptiles, amphibians, birds, mammals, and more. It runs from 1 to 4pm for 5 Saturdays at Lansing Community College (East Campus). Call LCC at 483-1860 to enroll.



Around the State in October

- ❖ ***Saturday, October 12: 1 to 6pm. Michigan Reptiles & Amphibians Exhibit; Cranefest, Baker Sanctuary, Bellevue.***
- ❖ ***Saturday, October 26: 11am to 3pm. MI Reptiles & Amphibians Exhibit; Spooky Science Saturday, Leila Arboretum, Battle Creek.***



A first-year Cooper's Hawk takes a break after chasing birds at a backyard feeder.

A Powerpoint Field Guide to Michigan Hawks & Eagles

***Sunday, October 13
1 to 5pm; \$5/person***

Join us on Sunday, October 13, any time during our open hours from 1 to 5 pm. At 2 pm we will present *A Powerpoint Field Guide to Michigan Hawks & Eagles*. Throughout the seasons, up to eleven species of hawks can be found in Michigan, as well as the Bald and Golden Eagle. Vultures will also be featured since they share similar flight characteristics with the birds of prey. While viewing an abundance of color images, learn how to identify all of them in the field. Discussion will also include classification, interesting behaviors of each species, the best seasons in which to find them, and where, specifically, you can go to see them around Greater Lansing as well as throughout the state.

Come early or stay late to visit, and interact with our huge zoo of Michigan reptiles & amphibians. Take a personalized guided walk on the trails, too. Knowledgeable staff is on hand throughout the day to help visitors of all ages make the most of their visit.



The Turkey Vulture has an eagle-like wingspan but exhibits a "shrunk" head in flight.



Cranes at Haehnle Field Trip Monday, October 14; 6:45am to 1pm

Jim will lead a small group of adults to Haehnle Bird Sanctuary, east of Jackson, to observe thousands of staging Sandhill Cranes as they awaken on the marsh and take-off toward surrounding fields to feed. Our spotting scope offers especially up-close viewing of a host of waterfowl and other species. The group will visit several other locations, as well. Advance registration required. Fee: \$40/person, includes transportation and personal bird checklists to keep track of the day's finds.

A family of Sandhill cranes takes flight. Photo © Steve Sage.



Catch Nature Discovery on WLNZ Radio's Coffee Break on Tuesday, October 22

Jim is scheduled to appear on Friday, October 22 at 9:45am, discussing Michigan wildlife topics. The show airs weekdays from 9 to 10am on 89.7 FM. Listen live online at lcc.edu/radio/onair/ or watch it live (or later in the day at 6pm) online at lcc.edu/tv/watch. We'll post a reminder on our Facebook fan page.

Climate Change Realist

Bill McKibben, founder of 350.org, calls this the most important number on the planet, and we agree. Most U.S. citizens are in the dark about its significance. Others would prefer not to give it credence. To acknowledge its gravity would require conscientious and drastic alterations to nearly every aspect of their comfortable and firmly entrenched fossil-fuel-supported lives. To read about the number's significance, check out www.350.org/about/science. We're keenly aware that there is only so much we can do as individuals to make an impact. That's why we just joined and donated to this organization. If you care about the man-made causes of climate change and the need to curtail our carbon output now, we urge you to join.



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OUR HATCHLING RAT SNAKES & FOX SNAKES NEED HOMES!

We'll give one, along with all the care support you need, to any educational institution that uses our services.

An excellent classroom mascot!

Contact us for details...

Become a fan of *Nature Discovery* on Facebook!

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