

# Hamlet Never Met a Horseshoe Crab

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TOWN BANK - The other day I was strolling on the Delaware Bay beach in Town Bank when I encountered an older gentleman (older than me anyway) with his dog on a leash walking towards me. As he approached, I continued my spring ritual of flipping horseshoe crabs over from their vulnerable position on their backs.

The man stopped and said "You know, I used to work over by 'the Point,' and when we used to flip those horseshoe crabs back over to try to save em, I was told that it was a waste of time."

He continued to explain to me that after the crabs mate on the beach, they inevitably die, so what's the use of flipping them over?

I usually try to listen to my elders. (There are fewer of them around now, I wonder how that happened?) so I thought of Hamlet's famous inquiry about choosing life or death, "To be or not to be, that is the question."

I modernized this philosophical dilemma for horseshoe crabs. "To flip or not to flip, that is the question." It is a question that is especially important to our 440-million-year-old horseshoe crabs that are not crabs at all.

So what is the story? That learned gentleman on the beach is not the only person who has questioned this practice of flipping crabs back over as they try to mate on our beaches in the spring.

I have heard the man's argument before. It could also be argued that by flipping these prehistoric spiders (yes, they are spiders albeit gentle ones) we are depriving the red knot and other seabirds of their much-needed source of food, their eggs and such; it's the circle of life, right?

Besides, they are scary looking and make wading in the shallow waters of the bay an adventure in tip-toeing in May and June especially for youngsters. So why should we care?

In 1956, Johns Hopkins University physician Frederick Bang discovered a use for these animals that ensures our vaccines or injectable drugs are safe for human use.

Somehow he determined that if we introduce horseshoe crab amebocytes (part of that icky blue blood) into a sample of the vaccine, we can tell if it is safe.

If the horseshoe crab cells start releasing their goo, it's because they've encountered bacteria and so the vaccine isn't safe for humans. And so captured (and later released) horseshoe crabs are essentially milked to recover some of their blue blood, much like cows, all to ensure that our medicines are safe to use.

I also learned that "Just flip 'em!" is the name of a program that urges beach walkers to perform this simple spring ritual to help save this creature that contributes to medical research and treatment.

According to the New Jersey Audubon Society, beachgoers who visit the Delaware Bay beaches during horseshoe crab spawning season "may encounter large numbers of horseshoe crabs, sometimes hundreds at a time, that have been flipped over on their backs as the tide goes out. Horseshoe crabs that are unable to right themselves risk death from exposure to extreme heat, from desiccation, or from predators such as gulls.

"By flipping the horseshoe crabs over and allowing them to slowly crawl back down to the water, a person strolling on the beach can allow a horseshoe crab to continue its life cycle."

The Manomet Delaware Bay Project estimated that last year, volunteers who flipped blue-blooded little cuties (ok not

so cute) saved at least 5,000 crabs. That's a lot of blue blood that humans can use to stay healthy, so maybe we do need to "just flip 'em" for our own and our children's sake.

Although Hamlet met a violent end (poisoned, maybe he could have used some horseshoe crab tested serum?), the answer for these heroes (the crabs?) is that they should continue "to be" with human help.

Let's do our part by flipping them whenever we can. Besides, how often do we get a chance to flip a pre-historic monster and live to tell about it?