

Endozoochory

Endozoochory may seem like a difficult word, but you have known its meaning ever since you first ate a blueberry. Try saying it: End–oh-zoe + (ochory rhymes with crockery). The word rolls off the tongue nicely. From the Greek, it means “transport of seeds in the guts of an animal.” Thacher Park abounds with examples of this successful evolutionary strategy which dresses a seed in sweet flesh in order to entice an animal to carry the seed elsewhere.

When alive, the stuffed bear at the Nature Center might have been stuffed with blueberries. A patient scientist observed a brown bear in a blueberry patch and calculated that the bear ate 16,000 berries in a morning. Since each berry has an average of 33 seeds, a bear can disperse half a million seeds per day.

Many trees have developed brightly colored berries to attract birds who can loft their seeds far from the parent tree. The park has lots of Cedar Waxwings that can be seen stripping a tree of its berries. The Waxwings digest berries so quickly that their droppings are still sweet. Surprisingly, their rectums absorb sugars just as well as their intestines do. This fact is the sort that ought to appeal to Middle School kids and get them interested in nature.

Passing through an animal’s intestine could destroy a seed’s ability to germinate – all that chemical and physical scouring. But seeds relying on endozoochory have evolved

hard coats for protection. Traveling in an animals' gut enhances the germination of fruit seeds twice as often as it reduces it. Abrasion in the gut breaks the seeds' dormancy.

It's icky to imagine, but some animals gather seeds from animal poop and carry them farther. Deer Mice scatter chokecherry and dogwood seeds in this way.

As you hike through Thacher in the fall, look for berries. See if you can figure out which animals are likely to eat them. And although they don't live in Thatcher Park, I can't resist ending with the word describing the eating habits of fruit bats. *Chiropterochory* means "going abroad with an animal whose hands resemble wings". Try wrapping your tongue around that one!

Information from a book that I recommend highly: Thor Hanson (2015), *Seeds*. NY: Basic Books

Written for the newsletter of the Friends of Thacher Park