

Another Friday email highlighting an organism found here at LSW, the **Silverfish**, *Lepisma saccharina*. This little insect is very small and is perhaps one of the banes of many librarians and historians. Silverfish eat paper and binding glue, invade wallpaper to consume the adhesive and even glossy magazines. The damage they can cause to libraries or historical documents can be irreversible.

**Description:**

**Length:** 15-18mm (that's really small)

**Tail:** 3 long bristles extend from tail

**Head:** horseshoe crab shape

**Antennae:** pair at head

**Color:** grey to silver

**Movement:** resembles fish side to side movement but flattened dorsally instead of laterally

**Body:** Segmented and looking like armor plating

**Activity:** nocturnal

**Science!**

Silverfish are a unique little insect which feed on carbohydrates such as starches and simple sugars. In fact, the specific epithet of its scientific name *Lepisma saccharina* has a direct reference to its food of choice, saccharides. These little insects do not get noticed often due to their size, yet can live for about a year without eating so long as they have access to moisture/water. When a silverfish population is high enough, they can cause thousands of dollars in damage to books. These insects do not spread diseases and pose little to no threat to human health.

Ecologically the silverfish is prey to several in-home predators. Earwigs, house centipedes and spiders are their main predators. Here at LSW we have all 3 types of predators roaming the hallways and classrooms searching for prey. The silverfish in the images was found in the hallway while I was walking to my classroom.

Silverfish reproduction is rather interesting for their size. Male and female silverfish begin mating by tapping each other with their antennae, a type of courtship ritual. The male then spins a Y-shaped silk structure and deposits a spermatophore (a packet containing sperm) close to the silk structure. The female finds the spermatophore and places it into her ovipositor. Eggs are fertilized internally using the sperm located in the spermatophore the female picks up. Females lay about 30 eggs at a time which can take up to 20-40 days to hatch. Hatchlings mature in about a year.

The small size and seemingly rare sight of a silverfish reminds me of the importance of subtlety. Jane Hirshfield wrote a short essay in the magazine called **Orion: people and nature**. The essay was featured in a collection called "What the World Needs Now: twelve honest answers." Hirshfield's words are powerful and poignant even 16 years after she penned them. I leave you with a small excerpt from the story:

**"In a time when statements and answers each grow loud to the point of detonation, the increase of subtlety offers an alternative worth cultivation.**

**The word comes from weaving, the shuttle passing under (sub) the web-threads (tile, as in textile) of the loom, making of interconnection a cloth that is finely textured, 'subtle.' What can be said of a mind that is finely textured? First perhaps, what it is not: subtlety counters arrogance, adumance, simplification. It opposes assumption, carrying within itself the seed of its perennial question: 'How else might something be seen?'**

**Multidimensional and mysterious, subtlety liberates the mind from patterned response and the status quo”**



Thank you and have a wonderful weekend.