Square Inch Science

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he Greek gods excelled at creating imaginative eternal punishments for those who upset them most: Cassandra's predictions were always ignored despite their accuracy; Sisyphus was never able to roll his boulder to the top of the hill. If the gods were active today, what eternal torture might they inflict on an entomologist? Perhaps the worst punishment imaginable for an entomologist would be to never again see anything smaller than a mouse. Imagine the horror of being denied the singular beauty, diversity, and novelty of the Small. Sadly, most people rarely notice small things, or if they do notice the whole—an insect, for instance—they overlook the parts: the veins of the wing, the structure of the head.

Never in the history of humanity have superpowers been so plentiful, cheap, and user-friendly. We fly further, communicate faster, and eat better than the Greek



Fig. 1. The first square inch collection: five families and 11 species of beetles from a single leaf litter sample collected in Greenville Co., South Carolina. Photo taken by Mark Smith, Macroscopic Solutions.



Fig. 2. A celebration of beetles: 28 species collected from the Missouri farm where I grew up and emergent from twigs collected nearby.

gods themselves. With microscopes, loupes, and cameras, we can slide down the scale of size and take a real-time foray into a portion of the universe that was otherwise unknowable just a few generations ago. Our modern superpowers allow schoolchildren to embark on voyages of discovery in their own backyards and become modern explorers—discoverers of mites instead of mountains.

What wonders might a square inch hold? Here are two examples of insect collections that take up very little room, but are actually quite large. In fact, many modern explorers—botanists, geologists, and paleontologists, to name a few—could easily fit an enormity into a single square inch.

Michael L. Ferro is the Collection Manager at Clemson University Arthropod Collection. He would love to see examples of more square inch collections from entomology and other sciences.

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