Imaging spiders for the South Dakota Spider Survey: challenges and frsutrations

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Overview

1. Background

2. Goals

3. Imaging challenges and frustrations

Background

- SDSS est. 2010
- > 100 specimens in Pfeiffer's personal collection in 2010
- Unknown number in SDSU Severn-McDaniel Insect Research Collection
  - Collection currently "misplaced"

Background (2013)

- Approx. 275 specimens in Pfeiffer's personal collection
- > 2500 specimens in 700 vials at DWU
- More than 260 species now documented in SD

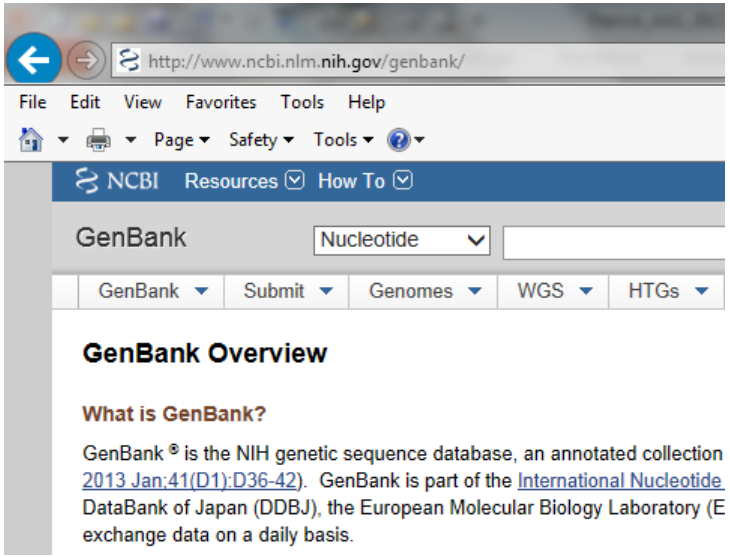
DNA Barcodes

- Goal is to barcode all species found in SD

Dissemination of information

Barcode of Life

Identifying Species with DNA Barcoding

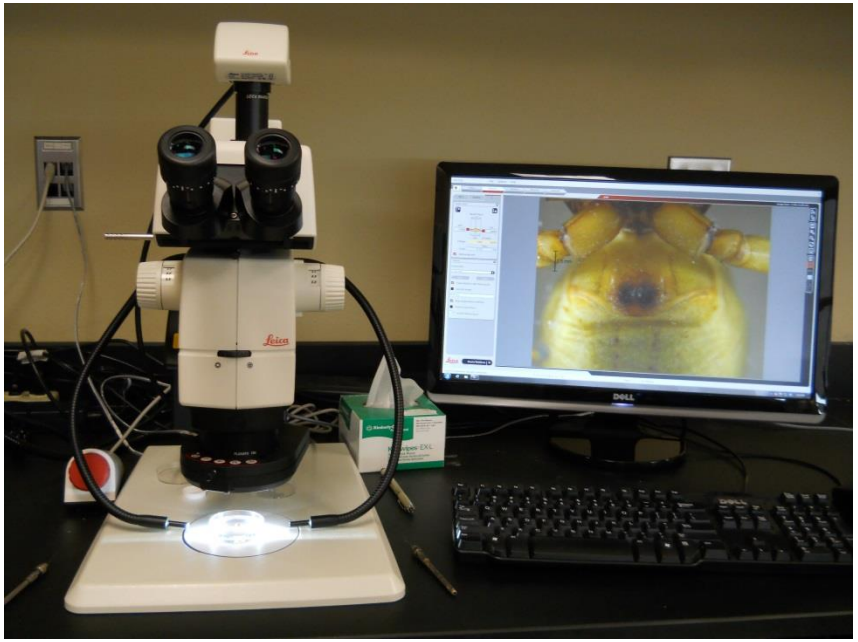


Imaging

Erigone atra Blackwall, 1833. Male from Mitchell, SD.

Imaging

- Leica M205C
- Fully automated (except zoom)



- Used to hold specimens in place.
- Large drop in petri dish
- Barely cover with EtOH
- Place specimen or structure on top of lubricant drop
- Add more EtOH if necessary

Imaging

- Click to start, click to end.
- Biggest challenges are lighting!

- Can process pictures, but often don't have all of the expertise to know how to adjust and still get a good picture!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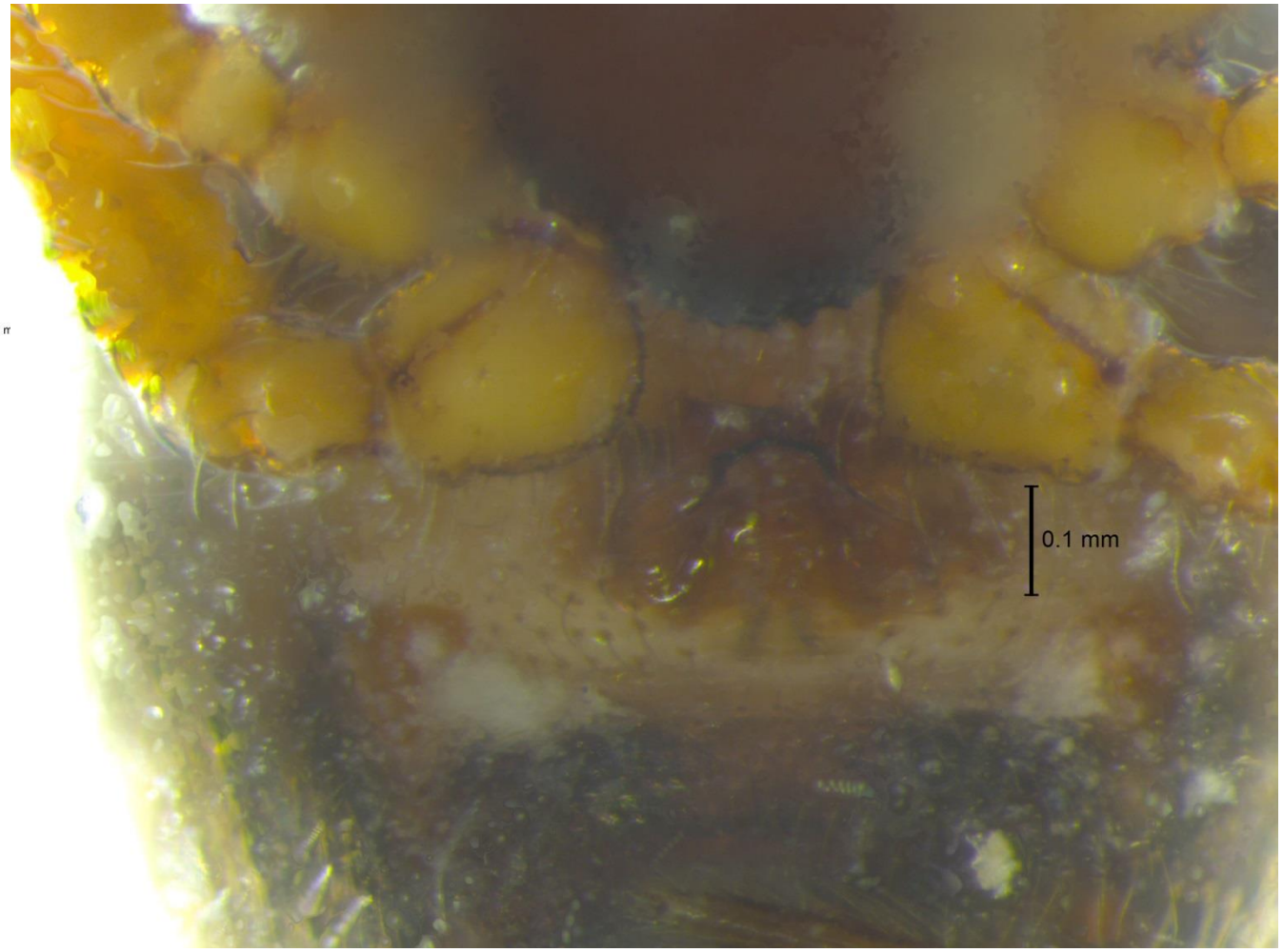
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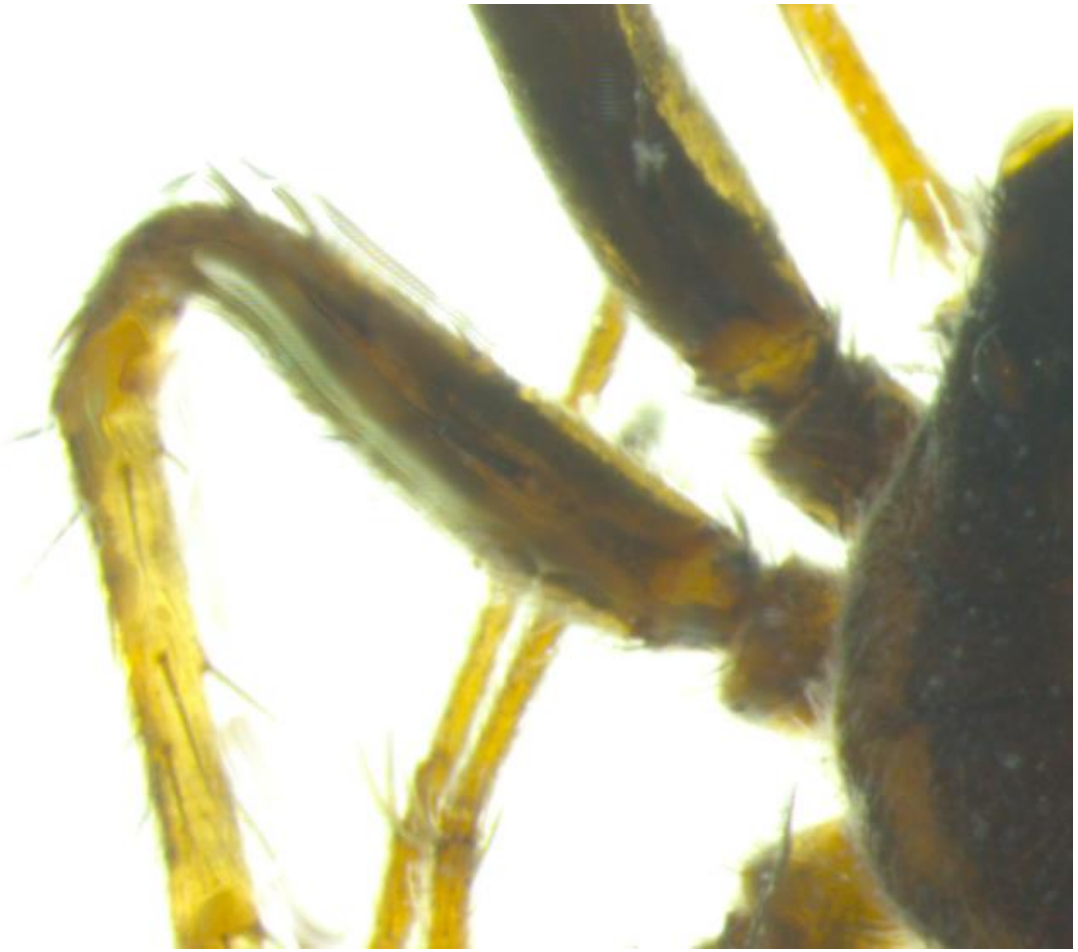

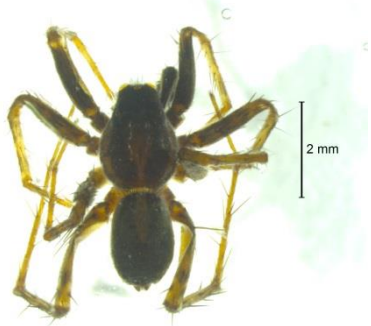
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