



PERSONAL BIOBLITZ:



a new way to encourage biodiversity knowledge in K-99 education and outreach

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When?

76 days, 1 March to 15 May 2014, 24/7.

How?

See, listen, discover, learn, identify, list.

Why?

We don't know many species anymore.

Who?

Rutgers' Journal Club

What?

Any species anywhere in Evolution and its fans. (except viruses).

THE RULES

The democratically agreed-upon rules were:

1. Anywhere in the world.
2. Food species are OK if you eat them.
3. No species from places with species name labels.
4. Heard species OK.
5. Dead remnants of species are OK, as long as it is identifiable; photos optional.
6. Pets and cultivars are OK.
7. Get ID help anywhere you can; help each other.

THE METHODS

Lists of observed species, dates, and localities were kept in Excel by each participant, then assembled into a master list. When species identification was not possible, we accepted higher taxonomic ranks, but then only as a single observation per rank. Basic statistics were done with Excel and R.

THE CHALLENGE

Three challenges:

1. Who will see the most species?
2. Can we together see more than 2000 unique species?
3. Will a graduate student see more species than Journal Club instructor Dr. Lena Struwe?

THE WINNERS

Who saw most species?

- | | |
|---------------------------|------|
| 1. Hedström, Eva | 1123 |
| 2. Struwe, Lena (F) | 1081 |
| 3. Gochfield, Michael (F) | 865 |
| 4. Pollock, Nick (G) | 495 |
| 5. Anholt, Allison (G) | 466 |
| 6. Holzapfel, Claes (F) | 383 |
| 7. Perzley, Julia (G) | 379 |
| 8. Lorusso, Nick (G) | 350 |
| 9. Kruger, Ariel (G) | 314 |
| 10. Howe, Natalie (G) | 249 |

30 participants; 7270 species observations, 91% identified to species level, 3474 unique species. (G – grad student; F – faculty)

THE SPECIES

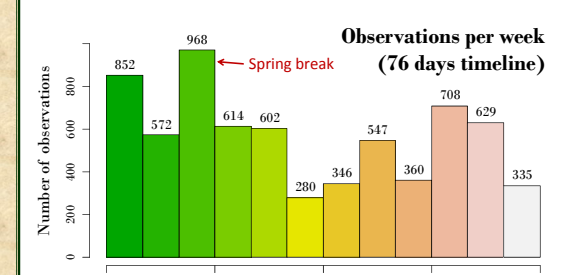
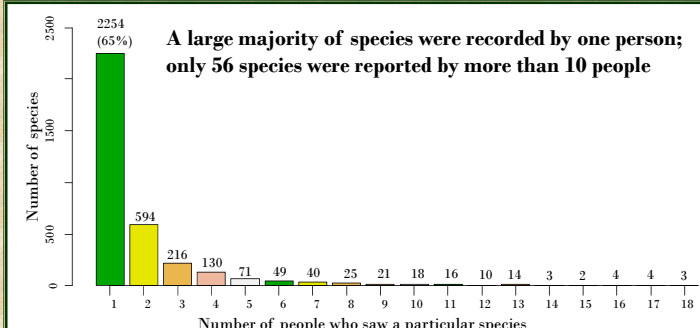
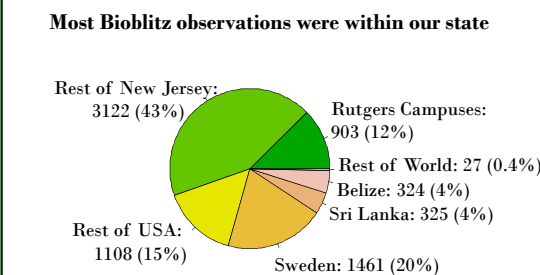
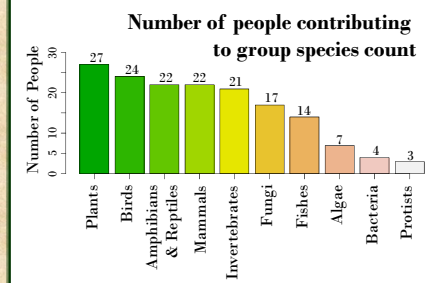
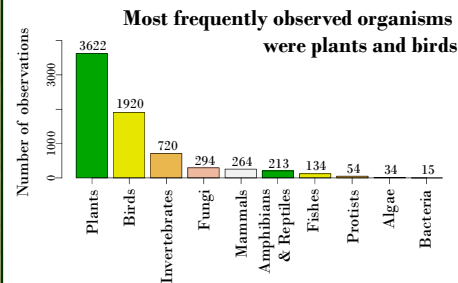
What was seen most often?

(# of observations recorded per species)

- 18 - Cardinal (*Cardinalis cardinalis*)
- 18 - Blue jay (*Cyanocitta cristata*)
- 18 - American robin (*Turdus migratorius*)
- 17 - Mallard (*Anas platyrhynchos*)
- 17 - Canada Goose (*Branta canadensis*)
- 17 - Turkey vulture (*Cathartes aura*)
- 17 - Starling (*Sturnus vulgaris*)
- 16 - Red-winged blackbird (*Agelaius phoeniceus*)
- 16 - Dog (*Canis lupus*)
- 16 - Rock Dove (*Columba livia*)
- 16 - Cat (*Felis catus*)
- 15 - Common grackle (*Quiscalus quiscula*)
- 15 - Gray squirrel (*Sciurus carolinensis*)
- 14 - Carrots, Queen Anne's Lace (*Daucus carota*)

RESULTS AND DISCUSSION

The majority of species observed were large, edible, stationary, and/or obviously charismatic (plants and birds). Microscopic species were 'specialist' species reported by few people. Despite that most species were seen within New Jersey (55%), most species were only seen by a single person. Therefore, our Bioblitz results showed no evidence of observation saturation of everyday biodiversity and indicated that many more species are to be found. The weeks with most observations included spring break and the first week of the BioBlitz.



Would we do it again? Absolutely! We all learned a lot, keep on learning, and now we see the world differently, more species everywhere, all the time...

Project sponsored by Chrysler Herbarians at Rutgers University. The Personal Bioblitz was made possible by our own blood, sweat, tears, and brain cells, as well as biological evolution on Earth and work by all previous taxonomists. No financial funding was received.

All photos taken during the Personal Bioblitz. Photo credits: Allison Anholt, Joni Baumgarten, Jennifer Blake, Michael, Lauren Evans, Michael Gochfield, Eva Hedström, Jessica Inoué, Ariel Kruger, Elvira de Lange, Natalie Lorusso, Nicholas Lorusso, Charles Martin, Nicholas Pollock, Yee May Seah, and Lena Struwe.