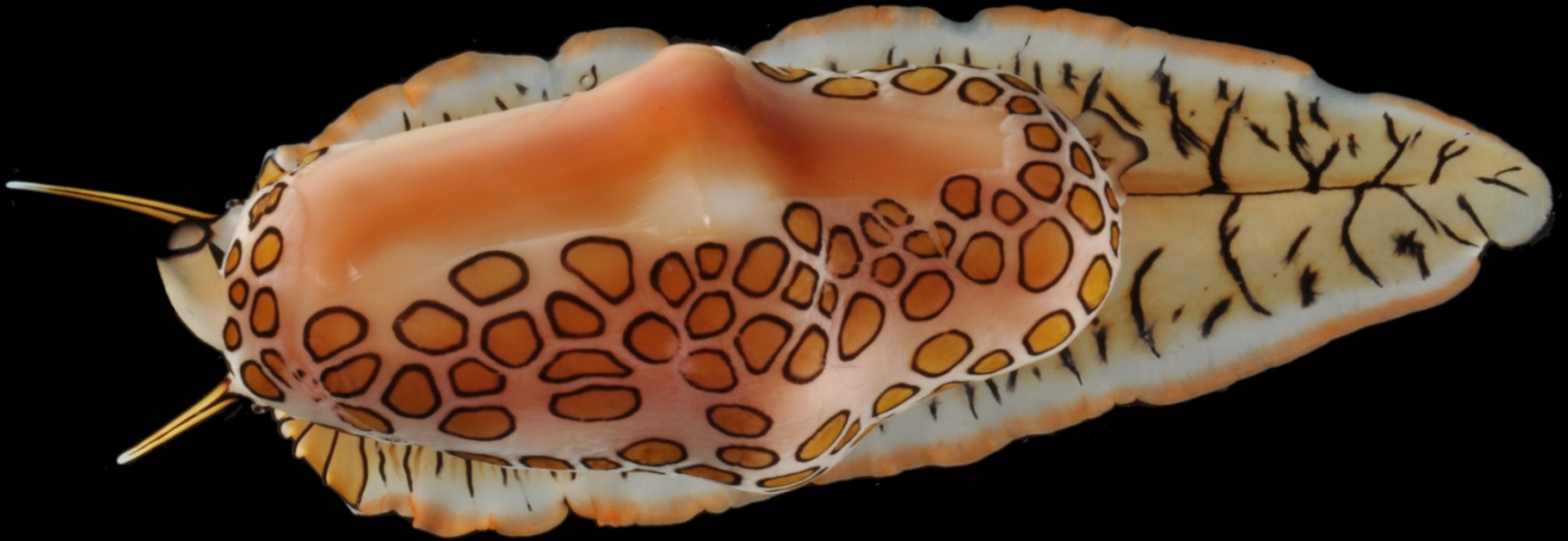
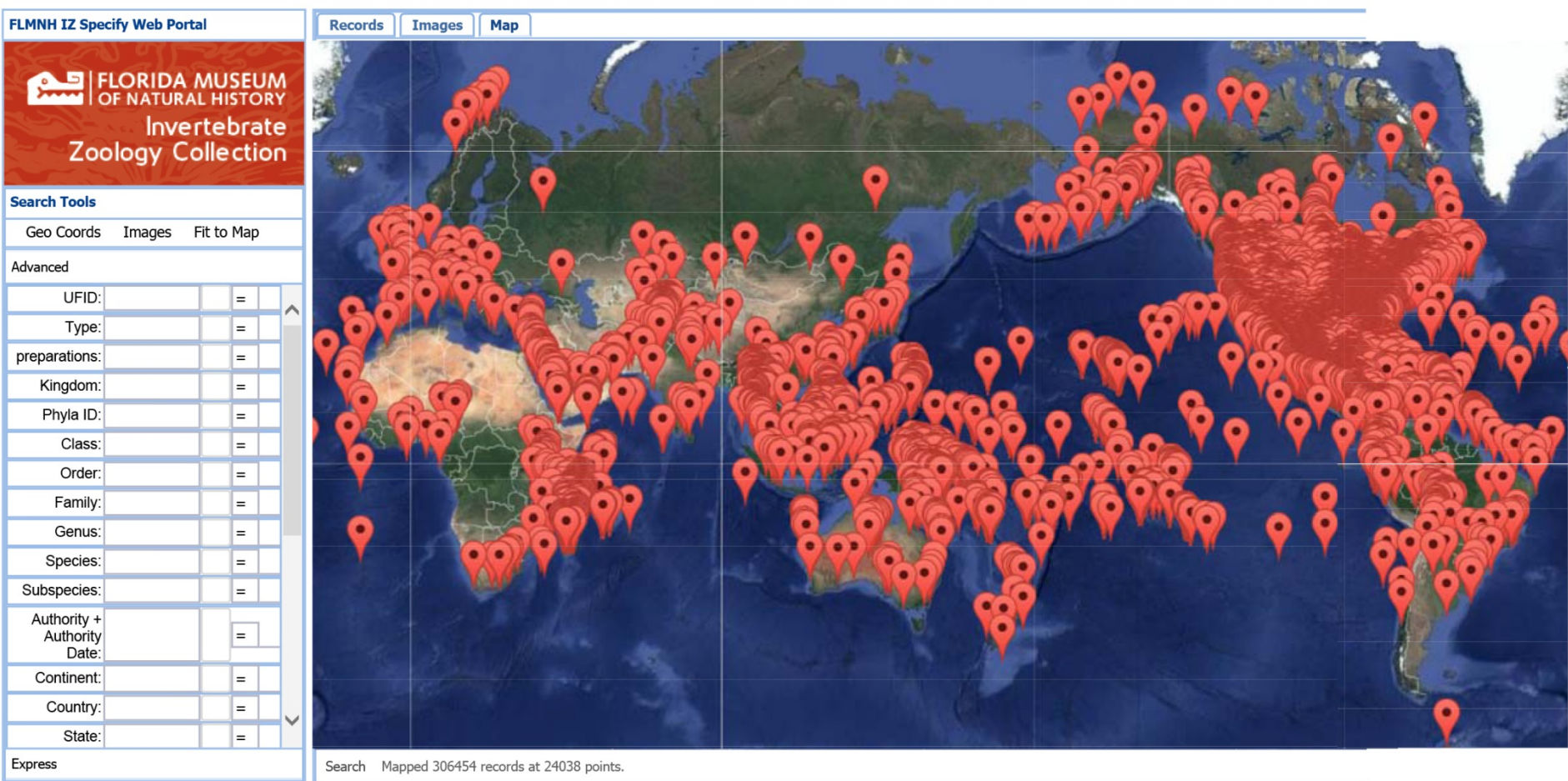


Specimen processing and photography in Division of Invertebrate Zoology



Geographic distribution of FLMNH's georeferenced invertebrates



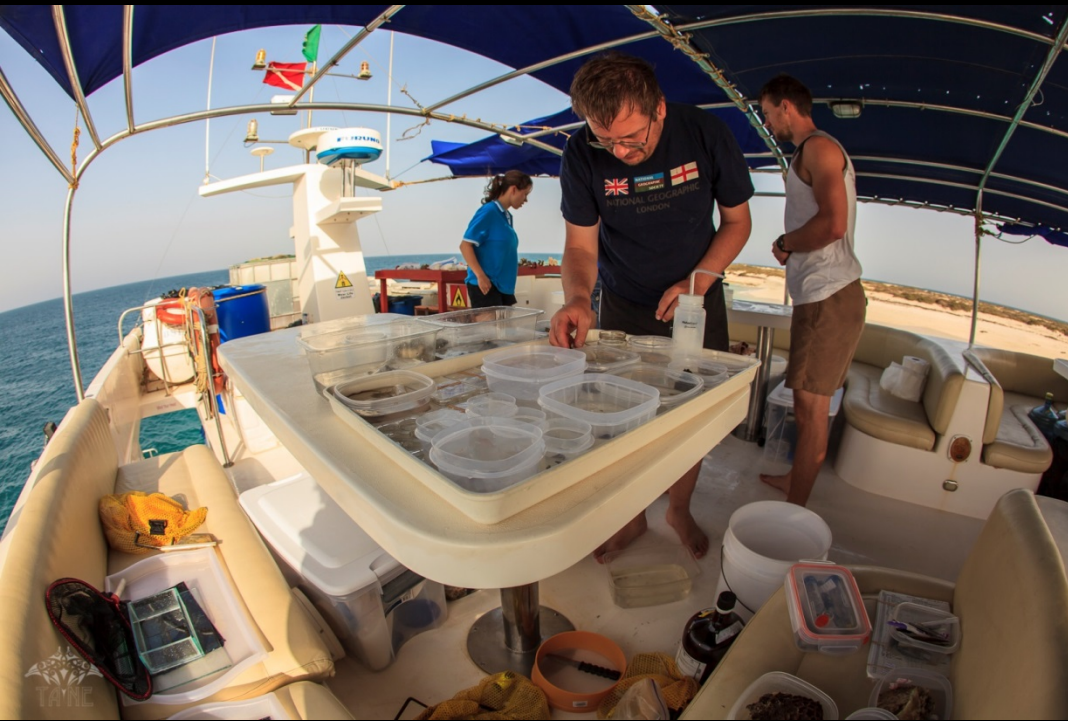
Invertebrate Zoology photo library

- ~300,000 photographs
- ~5,000 habitat photographs
- ~7,000 in situ specimens
- ~70,000 animals photographed live in lab
- ~1000 photographs of dry mollusk shells
- ~200 photographs of reproductive anatomy

Most invertebrates are small and hidden and in situ photography is often impossible



Specimens are triaged with interesting or fragile specimens processed first



Field Data

Field Number: specimen specific data
 Station Number: station specific data

| Date | Project | Station | Morphospecies (lowest taxon level) | Entered by: | | | Notes (count, microhab, assoc, fix...) |
|------|---------|---------|---------------------------------------|-------------|--------|---------|---|
| | | | | Photo | Tissue | Voucher | |
| 421 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 422 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 423 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 424 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 425 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 426 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 427 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 428 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 429 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 430 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 431 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 432 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 433 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 434 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 435 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 436 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 437 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 438 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 439 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 440 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 441 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 442 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 443 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 444 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 445 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 446 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 447 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 448 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 449 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 450 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 451 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 452 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 453 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 454 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 455 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 456 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 457 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 458 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 459 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 460 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 461 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 462 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 463 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 464 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 465 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 466 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 467 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 468 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 469 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 470 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 471 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 472 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 473 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 474 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 475 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 476 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 477 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 478 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 479 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |
| 480 | AF 24 | 11 | Alouatta palliata | ✓ | ✓ | ✓ | |



Two copies of the field number
one for the specimen
the other for a DNA subsample



Color and form are often lost in preserved specimens

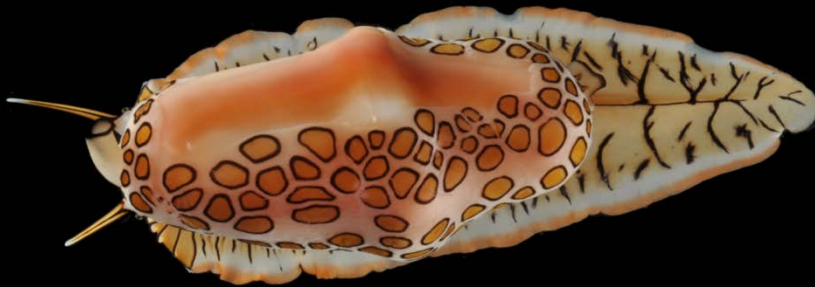


Lab photography of live animals

- Animals narcotized if necessary
- Shot with flashes allowing clear hand held shots
- Aperture small allowing good depth of field
- First photograph includes field number and scale
- Multiple shots to get best lighting and views



Uniform background



Aquatic laboratory photography



- Animals placed in a small tank.
- Flashes placed on either side.
- Tank suspended over wet black velvet.
- Water periodically cleaned.

Isolated field sites require stripped down photo supplies



Most shots are staged on natural substrates



Diffuser

reduces shine and flash highlights
especially on shiny shells



Photographs of Papua New Guinea snails



Hundreds of shells in
three views.



For species descriptions
of 200 new species.



Able to use for
morphometrics



Sylgard for pinning out dissections for photography



Recorded extinctions in the last 500 years

