The Use of Digital Photography for Vouchering Fish Collections

Gordon Linam



Why Voucher?

- SWQM sampling protocol
- QA/QC



Why Photo Voucher?









Disadvantages of Photo Vouchers

- No specimen
- May not be suitable for identification



Reference

 Stauffer, J.R., J. Karish, and T.D. Stecko. 2001. Guidelines for using digital photos as fish vouchers for Pennsylvania fishes. Pennsylvania State University and National Park Service. 13 pp.

Digital Camera Specifications

- Color 16-bit or better
- High pixel density 1024 X 768
- Macro capability
- Built-in or external flash

Photo Composition

- Photograph left side
- Maximize fish in field of view
- Include size reference

Photo Management

- Save file in compressed jpeg format (medium to high quality)
- Add text label
- Rename file











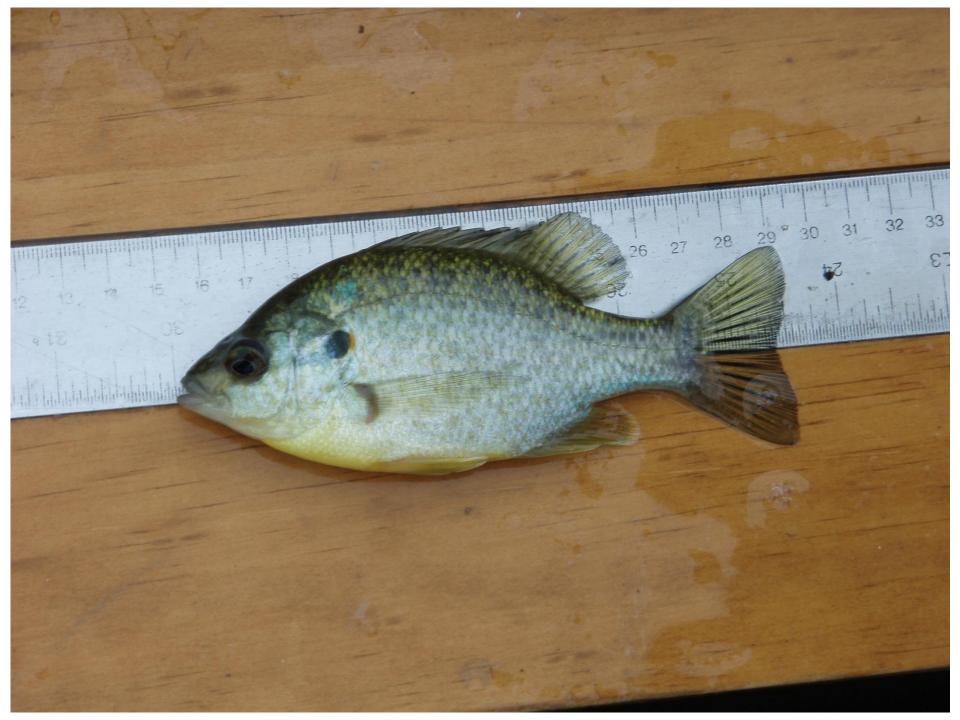












































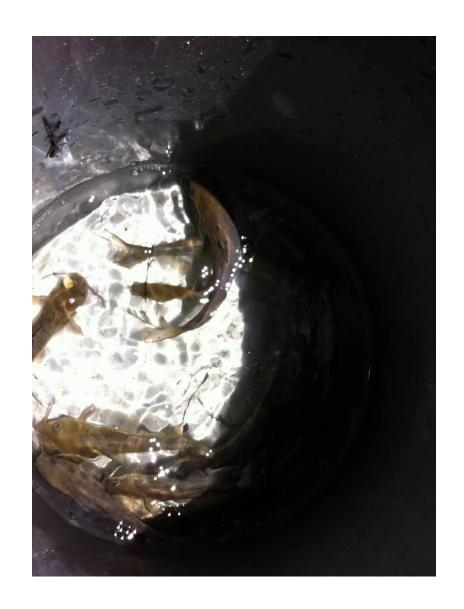














Conclusions

- Must be familiar with fish keys
- Use photography as a vouchering tool rather than a means for identification
- Okay to use digital photos for identification, but specimen may be necessary if photo does not capture necessary details



Laboratory Tracking, Preservation, and Labeling

- Or -

'NOW what do I do with all these Fish!?!'

Fixing and Rinsing

- Formalin for a minimum of 7 days
- Rinse/soak in water for 3 days
- Store in 70% ethyl alcohol (non-denatured)

| | | | | Sample Tracking Log | | | | | | | | |
|----------------------|--------|------------|-----------------|---------------------|-----------------------------|--------------------------------------|--------------|-----------------------|--------------------|------------------|------------------|------|
| Waterbody/Station ID | County | Collectors | Collection Date | Bottle ID | H ₂ O Rinse Date | H ₂ O Rinse (Initials) | Ethanol Date | Ethanol (Initials) | Sort (Initials) | ID (Initials) | QA (Initials) | Pass |
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- Waterbody/Station ID
- County
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- H₂O Rinse Initials

- Ethanol Date
- Ethanol (Initials)
- Sort (Initials)
- ID (Initials)
- QA (Initials)
- Pass

Voucher Specimens

- Serve as long term physical representations
- Maintain for a minimum of 5 years or until the conclusion of any applicable regulatory decision
- Adequate quantity and quality of space

Dean Hendrickson Curator, Ichthyology University of Texas TNHC 10100 Burnet Rd. PRC176/R4000 Austin, Texas 78758

512-471-9774

