

Good Data

GIGO!! Garbage in, garbage out

Quality of data

- ✓ accurate
- ✓ meet standard requirements
- inaccurate data wastes money, time and effort
- fails to answer your research question

Best practice in Collecting data

Standardize common methods of collection and storage to maximize the potential outputs for each specimen and to facilitate collaboration between researchers from different institutions, countries and regions

Field data

What data do we collect in the field?

(apart from date & collector names)

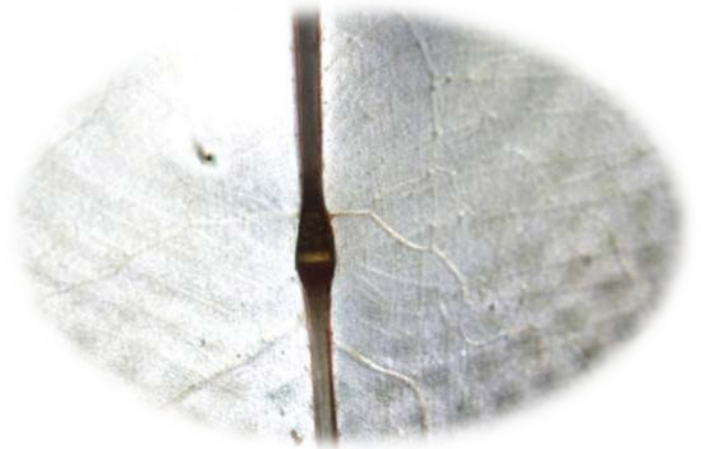
- Location data
- Specimens data

Location data

- **Locality**; name of location, village, district, province, country, landmark –direction, distance
- **Co-ordinates**; latitude, longitude
(decimal degree is preferred); always note GEO code
- **Altitude**; can be min-max altitude, ground validation
- **Habitat description; and photo of habitat**
- **Weather**; moon-phase
- Presence of disturbance, threat
- **Trapping effort**
- **ANYTHING ELSE?**
- **personal notebook**

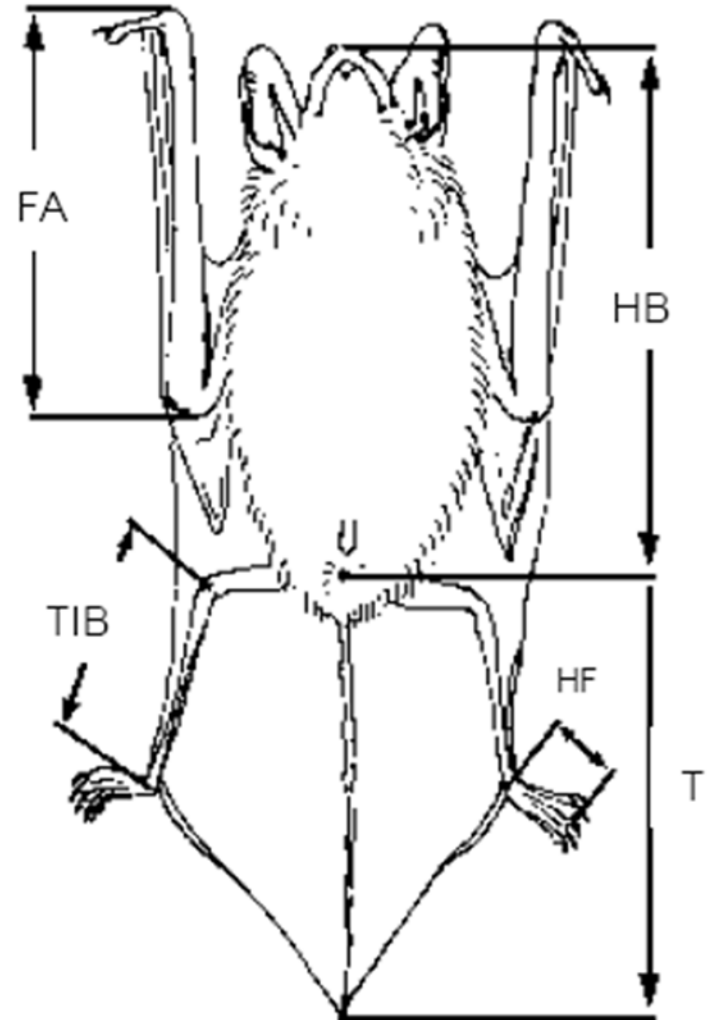
Specimen data

- Capture information
 - date; time; collector; capture method
- Sex
- Age
- Reproduction status
- Body mass
- Species name (if possible)



Morphometric data

...



As in field note

Acoustic data

- Number (or name) of sound files
- Recording methods
- ...



Photographic data

- Number of picture files

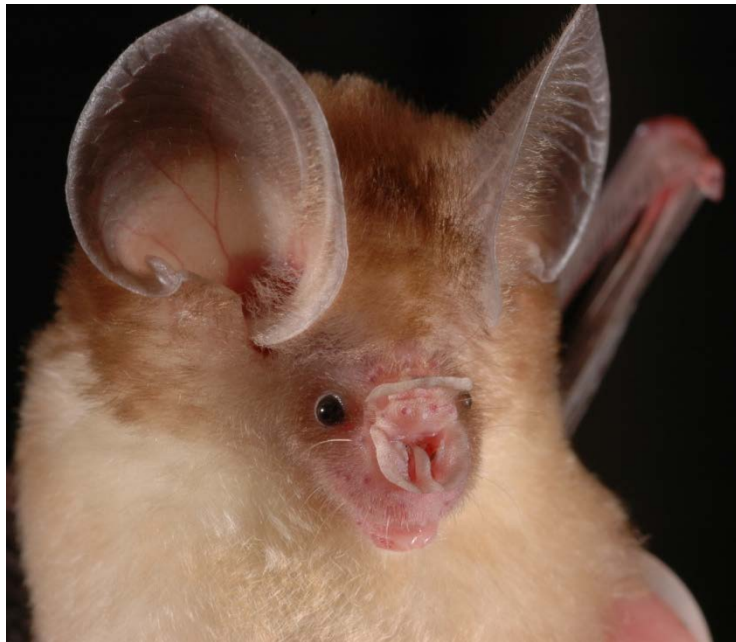
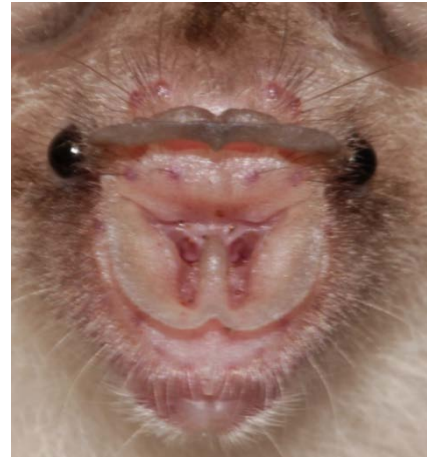
What shots do we take?

Examples: *Rhinolophus*



What shots do we take?

Examples: *Hipposideros*



What shots do we take?

Examples: Vesper bats



Don't forget a cute shot!



BATS OF THAILAND

FAMILY PTEROPODIDAE



FAMILY CRASEONYCTERIDAE



FAMILY MEGADERMATIDAE



FAMILY NYCTERIDAE



FAMILY EMBALLONURIDAE



FAMILY HIPPOSIDERIDAE



FAMILY RHINOLOPHIDAE



FAMILY VESPERTILIONIDAE



FAMILY MINSUPTEIIDAE



FAMILY SCOTONURIDAE



Genetic samples

Codes of...

- Wing puncture
- Liver
- Tongue

Storage...

- In the field: absolute alc.; dry ice or ice gel, buffer
- In lab: deep freez e.g. -20°C or -80°C

What else should we collect in the field?

- Ectoparasites?
- Feaces?

Museum specimens



Museum specimens

- Label must be made properly!
 - fluid specimens – only field no.?
 - dry skin; skull -- full

Data archiving

- Field notes
 - keep in folder sorted by year/date
 - scan to PDFs

23 Jan 2012 ^{Trap 1 (5 km, trap 2) to bridge 2 (trap to Biatec plat) (trap 3)}

Bats/Small Mammals Trapping Record

Date: 23 Jan 2012 collector: Pipet & Seuring
 Locality: Hulu Kelé Research Station latitude: _____ longitude: _____ altitude: _____
 Habitat Description: Evergreen forest, Site 2: 2.5 km SE of the station; site 3 = 10 km west of the station - Bridge II
 Weather: Sunny-clear at trap 2 / rain last night @ trap #3

13025-DNA 12.01X

| No. | Bag | V.S. | Time | Trap/site | Species | sex | status/ age | W | FA | E | T | HF | HB | Tib | NL | Recording Method | Sound file | Animal Photo | Wing Photo | Tissue sample | |
|-----|-----|------|------|-----------|---------------------|-----|----------------|------|------|------|------|------|------|------|-----------|------------------|------------|--------------|------------|---------------|-------|
| | | | | | | | | | | | | | | | | | | | | Wing | Liver |
| 1 | | | | Trap 3 | <i>H. ducorum</i> | M | Ad | | 42.7 | | | | | | | Hand | 061-062 | 8620-8622 | | 64 | |
| 2 | ✓ | | | Trap 2 | <i>K. papillosa</i> | F | | 9.4 | 40.7 | 17.9 | 52.3 | 9.2 | 49.0 | 19.9 | / | bag | 1000 | 8623-8624 | | 72 | 73 |
| 3 | ✓ | | | Trap 3 | <i>A. affinis</i> | M | Ad | 15.4 | 44.2 | 23.3 | 21.8 | 10.2 | 55.0 | 25.0 | 9.0 | Hand | 64-65 | 8627-8628 | | 66 | 67 |
| 4 | ✓ | | | Trap 2 | <i>K. pellucida</i> | M | Ad | 29.9 | 17.9 | 45.0 | 6.4 | 39.6 | 15.7 | / | fly (bag) | 106-019 | 8629-8630 | | 70 | 71 | |
| 5 | | | | Trap 3 | <i>H. diademata</i> | F | Ad | | | | | | | | | Hand | 66-67 | 8645 | | 65 | |
| 6 | ✓ | | | Trap 3 | <i>Mus musculus</i> | M | Ad | 8.3 | 26.7 | 10.7 | 40.2 | 9.1 | 46.2 | 14.4 | / | fly (bag) | 070-075 | 8653-8655 | | 68 | 69 |
| 7 | ✓ | | | Trap 2 | <i>H. shawi</i> | F | Ad | 26.9 | 42.9 | 20.4 | 28.0 | 6.9 | 45.7 | 14.2 | 4.0 | Hand | 47-48 | 8670-8677 | | 76 | 77 |
| 8 | ✓ | | | Trap 3 | <i>H. galavitus</i> | | | 7.2 | 47.2 | 17.2 | 36.7 | 6.6 | 47.0 | 20.0 | 7.4 | Hand | 85-86 | 8666-8670 | | 74 | 75 |
| 9 | ✓ | | | Trap 3 | <i>K. nimula</i> ?? | F | Ad | 2.5 | 29.3 | 11.5 | 39.8 | 6.1 | 35.5 | 14.2 | / | fly | 94-95 | 8685-8686 | | 78 | 79 |
| 10 | ✓ | | | Trap 3 | <i>K. pellucida</i> | M | Ad | 4.2 | 20.1 | 17.4 | 46.0 | 7.1 | 39.2 | 17.6 | / | fly | 89-92 | 8671-8684 | | 80 | 81 |

Status/Age: Preg=Pregnant; Lac=Lactating; Ad.=Adult; Juv=Juvenile; imm.=immature
 Recording Method: Hand=in hand held; Bag=in bag; Hrel=Hand release; Fly=free flying; Zip=Zipline

Page...1...of...1...

At night: 1 ♀ *R. affinis* released at site 3.
 Morning: 10 (Lact) *N. tringata* / 1 *R. affinis* ♀ / 2 *H. shawi* ♂
 10 *H. shawi* / 1 *H. galavitus* / *K. pellucida* ♂

+ *Mus musculus* coll. in the bag; file = 062
 ++ 084 *K. pd* + *K. pap* mixed together
 + Bl. 97 *K. pd* & *K. pap* mixed together

- TRIPS_2011-Present
 - Trip 2011_Kang Krachan-Chumphon_Aug 2011
 - Trip 2011_Khuan Khao Wang Forest Park_23-25 Aug 2011
 - Trip 2011_Mae Hong Son-Chiang Mai_June 2011
 - Trip 2012_Acoustic Lure_3-16 Feb 2012
 - Trip 2012_Bulon_20-23 Feb 2012
 - Trip 2012_FieldBio2012_Trang_6-8 March 2012
 - Trip 2012_Hala-Bala_20-26 Jan 2012
 - Trip 2012_India KMTR_21-29April 2012
 - Trip 2012_Khao Ban Tad_9-13 Jan 2012
 - Trip 2012_Khao Ban Tad_12-16 March 2012
 - Trip 2012_Krabi_3-13 May 2012
 - Trip 2012_PSU Reservoir_11 May 2012
 - Trip 2012_Satun-Khao Nam Kang_14-16 May 2012

- Control Panel
- Mobile Device
- Namuga 1.3M Webcam
- Shared Documents
- Mister Hunter's Document
- My Network Places
- Recycle Bin
- My Bluetooth Places
- Adobe Acrobat 9 Pro Extended
- mammalogy lecture-lab

Photos & Calls archives



C.
brachyotis_female_11...



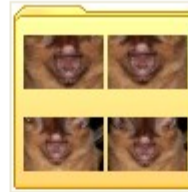
C.
brachyotis_female_11...



H.
atrox_female_11082...



H. atrox_male_110824.5



H.
atrox_male_BD110824.4



H.
bicolor_male_BD1108...



H.
cineraceus_female_BD...



H.
larvatus_female_P511...



K.
hardwickii_female_BD1...



K.
hardwickii_male_BD11...



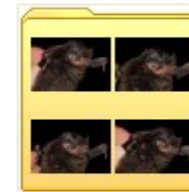
K.
pellucida_female_BD1...



K.
pellucida_male_BD110...



Leptobrachium
hendricksonii_110824



M. cf.
medius_female_P5110...



M.
surifer_female_UP110...



Murina
suilla_male_P5110824.2



Nycticebus
coucang_110824



R.
affinis_male_110823.5



R.
affinis_male_110823.9



R.
lepidus_female_P5110...

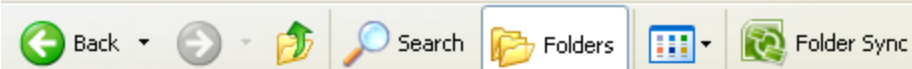


R.
lepidus_male_P51108...

Call library

D:\RESEARCH PROJECTS\2007-2008_Call References of Southern Thai Bats 2007-2008

File Edit View Favorites Tools Help



Folders

- 2007-2008_Call References
 - Emonticola
 - FREE FLYING
 - Harmiger
 - Hbicolor
 - Hcineraceus
 - Bag
 - Hand Held
 - Hand Released
 - Hdiadema
 - Hgaleritus
 - Hhalophyllus
 - Hlarvatus
 - Hlekaguli
 - Hturpis
 - Khardwickii
 - Megspasma
 - Minaustralis
 - Minmedius
 - Minpusillus
 - Mucyclotis
 - Musuilla
 - Myhorsfieldi
 - Mymuricola
 - Mysiligorensis
 - Racuminatus
- Emonticola
- FREE FLYING
- Harmiger
- Hbicolor
- Hcineraceus
- Hdiadema
- Hgaleritus
- Hhalophyllus
- Hlarvatus
- Hlekaguli
- Hturpis
- Khardwickii
- Megspasma
- Minaustralis
- Minmedius
- Minpusillus
- Mucyclotis
- Musuilla
- Myhorsfieldi
- Mymuricola
- Mysiligorensis
- Racuminatus
- Raffinis
- Rcoelophyllus
- Rlepidus
- Rluctus
- Rmalayanus
- Rrobinsoni
- Rstheno
- Ryunanensis
- Tmelanopogon
- Tpachypus
- Tsaccolaimus