



Sampling Process and Data Recording

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CONTENT

General Sampling Overview

General Sampling Process

Data Recording

KU

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General Sampling Process

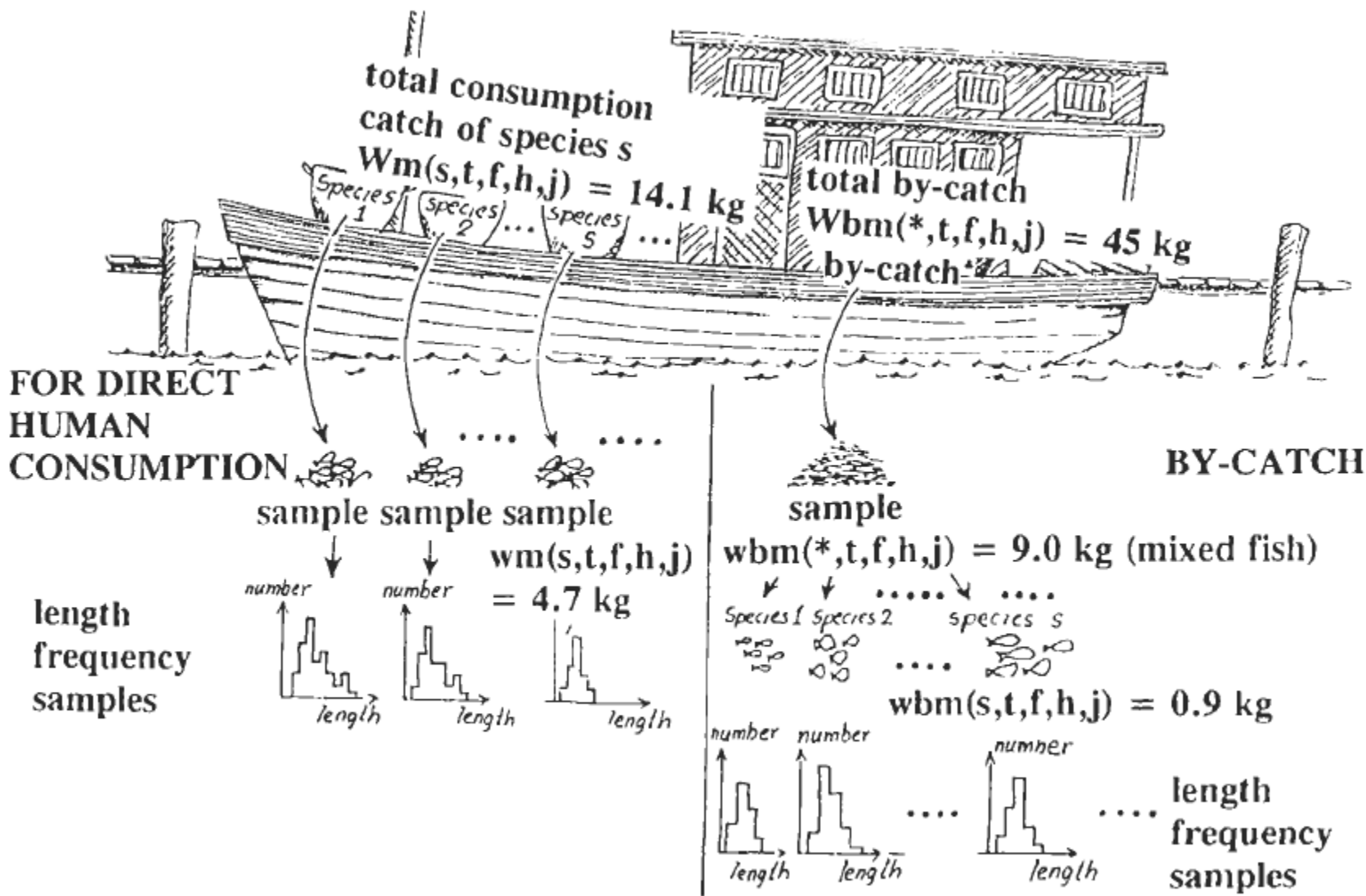
(at the Landing Site)

Total catch from good fish and trash fish sub-sampling

This is very useful when

- Fishers already separate ‘good’ and ‘trash’ fishes on-board
- Important point: **juvenile good fishes are classified as trash**
- Lack of juvenile’s data

Total catch from good fish and trash fish sub-sampling









14 7 2004



14 7 2004



14 7 2004





14 7 2004





Sorted :fish



Sorted :shrimp



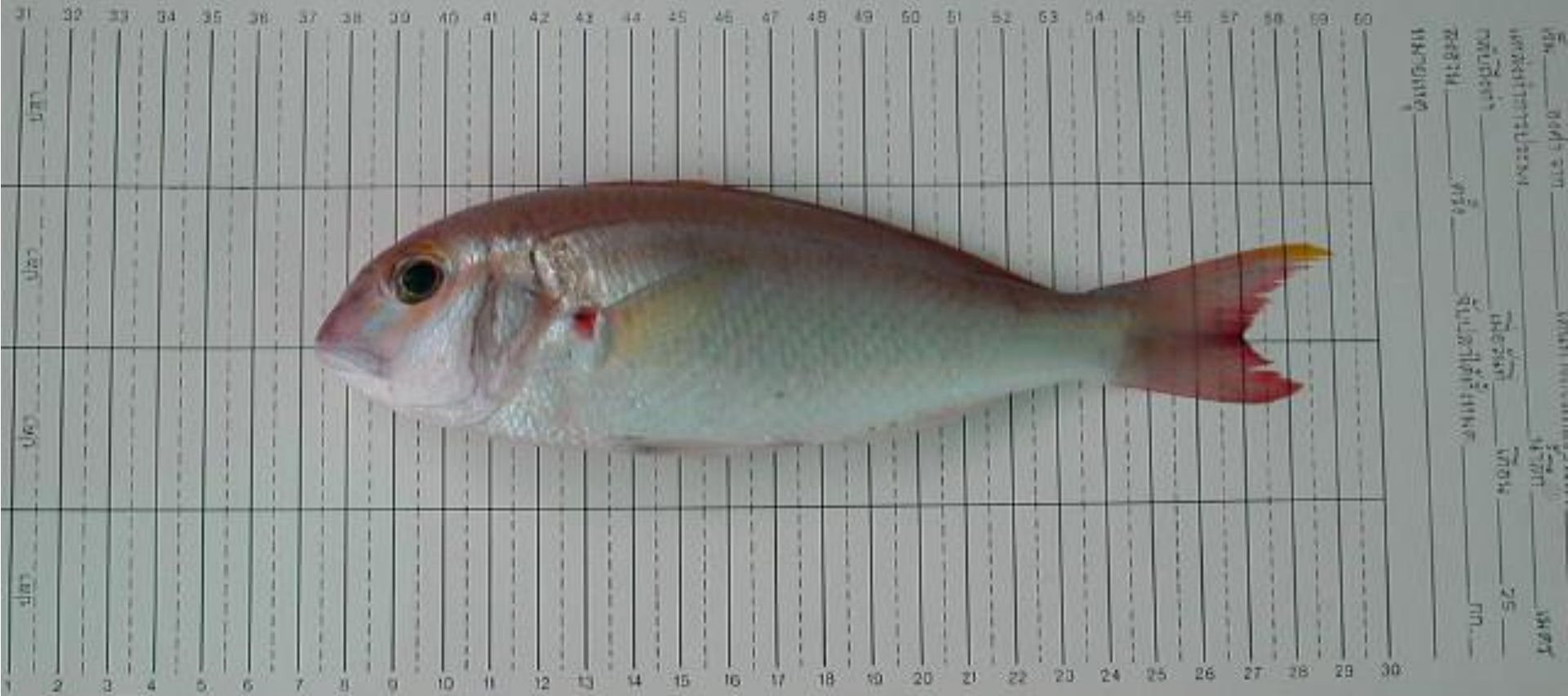
Sorted :shrimp

5 9 2003



Measure





Punching paper



ปลา

Punching paper

6 8 2003

เริ่มลอก
ปลา



เริ่มลอก
ปลา



เริ่มลอก
ปลา



Punching pin

5 9 2003



Biological study





Catch in Weight

- **Raising Factor (*R.F.*)**
- **Fleets**
- **Landing sites**
- **Fishing efforts (boats / days / trips)**
- **Observed catch (in weight)**



Consumption fish:

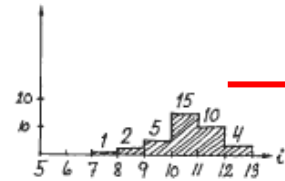
Total weight of sampled catch: $W_m = 14.1$ kg
 Total weight of sample: $w_m = 4.7$ kg
 Raising factor: $W_m/w_m = 14.1/4.7 = 3$

By-catch:

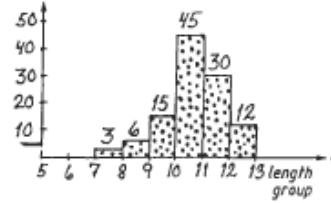
Total weight of sampled by-catch: $W_{bm} = 45$ kg
 Total weight of sample (all species): $w_{bm} = 9$ kg
 Raising factor: $W_{bm}/w_{bm} = 45/9 = 5$

Consumption fish (species s)

length-frequency sample
 $cm(s,t,f,h,j,i)$
 sample size = 37

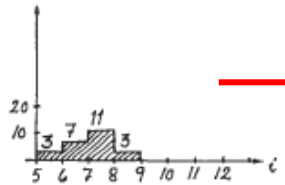


raised length-frequency sample
 $cm * W_m/w_m = cm * 3$
 $37 * 3 = 111$

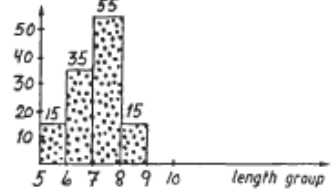


By-catch (species s)

length-frequency sample
 $cbm(s,t,f,h,j,i)$
 sample size = 24



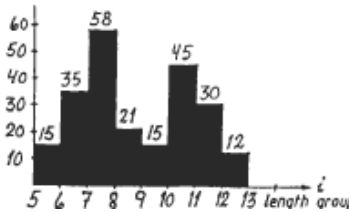
raised length-frequency sample
 $cbm * W_{bm}/w_{bm} = cbm * 5$
 $24 * 5 = 120$



Total catch (species s)

estimated length-frequency of species s in the total catch of the sampled trip
 $C_m(s,t,f,h,j,i)$

combined length-frequency sample
 $C_m = cm * 3 + cbm * 5 = 111 + 120 = 231$



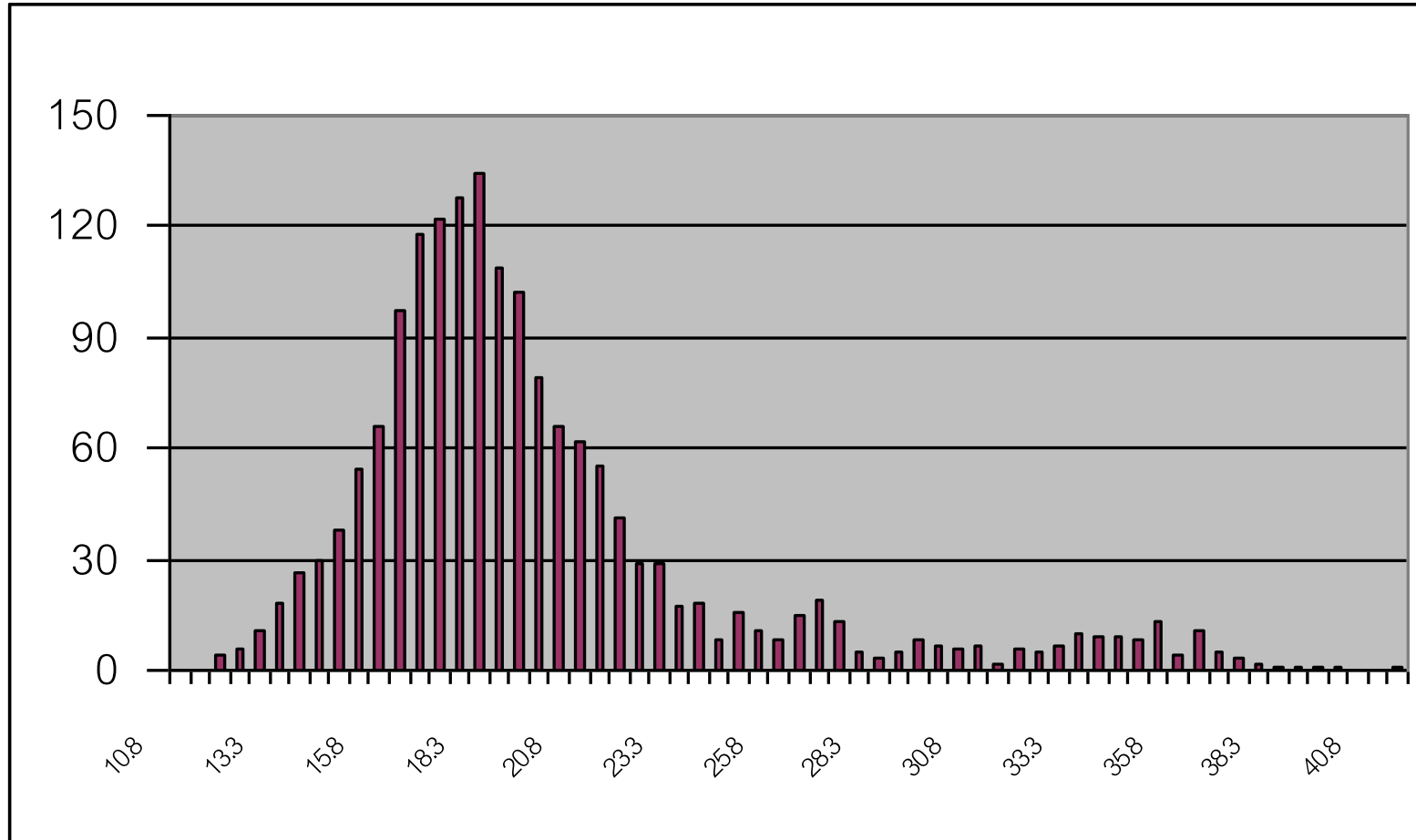


It MUST be Known :

- **The total catch weight of good and trash fish**
- **Sample weight of each good fish species**
- **Sample weight of trash fish**

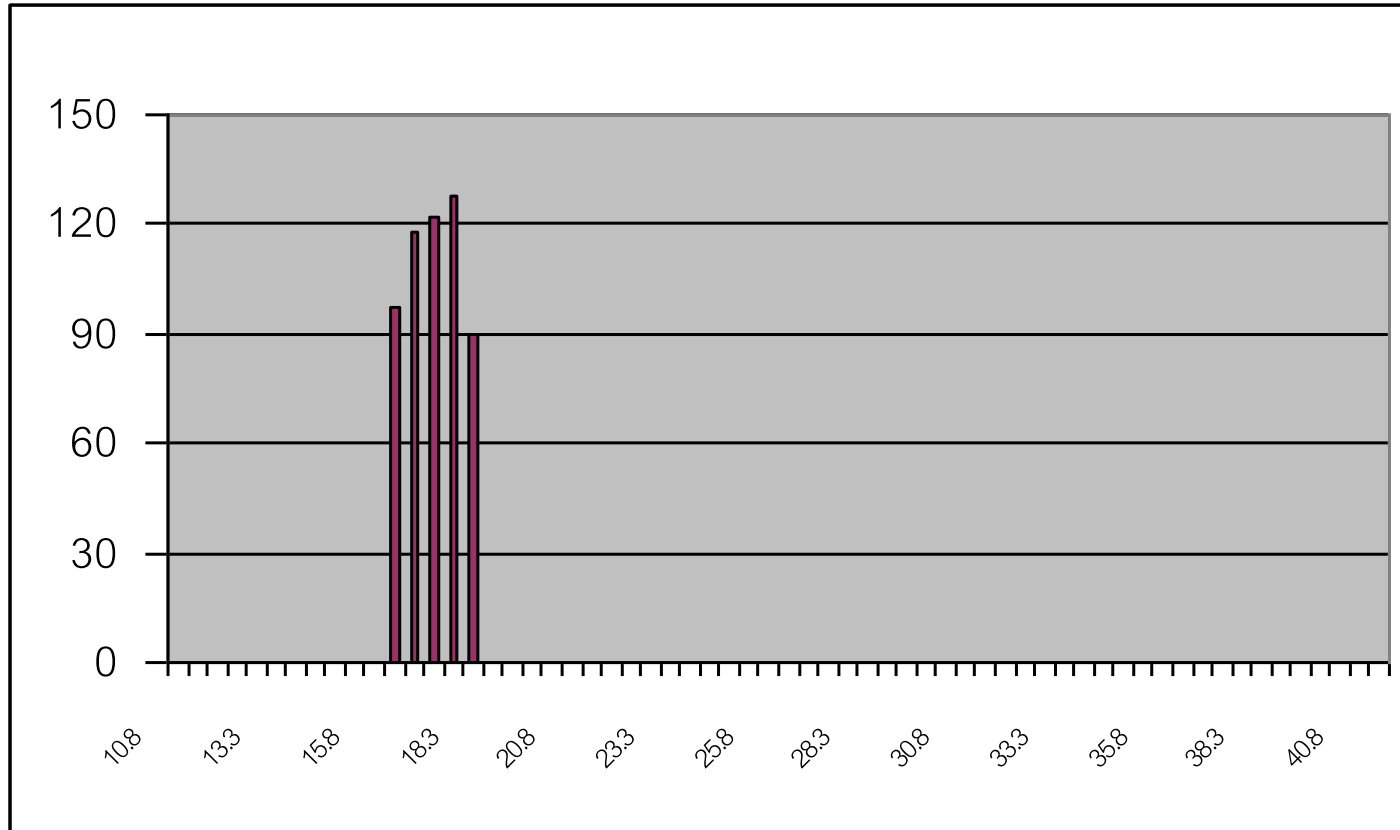


Good LFD for Stock Assessment





Poor LFD for Stock Assessment





10 minutes break

