



Conversion factors for tuna species

Allometry: types of conversions used in tuna fisheries

a) Weight \Leftrightarrow length relationships :: $W = f(L) // L = f^{-1}(W)$

b) Length relationships :: $L1 = f(L2)$

c) Weight relationships :: $W1 = f(W2)$

=> Most common relationships (f): linear, power (log linear), exponential

ICCAT Manual (<https://www.iccat.int/en/ICCATManual.asp?mId=4>)

Section: A4. Population Parameters for Key ICCAT Species

Shows:

- Many options in cases (a) and (b)
- Poor in cases (c)



Weight to weight relationships

Weight conversion factors (CF) by major species(*) adopted by the SCRS (ICCAT)

*Only one presented (CF could depend on age/size, season, area, others)

| Product shape/form | | species (cf) in ICCAT | | | | | | | | | | | |
|--------------------|--------------|-----------------------|------|-------|------|------|-----|------|------|------|------|------|-----|
| | ProdShapeCod | ProductShape | ALB | BFT | BET | YFT | SKJ | SWO | BUM | SAI | SPF | WHM | ... |
| major | LV | Alive | | 1.00 | | | | | | | | | |
| | RW(LW) | Rounded weight | | 1.00 | | | | | | | | | |
| | DW | Dressed weight | | 1.25 | | | | 1.33 | 1.20 | 1.20 | 1.20 | 1.20 | |
| | GG | Gilled & gutted | | 1.16 | 1.13 | 1.13 | | 1.14 | | | | | |
| | HD | Headless | | 2.00 | | | | | | | | | |
| | HG | Head & gutted | | 2.00 | | | | | | | | | |
| minor | BK | Block | | 2.00 | | | | | | | | | |
| | FL | Fillet | | 1.67 | | | | | | | | | |
| | BM | Belly meat | | 10.28 | | | | | | | | | |
| | KB | Kebabs | | 2.00 | | | | | | | | | |
| | LO | Loins | | 2.00 | | | | | | | | | |
| | ST | Steak | | 2.00 | | | | | | | | | |
| | TK | Trunk Style | | 2.00 | | | | | | | | | |
| | OT | Other | | 2.00 | | | | | | | | | |
| UN | Unknown | | 2.00 | | | | | | | | | | |

(a proxy)

Others sources exists (sometimes hard to find the scientific study).

FAO & tRFMO members have to report nominal catches in live weight, without proper conditions !!!

:: Why don't this Group put effort on this basic, but fundamental aspect ?

:: Step 0: An inventory (with references) is urgently required to better understand this “weekness”