

Length-weight relationship of *Barbus plebejus*
from Slovenia, sampled from 15.05.2012 to 24.06.2024
(n = 1901, length range from 2.60 cm to 56.30 cm,
specimen condition: mixed)

- Authors: Bojan Marčeta, Žiga Sanda, Petra Pavšič
- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 06.11.2024
- Country: SVN
- Species: *Barbus plebejus*
- Length type: TL (biometry_id = 76)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 15.05.2012
- Sampled to: 24.06.2024
- n: 1901
- L min [cm]: 2.60
- L max [cm]: 56.30
- W min [g]: 0.20
- W max [g]: 2178.00
- Data transformation: natural logarithm
- a: 0.0099436
- b: 3.0147660

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.8571 -0.0816 -0.0070  0.0846  0.6777
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -4.61083    0.01464   -315    <2e-16 ***
## ln_l_x       3.01477    0.00527    572    <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.136 on 1899 degrees of freedom
## Multiple R-squared:  0.994, Adjusted R-squared:  0.994
## F-statistic: 3.27e+05 on 1 and 1899 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq F value Pr(>F)
## ln_l_x        1 6046.34375 6.046344e+03  327419      0
## Residuals 1899   35.06823 1.846668e-02      NA      NA
```

Visualization

