

Length-weight relationship of *Barbus barbus* from Slovenia, sampled from 20.04.2010 to 11.09.2024 (n = 6321, length range from 2.60 cm to 80.50 cm, specimen condition: mixed)

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- Data source: BIOS, Fisheries Research Institute of Slovenia
- Analysed on: 06.11.2024
- Country: SVN
- Species: *Barbus barbus*
- Length type: TL (biometry_id = 76)
- Season: combined
- Sex: mixed
- Specimen condition: mixed
- Sampled from: 20.04.2010
- Sampled to: 11.09.2024
- n: 6321
- L min [cm]: 2.60
- L max [cm]: 80.50
- W min [g]: 0.20
- W max [g]: 4450.00
- Data transformation: natural logarithm
- a: 0.0093443
- b: 2.9964416

Statistics - summary

Linear model:

```
##
## Call:
## lm(formula = ln_w_y ~ ln_l_x, data = data_clean)
##
## Residuals:
##      Min       1Q   Median       3Q      Max
## -0.8697 -0.0715 -0.0037  0.0685  0.8816
##
## Coefficients:
##              Estimate Std. Error t value Pr(>|t|)
## (Intercept) -4.67298    0.00915   -511    <2e-16 ***
## ln_l_x       2.99644    0.00294   1021    <2e-16 ***
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## Residual standard error: 0.126 on 6319 degrees of freedom
## Multiple R-squared:  0.994, Adjusted R-squared:  0.994
## F-statistic: 1.04e+06 on 1 and 6319 DF, p-value: <2e-16
```

ANOVA:

```
##              Df      Sum Sq      Mean Sq F value Pr(>F)
## ln_l_x         1 16525.0137 1.652501e+04 1042106      0
## Residuals 6319   100.2025 1.585733e-02      NA      NA
```

Visualization

