Spatiotemporal analysis of diet and distribution of Atlantic cod and flounder in relation to density

Max Lindmark^{a,*}, Sean C. Anderson^{b,c}, Mayya Gogina^d, Mattias Sköld^a, Valerio Bartolino^a, Michele Casini^{a,e}

^a Swedish University of Agricultural Sciences, Department of Aquatic Resources, Institute of Marine Research, Turistgatan 5, 453 30, Lysekil, Sweden

^bFisheries and Oceans Canada, Pacific Biological Station, Nanaimo, BC, Canada

^cSimon Fraser University, Department of Mathematics, Burnaby, BC, Canada

 d Leibniz Institute for Baltic Sea Research, Seestraße 15, 18119, Rostock, Germany

^e University of Bologna, Department of Biological, Geological and Environmental Sciences, Via Selmi 3, 40126, Bologna, Italy

Abstract

This is the abstract. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Vestibulum augue turpis, dictum non malesuada a, volutpat eget velit. Nam placerat turpis purus, eu tristique ex tincidunt et. Mauris sed augue eget turpis ultrices tincidunt. Sed et mi in leo porta egestas. Aliquam non laoreet velit. Nunc quis ex vitae eros aliquet auctor nec ac libero. Duis laoreet sapien eu mi luctus, in bibendum leo molestie. Sed hendrerit diam diam, ac dapibus nisl volutpat vitae. Aliquam bibendum varius libero, eu efficitur justo rutrum at. Sed at tempus elit.

Keywords: Diet, Spatial analysis, Competition, Stomach content data, Spatio-temporal models, Density dependence, Atlantic cod, European flounder

Please make sure that your manuscript follows the guidelines in the Guide for Authors of the relevant journal. It is not necessary to typeset your manuscript in exactly the same way as an article, unless you are submitting to a camera-ready copy (CRC) journal.

For detailed instructions regarding the elsevier article class, see https://www.elsevier.com/authors/policies-and-guidelines/latex-instructions

1. Bibliography styles

Here are two sample references: Feynman and Vernon Jr. (1963) Dirac (1953).

By default, natbib will be used with the authoryear style, set in classoption variable in YAML. You can sets extra options with natbiboptions variable in YAML header. Example

 $\verb|natbib| options: longnames first, \verb|angle|, \verb|semicolon||$

There are various more specific bibliography styles available at https://support.stmdocs.in/wiki/index.php? title=Model-wise_bibliographic_style_files. To use one of these, add it in the header using, for example, biblio-style: model1-num-names.

Email address: max.lindmark@slu.se (Max Lindmark)

^{*}Corresponding author

1.1. Using CSL

If cite-method is set to citeproc in elsevier_article(), then pandoc is used for citations instead of natbib. In this case, the csl option is used to format the references. By default, this template will provide an appropriate style, but alternative csl files are available from https://www.zotero.org/styles?q=elsevier. These can be downloaded and stored locally, or the url can be used as in the example header.

2. Equations

Here is an equation:

$$f_X(x) = \left(\frac{\alpha}{\beta}\right) \left(\frac{x}{\beta}\right)^{\alpha-1} e^{-\left(\frac{x}{\beta}\right)^{\alpha}}; \alpha,\beta,x>0.$$

In line equations work as well: $\sum_{i=2}^{\infty}\{\alpha_{i}^{\beta}\}$

3. Figures and tables

Figure 1 is generated using an R chunk.

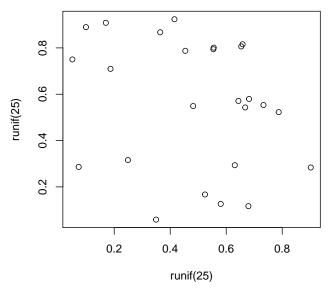


Figure 1: A meaningless scatterplot

4. Tables coming from R

Tables can also be generated using R chunks, as shown in Table 1 example.

knitr::kable(head(mtcars)[,1:4])

Table 1: Caption centered above table

	mpg	cyl	disp	hp
Mazda RX4	21.0	6	160	110
Mazda RX4 Wag	21.0	6	160	110
Datsun 710	22.8	4	108	93
Hornet 4 Drive	21.4	6	258	110
Hornet Sportabout	18.7	8	360	175
Valiant	18.1	6	225	105

References

Dirac, P.A.M., 1953. The Lorentz transformation and absolute time. Physica 19, 888–896. doi:10.1016/S0031-8914(53)80099-6. Feynman, R.P., Vernon Jr., F.L., 1963. The theory of a general quantum system interacting with a linear dissipative system. Annals of Physics 24, 118–173. doi:10.1016/0003-4916(63)90068-X.