# Review of some general Concepts

## D. Miranda-Esquivel

#### 2024-01-20

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## 1 General objective

- In this section, we will review:
- basic probability concepts and various probability distributions.
- use(s) of Bayes inference in Ecology
- some critics of the use of  ${\bf p}$

### 1.1 Key Concepts

- Probability basics
- Common probability distributions (binomial, dirichlet, gamma, exponential, log-normal)
- Time to say good-bye to  $\mathbf{p}$
- Bayes in Ecology

#### 1.2 Activities

- Review: Unit 3. Bodine et al and the ASA statement.
- Read: Bayesian inference in ecology. Ecology Letters (2004) 7: 509-520 doi: 10.1111/j.1461-0248.2004.00603.x
- Find a paper in your area of expertise and revise the use of p, write down a short analysis (max 1000 words) of the possible ways to solve the problems you might have detected.

#### 1.3 Readings

#### 1.3.1 Basic readings

- Unit 3. Bodine et al Read Online
- Ellison. 2004. Bayesian inference in ecology. Ecology Letters. 7: 509–520 doi: 10.1111/j.1461-0248.2004.00603.x
- ASA statement Read Online

#### 1.3.2 Should read

- Chapter 5. Sokal & Rohlf
- Chapter 1. Anderson's perspective on Science and Experimental design Read Online