

# Review of some general Concepts

D. Miranda-Esquivel

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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 **p**

### 1.1 Key Concepts

- Probability basics
- Common probability distributions (binomial, dirichlet, gamma, exponential, log-normal)
- Time to say good-bye to **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](#)