Applying a Multiverse to Population Habitat Analyses

Benjamin Michael Marshall[*1] **and Alexander Bradley Duthie**[**1]

[1]**Biological and Environmental Sciences, Faculty of Natural Sciences, University of Stirling, Stirling, FK9 4LA, Scotland, UK**
[*]benjaminmichaelmarshall@gmail.com
[**]alexander.duthie@stir.ac.uk

Abstract

abc

Keywords

Movement ecology, simulation, compana, resource selection functions, step selection function, habitat preference, habitat selection, animal movement, multiverse, research choice, researcher degrees for freedom,

1 Introduction

abc

2 Methods

test test

3 Results
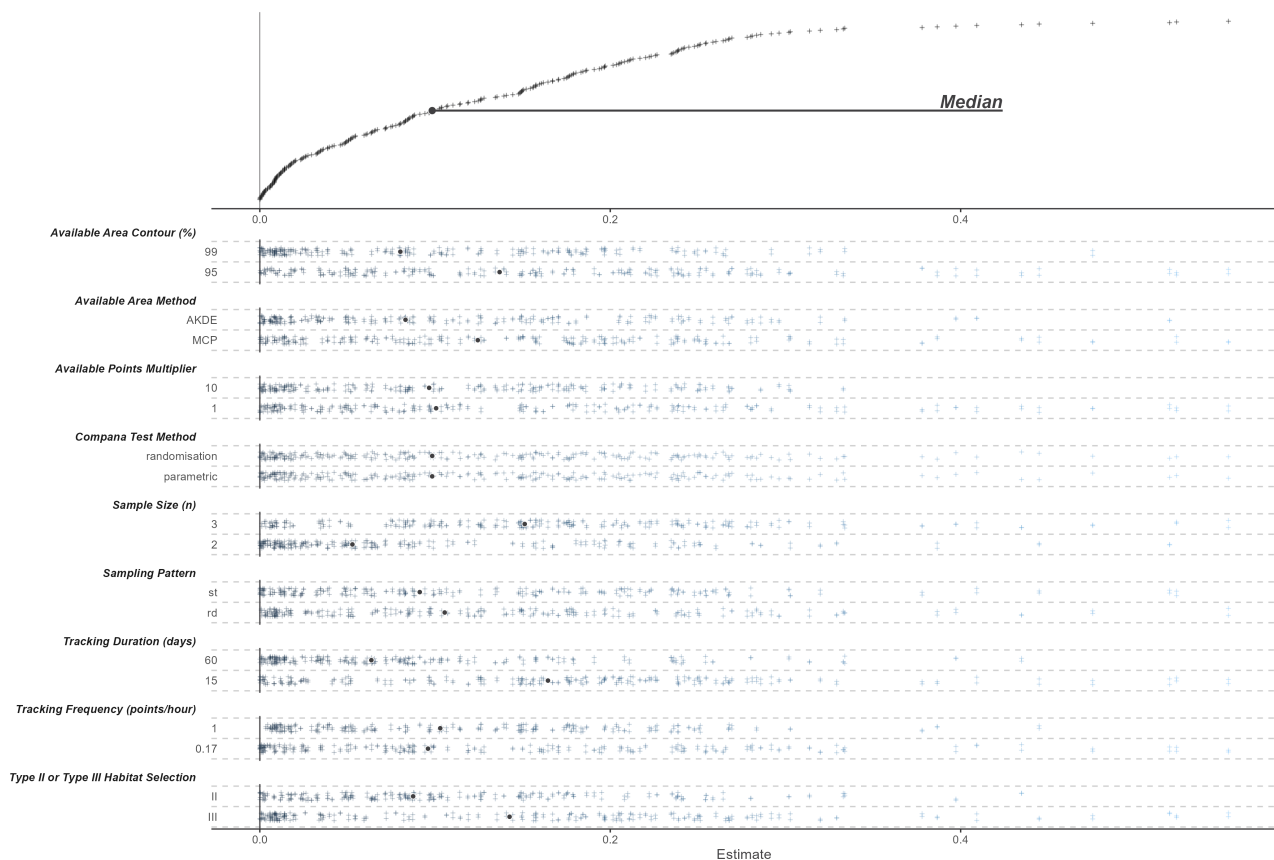
3.1 Specification Curves

(Fig. 1).

Figure 1. Spec curve

(Fig. 2).

(Fig. 3).

3.2 Model Results

The conditional R^2 values differed for the three models. The Compana results model had a conditional R^2 of 0.33; whereas the SSF model returned 0.59, and the Poisson model returned 0.94.

The marginal R^2 represents the bulk of the conditional R^2 suggesting an important role for the fixed/population effects. The Compana results model had a conditional R^2 of 0.48; whereas the SSF model returned 0.51, and the Poisson model returned 0.83.

The sample size was negatively correlated with deviation from the median estimate (β -0.03; 95% HDCI -1.15 — 1.8).
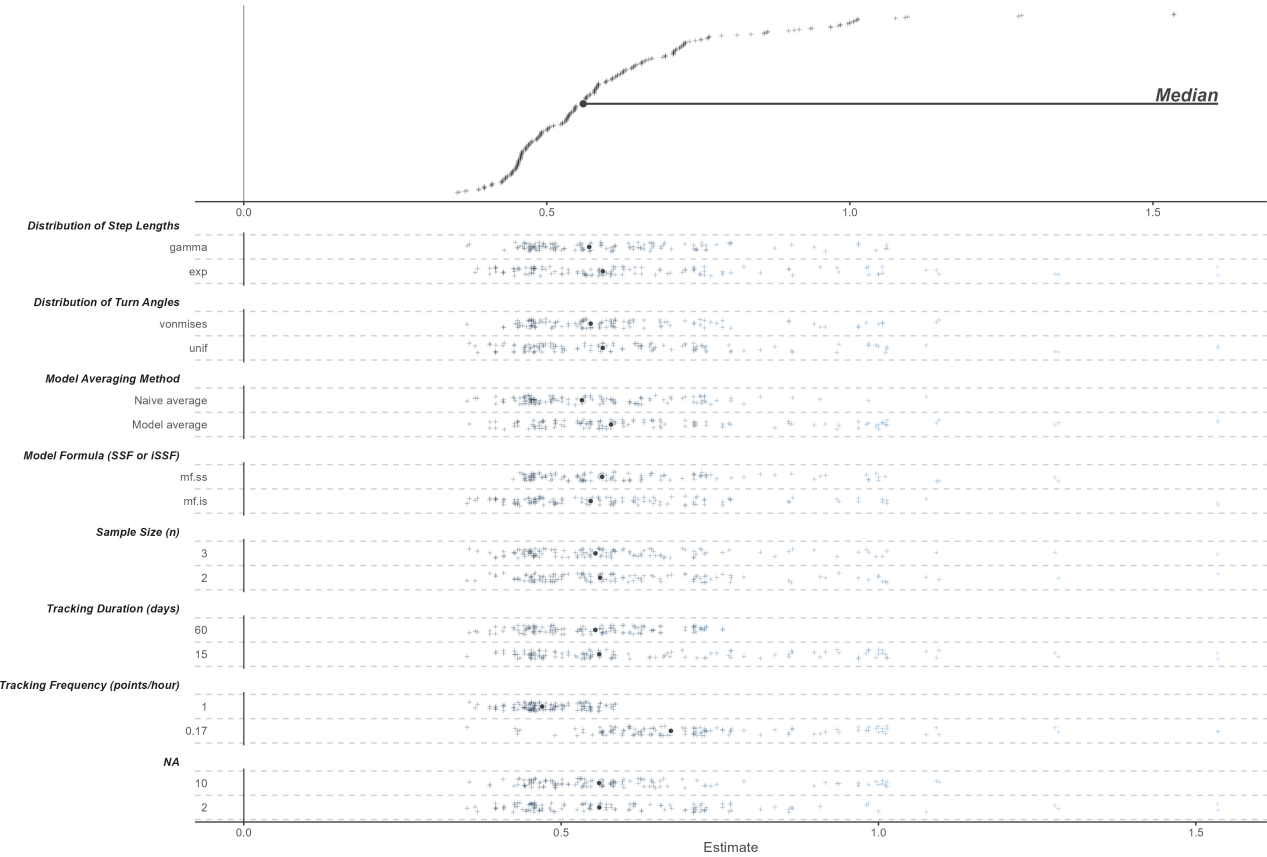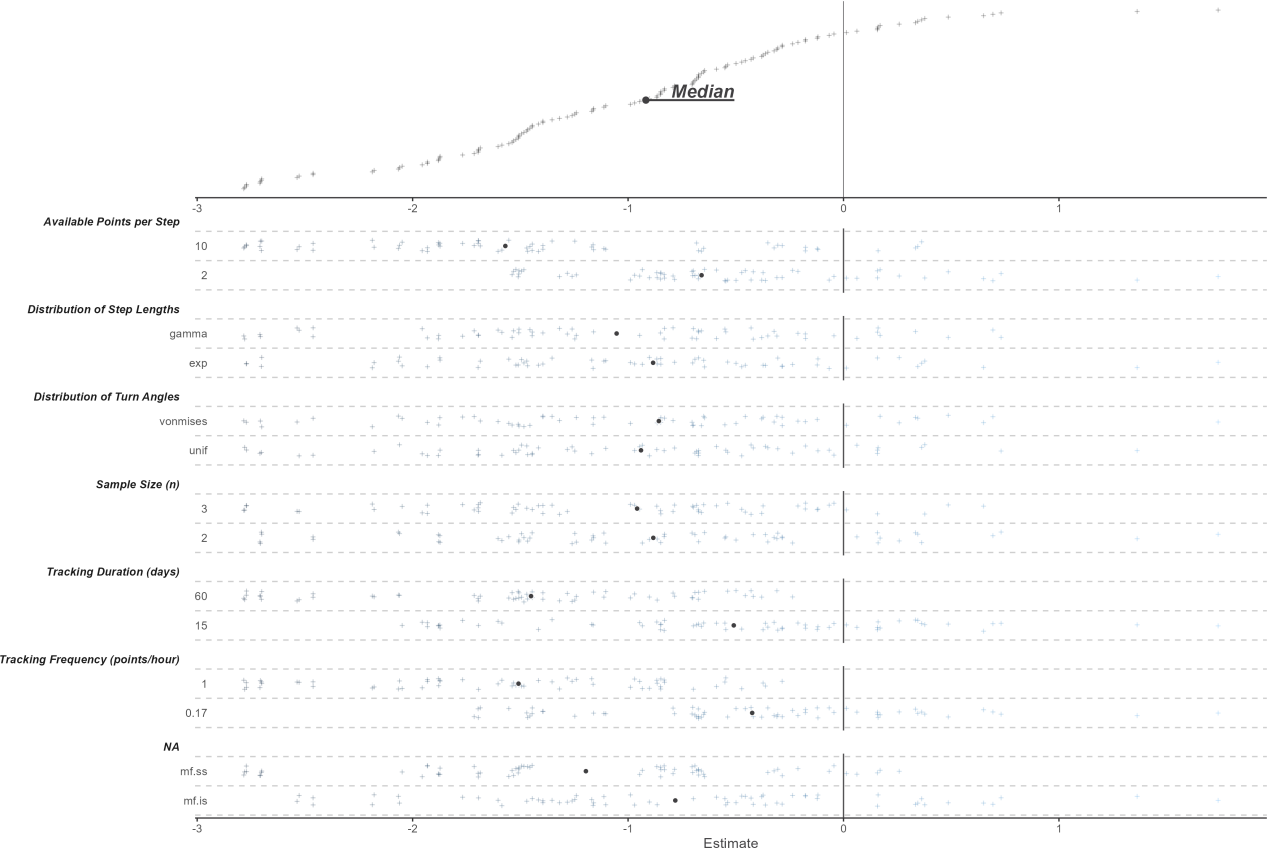
(Fig. 4).

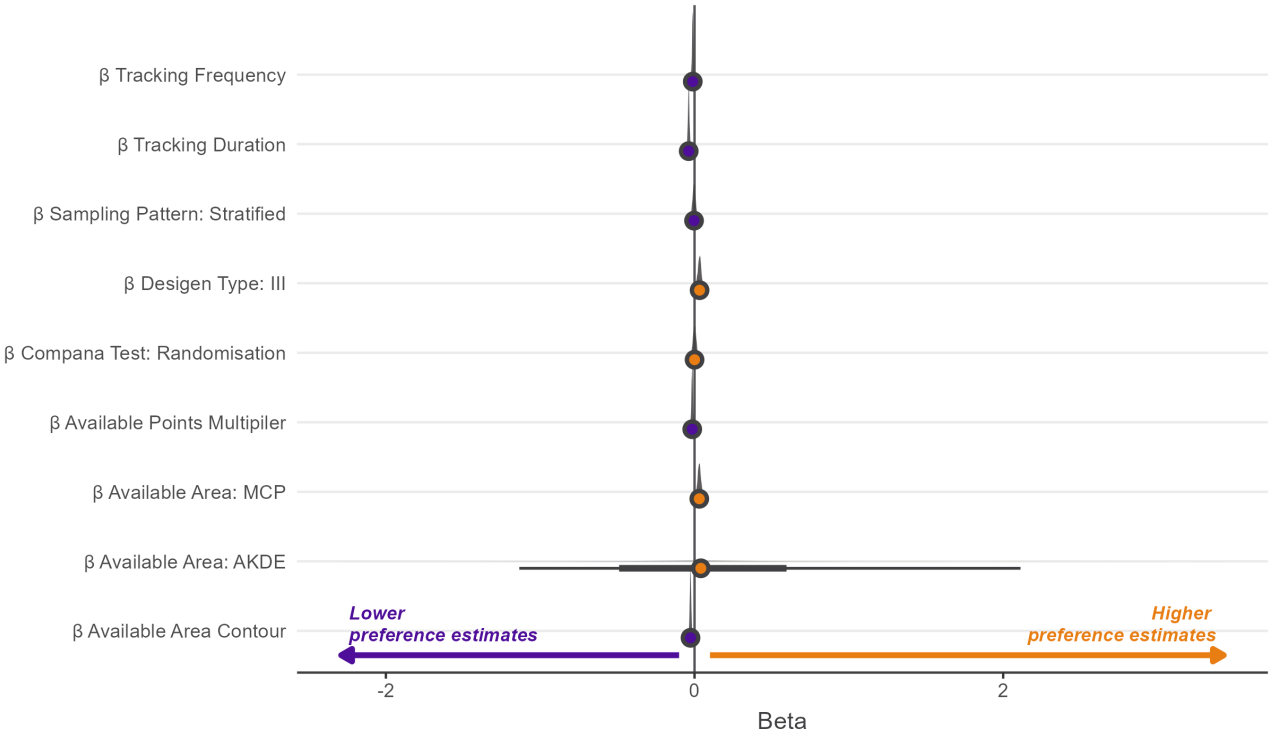**Figure 2.** Spec curve

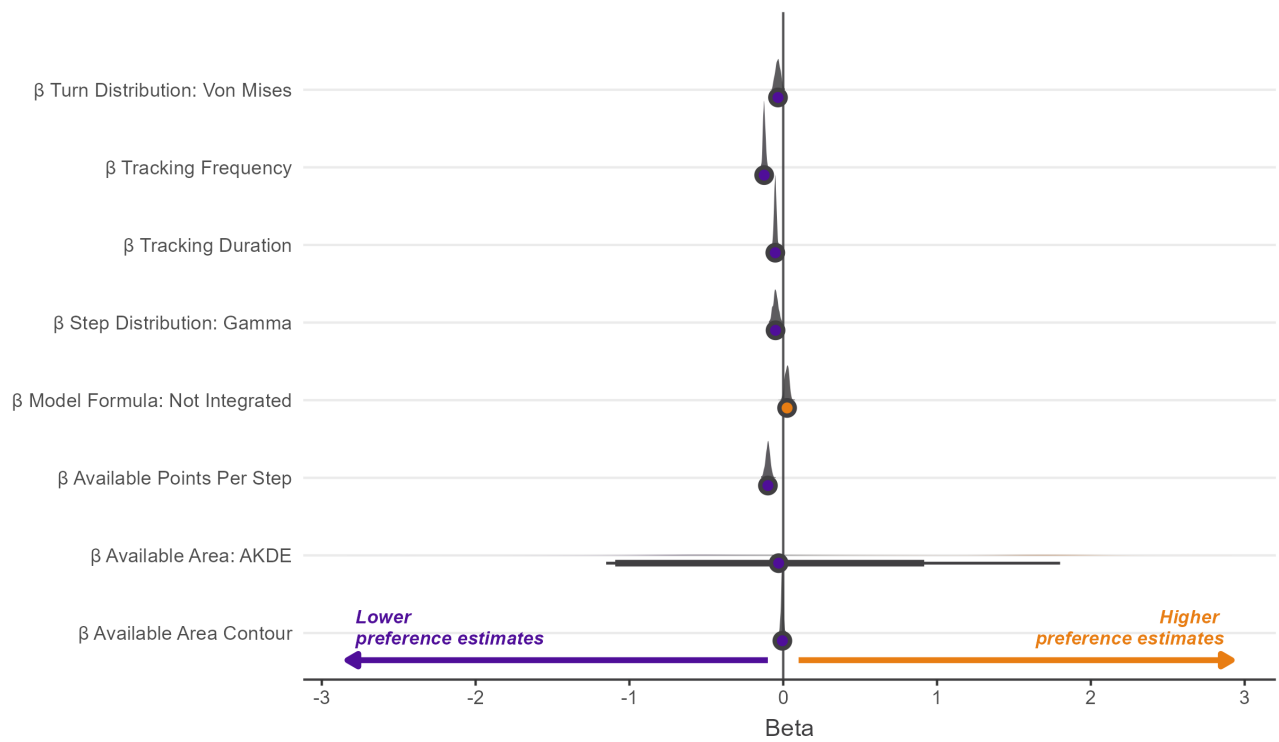**Figure 3.** Spec curve

Figure 4. Beta coefs

(Fig. 5).

(Fig. 6).

4 Discussion

Figure 5. Beta coefs

Figure 6. Beta coefs