## Teaching Notes for Sifaka Life History Case Study

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**Course Information**

Department: **Biology**

Level: **Lower Undergraduate**

Course type: **Ecology and Evolution is a 200-level course required of Biology and Environmental Science majors (lab and lecture)**

Students: **Majors**

Number of Students: 48

**Module Information**

Module Name: Sifaka Life History Case Study

Files associated: Lecture Powerpoint; Student handout; Figures adapted from Richard et al. (2002)

Learning Goals:

* To improve understanding of the biology and origin of the values underlying the parameters in a life table.
* To reinforce understanding of the difference between a cohort and a static life tables.

**Teaching Notes**

This case study was created to complement the Life History SimUText chapter (SimBio, <http://simbio.com/products-college/simutext-ecology>) and was developed while participating in SimBio’s FMN. Prior to the case study, students will have been introduced to natural selection and life tables. This is an Interrupted Case (based on the case types listed by the National Center for Case Study Teaching in Science) where students complete portions of a handout as they are presented information on slides. Answers are given on slides so that students are able to modify their answers in response to class discussion.

Instructors PowerPoint has correct answers included and additional information in the Notes section of some slides.

**Adapting the Case:**

This case study could be shortened or lengthened by either giving the students more of the calculations to do themselves (e.g., estimating median birth rates for each age class) or asking them to do fewer calculations. The portion about the evolution of biased sex ratios could also be removed if not appropriate for a particular class.

Part 3, Q. 2 could be eliminated or modified to focus on an organism that students are likely to be familiar with.

**Literature Cited**

Richard, A.F., R.E. Dewar, M. Schwartz, and J. Ratsirarson. 2002. Life in the slow lane? Demography and life histories of female sifaka (*Propithecus verreauxi verreauxi*).