

# Hairy Tales and Monkey Business

The conservation value of children's picture books used in conservation education programmes and picture books sold commercially with a focus on primates



K.M. Sorenson<sup>1</sup>, K.A.I. Nekaris<sup>2</sup>, V. Nijman<sup>2</sup>

<sup>1</sup>MSc Primate Conservation Oxford Brookes University, Oxford OX3 0BP, U.K.  
<sup>2</sup>Nocturnal Primate Research Group, Oxford Brookes University, Oxford OX3 0BP, U.K.



## Background

- Children taught about **frightening** conservation issues too young **become scared** rather than engaged (Ecophobia<sup>1</sup>)
- lessons should instead focus on **empathy for the natural world before** presenting its challenges and calling upon children to take action.

<sup>1</sup> Sobel D (1996) Beyond ecophobia. Great Barrington, MA: Orion Society

## Research Questions

1. Are children's books intended for primate conservation education programs **more scientifically accurate** those commercially available?
2. Will conservation education books have a **more frequent call to action?**, Will they have a **higher level of ecophobia?**

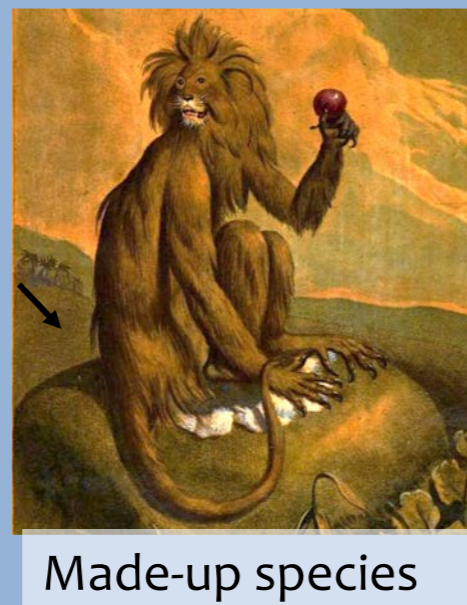
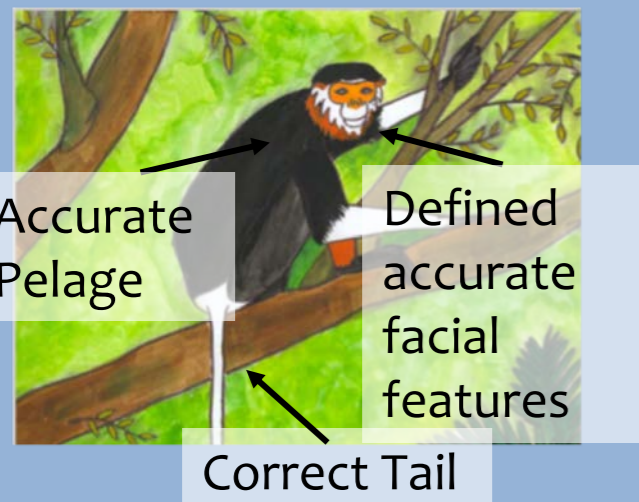
## Methods

All books were holistically evaluated and scored for:  
**scientific accuracy, anthropomorphism ecophobia, and educational development stage.**  
**Educational development stage:** conservation education suitable for children's intellectual and emotional capabilities.

## Scientific Accuracy

High

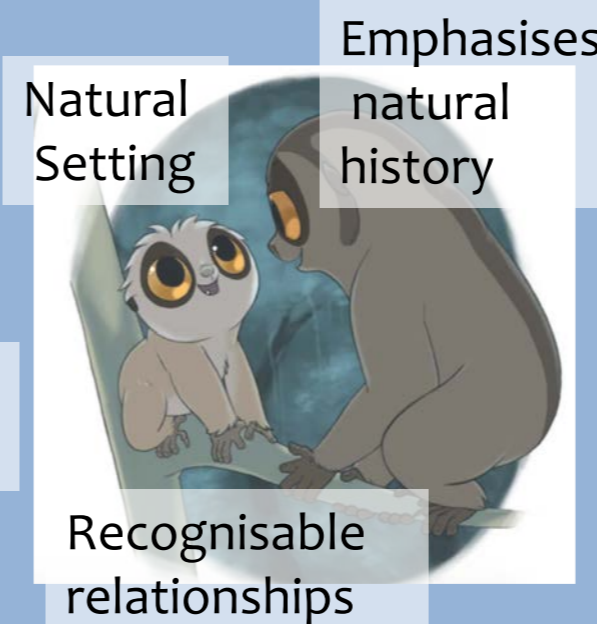
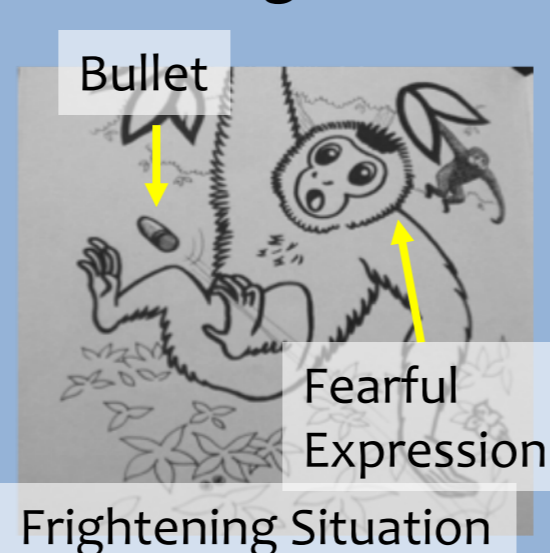
Low



## Ecophobia

High

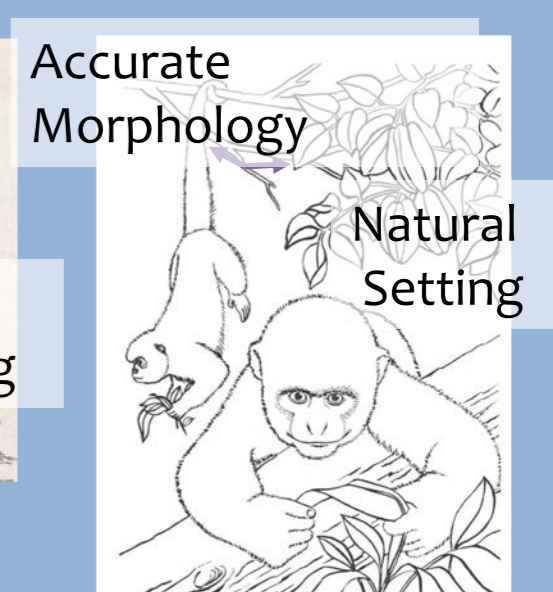
Low



## Anthropomorphism

High

Low



## Educational Development Stage

### Empathy



Ages 4-7  
Children's homes, and significant relationships are their worlds.

**Educational Focus:**  
Empathy building

### Exploration



Ages 8-11  
Children begin to explore the world.

**Educational Focus:**  
Desire to begin exploring.

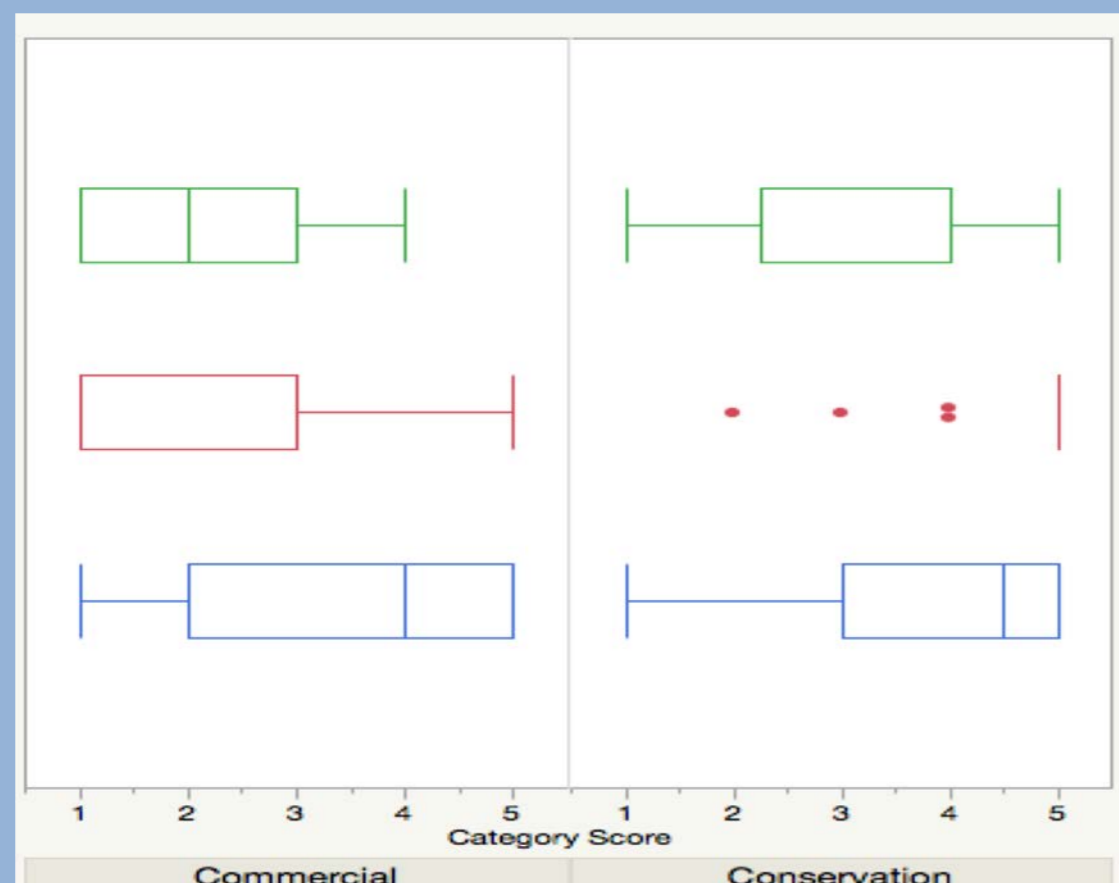
### Social Action



Ages 12+  
Towns and cities become more significant.

**Educational Focus:**  
Environmental problems where children can make a difference, beginning small

## Results



**Figure 1:** Median scores and interquartile range of commercial (n=42) and conservation education picture books (n=24) assessed for ecophobia (green), scientific accuracy (red), and anthropomorphism (blue).

Conservation education books were significantly **more scientifically accurate** ( $U=5.5, p<0.001$ ) and significantly **more ecophobic** ( $U=3.6, p<0.001$ ) than commercial books (fig. 1)

There were **significantly more** conservation education books than commercial picture books written with **calls to action** (chi-squared goodness of fit test,  $X^2(1, n=67)=24.17, p<0.001$ )

There was **no difference** in the number of books written with **empathy and exploration messages** between the two book categories.

## Discussion

- The lack of scientific accuracy in commercial children's picture books about primates is consistent with previous research<sup>2,3</sup>
- The high level of scientific accuracy in primate conservation education picture books contrasts with previous research on accuracy on biological picture books and suggests truthful representations can be achieved<sup>2,3</sup>.
- The high levels of ecophobia in conservation picture books suggests that these stories may be scaring instead of engaging children, and that writers and illustrators may be lacking knowledge of child development.

<sup>2</sup>Trundle KC, Troland TH and Pritchard TG (2008) Representations of the moon in children's literature: An analysis of written and visual text. *Journal of Elementary Science Education* 20(1): 17–28.

<sup>3</sup>Beaumont ES, Mudd P, Turner IJ and Barnes K (2017) Cetacean Frustration: The Representation of Whales and Dolphins in Picture Books for Young Children. *Early Childhood Education Journal* 45(4): 545–551.

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