



Five minutes in an elevator at 30000 feet

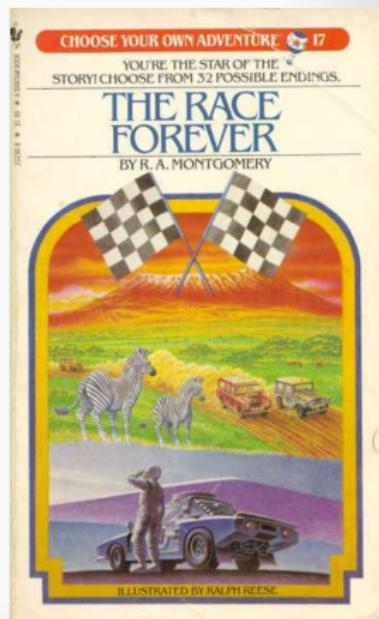
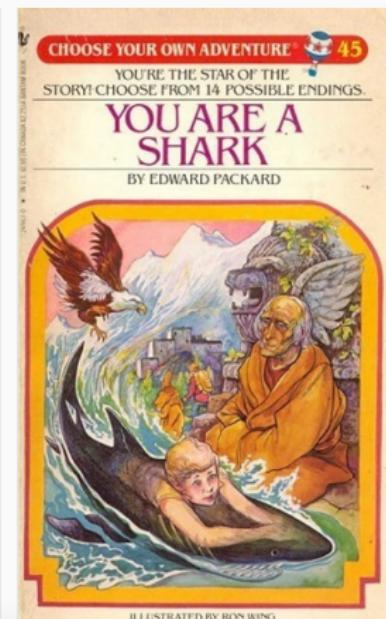
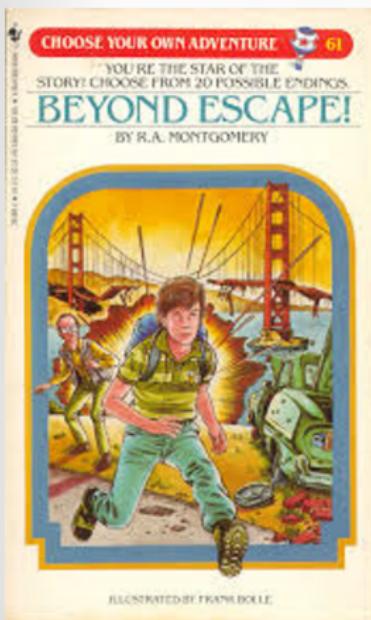
Marcus W. Beck

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Email: beck.marcus@epa.gov

July 27, 2016

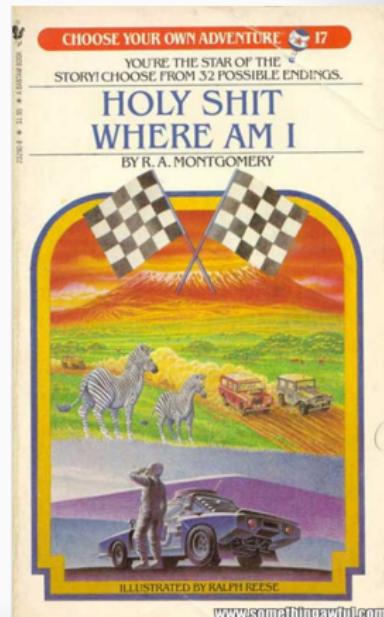
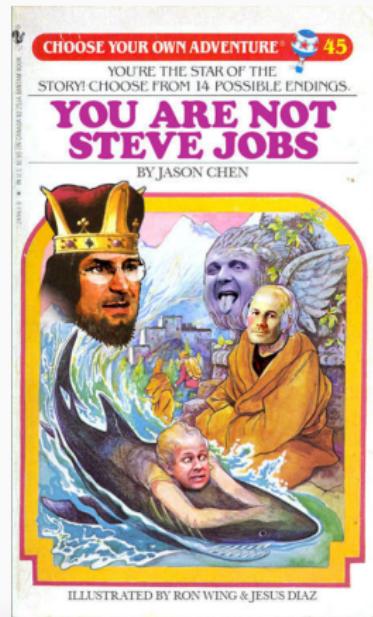
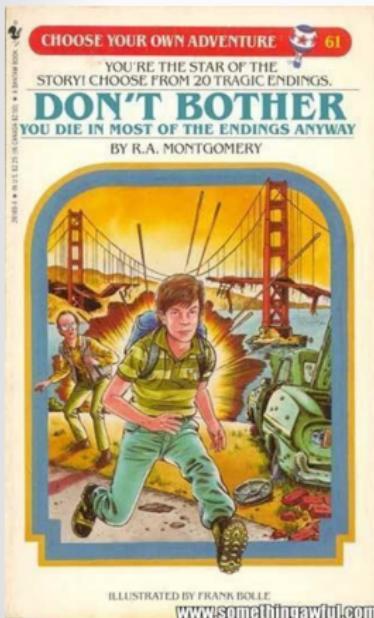


Choosing your own adventure





Choosing your own adventure





Choosing your own adventure

13 years old

1. Learn to fly
2. Join Air Force
3. Fighter pilot/
professional
skateboarder



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20 years old

1. BSc in Zoology
2. Intern for FWC
3. MSc in
Conservation
Biology
4. Fisheries
Biologist



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1. Learn to fly
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professional
skateboarder

20 years old

1. BSc in Zoology
2. Intern for FWC
3. MSc in
Conservation
Biology
4. Fisheries
Biologist

30 years old

4. Intern for
MNDNR
5. PhD in
Conservation
Biology
6. ORISE post-doc
7. Fed post-doc

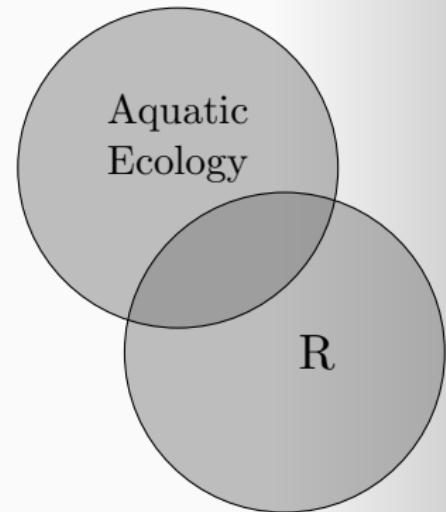
Elements of the adventure

- Water quality
- Biological monitoring
- Eutrophication
- Aquatic Macrophytes
- Ecosystem metabolism



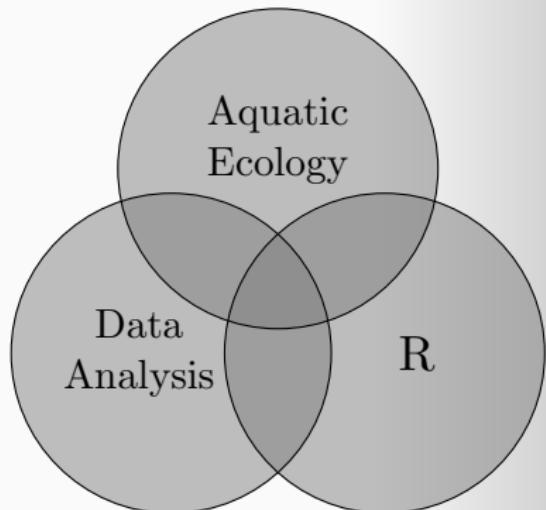
Elements of the adventure

- NeuralNetTools
- SWMPr
- WtRegDO
- WRTDStidal
- ggord
- rStrava



Elements of the adventure

- Indicator development
- Time series methods
- Reproducible research
- Visualization and graphics
- Model comparisons



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