

## Avian Valentinos

Why do some birds mate for life, while others are less faithful?

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Photo: National Geographic

# Mating for life depends on....

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- ▶ **Caring for the young**
- ▶ **Attracting mates**
- ▶ **Intimidating rivals**

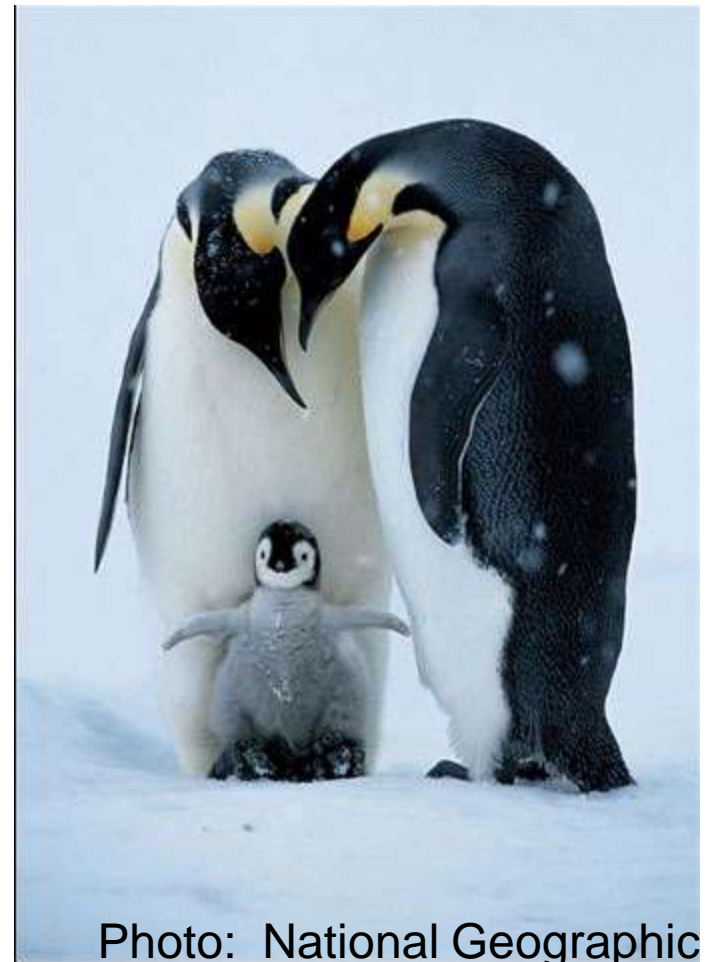


Photo: National Geographic

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Which sex is liberated?  
**CARING FOR YOUNG**



Photo: National Geographic

# When 2 parents do better than 1....

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- ▶ Defense from predators



SOURCE: "Growing up" Trials of Life

# When 2 parents do better than 1....

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- ▶ Compete for resources



SOURCE: "Friends & Rivals" Trials of Life

# When 2 parents do better than 1....

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- ▶ Feed the young



SOURCE: “Growing up” Trials of Life

# When 2 parents do better than 1....

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- ▶ Defense from predators
- ▶ Compete for resources
- ▶ Feed the young



SOURCE: "Growing up" Trials of Life

# Liberation when 1 parent suffices...

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- ▶ Sexual dimorphism
- ▶ IF mother's care is enough
- ▶ Males are liberated
- ▶ Female choice is instinct-coded in genes



SOURCE: "Courting" Trials of Life



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How to choose a mate?  
**ATTRACTING MATES**



Photo: National Geographic

# When single mothers are not enough...

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- ▶ Females choose...
- ▶ ...honest cues about male care
- ▶ e.g. real gifts of food & nest material



SOURCE: "Courting" Trials of Life

# When single mothers are not enough...

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- ▶ If female choice is instinctive
- ▶ Little cost for false advertising
- ▶ e.g. symbolic gifts



SOURCE: "Parenthood Game" Sierra Club

# When single mothers are not enough...

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- ▶ e.g. symbolic gifts...
- ▶ ...on exciting feet



SOURCE: "Courting" Trials of Life

# When single mothers do fine without males...

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- ▶ IF females continue to choose based on advertising
- ▶ No cost for males who cheat on quality of gifts
- ▶ e.g....."bling"



SOURCE: "Courting" Trials of Life

# When single mothers do fine without males...

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- ▶ e.g. “bling”...
- ▶ and “fancy penthouse”



SOURCE: “Courting” Trials of Life

# When single mothers do fine without males...

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- ▶ e.g. “bling”...
- ▶ and “dance floor”....
- ▶ and dancing & singing



SOURCE: “Courting” Trials of Life

# When single mothers do fine without males...

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- ▶ e.g. “dance space”....
- ▶ .... dances
- ▶ .... and group aerobatics



SOURCE: “Courting” Trials of Life © National Geographic



# When single mothers do fine without males...

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- ▶ e.g. “best costume”



SOURCE: “Courting” Trials of Life

# When single mothers do fine without males...

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- ▶ e.g. “most dramatic”



SOURCE: “Courting” Trials of Life

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How to defend a mate?

**INTIMIDATING RIVALS**



# Costs of liberation for males...

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- ▶ “outrageous clothing budget”



SOURCE: “Courting” Trials of Life

# Costs of liberation for males

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- ▶ “outrageous clothing budget”
- ▶ “vulnerable to predators”



SOURCE: “Courting” Trials of Life

# Liberated or not....males compete

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- ▶ Chase off rivals



SOURCE: "Courting" Trials of Life

# Liberated or not....males compete

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- ▶ Attract female attention despite costs
- ▶ Expensive ornaments
- ▶ Vulnerable to predators
- ▶ Intimidate rivals



SOURCE: "Parenthood" Sierra Club

# SUMMARY

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**Q:** Why do some birds mate for life and others are less faithful?

**A:** depends on....

- when a single parent is not enough to raise chicks successfully=>lifers
- single parents do fine=> less faithful
  - Mate choice becomes instinctive, not based on cues of parental care...more on attention-getting
  - Intimidation of rivals becomes as important as attracting females



Photo: National Geographic