

Isolation and Mate Choice discussion

This discussion explores how artificial boundaries can decrease mate choice, with a specific example of highways limiting mate choice for bighorn sheep.

Discussion:

Key idea: Artificial boundaries can decrease mate choice and isolation.

Question: If you and your neighbors never crossed out of the boundary of your neighborhood and people in nearby neighborhoods did the same, how would that affect the people in your neighborhood?

Answers: It would limit food, mate, and entertainment choices. People would be isolated.

Question: Why is it so bad for populations to be isolated? How would you feel about only being allowed to date the people in this class?

Answers: Limited mate choice – bad for people and other animals! Limited mate choice can lead to having to pick less attractive and/or less healthy mates.

Key Idea: Highways act as barriers preventing the movement of bighorn sheep, leading to limited mate choice.

Question: So we think isolated populations can lead to limited mate choice. How might highways limit mate choice in the bighorn sheep?

Answers: Highways act as barriers to the movement of bighorn sheep between mountaintops. Sheep have limited mate choice because they cannot cross highways to find new mates.