

SCIENCE BULLETIN: HIGHWAYS BLOCK BIGHORN SHEEP	
Questions	Bighorn Sheep
1. How have people changed the habitat in this example?	<i>People change the habitat in many ways including creating highways and fences that cause habitat fragmentation and can lead to inbreeding.</i>
2. Why do people change the habitat ? How does it help us?	<i>People have built roads to make travel quicker between LA and Las Vegas. This quick travel time has helped the Vegas economy.</i>
3. How do the habitat changes impact populations in this area?	<i>Bighorn sheep populations are isolated from each other, which increases the likelihood of inbreeding. Inbreeding causes many genetic health problems.</i>
4. How do you know that the habitat is being changed and that local populations are affected? Describe the evidence or data .	<i>Scientists studied DNA evidence from different populations of bighorn sheep to see if they were interbreeding or not. They found that bighorn sheep populations that were separated by roads showed less interbreeding than those not cut off from each other.</i>
5. Suggest how to solve this problem.	<i>Build an underground tunnel underneath the fences and highways for the animals to travel. Elevate the highway. Construct highway overpasses for animals. Introduce new bighorn sheep into existing populations to increase genetic diversity.</i>