

STUDENT GUIDE

PERFORMANCE TASK LESSON 26



Part 1: Evaluating Media Claims

Decide where each media claim fits best on the table below. Write the title of the claim and the claim number in the appropriate place on the table.

Valid claim	
Misleading claim that omits important context or details	Claim 14: Avoiding meat and dairy is the 'single biggest way' to reduce your impact on Earth.
Invalid claim	Claim 15: Cattle ranching is terrible for biodiversity.

Use evidence from the whole unit to verify or refute the information presented in **Claim 14**. Be sure to use the Look Fors provided to guide your response.

I think Media Claim 14 is misleading. I think media claim 14 is misleading. It says that avoiding meat and dairy are the single biggest ways to reduce your impact on Earth.

The dairy system has a number of costs and benefits. One of the benefits we found was how the system can produce dairy products for people. But one of the costs we found was that it emits greenhouse gases.

One of the ways we found to compare the impact of the dairy industry to other industries is to compare their greenhouse gas emissions. Even though the contribution of livestock is small (5.8%), it does still produce some methane and carbon dioxide that participate in the greenhouse effect. But it is much less than the greenhouse gas emissions worldwide for electricity production (41.7%) and for transit (16%), for example, according to [Our World in Data](#).

Another cost we found was that the dairy system, especially when growing monocultured crops for feed, can have a negative impact on biodiversity. According to the [London School of Economics](#), biodiversity loss is mostly caused due to habitat loss and pollution. We know the dairy industry creates water and air pollution from manure runoff and fertilizer and pesticide use for growing monoculture crops. And these monoculture crops



also do not provide much habitat for wildlife. But practices such as grazing or rotational grazing can improve habitats, decrease pollution, and lead to less biodiversity loss.

So overall even though there is some partial truth to Media Claim 14, I think it is overall misleading and missing context.

Use evidence from the whole unit to verify or refute the information presented in **Claim 15**. Be sure to use the Look Fors provided to guide your response.

I think media claim 15 is inaccurate. It says that cattle ranching is terrible for biodiversity. This claim is inaccurate grazing of cattle has been shown to increase biodiversity compared to monoculture cropland.

The way the dairy system is designed is meant to provide dairy products for consumers. The system was built to do this well. One unintended consequence of this design is that it contributes to a loss of biodiversity. This is especially true with practices such as growing monocultured crops for dairy cattle feed. We saw that the biodiversity in a field of monocultured crop was much less than in a field of undisturbed land. However, there are practices that the dairy system can use to improve biodiversity. For example, in the article titled "Grazing and Biodiversity" we saw "Metera et al. (2010) found that grazing created favorable conditions for the formation of habitat structure preferred by many endangered birds, small mammals, and invertebrates, positively impacting biodiversity of grasslands." This indicates that a practice such as grazing, when done appropriately, can provide habitat for certain species. If the blackbird's habitat is being wiped out, then perhaps a grazing practice is creating new habitats for the birds.

Further, the same article argued that "The effects of grazing on plant communities and biodiversity thus reflect some basic ecological principles. These include: (1) plants are distributed in patches, and the status and distribution of patches depend upon the processes, such as grazing, that create them; (2) grazing can increase heterogeneity of plant communities by reducing dominance by a few species, which are replaced by numerous secondary species and (3) habitat diversity (patchiness) and resultant ecotones or edges are important as wildlife habitat for many species, but not all. Non-uniform use of rangelands by livestock contributes to these effects."

Furthermore, we know the dairy system is trying out additional strategies to increase biodiversity, such as rotational grazing, which can further increase biodiversity compared to monocultured crops. We have to get food to eat from somewhere, so if media claim 15 is saying that grazing of cattle is a worse choice than feeding them food from monocultured crops, I would disagree because the monoculture cropland is going to reduce biodiversity even more.