

## EnSci 16.1

Goals: Compare and contrast farming practices, how to make more sustainable choices in farming

Plan:

Video: Journey of a Beef Cow,

- How would we traditionally raise and slaughter an animal, what differences are there in what was illustrated in the video and how would they be more harmful to the environment
- Why do they do these methods in the first place?

Class discussion: Are factory farms a necessary evil? How can we get around these practices?

Discussion: Methods to reduce impact of farming on the land

- Contour farming
- Terracing
- Polycultures
- Crop Rotation
- No-till farming

HW: Describe how a monoculture of crops can harm the environment (reading)

## EnSci 16.2

Goals: Debate the use of meat in our diets, should we cut back or cut out meat?

Plan:

Recall thermodynamics of food webs (10% rule)

Discuss: Should we just eat the corn we feed to cows, pigs and chickens?

Class debate: No change, cut back, or cut out?

HW: reflection paragraph on which of the three options you agree with and why

## EnSci 16.3

Goals: Determine the effects of sustainable agriculture

Plan: Top Crop sustainable agriculture simulator

<https://www.nationalgeographic.org/interactive/top-crop/>

Students will complete the simulation and reflect on the choices they made in farming