

Ecological Communities

Unit 4, Chapter 6

Key Concepts (Chapter 6)

Chapter theme: Biospheres and competition for resources. **What are the basics?**

Your thoughts?

In what situations would you expect fierce competition to impact law enforcement?



Diving deeper

Ecological community -- a defined space and all the inhabitants in it.

Intraspecific/interspecific competition

Intra = within, inter = different

Interspecific competition

Two or more species compete for the same limited resources within an ecological community.

They **CANNOT** co-exist. (Burrito experiment)

Fundamental & realised niched

Specialisation is key.

Your thoughts?

Apply this to humans. How do we specialise within the city/town/community to coexist for the same resources? How might this impact law enforcement?

Exploitation & interference

Tell me a story.

Think about a time when you exploited a situation to get a resource you wanted.

Think of a time when you acted aggressively to get a resource you wanted.

Vegetarian / predator / parasite

Your thoughts

Apply the concepts of niche, competition, and preferences to humans and describe a law enforcement picnic.



Nature's arms race



Fancy, scientific name =
Coevolution

Involves... (gimme a list)

Survival Tactics

Herbivores -- Defensive... and anything to reproduce

Predators -- Diversify

Parasites -- Opportunistic and devious

Law enforcement focus



Black Plague, circa 1350s



Ebola, 2014

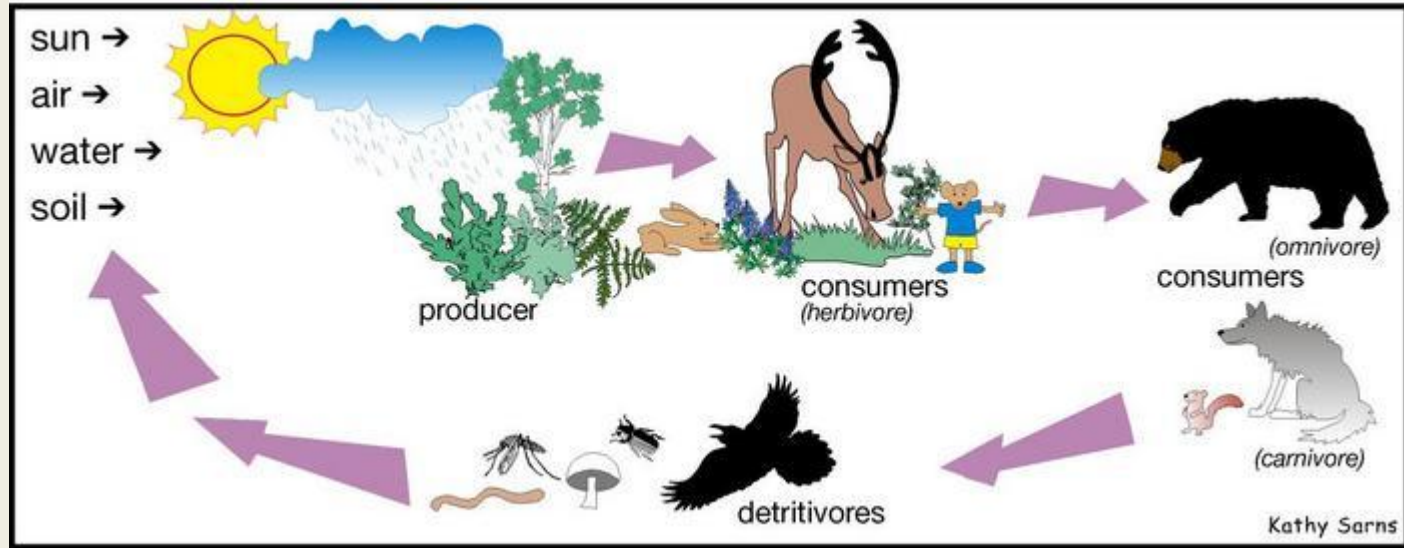
Balancing acts

Symbiosis - Intimate interdependence

Mutualism - Intimate AND mutually beneficial

Commensalism -- Benefit only one species

What's for dinner?



Energy is for dinner!

Diversify and prosper

Keystone species

Animals that prop up a large part of the food chain.

Trophic cascades -- when the balance is off.

Disturbance in the force

What happens if....

Your thoughts?

What would cause a disturbance so great that law enforcement might be needed?

Summary

1. Biospheres are a complicated give and take, and diversification is the key.
2. Survival to reproduce is the whole point.
3. Everything is integrated and part of a whole story.
4. Disrupting the balance can cause problems over time.

Unit Homework

Chapter 6:

§ 6.1,

2 - 3

§ 6.2

3

§ 6.4

2

Chapter 7:

§ 7.1

1 - 3

§ 7.8

1 - 4

Project 2 (due in two weeks)

DUE: 21.May.2015

Humans fighting for resources

Documents for reference

Why we fight wars

Ancient humans fought for resources