

Ecosystem Investigators

Stream Food Web Exploration



Name: _____ Date: _____ Period: _____

INTRODUCTION: Streams are full of an incredible amount of life. Many of these organisms depend on each other, either as prey or as creators of new food sources. In this activity, you will be looking at the relationships between organisms within the stream food web. By exploring these relationships, you will be deepening your understanding of how organisms are connected to each other and how energy moves through the web. Review the vocabulary before filling in the tables and observing the food web. As you work through this activity, you'll answer questions that help you think more in-depth about the stream habitat and community of organisms living there.

VOCABULARY:

Habitat – The food, water, shelter and space an organism needs to survive

Ecological niche – The role an organism has in its environment; their total interactions with abiotic and biotic factors

Producer – An organism that produces their own energy (usually through photosynthesis)

Consumer – An organism that consumes energy by eating other organisms

Decomposer – A consumer that gets their energy or nutrients from dead organisms

Scraper – An organism that scrapes algae or fungi and bacteria off hard surfaces like rocks

Shredder – An organism that chews up dead plant material into smaller pieces before consuming them

Collector – An organism that either filters small pieces of food out of the water or gathers it off the stream bottom

Predator – An organism that hunts and consumes animals

Prey – An organism that is eaten by other organisms

Riparian Zone – The area of land immediately surrounding a stream or river

STEP 1: Fill in Table 1 by classifying the organisms as a producer, consumer, scraper, shredder, collector, or predator. (NOTE: Some may fit in more than one column, and not every card will fit in a group!)

Table 1: Producers and consumers

Producers	Consumers	Scrapers

Shredders	Collectors	Predators

F) This stream food web is an example of a model. It represents some of the relationships between biotic and abiotic factors in and near the stream in a way that allows us to see different patterns. No models are perfect, and usually models representing relationships in nature require complexities that make them difficult to use. What do you think is missing from this model? How do you think this model is inaccurate or could be improved?