

Food Web Board Game

UConn 4-H Earth Agents

Background

Food chains show the flow of energy through an ecosystem. An ecosystem represents a group of plants and animals that are connected with each other and their environment. Biotic factors in an ecosystem represent living beings. Squirrels, pine trees, and fungi are all biotic factors. Abiotic factors are non-living and make up the physical environment that biotic factors engage with. Examples of abiotic factors include rocks, bodies of water, and the air we breathe. Energy flows through an ecosystem through production and consumption. Typically, plants are production organisms, taking up energy from the sun and growing leafy vegetative material that can be consumed by animals. Animals in an ecosystem are consumptive organisms and can be herbivores, carnivores, and omnivores. Herbivores, like deer, only eat plants. Carnivores, like hawks, only eat other animals. Omnivores eat both plants and animals.

Supplies and Tools

Printed food chain species

Die

Scissors

Glue

Misc. items for game pieces

Cardstock, posterboard, or other paper



Activity Steps

Learn about the different plant and animal species below by reading about their eating behaviors. Then, cut out each square and arrange them on a paper or poster board in the order that energy would flow through the ecosystem. You may draw multiple paths from the same animal or plant. Ask an adult to check your work before gluing them down.

Example: Flower (producer) -> butterfly (herbivore) -> bird (omnivore) -> fox (omnivore).

Once you have glued down each species, draw a pathway from each species in the proper order. Divide the pathway into small squares to represent board game spaces. Find some items around the house or outdoors to represent game pieces, like an acorn or stone. Play your board game with friends and household members to teach them what you've learned about ecosystems and food chains.

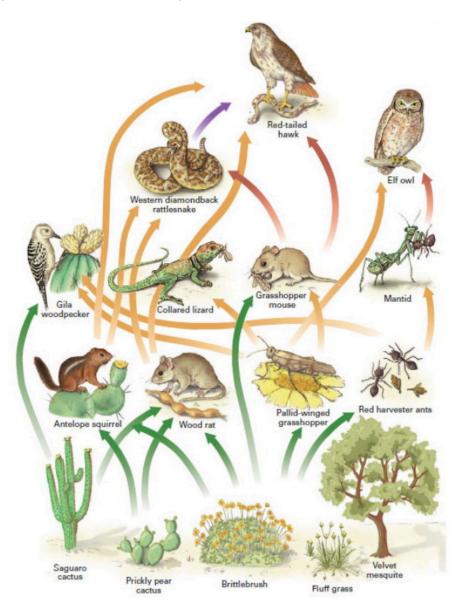


Image source: evergreenps.org

Food Chain Players



Grass - Producer



Eastern red-tailed hawk -Carnivore



Red fox - Omnivore



American bullfrog -Carnivore



White-tailed deer -Herbivore



Beetle - Omnivore



Sparrow - Omnivore



Racoon - Omnivore



Apple tree - Producer



Eastern tiger swallow-tail butterfly - Herbivore



Ox-eyed daisy - Producer



Deer mouse - Herbivore

If you enjoyed this project, visit <u>4-h.extension.uconn.edu</u> to learn more about UConn 4-H. Check out the <u>UConn 4-H</u> webpage to view the video associated with this activity.

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