



Ecosystem Cards

Pond Ecosystem

As evening approaches, a great blue heron lands in the shallow waters at the edge of the pond, searching for frogs and fish to eat. Suddenly, a “plop” is heard as green frogs quickly slide from their hunting places among the vegetation into the water. They will look for tasty insects later when it is safer. Almost unnoticed, a female red-winged blackbird tends to her eggs, her brown-streaked coloring blending in among the tall grasses and cattails found along the edge of the pond. The male is singing loudly and flashing the bright yellow and red on his wings as he defends his territory. Soon these birds will be feeding insects to their young. There appear to be small logs and branches going across the pond. It is a beaver taking branches to fix up the dam! This area was once a smaller side stream, but a beaver built a dam to create this pond.



As darkness engulfs the pond, the quiet night is interrupted by the hooting of a great horned owl perched somewhere in the nearby woods. Small animals beware; the owl is ready to hunt. Back at the pond, as many animals rest for the night, the big brown bats fly out over the water, feasting on mosquitoes, moths, gnats, and other night insects.

Eastern Deciduous Forest

On the damp forest floor a chipmunk scurries and digs beneath fallen leaves in search of black walnuts to store away. A black bear ambles slowly by, sniffing the ground for ants, grubs, and acorns to feast upon. Nearby, the rap-tap-tapping of a pileated woodpecker is heard echoing through the canopy of cathedral-like maple and oak trees. Trees are home to many beetles and ants, favorite foods of the woodpeckers. Clusters of white pine and cedars waft a sweet earthy fragrance as a red squirrel feasts on the fallen pinecones and mushrooms below. A barred owl roosts high in the pine tree, full after a successful night of hunting squirrels, rabbits, and mice. A red-shouldered hawk arises from the oak tree to begin its day of hunting for squirrels, mice, and chipmunks. After an early morning meal of acorns, berries, and young leaves, white-tailed deer nestle beneath a cluster of raspberry brambles waiting for the sun to rise and warm the day. As wild turkeys begin to move about scratching for seeds and grubs to eat, they suddenly take shelter in a large tree nearby as a lone coyote, tired from a night of hunting for shrews, mice, and voles, searches for a resting place. In the distance, a “kurplunk” is heard, creating ripples on the surface of a vernal pool; a frog is on the move. It is morning in this mixed hardwood forest.



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Field Ecosystem

Grasshoppers munch on the leaves of purple coneflowers while watching out for meadowlarks and grasshopper sparrows that could eat them. Nearby, leaf-cutting bees buzz among the clover and coneflowers, collecting pollen on the hairs on their abdomens. A solitary red-tailed hawk sits in an oak tree overlooking the meadow. Quickly, she swoops into the field and catches a meadow vole, interrupting its meal of grasses. Other animals, now on alert, soon settle back to their tasks. A short-tailed shrew continues to search for grasshoppers and other insects to eat. Pathways made by the meadow vole help the shrew travel through the foxtails, little bluestem, and other tall grasses. A cottontail rabbit quietly feasts on clover flowers, constantly scanning for predators. Later in the afternoon, a young woodchuck comes out of its underground burrow to munch on orchard grass while turkey vultures take off from their resting spot in the trees to



fly over the field, searching for carrion to eat. Suddenly, there is a flash of red through the grasses as a red fox gives chase to the cottontail rabbit. The rabbit hops away, zigzagging into a thicket of young pine trees. The fox missed this meal! Soon several young foxes, called kits, come out of the underground den, made from an abandoned woodchuck hole. They pounce on each other and chase after the grasshoppers. As they get a bit older, they will be out on their own, hunting for rabbits, woodchucks, and other small mammals.

Urban Park

As joggers and bicyclists zip past an overgrown stand of Norway maples and sumac, a chickadee flits high above—from branch to branch—feeding on spiders, gnats, beetles, and poison ivy berries. Overhead, a kettle of turkey vultures swirl in concentric rings looking for a road-killed opossum along the way. Flashes of red brighten the day as cardinals fly among the shrubs, snacking on seeds, while a bluebird munches on a caterpillar picked off the viburnums. Soon a gray squirrel scurries from behind a mulberry tree and digs into the leaf litter for acorns. The squirrel perches on an old stump to eat its acorn, constantly on the lookout for red foxes and other predators. A hungry blue jay, hoping to steal the acorns to eat, chases the squirrel. The noisy jay startles a box turtle moving steadily under the shrubs in search of berries and other food. As an angler casts out for catfish in the park's small lake, black ducks and grebes search for snails, aquatic insects, and small fish to eat. Chimney swifts perform an aerial dance above the water's surface feasting on a fresh hatch of mayflies. Meanwhile a red-tailed hawk is getting ready to fly off in search of squirrels, chipmunks, and meadow voles, while earthworms emerge from holes in the soil to become a delicious meal for a flock of hungry robins. It is a busy morning in the city park.

