

Terrestrial Ecosystems (Biomes)

Type of Ecosystem	Description
Tundra	<ul style="list-style-type: none"> • Located near the north and south poles • Light rainfall • Average summer temperature is 1° C • Subsoil is permanently frozen • Many lakes, ponds, and bogs • Very few small trees • Small plants • Animals: reindeer, caribou, polar bears, arctic wolves, foxes, hares, lemmings, birds, and insects
Coniferous Forest	<ul style="list-style-type: none"> • Located about 60° N latitude • Medium rainfall • Average summer temperature is 12° C • Subsoil thaws during summer • Some lakes, ponds, and bogs • Coniferous trees such as spruce and fir • Only a few deciduous trees • Animals: moose, black bears, wolves, lynx, wolverines, martens, porcupines, and birds
Deciduous Forest (the state of Maryland falls into this biome)	<ul style="list-style-type: none"> • Located in middle latitudes between 20° and 60° N latitude • Medium rainfall • Average summer temperature is 24° C • Trees are broad-leaved, change colors in autumn • Animals: squirrels, deer, foxes, and bears
Grasslands	<ul style="list-style-type: none"> • Located in mid-continent areas of middle latitude • Found in regions with warm and cold cycles and tropic regions on the savannas with wet and dry cycles • Low rainfall • Average summer temperature is 20° C • Large (bison, pronghorn antelope, zebra) and small (burrowing rodents, prairie dogs) herbivores on the savannas
Tropical Rain Forest	<ul style="list-style-type: none"> • Located near the equator and near mountain ranges • Humid • Heavy rainfall • Average summer temperature is 25° C • Tall trees with dense canopies • Floor doesn't get much sunlight, but temperature is constant • Diverse species of plants and animals
Deserts	<ul style="list-style-type: none"> • Located on either side of the equator between 0° and 20° latitudes • Little rain • Extreme temperature fluctuations • Average summer temperature is 30° C • Not much grass • Plants have adapted to desert conditions • Animals: kangaroo rats, snakes, lizards, some birds, spiders, and insects

Aquatic Ecosystems

Type of Ecosystem	Description
Freshwater	<ul style="list-style-type: none"> • Streams, rivers, lakes, marshes, and swamps • Low salinity level • Found in areas with differing temperatures • Support a wide variety of animal and plant life
Marine	<ul style="list-style-type: none"> • Divided into intertidal, pelagic, and benthic zones • High salinity level • Intertidal zone – area of shore that can be seen between low and high tides • Most biologically active area • High level of light and nutrients • Under the most stress • Pelagic zone – largest ocean area • Divided into two areas • Shallow area closer to shore with a maximum depth of 200 meters • Good light for photosynthesis • Animals: fish (tuna, herring, sardines, sharks, rays), whales, and porpoises • Deeper area comprises most of the oceans of the world – deeper than 200 meters • Little light, cold temperatures, and high pressure • Animals: lantern fish, eels, and grenadier fish • Benthic zone – ocean floor • Animals: worms, clams, hagfish, crabs • Coral reefs in warm, shallow areas – home to sea stars, plankton, sponges, and a variety of fish
Estuary	<p>Fresh and salt water meet in coastal area</p> <p>Fluctuating salinity level (not as high as in ocean ecosystems)</p> <p>Water is surrounded by land with access to open ocean and rivers</p> <p>Contains salt marshes and swampy areas</p> <p>Biologically diverse</p>