

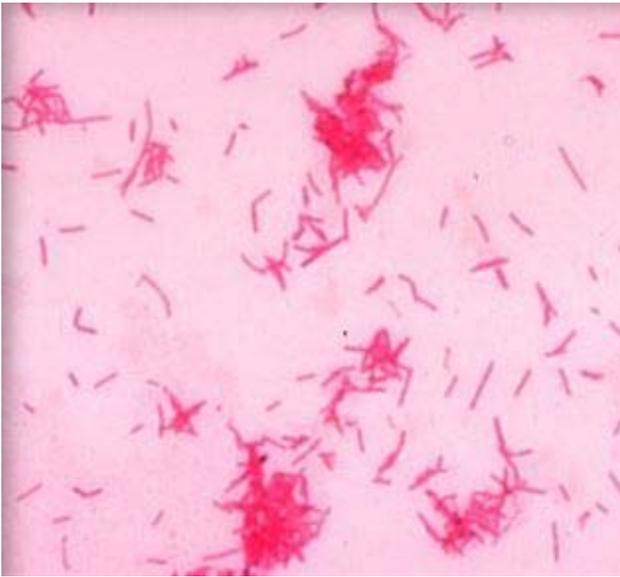
bacteria

Clostridium spp.

Domain:	Bacteria
Division/Phylum:	Firmicutes
Class:	Clostridia
Order:	Clostridiales
Family:	Clostridiaceae

ILLINOIS STATUS

common, native



(400x)

FEATURES

Bacteria are microscopic, unicellular, prokaryotes (no defined nucleus). The members of the genus *Clostridium* are usually rod-shaped, but they may be coccoid (spherical) to filamentous. Most cells have flagella to assist in movement. Individuals are grouped in pairs or short chains. These bacteria can produce an endospore to help survive harsh environmental conditions. The endospore may be oval or spherical.

BEHAVIORS

The members of the genus *Clostridium* are found in many habitats throughout Illinois. Optimal temperatures for growth are between 10 and 65 degrees Celsius. They are usually obligate anaerobes, meaning that they do not use oxygen in respiration, so they can grow in places where oxygen does not occur. Many species produce toxins. Some are pathogens for animals through wound infections or absorption of toxins. The bacterium that causes botulism, a form of food poisoning, is a member of this genus.

ILLINOIS RANGE



(1000x)



(1000x)

Aquatic Habitats

bottomland forests; lakes, ponds and reservoirs; Lake Michigan; marshes; peatlands; rivers and streams; swamps; temporary water supplies; wet prairies and fens

Woodland Habitats

bottomland forests; coniferous forests; southern Illinois lowlands; upland deciduous forests

Prairie and Edge Habitats

black soil prairie; dolomite prairie; edge; gravel prairie; hill prairie; sand prairie; shrub prairie