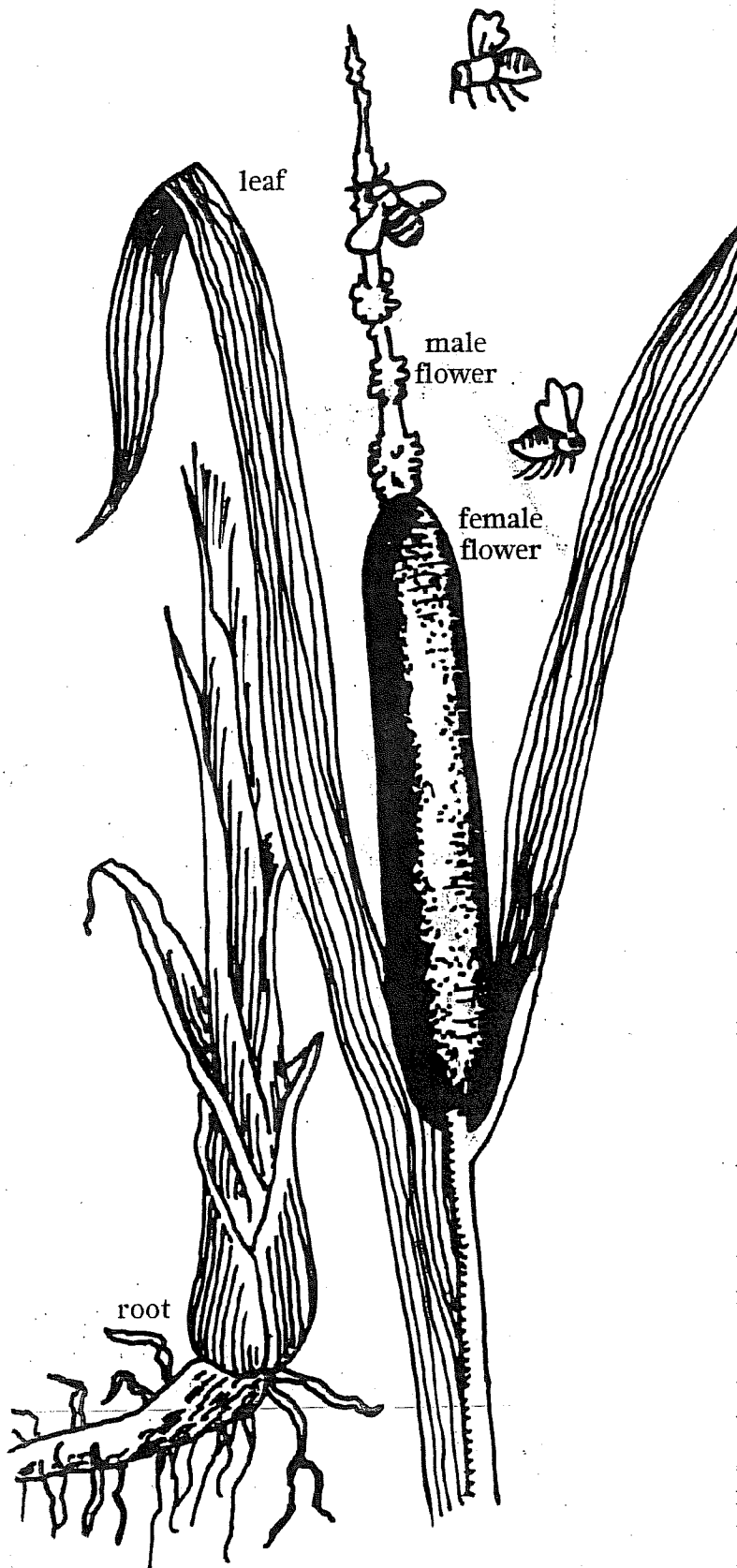


Cattails



Cattails are tall aquatic plants that often grow in the shallow water of fresh water marshes. Their roots grow down and also grow sideways and send up new shoots close to the existing plants. Because of this ability of root growth, cattails often grow in dense or thick stands.

In the spring, strong, stiff sword-like leaves poke up through the wetland soil. The flat, narrow leaves are one-inch wide and grow taller than the thin, stiff stem. In May, the stem produces a pencil-thin, velvety, green spike. The top six inches of this spike will bear tiny golden male flowers. This part of the spike remains slender. The lower six inches, made up of thousands of even tinier brown female flowers, is plumper.

The male flowers burst open in the spring, releasing pollen which is carried by both insects and wind to fertilize other female cattail flowers. The male flowers drop off and the top of the spike becomes bare. The female flowers mature and swell into a fat, velvety, brown, cylinder-shaped seed head. This seed head is actually thousands of tiny brown seeds. Each seed is attached to a fluffy bit of cattail. In late winter the fluffy seeds are carried by the wind, dispersing millions of them near and far. Many new cattail plants will grow from these seeds.

Redwing blackbirds often nest among the cattails and use cattail fluff to line their nests. A bittern (bird) can often be found hiding in a cattail marsh stretching its beak straight up, causing the lines of its feathers to blend with the cattail plants. Even before the cattails re-grow in the spring, muskrats eat the cattail roots.

When cattails die down each year, they become a mass of decaying material in the shallow water. Decaying cattail plants are food for millions of tiny and microscopic organisms that are food for larger organisms. Rivers can carry some of the rich cattail decaying matter downstream to the estuary.

CATTAIL CONTRIBUTIONS

Read the attached article with information about cattails and study the illustration.

State **four** ways cattails contribute to the productivity of the living river basin system and give evidence from the text for your answers.

CATTAIL CONTRIBUTIONS TO A LIVING RIVER BASIN SYSTEM

1.

2.

3.

4.
