



## black fly

representative species

Kingdom:	Animalia
Division/Phylum:	Arthropoda
Class:	Insecta
Order:	Diptera
Family:	Simuliidae

### Features

Black flies (buffalo gnats) undergo complete metamorphosis (egg, larva, pupa, adult). The larva may grow to one-fourth inch long. A distinctive trait of the larva's body is that one end is wider than the other. The black fly larva breathes through its body surface. It has a black head and usually has a pair of foldable, fanlike structures on the anterior end. A suction pad helps the larva remain in one place in the stream. The larva may be green, brown, gray, or black. The adult black fly is black or gray with a humped thorax, short antennae, short legs, and wings that are broad at the base. The adult is very small (only about one-fifth inch long).

### Natural History

The larva and pupal stages of the black fly live in streams. Masses of larvae attached to stones look like moss. Adults are terrestrial (living on land). The female black fly deposits eggs on submerged vegetation or other items in water in midsummer. The larva attaches itself to rocks on the stream bottom

with a pad of silk it spins and with hooks on its abdomen. Transformation into the adult stage occurs in late spring and early summer. The female adult needs a blood meal to nourish the developing eggs and often becomes a biting pest to humans at this time. The larva is a filter-feeder on algae, microscopic organisms, and plant debris.

### Habitats

interior rivers and streams

### Iowa Status

common; native

### Iowa Range

statewide

### Bibliography

Iowa Department of Natural Resources. 2001. *Biodiversity of Iowa: Aquatic Habitats* CD-ROM.