

Horn fly

Haematobia irritans



Photo by Tom Harvey, K-State Research and Extension

Description: Small, gray flies, about 3/16 inch long; a slender, black piercing mouthpart projects forward from the bottom of the head. They often aggregate densely on cattle, each fly oriented with its head in the same direction as hair tips of that site on the host.

Domestic animals affected: primarily cattle but to a lesser extent will feed on horses, sheep, and goats.

Damage caused: irritation from incessant biting is compounded by blood loss and effects on host physiology causing reduction in milk production, efficiency, and rate of gain. There is little to implicate horn flies in disease transmission, although it is a within-herd possibility.

Development: complete metamorphosis: egg, three larval instars (maggots), pupa, adult.

Generational time: often probably 14 to 18 days, but as few as 10 days under ideal conditions.

Oviposition site: fresh cow manure; the female fly often begins ovipositing before the cow has completed defecation.

Larval habitat, feeding: larvae live in fresh pats of cow dung and feed on the microbial flora and fauna in it and from decomposition products of microbial action on the dung.

Adult habitat, feeding: On finding a host, horn flies remain on it and others in the same herd for life, moving to different anatomical sites to regulate their temperature and minimize exposure to the wind. Both sexes suck blood, males feeding ca. 20 times and females ca. 40 times daily.

Method of dispersal or infestation: strong fliers, on emerging as adults they fly to find hosts; up to 10 miles has been recorded; most probably find cattle within 3 miles.

Seasonality: in Kansas, April through October and, in a warm fall, even as late as mid-November; often abundant June through mid-July with a second population peak in mid- to late August.

For additional information contact:

Ludek Zurek Ph.D.

Medical and Veterinary Entomology

Department of Entomology

Kansas State University

Manhattan KS 66506

(785) 532-4731

lzurek@ksu.edu

Kansas State University Agricultural Experiment Station and Cooperative Extension Service