

Face fly

Musca autumnalis



Photo by Tom Harvey, K-State Research and Extension

Description: similar to the closely related house fly, ca. 1/4 to 5/16 inch long and with a slightly darker body; sponging mouth-parts with microscopic rasping "teeth"; face between eyes and mouth is silvery.

Domestic animals affected: horses and cattle.

Damage caused: nuisance effect on animals, but research shows no direct reduction in performance; they mechanically vector *Moraxella bovis* (pinkeye) bacteria and are biological vectors of nematode eyeworms that affect cattle and horses.

Development: complete metamorphosis: egg, three larval instars (maggots), pupa, adult; puparium is white, calcified.

Generational time: usually 12 to 20 days depending on temperature.

Oviposition site: fresh cow manure within hours after deposition.

Larval habitat, feeding: larvae live in cow dung pats, feeding on the microbial flora and fauna in it and on decomposition products resulting from microbial activity.

Adult habitat, feeding: Off the host, they rest on vegetation or structures at night and most of daylight hours or feed on plant sugars and juices on the surface of manure deposits. On host animals, they obtain protein from nasal mucus, saliva, and tears; microscopic "teeth" on their tongues are used to abrade eye tissue to stimulate the flow of tears (see Note below). Opportunistically, they are attracted to, and feed on, blood made available by horse fly bites or other wounds. Face flies do not enter dimly-lighted building interiors.

Method of dispersal or infestation: Strong fliers capable of traveling several miles, but most stay within the host's vicinity; they do not come into buildings except for the autumn (diapausing) brood which seeks an overwintering site.

Seasonality: Adults emerge from winter hibernacula in March and early April and may be temporarily abundant on faces of cattle and horses at that time; then they decline in number until June or July when the population rebounds; present to numerous into mid-October.

Notes or comments: 70 to 95% of face flies on an animal are females, as they need more protein than do the males.

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

K-State Research and Extension is an equal opportunity provider and employer. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and United States Department of Agriculture Cooperating, Fred A. Cholick, Director.