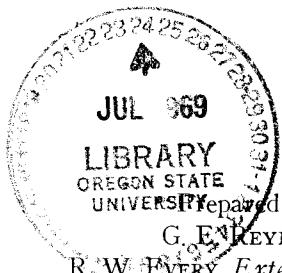


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The Face Fly

Prepared by R. L. GOULDING, *Entomology Department*,
G. E. REYNOLDS, *Extension Animal Health Specialist*, and
R. W. EVERY, *Extension Entomologist, Oregon State University, Corvallis*

The face fly was found in Canada in 1952. This was the first record of its appearance in North America. By 1958 it had become a pest in several eastern states and was found in Oregon for the first time in 1967. It now occurs in all parts of the state.

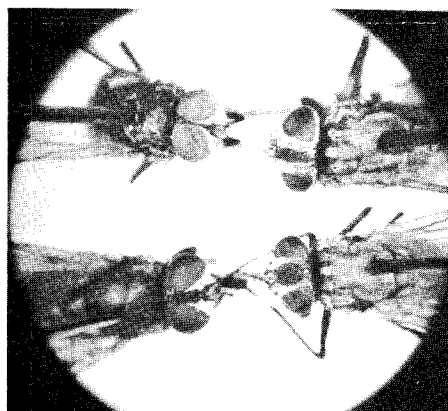
The face fly does not bite or suck blood from its host. It feeds on secretions and moisture around the eyes and muzzle of cattle, horses, and sheep. The resulting irritation causes infested animals to seek shade and disrupts their feeding, which may be reflected in poor gain and reduced milk production.

"Pinkeye," or infectious bovine keratoconjunctivitis, is an important infectious disease of eyes of cattle which may be transmitted by the face fly in addition to other routes of infection. It is one of the most difficult cattle diseases to prevent or treat in a practical manner. Pinkeye is economically important because infected animals may fail to gain weight at a normal rate or may even lose weight. Milk cows may drop in production by 50%. Treatment is an additional cost. Infected animals should be isolated from the rest of the herd and kept in the shade when possible to reduce contact with face flies. Your county Extension agent can supply additional information on control of pinkeye in livestock.

The face fly may become a household pest. In the fall the flies seek sheltered hibernation sites and may enter homes. They become active on warm days during the winter and are especially noticeable in the spring.

The face fly is a little larger and darker than the house fly. The eyes of the male face fly nearly touch, whereas eyes of the male house fly are somewhat separated by a dark hairy patch. The male face fly has an orange-colored ab-

domen. The female face fly has an orange stripe on the abdomen. Both face flies and house flies may be found on the faces of cattle, and both may be found resting on the outside of buildings, fence posts, and similar places.



—ROLAND W. PORTMAN, UNIVERSITY OF IDAHO

Top: face flies; Bottom: house flies. The face fly closely resembles its near relative, the common house fly. The most noticeable differences are in their faces. Eyes of the male face fly (top left) almost touch, while those of the male house fly (bottom left) are separated by a dark, hairy patch. A similar dark, hairy patch between the eyes is characteristic of the females of both species. However, note that in the female face fly (top right), the patch is narrow, covering only about one-third of the area between the eyes, while in the female house fly (bottom right), it is wide, covering more than half the area between the eyes.

Face flies may be found on animals during daylight hours throughout most of the summer. At night they rest on vegetation. They spend two or three days feeding on the animals and four or five days feeding on dung. Egg laying occurs when females are feeding on fresh droppings. Face fly maggots develop in dung. The period from egg to adult usually requires about two to

three weeks, and repeated generations of flies occur throughout the summer. The adults are strong fliers and marked flies have been found $\frac{3}{4}$ of a mile from points of release. Other reports indicate even greater distances of flight in a 24-hour period.

Control

There is no single satisfactory approach to face fly control on beef cattle. Reasonably satisfactory control can be expected in dairy herds which are treated regularly. The difficulty in control is caused by habits of the fly. Only a small percent of the face fly population is on cattle at any one time. Flies are able to fly relatively long distances in a short time, and treated animals are subject to reinfestation.

Spraying: Control of the face fly on dairy animals has been achieved by frequent spraying with fine mist sprays containing one of the materials shown in the control chart.

Full volume spraying of beef animals as practiced in the control of horn flies has given only temporary control of face flies. This practice would be of practical value under circumstances where the spray could be applied just before animals were moved to pastures or range where reinfestation by face flies was not imminent.

Ultra low-volume malathion sprays applied by aircraft at the rate of 8 ounces actual malathion per acre have given reasonably good control of face flies and may have value under circumstances where animals are confined to relatively small pastures. Flies have been effectively controlled by this method for four or five days, followed by gradual increase. Several treatments at about 12- to 16-day intervals probably

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would be required to reduce the stress of face flies.

Face flies are frequently found resting on the sides of buildings, fence posts, and around corrals. General fly control to reduce house flies will contribute to face fly control.

Backrubbers: When properly placed in situations where animals are forced to use them, backrubbers offer the most practical method of face fly control. They should be placed near salt boxes, between pastures and water, in gates or lanes through which cattle move, or in places where cattle congregate. Livestock owners are most familiar with the best situations for setting up the self-treating devices for forced use. Dust bags as used for horn fly control on beef cattle may be of value in reducing face flies. Do not use dust bags with horned cattle.

Feed additives: Low level feeding of salt-mineral mixtures containing ronnel have reduced fly larvae in cattle droppings. This reduction may not result in lower fly populations because of the migration of adult flies. Variable results may be attributable to differences in consumption rates.

Natural controls: In states where the face fly has been present for a longer time than in Oregon a parasitic nematode has been a factor in reducing numbers of face flies. This nematode has been found in flies in Oregon. The nematode prevents flies from normal egg laying.

Precautions

Follow the manufacturer's precautions when using any insecticide. Be sure that the label clearly indicates that the insecticide formulation can be used on livestock. Do not contaminate food, feed, or drinking water with insecticides.

Do not use phenothiazine or tranquilizers within two weeks of the time animals have had access to organic phosphate compounds. All chemicals mentioned in this publication except toxaphene are considered to be in the organic phosphate class of insecticides.

The control recommendations appearing in this fact sheet were drawn in part from field observations and trials conducted by LeRoy C. Wright in cooperation with Dr. James A. B. McArthur at the Eastern Oregon Experiment Station.

Dairy Cattle

Insecticide	Application rate ¹	Restrictions
Sprays		
Ciodrin—1% low volume spray application	Use 4 T. Ciodrin 1.1 lb./gal. E.C. per 1½ pts. of water. Apply 5 t. of spray to the face and a total of 5 to 10 t. to the back and sides of the animal three times per week. One t. of sugar per pint of spray improves control.	Do not apply more than three times per week.
Ciodrin—2% as spray (hand or power sprayers)	Use 8 T. (4 fl. ozs.) Ciodrin 1.1 lb./gal. E.C. per 1½ pts. water. Spray thoroughly to cover all parts of the animal, including legs. Use 1 to 2 fluid ozs. of spray per animal. Apply daily.	
Ciodrin—2% as ready-to-use animal spray solution	Apply daily as a fine mist to cover all parts of the animal.	Do not apply in excess of 2 fluid ozs. per day.
Ciovap—mixture of 1% Ciodrin and ¼% Vapona as a ready-to-use animal spray solution	Apply with hand-powered or automatic spray equipment. Apply daily as a fine mist to cover all parts of the animal, including legs. Do not use in excess of 2 fluid ozs. daily per animal.	Do not wet the skin. Do not apply regularly to calves under 6 months of age. Do not use on Brahman cattle.
Vapona—1% as ready-to-use animal spray solution	Apply 1 to 2 fluid ozs. per animal as a fine mist spray daily with hand sprayer. Apply to cover all parts of the animal, including legs.	Do not apply more than 2 fluid ozs. daily per animal. Do not wet the skin. Do not apply regularly to calves less than 6 months of age. Do not use on Brahman cattle.
Backrubbers²		
Ciovap—a mixture of 1% Ciodrin and ¼% Vapona	Ready to use.	Do not allow calves under 6 months to have regular access to rubber. Do not use on Brahman cattle.
Ciodrin—1% in oil	Mix 1 qt. of Ciodrin E.C. (1.1 lb./gal.) per 4 gals. of backrubber oil.	
Co-Ral—1% in oil	Use 1 gal. 1 lb./gal. E.C. per 13 gals. of backrubber oil.	

¹ T = tablespoon; t = teaspoon; E.C. = emulsifiable concentrate.

² Use No. 2 diesel or fuel oil or oils especially prepared for backrubber use. Use approximately 1 gallon of insecticide-oil mixture per 20 lineal feet of backrubber. *Do not mix insecticide with used motor oil.*

Beef Cattle

Sprays

Where practical, any of the sprays suggested for use on dairy cattle may be applied to beef animals. Use the same rate and method of application. In addition, sprays of 0.5% Korlan, 0.375% Ruelene, 0.5% malathion, and 0.5% toxaphene applied with power sprayers may give temporary reduction in fly numbers. Follow the manufacturer's directions for mixing these sprays and observe the restrictions appearing on the label.

Insecticide	Application rate	Restrictions
Backrubbers¹		
Ciovap, Ciodrin, or Co-Ral	Use as suggested under dairy animals.	
Korlan—1% in oil	Mix 1 gal. Korlan 24E with 27 gals. of backrubber oil.	Do not use backrubber treatment within 14 days of slaughter.
Toxaphene—5% in oil	Follow label directions for mixing.	Do not allow cattle access to backrubbers within 30 days of slaughter.
Co-Ral	Use as suggested under dairy animals.	

¹ Use No. 2 diesel or fuel oil or oils especially prepared for backrubber use. Use approximately 1 gallon of insecticide-oil mixture per 20 lineal feet of backrubber. *Do not mix insecticide with used motor oil.*