

DIFLUBENZURON	GROUP	15	INSECTICIDE
LAMBDA-CYHALOTHRIN	GROUP	3A	INSECTICIDE

# PROZAP<sup>®</sup> PROTECTUS

## POUR-ON INSECTICIDE - IGR



BEEF CATTLE

## Triple Active Formula for Use on Beef Cattle and Calves

Prozap<sup>®</sup> Protectus Pour-On Insecticide—IGR is a triple active formula for use on beef cattle and calves that kills chewing and sucking lice, horn flies, stable flies, horse and deer flies. A unique combination of actives includes an insect growth regulator (IGR), adulticide, and a synergist that provide cattle relief from infestations and producers a reliable solution that helps minimize handling, time, and labor costs. The addition of the insect growth regulator, diflubenzuron, kills louse eggs before they hatch, providing season long control of lice in one application.

Contains 3% diflubenzuron, 2.5% piperonyl butoxide, and 0.5% lambda-cyhalothrin.

- Ready-To-Use as a Pour-On
- Kills chewing and sucking lice, horn flies, stable flies, horse and deer flies on beef cattle and calves
- Kills louse eggs before they hatch
- Season long control of lice

### 0.5 gal. Size\*: Treats 64 Cattle

(1,000 lbs. per animal)

### 2.5 gal. Size: Treats 320 Cattle

(1,000 lbs. per animal)

\*0.5 gal. (1.892 L) comes in a backpack style bottle with a snap-on dip tube and removable storage compartment that contains strap and spigot cap for easy dispensing. The container can be used upright, with the dip tube, or inverted without the dip tube. This provides the user the convenience to use mobile or stationary.

Prozap Pour-On Applicator Gun sold separately.

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.



## Prozap Coordinated Insect Management

Take Integrated Pest Management to the next level with Prozap's Coordinated Insect Management strategy. Plan your approach to insect management with your veterinarian based on your regional pests, seasons, and the economic thresholds of insect populations to begin treatment. Implement the plan using Prozap products and other control methods, then monitor results and consult with your veterinarian or other professional to adjust the plan and rotate actives to avoid resistance.

Learn more at [www.Prozap.com](http://www.Prozap.com) or scan code.



## Application of Prozap Protectus Pour-On Insecticide—IGR

Apply to beef cattle and calves at the rate of 0.1 fl. oz. (3 mL) per 100 lbs. of body weight, equivalent to 1 fl. oz. (30 mL) per 1,000 lb. animal. Apply correct dose along back using a graduated applicator gun. Keep away from eyes and mucous membranes of the animal being treated. Shake well before use.\*

\*It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Read the entire label and follow all use directions, use restrictions, and precautions.



## Prozap Pour-On Applicator Gun

The Prozap Pour-On Applicator Gun is a 30 mL adjustable dose gun designed to accurately apply Prozap Protectus Pour-On Insecticide—IGR and other pour-on products. It is easily adjusted from 1 mL to 30 mL in 1 mL increments with a simple turn of the adjustment dial.

Comes complete with following accessories:

- 6 ft. Surgical Grade Tubing (0.37" ID)
- Dip Tube
- Wide Mouth Cap (fits all Prozap 2.5 gal. products)
- Standard Sized Spigot Cap
- Hose Armor Springs (2)





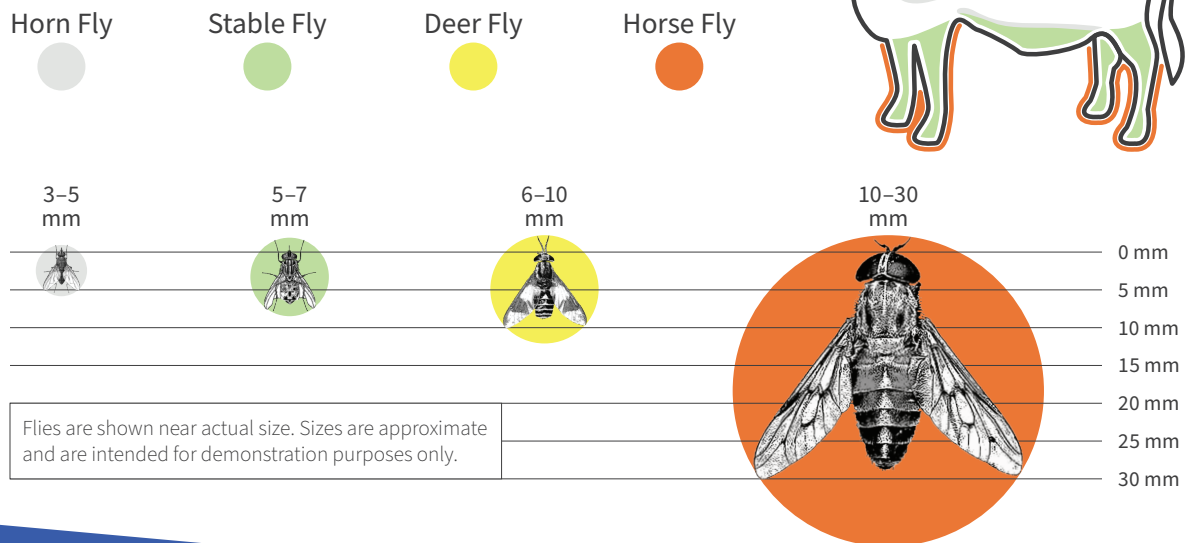
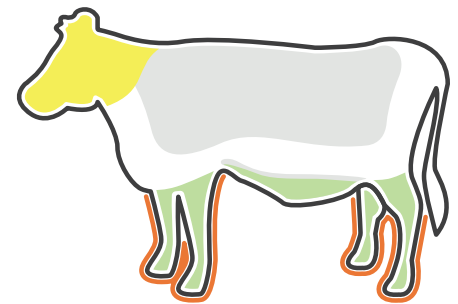
# Flies in Beef Cattle



Areas of Infestation



Size Comparison



Horn Fly

Horn flies are one of the most economically important pests of beef cattle, estimated at more than a billion dollars of damage and loss to the cattle industry each year. Treatment initiation is advised when a threshold of 100 horn flies per animal is reached and normal grazing patterns are altered as cattle attempt to gain relief.<sup>1,2</sup> The horn fly is a small blood-feeder (3–5 mm long) found in constant association with grazing cattle and in smaller numbers on dry lot or indoor cattle. They are greyish in color with two stripes on their thorax. They have piercing/sucking mouthparts and bites are painful to cattle. Horn flies feed on blood 20–30 times a day, resting on cattle between feedings. They can be seen on the withers, back, and side of the cattle and will move to the belly during the hottest parts of the day.



Horse Fly

Horse flies and deer flies are significant livestock pests with painful and persistent biting behavior. Heavy attacks can lead to reductions in weight gain, reduced milk yield, and reduced feed utilization efficiencies. Adult flies serve as vectors for many disease agents (viruses, bacteria, protozoans and nematodes) of livestock.<sup>3</sup> The horse fly is a large fly (10–30 mm long) that can be a serious nuisance to livestock. They feed on blood and can be seen feeding in various areas on the animal, but the legs are the favored area.



Deer Fly

Deer flies are smaller than horse flies (6–10 mm long) and are yellow to brown in color with patterned wings. Deer flies prefer to bite high on the body, head, or shoulders.



Stable Fly

The biting/feeding behavior of stable flies causes a reduction in feed intake, slower growth rates, and reduced weight gain in cattle. Production losses in cattle will likely occur when bunching, stamping, and tail switching is excessive or when the economic threshold of three stable flies per leg is met.<sup>4</sup>

Stable flies resemble the house fly in appearance but are slightly smaller in size (5–7 mm long) and have a painful bite. They feed on the lower portions of cattle, around the legs and belly, including the udder. Adults have a piercing/sucking proboscis used to extract blood. They have seven circular black spots on a gray abdomen.

# PROZAP<sup>®</sup> PROTECTUS

POUR-ON INSECTICIDE - IGR



Chewing  
Lice



Sucking  
Lice

## Lice in Beef Cattle

Lice are a common winter problem on cattle and heavy infestations can lead to economic losses due to reduced weight gains and general “unthriftiness,” leaving cattle more susceptible to disease. Moderate-to-heavy lice infestation can reduce weight gain by 0.21 pounds per day.<sup>5, 6, 8</sup>

Economic losses from lice infestations to U.S. cattle producers are estimated to be over \$125 million a year.<sup>5, 7</sup>

The cattle biting louse has a bluntly triangular head and is pale brown with dark bands running across the body (1–2 mm in length). The chewing louse feeds on hair and skin and is frequently found on the top line of the back, especially the withers area and will spread to the poll and tail head.

There are three species of sucking lice, which feed on blood and are commonly found on cattle: the short-nose cattle louse (3–5 mm in length), long-nose cattle louse (2.5 mm in length), and the little blue cattle louse (1–2 mm in length).

Both chewing and sucking lice reduce performance and irritate cattle, causing them to rub against available objects, which damages hides, fences, equipment, and buildings.<sup>5</sup>

Product Number	Product	UPC	EPA Registration Number	Case Ct.
1896010*	Prozap Protectus Pour-On Insecticide—IGR 2.5 gal. (9.464 L)	045446028812	89459-127-47000	2
1898010	Prozap Protectus Pour-On Insecticide—IGR 0.5 gal. (1.892 L)	045446028829	89459-127-47000	4
380708	Prozap Pour-On Applicator Gun 30 mL Adjustable Dose	658261380708	N/A	10

\*One (1) Prozap Pour-On Applicator Gun is included per case of 2.5 gallon Prozap Protectus Pour-On Insecticide—IGR.



<sup>1</sup>Koehler, P., Butler, J. et al. (2005). Horn Flies. University of Florida Extension ENY-285, 1–3.

<sup>2</sup>Byford, R., Craig, M. et al. (1992). A review of ectoparasites and their effect on cattle production. *Journal of Animal Science*, 70, 597–602.

<sup>3</sup>Texas A&M AgriLife Extension, Livestock Veterinary Entomology <https://livestockvetento.tamu.edu/insectspests/horse-fly/>

<sup>4</sup>Texas A&M AgriLife Extension, Livestock Veterinary Entomology <https://livestockvetento.tamu.edu/insectspests/stable-fly/>

<sup>5</sup>Campbell, J. (2006). Lice control on cattle. Neb Guide, U. of Nebraska—Lincoln, 1–2.

<sup>6</sup>Byford, R., Craig, M. et al. (1992). A review of ectoparasites and their effect on cattle production. *Journal of Animal Science*, 70, 597–602.

<sup>7</sup>Kunz, S., Murrell, K. et al. (1991). Estimated Losses of Livestock to Pests. CRC Handbook of Pest Management in Agriculture, 1, 69–98.

<sup>8</sup>Gibney, V., Campbell, J. et al. (1985). Effects of various infestation levels of cattle lice on feed efficiency and weight gains of beef heifers. *J. Econ. Entomol.* 78, 1304.

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