

# **House Fly Densities around Ag Barns and Dairies in Texas**

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House flies pose a serious pest for barn/stable operators and dairy operators throughout the United States. When the population rises well above a manageable rate they begin to travel to nearby houses and businesses. House flies do not bite but are extremely annoying and are not appreciated by the general public. Although most livestock can tolerate several hundred house flies at one time, people become discouraged at the site of one house fly. In addition to their nuisance status, house flies have the ability to mechanically transmit over 200 known pathogens that cause disease to humans and animals. Therefore it is important for barn/stable operators and dairy operators to keep their house fly numbers suppressed.

## **Objective**

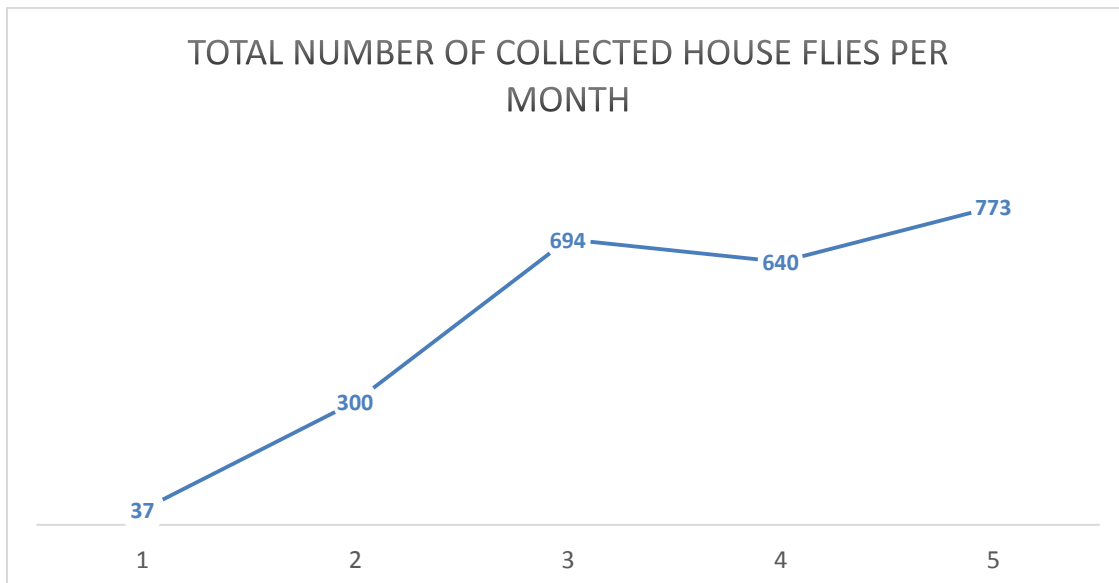
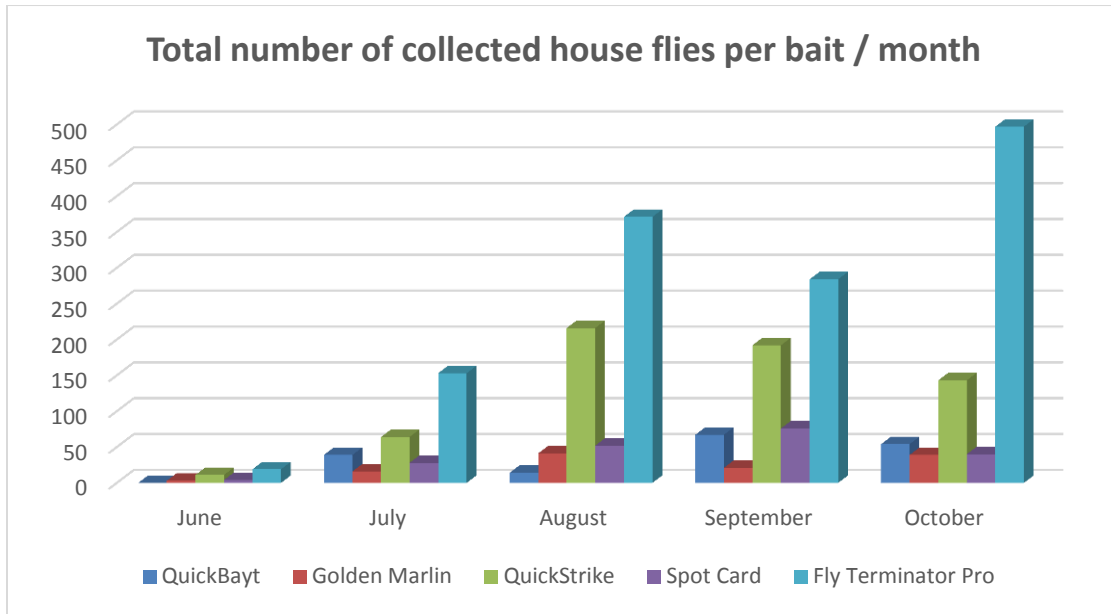
- Record house fly numbers during the 2018 fly season in Districts 3, 4, 5, 7, 8 and 10 in Texas with scatter bait stations containing different types of baits (QuickBayt, QuikStrike, and Golden Malrin) and pheromone traps.
- Compare the products and number of dead house flies in order to determine which scatter bait is the most effective at attracting and killing house flies.

## **Methods**

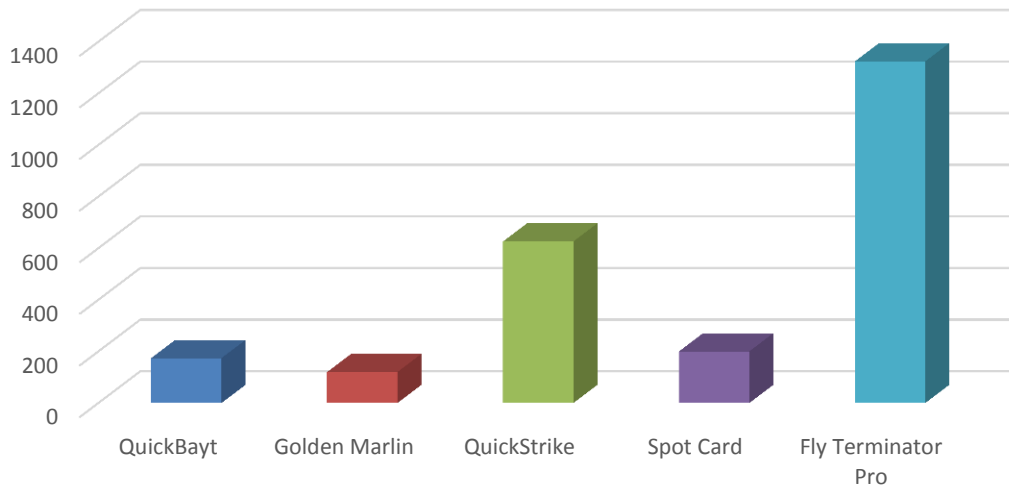
- The trial was set up from June 1 until October 31.
- One location (livestock barns) was chosen and traps were set up.
- Collections were made on a monthly (every 4 weeks) basis from the location.
- Bait stations were placed or hung 4 ft. above the ground out of animal reach.
- The Fly Terminator Pro trap was hung at least 4 ft. above the ground out of animal reach at one location.
- The sites compared different products (4/site).
- Bait stations were small sized plastic containers with lids and filled with 1 oz. of Golden Malrin, 1 oz. of QuikStrike or 1 oz. of Quick Bayt, 3 bait stations / barn.
- The Fly Terminator Pro traps were filled with the instructed amount of water and the pheromone attractant dissolves in the water within the trap.
- At each visit, the old bait was removed.
- New bait was placed in the bait station at that time and a new Fly Terminator Pro trap was placed up at each visit.
- The collected bait and dead house flies were then removed from the barn and fly numbers were recorded.
- In addition to the traps, spot cards were placed by each trap to evaluate the number of house flies resting in the vicinity.

## Data & Results

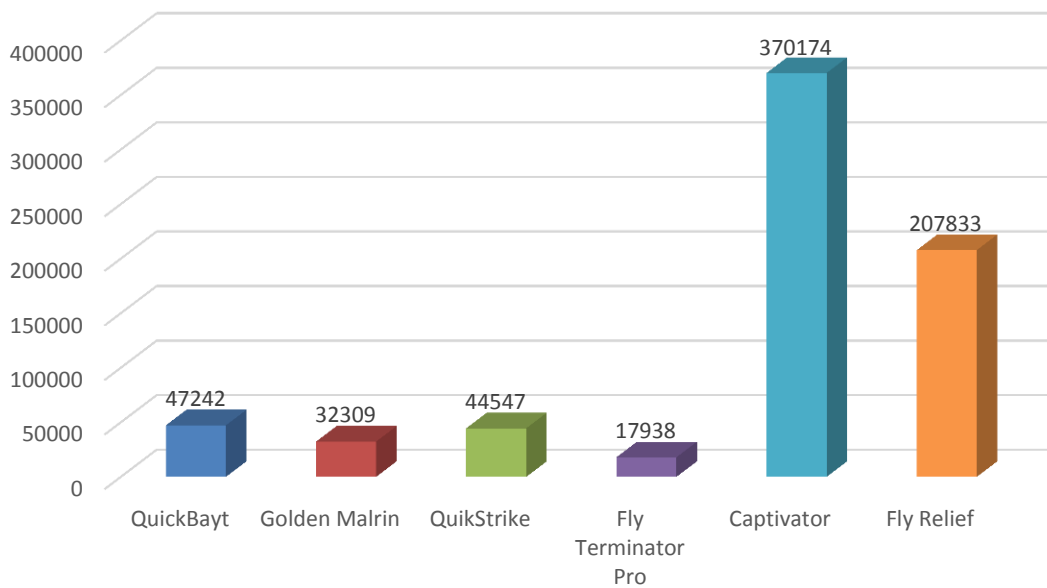
	Month 1	Month 2	Month 3	Month 4	Month 5
	June	July	August	September	October
QuickBayt	0	39	14	67	54
Golden Marlin	3	16	41	21	39
QuickStrike	11	64	216	192	143
Spot Card	4	28	52	76	40
Fly Terminator Pro	19	153	371	284	497



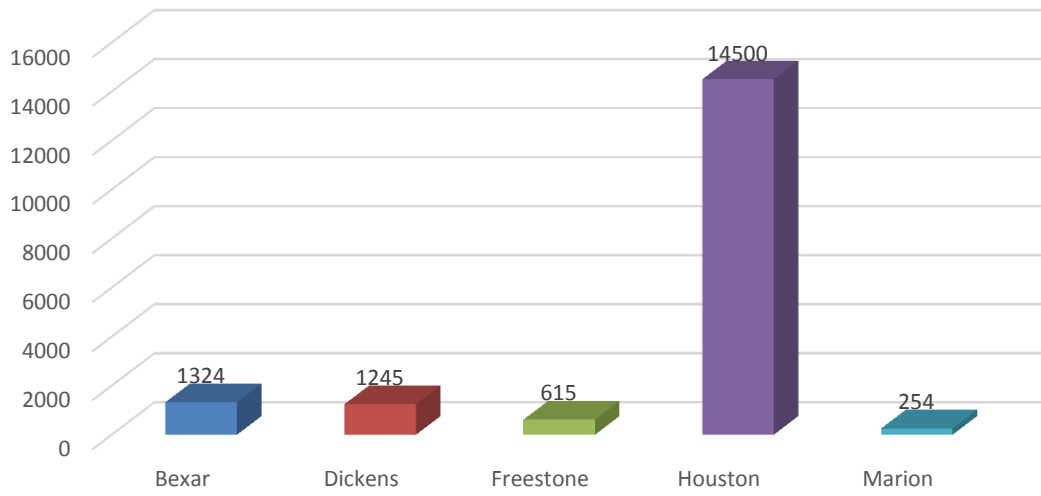
**Total number of house flies collected per bait in Bexar County**



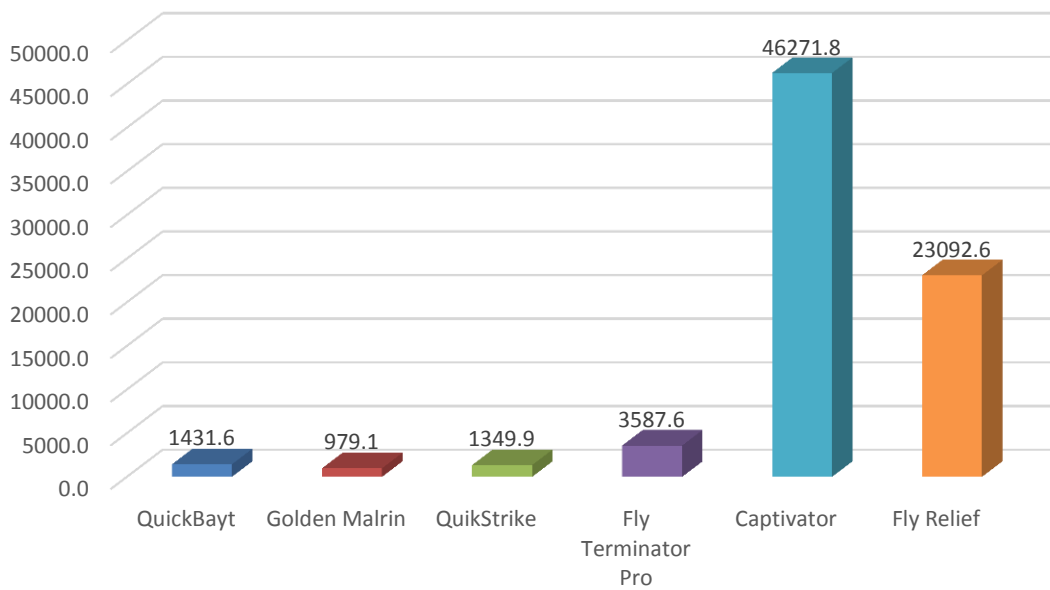
**Total Number of Dead House Flies per Baits & Traps 2018**



Fly Terminator Pro Totals



Total Average Flies per Bait Station 2018



## **Conclusion**

The total number of dead house flies collected from Bexar County equaled 2,244. The three baits tested collected decent amounts with QuikStrike bait collecting the most at 626. A total of 174 dead house flies were collected with QuickBayt and 120 house flies were collected with the Golden Malrin. The Fly Terminator Pro traps collected 1,324 dead house flies, which is clearly where all the flies were going.

The total number of dead house flies collected from the thirty-three counties that participated in the house fly project equaled an estimated 720,043 dead house flies. The three baits tested collected 47,242 total flies with QuickBayt, 44,547 total flies with QuikStrike and 32,309 flies with Golden Malrin. The pheromone traps collected 595,945 total house flies, captivator totaled the most with 370,174, Fly Relief collected 207,833 and the Fly Terminator traps collected 17,938 flies.

The pheromone traps are designed to attract house flies with an attractant and cause the flies to be trapped within the device upon entering. Therefore, total house fly collections always surpass the baits. This year the baits were placed out in small plastic tubs instead of the milk jug bait stations and results show the collects to be higher but there is no way to tell if that was from the collecting containers.

This year the number of fly catches varied from the previous year with QuickBayt bringing in the highest number of dead flies beating QuikStrike by 2,695 flies and Golden Malrin by 14,933 flies. This year all the counties were given each of the baits, QuickBayt, QuikStrike and Golden Malrin to test in a single barn just like last year. The bait collections were higher this year when compared to 2017's numbers with the pheromone traps collecting 4.8 times more flies than the baits.

Collective state results show all of the trap options to be effective, this year the Golden Malrin had the lowest numbers when compared to the other baits, same as last year. The most successful bait used was QuickBayt. The non-insecticidal traps showed excellent numbers again and accurate results when changed monthly. In practical settings, these traps are not changed as frequently as they should be and their effectiveness diminishes when the water and pheromone attractant run dry.