

CYZMIC Activity



NO! Not that kind of Seismic Activity

We changed our barrier spray treatment



Active Ingredient:
Tau-fluvalinate



Active Ingredient:
Lambda-cyhalothrin



StrikeMax PolyMax Adjuvant



an adjuvant that improves the consistent spreadability and adhesion when combined with a pesticide for a treatment

How we did it



- Pour 2 fl.oz Cyzmic CS along with 1.5 fl. oz. of StrikeMax PolyMax Spray Tank Adjuvant in a 2.5 jug of water
- Shook well to mix
- Mixed only the amount of jugs needed to complete spray

- A few things that was noticed:
- No spray if within a 24 hour period of rain
- All proper PPE was worn in preparation, during and after barrier treatments and while cleanup of reusable PPE and equipment was done.
- Minor irritation was noticed if skin came in contact with pesticide. Follow all labeled instructions

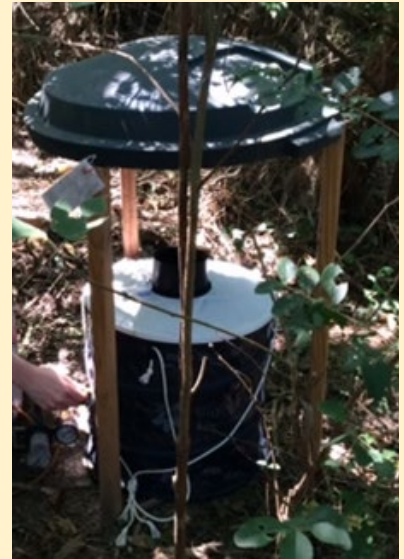


Why change to Cyzmic CS?

- **Mavrik over time wasn't working as effectively**
- **Pesticide rotation**
- **We wanted to see if could work better**

What we did...

- **For a comparison of Mavrik Perimeter to Cyzmic CS**
- **3 sites where chosen for the comparison**
- **Each site consisting of a treated & untreated site**
- **Trapping was done at each site simultaneously**



Trapping, Collections, & Barrier Sprays

- **Trapping was done every week from Apr. 5th – Oct. 10th for both Treated & Untreated sites for years 2021 & 2022**
- **Barrier Sprays was completed every 28 days starting 5/19/21 – 10/6/21**
- **Barrier Spray was completed every 28 days starting 6/1/22 – 9/21/22**
- **If barrier spray coincided with trapping day, it was sprayed after the traps were collected same day**
- **Barrier spray was conducted by the same technician each time**

Three sites that were chosen:

Carolina Road

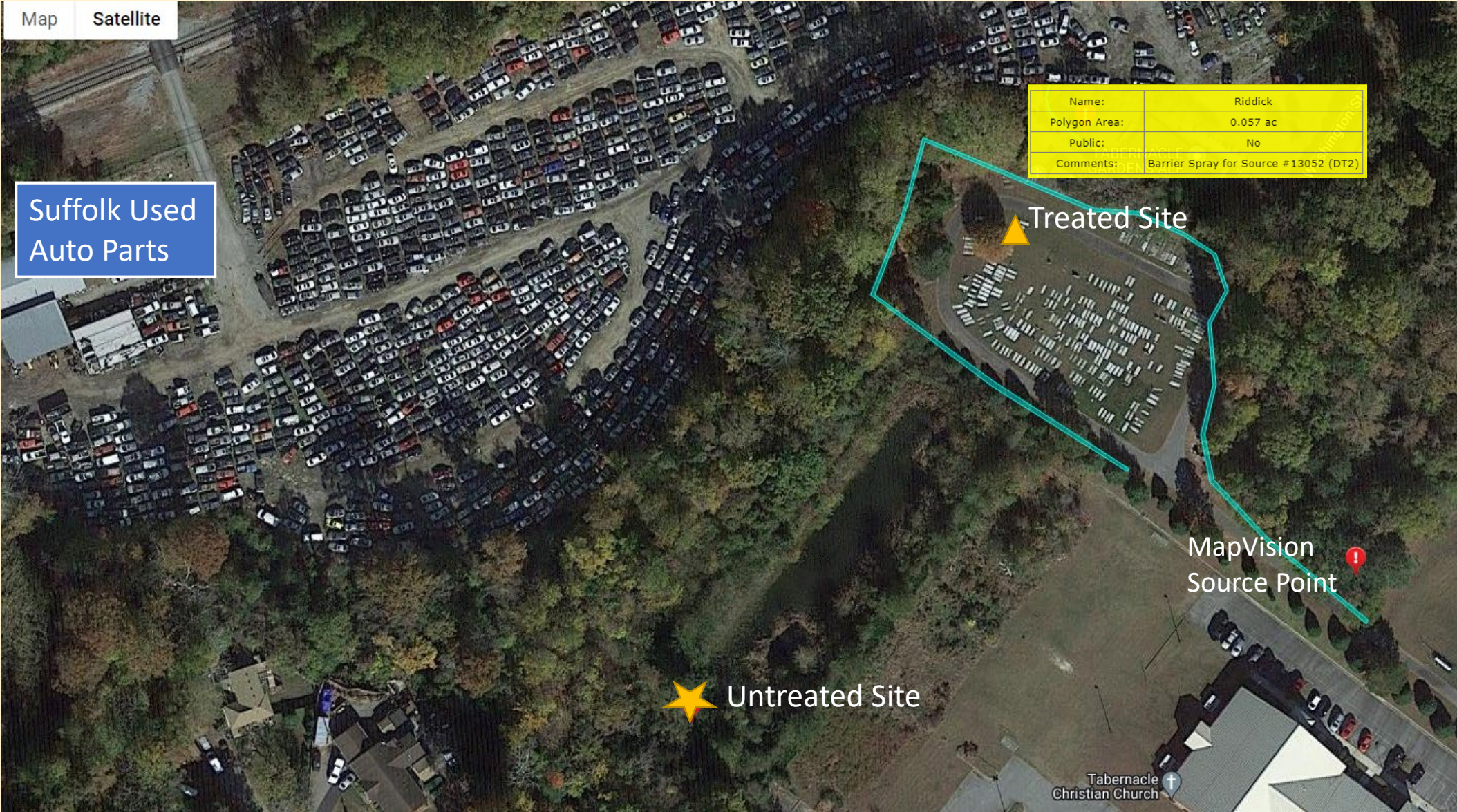


Lake Meade Dog Park



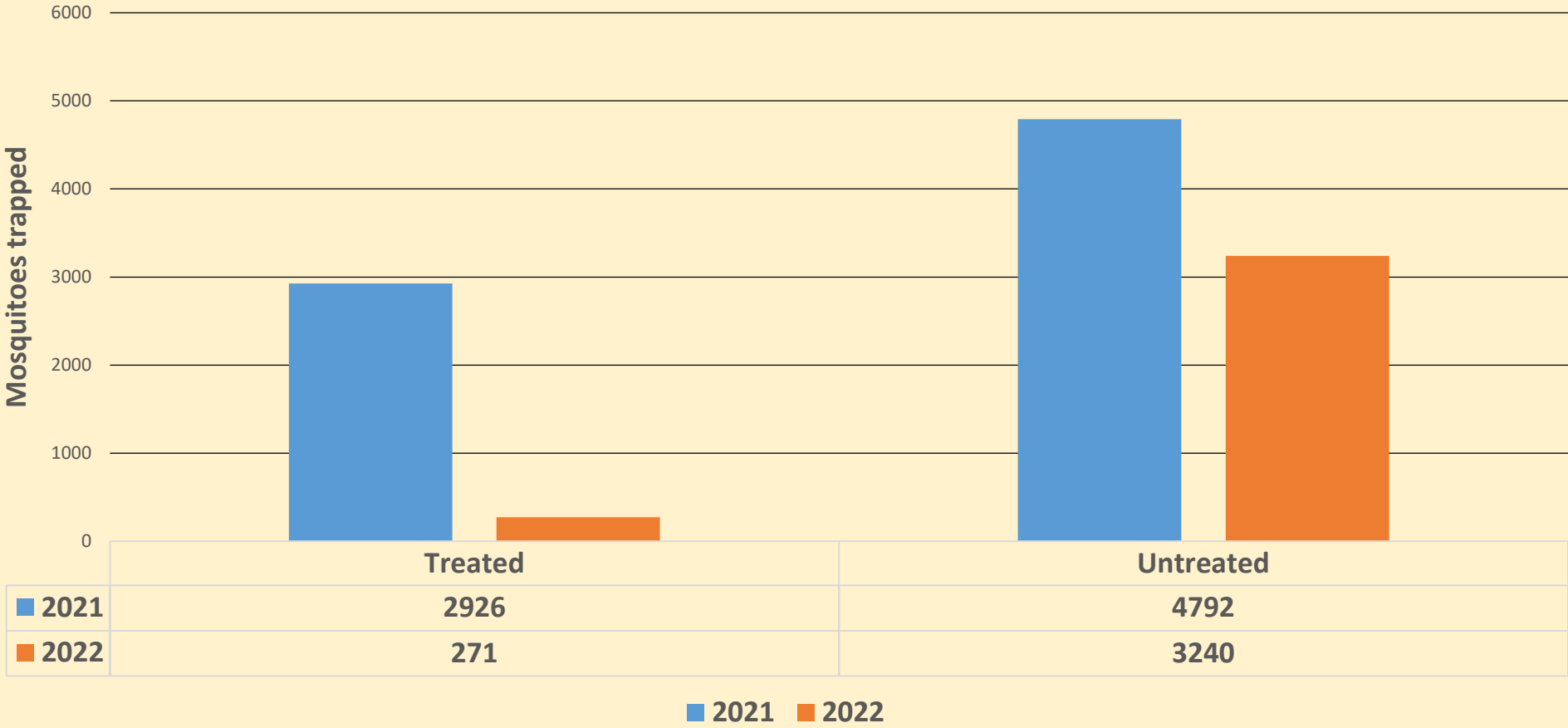
Wilson Pines

Wilson Pines



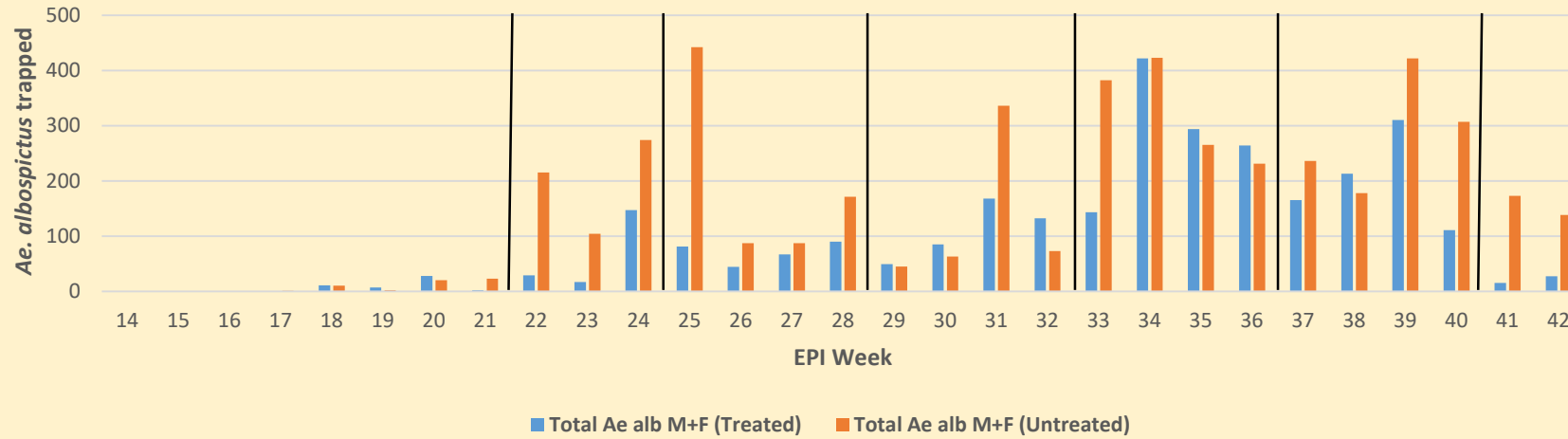
Wilson Pines Yearly Totals for 2021 & 2022

Wilson Pines Total *Ae. albopictus*

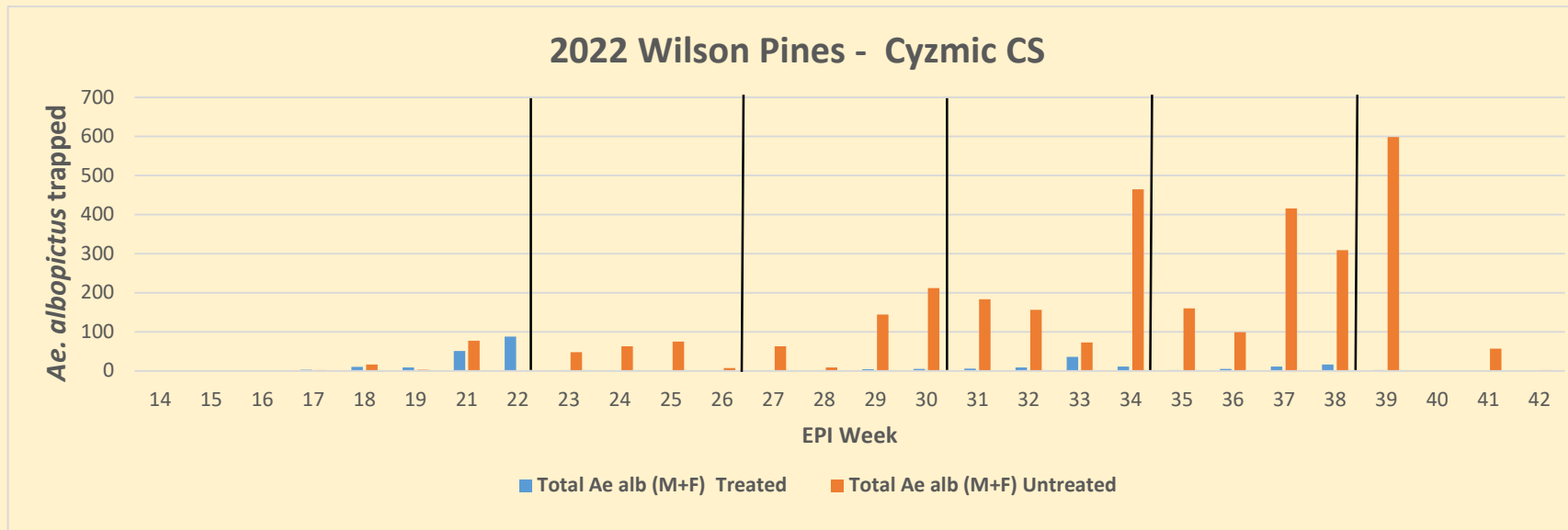


Mavrik Perimeter compared to Cyzmic CS

2021 Wilson Pines - Mavrik Perimeter

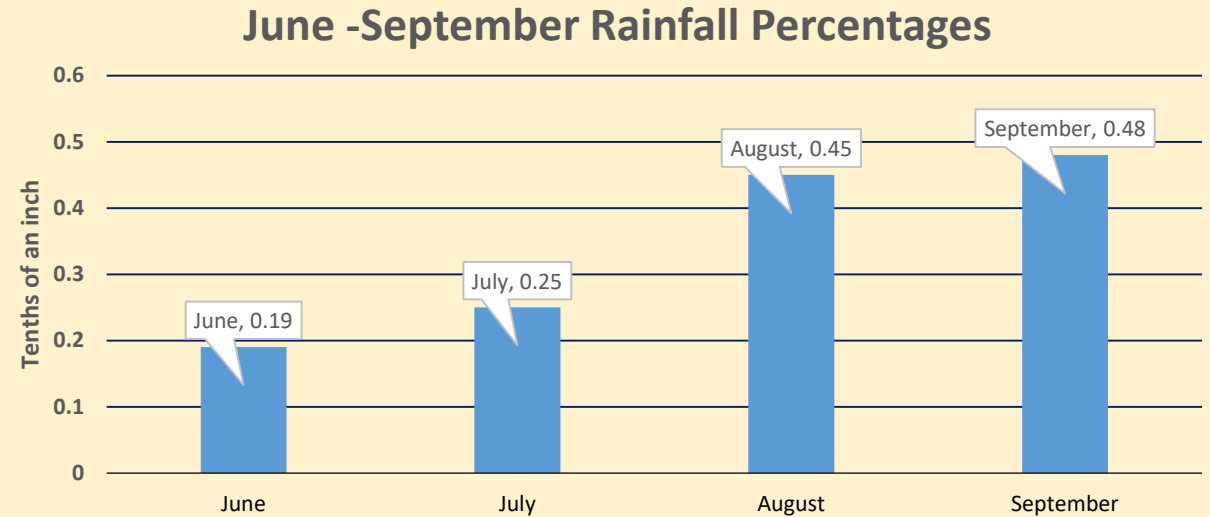


2022 Wilson Pines - Cyzmic CS



What we found was:

- That the Cyzmic CS did work better than Mavrik Perimeter, at least for our program
- It was a dry summer:
- The average rainfall from June – September was only a third of the usual amount.
- Did that have any effect on the number of mosquitoes caught?
- Not sure.
- Could the adjuvant have made the Cyzmic CS work better?
- Again, not sure.
- StrikeMax PolyMax adjuvant leaves everything with a sticky residue, yeah...but that's another story for another time



In the Future:

- Will it continue to work better than Mavrik Perimeter?
- Will we continue to see these results...
- Possibly continue to set the sites and collect data for a better comparison.
- Maybe a comparison with 2022 to 2023 Cyzmic CS numbers to see it continues to have the same results in controlling *Ae. albopictus* populations
- Maybe new sites for more trapping and more barrier spray treatment data?





Acknowledgements:

Suffolk Mosquito Control

Biologists:

Jay Kiser

Karen Akaratovic

Technicians:

Alex Riley

Junior Harrell

THANK YOU!