## Backyard Adulticiding Caribbean model

Thanks to: David Sykes; AllPro Vector Group Dr. Claude Thomas: Curtis Dynafog B&G Mosquito Control of Iowa Jasmik

Joe Andrews AllPro Vector Group & TMA

#### If a Zika Outbreak Occurs

- Spraying backyards is necessary to control container mosquitoes once adults begin to emerge
- The predominant species of concern are *Aedes albopictus* and *Aedes aegypti*
- The spray cloud needs to linger & move around obstacles such as fences, shrubbery and buildings
- Spraying can be done if certain conditions are present
- Effective applications will depend on good equipment, the right conditions and evaluations of control

#### Inversions

- An inversion is needed for best results from adulticiding
- An inversion occurs when the air near the ground is several degrees cooler than the air 20-30 ft above the ground.
- An inversion can occur in heavily shaded backyards
- Usually occurs at sundown or early morning
- An inversion helps to keep the spray cloud near the ground



#### The Weather

Best conditions for spraying

An inversion with low wind speed!



#### Adulticiding: Optimizing Applications

#### <u>Timing</u>

- Spray during peak activity period for mosquitoes: morning or evening
- Consider Inversions, Thermals <u>Environmental Factors</u>
- Don't spray during rain
- Don't spray when winds exceed label directions
- Barriers can limit spray drift
- Record Keeping
- Chemical used
- Area treated



#### **ULV: Gas Handheld**







## **ULV: Portable Units**



## **Thermal Fogging**

#### • Propane fogger

























#### Barrier Sprays & Mosquito Control for Hire Joe Andrews MAMCA 2012

## Back yard mosquito control

#### One man companies

- Yard Screen Raleigh NC
  - Surveillance
  - Tip and Toss
  - Barrier spray
  - Larvicides
- Mist Pro New Bern NC
  - Surveillance
  - Tip and Toss
  - Barrier spray
  - Larvicides
  - Misting Systems
  - IFA's
  - Ticks
  - ULV & Thermal applications

#### Franchises

- Mosquito Squad
- Mosquito Terminators
- Mosquito Authority
- BuzzOff
- MosquitoNix
- Terminix
- Cleggs
- Many others

## **Misting Systems**

- Either natural Py's or Synthetic pyrethroids
- Set on a timer (digital or analogue)
- Two to three sprays per 24 hours
  - Set at sunset midnight and 4-5 AM
- 30 to 45 seconds in duration
- 200+ psi
- An estimated 8 micron droplet
- Nozzles placed around the perimeter on risers in and around harborage
- Mixing drums or self injecting systems









#### **Barrier Applications**

- Can be made with a variety of products that are NOT labeled for ULV applications
- Can keep mosquitoes away from certain areas such as playgrounds, schools, etc
- Are usually "wet" sprays applied to foliage
- Products for Barrier applications are usually applied using a backpack or pump up "hand held" sprayer
- Are applied at much higher rates than ULV

## Backpack sprayers





#### Backyards: Factors to Consider

#### Obstacles

- High Fences, Trees, Shrubbery
- Thermal Updrafts
- Buildings change air currents

#### **Environmental Factors**

- Good Inversions help
- Rain or fog limits control
- Wind may be from wrong direction

Keep /Maps/Good Records



#### Information

- Considerable information online
- Visit our website for labels, and SDS (MSDS)
- Equipment information is available on our website with the link
- Additional information is available on the GMCA website
- Contact our office at <u>www.allprovector.com</u> or call 888-603-1008

## **Barrier Sprays**

- 80-120 micron droplets applied with a motorized mister blower
- Applications to harborage especially along the perimeter
- Products vary widely
  - Bifenthrin
  - Cyfluthrin
  - Lambda Cyhalothrin
  - Deltamethrin
  - others

## **ULV** applications





#### ATV mounted ULV



# Thanks for your time & BE WELL...

