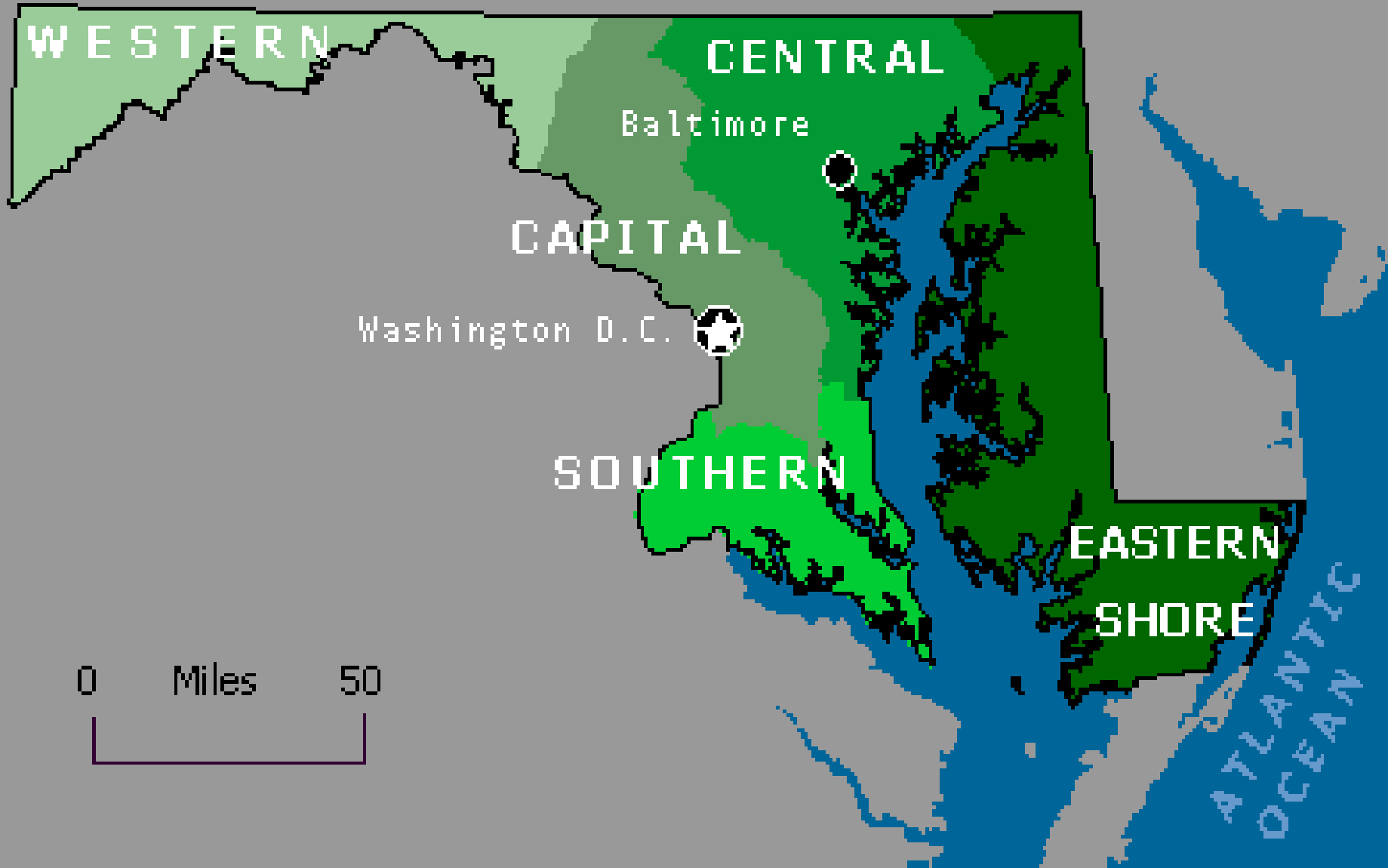


# Maryland 2019 Update



# Statewide Statistics

## Acres Treated: (Ground Control Only)

Adult Control:	1,148,628
Larval Control:	636
OMWM:	647
Total Acres Treated By Ground Control	1,149,911

# Aerial Applications

<b>Larvicide</b>	<b>5,978 acres</b>
<b>Adulticide</b>	<b>95,418 acres</b>
<b>Total</b>	<b>101,396 acres</b>



**20,797 acres in response to positive pools**

# Eastern Shore

- Above average tides (Ongoing Issue)
- Salt marsh species controlled by aircraft



# Maryland's Top 3



*Ae. sollicitans*



*Cx. species*



*An. species*



# Maryland Arbovirus Surveillance Results, 2019

Surveillance Season: July 1 - October 31, 2019

Data Current as of November 20, 2019

Population	WNV	EEE	Total
Humans	4*	0	4*
Mosquito Pools	6	3	9
Equines	0	1	1
Birds	0	0	0

## Humans

Region	Pediatric	Adult	Total
National Capitol Region	0	3*	3*
Baltimore Metro Region	0	1	1
<b>Total</b>	<b>0</b>	<b>4</b>	<b>4</b>

\*Travel-associated case

## Mosquito Pools

Region	WNV	EEE	Total
Eastern Shore	0	3	3
National Capitol Region	6	0	6
<b>Total</b>	<b>6</b>	<b>3</b>	<b>9</b>

## Equines

Region	WNV	EEE	Total
Eastern Shore	0	1	1
<b>Total</b>	<b>0</b>	<b>1</b>	<b>1</b>

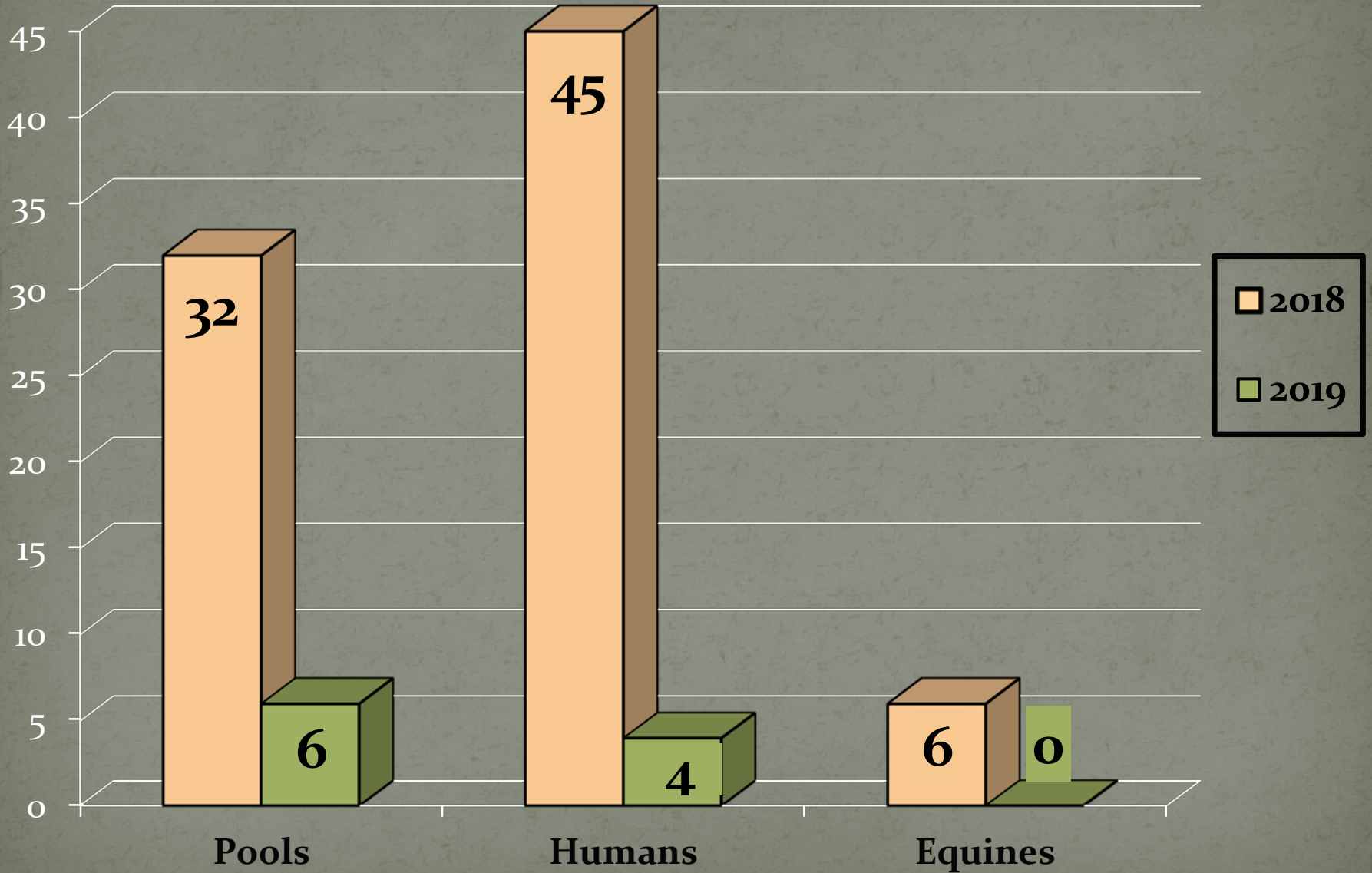
## Birds

Jurisdiction	Species	WNV	Total
None reported to date.			0
<b>Total</b>			<b>0</b>

# **Arboviral Surveillance: An Inter-Agency Coordination**

- **Mosquito pools collected by:**
  - **Maryland Department of Agriculture**
  - **Maryland Department of Natural Resources**
  - **United States Department of Defense**
- **Mosquito pools are tested by**
  - **Maryland Department of Health**

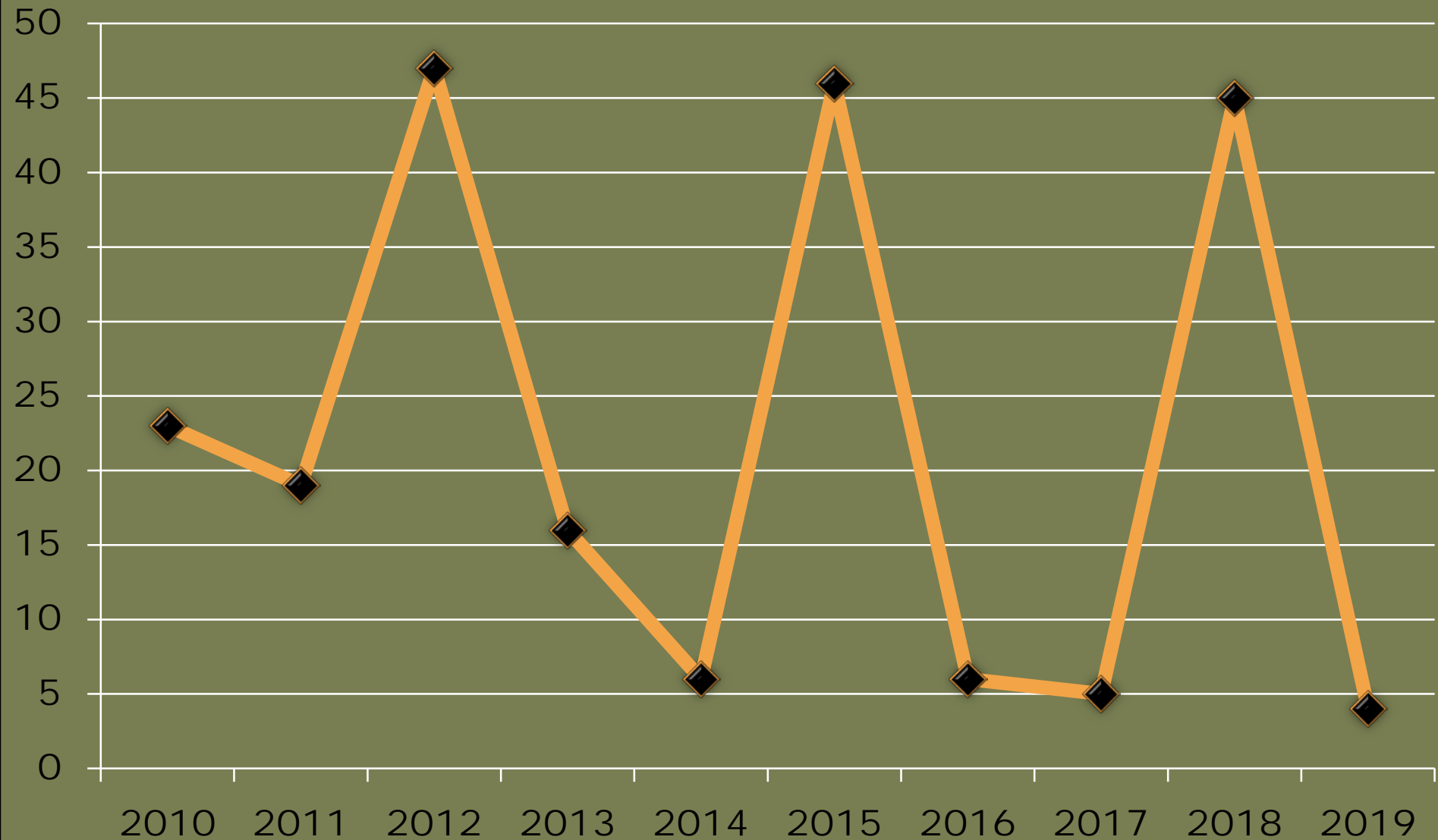
# WNV: 2018 vs 2019





# WNV Human Cases

3 Year Trend:: 2021?



# Mosquito Control + Black Fly Control



*Photo courtesy of [www.dep.pa.gov](http://www.dep.pa.gov)*

**WHO:** Maryland Department of Agriculture, Department of Natural Resources, University of Maryland Department of Entomology

**WHAT:** Black Fly Control

**WHEN:** Started in 2017  
5 - monthly applications per year

**WHERE:** Potomac River in Washington County, MD

**WHY:** Response to Citizen Requests

**HOW:** BTI applied by helicopter



Female black fly taking a blood meal (Photo credit: Oklahoma State University)

**Modeled from  
PA's program**

**What do ya'll do in the winter time?**



# Permanent Work Projects



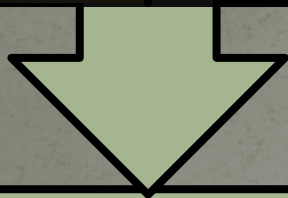
- “Off Season” November - April
  - Annual maintenance of Crisfield tidal dike/gate systems
  - OMWM Projects: New projects every year



# Corrosion of Steel

Pipes Rust

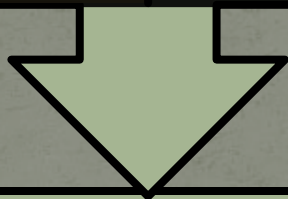
Pipes Unravel



## Gaps in Pipe

Water Flows  
in Gaps

Water Erodes  
Berm



## Breach in Berm

Dike System  
Failure

Tidal Water  
Floods Inland



# 1<sup>st</sup> Time Install with Plastic Pipe



WORKING WELL SO FAR ~ TIME WILL TELL

# Repair Heavy Equipment

- ~ Track pads are made of aluminum
- ~ Oak boards rot & buttons wear down
- ~ Track chain becomes loose: needs tightening
- ~ Routine Maintenance: oil, filters, grease bearings, replace hydraulic oil, etc.





# Winter Projects: Rebuild Old Trailer







- Facility maintenance: pruning, mulching, raking, tree felling, snow removal, etc.
  - Building repairs and upgrades: painting, welding, fabrication, carpentry, flooring, electrical wiring & conduit, rain gutter cleaning/repairs, etc.
  - Budget reviews, invoicing, compilation and analysis of field data & statistics, etc.
- «Continuously engage in projects that improve our program and facilities»**

# THANK YOU

Slideshow by: Kyle Brinson