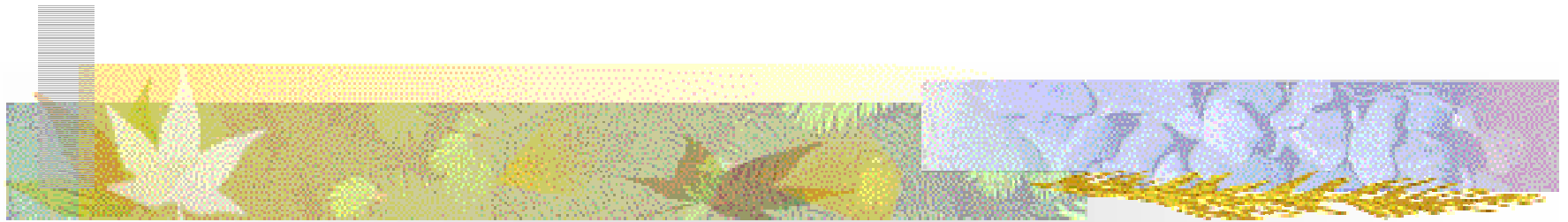


# **West Nile virus first transmission season in Florida, 2001-**

more than 400 horse cases and 170 chicken  
seroconversions but only sporadic human disease



C. Blackmore, L.M. Stark, R.L. Oliveri,  
L.A. Conti and S.T. Wiersma



# Background

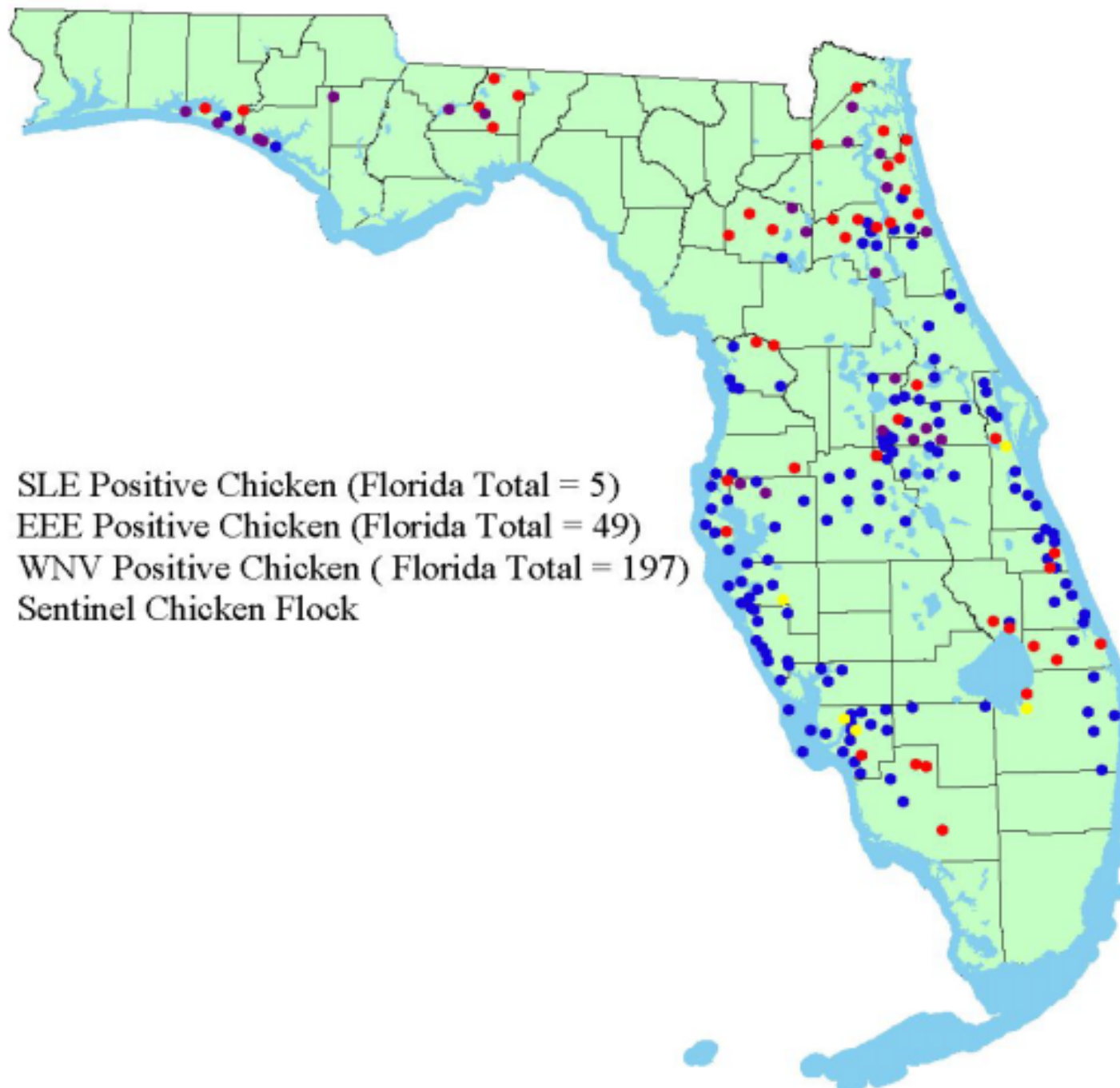
- **History of episodic SLE outbreaks + sporadic EEE disease:**
  - SLE and EEE sentinel chicken surveillance
  - Mosquito population surveillance
  - Horse illness surveillance (EEE)
  - Human case surveillance
- **Added surveillance for WN virus:**
  - Dead bird reporting
  - Dead bird testing

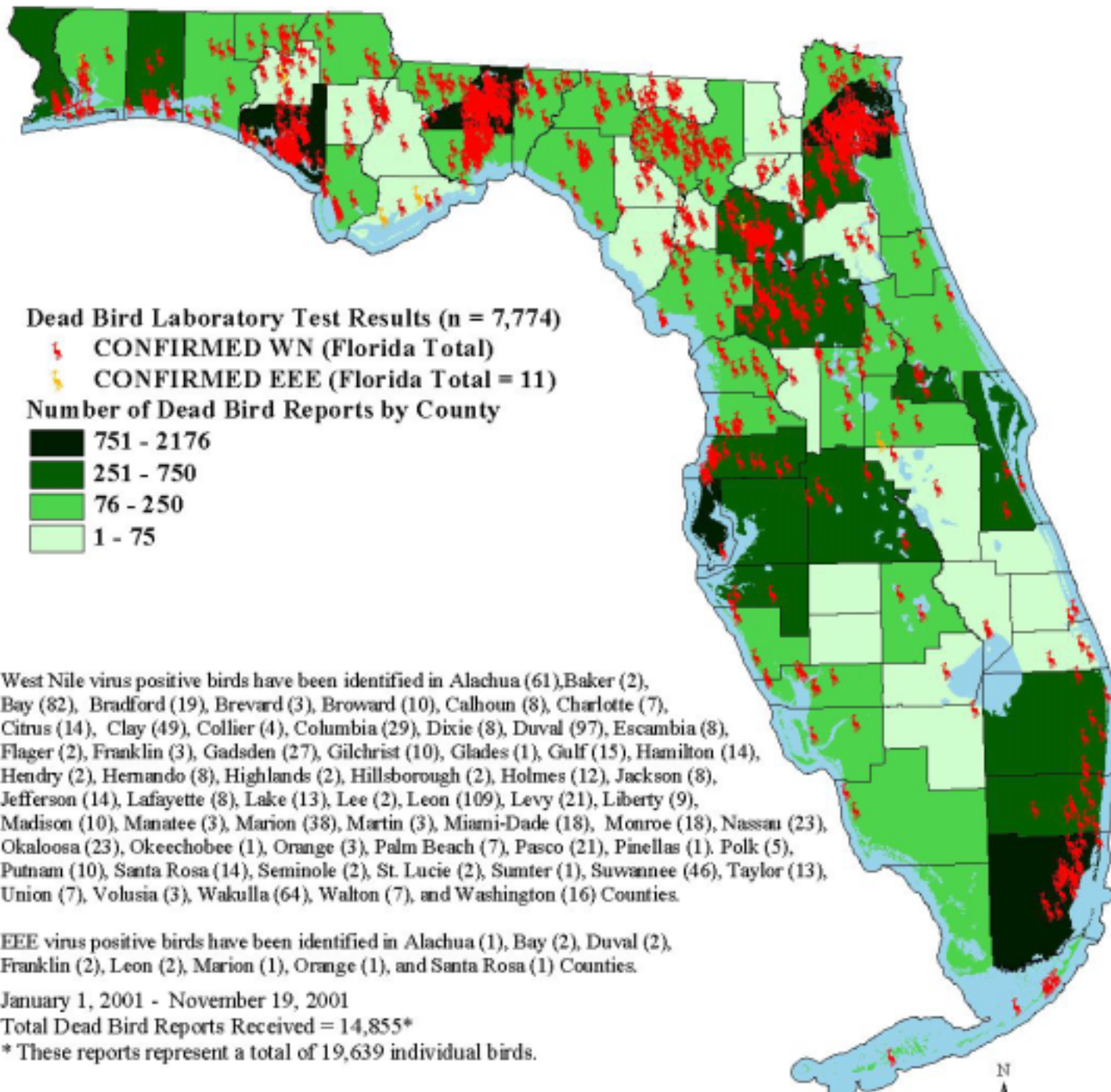


# Outbreak overview

- First confirmed WN virus infected crow-  
Jefferson Co., July 3, 2001
- 12 human cases from 9 counties
- 492 horse cases in 40 counties
- 8 cases preceded by WN + birds in county;  
7 also by + horses or chickens
- Dead birds most sensitive WN  
indicator









## WN virus positive by species

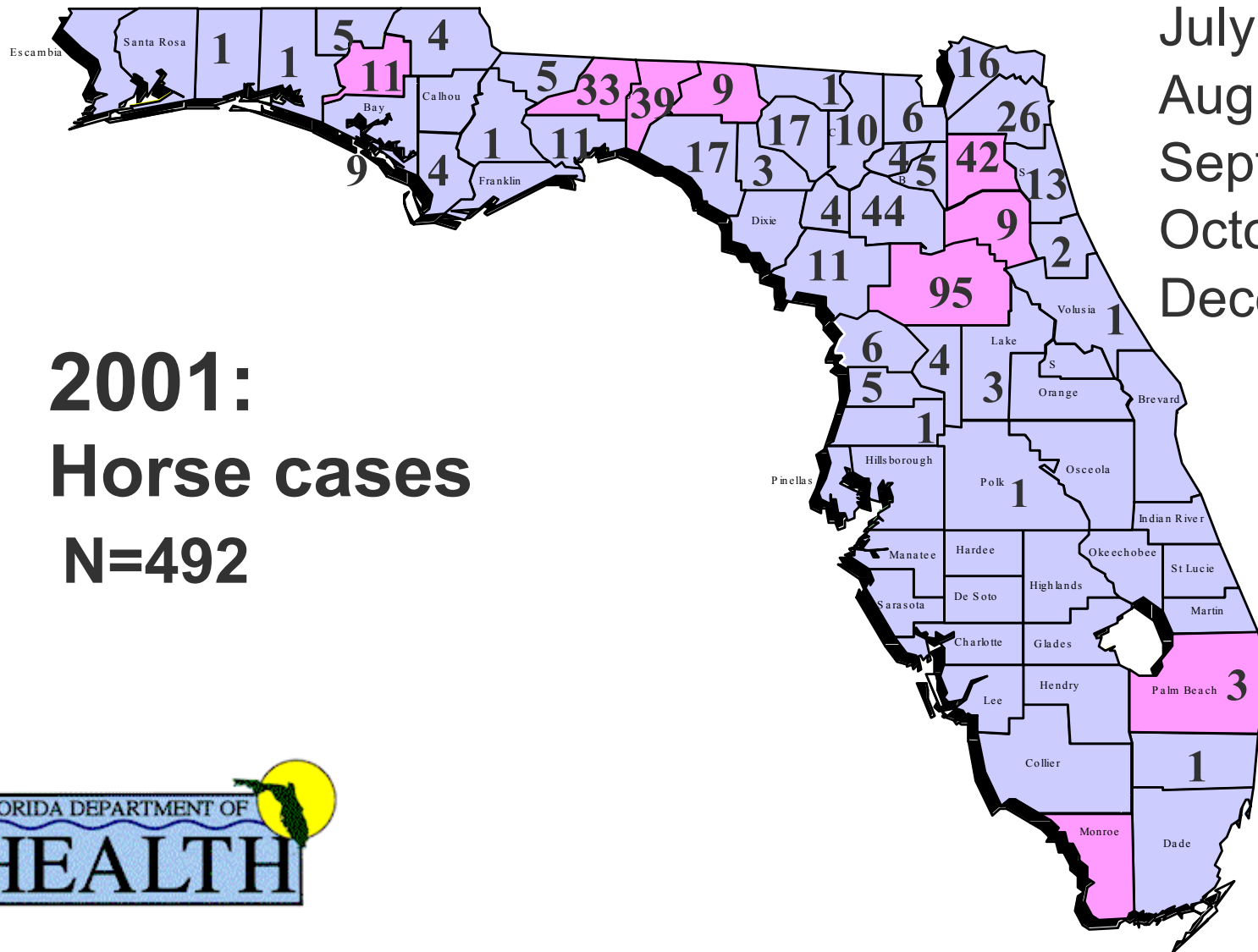
Species	N pos	N tested	Rate
<b>crow</b>	<b>408</b>	<b>812</b>	<b>0.50</b>
<b>bluejay</b>	<b>218</b>	<b>751</b>	<b>0.29</b>
<b>duck</b>	<b>8</b>	<b>54</b>	<b>0.15</b>
<b>cardinal</b>	<b>16</b>	<b>164</b>	<b>0.10</b>
<b>finch</b>	<b>18</b>	<b>199</b>	<b>0.09</b>
<b>pigeon</b>	<b>19</b>	<b>216</b>	<b>0.09</b>
<b>warbler</b>	<b>23</b>	<b>262</b>	<b>0.09</b>
<b>grackle</b>	<b>11</b>	<b>135</b>	<b>0.08</b>
<b>sparrow</b>	<b>17</b>	<b>215</b>	<b>0.08</b>
<b>catbird</b>	<b>12</b>	<b>156</b>	<b>0.08</b>
<b>dove</b>	<b>130</b>	<b>1793</b>	<b>0.07</b>
<b>thrush</b>	<b>11</b>	<b>163</b>	<b>0.07</b>
<b>mockingbird</b>	<b>17</b>	<b>262</b>	<b>0.06</b>
<b>chicken</b>	<b>4</b>	<b>181</b>	<b>0.02</b>
	<b>912</b>	<b>5363</b>	

**N tested =7681**

**N pos. =1106**

**Rate pos= 14%**





July  
 August  
 September  
 October  
 December

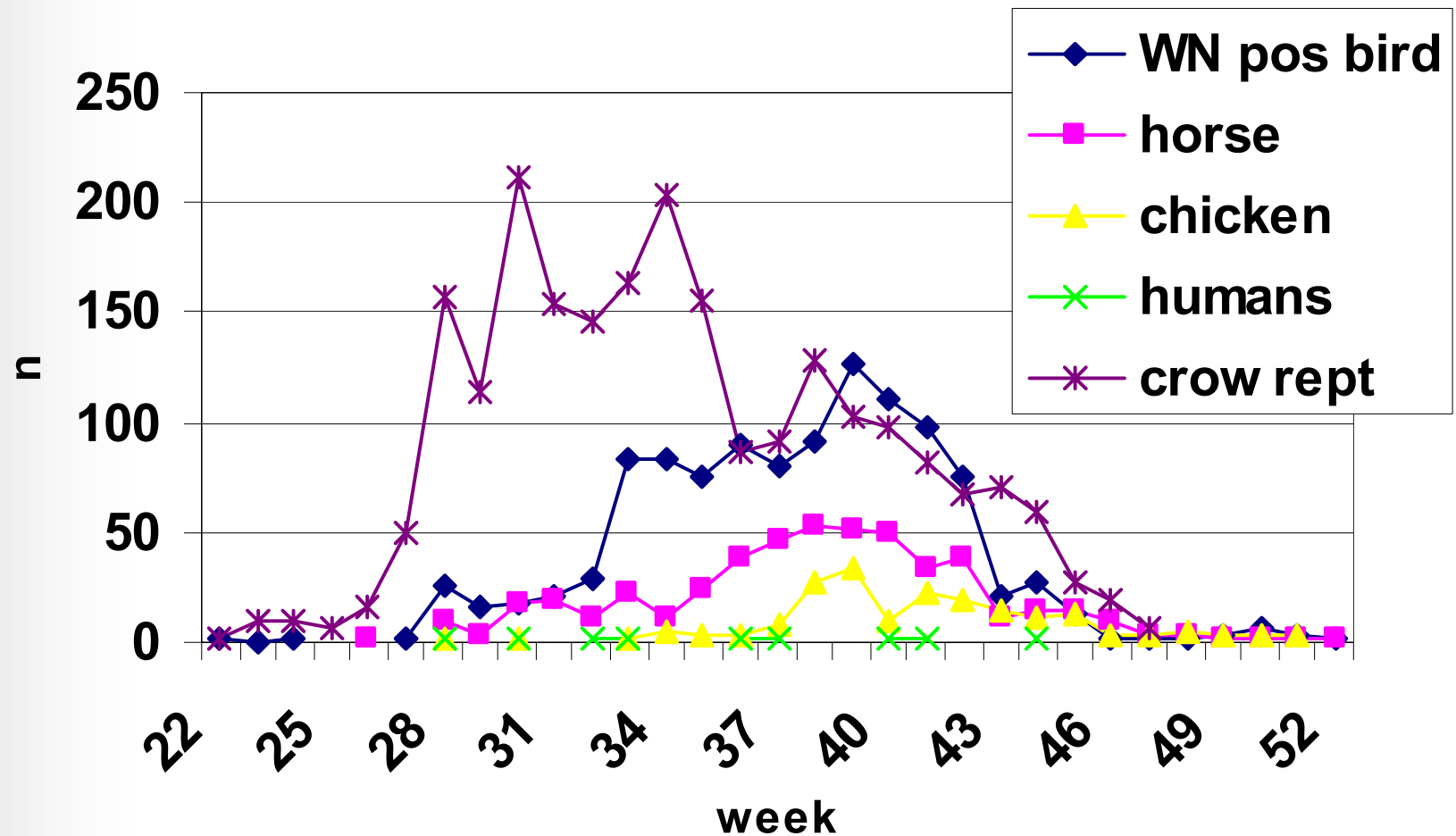
**2001:  
 Horse cases  
 N=492**





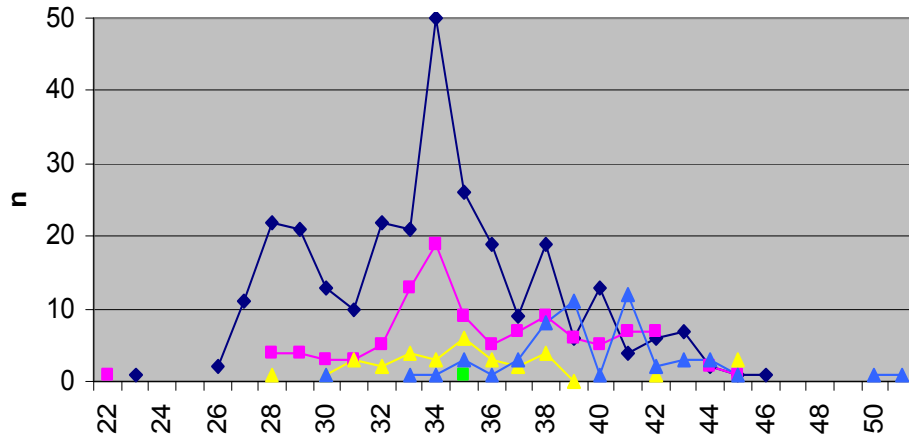


# WN + tests and dead crow reports Florida, 2001

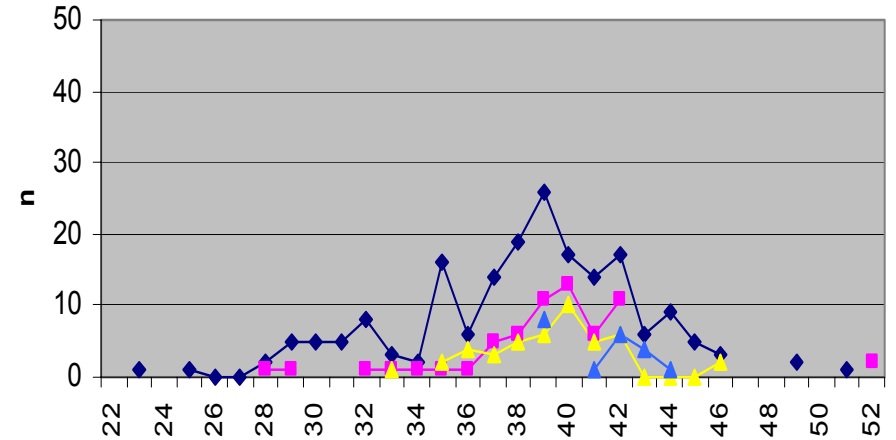


# WN virus activity- A comparison among 4 Florida counties

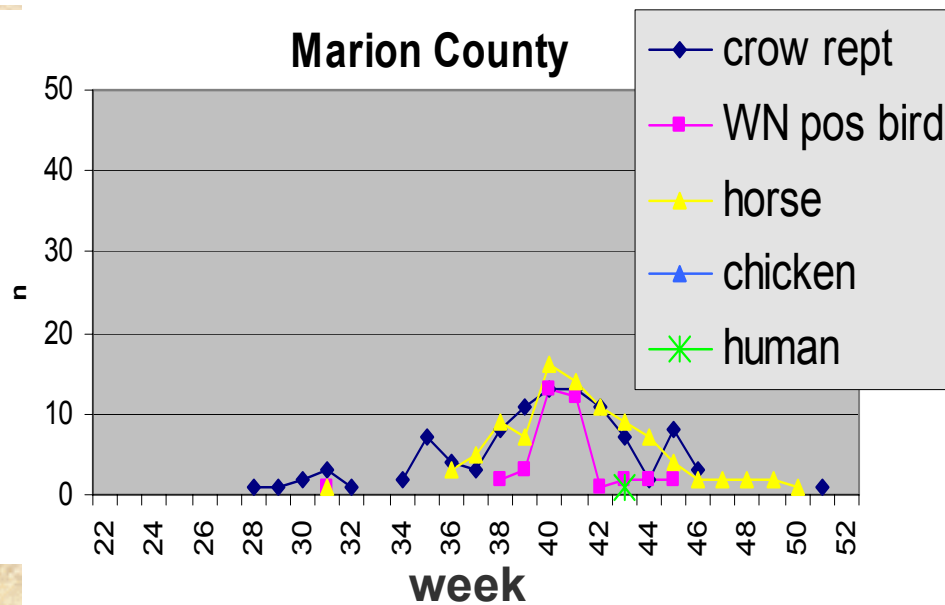
## Leon County



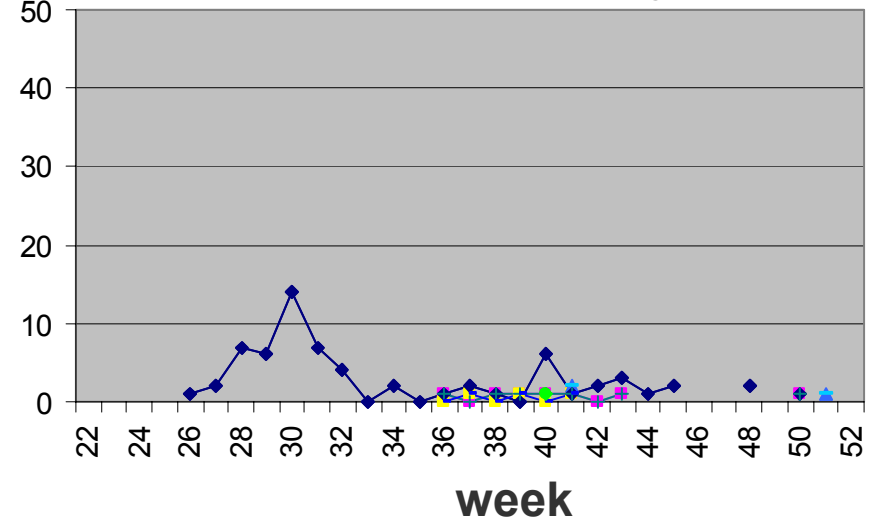
## Alachua County



## Marion County

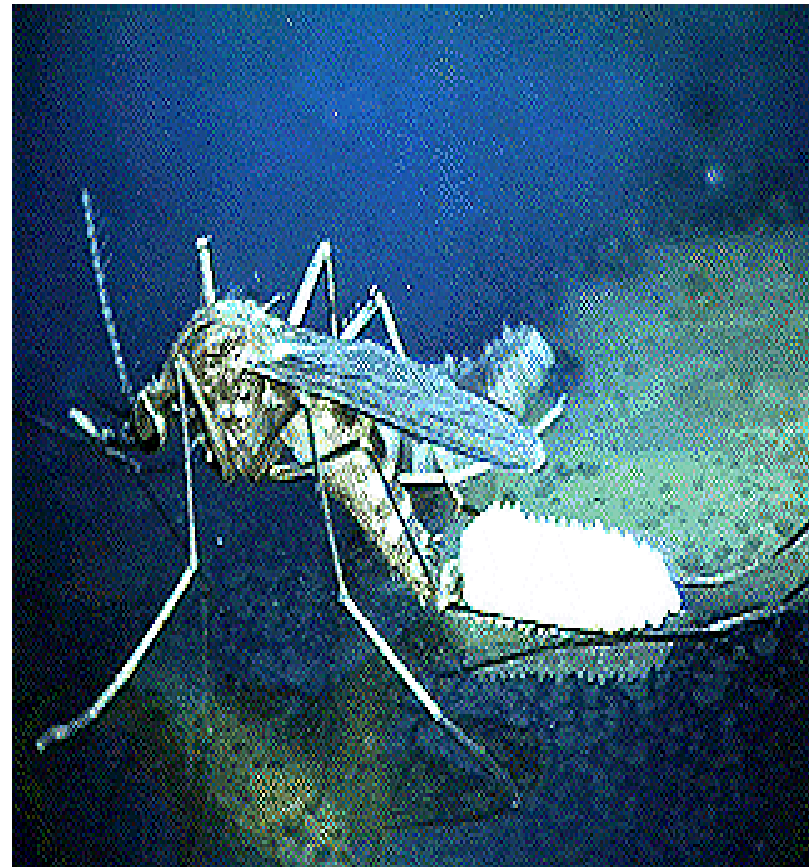


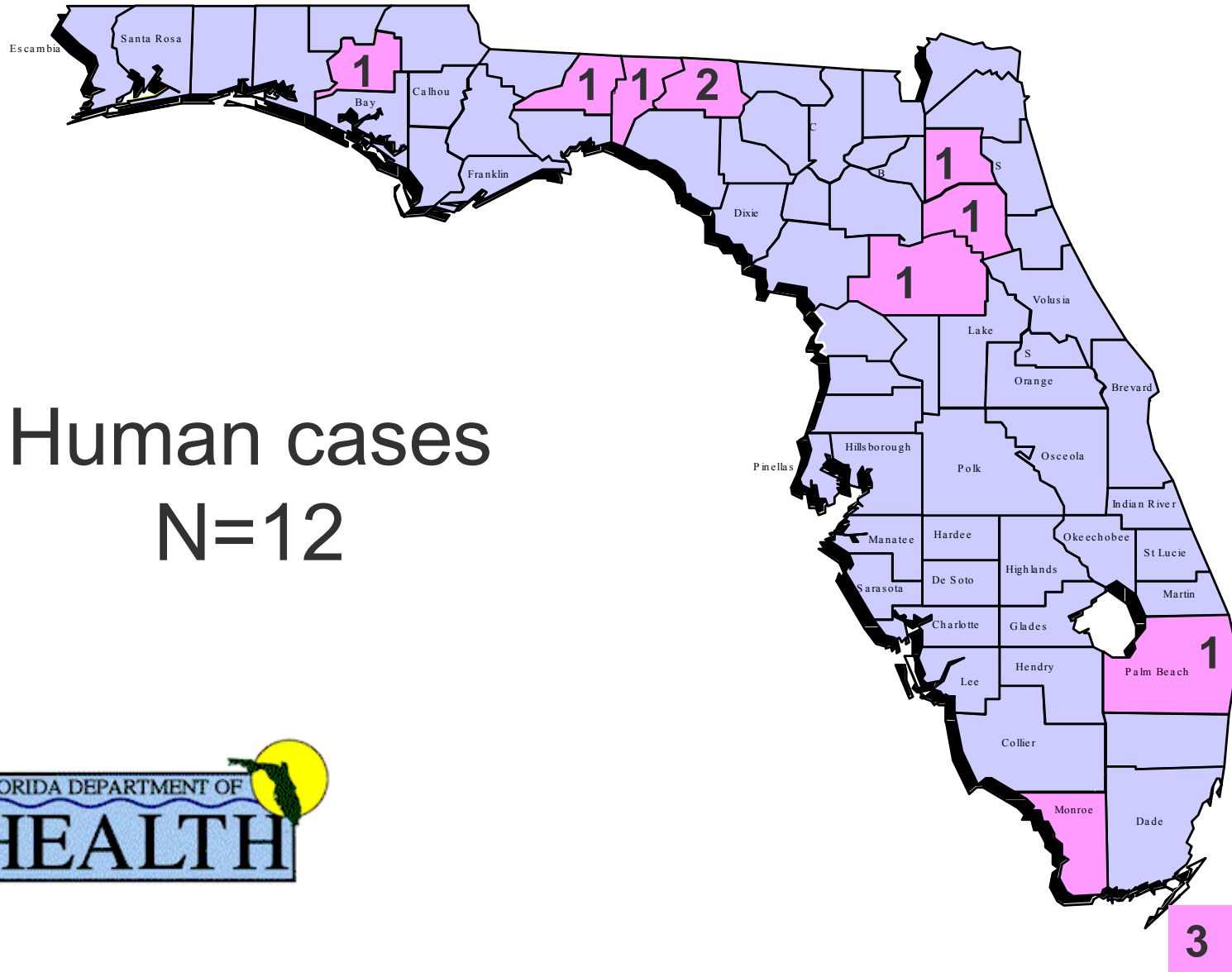
## Palm Beach County



# Mosquito Surveillance

- 39 mosquito pools w/ WN virus
- *Culex*
  - *quinquefasciatus*
  - *nigripalpus*
  - *salinarius*
- *Culiseta*
  - *melanura*
- *Ochlerotatus*
  - *taeniorhynchus*
  - *atlanticus*
- *Anopheles*
  - *crucians*
  - *atropos*
- *Deinocerites*
  - *cancer*





Human cases  
N=12

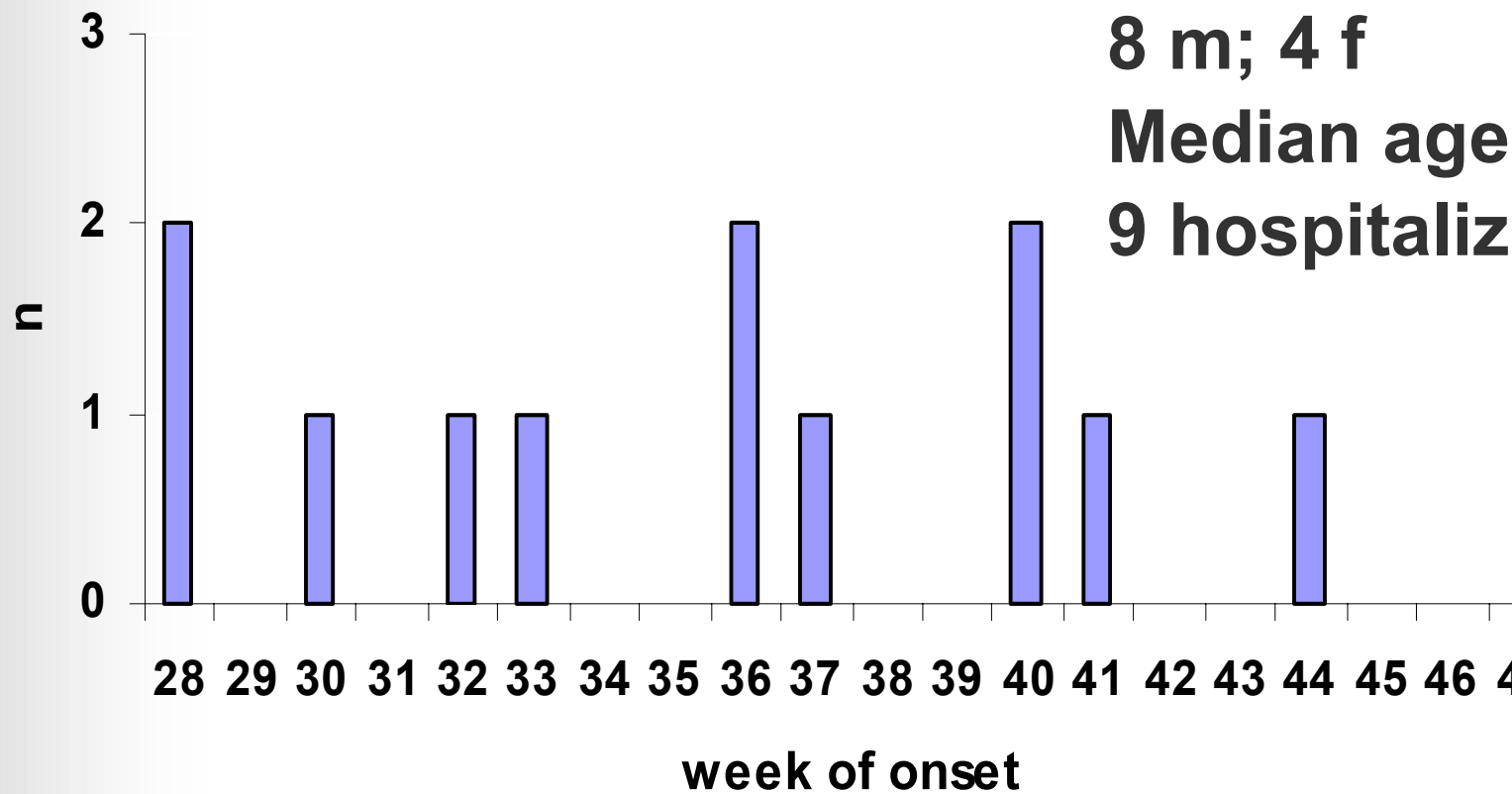


*The  
Florida Keys*






# Human West Nile Encephalitis, Florida, 2001



# Summary

- 2001 epizootic focus in rural Florida, in areas without sentinel chicken or mosquito surveillance programs
- Sporadic human cases-reason?
- Crow mortality lower than in NE- appears to correlate with WN virus activity
- *Culex* mosquitoes appear to be important vectors-  
bridge vectors?



A photograph of a dense forest with sunlight filtering through the trees, creating a dappled light effect on the ground. The text is overlaid in the lower center of the image.

**Thank you for  
your attention.  
Questions?**

# Number of Sentinel Chicken Seroconversions to SLE or WN virus, July-December, 1997-2001

