



The Return of the Bald Eagle:

Bald Eagle Indicator Trends in SE Michigan

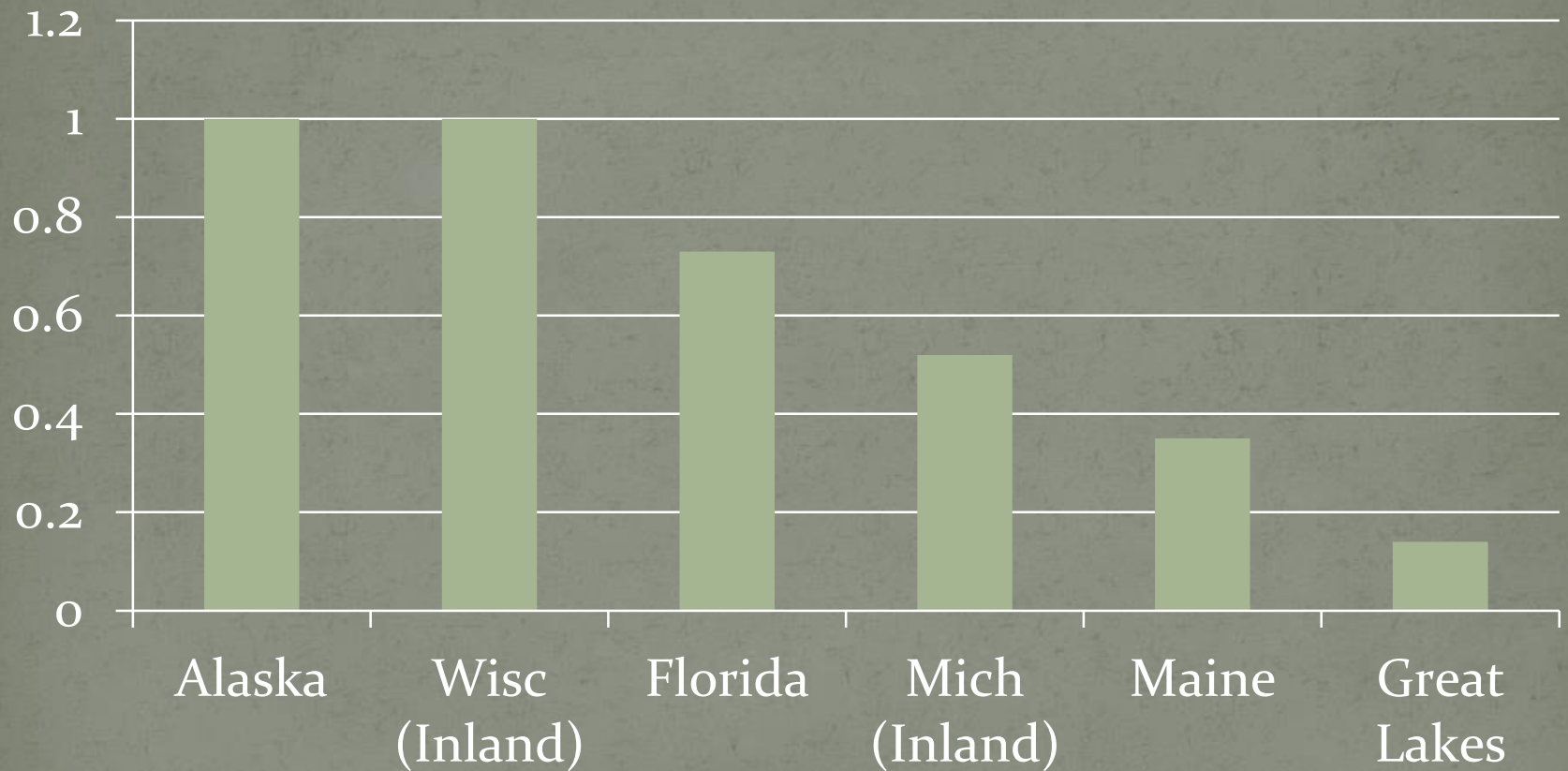
Chris Mensing
U.S. Fish and Wildlife Service
East Lansing, MI

History

- 1782 – National Symbol
- 1918 – Migratory Bird Treaty Act
- 1940 – Bald Eagle Protection Act
- 1982 – Bald and Golden Eagle Protection Act
- 1967 – Endangered Species Preservation Act
- 1973 – Endangered Species Act



BAEA Productivity (1960s)



This Year's Most Powerful Fly Spray
 IS LIQUID **DDT KILL-COAT**
 *The **2-WAY SPRAY!**



★ YES SIR
 2-WAY
 BECAUSE

★ 3 MONTHS
 KILLING WHEN
 SPRAYED ON
 SURFACES!

★ INSTANT
 KILLING WHEN
 SPRAYED ON
 INSECTS!

3 MONTHS LASTING ACTION

When you spray a coat of DDT Kill-Coat on walls, window sills, wire screens, carpet edges, etc., it leaves a "killing-coat" of 99% DDT. This "killing-coat" remains effective for 3 months. No insect can walk on it and live.

QUICK KILLING! When you spray DDT Kill-Coat AT insects it kills at once.

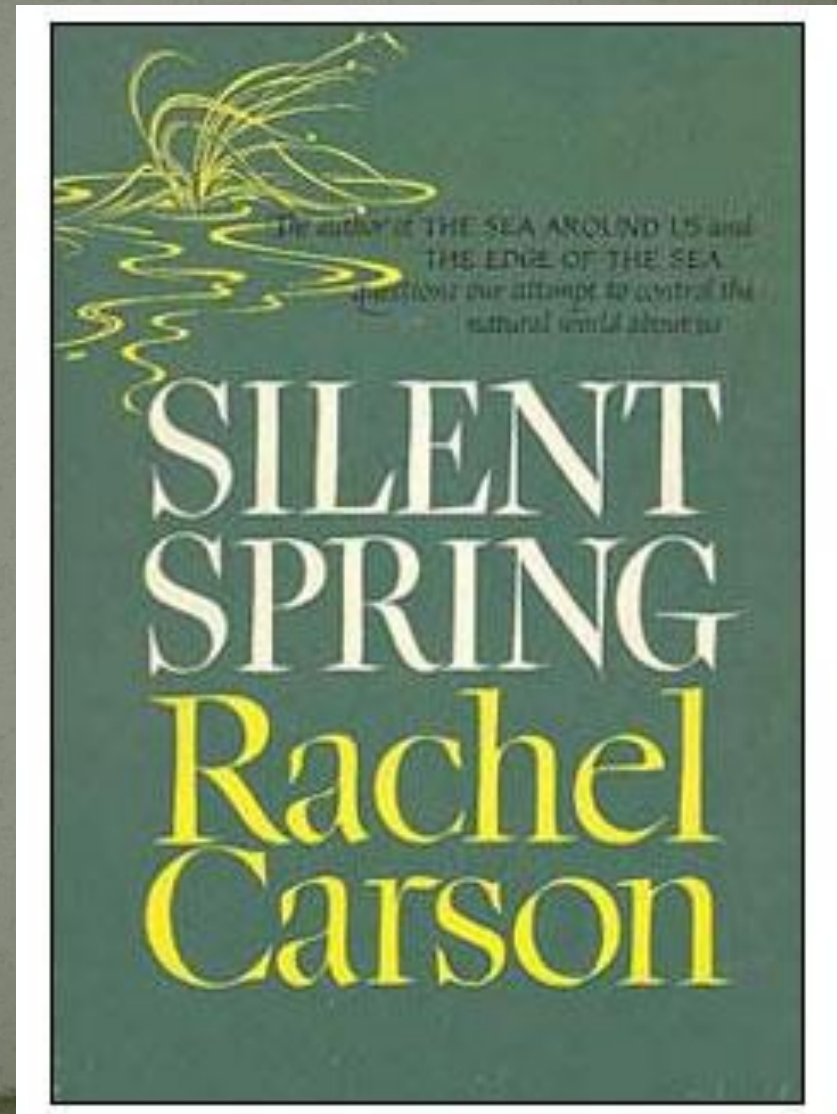
KILLS ALL HOUSEHOLD INSECT PESTS! Used either way DDT Kill-Coat kills Flies, Silverfish, Mosquitoes, Moths, Fleas, Ants, etc.

Liquid D.D.T.
KILL-COAT



THIS YEAR'S MOST POWERFUL FLY SPRAY



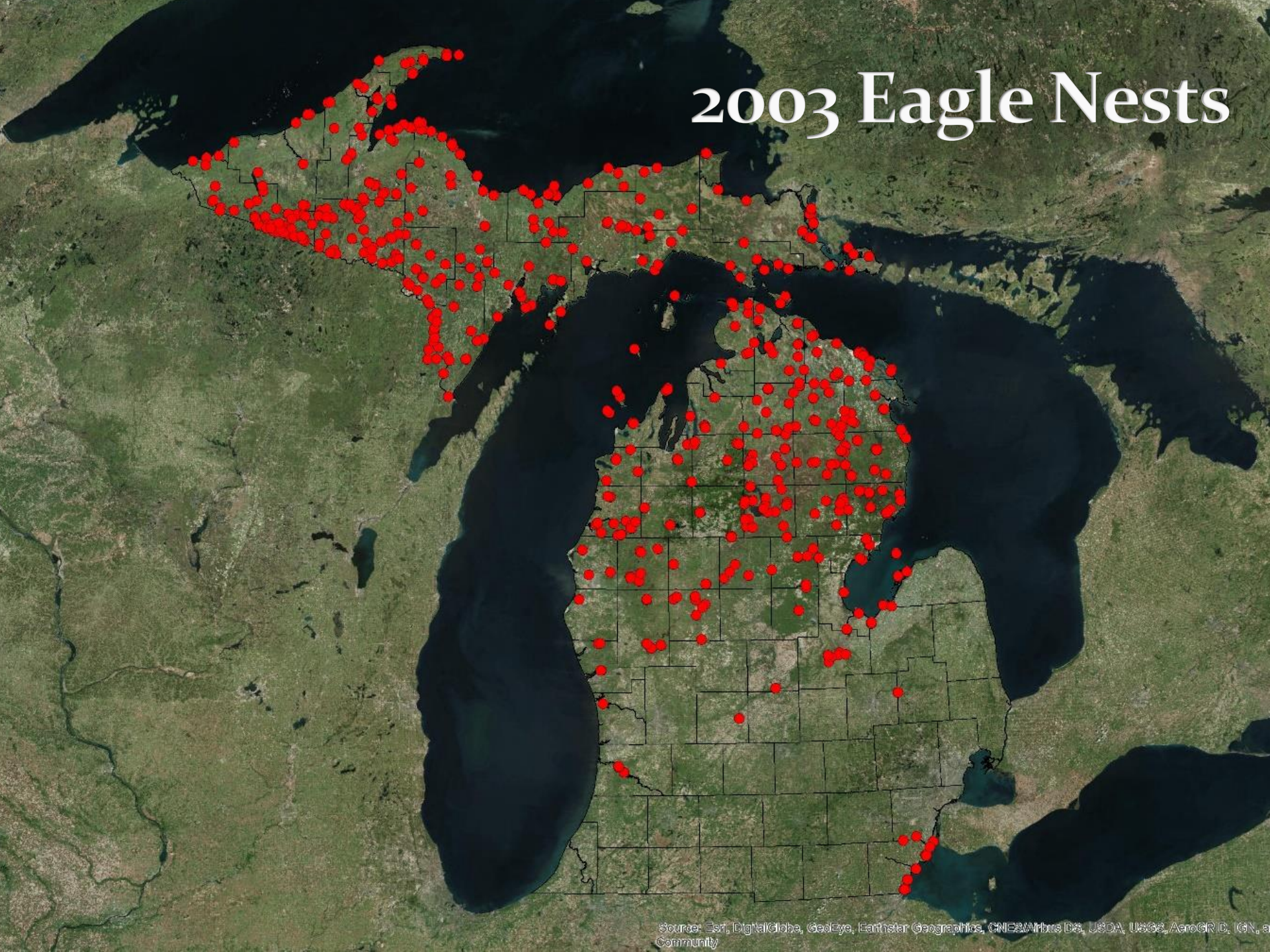


History continued

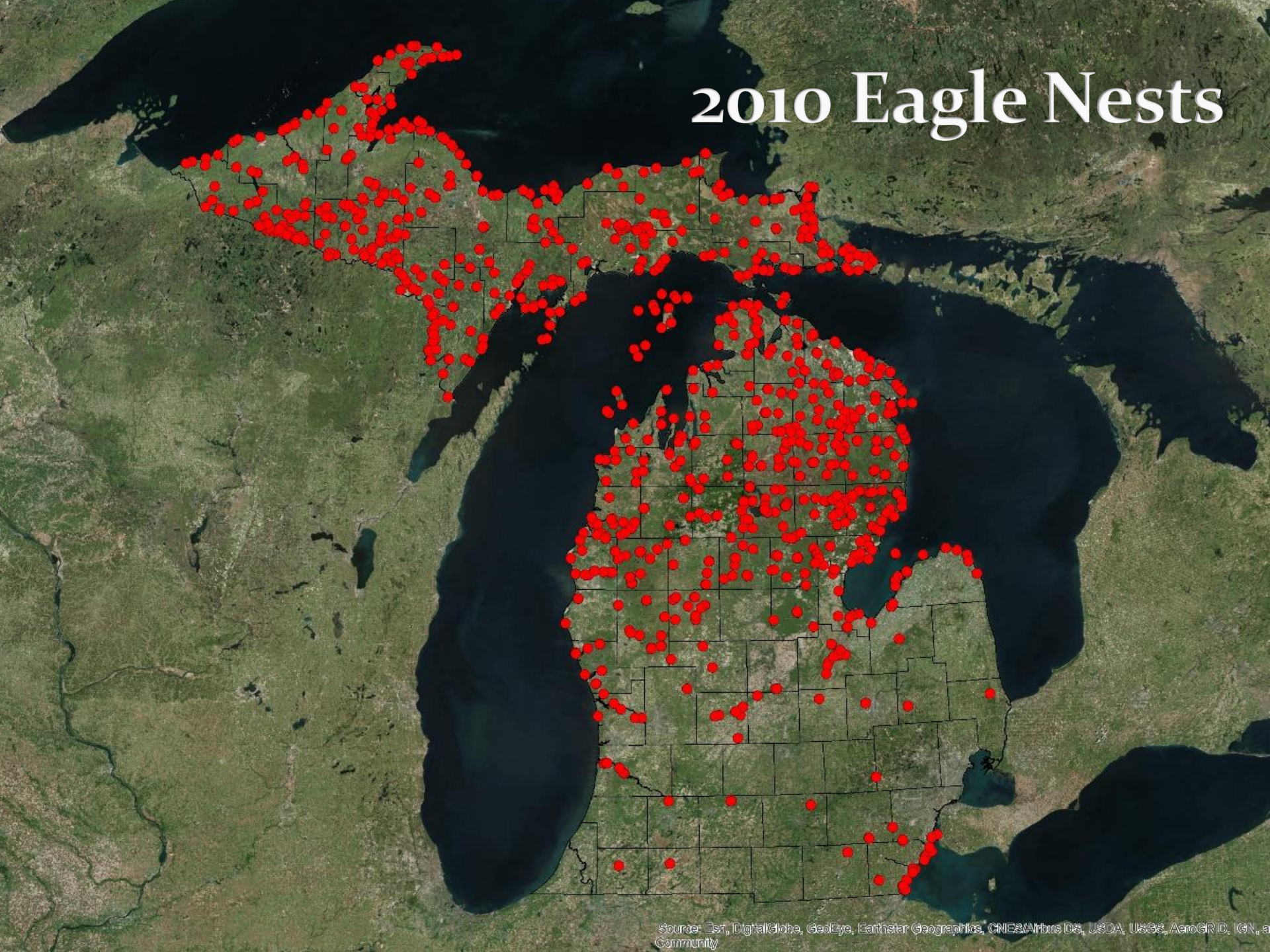
- 1782 – National Symbol
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2007 – Delisted!!

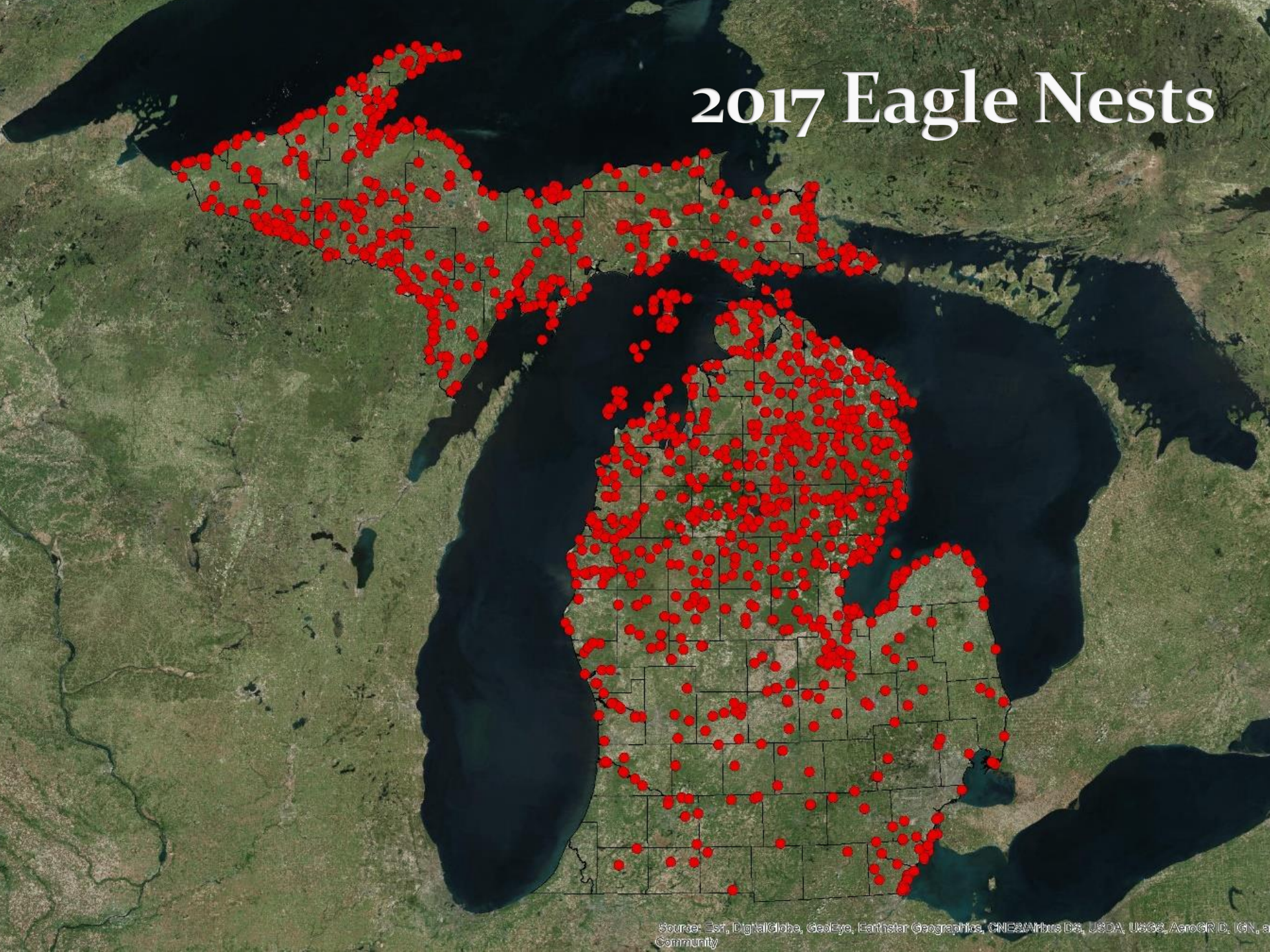
2003 Eagle Nests

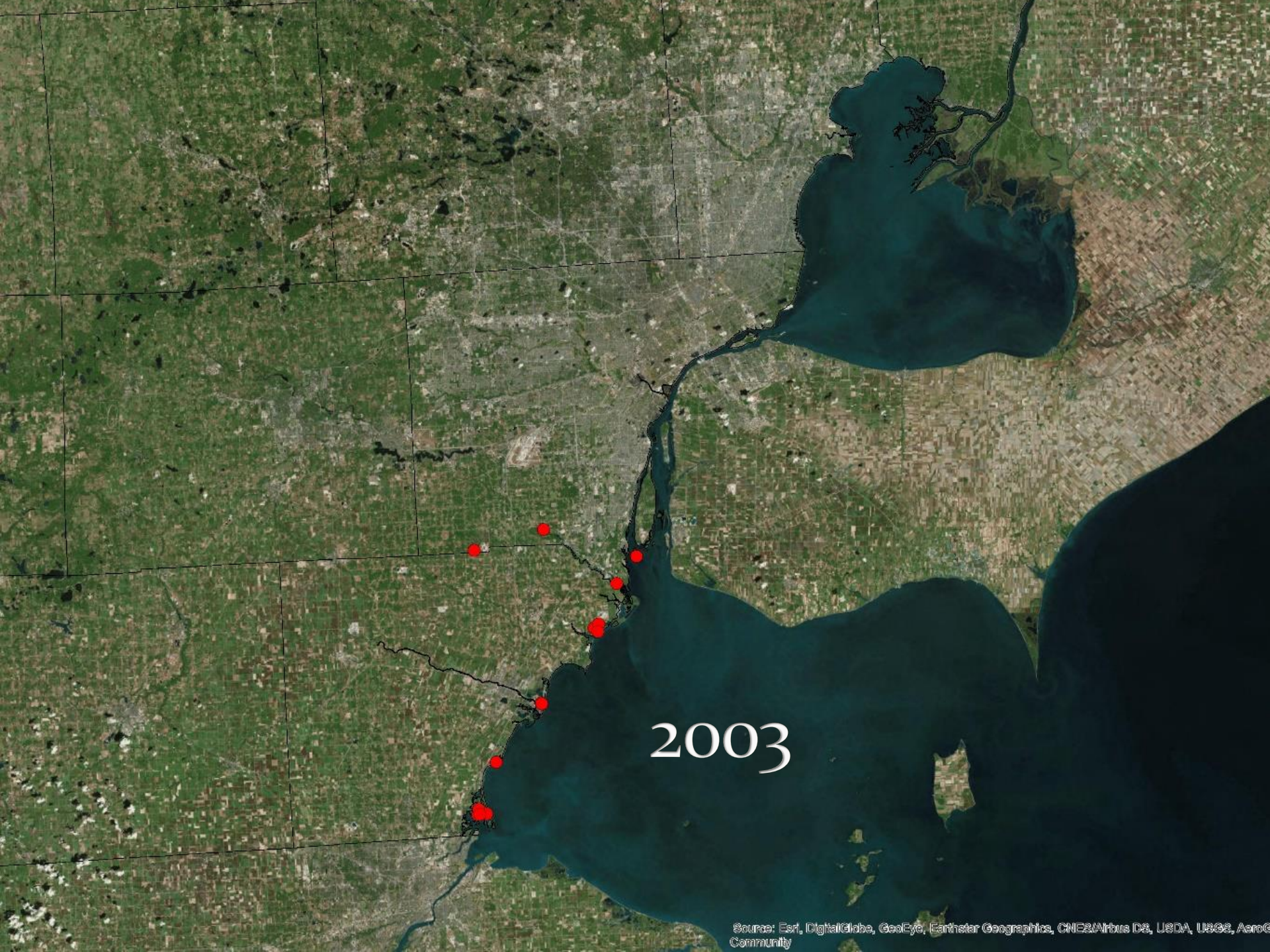


2010 Eagle Nests

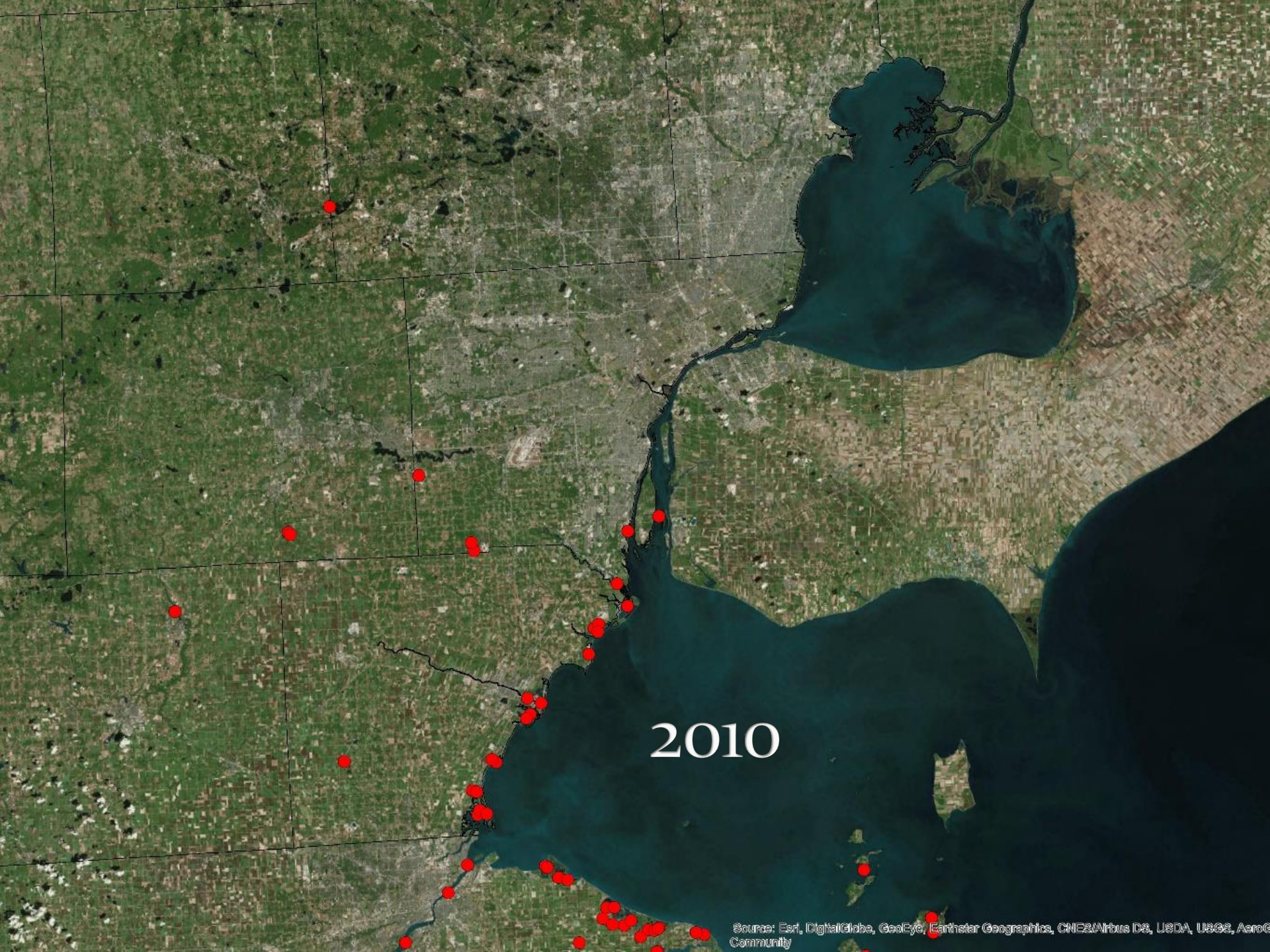


2017 Eagle Nests



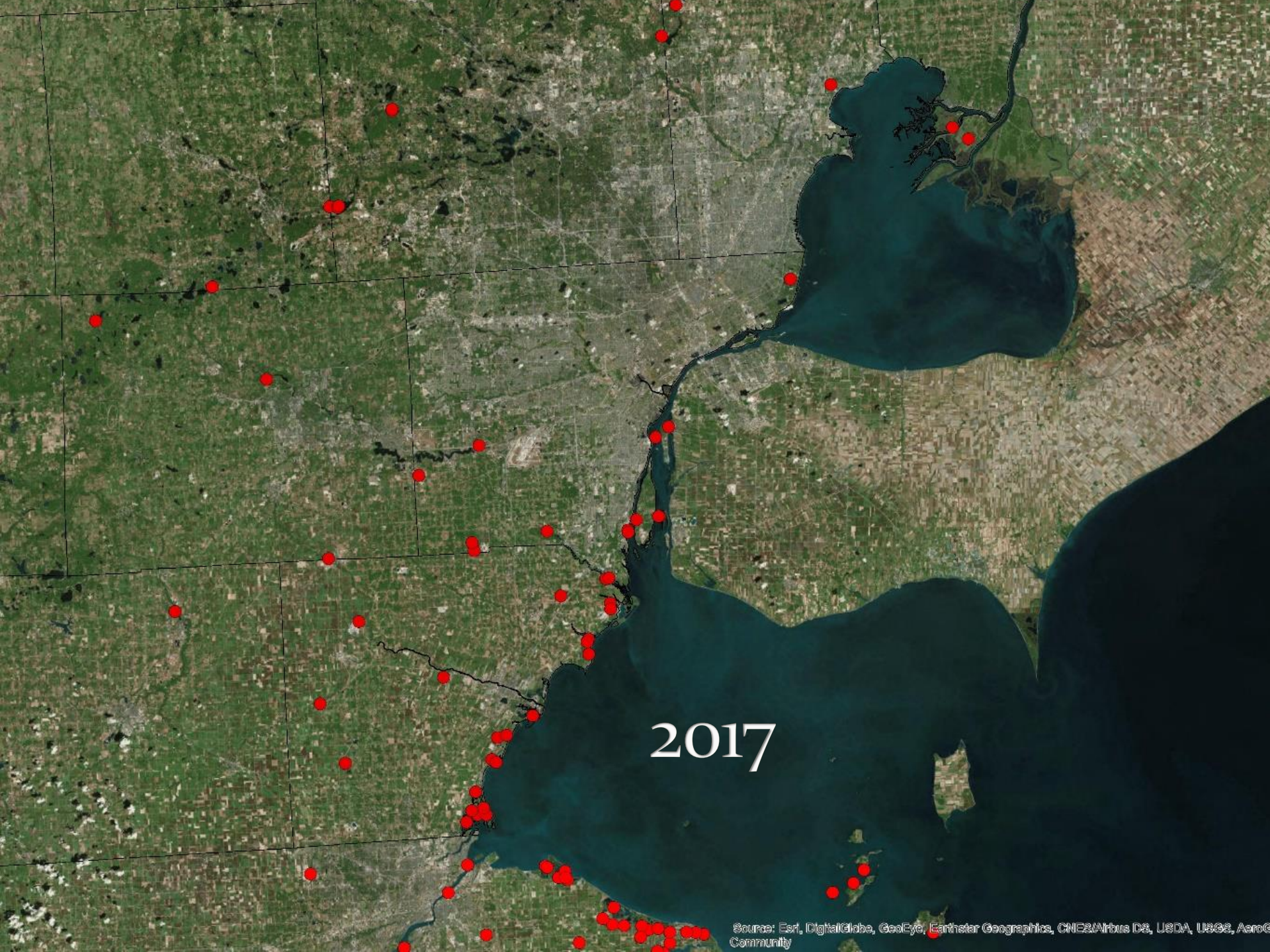


2003



2010

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroG Community



2017

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroG Community

Bald Eagle Active Territories

State	1990	1995	2000	2006	2010	2014	2017	X Inc.
Illinois	8	14	36*	100	-	-	-	12.5
Indiana	2	15	24	68	-	-	-	34
Iowa	8	36	100*	200	-	-	-	25
Michigan	174	268	370	482	644	748	835	4.8
Minnesota	437	618	681	1312	-	-	-	3.0
Missouri	11	24	64	123	-	-	-	11.2
Ohio	16	30	63	125	-	-	-	7.8
Wisconsin	358	583	770	1065	-	-	-	3.0
* Survey data from 1999								

PBB

PCB

DDT

DDE

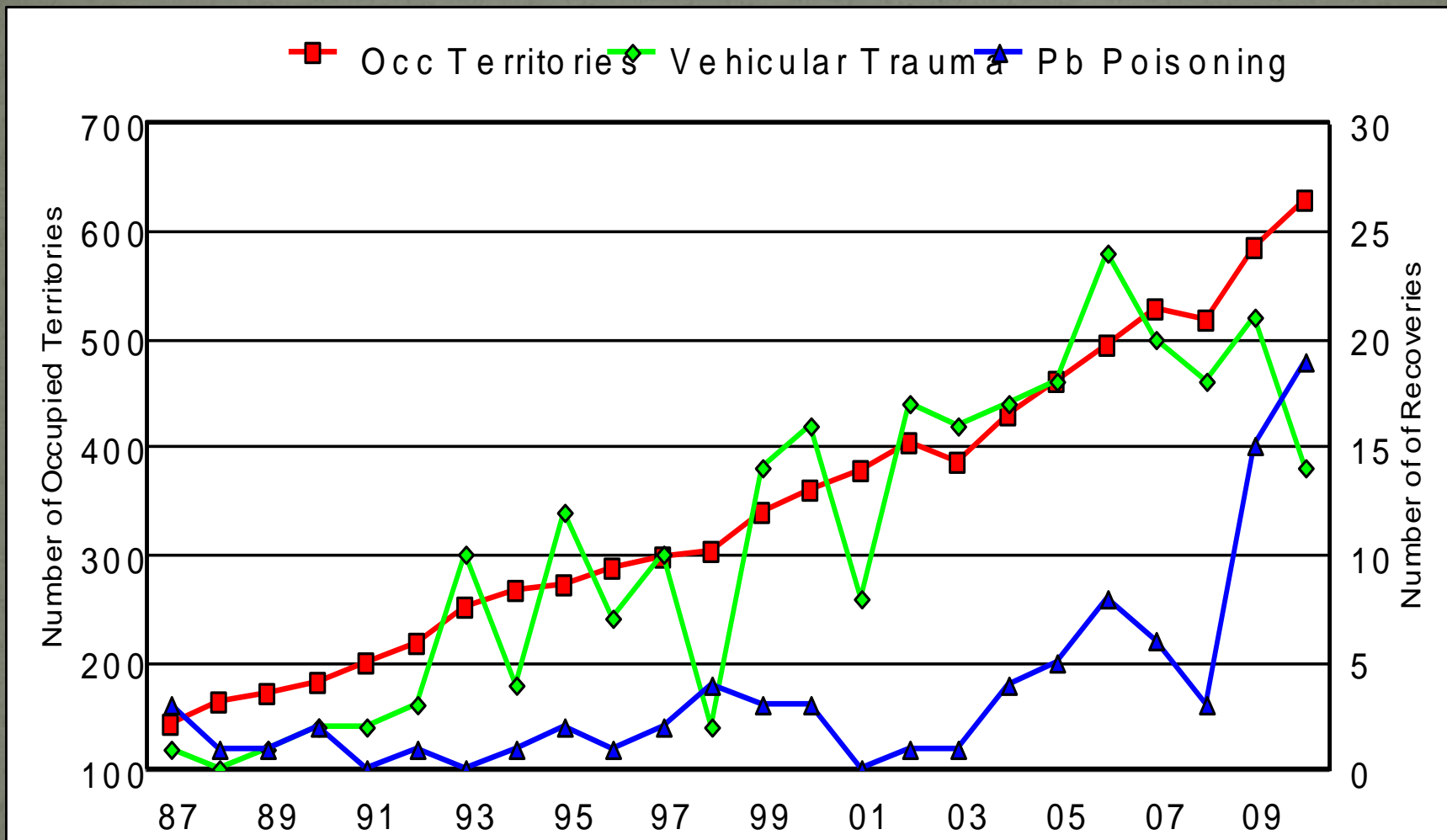
AOC

CEC

BUI



Causes of Mortality

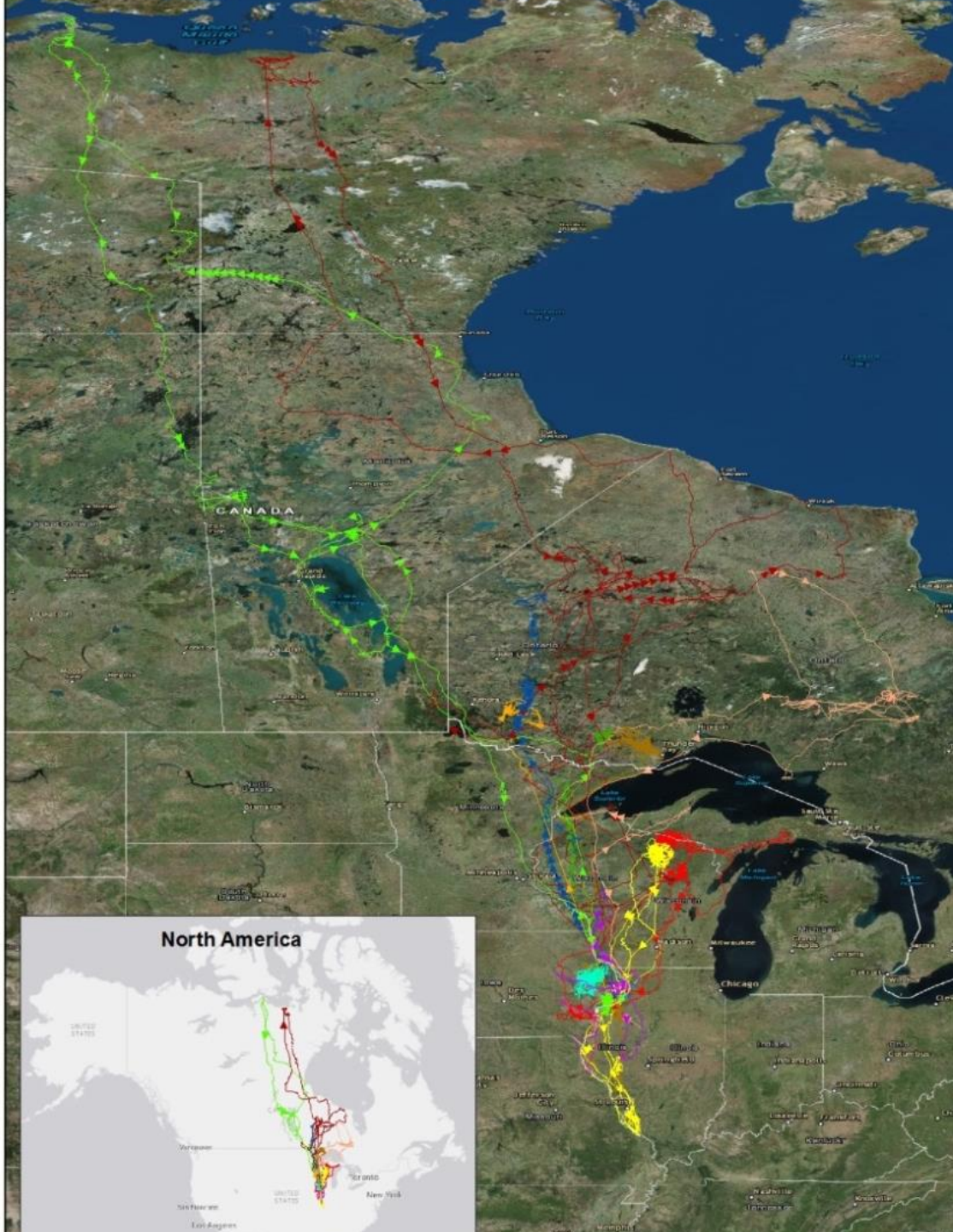


- 22 years of data = 52 lead-related deaths
- 2008-2009 = 34 lead-related deaths



<http://thefutureofthings.com/5835-repower-5m-largest-wind-turbine/>





- 1388: Credit
- 1396: Mississippi T
- 2634: Good Man Vern
- 2683: New Year
- 4952: Lost Mound
- 5413: Ferris
- 5454: Long Grove
- 5879: Charlie Macbride
- 5959: ACE
- 5967: Freight House
- 6692: Kingfisher Farm
- 6734: Arsenal Island
- 6845: Stacey - Lost Mound
- 7991: Nuke

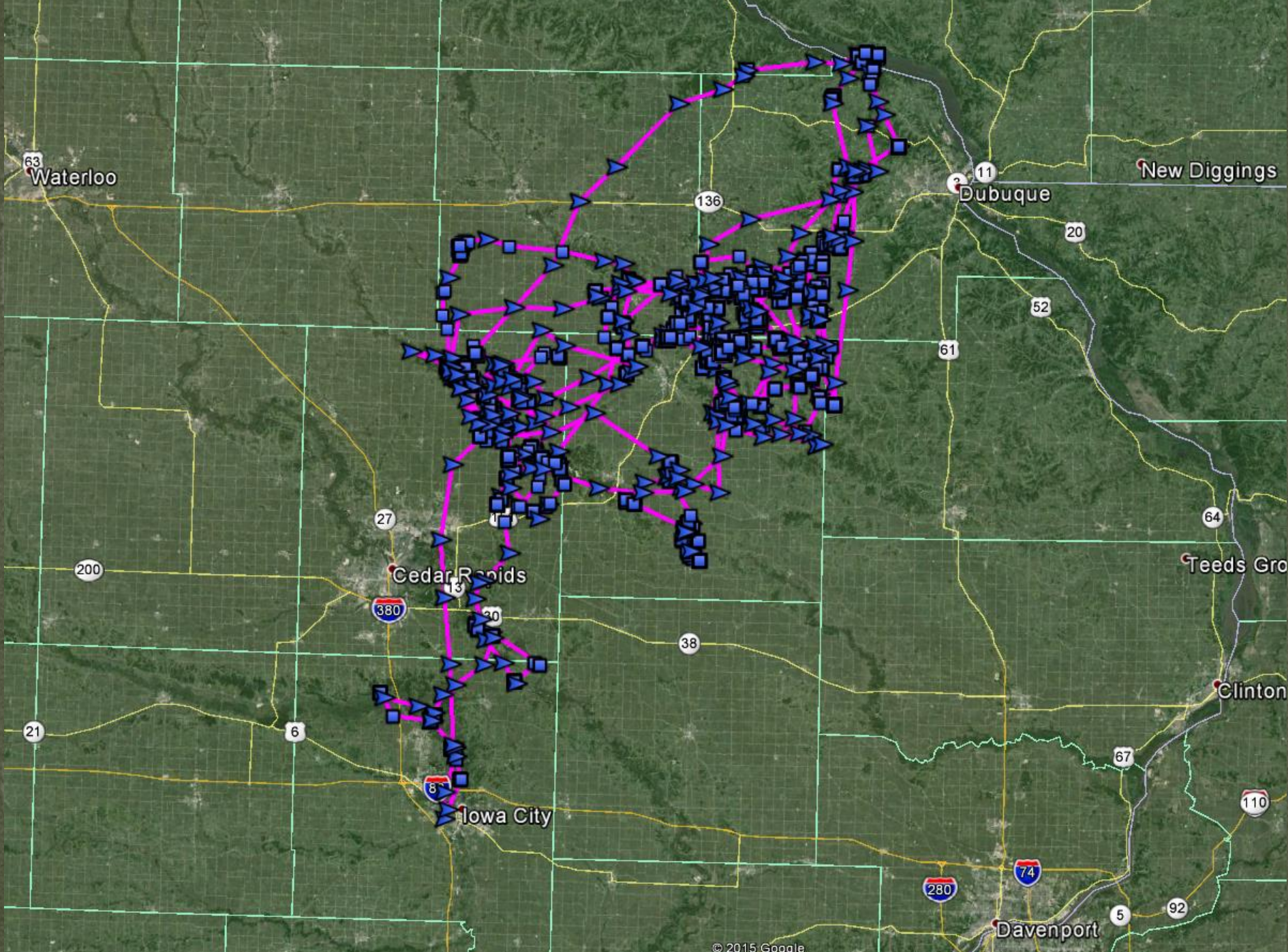
U.S. Fish and Wildlife Service
 Region 3
 Rock Island Field Office
 Bald Eagle Telemetry Study

First unit released
 March 10, 2014
 (0974: Hennepin)

Units not depicted:

- 7090: Picker
- 3988: Buffalo Bill
- 8049: Hunter
- 4770: Rocky
- 5884: Valentino





Questions??

