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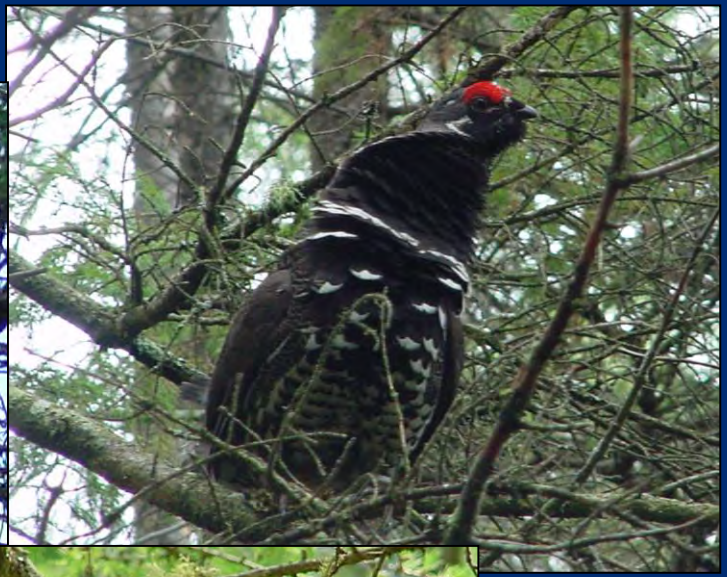
Department of
Environmental
Conservation

Spruce Grouse Update

Angelena M. Ross
Region 6 Wildlife Biologist
New York State Fish and Wildlife Management Board

March 15, 2018



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Ruffed Grouse

Spruce Grouse

Spruce Grouse Range

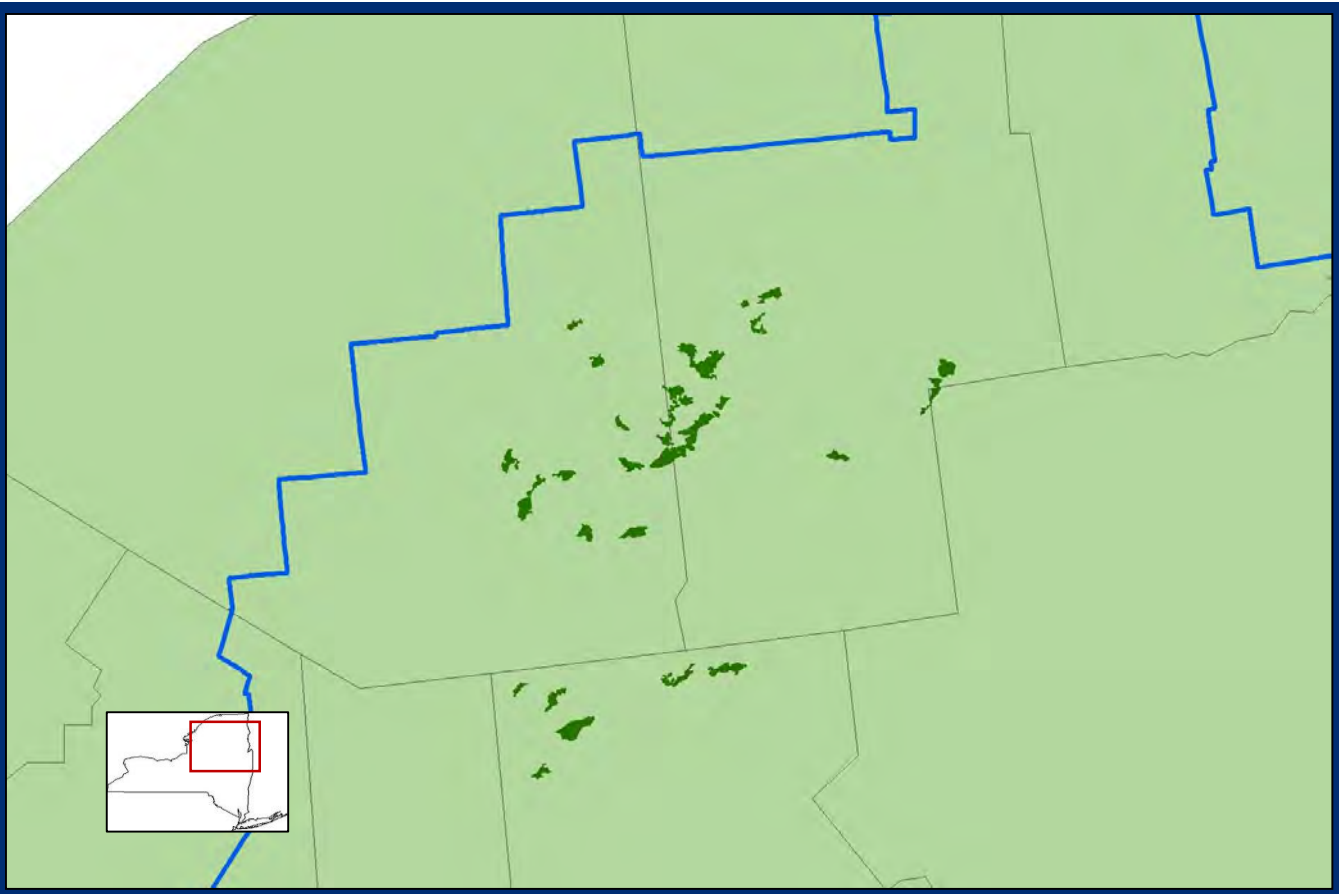



Photo: Angelena M. Ross


Photo: Glenn Johnson


Photo: Angelena M. Ross

Reproductive Characteristics

- Mate in spring
- Polygynous breeding system
- Nest on ground
- Clutch size: 4-7 eggs
- 1 brood per year

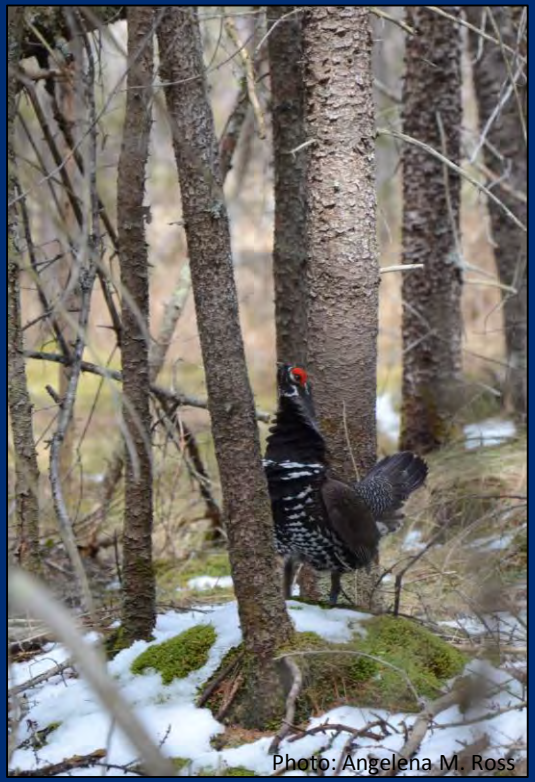


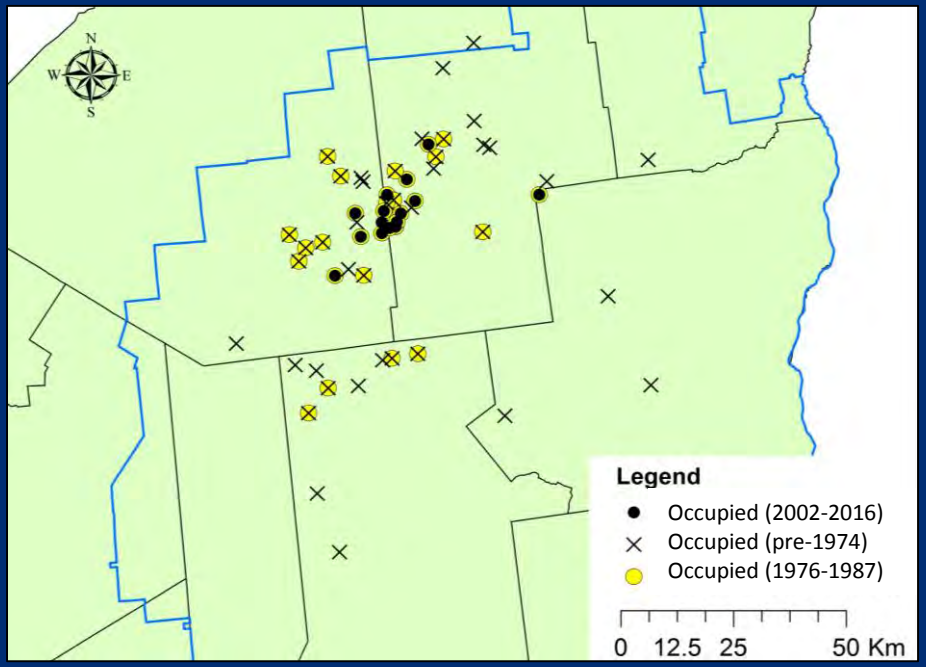
Photo: Angelena M. Ross


Photo: Glenn Johnson


Photo: Glenn Johnson

Spruce Grouse: Changes in Distribution

- Small, insular subpopulations occur in the NW Adirondacks
- Subpopulations have declined from 26 occupied in 1987 to 12 occupied in 2016
- Endangered



Results of Habitat Study

- Forest stands at unoccupied sites were taller had less structural diversity and were less dense than stands at occupied sites.
- Occupied sites had more earlier successional species than unoccupied sites.
- Occupied sites were larger than unoccupied sites (198 vs. 181 ha).
- Occupied sites were closer to one another than unoccupied sites were to occupied sites (x = 3.2 km versus 11.8 km).


Photo: Rob Bouta


Photo: Glenn Johnson

Loss of Genetic Diversity – NYS Museum

DNA sequences from 22 ADK Spruce Grouse captured in 2006-2008 to assess current levels of genetic diversity

Sequenced DNA from museum specimens collected from 1882-1942 to determine if genetic diversity has declined in the last century

Photo: Jeremy Kirchman

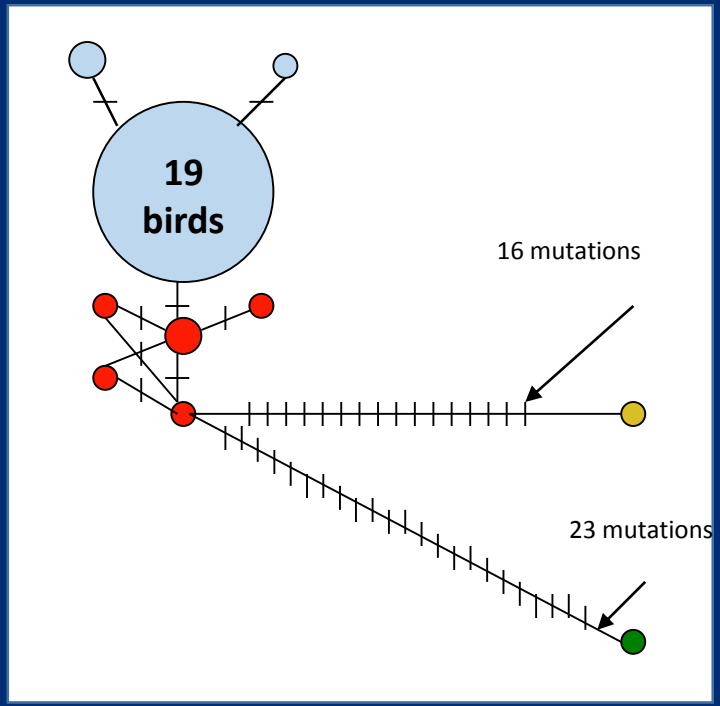

Photo: NYS Museum

Loss of Genetic Diversity – NYS Museum

ADK sample: 22 birds, data from 1100 nucleotides, only 3 genotypes.

Much smaller Ontario sample has 5 genotypes.

- Adirondacks (n=22)
- Ontario (n=6)
- Minnesota (n=1)
- Michigan (n=1)

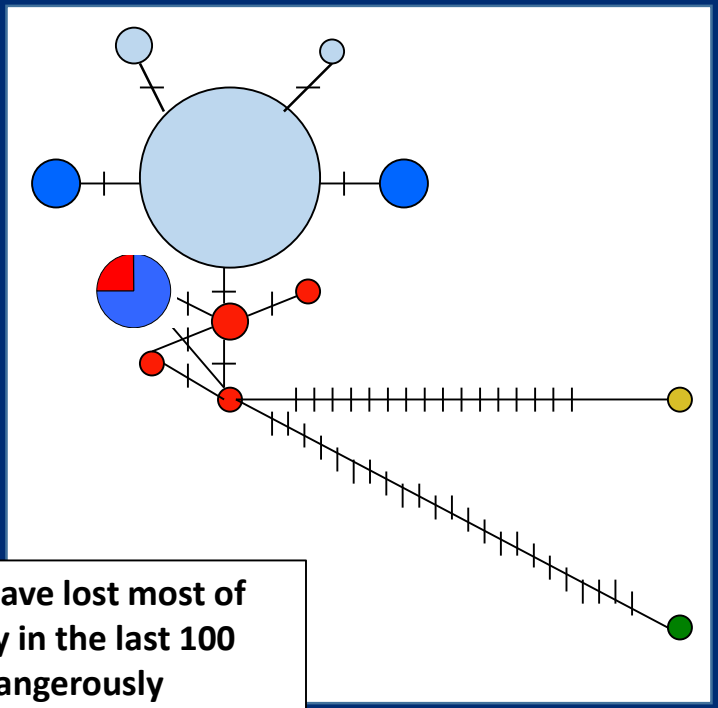


Slide: Jeremy Kirchman

Loss of Genetic Diversity – NYS Museum

All birds have genotypes that are not found in New York today.

Three birds have a genotype found today in Ontario.



- Adirondacks (n=22)
- Ontario (n=6)
- Minnesota (n=1)
- Michigan (n=1)
- ADK museum specimens (n=9)

NY's Spruce Grouse have lost most of their genetic diversity in the last 100 years, and now are dangerously genetically depauperate.

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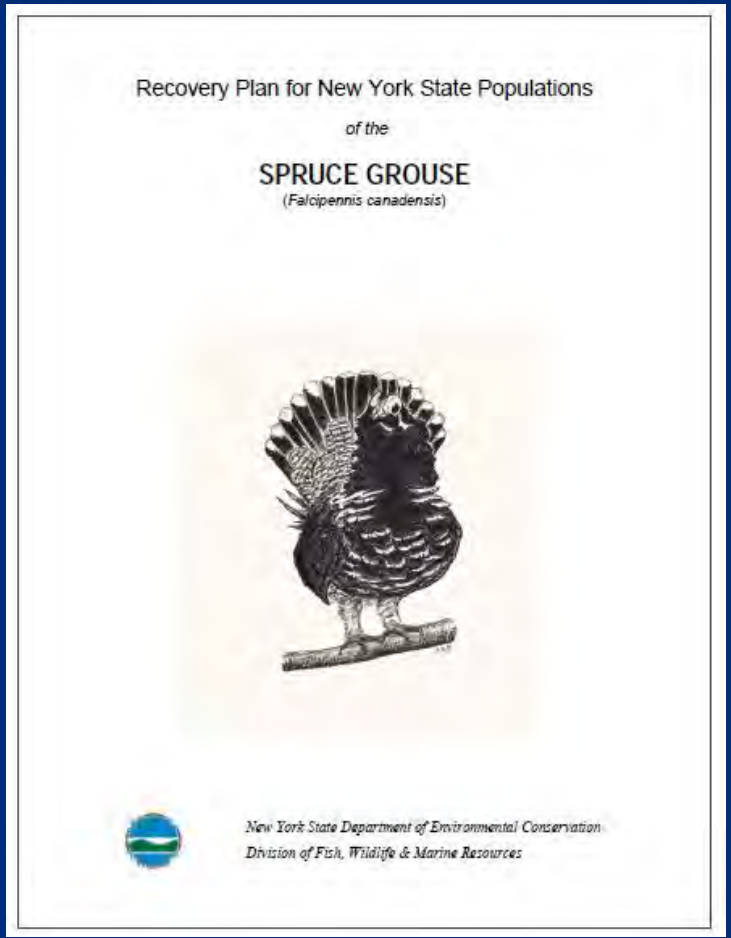
Slide: Jeremy Kirchman


Recovery Plan for New York State Populations

of the

SPRUCE GROUSE

(*Falcipennis canadensis*)

New York State Department of Environmental Conservation
Division of Fish, Wildlife & Marine Resources

Recovery Plan:

- Manage Habitat
- Supplement populations
- Monitor Results
  - Habitat
  - Translocations
  - Genetics

Bird and Mammal Team Assignment:

Conduct pilot study for trap and transfer

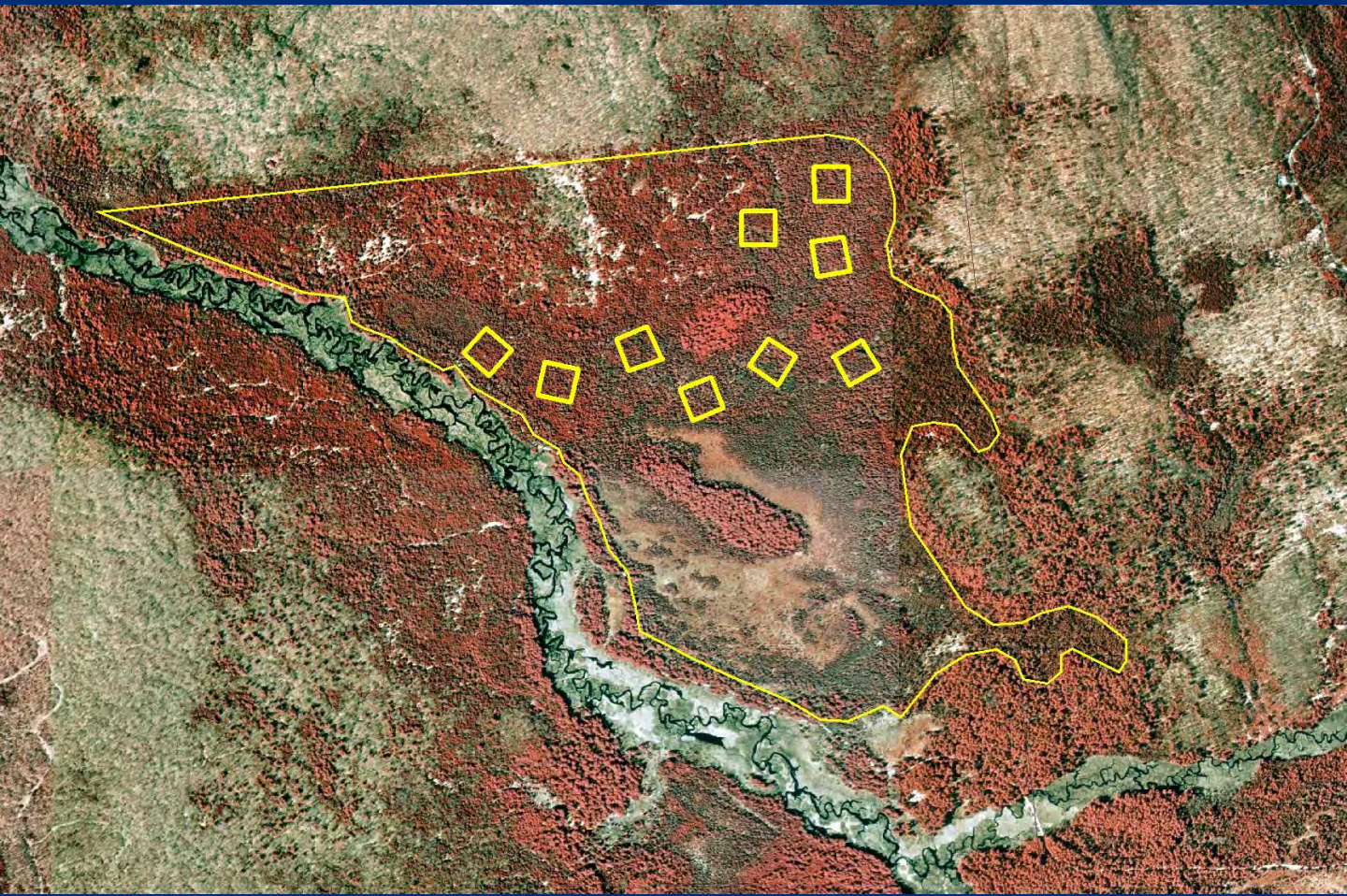


Photo: Angelena Ross

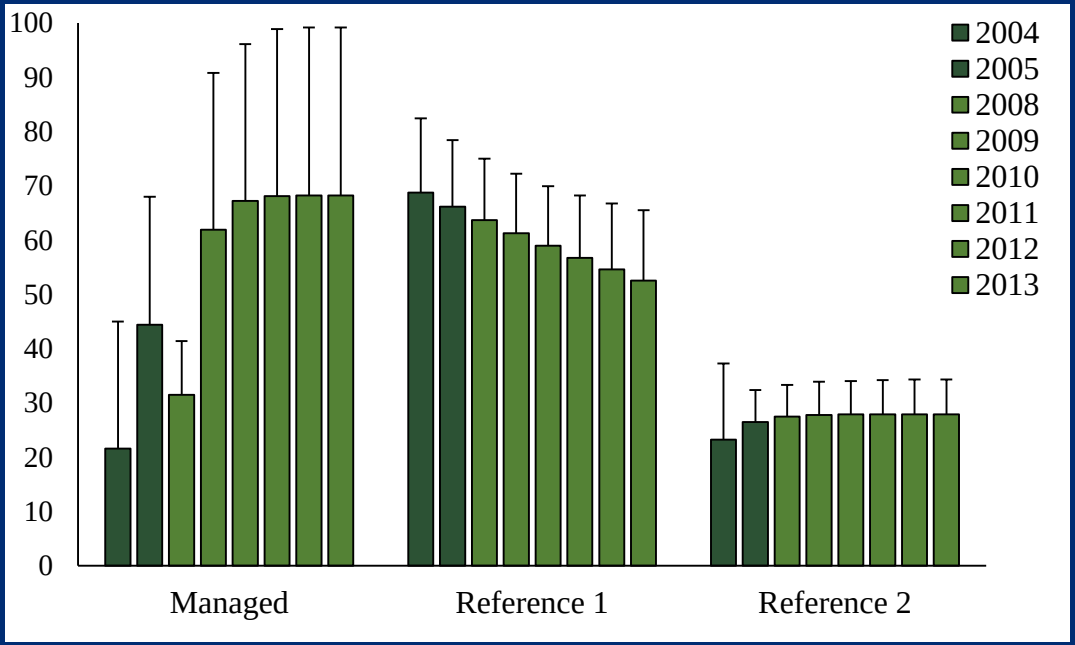
Food Availability

Variable and treatment level	Mean difference	P-adjusted
Abundance		
managed—control	0.35	<0.01
reference—control	0.21	0.03
reference—managed	-0.14	0.19
Biomass		
managed—control	0.25	0.01
reference—control	-0.04	0.90
reference—managed	-0.29	<0.01

Nest Temperatures

Variable and treatment level	Mean difference	P-adjusted
Daily Max. Temp		
managed—control	3.7	<0.01
reference—control	2.8	0.01
reference—managed	-0.9	0.47
Daily Min. Temp		
managed—control	-2.4	0.01
reference—control	-1.1	0.01
reference—managed	-0.9	<0.01

Percent Area Occupied of managed and two control sites



Spruce Grouse: Translocations

Goal:

Translocate spruce grouse into areas of their NY range to help lead to the population's recovery

Hypotheses

Translocated and resident spruce grouse will have similar annual **survivorship rates**, **home range sizes**, and **productivity**

Sample sizes needed:

- 51 spruce grouse home ranges
- 41 spruce grouse mortality rates
- 11 nests

(with 95% confidence)

Spruce Grouse: Translocations


Photo: Angelena Ross


Photo: Angelena Ross

Spruce Grouse: Translocations

Spruce Grouse: Translocations

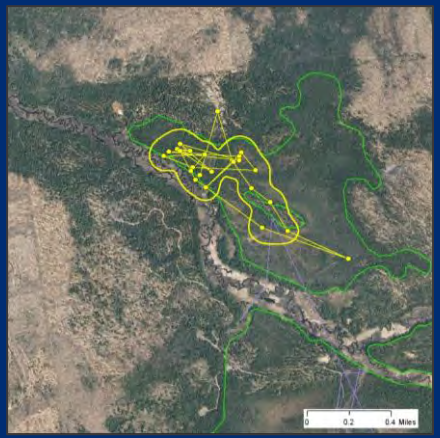
Mean directionality tests of spruce grouse: movements were random after release

Bird sex and band number	*n*	Rayleigh's U statistic	*P*-value
Male 3	18	0.303	0.452
Male 23	24	0.139	0.217
Male 24	22	0.319	0.425
Female 13	30	0.126	0.773
Female 22	24	0.445	0.220
Female 26	21	0.377	0.331

Spruce Grouse: Translocations

Home ranges of translocated grouse were of similar size to those of resident grouse:

	Translocated	CI	*n*		Resident	CI	*n*		*P*
♀	27.10	22.32-32.90	33		57.68	44.95-74.01	12		0.242
♂	17.23	10.36-28.65	8		22.11	17.91-27.30	23		0.303



Spruce Grouse: Translocations

Clutch sizes of translocated grouse were of similar size to those of resident grouse:

	Translocated	SE	*n*		Resident	SE	*n*		*P*
EGGS	4.89	0.48	20		5.28	0.42	7		0.560


Photo: Anthony Collerton

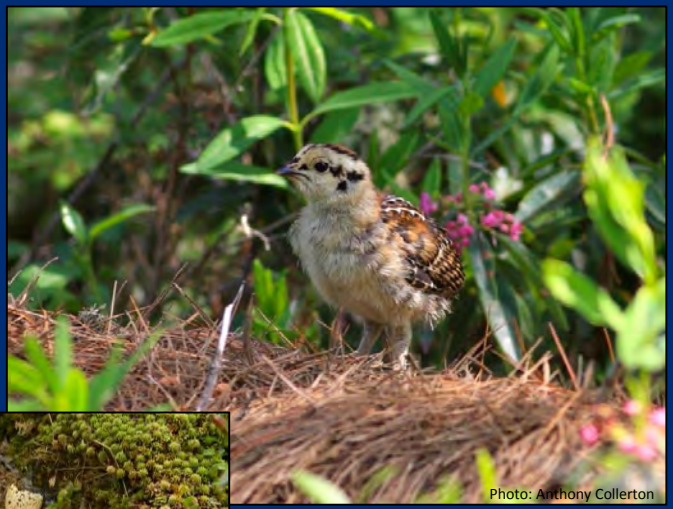


Photo: Anthony Collerton


Photo: Dave Selner

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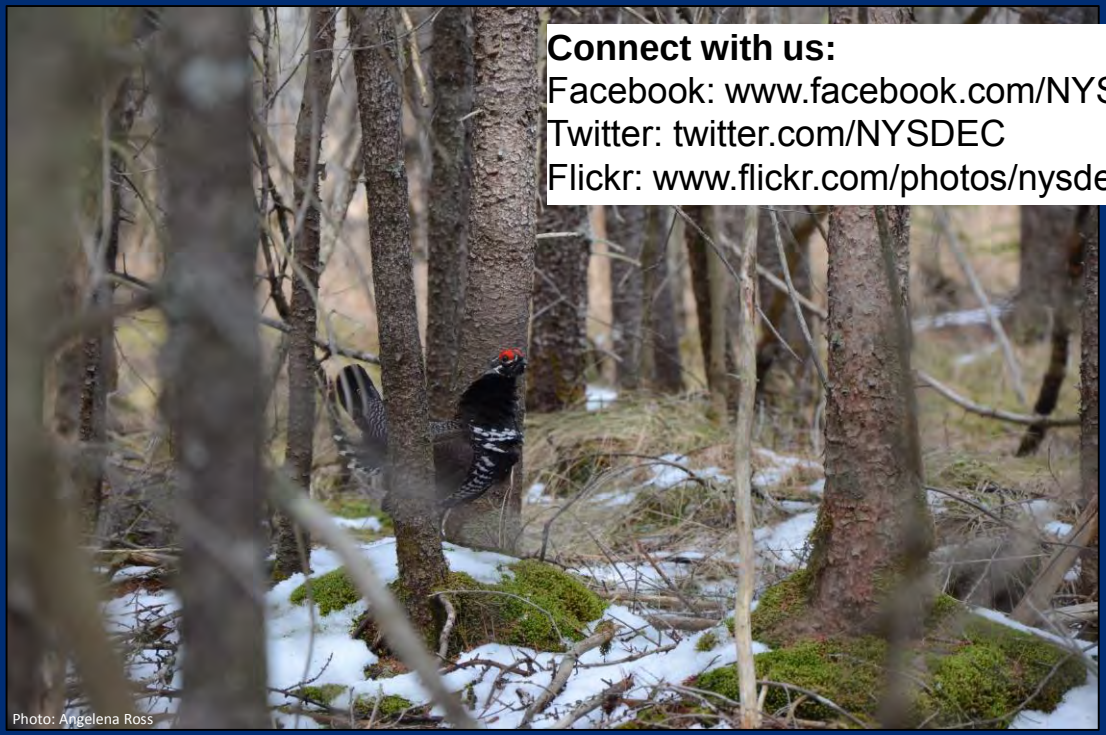
Thank You!



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Status of River Otter in across NY State

SUNY ESF Roosevelt Wild Life Station

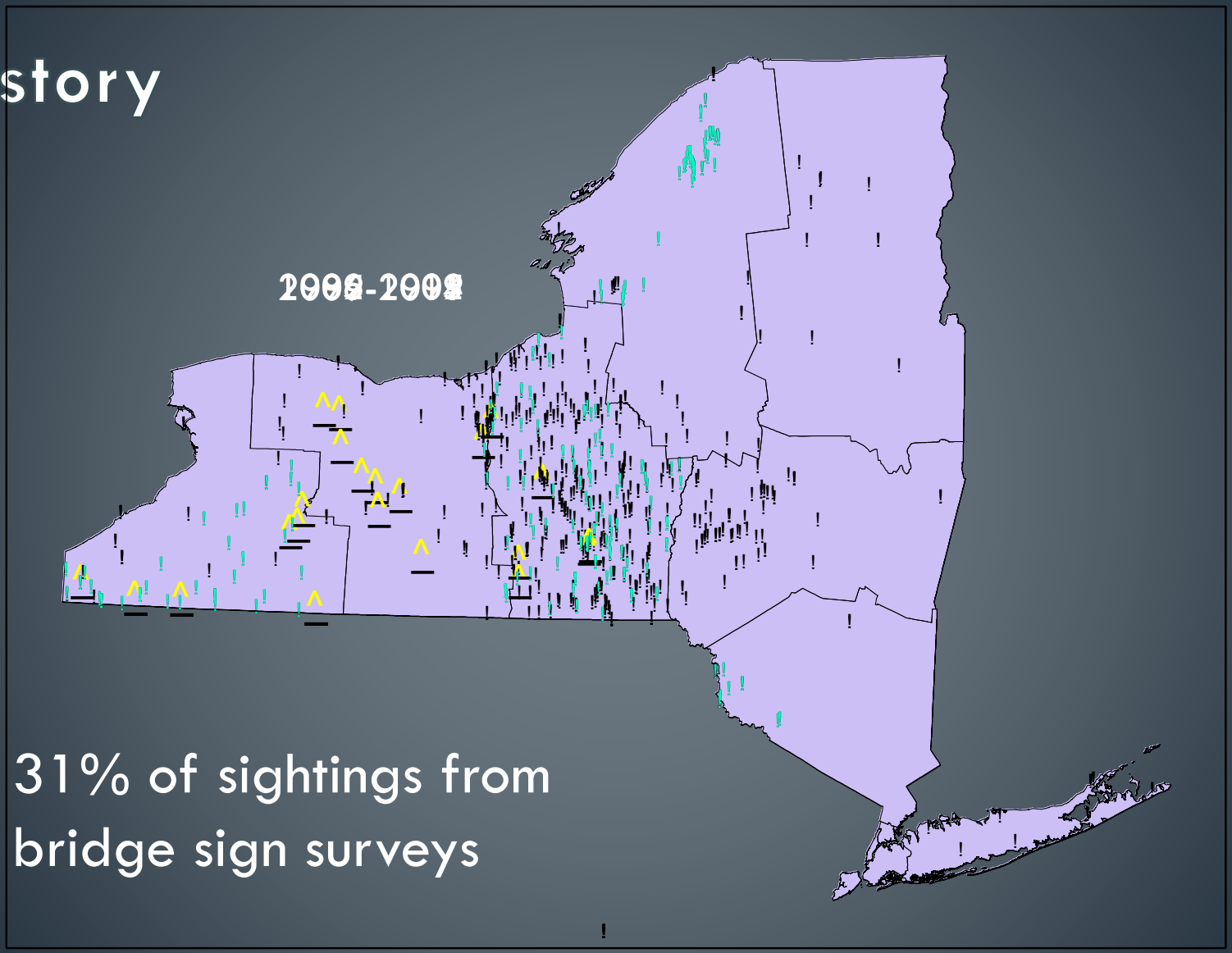
Study Objectives

1. Document historic trend in otter population within recovery zone
2. Assess current status of river otter in areas closed to harvest
3. Provide robust, efficient and non-harvest based plan for monitoring changes in otter populations

General approach

- Site occupancy design
- Winter bridge-based surveys
- Alternative methods?

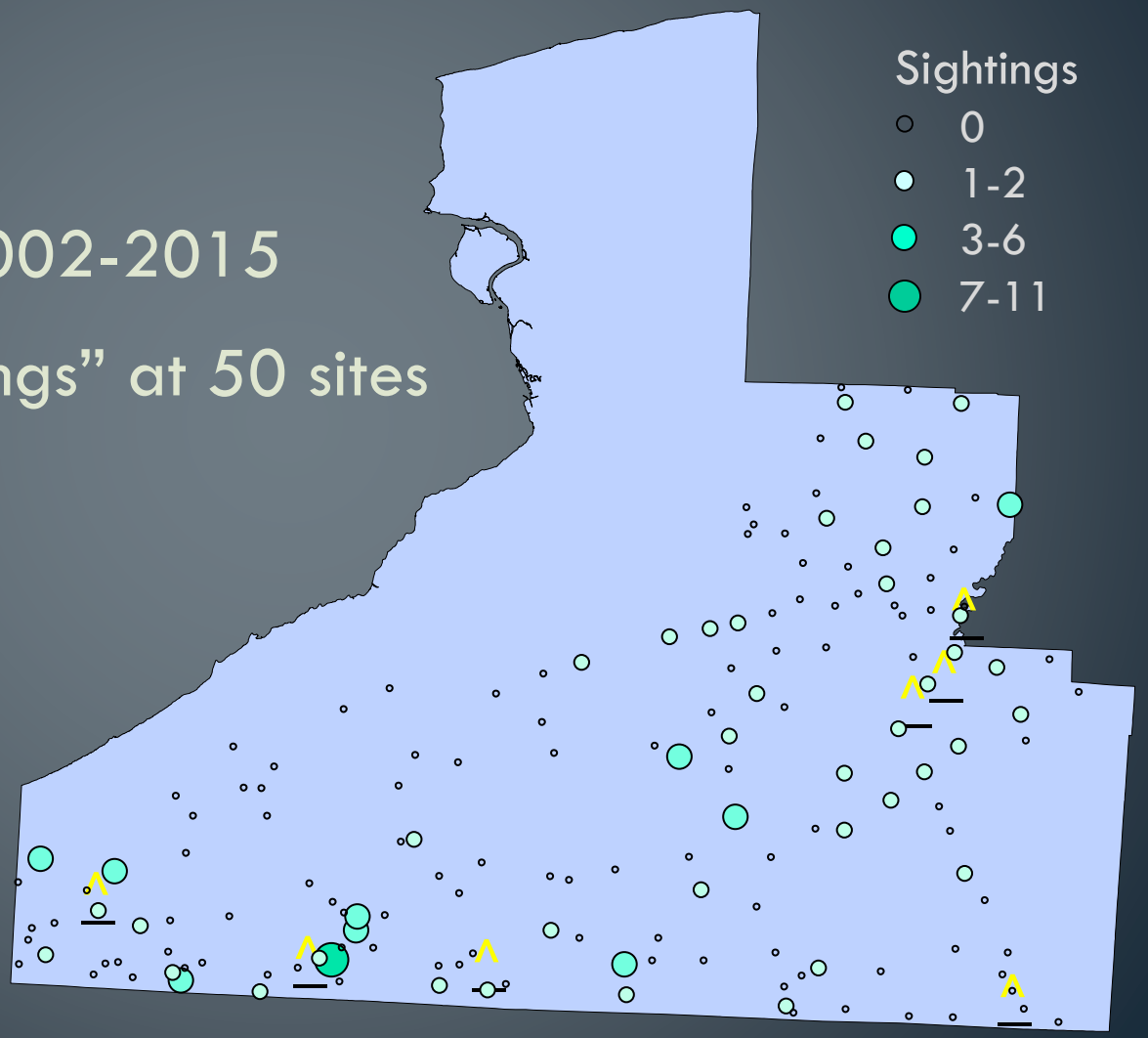
History



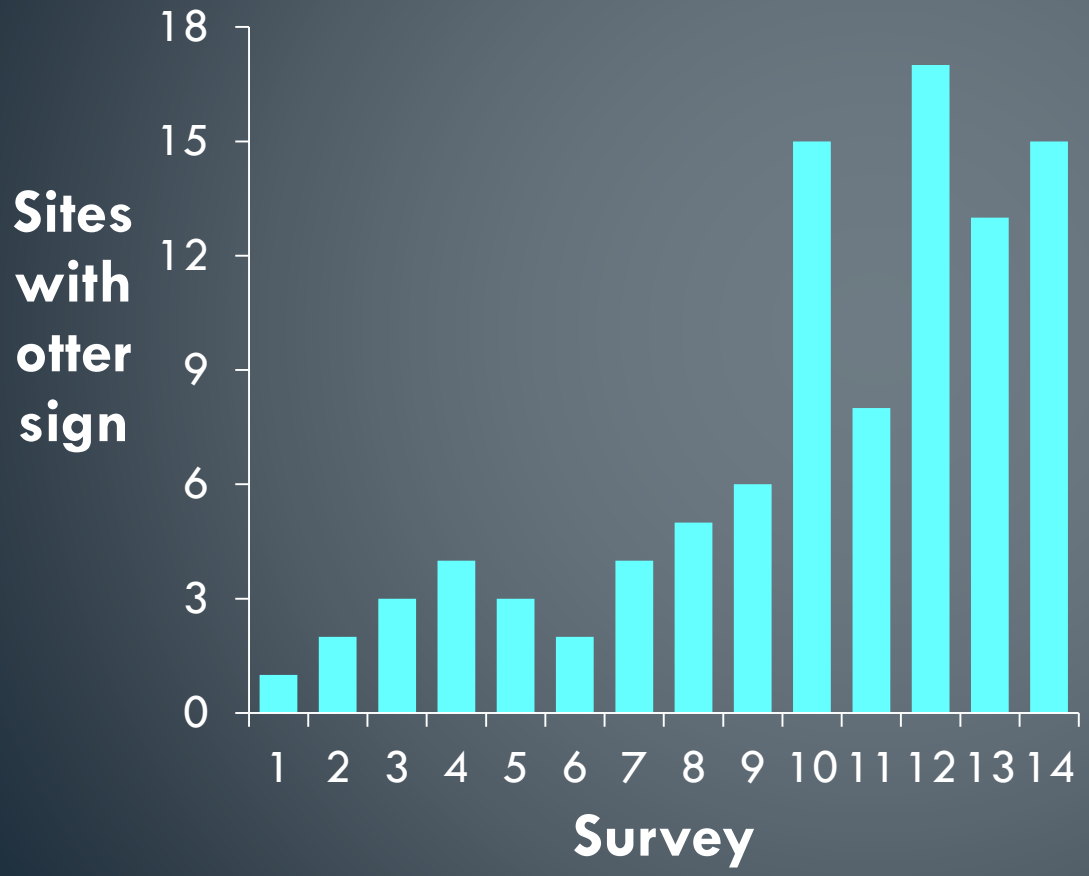
- 31% of sightings from bridge sign surveys

Region 9 Surveys

- 159 sites
- 1997-1999, 2002-2015
- 98 total “sightings” at 50 sites
  (2-11 sightings/site)



Region 9 Surveys



- False absences not accounted for
- Single visit, short distance problematic
  (Jeffress et al. 2011)

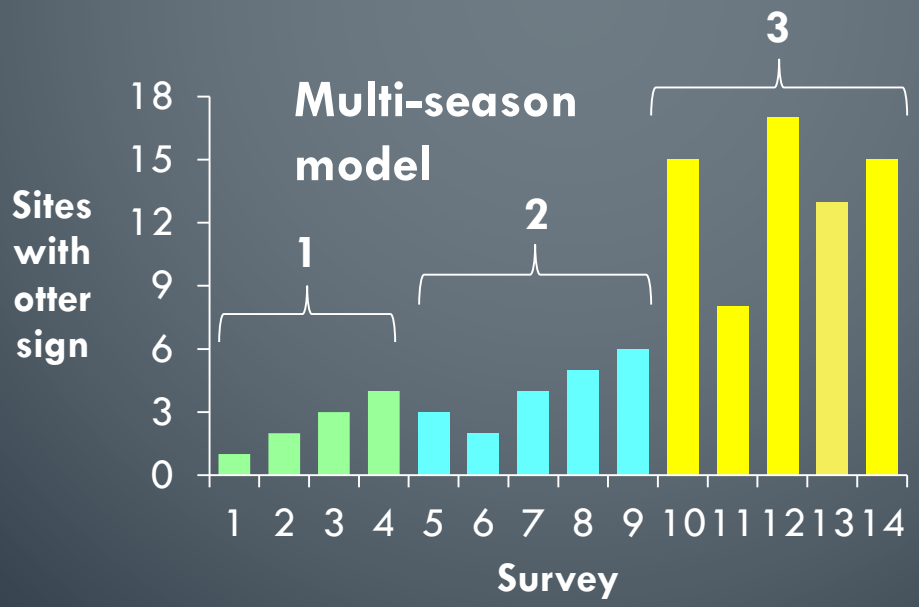
"Fixing" bridge surveys

- **Conduct replicate surveys** (MacKenzie et al. 2002)

  Temporal replicates

  → revisit sites (4+ times/season)

  → years as replicates



"Fixing" bridge surveys

- **Conduct replicate surveys** (MacKenzie et al. 2002)

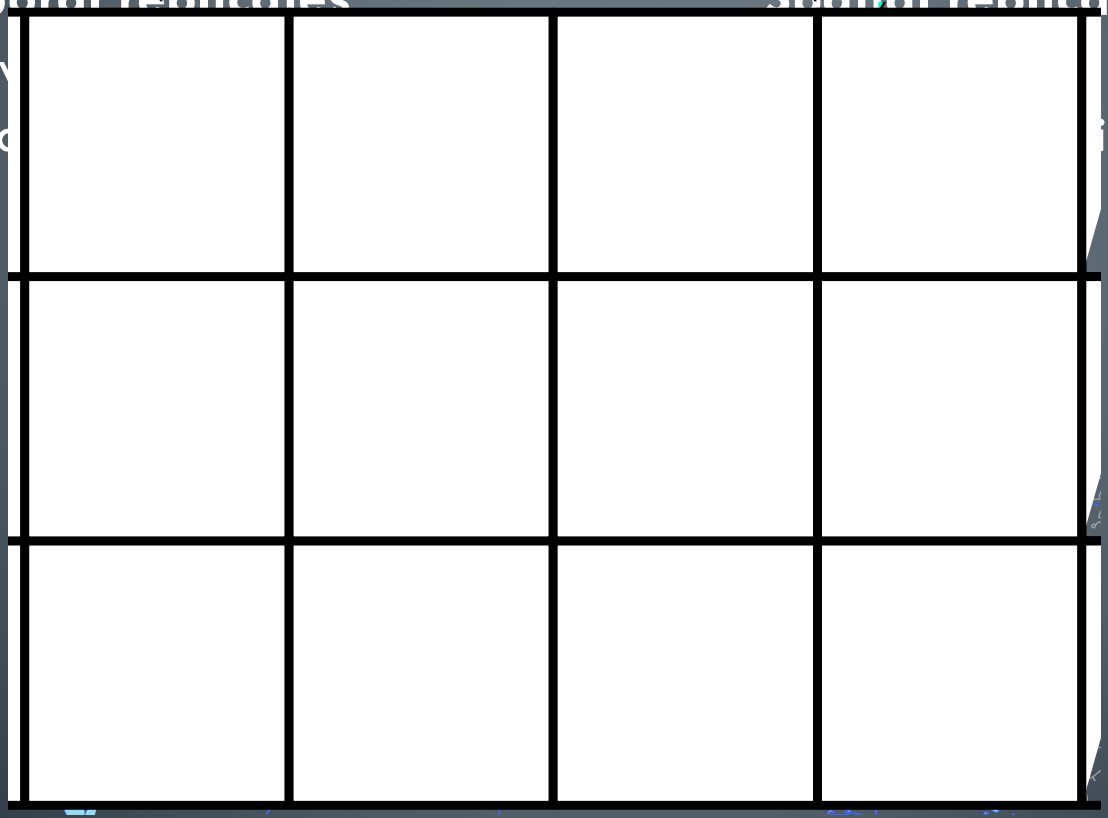
Temporal replicates

→ rev

→ yea

Spatial replicates

icates w/in blocks



Survey site

Survey block

Best model

Variable	Season	Estimate
Probability of Detection	2002-2005	0.06 (0.00-0.13)
	2006-2010	0.22 (0.09-0.35)
	2011-2015	0.32 (0.23-0.41)

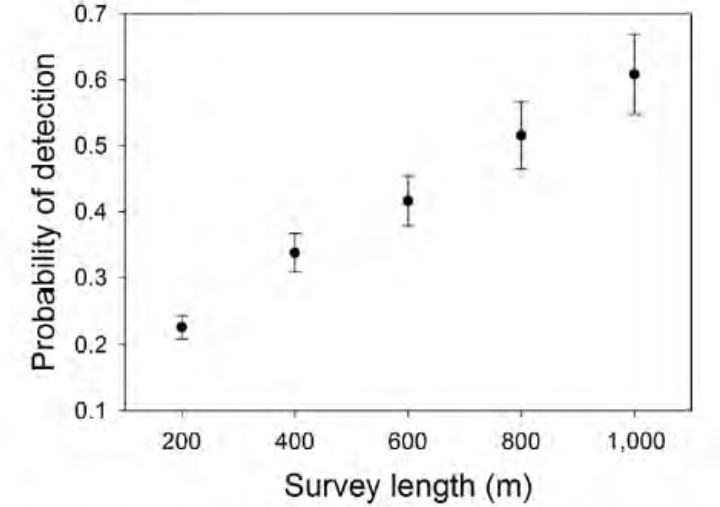
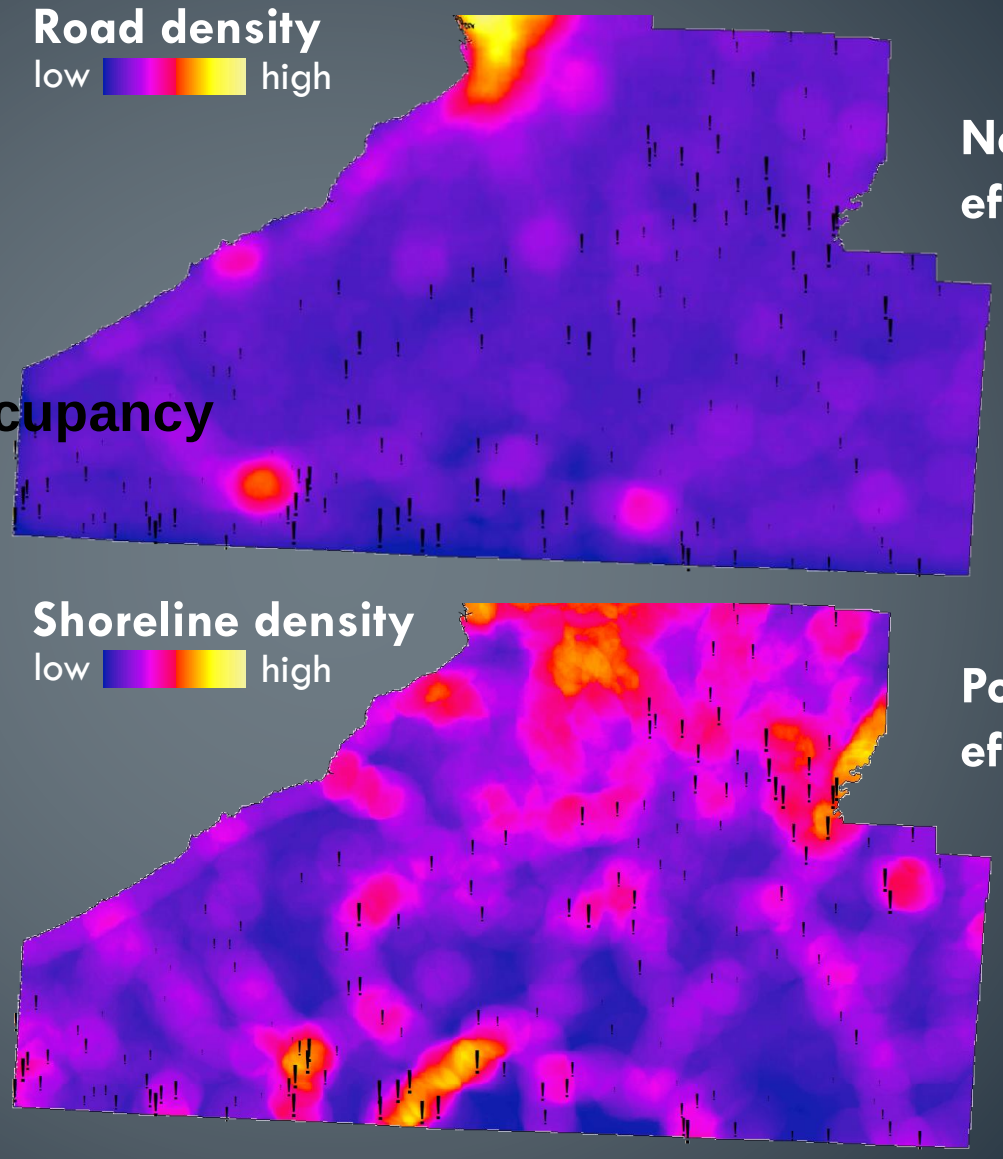


Figure 3. Probability of detection for 5 incremental survey lengths estimated from river otter sign surveys conducted in eastern Kansas, USA, 2008–2009. Error bars represent one standard error.

$\hat{p}$ = **0.23 (0.02 SE)**
200-m bridge surveys
(Jeffress et al. 2011)

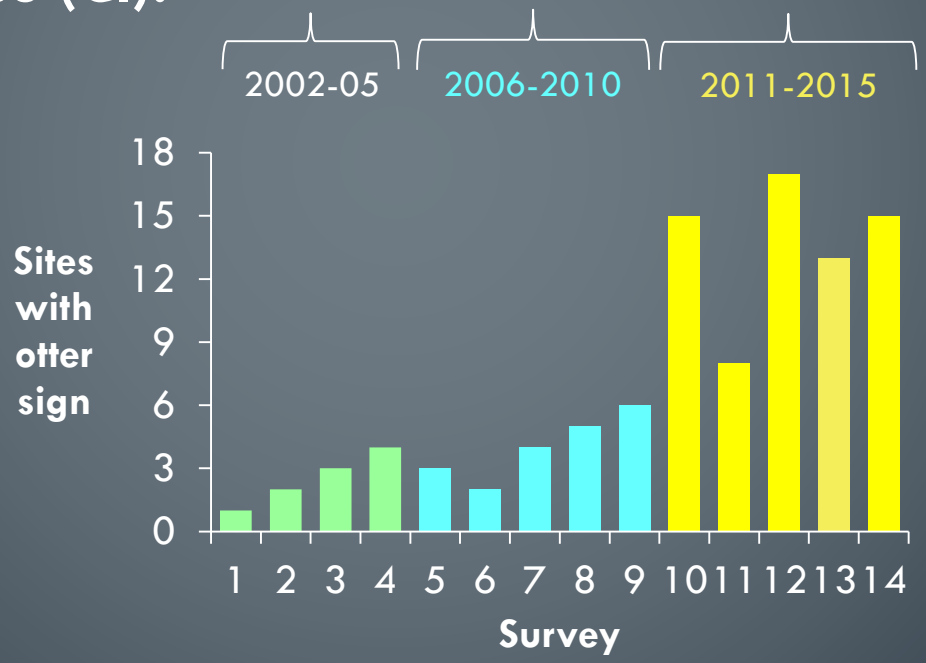
Best model


Road density
low
high
Negative effect
Shoreline density
low
high
Positive effect
Legend
Probability of site use 2002-2005
Probability of Occupancy
0.01 - 0.10
0.010 - 0.21
0.21 - 0.35
0.35 - 0.52
0.52 - 0.89

Best model

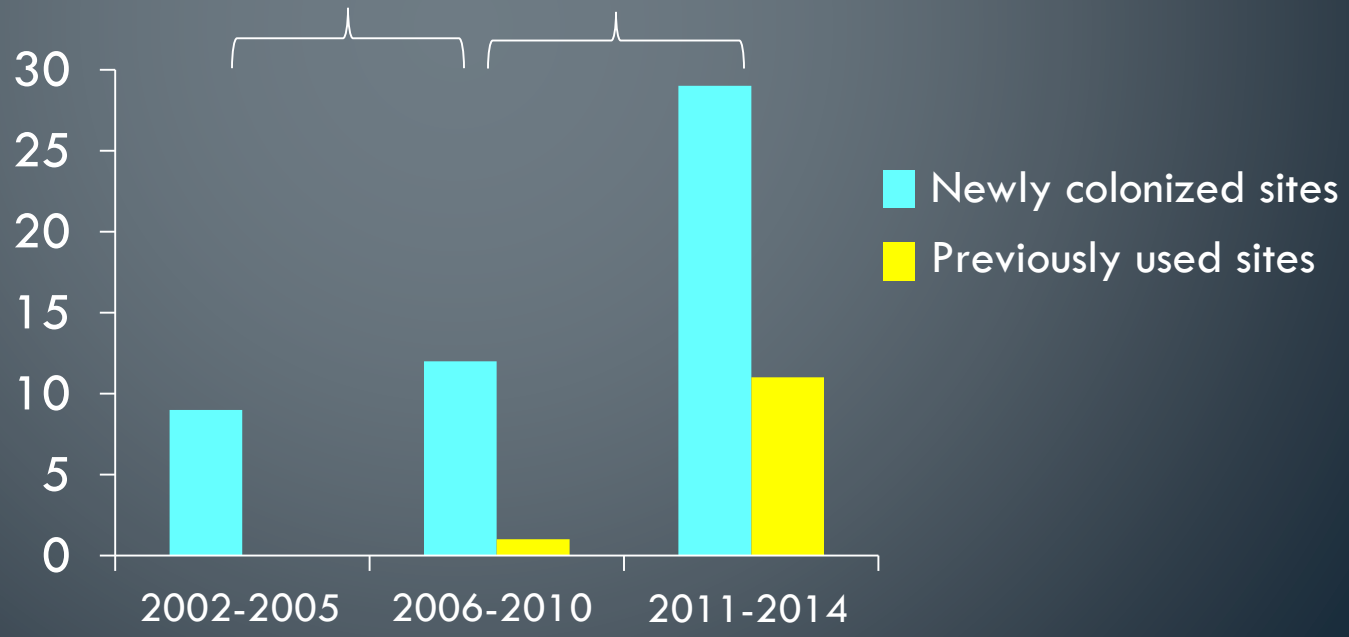
Predicted mean probability of site use (CI):

~ **0.14** (0.02-0.26) **0.33** (0.21-0.45)



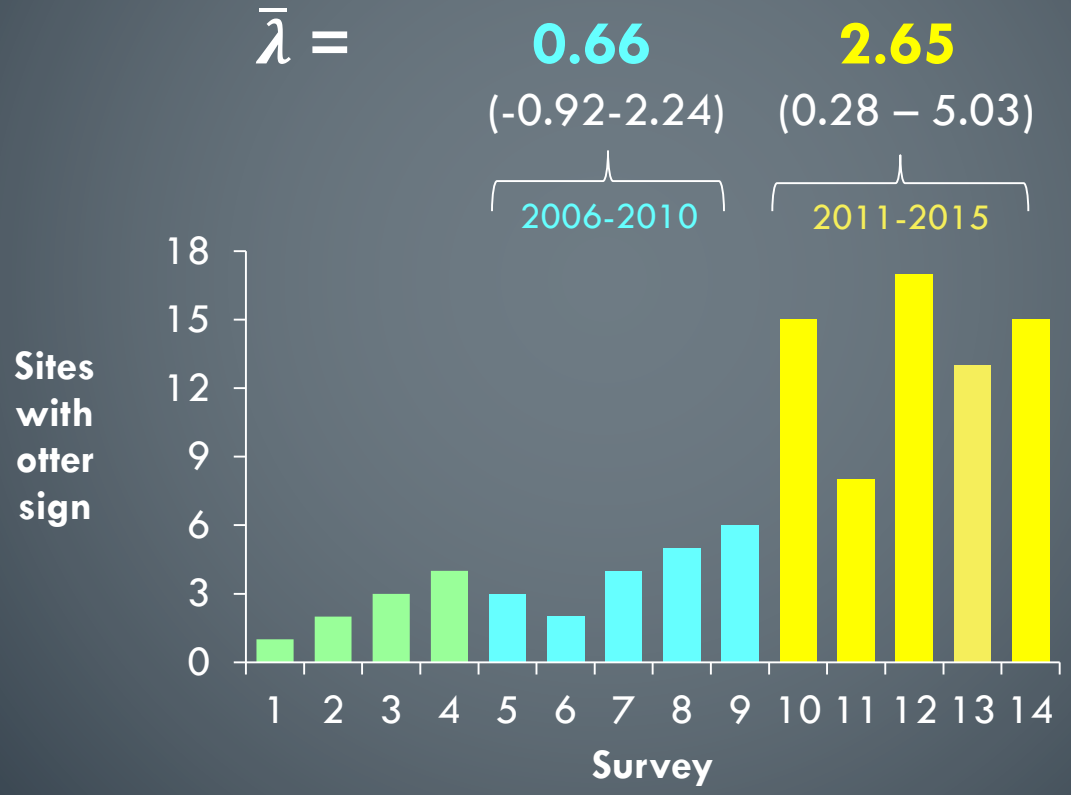
Best model

	2002-2005	2006-2010
Probability of colonization	**0.05** (0.00-0.20)	**0.23** (0.12-0.34)
Probability of extinction	**0.66** (0.36-0.96)	**0.05** (0.00-0.37)



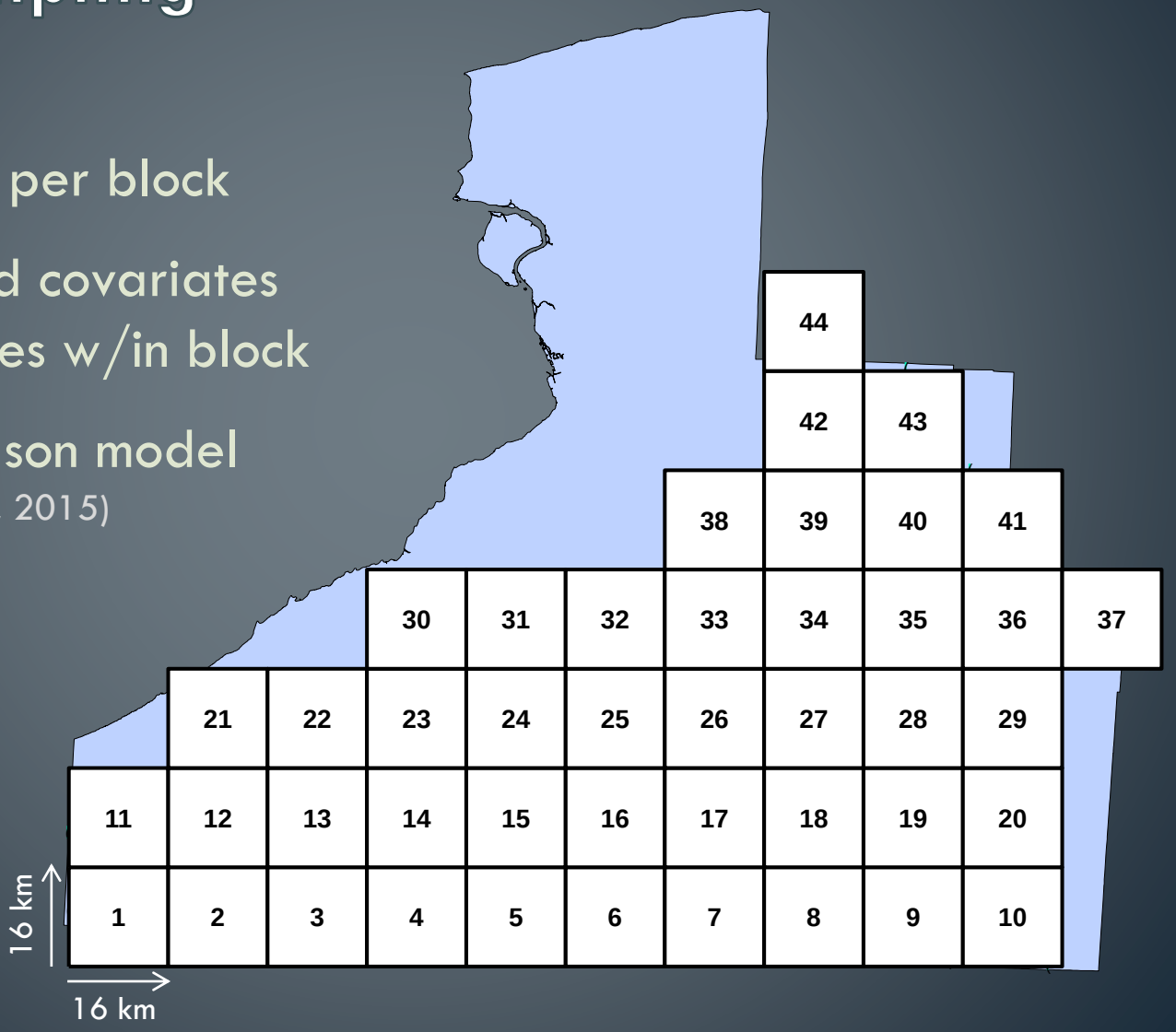
Best model

Occupancy-derived estimate of population growth



Alternative approach: Spatial sampling

- 1-8 reps per block
- Averaged covariates across sites w/in block
- Multi-season model (2013, 2014, 2015)



Best model

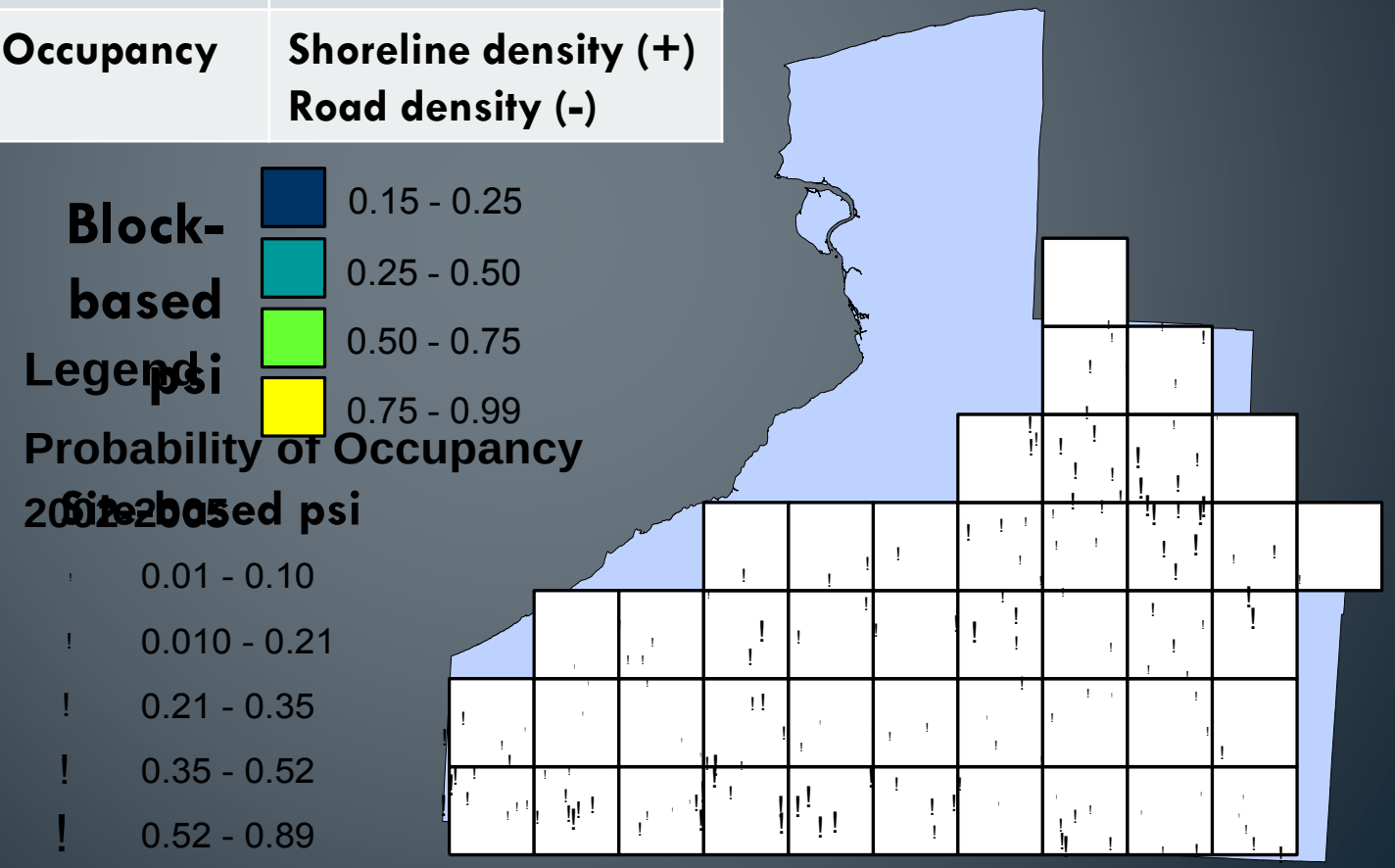
Variable	Estimate
Probability of Detection	**0.14 (0.09-0.19)**

Temporal mean =
0.32 (0.23-0.41)

Detection and occupancy confounded to some degree with spatial sampling
(Peach, Cohen & Frair 2017)

Best model

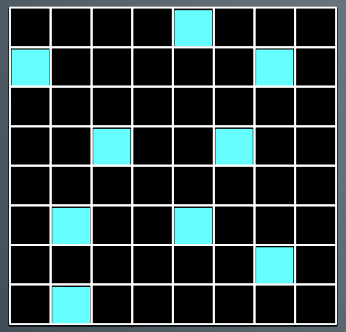
Variable	Estimate
Probability of Detection	0.14 (0.09-0.19)
Probability of Occupancy	**Shoreline density (+)** **Road density (-)**



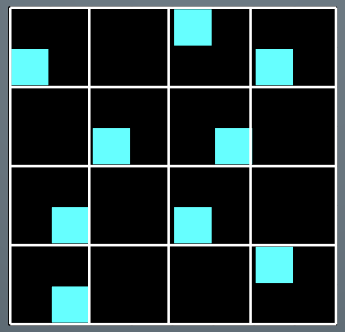
Best model

Variable	Estimate
Probability of Detection	0.14 (0.09-0.19)
Probability of Occupancy	**Shoreline density (+)** **Road density (-)**

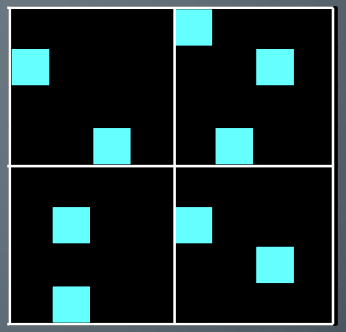
Spatial mean ψ (95% CI)	**Temporal mean ψ** (95% CI)
0.62 (0.38-0.84)	0.33 (0.21-0.45)



$\psi = 0.14$



$\psi = 0.56$

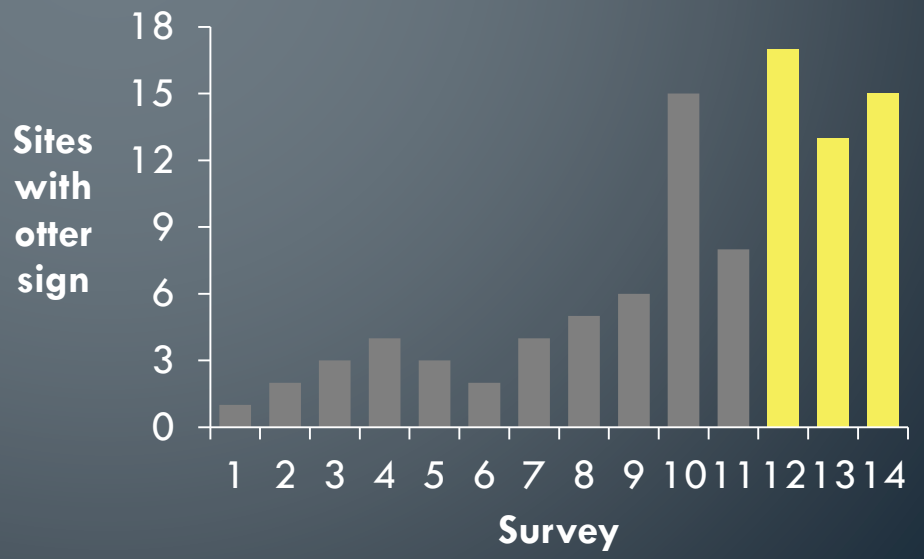


$\psi = 1.00$

Best model

Variable	Estimate
Probability of Detection	0.14 (0.09-0.19)
Probability of Occupancy	Shoreline density (+) Road density (-)
Probability of Colonization	**0.00 (0.00-0.00)**
Probability of Extinction	**0.02 (0.00-0.26)**

Occupancy-based estimate of population growth:
λ = **0.98** (0.74 – 1.22)



Where do we go from here?

Design option 1

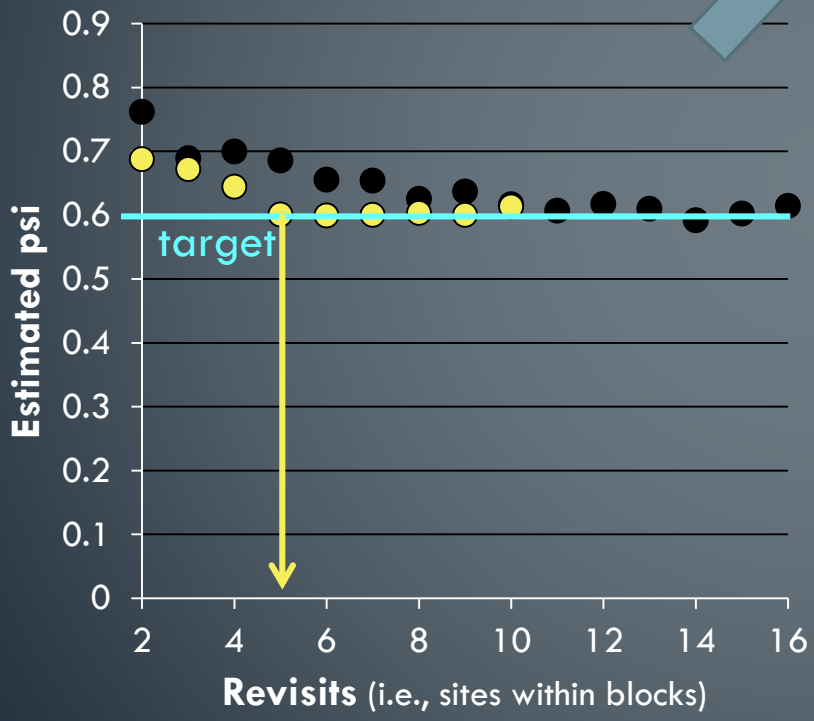
Survey all blocks with equal intensity

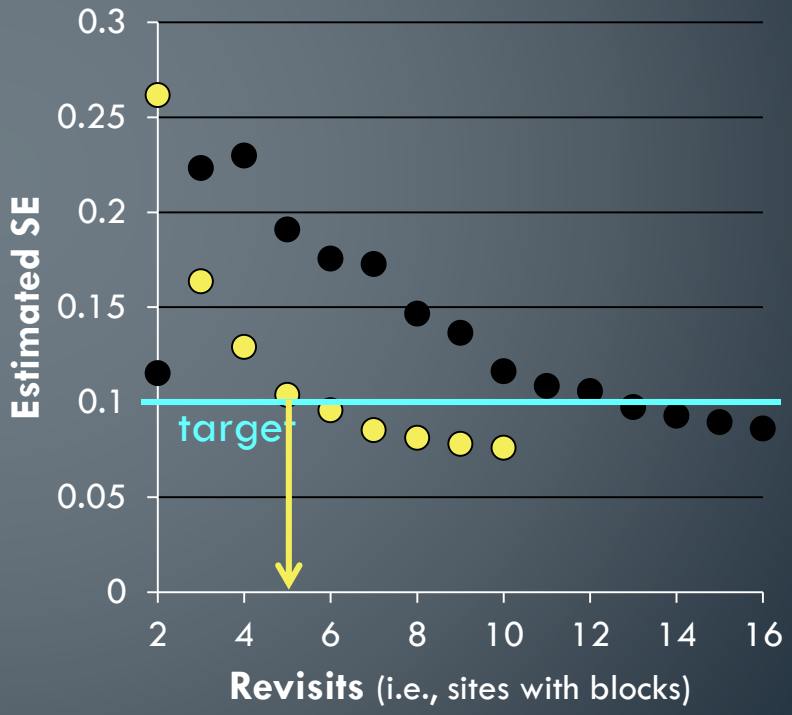
Increase p by searching 400 m

$\psi = 0.6$ and $p = 0.3$

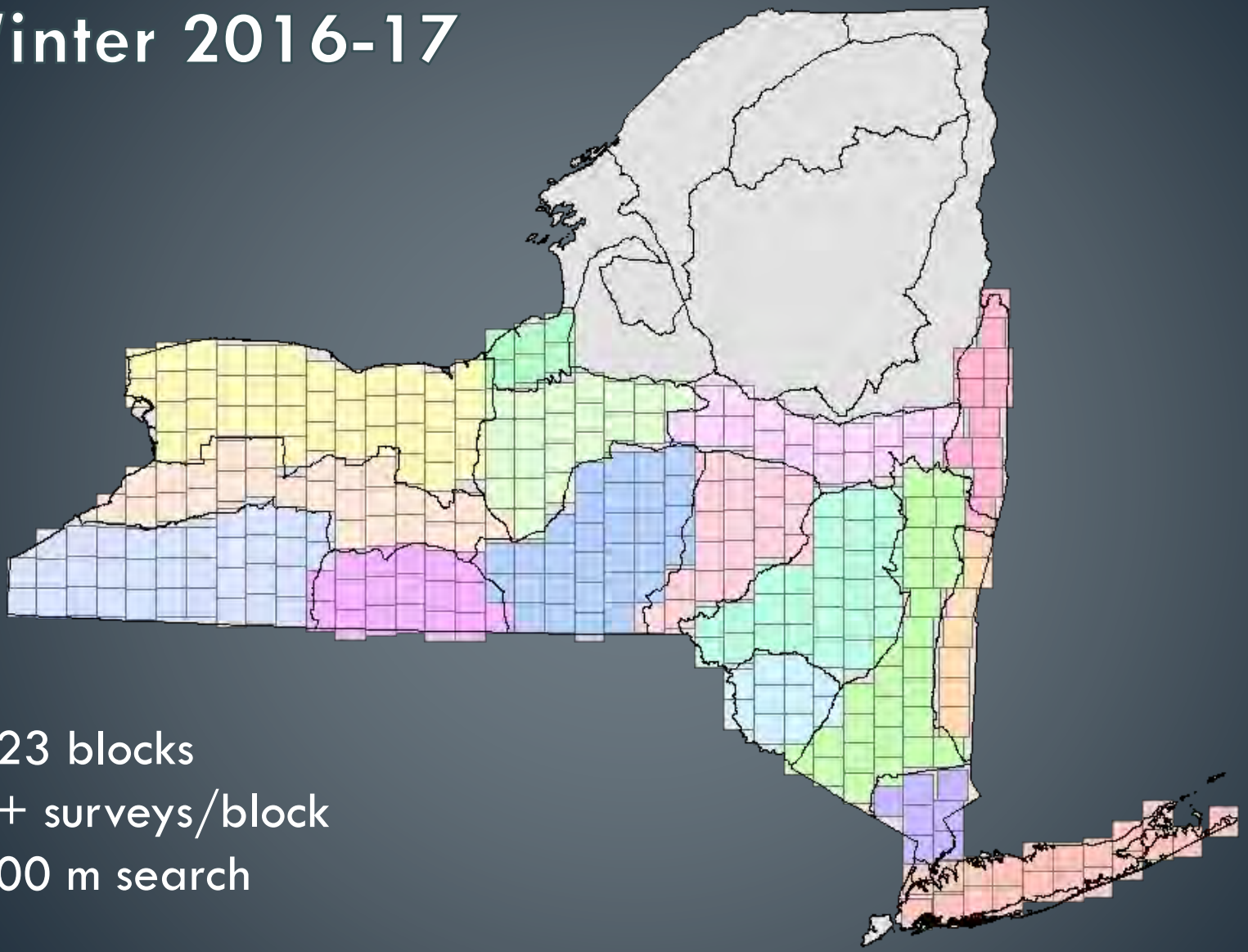
44 total blocks

220 sites per large WMUA





Winter 2016-17

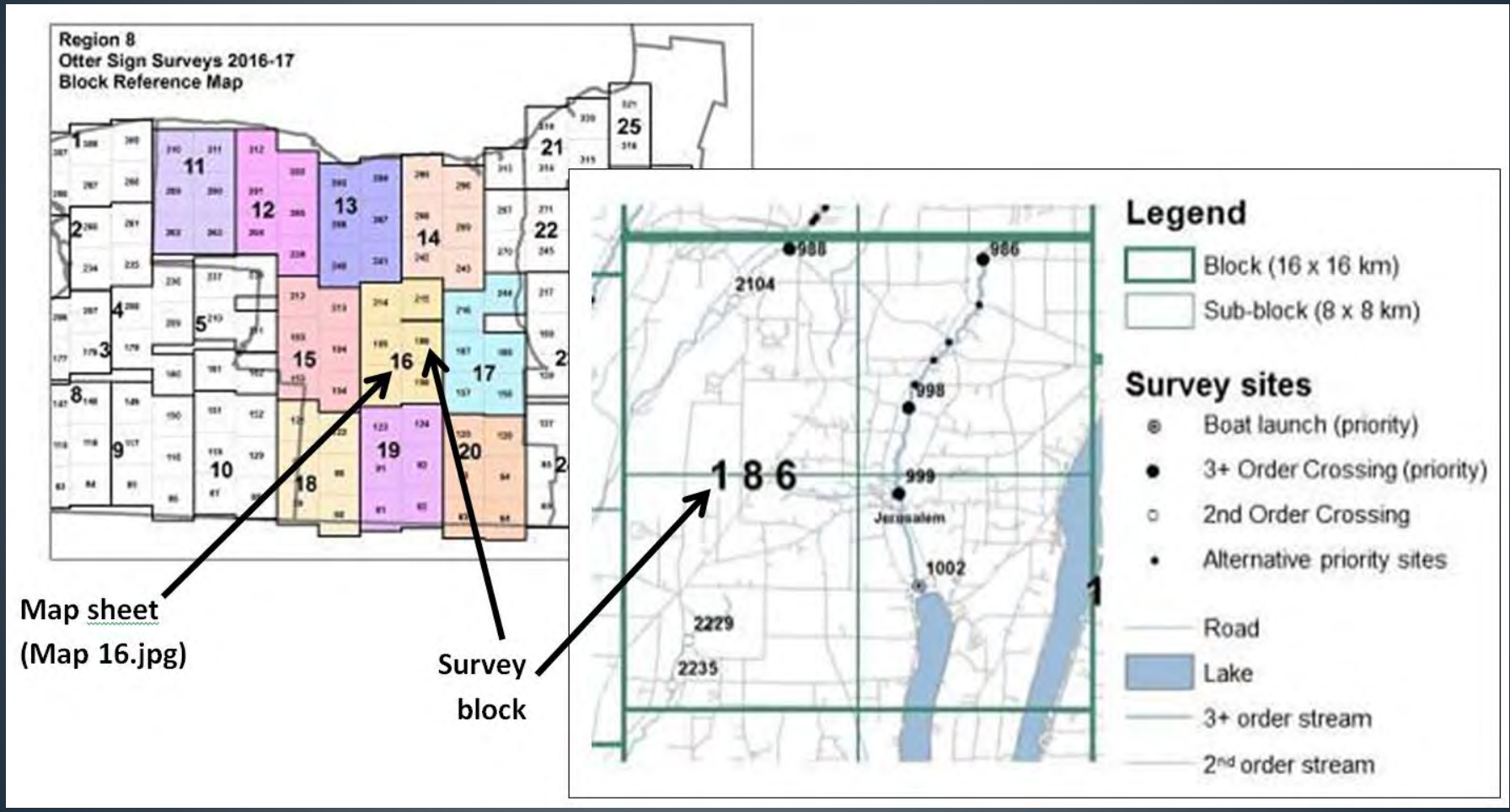


323 blocks

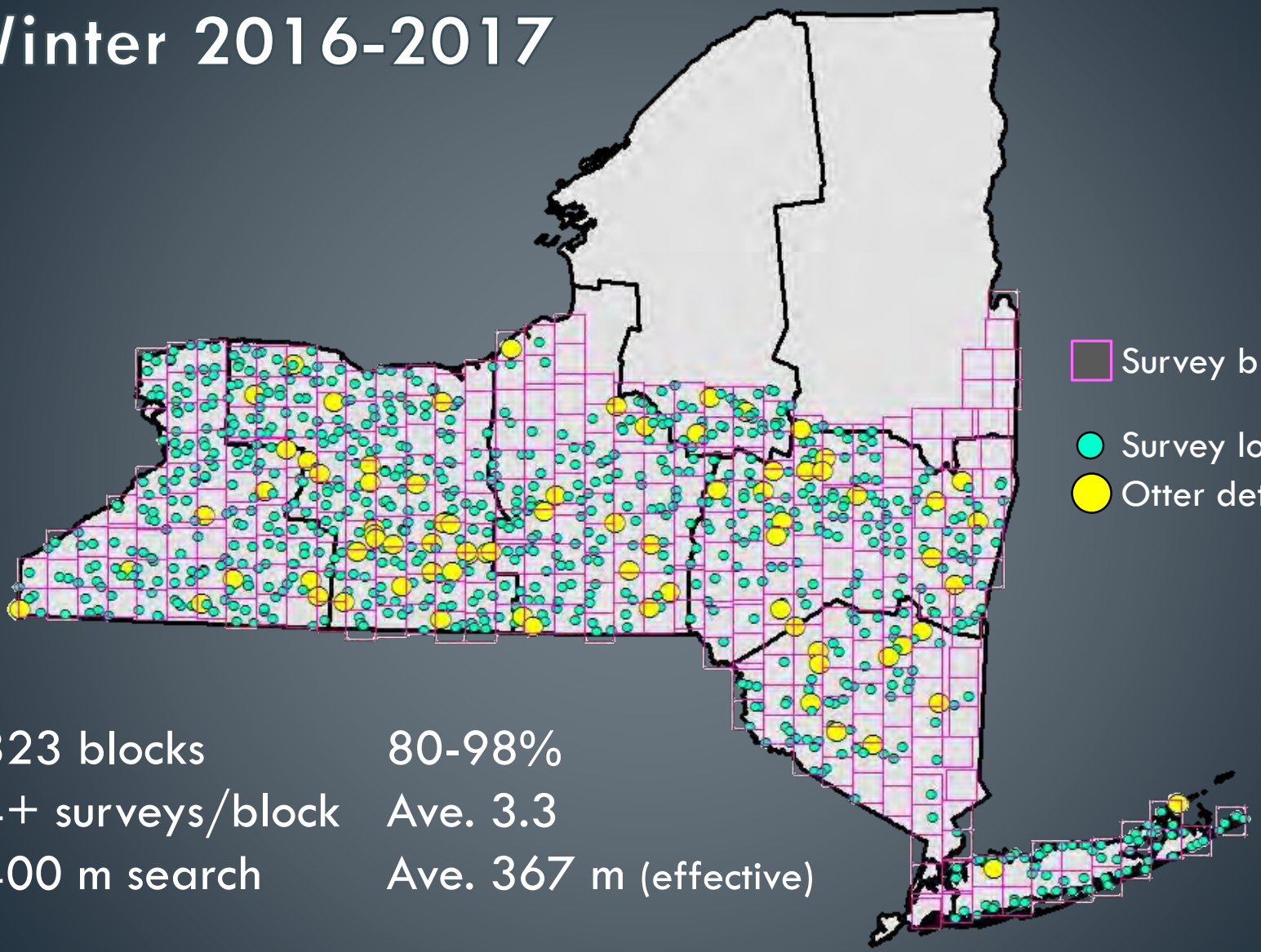
4+ surveys/block

400 m search

Implementation



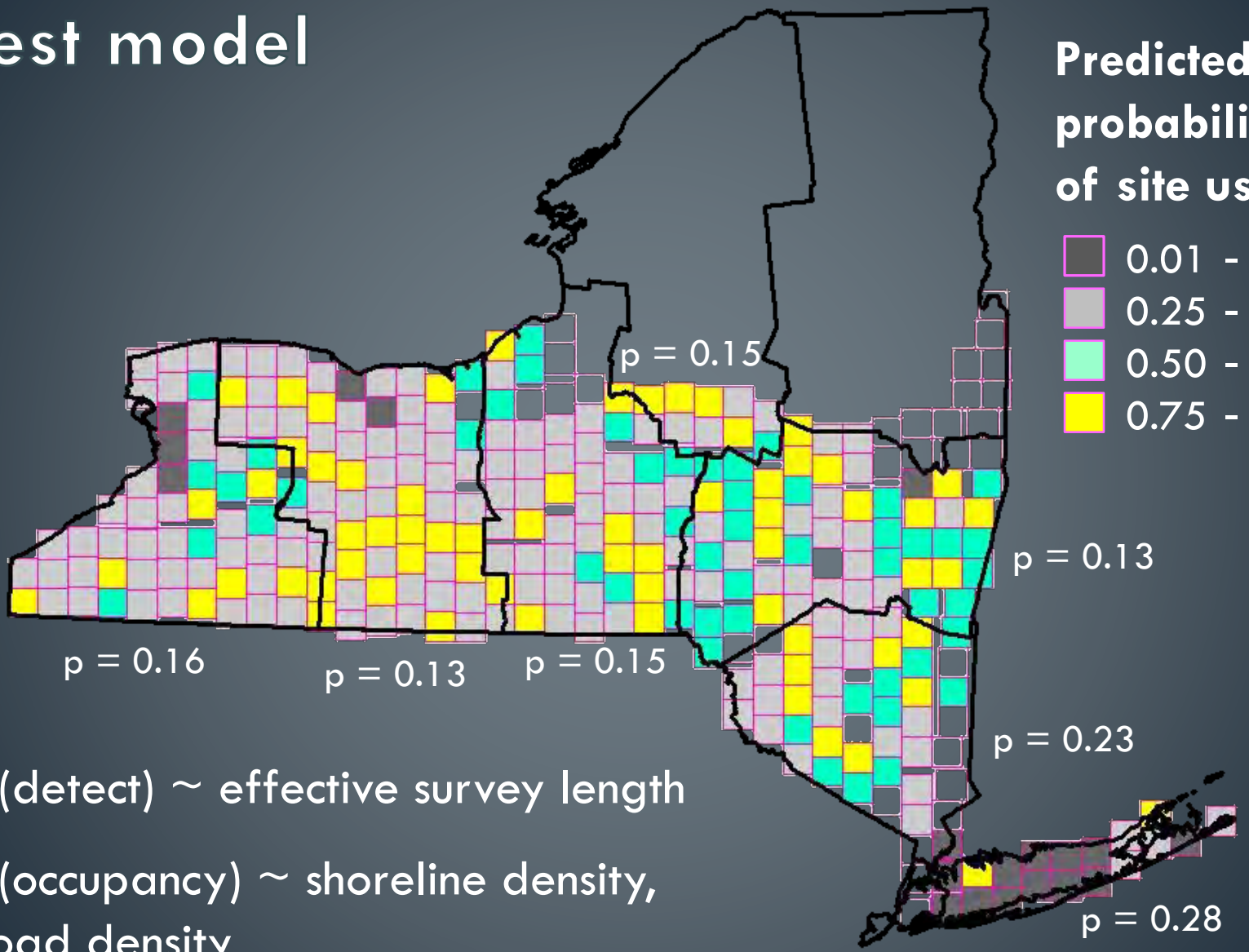
Winter 2016-2017



323 blocks
4+ surveys/block
400 m search

80-98%
Ave. 3.3
Ave. 367 m (effective)

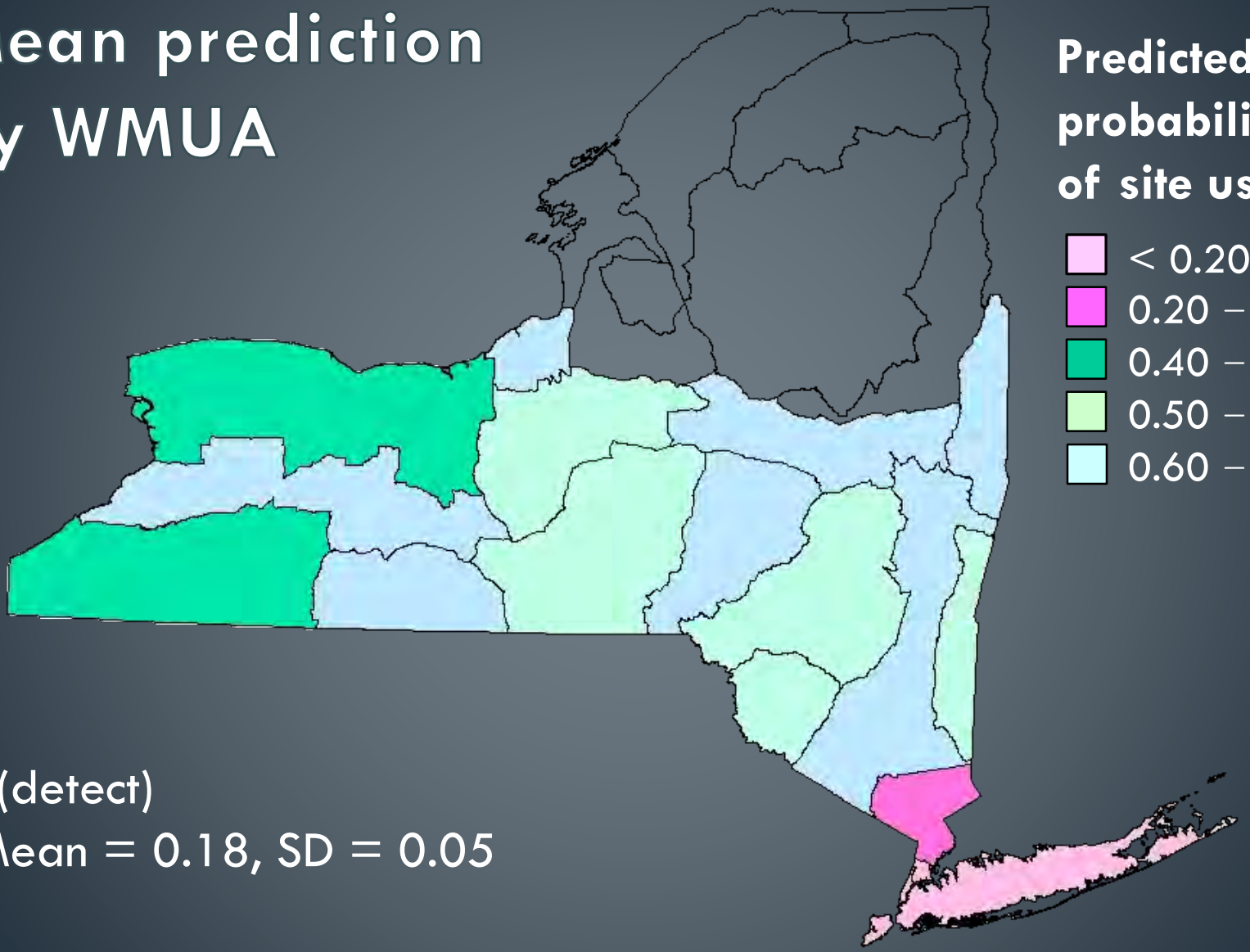
Best model



P(detect) ~ effective survey length

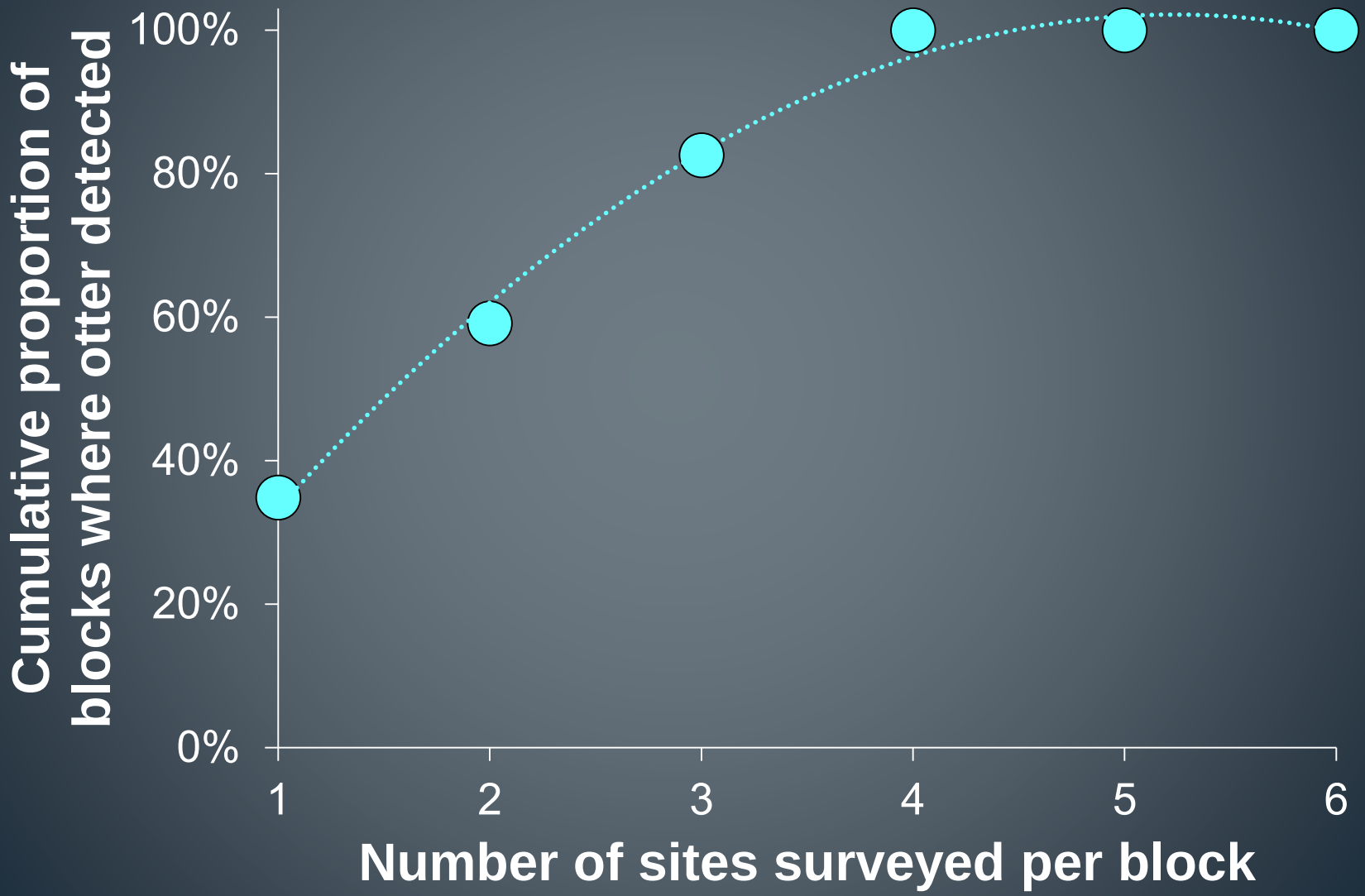
P(occupancy) ~ shoreline density, road density

Mean prediction by WMUA

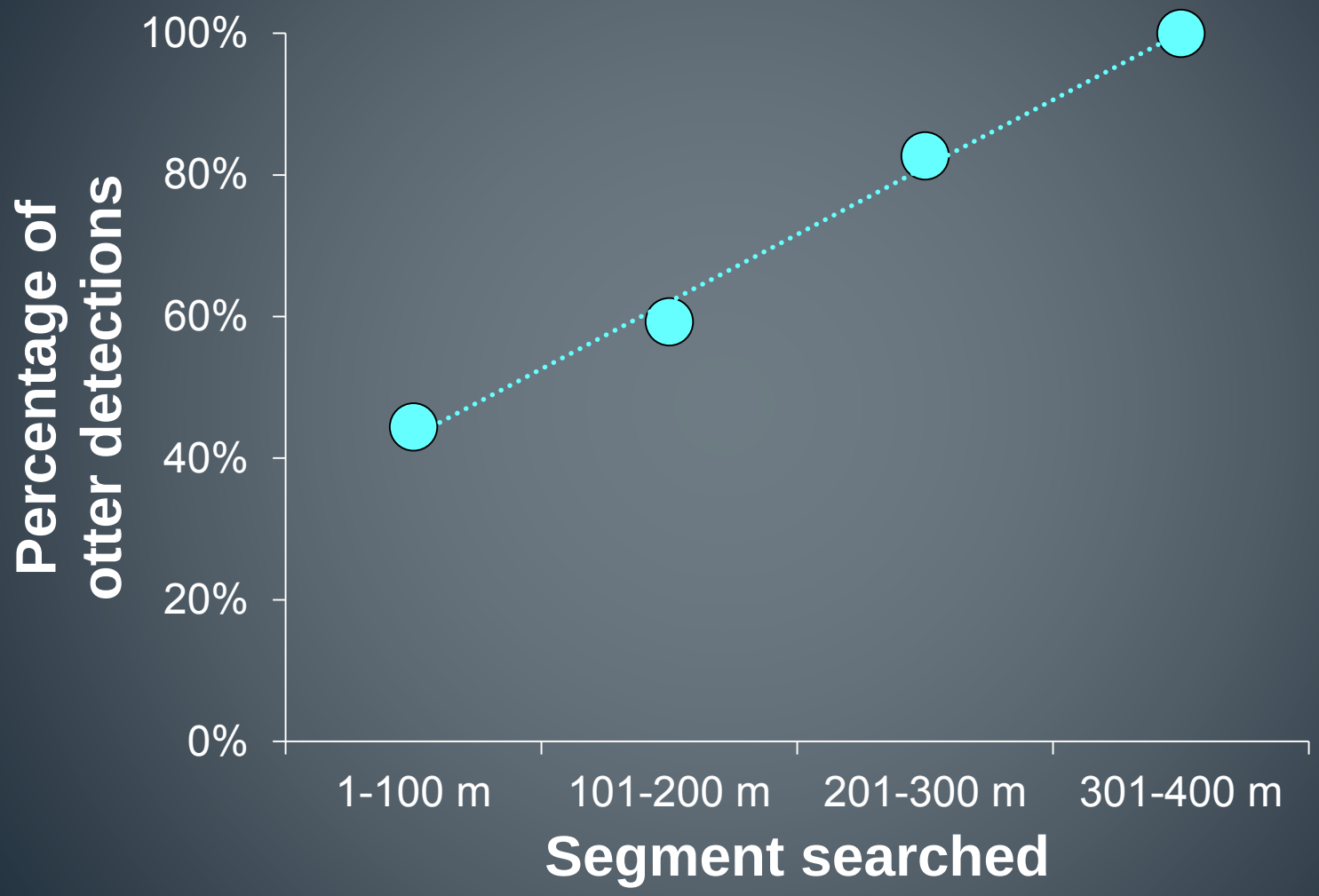


P(detect)
Mean = 0.18, SD = 0.05

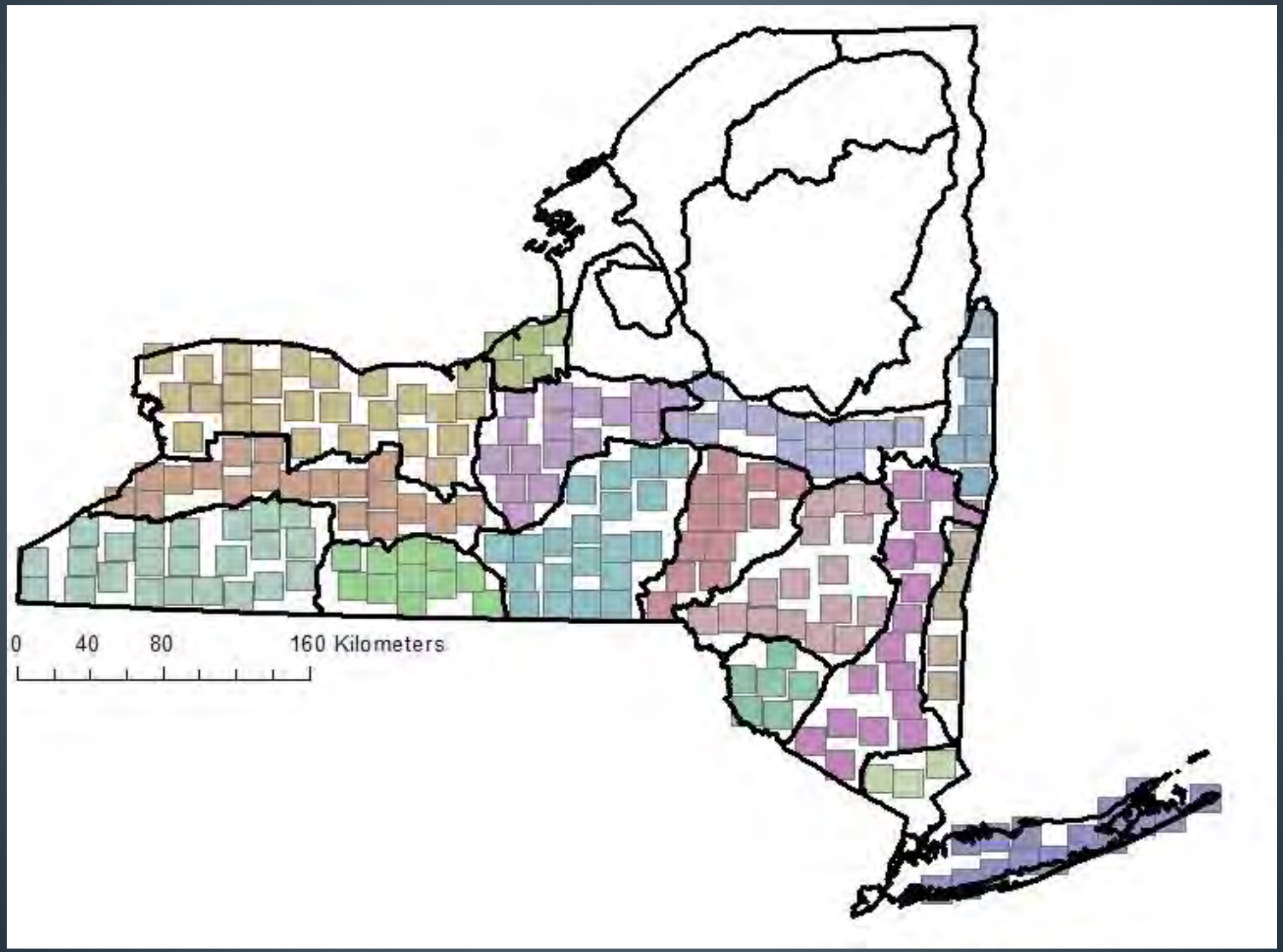
Keep 4 surveys per block



Keep 400-m search length



Reduce total # of blocks (34% reduction)



Final analysis … coming this May

New York State Department of Environmental Conservation

Hunter Related Shooting & Tree Stand Incidents
Legal Updates
EnCon Law Q & A

Andrew M. Cuomo
Governor

Basil Seggos
Commissioner

New York State Department of Environmental Conservation

Lt. Nathan VerHague
Lt. Liza Bobseine
ECO Ric Grisolini

Andrew M. Cuomo
Governor

Basil Seggos
Commissioner

2017 HUNTING SAFETY STATISTICS

Prepared by the Hunter Education Program

Total Incidents 2017	
Fatal	1
Non-fatal	18
Self-Inflicted	5
Two-Party	14

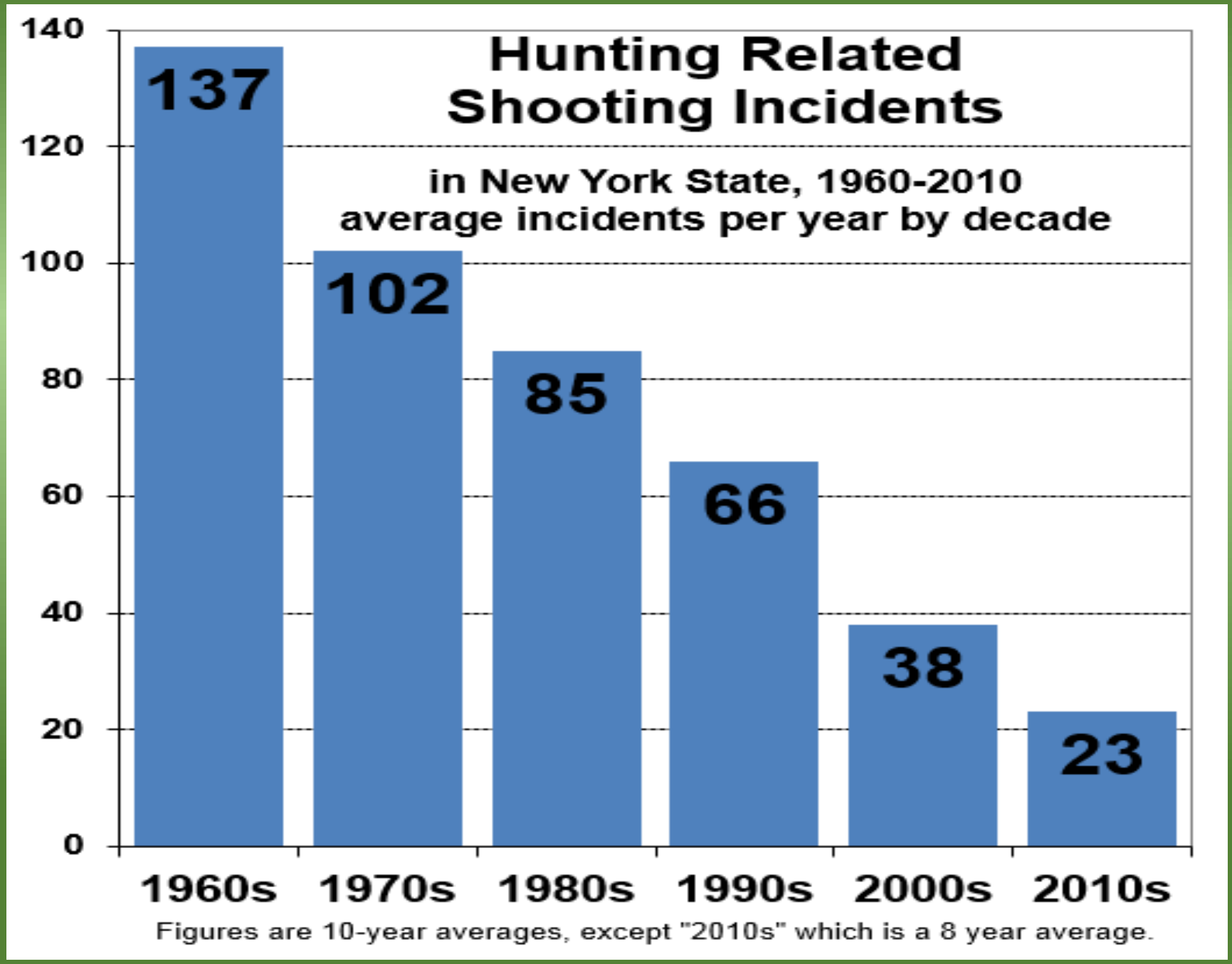
2017 HUNTING SAFETY STATISTICS

SPECIES HUNTED

Big Game:	Bear	0
	Deer	6
Turkey:	Spring	3
	Fall	0
Upland/Furbearer:	Rabbits	1
	Squirrels	1
	Upland Birds	2
	Raccoon	0
	Fox & Coyote	2
Waterfowl		3
Other:	Woodchuck	0
	Other (nongame)	0
Unknown (general upland game)		1

2017 HUNTING SAFETY STATISTICS
TYPE OF IMPLEMENT

Shotgun	10
Rifle	7
Handgun	1
Muzzleloader	0
Crossbow	0
Bow	1
Air Gun	0


Hunting Related
Shooting Incidents
in New York State, 1960-2010
average incidents per year by decade
140
120
100
80
60
40
20
0
137
102
85
66
38
23
1960s
1970s
1980s
1990s
2000s
2010s
Figures are 10-year averages, except "2010s" which is a 8 year average.

Single Fatality in 2017 Season

- Chautauqua County
- Firearm: Thompson Contender
- **Illegal/Unethical Activities at the time of the incident:**
  - **Trespass**
  - **Hunting after legal shooting hours**
  - **Failure to identify target**

How HRSI Info is Gathered

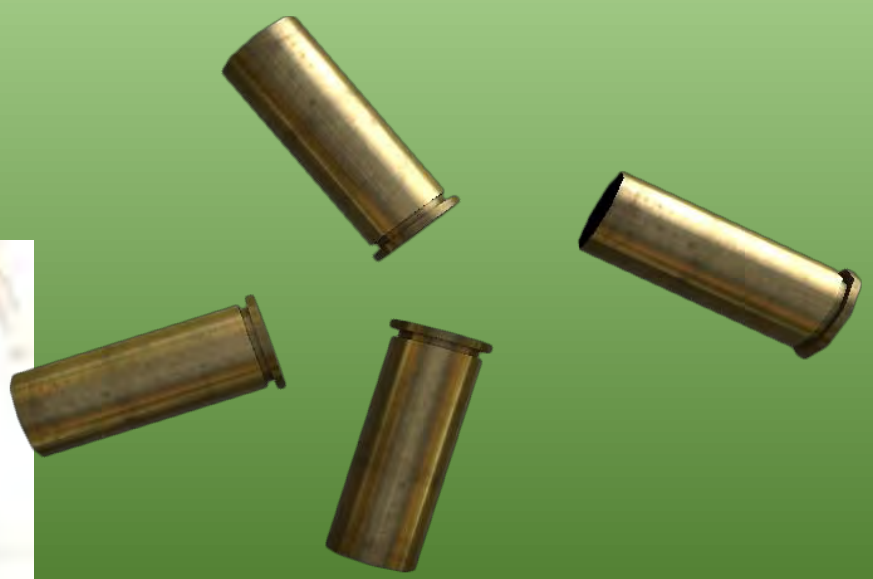
- Often, the story we are told is not what actually happened.
- Interviews
- Evidence detection & Collection
- Search Warrants

Techniques used in HRSI documentation:

- **K-9s to locate shell casings, wads, blood, animals, etc.**
- **Forensic Evidence Collection: Fingerprints, trace evidence**

Techniques used in HRSI documentation:

- **Scene recreation (using similar or actual clothing, light and visibility conditions, etc. to show a jury or judge what the scene was like**
- **Scene Mapping**



2017 TREE STAND SAFETY STATISTICS

Tree stand incidents are becoming a major cause of hunting related injuries. The proper use of tree stands and tree stand safety equipment will help to prevent these injuries and fatalities.

Tree Stand Injuries & Fatalities

- In our first year documenting Tree Stand Injuries, we investigated 12 incidents
- 6 of those were fatal

2017 TREE STAND SAFETY STATISTICS

TOTAL INCIDENTS	12
Fatal – no full-body harness	5
Fatal – with unattached harness*	1
Fatal – with attached harness	0
Non-fatal – no full body harness	3
Non-fatal – with unattached harness	3
Non-fatal – with attached harness	0

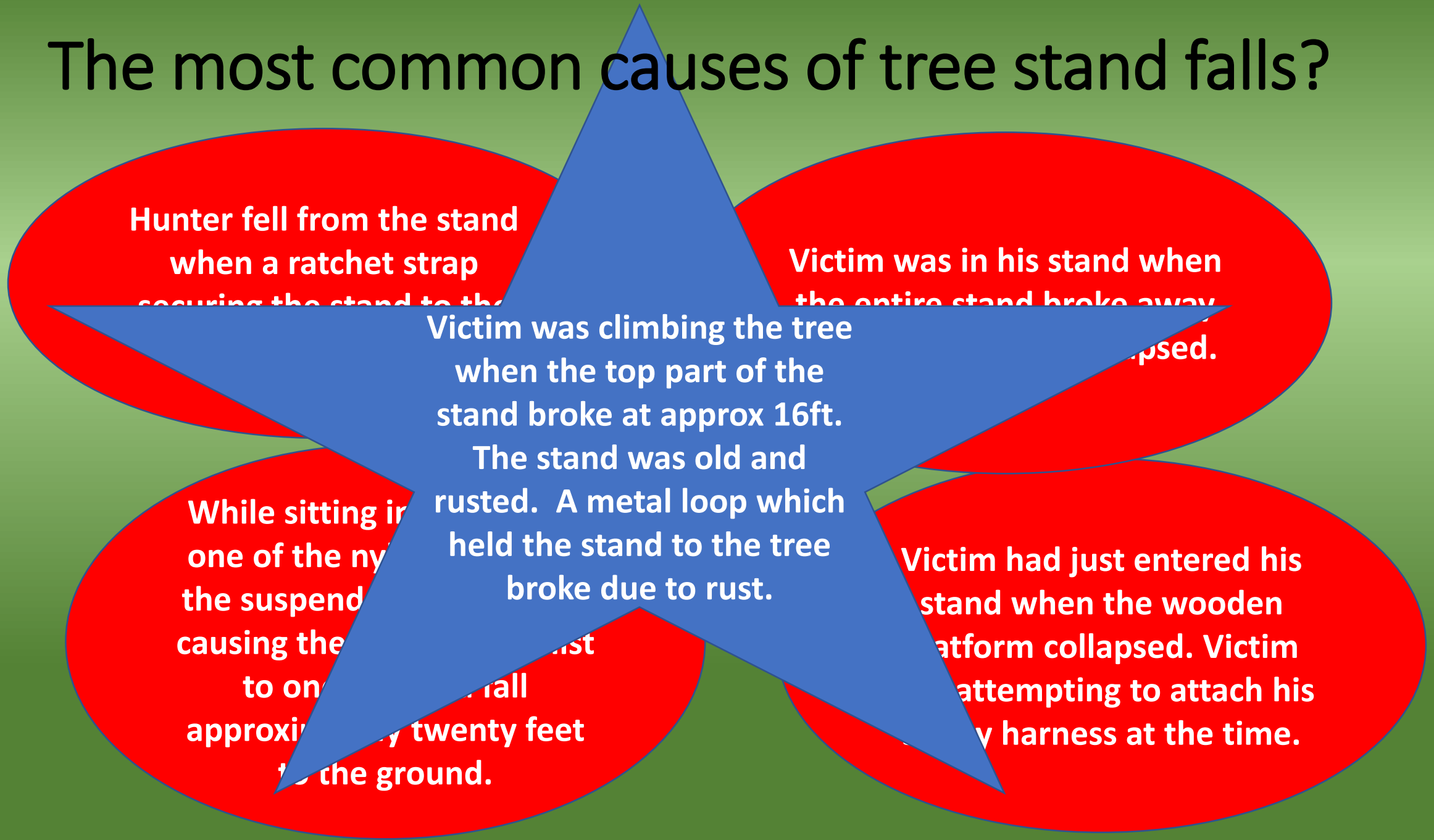
Yes, I did bag him from a tree stand, how did you guess?!

2017 TREE STAND SAFETY STATISTICS

TYPE OF STAND	
Climbing tree stand	2
Hang-on tree stand	4
Ladder stand	2
Tower/tri-pod stand	0
Home-made tree stand	4

I fell out of my tree stand but fortunately nothing got hurt!

The most common causes of tree stand falls?



Legal Updates:
Newly enacted fines for Deer/Big Game

Before:

- Big Game “out of season” or “with aid of a “light”
- Any illegal take of a deer

=

- Misdemeanor, 1yr in prison + $250-$2,000 Fine

Legal Updates:
Newly enacted fines for Deer/Big Game

Effective March 29, 2018:

- Big Game “out of season” or “with aid of a “light”

=

Misdemeanor, 1yr in prison + $500-$3,000 Fine

Other Illegal take of Deer/Bear/Moose still $250-$2,000 Fine

Implications:
Newly enacted fines for Deer/Big Game

- Certain offenses now carry higher *potential* fines
- However, the decision regarding the sentence imposed still rests with the local criminal court judge…..

Encon Law Questions?

Thanks for your time!

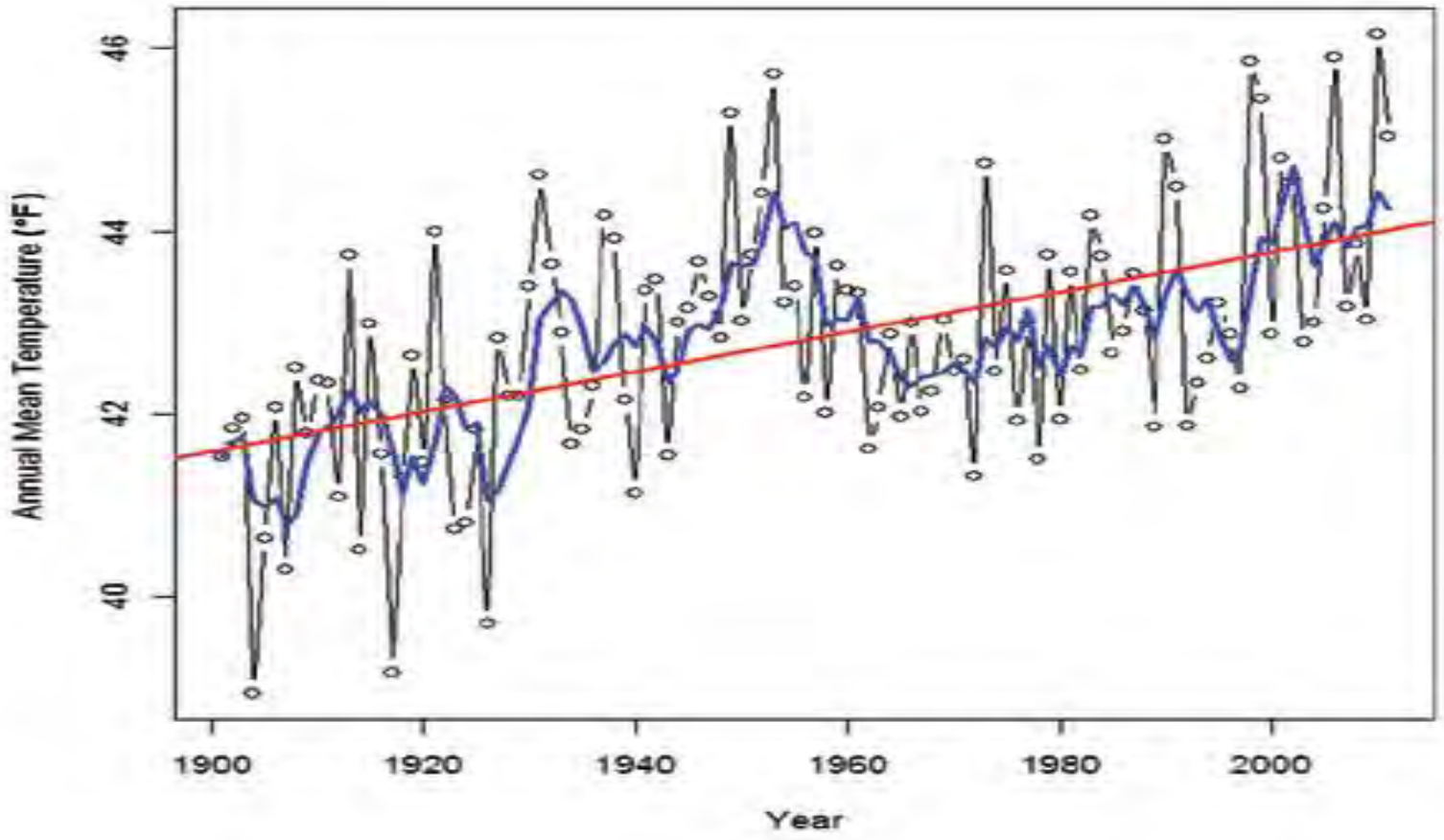
Lt. Nathan VerHague (315) 219-7594

Lt. Liza Bobseine (518) 265-4206

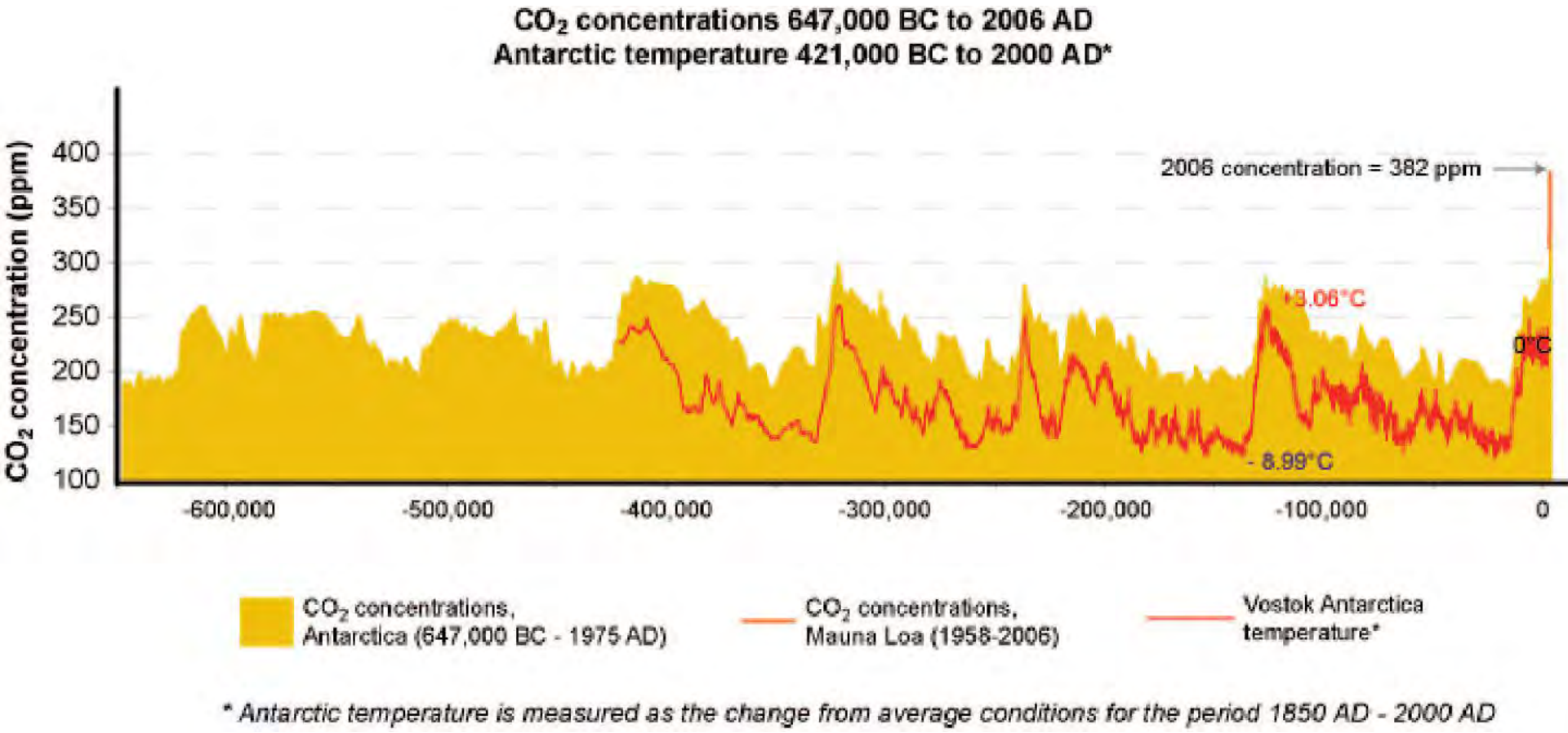
ECO Ric Grisolini (607)-316-2574

Climate Change and Forestry
3-16-2018

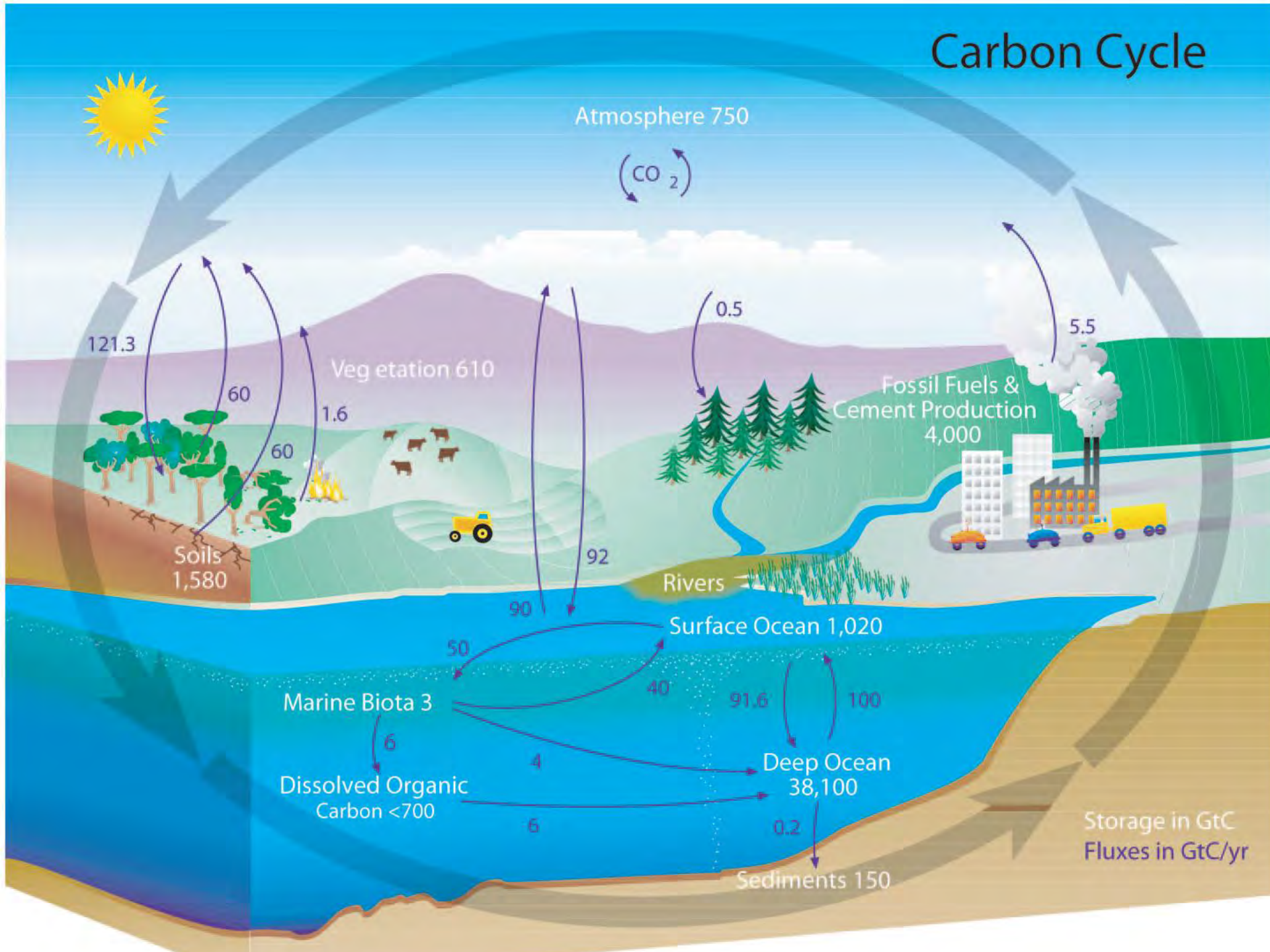
Figure 10.—Mean annual temperature across the assessment area, 1901 through 2011. Open circles represent the mean for each year. The blue line represents the rolling 5-year mean. The red regression line shows the trend across the entire time period (a rate of increase of 0.022 °F/year). Data source: Climate Wizard (2014).



Changes in temperature and carbon dioxide (Source: US EPA 2008)



** Antarctic temperature is measured as the change from average conditions for the period 1850 AD - 2000 AD*


Carbon Cycle
Atmosphere 750
CO 2
121.3
60
60
1.6
Veg etation 610
0.5
5.5
Fossil Fuels &
Cement Production
4,000
Soils
1,580
92
90
Rivers
Surface Ocean 1,020
50
40
Marine Biota 3
91.6
100
6
4
Dissolved Organic
Carbon <700
Deep Ocean
38,100
6
0.2
Sediments 150
Storage in GtC
Fluxes in GtC/yr

New England and Northern New York Forest Ecosystem Vulnerability Assessment and Synthesis: A Report from the New England Climate Change Response Framework Project

January 2018


Maine
New York
Vermont
New Hampshire
Massachusetts
Connecticut
RI

Current Forest Conditions

- Land use favors younger forests and reduced species diversity
- Stressors include: land use change, parcelization, fire, invasive alien species, diseases and pests, overbrowsing and extreme weather events
- 90% of the forest is suitable for wood production
- annual harvests are less than growth

Observed Climate Change

- Precipitation patterns have changed across the region
- Greater annual precipitation, increase in extreme precipitation events, decrease in snowfall amounts
- Substantial sea-level rise (12 inches or more)
- Reduction in lake ice, increased growing season length, plant and animal shifts

“Projected” changes in climate and physical processes.

- Continued temperature increases in winter.
- Increased winter/spring precipitation. Summer/Fall precipitation events are more variable. More intense precipitation events.
- Shorter and milder winters, continued declines in snowfall but more winter rains.
- Shorter periods where soils are frozen

“Future” Climate Change Impacts on Forests

- Reductions in Boreal species such as spruce and fir
- Increases in species with ranges to the south such as red maple, red oak and cherry
- Hotter dryer summers may cause common species to decline especially in the south
- Forest productivity will be influenced by factors such as Carbon Dioxide and moisture

“Potential” Impacts on Drivers and Stressors

- Temperatures will increase
- Growing seasons will lengthen
- Winter processes will change
- Sea levels continue to rise
- Amount and timing of precipitation will change
- Intense Precipitation events will be more frequent
- Soil moisture patterns will change
- Increased risk of drought during the growing season
- Insect pests will increase in occurrence and be more damaging
- Invasives will increase in extent or abundance

“Potential” Impacts on Forests

- Boreal tree species will face increasing stress
- Habitat will favor southern species
- Forest composition will change across the region
- These changes will take decades or longer to occur absent major disturbance
- Tree regeneration and recruitment conditions will change
- Forest productivity will increase over the next several decades

Adaptive Capacity Factors

- Low-diversity systems are at greater risk
- Fragmented landscapes will have reduced ability to migrate in response to climate change
- Species or systems with narrow habitat requirements will have less opportunity to migrate
- Ecosystems that have greater tolerance to disturbance have less risk of declining on the landscape

Management Implications

- Plants, animals and people that depend on forests may face additional challenges as the climate shifts
- Greater financial investments may be required to manage forests and infrastructure and to prepare for severe weather events
- Activities such as wildfire suppression or recreational activities (snowmobiling, skiing etc) may need to be altered as temperature and precipitation patterns change
- Climate change may present opportunities for forest products industry, recreation and other sectors if changing conditions are anticipated

Forest Management Solutions for Mitigating Climate Change in the **United States**

May 2008

Reducing Atmospheric GHGs
Wood Substitution

1. The use of wood products avoids the omissions from substituted products and forest carbon remains in storage
2. Wood from sustainably managed forests can be replenished continually while providing services like clean water and air
3. Life cycles reveal that forest products store more carbon, emit less GHGs and use less fossil fuel than steel, concrete and other products.
4. Wood Product substitution doesn't permanently eliminate carbon from the atmosphere

Reducing Atmospheric GHGs Biomass Substitution

- Harvest residue for power generation
- Biomass can be substituted for coal, natural gas, gasoline and fuel oil.
- Direct burning, hydrolysis and fermentation, pryolysis, gasification and other processes are used to turn wood into energy or fuel
- We will need to build 1,200 power plants in the next 25years to keep up with energy demands
- Every BTU of gasoline that is replaced with cellulosic ethanol reduces GHGs by 91% according to life cycle analysis.

Reducing Atmospheric GHGs Wildfire Behavior Modification

- In Lake Tahoe, 2007, a 3,100 acre fire released 141,000 tons of CO2 into the atmosphere
- Future wildfire emissions are likely to exceed current levels.
  - Pretreatment for fuel reduction
  - Schedule low-severity prescribed burns
  - Harvest small wood for energy

Reducing Atmospheric GHGs Avoided Land-use Change

- Forests store more carbon than agricultural lands or developed lands
- Between 1850 and 1998-forest land conversions released more carbon to the atmosphere than any other human activity besides energy production
- Forest land returns are less than those for development
- Corn ethanol production encourages forest to agriculture LU change

Reducing Atmospheric GHGs
Sequestration in Forests

- Hardwoods and evergreens absorb about the same amount of carbon
- Mixed species, mixed –age stands have higher capacities for carbon uptake and storage
- Management to ensure full stocking, health and less soil disturbance means greater uptake

Reducing Atmospheric GHGs Storage in Wood Products

- Harvesting reduces forest carbon storage by removing organic matter and disturbing soil
- Carbon in wood removed is stored in forest products
- Products can store carbon for long periods and reduce emissions through product substitution

Some Problems
Not in the Studies

- **Bad news for forests: Beeches booming as climate changes -** A scientific paper shows environmental changes are squeezing out important tree species.
- **New York Petitions U.S. EPA to Protect State's Air Quality -** Petition Seeks Emissions Reductions from Power Plants and Industrial Sources in Nine States that Jeopardize New York's Ability to Meet Ozone Standards

Some Conclusions

- Society's current reluctance to embrace forest management as a partial way of addressing climate change is surprising
- The health and welfare of 7.5 billion humans depends on the health and welfare of forests
- Never say never or always – Forest Pre(re)serve.
- Anti-harvest groups and urban populations
- Wind Turbines and Solar panels vs. trees
- Balloon Theory
- Climate is Complex!! Retain Flexibility!!

NEW YORK
STATE OF
OPPORTUNITY

Department of
Environmental
Conservation

Fish and Wildlife Program Highlights 2018

Budget and Staffing

Staffing:

Division of Fish and Wildlife

- 308.45 permanent positions (305.25)
  - Direction: 19.85
  - Fisheries: 138.5
  - Habitat: 41.45
  - Wildlife: 108.65

Budget: Flat for 2018-19

Division of Fish and Wildlife

- General Fund: $ 608,100 (OPS) $4,281,555 (NPS)
- Conservation Fund: $2,036,000 (OPS) $2,991,745 (NPS)
- Federal Aid
  - Wildlife Restoration: $22.6 M
  - Sport Fish Restoration: $4.5 M (freshwater)
  - State Wildlife Grants: $2.2 M

Hatchery Renovations

New York Works Funding

- NYW 3 - $4 million
- NYW 4 - $4 million
- NYW 5 - $3 million
- NYW 6 - $3 million
- NYW 7 - $$$

26 Projects Completed

NEW YORK STATE OF OPPORTUNITY
Department of Environmental Conservation

Game Farm Renovations

New York Works Funding

- NYW 5 - $1 million
- NYW 6 - $1 million
- NYW 7 - ???

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Legislation

Introduced:

- S7952 – DEC authority to manage deer and bear
- S7951 – DEC authority to adopt hunting regulations NZ
- S7950 – DEC authority adopt migratory game bird regulations
- Senate Budget:
  - “crossbow bill” – special archery seasons
  - “deer culling” provisions

WMA Acquisition Update

Land acquired or under contract

Region	County	WMA	Acres
3	Dutchess	Tivoli Bays	56.5
4	Columbia	Doodletown	689.8
4	Columbia	Stockport	114.7
4	Greene	Vosburgh Swamp	167
4	Schoharie	Franklinton Vlaie	23.3
5	Saratoga	Saratoga Sand Plains	181.7
6	Jefferson	Pt. Peninsula	48.5
6	St. Lawrence	Wilson Hill	458.8
7	Onondaga	Cicero Swamp	25
8	Seneca	Junius Ponds	96.2

Land acquired or under contract

Region	County	WMA	Acres
8	Yates	High Tor	142.7
8	Schuyler	Connecticut Hill	100
8	Wayne	Lake Shore Marshes	34.7
8	Schuyler	Catherine Creek	44.6
9	Erie	Tonawanda	61.6
			2,245.1

15 potential acquisition totaling approximately 7,250 acres are also being pursued.

Young Forest Initiative Update

Young Forest Initiative - Progress

34 Approved Habitat Management Plans

3 additional Habitat Management Plans pending approval

18 additional Habitat Management Plans in draft

23 Public meetings held (29 WMAs)

Young Forest Initiative - Progress

Inventories Completed (acres):

Region 3	(9,370)	(72%)
Region 4	(2,171)	(12%)
Region 5	(5,269)	(90%)
Region 6	(43,628)	(100%)
Region 7	(38,838)	(74%)
Region 8	(20,588)	(43%)
Region 9	(8,807)	(57%)
Total	**(128,671)**	**(66%)**

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Young Forest Initiative - Progress

Inventories completed on 61 (67%) of WMAs

Inventories underway 14 additional WMAs (59,796 acres)

Inventories completed: Bear Spring Mountain (R4), Little John (R7), Tioghnioga (R7), Three Rivers (R7), Connecticut Hill (R7), John White (R8), Conesus Inlet (R8), High Tor (R8), Conewango Swamp (R9)

Young Forest Initiative - Progress

27 Approved Prescriptions

17 Projects currently under contract (722 acres)

26 projects in planning stage (1,836 acres)

14 completed projects (338 acres)

Young Forest Initiative - Progress

Commercial and Non-commercial cuts:

Pharsalia (R7) - 111 ac
Tioghnioga (R7) – 89 ac
Connecticut Hill (R7) – 60 ac
Bear Spring Mountain (R4) – 62 ac
Partridge Run (R4) – 17 ac
Tioghnioga (R7) – 20 ac
Cicero Swamp (R7) – 12 ac
Cicero Swamp (R7) – 16 ac
Connecticut Hill (R7) – 40 ac

Habitat and Access Stamp

Promoting Habitat / Access Stamp Sales:

- Goal – 25,000 2018 H / A Stamps (Barred Owl)
- “Stickers” – agents, State Fair
- Agent Incentives (recognition)
- Banner-ups – State Fair, top retailers
- Posters – (image of “stickers”)
- Update DEC website
- Social Media
- Change Call-out Box in DECALS

BE A HABITAT HERO

2018 Habitat & Access Stamp

$5

Invest in the future of New York's wildlife habitat and outdoor recreational opportunities.

Each Habitat Stamp purchase enters you into a drawing to win a FREE LIFETIME LICENSE

*valid email address is required

Whether an angler or hunter, birder or photographer, purchasing a $5 Habitat & Access Stamp is the perfect way to preserve New York's wildlife heritage and increase public access for fish and wildlife-related recreation.

For more information, talk to your NYS DEC License Issuing Agent, or visit our website at www.dec.ny.gov

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