

*MASTING
DRIVES BIRD OF
PREY
ABUNDANCES*

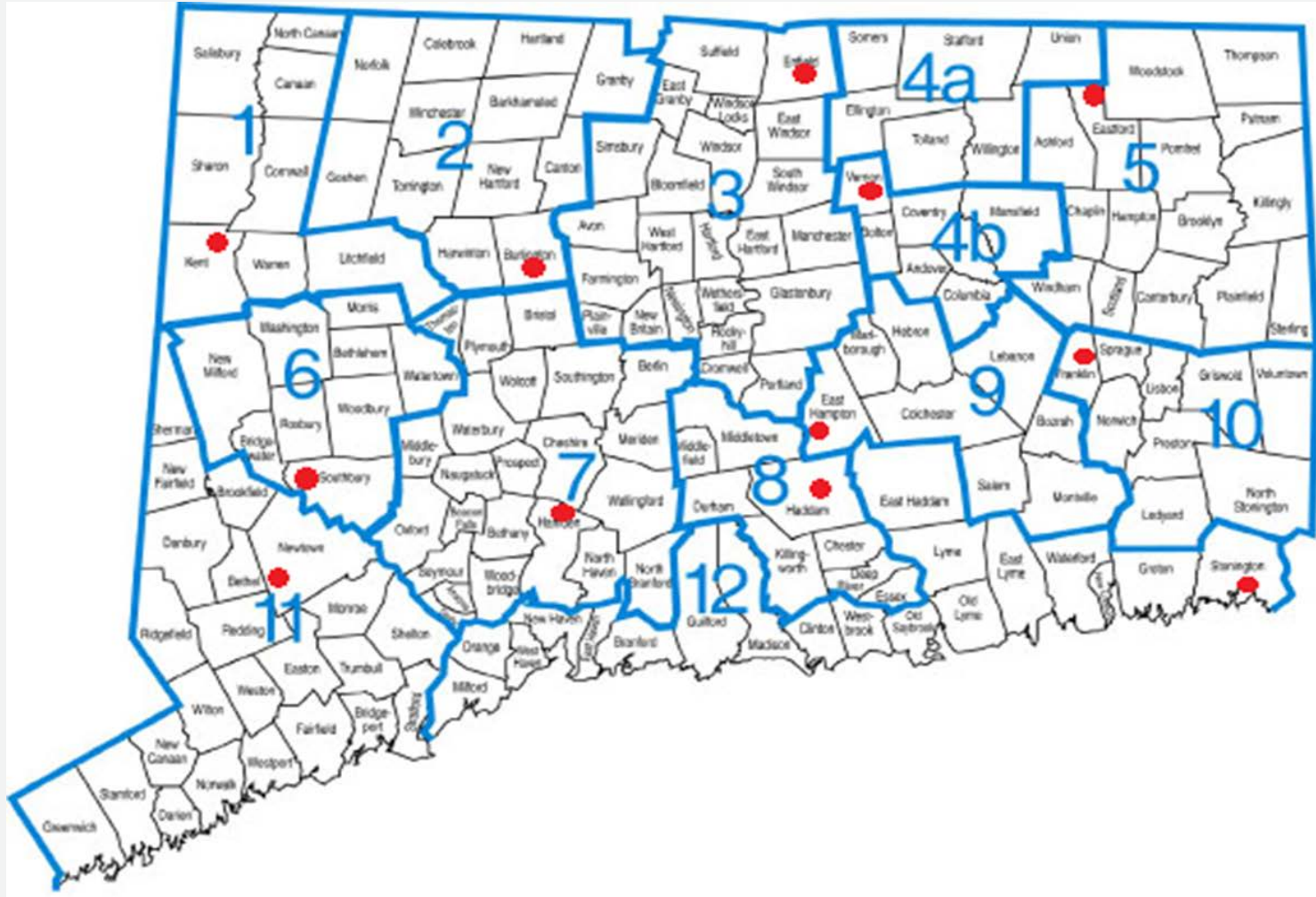
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Scott Williams, CAES Scientist*

BACKGROUND INFORMATION



- *Survey Initiated by the Northeast Wild Turkey Technical Committee in 2007.*
 - *CT is one of several states in the Northeast and Southeast US that provide data for a regional perspective.*
 - *VA Department of Game and Inland Fisheries maintains the Master Mast Survey Database.*
 - *There is one survey site in each of CT's 12 Deer/Turkey Management Zones.*
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12 Connecticut Mast Survey Site Locations (575 Total Trees)



1. Housatonic River WMA
2. Sessions Woods WMA
3. Scantic River State Park
4. Belding WMA
5. Yale- Myers Forest
6. Aldo Leopold WMA
7. Sleeping Giant State Park
8. Cockaponset State Forest
9. Hurd State Park
10. Franklin Swamp WMA
11. Huntington State Park
12. Barn Island WMA

METHODS

- *Survey is conducted between August 15th and August 31st each year.*
 - *Trees are located and scanned for acorns for a 30 second period.*
 - *Data Collection Includes: overall presence/absence of acorns; percent acorn crown coverage; total acorn count for a 30 second period; tree health.*
 - *A mast index on a scale for 0 to 6 is annually derived for each tree based on presence/absence of acorns.*
 - *Dead trees are replaced with new trees in close proximity.*
 - *DBH measurements (5-year interval) and GPS coordinates exist for all trees.*
 - *Information is entered into Master Mast Survey Database and CT Mast Survey Database.*
 - *Of the original 575 trees, 392 have lasted.*
 - *183 trees have been replaced.*
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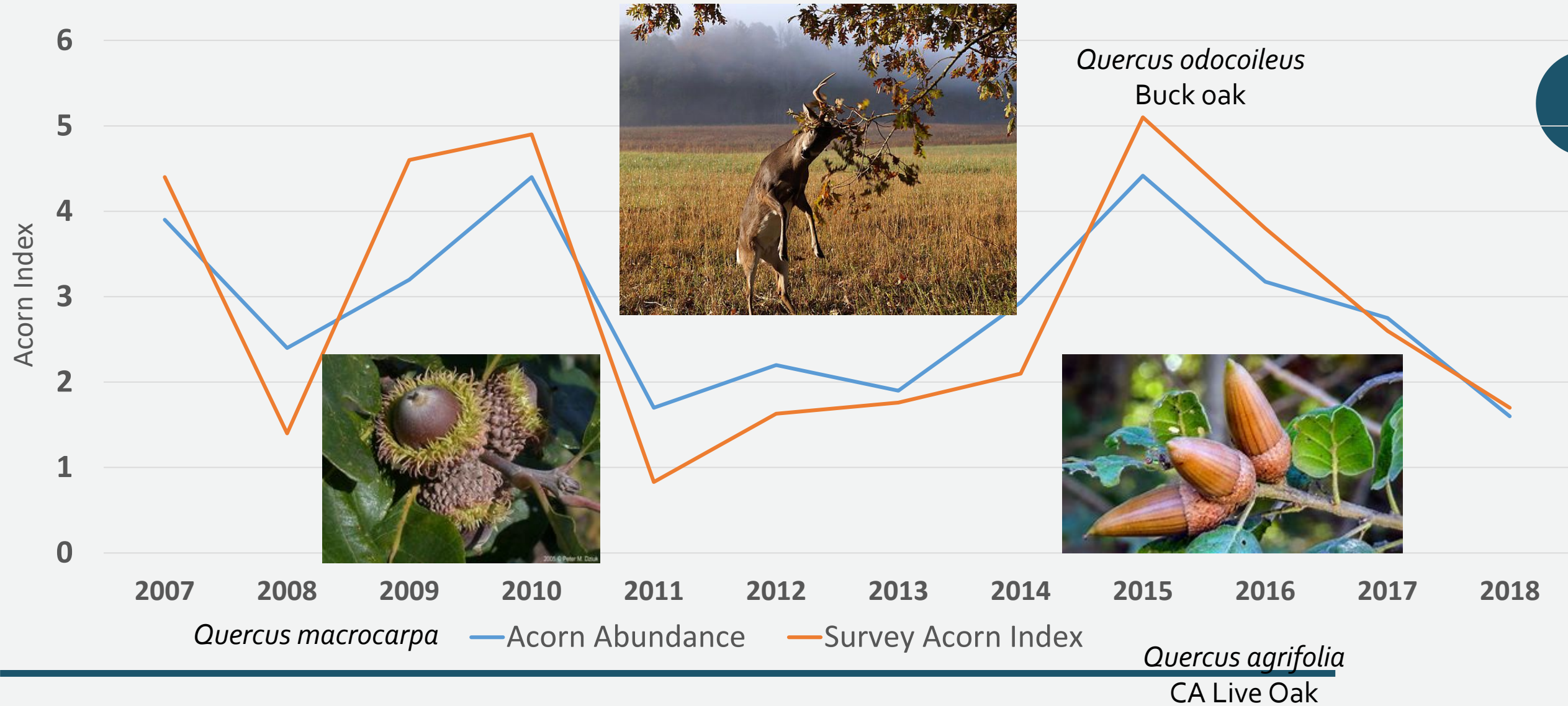
Oak Mast Productivity by Year in Franklin Swamp WMA, 2007-2019



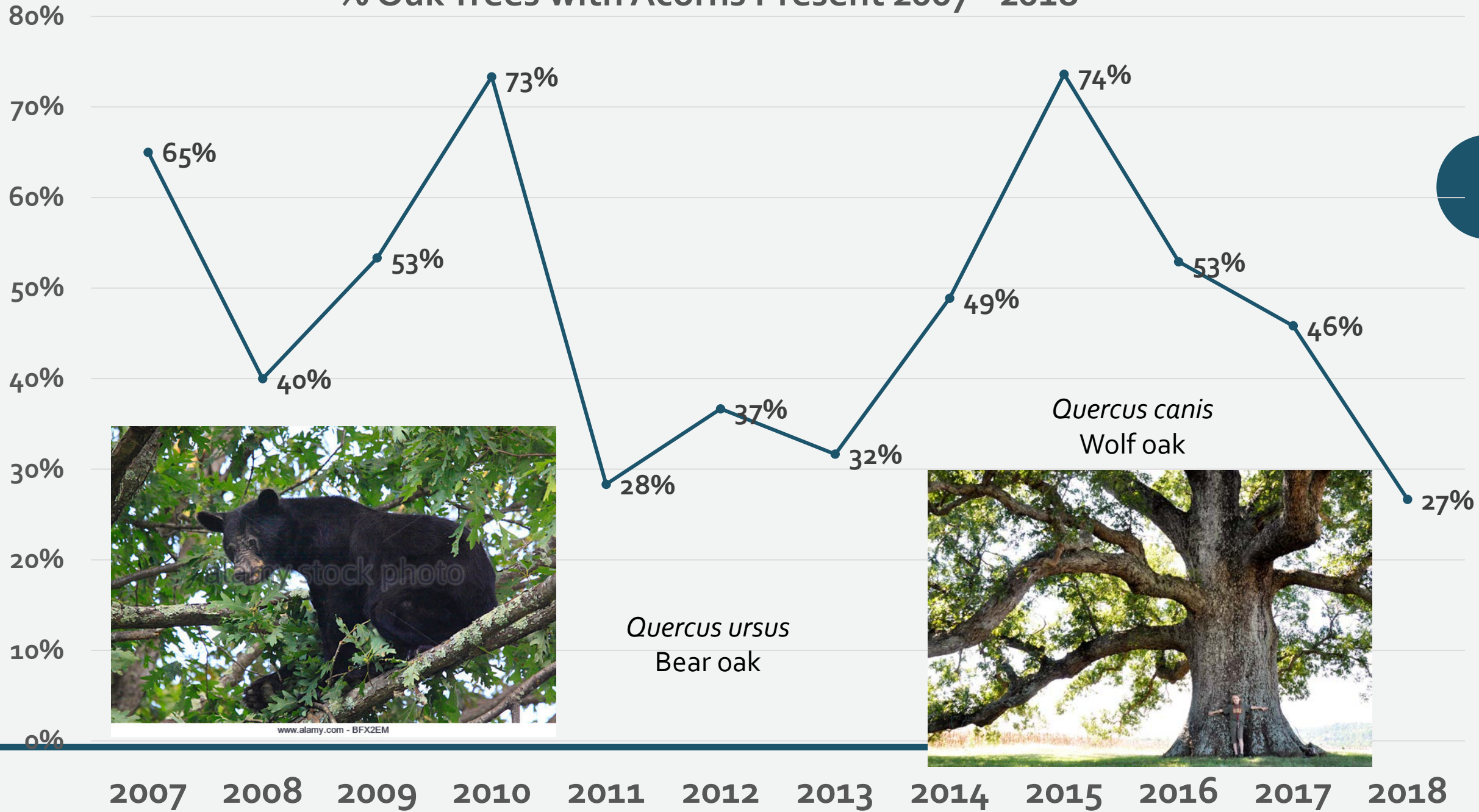
Quercus douglasii
Blue Oak
California

— Red — White

DEEP Acorn Abundance Numbers vs. Deer Hunter Survey Acorn Index Estimates



% Oak Trees with Acorns Present 2007 - 2018



www.alamy.com - BFX2EM

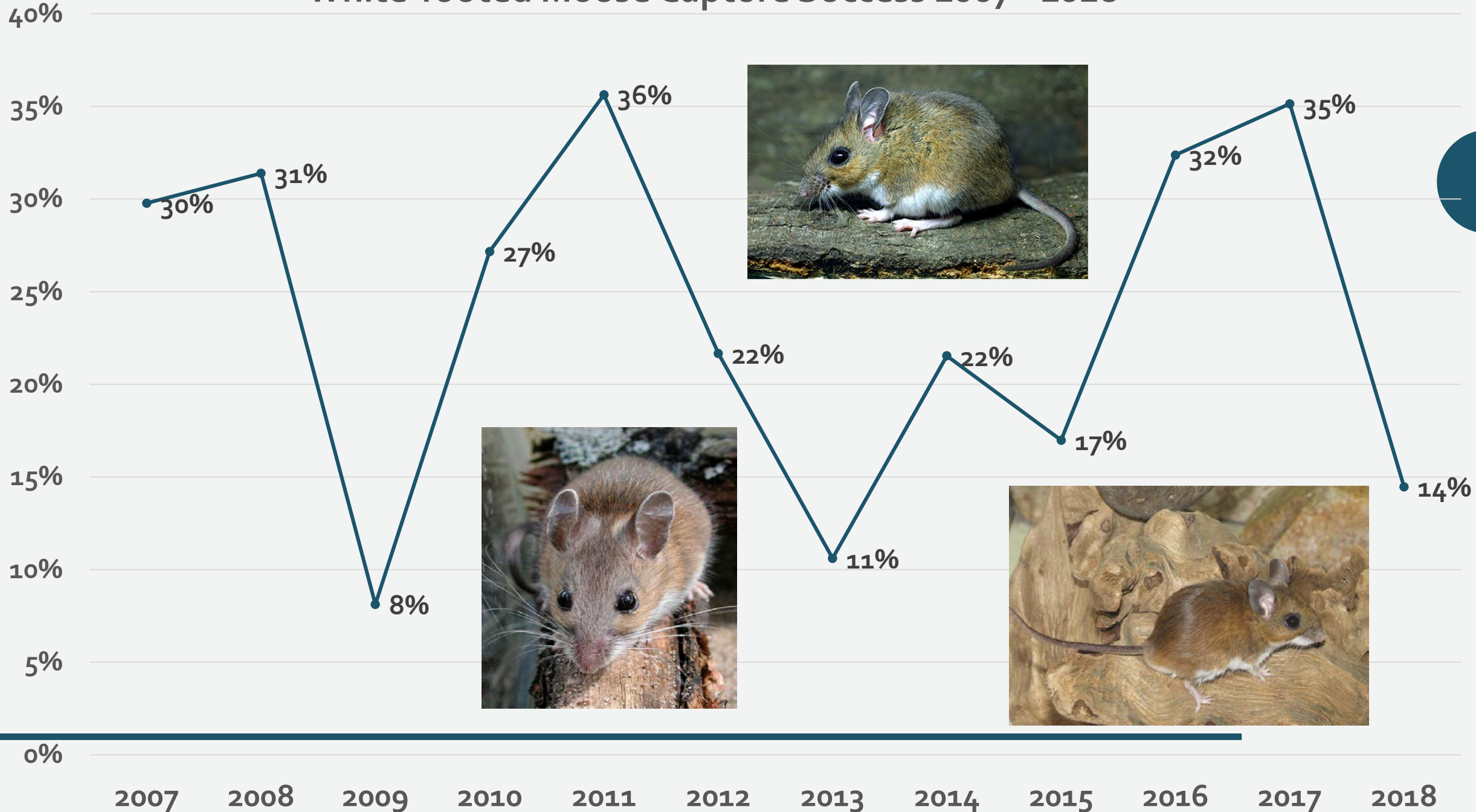
Quercus ursus
Bear oak



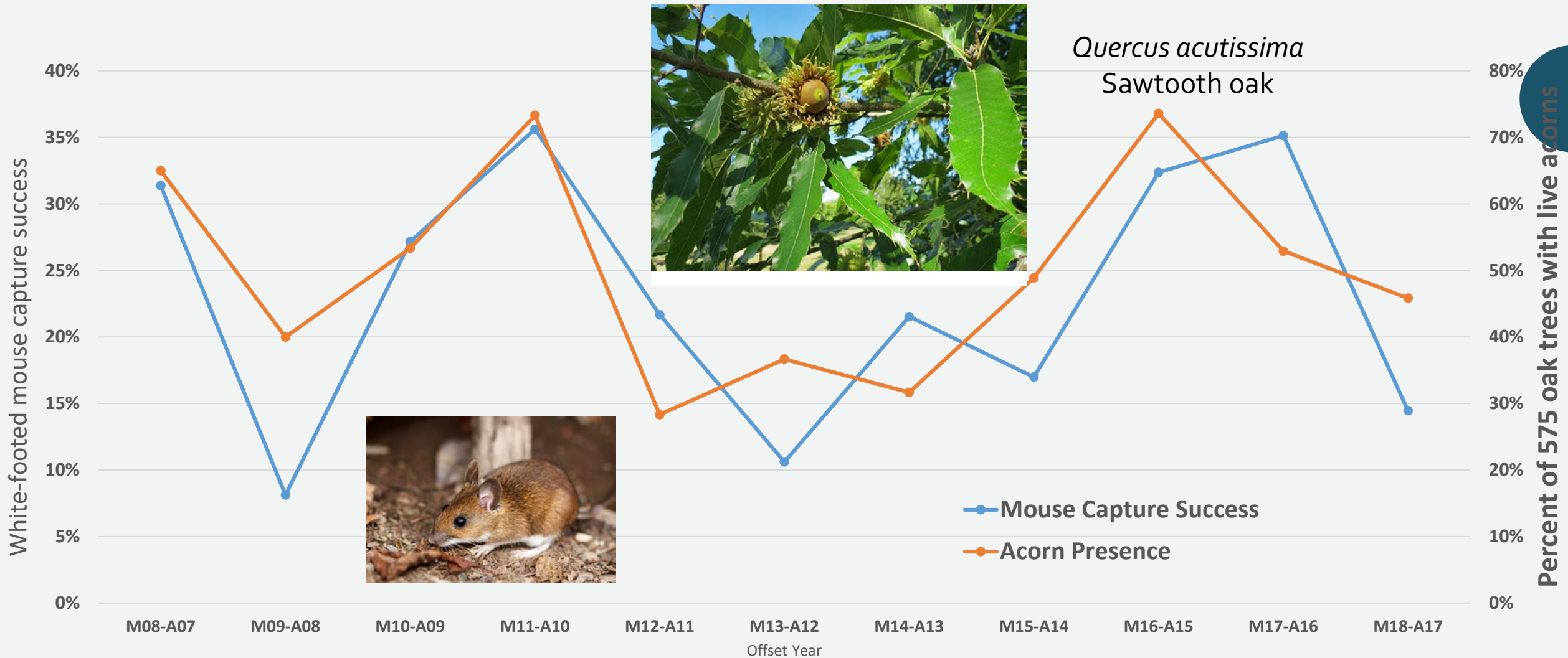
Quercus canis
Wolf oak

White-footed Mouse Capture Success 2007 - 2018

White-footed mouse capture success

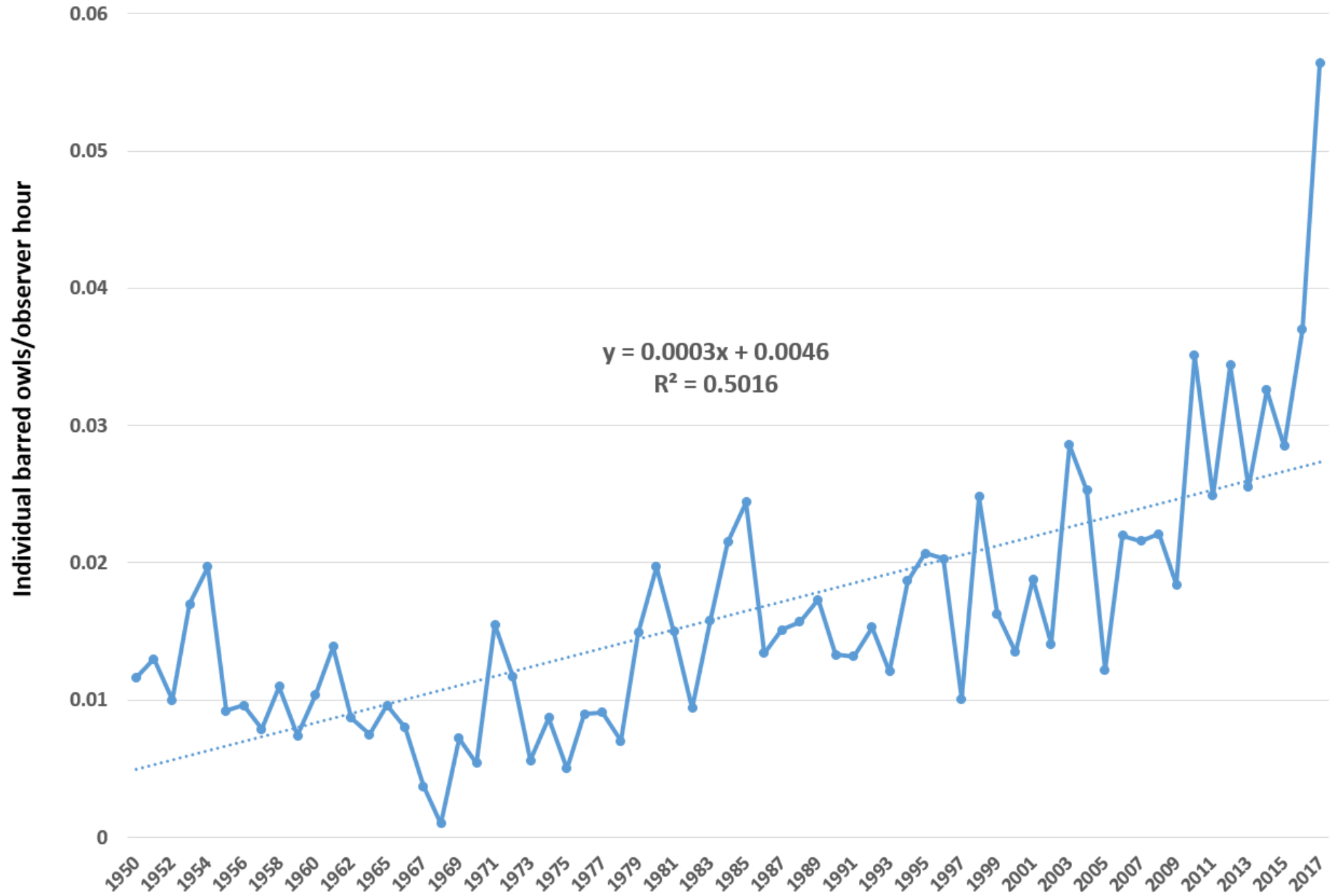


Mouse Capture Success and Acorn Presence, Offset One Year

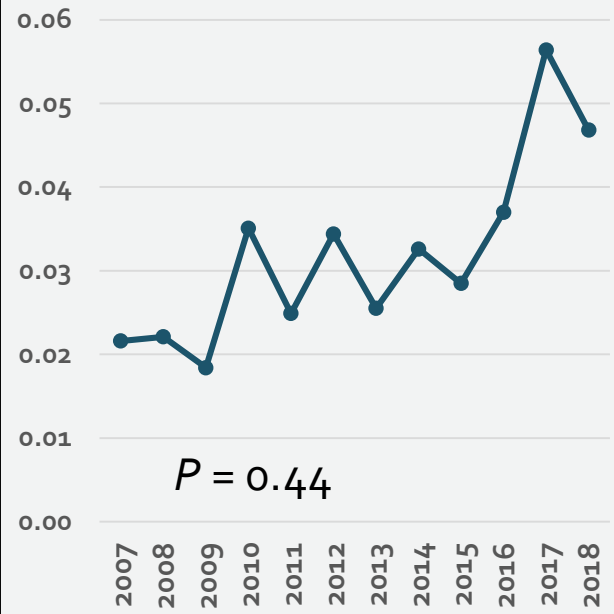




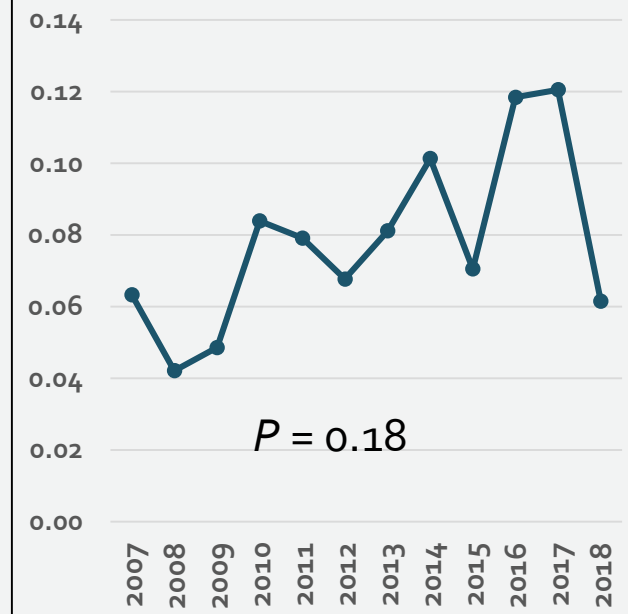
Connecticut Barred Owl Christmas Bird Count 1950-2017



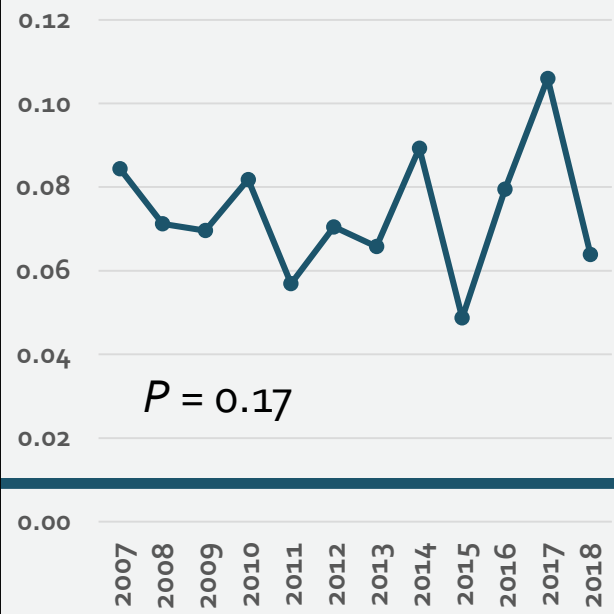
Barred Owl



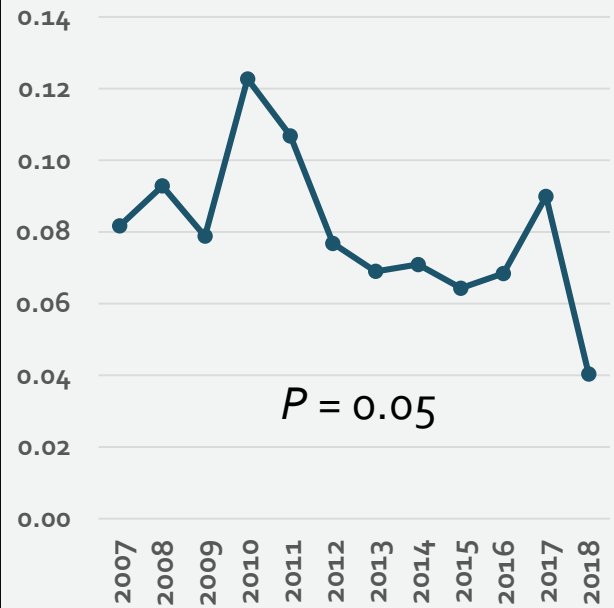
Red-Shouldered Hawk



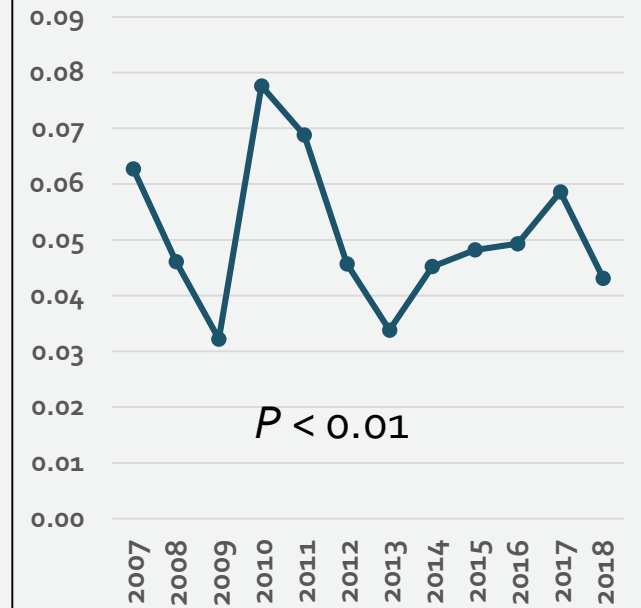
Cooper's Hawk



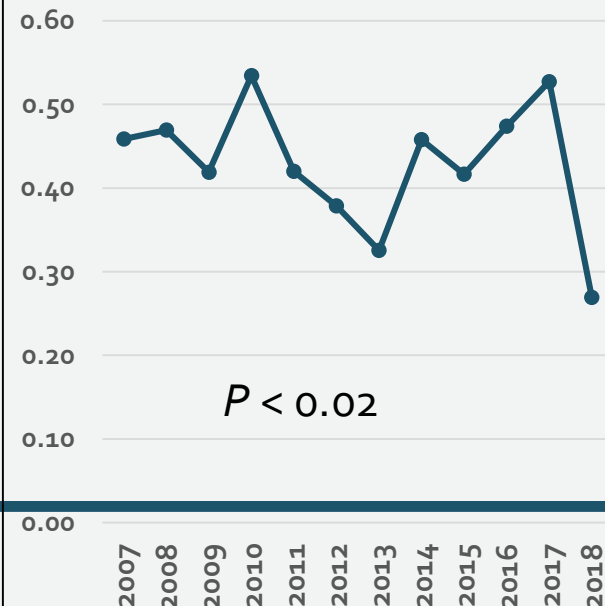
Eastern Screech Owl



Great Horned Owl



Red-Tailed Hawk



*FUTURE
RESEARCH
DIRECTIONS??*
