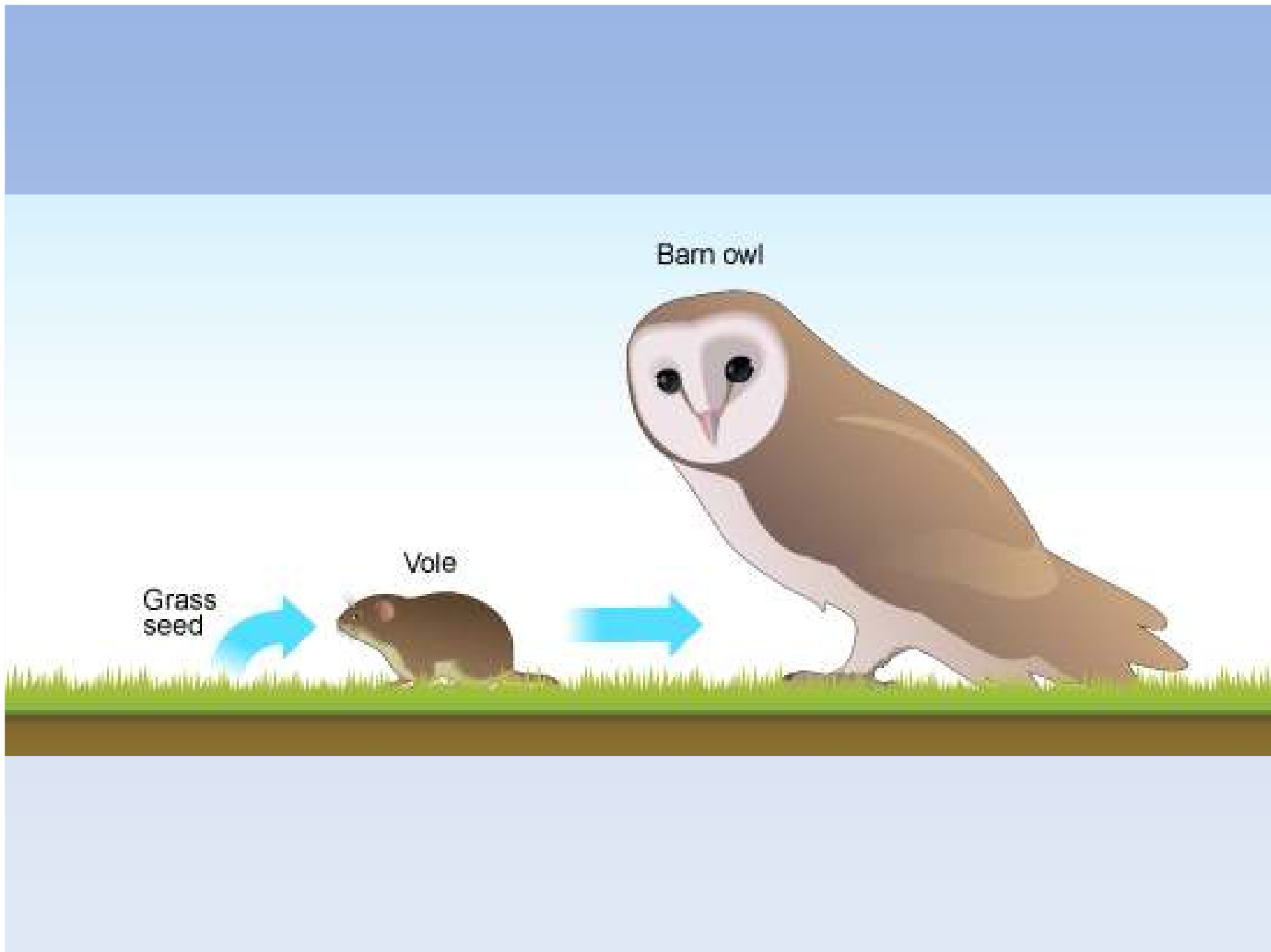


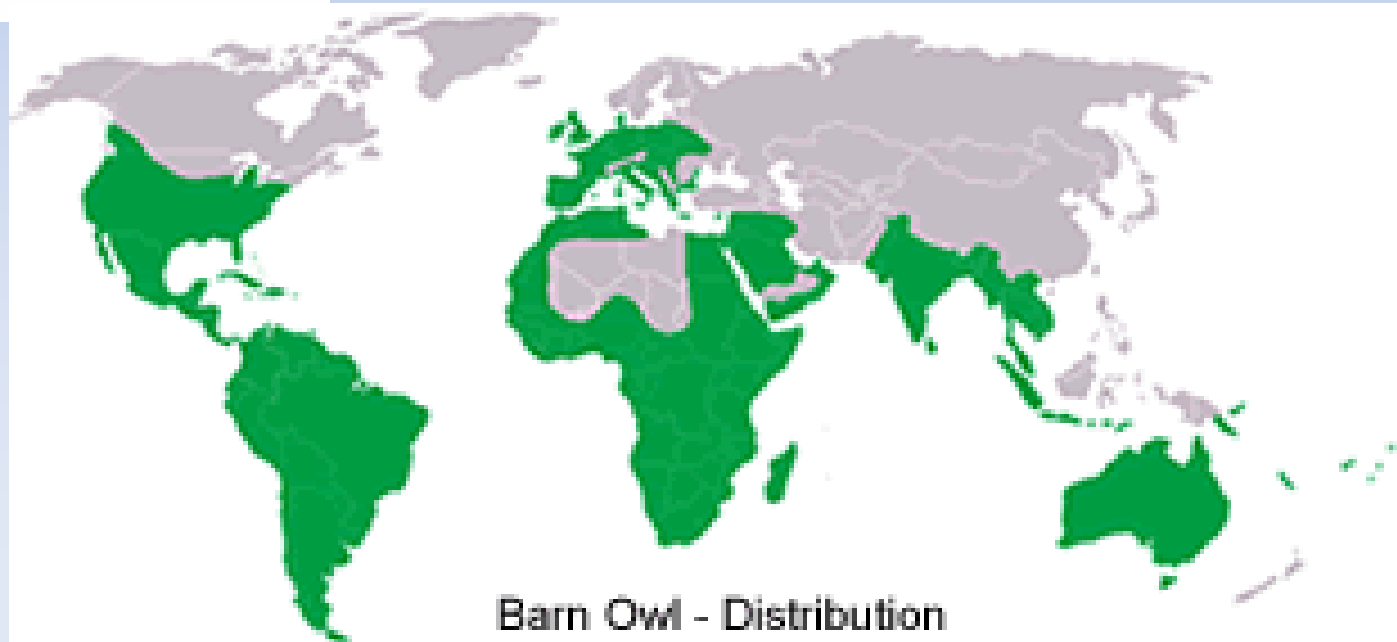
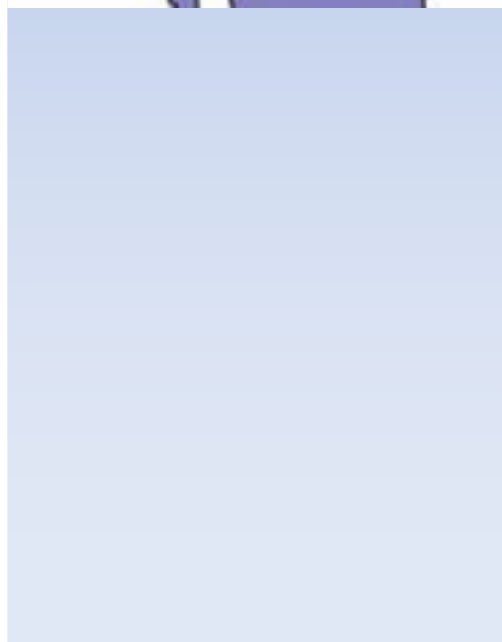
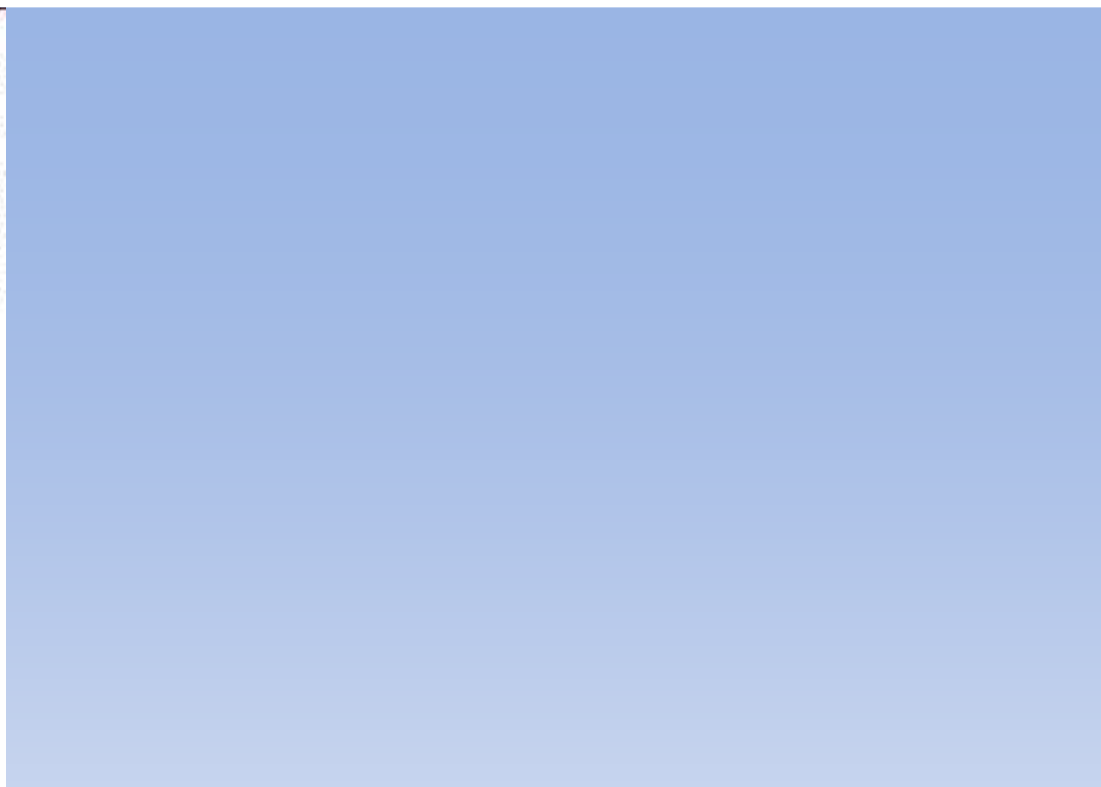
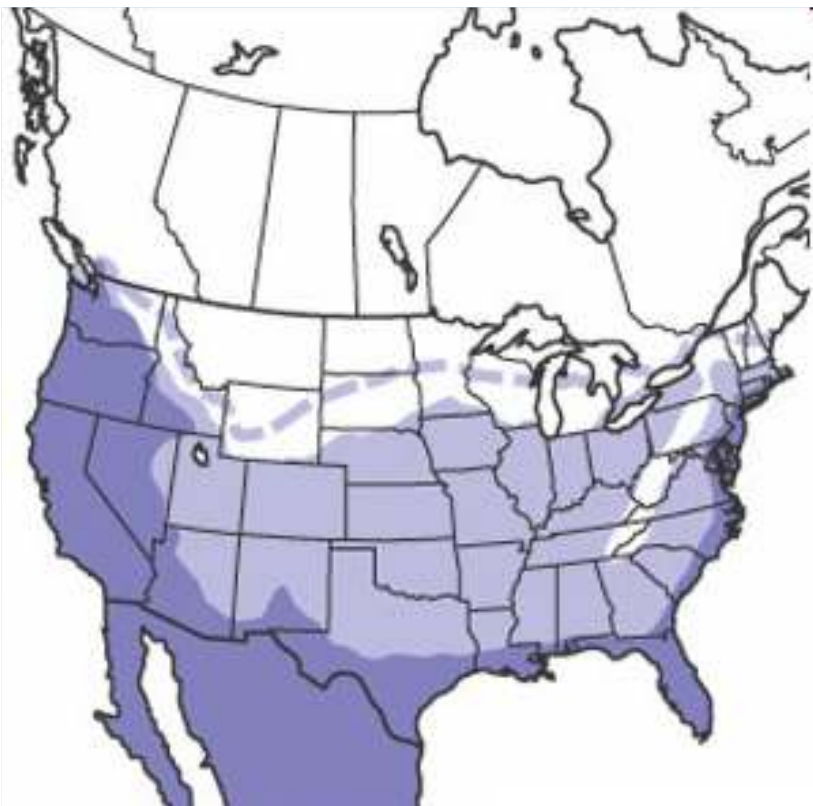
Managing Barn Owls for Rodent Control

Presented by
Mike Omeg









Barn Owl - Distribution



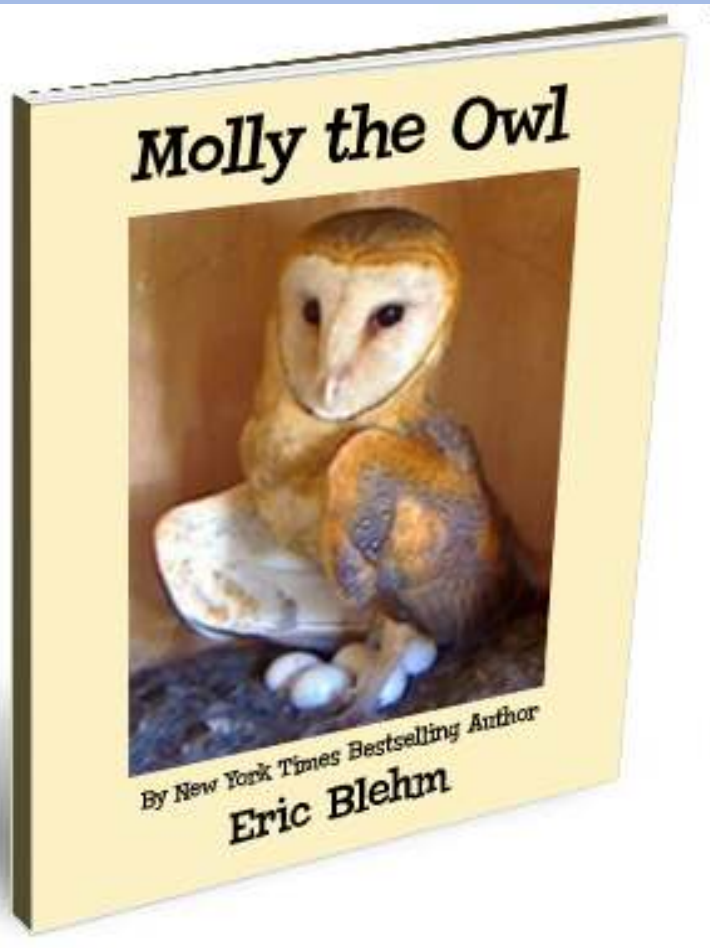
Why encourage barn owls?

Rodent damage is a “hidden” cost:

How much does the loss of trees and reduced vigor from rodents cost you each year in replacement trees and lost vigor/production?



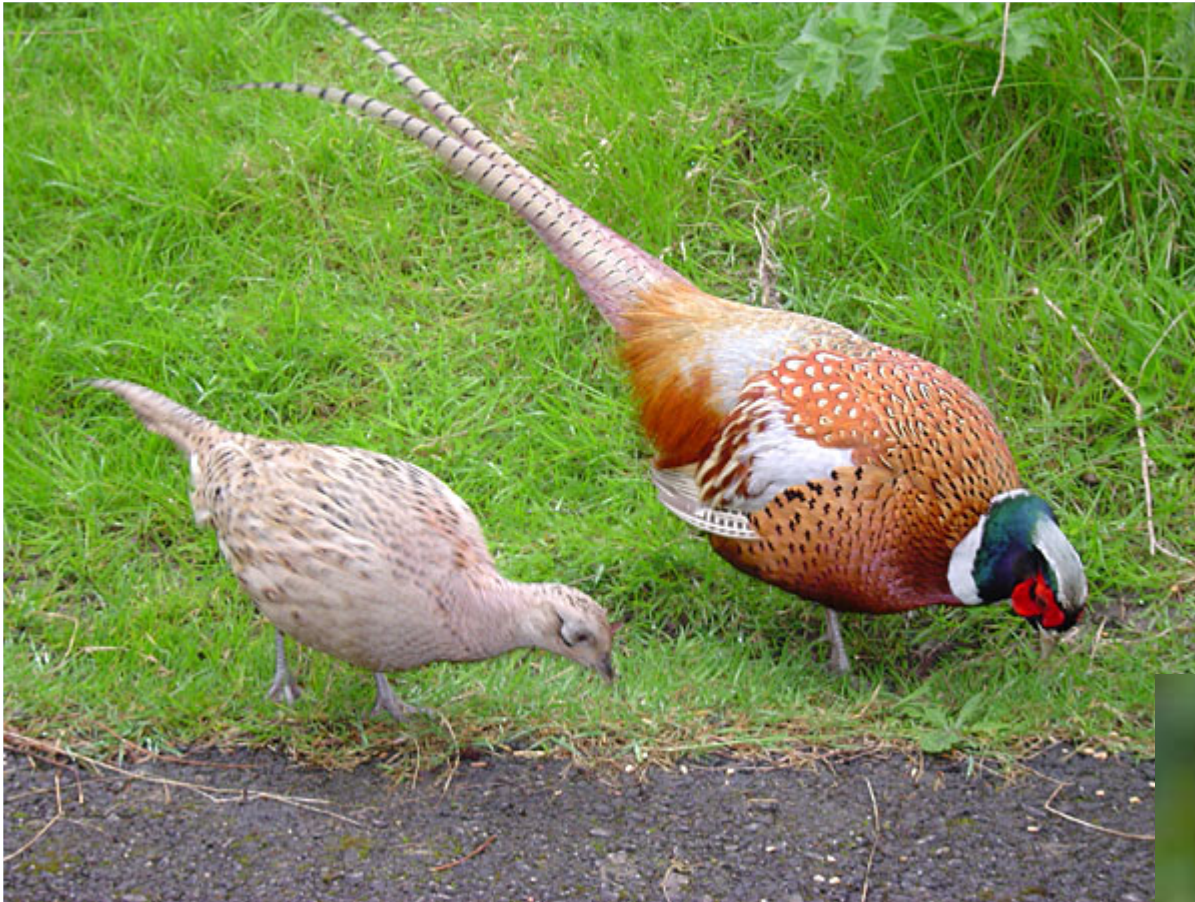
Everyone loves Barn Owls!
Make it a selling point.

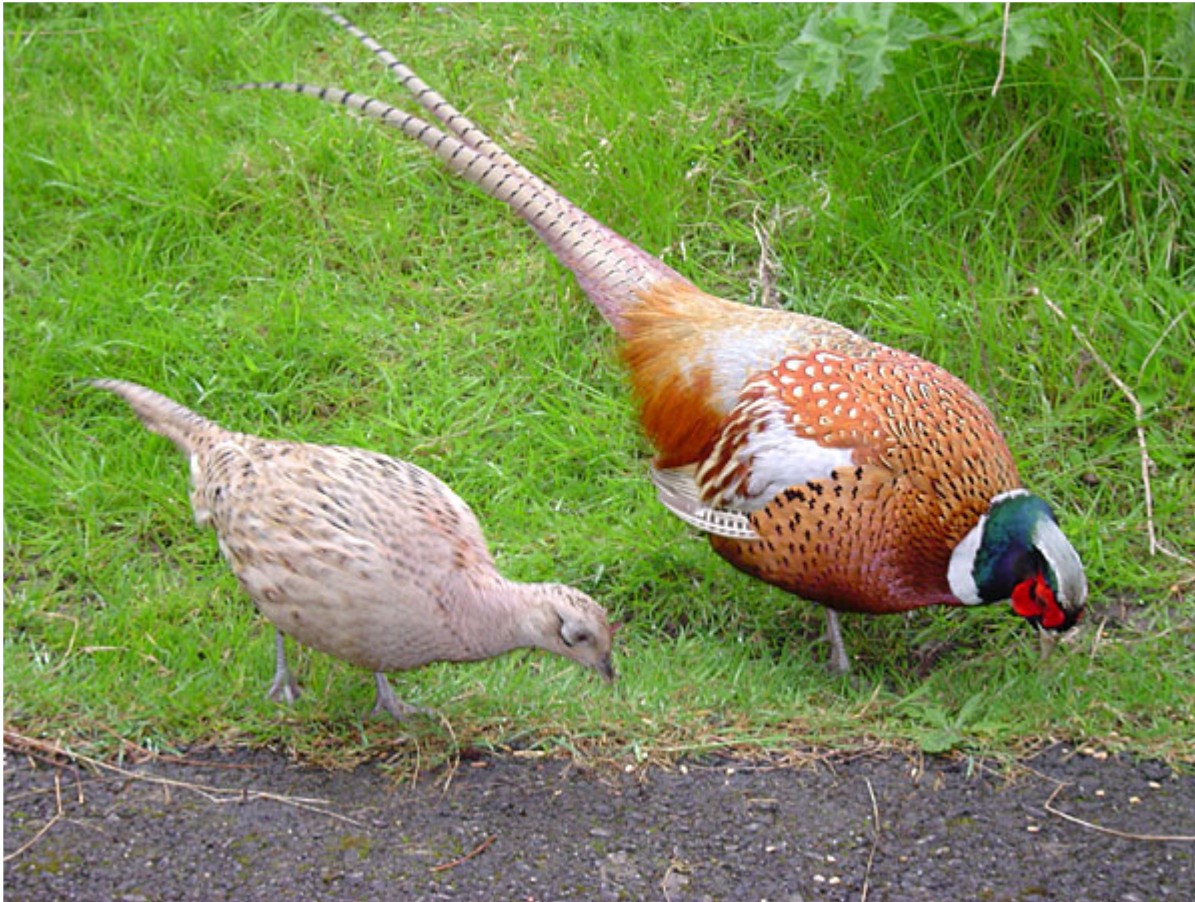




Gerald and Buff Corsi © California Academy of Sciences



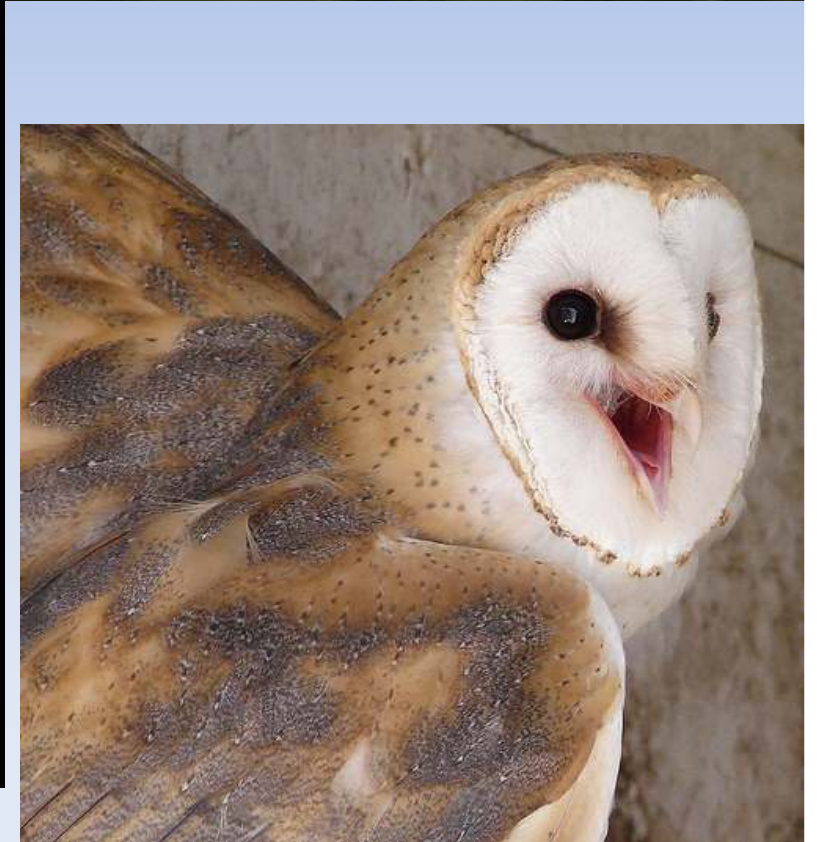




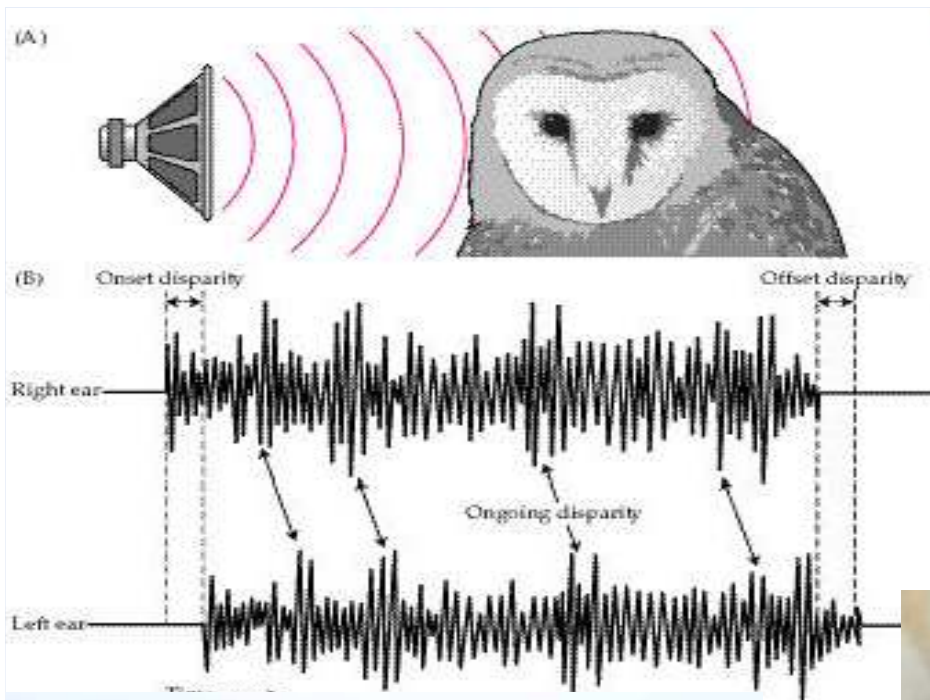
Owls are Raptors



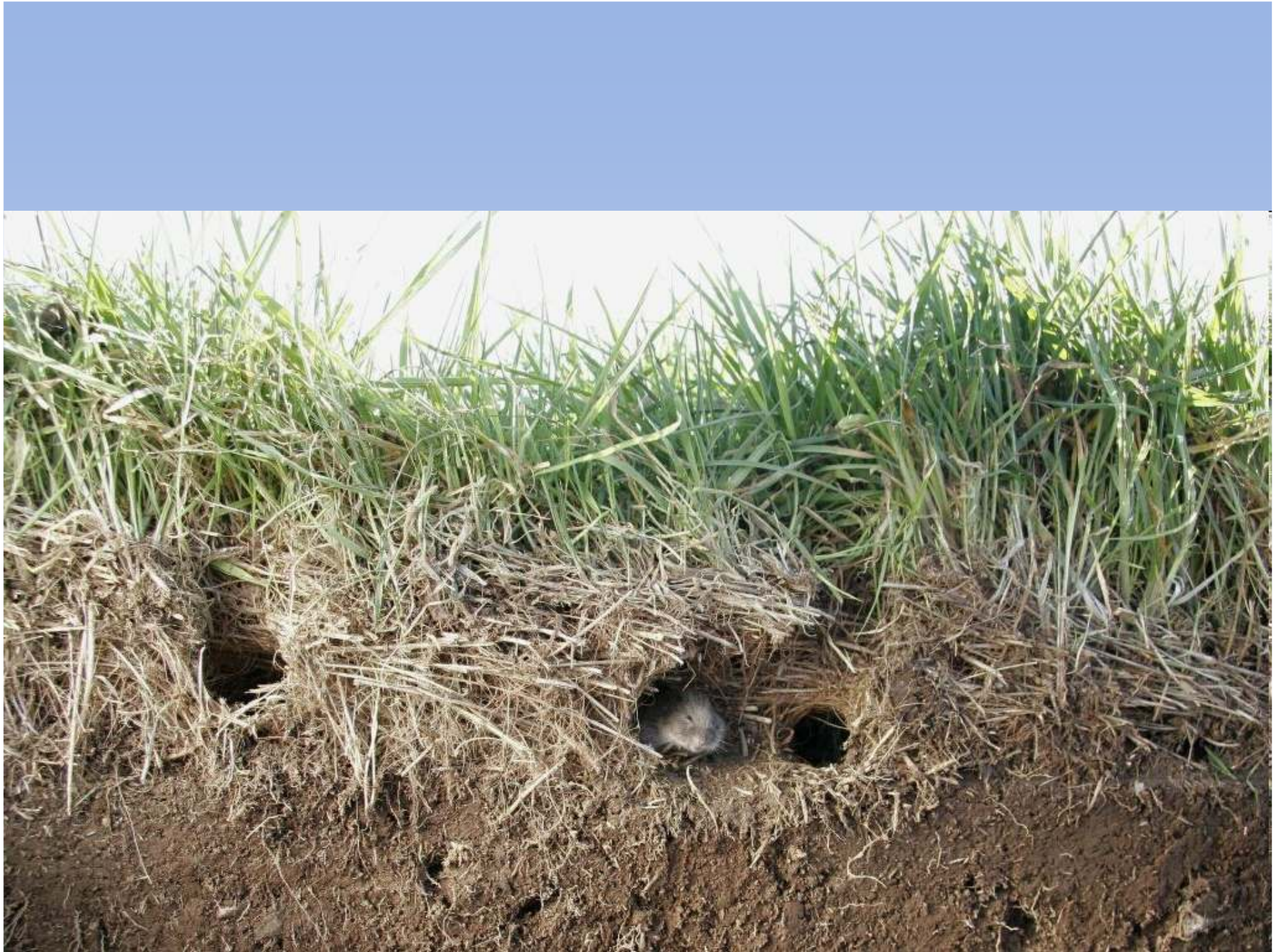




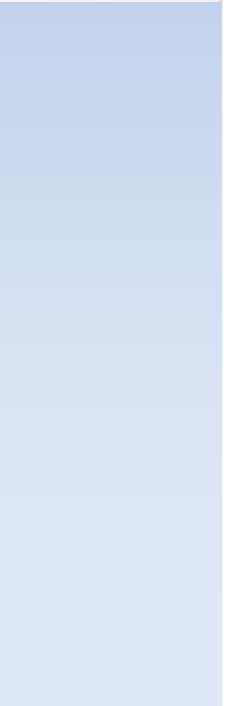
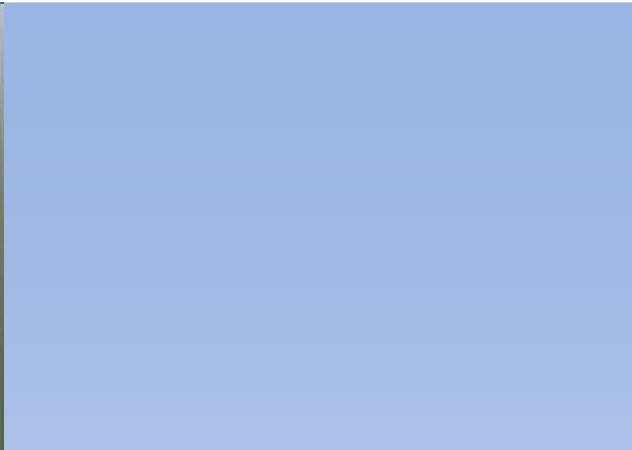


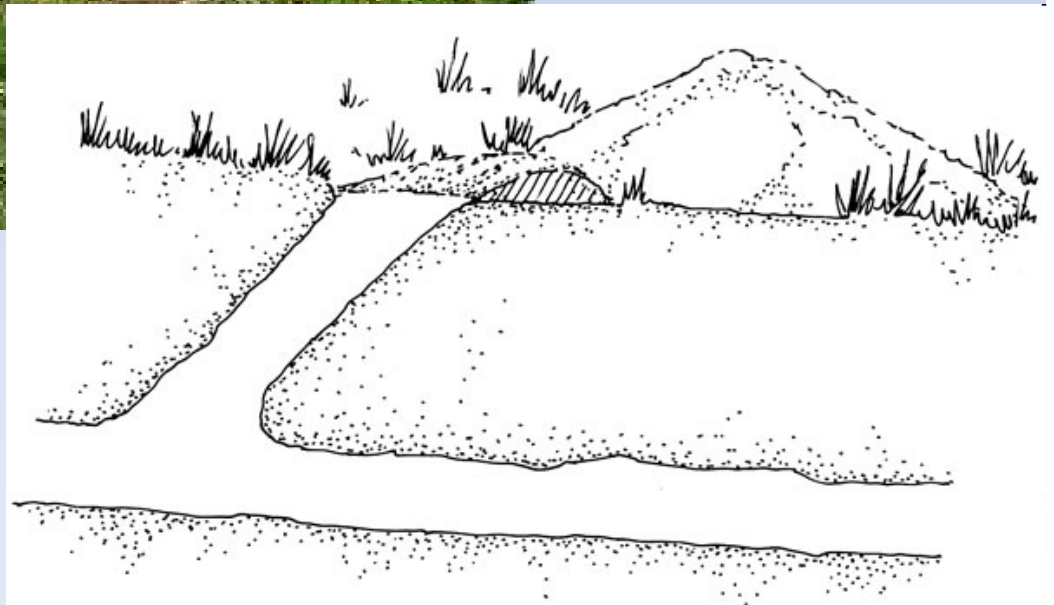






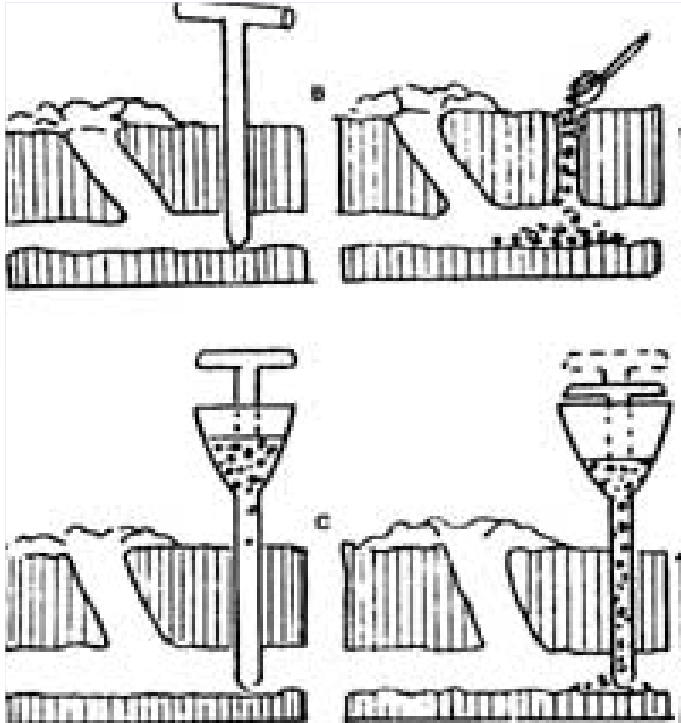


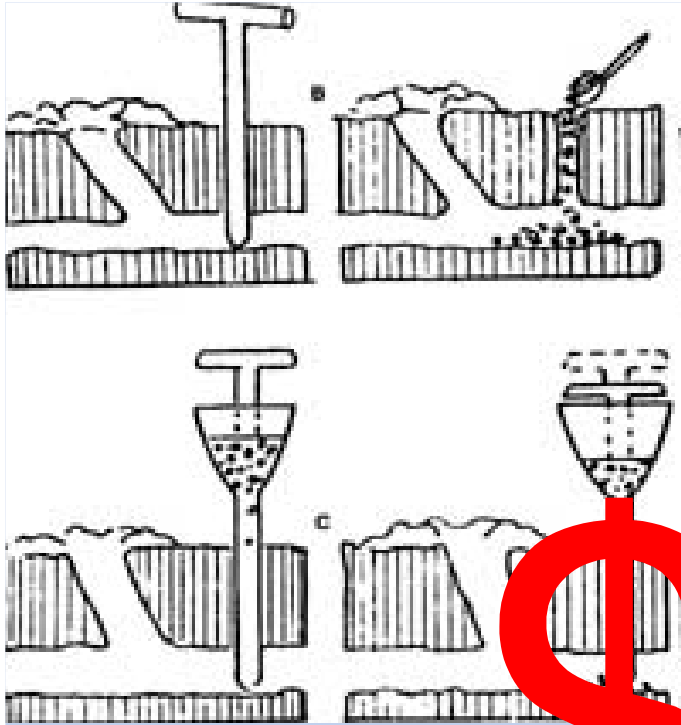












\$\$\$\$



Barn Owls and Your Wallet: Annual Rodent Control

- Seavert budgets \$30.11/acre/yr (2007 budget)
- Omeg Orchards: approx \$43/acre/yr
- Cooper Orchards (labor): approx \$34/ac/yr
- These figures do not account for buying the equipment- gopher machine, spreader.
- For a 20 acre block @ \$43/ac= \$860/yr
- 20 acres requires 2 owl boxes @ \$250ea installed = \$500
- Barn owl boxes will pay for themselves in just a year or two once occupied.

Barn Owls and your Wallet:

Young tree loss

- **At 340 trees per acre (8x16 spacing) the cost buying and planting a tree is \$17.09 per tree (Seavert).**
- **For a 20 acre block with gopher problems:**
 - **20 acres at 8x16 spacing = 6,800 trees**
 - **½ % trees loss to gophers = 34 trees**
 - **34 dead trees x \$17.09/tree = \$581.06 each year**
 - **3 years of ½ % tree losses = \$1,743 lost dollars**
 - **Replanting dead trees will add even more cost!**
- **20 acres of orchard requires 2 owl boxes @ \$250ea installed = \$500**

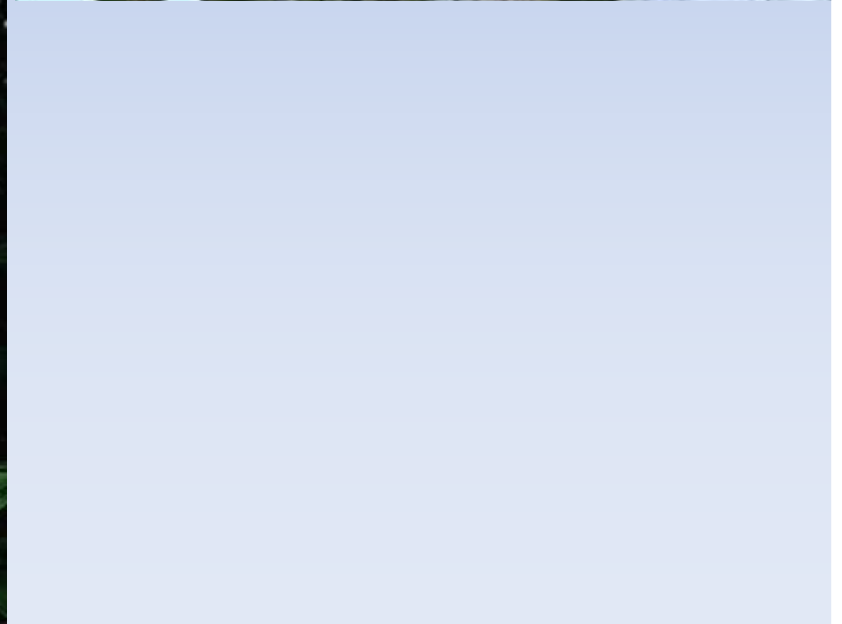
Barn Owls and Your Wallet:

Annual Rodent Control

- **Rodenticides cost approx \$1 to \$1.50 per pound**
- **Recommended rates are 5 lbs/ac = \$5 to \$7.50ac**
- **Treat 5% of a 200 acre field = \$50 to \$75 each time you treat.**
- **Normally treat 2x per year = \$100 to \$150/yr**
- **These figures do not account for buying the equipment-spreader or labor.**
- **2 owl boxes @ \$250ea installed = \$500**
- **Barn owl boxes will pay for themselves in saved materials cost just three to five years once occupied. EVEN LESS time if you figure equipment and labor.**

Barn Owls will Help!



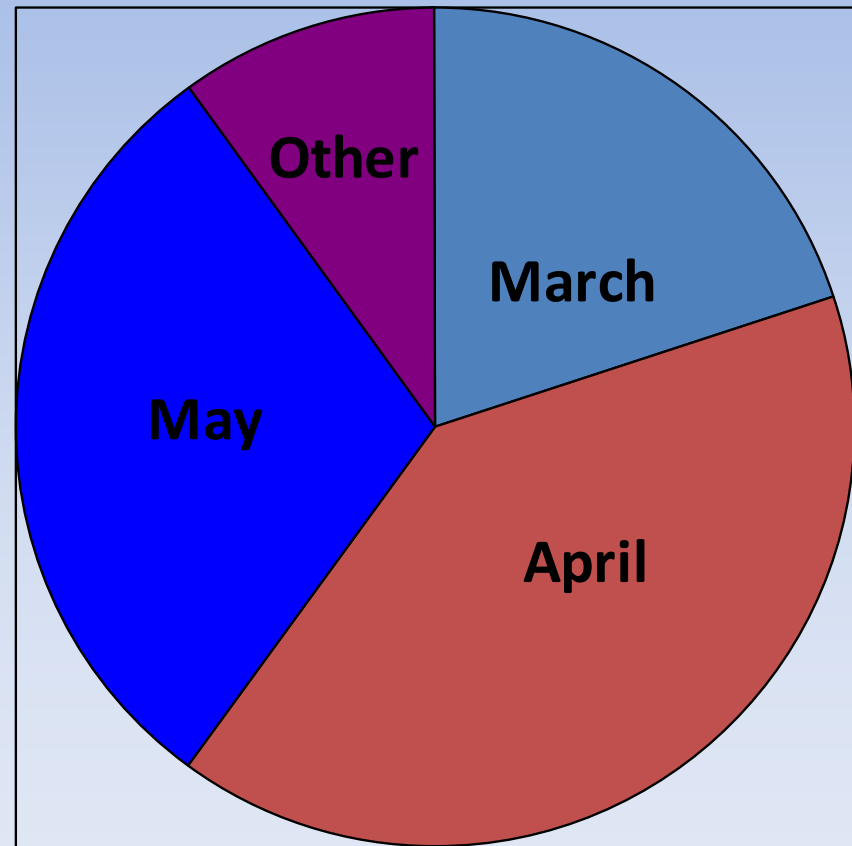






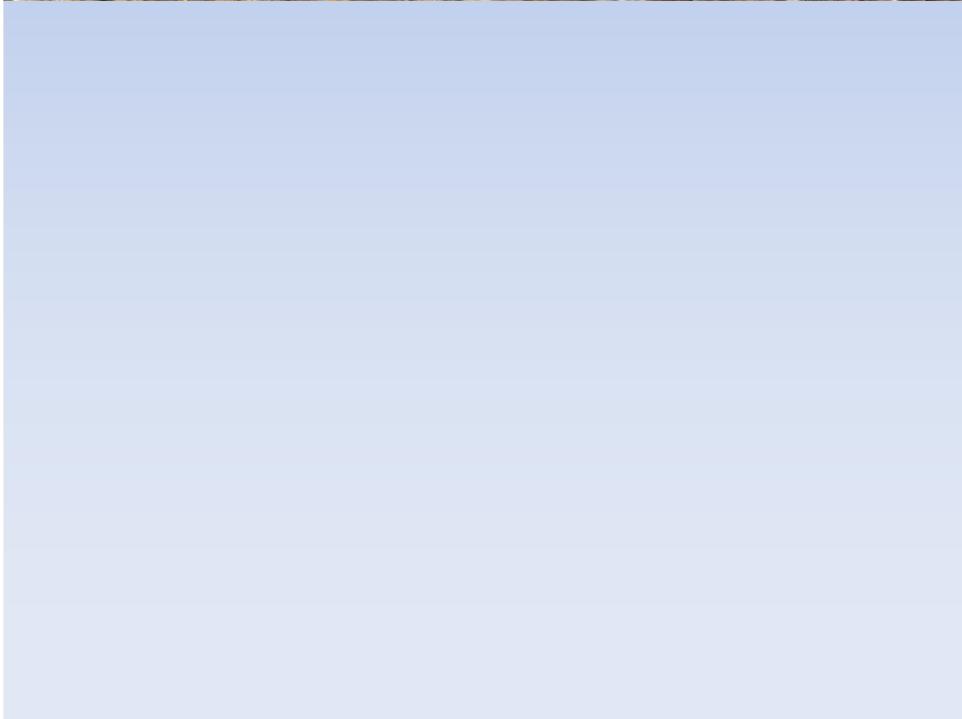


Beginning of Nesting











A guide to ageing young Barn Owls

Day 14

WL = 55mm
Weight = 167g



Day 21

WL = 92mm
Weight = 239g



Day 28

WL = 127mm
Weight = 330g



Day 35

WL = 171mm
Weight = 385g



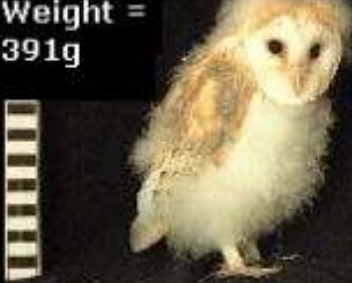
Day 42

WL = 204mm Weight = 374g



Day 49

WL = 232mm
Weight = 391g



Day 56

WL = 260mm
Weight = 387g



Day 63

WL = 276mm
Weight = 346g

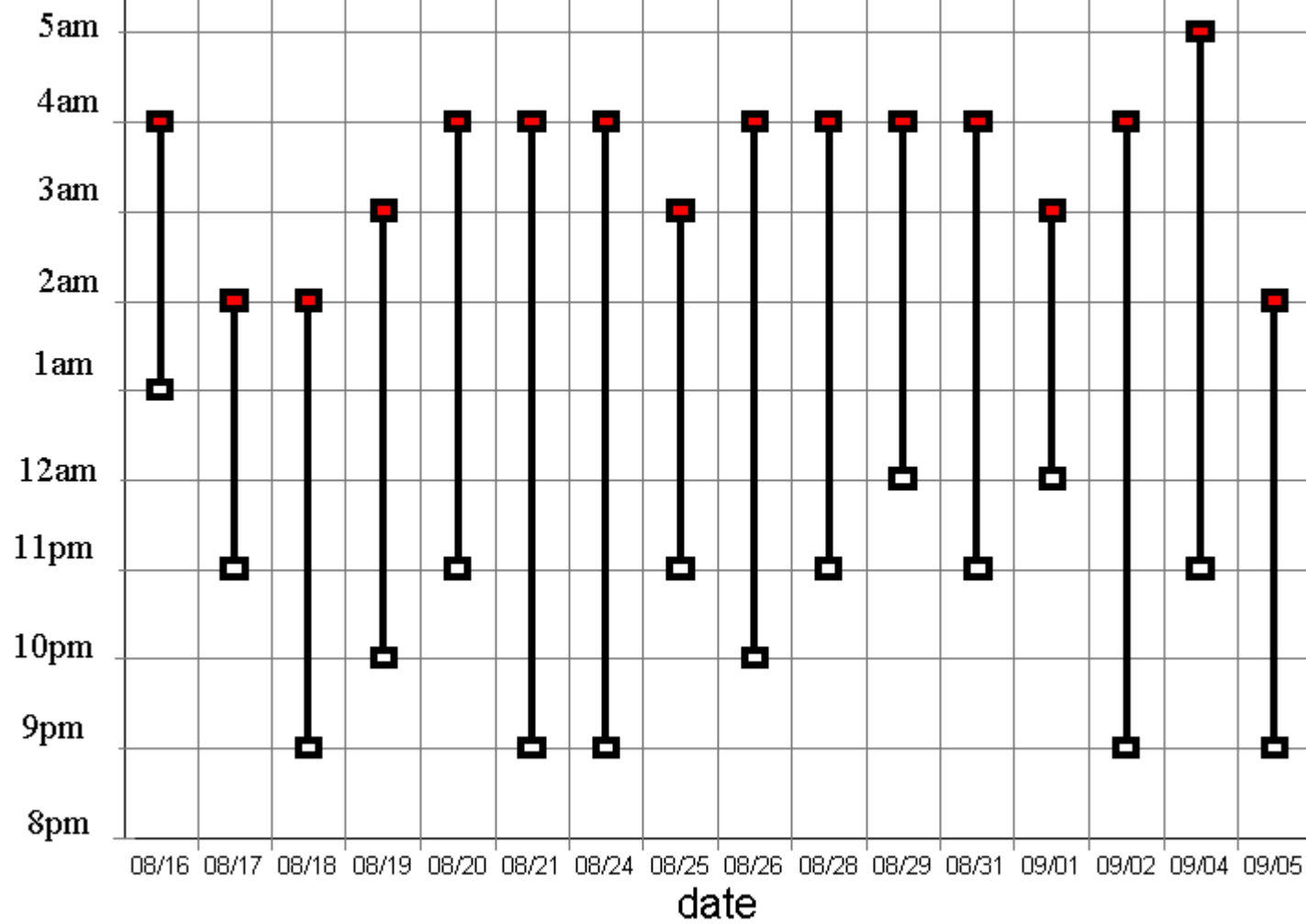






Hunting period

first to last prey delivery





Barn Owls Eating Gophers

- A family of barn owls will eat 10-12 gophers per night during the 4 month brooding period (Apr-Jul)
- Barn owl adults eat at least 1 gopher per night during the rest of the year
- A family of 2 parents and 5 young will eat over 3000 gophers in one year
- How much must you spend to control 3000 gophers?



Barn Owls Eating Voles/Mice

- A family of barn owls will eat about 120 voles per night during the 4 month brooding period (Apr-Jul)
- Barn owl adults eat up to 10 voles per night during the rest of the year





Photo: C Ingles, ANR Press



Photo: C Ingles, ANR Press

If you need to wear a respirator to spray don't apply the product to your barn owl boxes.



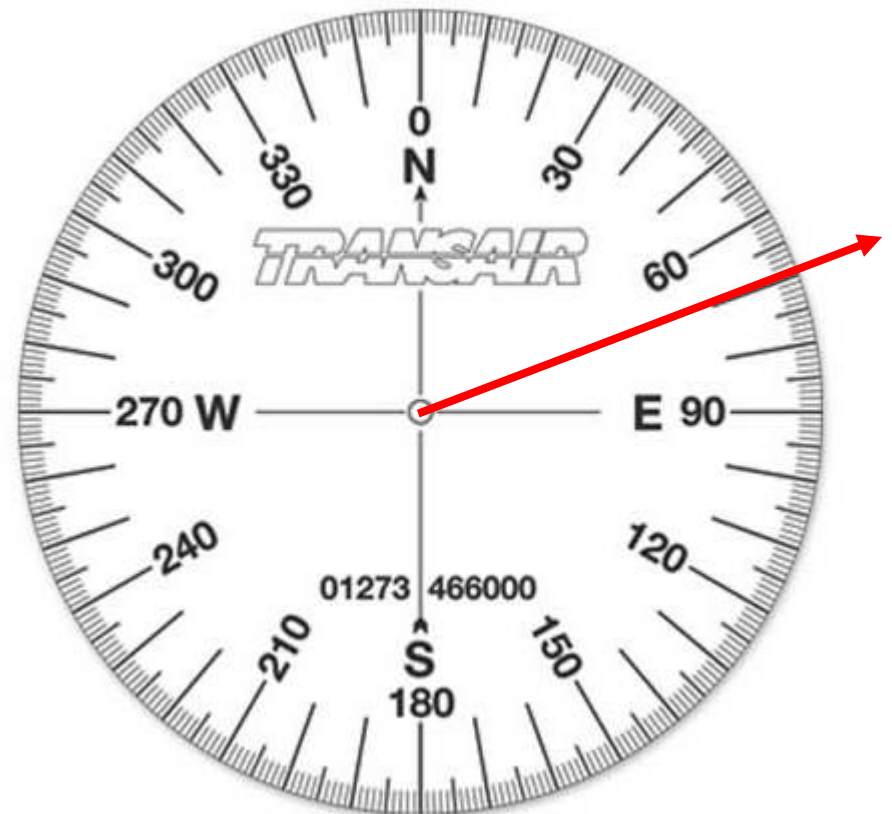


Owl Box Placement

- Use a steel pole 8 feet or more high
- Face entrance to true east
- Locate within 50 yards of a nursery tree
- Place at the edges of your orchard
- Avoid roads
- Don't forget maintenance
 - Yearly cleanings
 - Paint if needed
 - **KEEP STARLINGS OUT!**



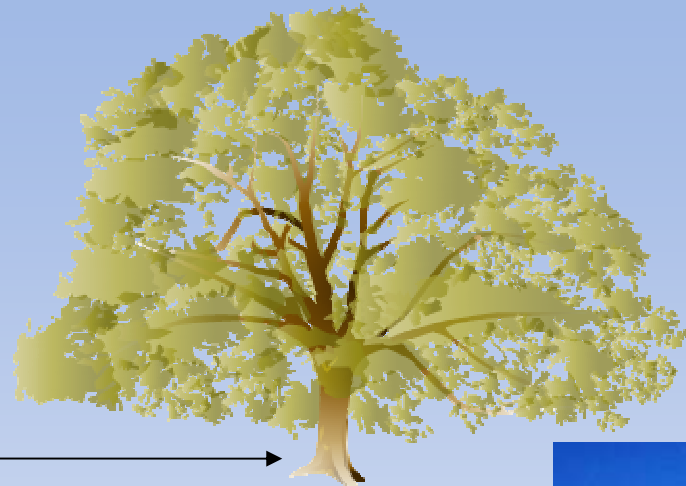
Face the box true East



Nursery trees are important



Within 50 yards to the
front of the box







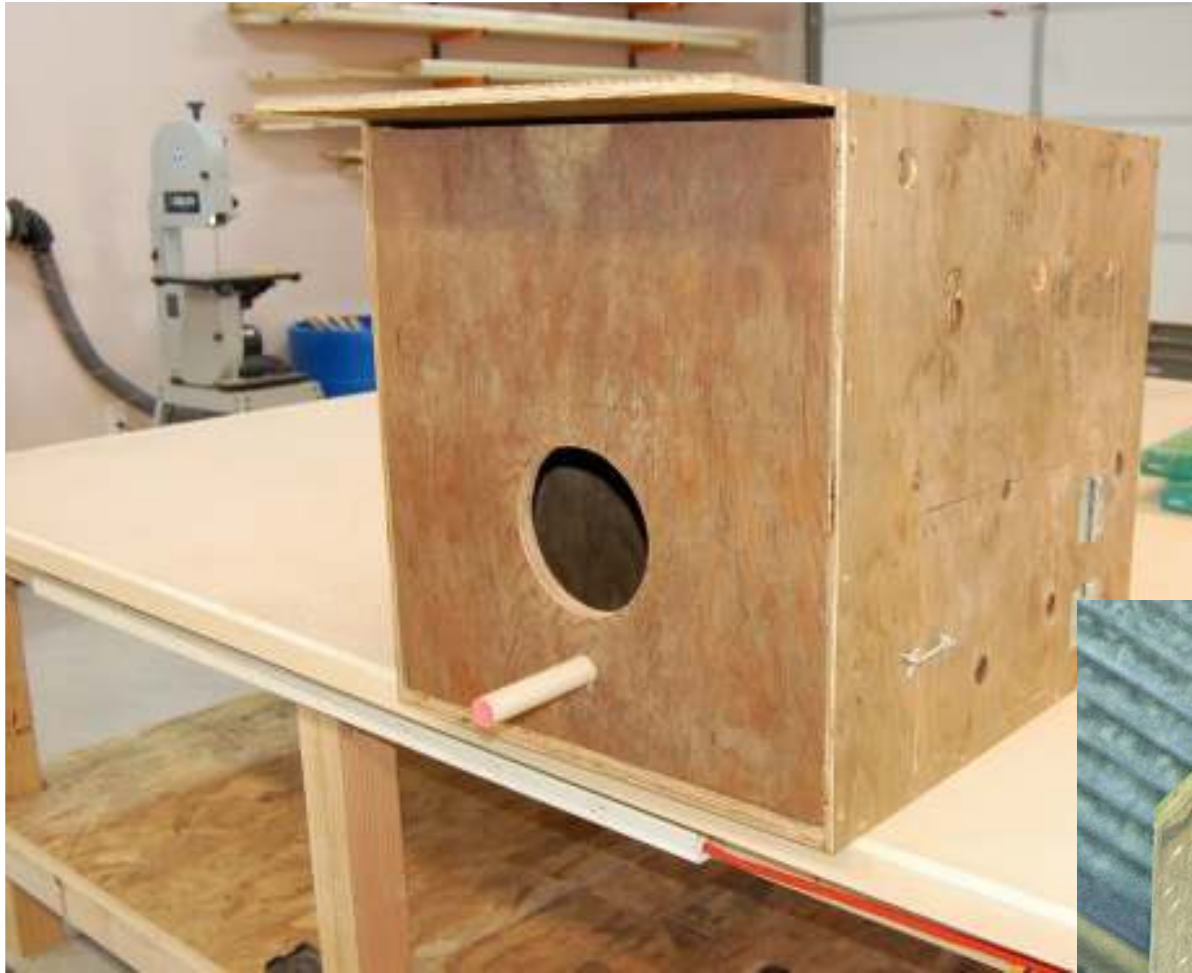


A good quality owl box

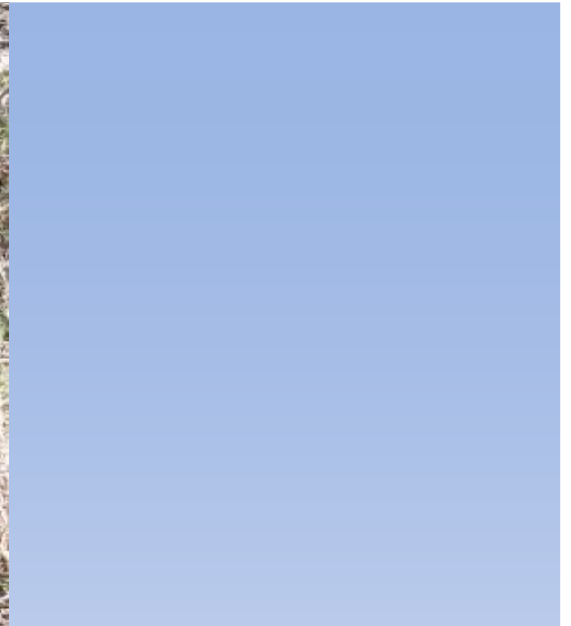
- Made of $\frac{3}{4}$ " plywood that is screwed and glued
- At least 2 ft sq- bigger is better
- Stained or painted
- Sun shade on top and back
- 4x3" elliptical entrance hole
- Internal predator baffle
- Top and bottom ventilation holes
- Doesn't have a perch if other owls species are in the area





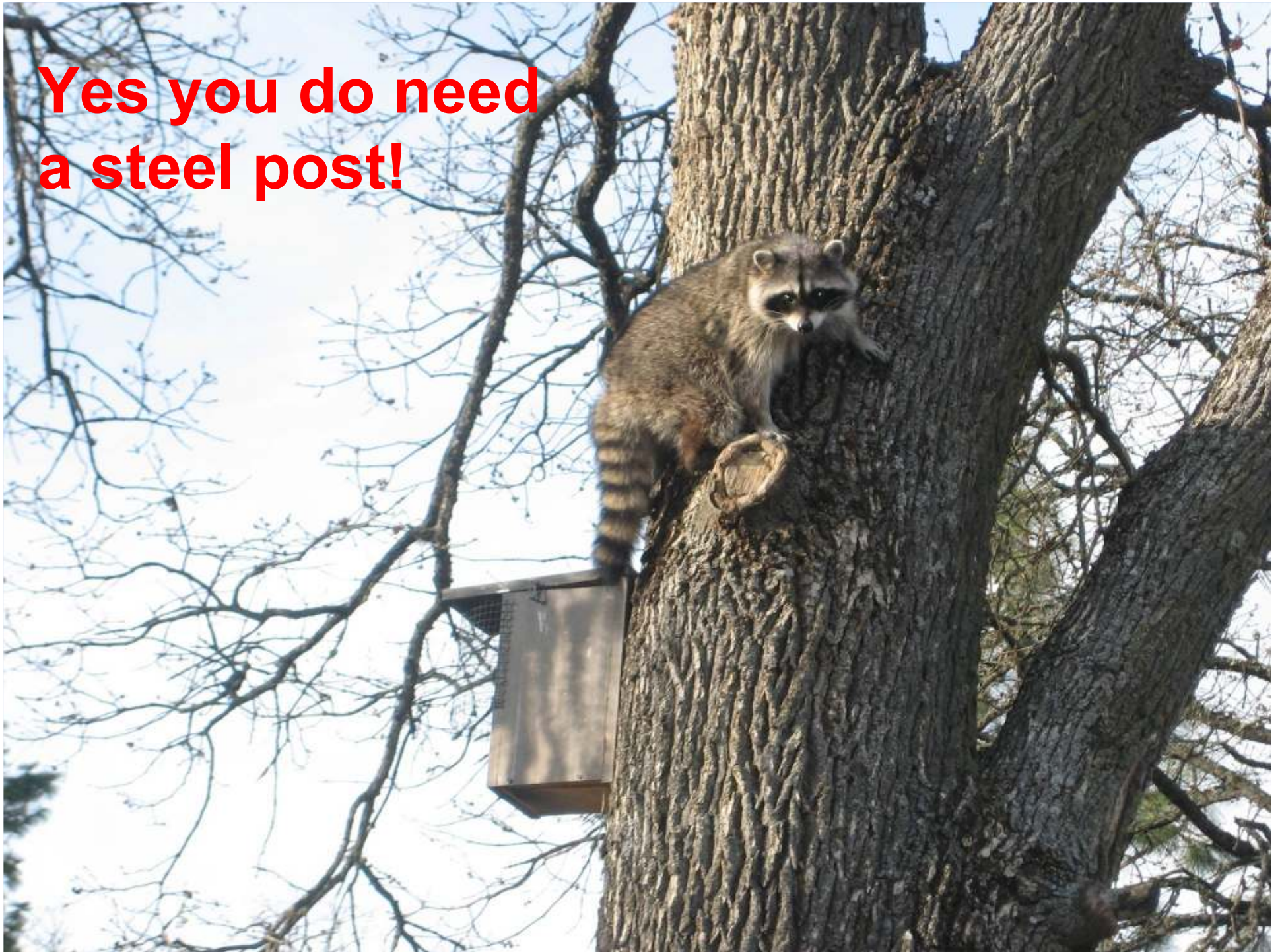




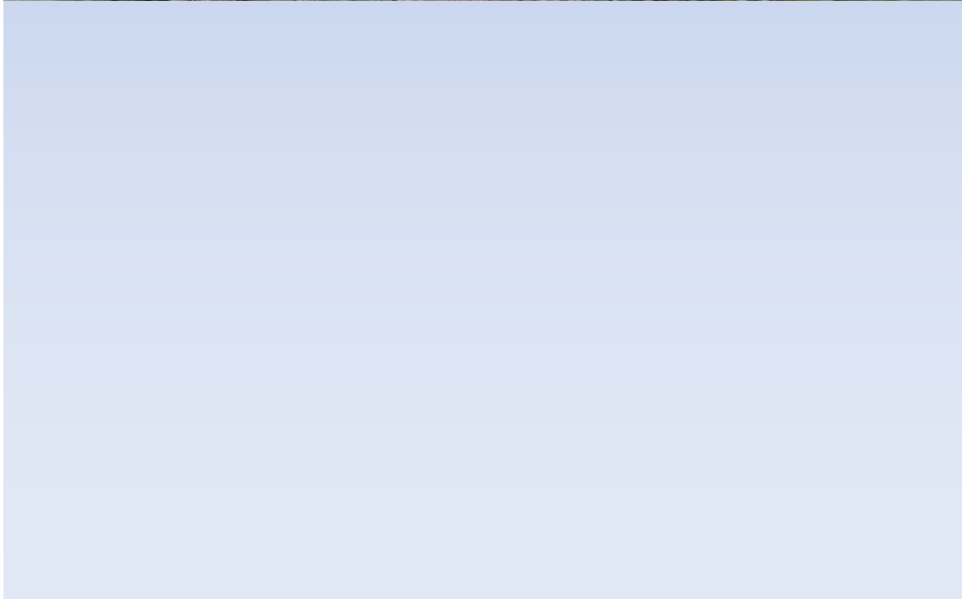




**Yes you do need
a steel post!**











Raptor Perches

*Get raptors where you
need them most*





Some rodenticides are dangerous, others are relatively safe

Lethal:

- Brodifacoum
D Con
- Diphacinone *Ramik Green/Brown*
- Bromadiolone

Sub lethal:

- Difenacoum

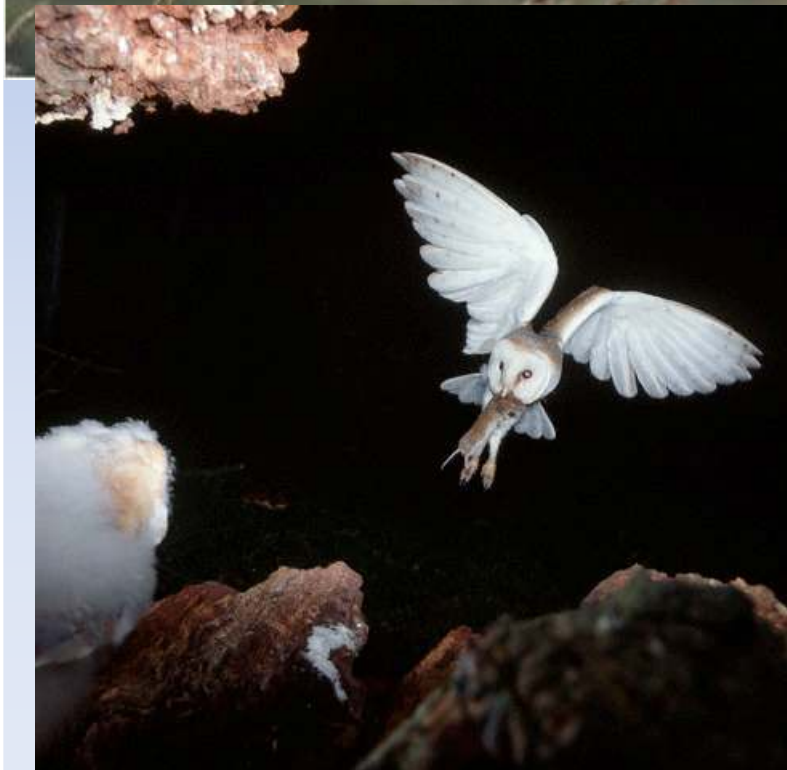
No adverse effects:

- Chlorophacinone –
Rozol Vole Bait
- Strychnine
- Zinc phosphide
- Fumarin

Rozol

- 10x less toxic to dogs than Ramik
- Virtually no risk of secondary poisoning to birds
- Cheaper
- Lasts longer





Questions?

Omegorchards.com
Tucksdwellings.com

