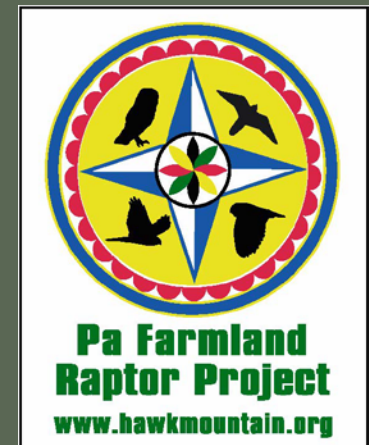


# Engaging the Private Landowner in Conserving American Kestrels

*Pennsylvania's Farmland Raptor Project*



Laurie Goodrich  
& Katie Andrews



# Farmland Raptors in Pennsylvania Have Declined Dramatically During the Past Twenty Years

**SHORT-EARED OWL**

**NORTHERN HARRIER**



Endangered in Pennsylvania

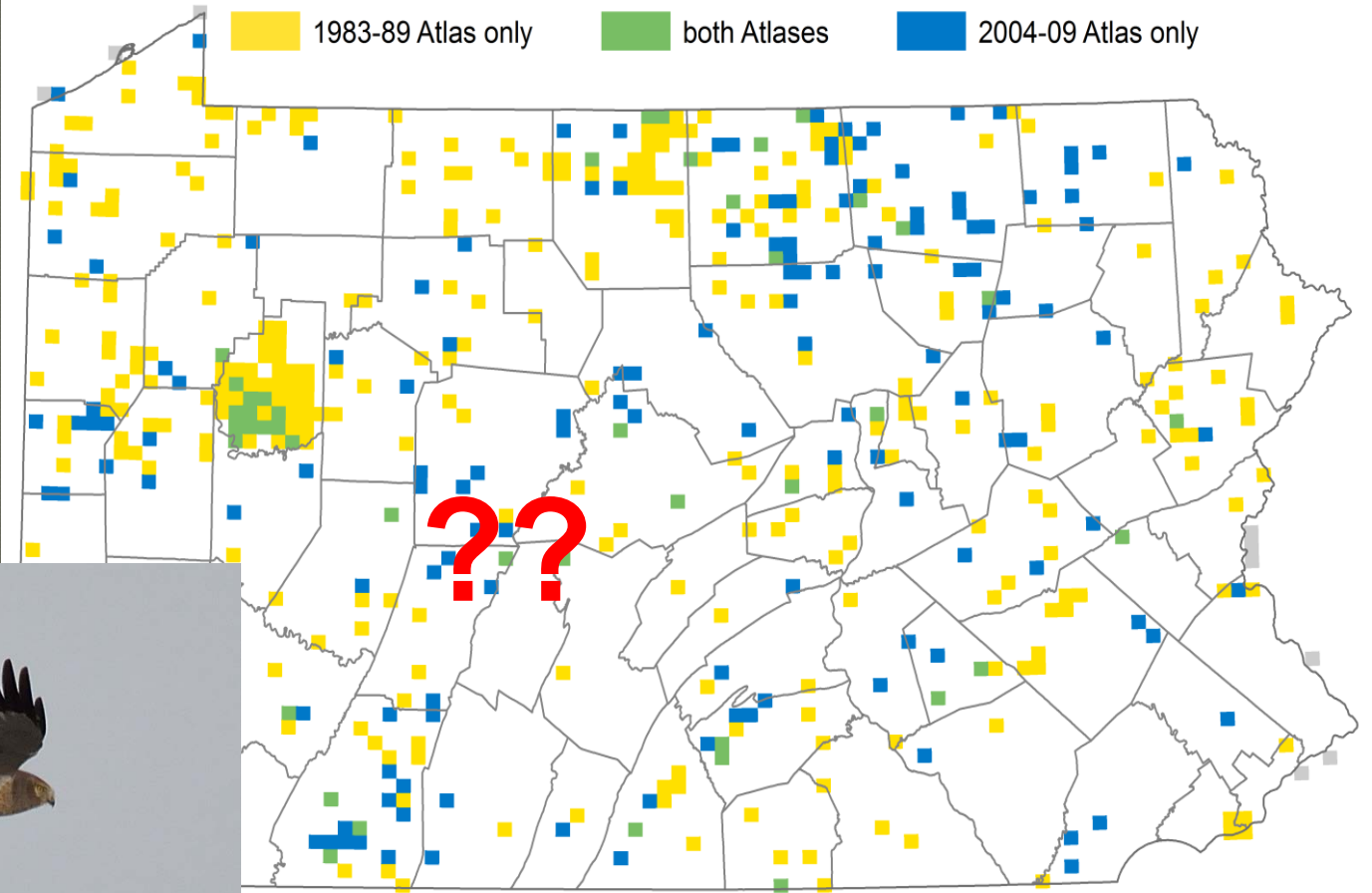


Threatened in Pennsylvania

# Breeding Bird Atlas 1980s to 2000s

- 48%  
Harrier

Northern Harrier





## AMERICAN KESTREL



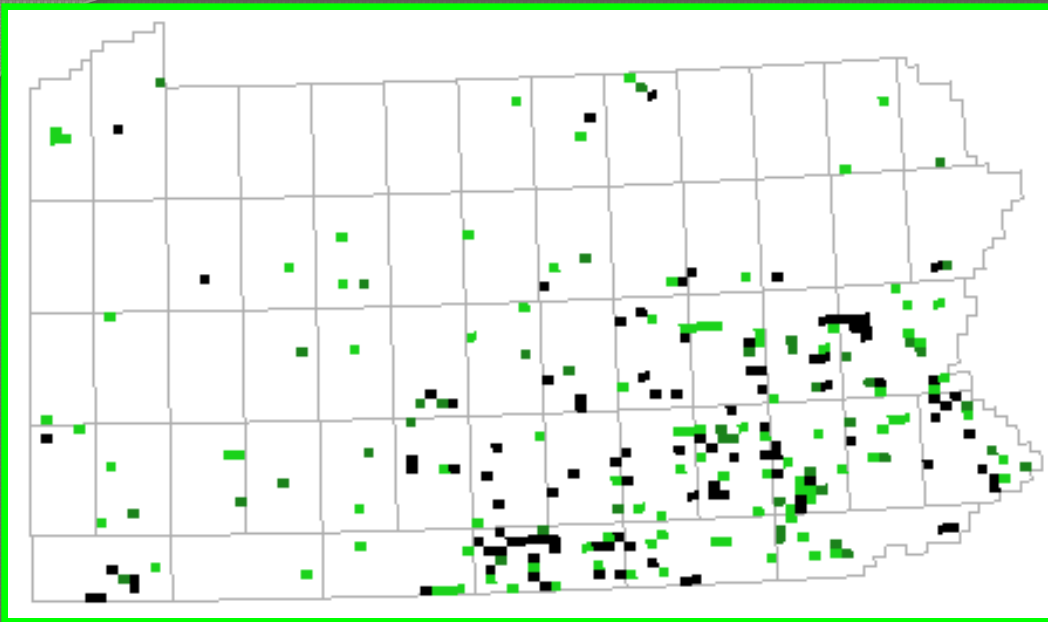
Populations  
declining in Eastern  
North America

## BARN OWL



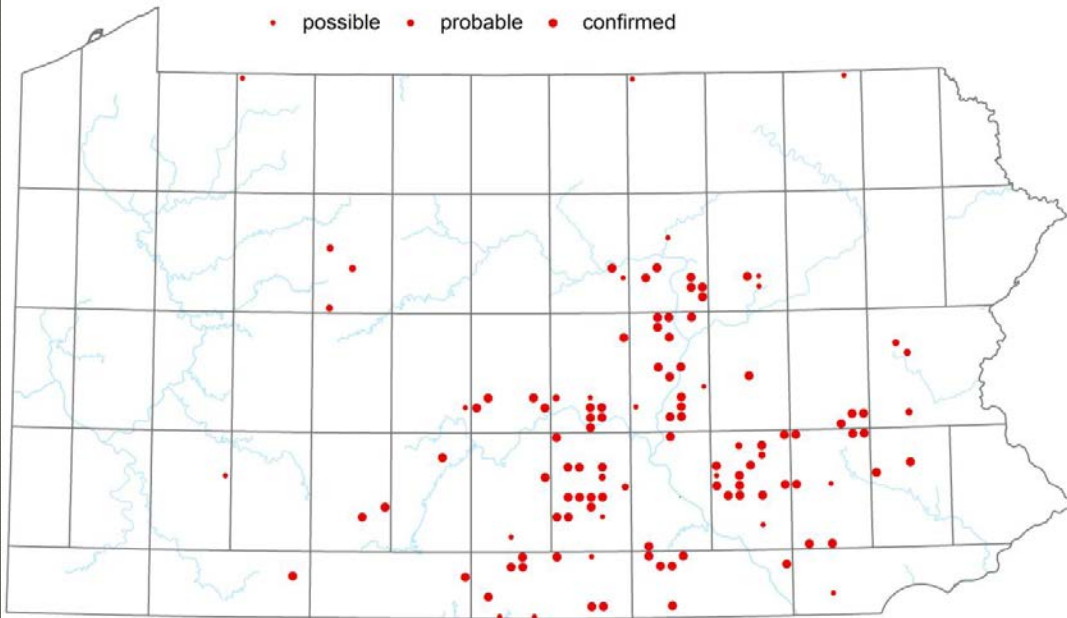
Declining in  
Pennsylvania (SSC)





PA BREEDING BIRD ATLAS MAPS

Barn Owl



**1984-1989**  
**(220 blocks)**

**53%**  
**decline**  
**in Barn**  
**Owl**  
**nesting**  
**locations**

**2004-2008**  
**(117 Blocks)**

## PROBLEM:

- Declining populations of farmland-associated birds, some threatened & endangered
- Lack of survey data on rare species
- Most field habitats are privately owned



**?Solution?:**  
Engaging  
Landowners  
in conservation

# The Farmland Raptor Project

---

## **Goal = Reach out to landowners to:**

- Enlist help in locating breeding and wintering sites
- Encourage farmland owners to put up boxes, delay mowing for harriers and owls
- Encourage birders to report sightings to us or to *EBird* to identify key sites winter and summer
- Encourage birders to revisit historical sites
- Create easy to use on-line system of reporting
- Include staff verification/education





# Project Goals 2012-2016

- Gather updated information on distribution of four species of declining farmland raptors in Pennsylvania
- Improve collaboration and reward land owners



# Outreach BARN OWL -----Collaborate with PA Game Commission





# Landowner recognition



**Conservation Partner**

**Pa Farmland  
Raptor Project**

HAWK MOUNTAIN

Wild Resource  
Conservation  
Program

© Mario Stazzoni

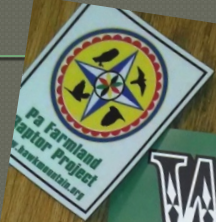
VORIS SIGNAL, LLC, MANALAPAN, NY 13104-0683 1-800-473-5098 www.voris.com



SJB '08



# Farmland Raptors Project



## WANTED

Sightings of Short-eared Owl,  
Barn Owl, Northern Harrier,  
and American Kestrel



Short-eared Owl



Barn Owl



Northern Harrier (female)



American Kestrel (male)



American Kestrel (female)

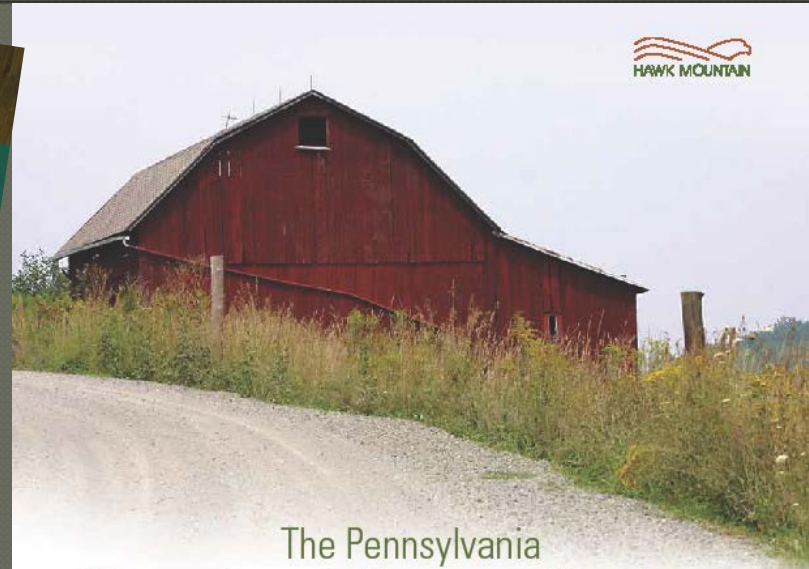


Northern Harrier

**Report your sightings of Farmland Raptors**  
Raptors prey on rodents and large insects and reduce the need for pesticides. For information on attracting these birds or to report sightings visit [www.hawkmountain.org/farmlandraptors](http://www.hawkmountain.org/farmlandraptors) or call 610.756.6000 x 206.



**Pa Farmland Raptor Project**  
[www.hawkmountain.org](http://www.hawkmountain.org)



## The Pennsylvania Farmland Raptor Project



Barn Owl



American Kestrel



Short-eared Owl



Northern Harrier

[www.hawkmountain.org/farmlandraptors](http://www.hawkmountain.org/farmlandraptors)

# Farmland Raptor Website

HM Pennsylvania Farmland Ra x

www.hawkmountain.org/raptorpedia/pennsylvania-farmland-raptor-project/page.aspx?id=3176

Apps 7-Day Forecast for L... OSNA acopianctr mail HawkCount HM Home | Hawk Moun... hawkmtwebemailac... V9 Portal Site - My ...

HOME VISIT LEARN SCIENCE RAPTORPEDIA JOIN OR GIVE VOLUNTEER EVENTS WHO WE ARE

Home > RaptorPedia > Pennsylvania Farmland Raptor Project

## Pennsylvania Farmland Raptor Project

### Help save farm friendly raptors

[JOIN THE NETWORK](#) or [Just Learn More](#)  
[Watch a video](#), courtesy of Berks Co TV  
Report a sighting now using the online form link:

[▶ Online Sighting Form](#)

Soaring over your farm or field could be the grassland raptor we're searching for. The Barn Owl, American Kestrel, Short-eared Owl and Northern Harrier prefer this landscape and can benefit landowners as well:

- Raptors on your property indicate a healthy environment
- Raptors prey on rodents, snakes and large insects
- Less rodents and insects mean you can reduce the amount of pesticides used
- Raptors are impressive to watch and fun to identify
- [Improve habitat at home--and maybe make some money!](#)

### Why are farmland raptors in decline?

- Habitat loss
- Increase in development



**BENEFIT FOR BIRDS  
CORPORATE SPONSOR**



### Become a Member



### Raptor Count Data


[▶ Newsletter Sign-Up](#)

f t YouTube

98%

# Online Sighting Report Form

## Farmland Raptor Sightings

Date  Species  Number Seen  Behavior  Habitat

Please enter GPS coordinates or nearest crossroads. Or select GPS coordinates by clicking the 'GeoPicker' below.

GeoPick

[How do I get GPS Coordinates](#)

**+Add Another  
Sighting**

### General Comments

Observer Information

Landowner Information



# New Displays for Outreach

**Grassland Raptors Benefit Farms**  
BARN OWL    AMERICAN KESTREL    NORTHERN HARRIER    SHORT-EARED OWL

4 Species Are In Decline & You Can Help!

- ✓ Join the Pa Farmland Raptors Network
- ✓ Learn how to spot the 4 species
- ✓ Report your sightings
- ✓ Place a Barn Owl control nestbox
- ✓ Increase grassland or pasture acreage
- ✓ Delay mowing until mid July
- ✓ Tell a friend and spread the word

Questions or  
@hawkmountain.org  
1700 Hawk Mtn Rd  
hawkmountain.org

**Conserve Our Farmland Raptors**  
These raptors are CAVITY NESTERS Provide a Nestbox

Conversion of hayfields to row crops

**Farmland Raptors**  
These raptors are GROUND NESTERS Conserve Grasslands

SHORT-EARED OWL

AMERICAN KESTREL

SHORT-EARED OWL

**HAWK MOUNTAIN**

# Conserve Our Farmland Raptors

These raptors are  
**CAVITY NESTERS**  
Provide a Nestbox



**AMERICAN KESTREL**

**BARN OWL**



Join the Pennsylvania Farmland Raptor Network  
[www.hawkmountain.org/farmlandraptors](http://www.hawkmountain.org/farmlandraptors)

# Conserve Our Farmland Raptors

These raptors are  
**GROUND NESTERS**  
Conserve Grasslands



**SHORT-EARED OWL**

**NORTHERN HARRIER**



Join the Pennsylvania Farmland Raptor Network  
[www.hawkmountain.org/farmlandraptors](http://www.hawkmountain.org/farmlandraptors)



# PROJECT OUTREACH



**2012-2013—  
> 9,000 people**



# Events, Talks, Articles in 2016

## Fairs, Talks, Presentations

PA Farm Show (7 day)

PSU Ag Day \*\*

PA Sustainable Agricultural  
Conference \*\*

Kutztown Future Farmers of  
America

Blue Mountain Wildlife Asso.

PA Young Farmers Asso. Winter  
Meeting

Kutztown Middle School

Schuylkill County Fair

PA German Cultural Heritage  
Center

Kempton F

Heemet Fescht

Christmas on the Farm

Hope Hill Lavender Farm Fest

Berks County Parks Go Fly a Kite Day

Meridian Bank Retiree Group Luncheon

Covered Bridge Festival

Ag Progress Days\*\*

Somerset County Fair

Old Dry Road Farm Fall Festival

## Journals Articles:

Historic Barn and Farm Foundation

Hay and Forage Grower

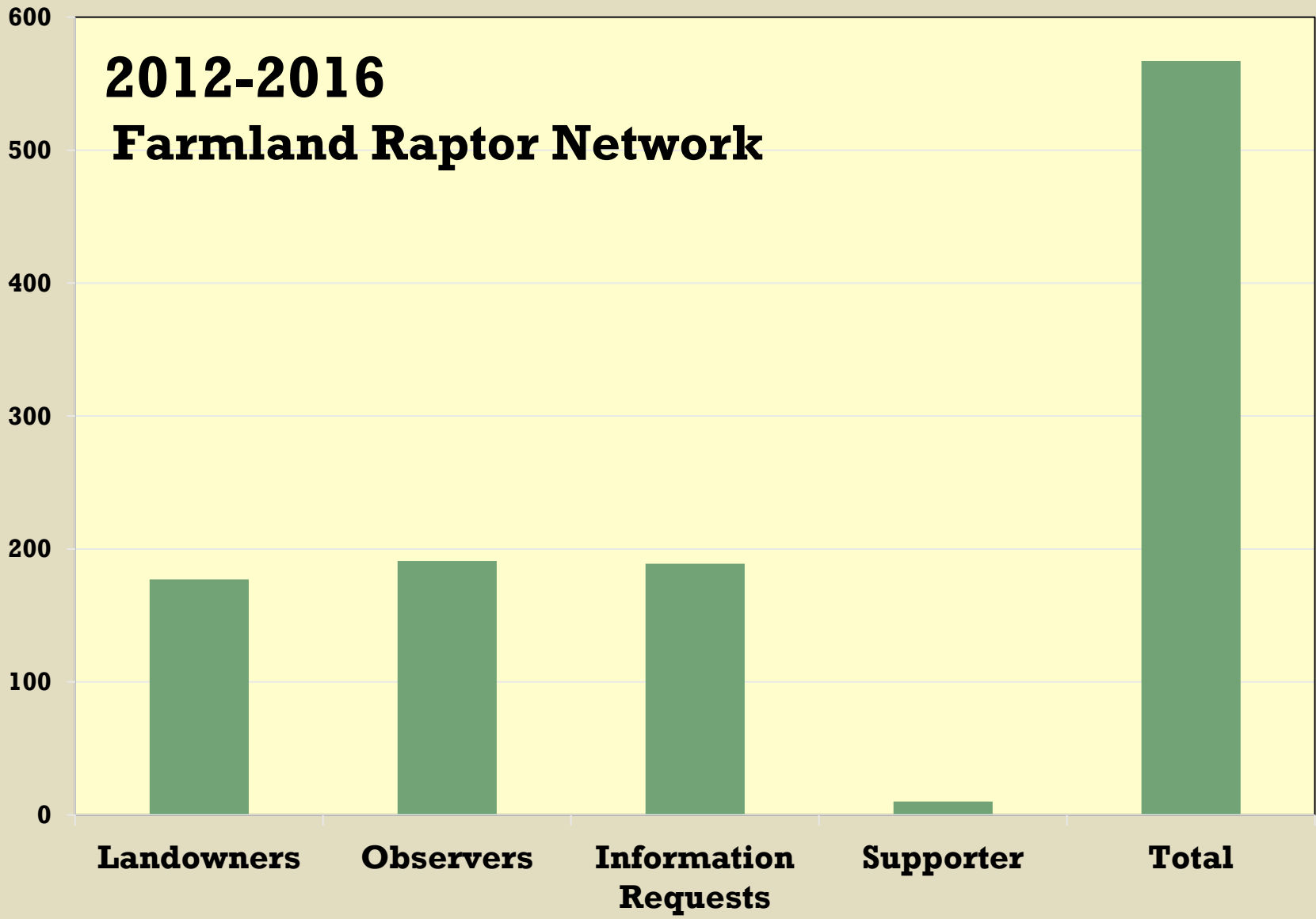
Farming Magazine

**\*\*Done by Shavers Creek Raptor  
Center**

# Involving students & scouts in boxes



# 2012-2016 Farmland Raptor Network

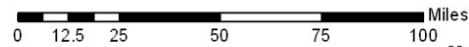
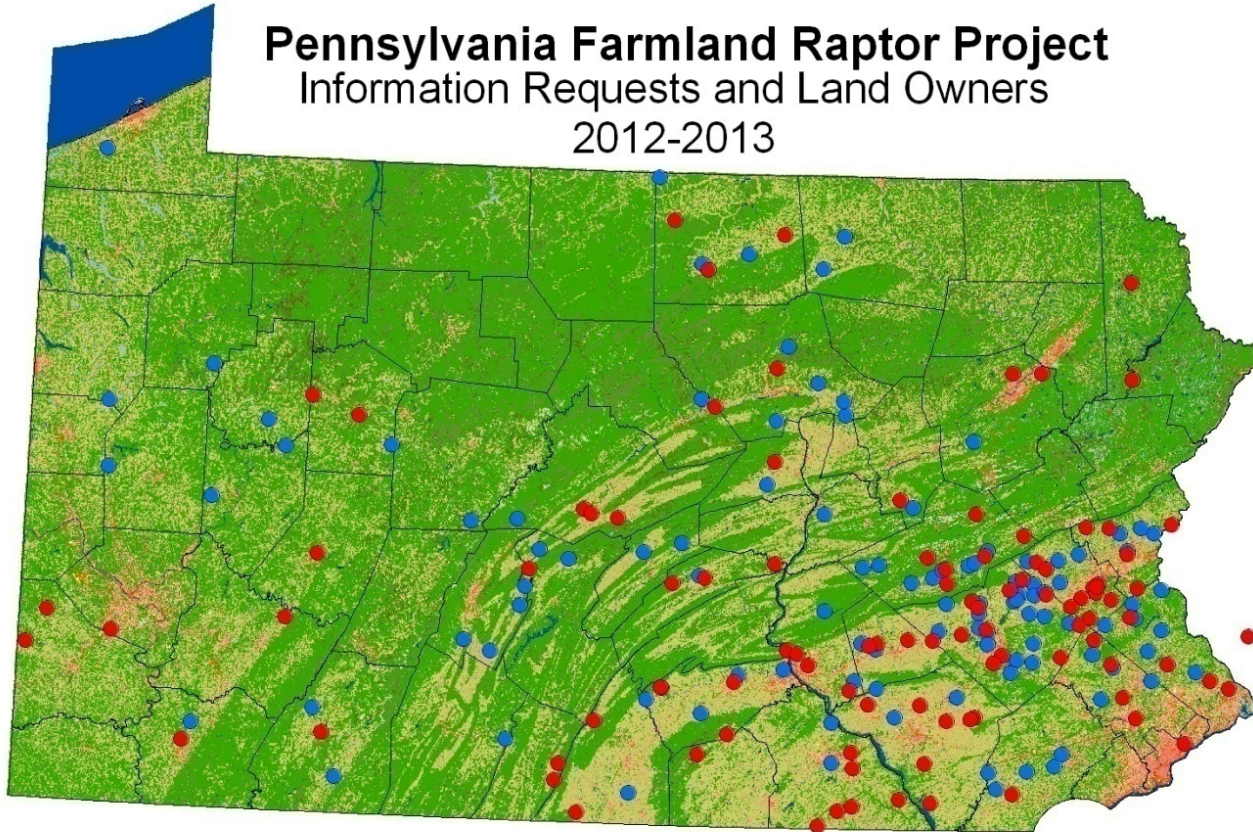




# Results 2012 -2013



## Pennsylvania Farmland Raptor Project Information Requests and Land Owners 2012-2013

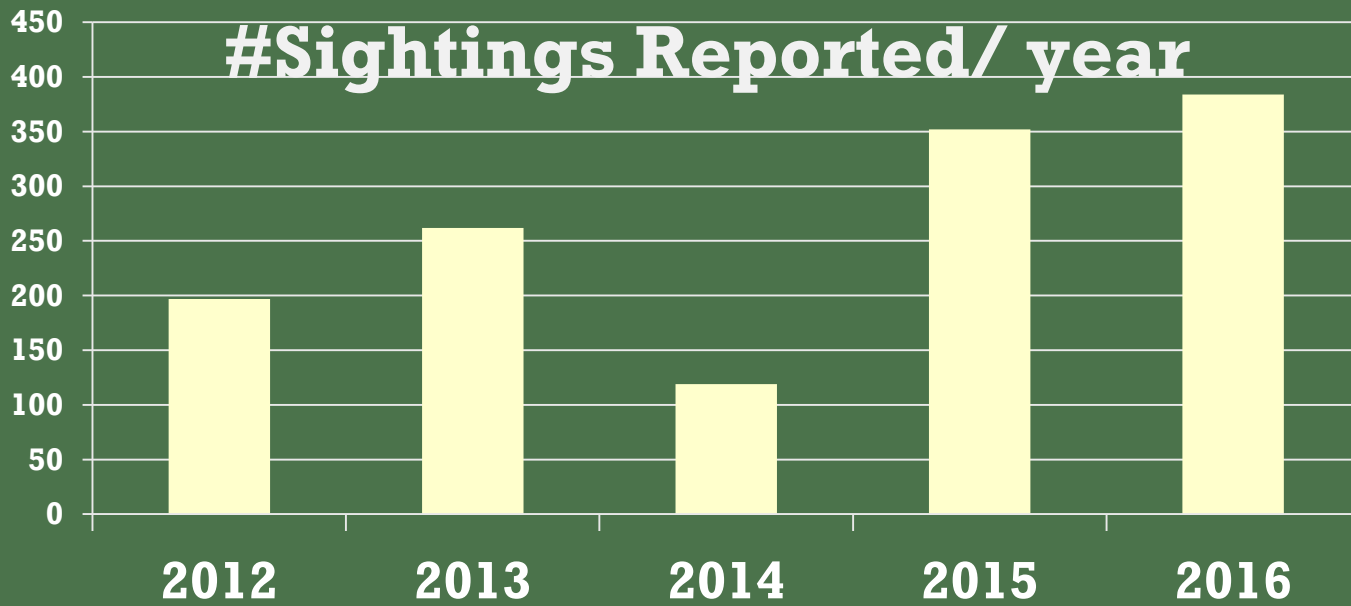


Map Created By: David Barber  
Sources: Hawk Mountain Sanctuary  
National Land Cover Dataset  
ESRI  
Date: 23 November 2013





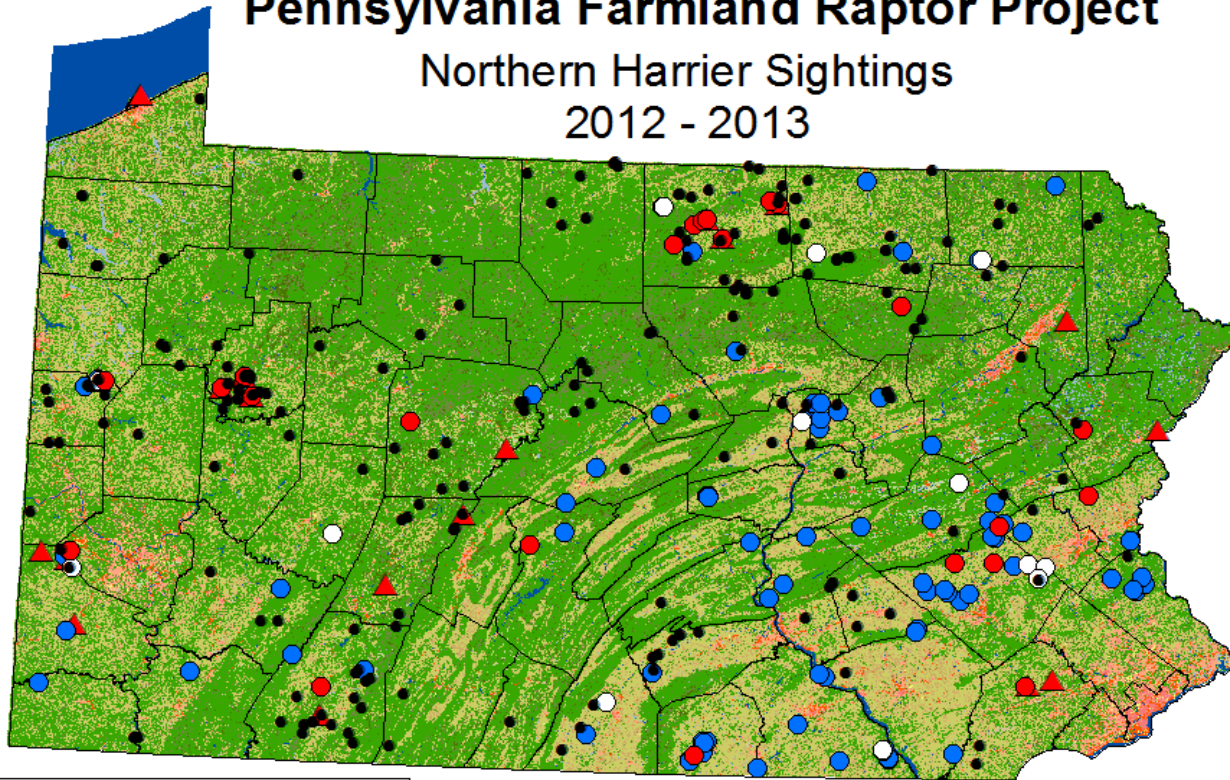
## #Sightings Reported/ year



# Compared to Atlas records from 2004-2009

## Pennsylvania Farmland Raptor Project

### Northern Harrier Sightings 2012 - 2013



#### Legend

- |                      |                              |                                |
|----------------------|------------------------------|--------------------------------|
| ● BR                 | ■ Open Water                 | ■ Evergreen Forest             |
| ○ M                  | ■ Low Intensity Residential  | ■ Mixed Forest                 |
| ● W                  | ■ High Intensity Residential | ■ Pasture/Hay                  |
| ▲ BR Nests           | ■ Commercial/Industrial      | ■ Row Crops                    |
| ● BB Atlas Sightings | ■ Bare Rock/Sand/Clay        | ■ Fallow                       |
|                      | ■ Cucumber/Strip Mine/Pls    | ■ Woody Wetlands               |
|                      | ■ Transitional               | ■ Emergent Herbaceous Wetlands |
|                      | ■ Deciduous Forest           |                                |

0 25 50 100 150 200 Miles



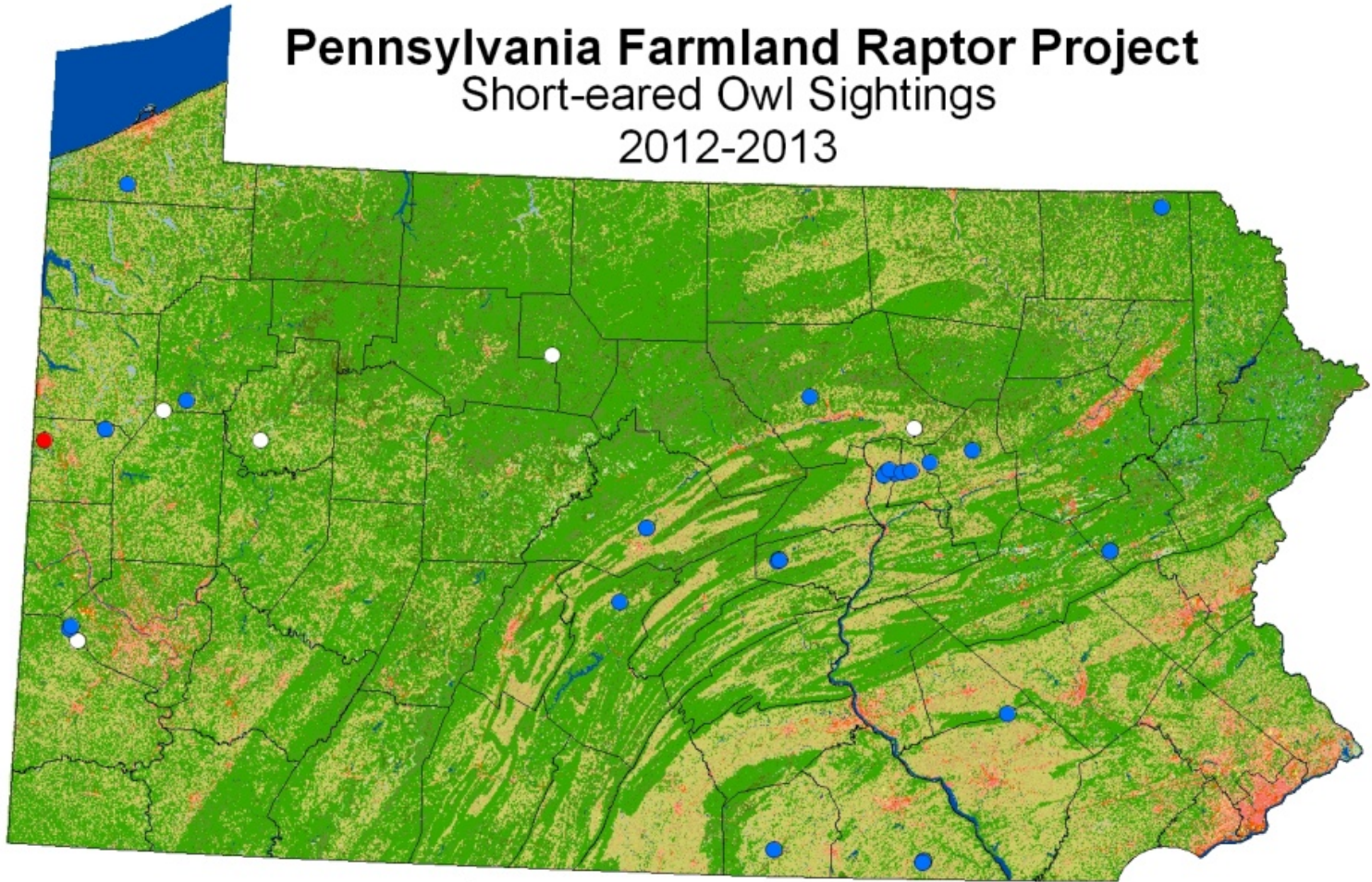
Map Created By: Christopher Stroher  
Sources: Hawk Mountain Sanctuary  
National Land Cover Dataset  
ESRI  
Date: May 2013



# Pennsylvania Farmland Raptor Project

## Short-eared Owl Sightings

### 2012-2013



**Legend**

Breeding	Open Water	Evergreen Forest
Migration	Low Intensity Residential	Mixed Forest
Non-breeding	High Intensity Residential	Pasture/Hay
	Commercial/Industrial	Row Crops
	Bare Rock/Sand/Clay	Fallow
	Quarries/Strip Mines/Pits	Woody Wetlands
	Transitional	Emergent Herbaceous Wetlands
	Deciduous Forest	

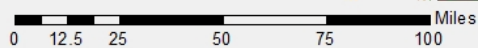
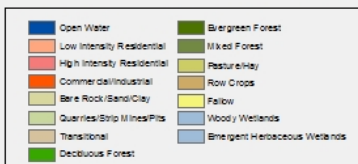
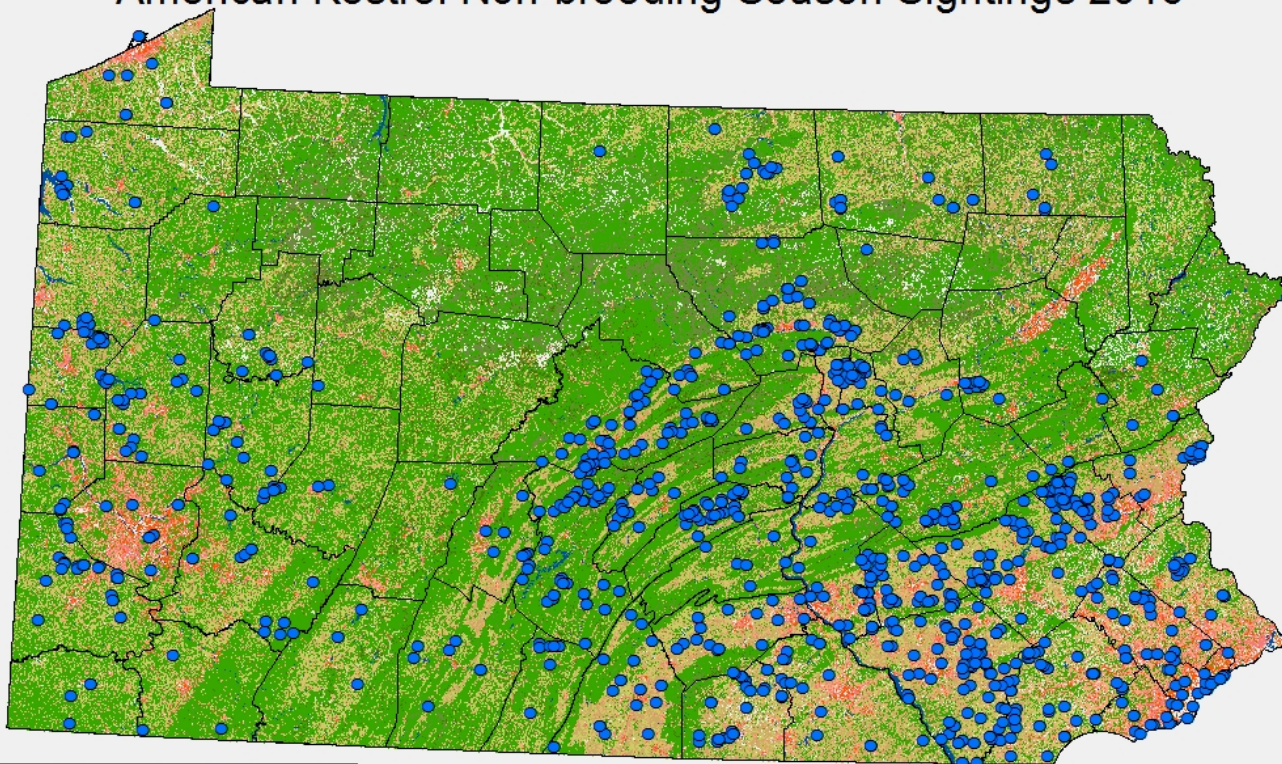
0 12.5 25 50 75 100 Miles

Map Created By: David Barber  
 Sources: Hawk Mountain Sanctuary  
 National Land Cover Dataset  
 ESRI  
 Date: 23 November 2013



# Wintering Kestrels

## Pennsylvania Farmland Raptor Project American Kestrel Non-breeding Season Sightings 2016



Map Created By: David Barber  
Sources: Hawk Mountain Sanctuary,  
National Land Cover Dataset,  
ESRI, eBird  
Date: 5 January 2017

# Kestrels in Education at Hawk Mountain

Kestrel Web Cam (& videos)  
Teacher Workshop  
Kestrel Curriculum

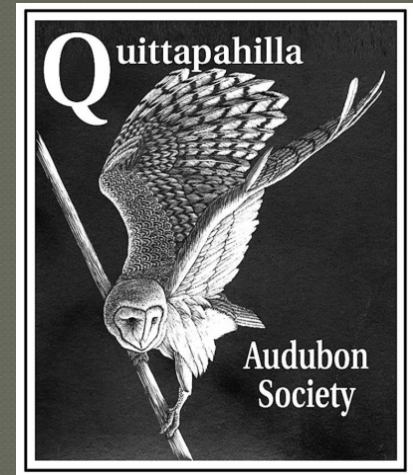


FOR INFO  
see [www.hawkmountain.org](http://www.hawkmountain.org)  
Or Erin Brown,  
[brown@hawkmountain.org](mailto:brown@hawkmountain.org)





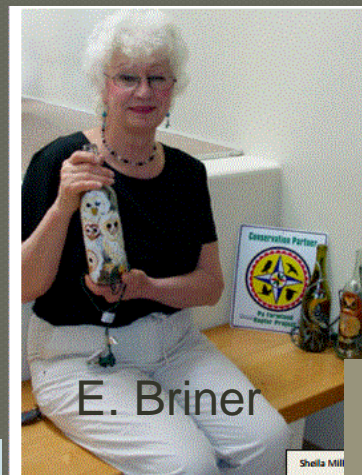
# Donors



Strausstown Rod  
and Gun Club

BARN (Berks Ag)

OverHome  
Alpaca

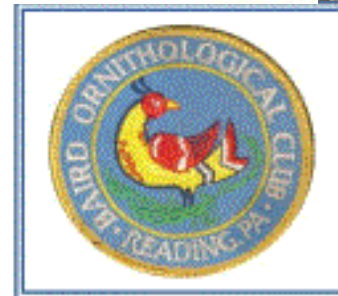


E. Briner



Blue Rocks Campground

WILD BIRDS  
UNLIMITED  
shillington



# Acknowledgments

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- Photos provided by Brent Bacon, Vic Berardi, Dan Mummert, Mary Linkvich, VIREO, Shawn Carey, David McNicholas, Vic Berardi, Rick Carlson, Bill Moses.
- **Volunteers**—Katie Andrews, Sheila Miller, Peter Phelan, Annie Stockmail, Kutztown High School, Marc Robinson, HMS volunteers
- Partners— Shavers Creek Raptor Center  
Pennsylvania Game Commission



# JOIN THE EFFORT TO CONSERVE FARMLAND RAPTORS



**Contact us with questions or sightings at:**

**Email:** [info@hawkmountain.org](mailto:info@hawkmountain.org)

**Phone:** 570-943-3411 x 106

**By mail:**

**Hawk Mountain Farmland Raptor Project**

**1700 Hawk Mountain Road**

**Kempton, PA 19529.**

