How can you help?

- The technology and expertise to make this project a success is expensive – each telemetry unit costs \$2500. Costs involved in trapping and data processing equal that of the hardware.
- Private donations are our biggest source of funding. Even partial funding for a telemetry unit will help us protect eagles.
- Your tax-deductible donation will help ensure that Golden Eagles do not needlessly suffer from our ignorance.

~
YES, I WANT TO HELP! I will support the DOAS Golden Eagle Research Project.
Enclosed is my tax-deductible donation of \$
Mail your check payable to <u>DOAS Golden Eagle</u> <u>Research</u> , with this form to:
DOAS Golden Eagle Research PO Box 544 Oneonta, NY 13820
Name:
City: State: Zip:
Email
Supporters who donate \$1000 will receive a lifetime membership in DOAS. Any donor who contributes \$5000 can name a tracked Golden Eagle.

If we do not reach the fund raising threshold for a trapping and telemetry project, all donations will still be used to benefit Golden Eagles in NYS.

Some natural and cultural history.

- Golden eagles are found throughout the northern Hemisphere
- A small population breeds in northeastern North America
- Virtually all individuals in that population migrate through NY—some winter here
- Eagles are important cultural symbols they appear on our coins and symbols of state worldwide
- Eagles have been persecuted for thousands of years, primarily because people believe that they kill livestock.



At the Franklin Mountain Hawkwatch, near Oneonta NY, observers count large numbers of Golden Eagles each year. Other important watch sites include Allegheny Front and Waggoner's Gap, both in Pennsylvania.



<u>Delaware-Otsego</u> <u>Audubon Society</u> www.doas.us

CONSERVATION PRIORITY: NEW YORK'S GOLDEN EAGLES

"In the twenty-first century, humans will determine the fate of this species and its habitat." --The Birds of North America Online



HOW DO WE PROTECT A

SMALL, ISOLATED

POPULATION OF EAGLES
IN A CHANGING WORLD?

What threatens Golden Eagles today?

The biggest threat to Golden Eagle populations come from a variety of human-driven influences. These include:

- electrocution
- shooting
- lead poisoning
- pesticides



<u>A new possible threat is</u> <u>development of wind power</u>

- At Altamont Pass in California, up to 100 Golden Eagles are killed each year by wind turbines.
- In NY, Golden Eagles migrate in a narrow corridor where wind development is proposed.
- Effective science can help identify where turbines will kill eagles and where they are unlikely to kill eagles.
- Hawk counts and telemetry data show Golden
 Eagles concentrate in our area each year during
 migration wintering birds concentrate in the
 northern Catskills.

What can we do?

- Dr. Todd Katzner's research group based at West Virginia University is tracking eagles to study their migration patterns in the Appalachians.
- Since 2006, 50 Golden Eagles were outfitted with satellite telemetry devices (PTTs) that obtain GPS quality locations accurate to within a few meters and provide data on flight speed and elevation. None were captured in New York.
- We propose to capture and track 4 wintering NYS Golden Eagles to add data from birds that behave differently and so improve Dr. Katzner's models.



Golden Eagle at Delaware Co. camera site

What's next?

- We continue to use hawk migration counts such as Franklin Mountain's to collect additional data on flight dynamics and eagle behavior during migration.
- Acquire funding for a February 2014 trapping program in NYS through grants and private donations.
- Improve mathematical models to provide greater detail on the specifics of how eagles use topography and weather.

What are our goals?

- To understand <u>where and how</u> these majestic birds migrate in eastern North America.
- Research the use of habitat and terrain by wintering Golden Eagles in New York.
- To identify more sites for seasonal raptor counts in New York.
- To create and disseminate maps of concentration areas in NY so regulators and developers have access to this information. These maps can be crucial tools to guide safer development of wind power in the eastern US.
- To benefit renewable energy development in NY. Telemetry research has already provided local benefits. By identifying migratory concentration areas, it has changed the risk assessment for a local project that was thought to be in a safe area, but in fact had a significant presence of eagles.