

# Wolverines

Past, Present, & Possibility

Steve Chorma

Lead Zookeeper

Zoo New York



# Tonight's Agenda

- Understanding Wolverines
- Their history in New York
- Where they are today
- The role of Zoos & Conservation
- Could they ever return?
  
- Trivia!!





# Trivia Time!



Participation is the key to winning our platinum membership giveaway!

- A.) Giveaway Winner = random trivia participant
- B.) Winner must attempt all questions
- C.) Winner will receive membership via mail or person
- D.) Have Fun!!!

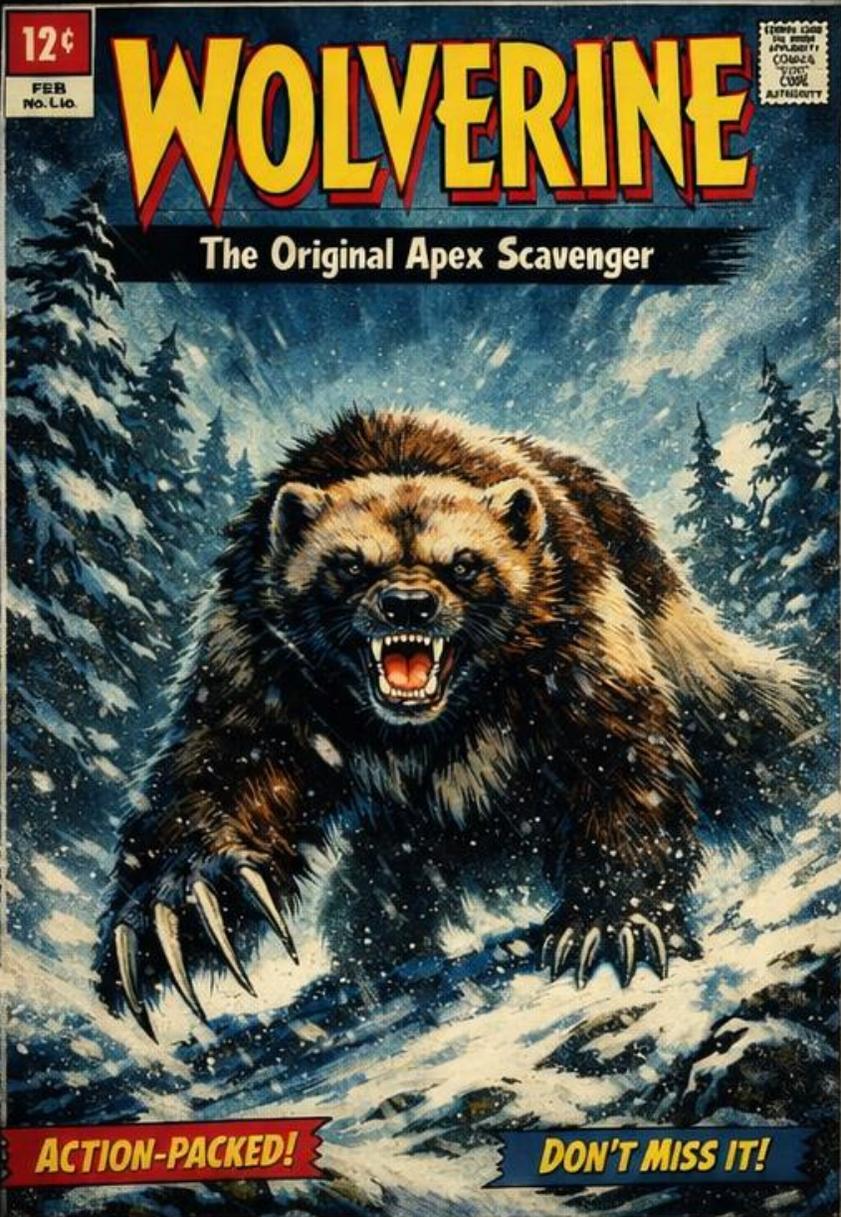


# Trivia Time!



What is the most common result when typing "Wolverine" into a google image search?

- A.) Wolverine – The Animal
- B.) Wolverine – The Superhero
- C.) The University of Michigan Mascot
- D.) Deadpool



# Real-life Superhero?

- Brave
- Super Strength
- Enhanced Sense of Smell
- Intelligent
- Support Ecosystems
- ~~Skeletons are coated in Adamantium, a nearly indestructible material, as a result of the Weapon X program.~~

# Wolverine Origins

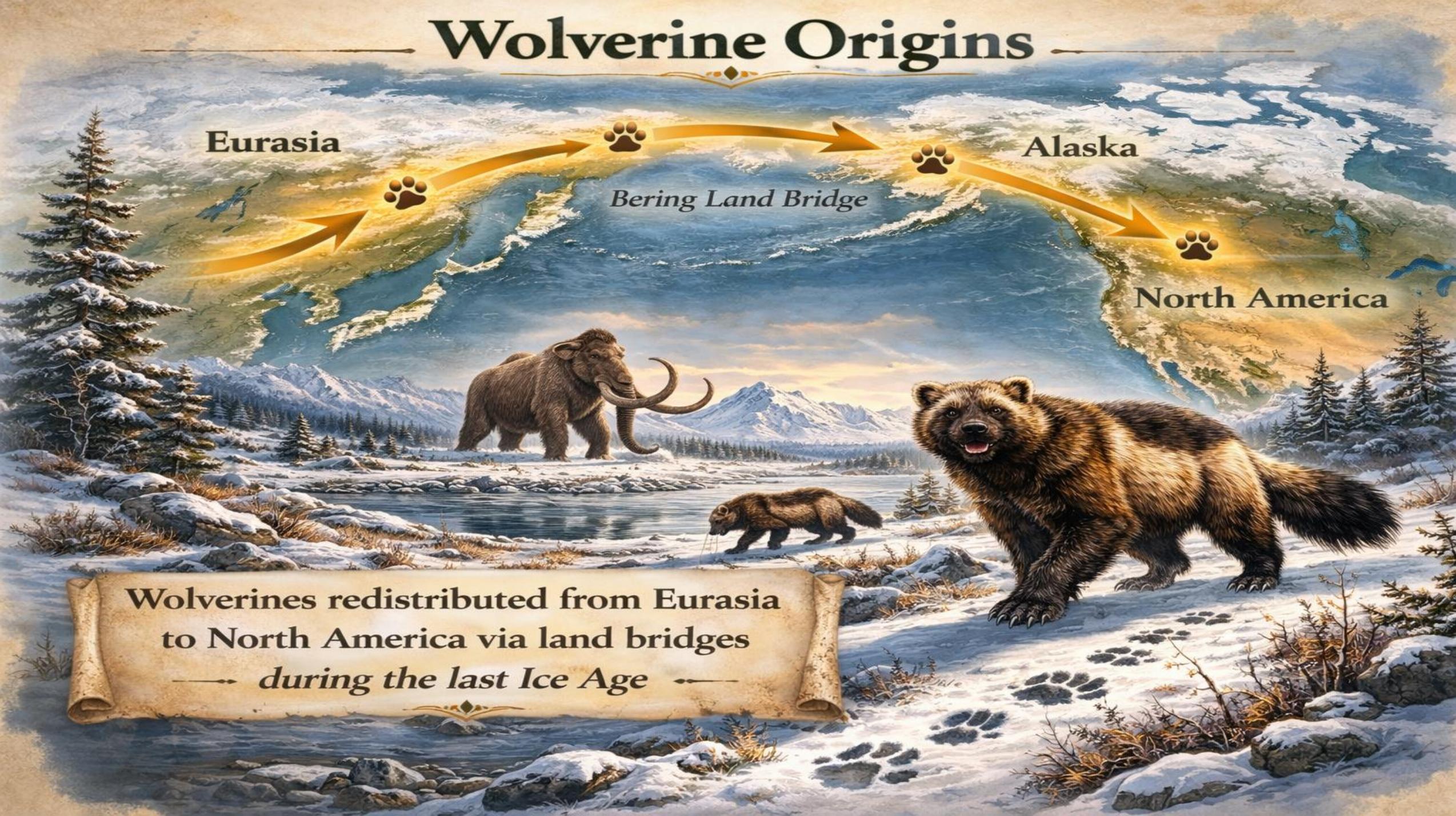
Eurasia

Alaska

North America

Bering Land Bridge

Wolverines redistributed from Eurasia  
to North America via land bridges  
— during the last Ice Age —



# Timeline of Mustelid Evolution



Early Mustelids

30–25 million  
years ago

*Megalictis ferox*

22–18 million  
years ago

Early Gulo Lineage

6–4 million  
years ago

Modern Wolverine  
(*Gulo gulo*)

~2 million years ago–  
present

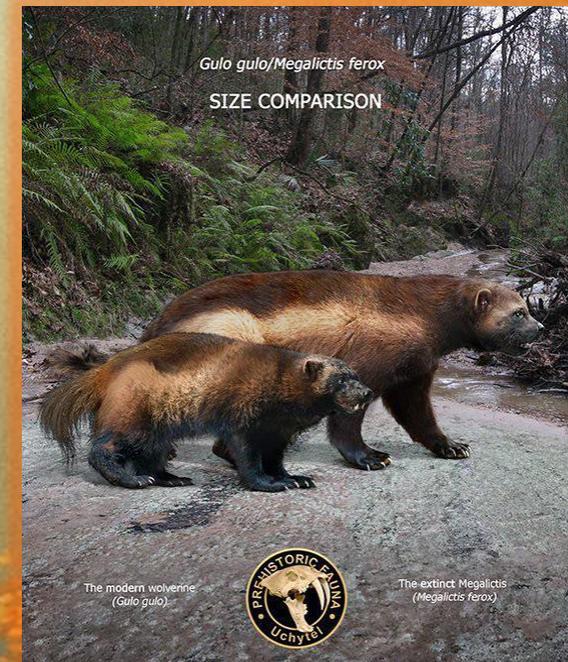


# Trivia Time!



Giant Wolverines roamed North America until only 10,000 years ago. In what region of North America did they commonly live?

- A.) Alaska
- B.) Alaska & Canada
- C.) Northern U.S., including New York
- D.) The Rocky Mountains



# — Ecological Role —



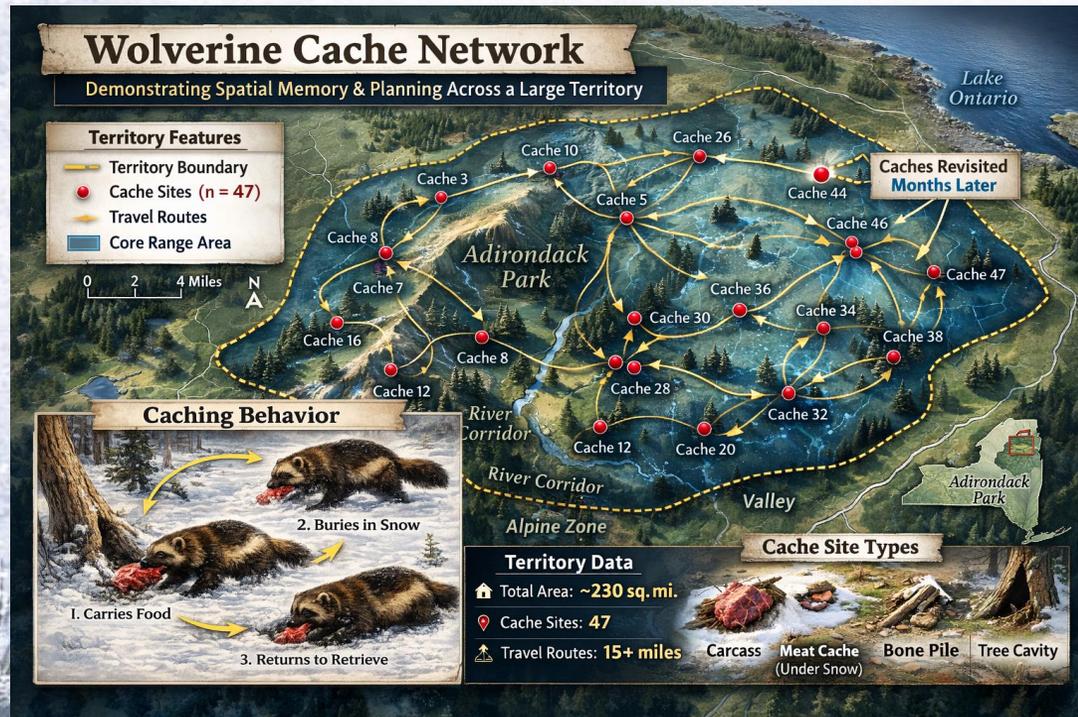
Scavenging



Seed Dispersal

# Range of Impact

## Scavenging



## Seed Dispersal





# Trivia Time!



How many items does the average person misplace per day?

- A.) 1
- B.) 3
- C.) 9
- D.) 15



DORE 1



# Loss & Historical Context





# Trivia Time!



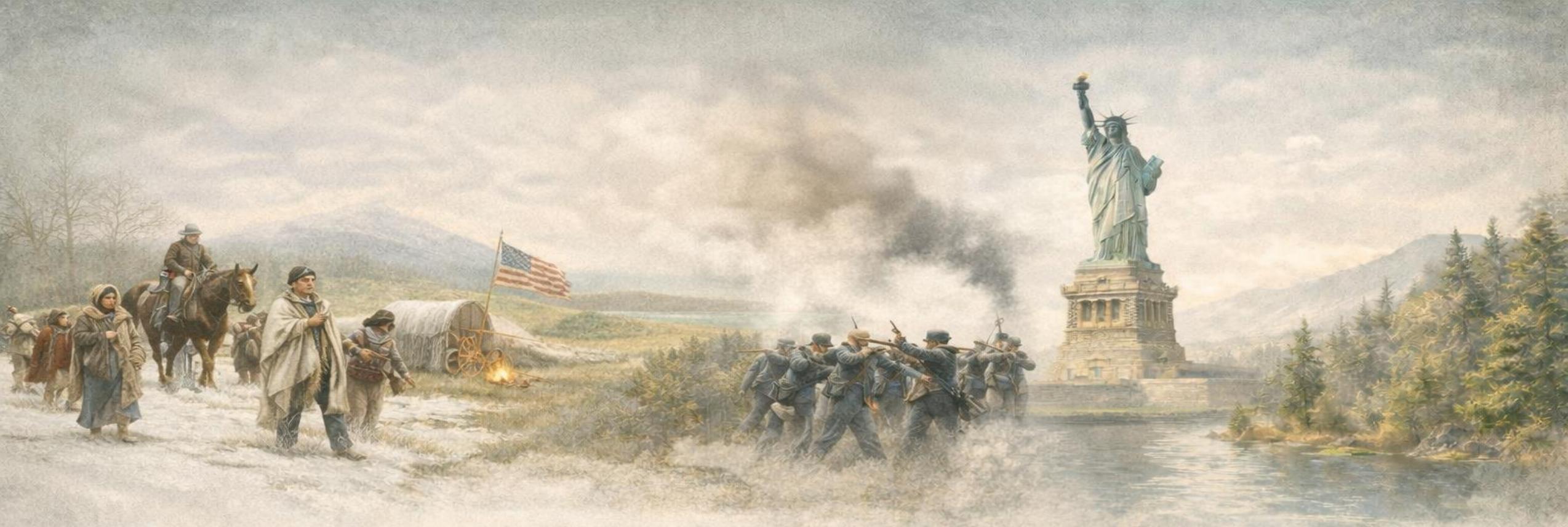
How many miles away, does the closest wild wolverine live from Watertown, NY?

- A.) 90 Miles
- B.) 360 Miles
- C.) 730 Miles
- D.) 1,100 Miles

# Breaking News

Wolverines have lost 40-60% of their historic global range





1800

1820

1840

1860

1880

1900

|  
1820's  
Wolverines  
Extirpated  
from NY

|  
1838  
Trail of  
Tears

|  
1850  
California  
becomes  
31st State

|  
1861  
Civil  
War  
begins

| |  
1886 1892  
Statue of Liberty established  
finished Park



# Trivia Time!



Wolverines were extirpated from NY in the early-mid 1800's... what decade were Grey Wolves extirpated from NY?

- A.) 1810's
- B.) 1820's
- C.) 1840's
- D.) 1890's

THE WOLVERINE  
FOUNDATION



MADES  
ERINE  
ECT



Reality & Modern  
Conservation



# Breeding Program & Population Management

---



## **Wolverine EEP expands to North America**

*Leif Blomqvist<sup>1)</sup> & Tom Ness<sup>2)</sup>*

<sup>1)</sup>EEP Coordinator for wolverines, Nordens Ark, [leif.blomqvist@nordensark.se](mailto:leif.blomqvist@nordensark.se)

<sup>2)</sup>AZA Wolverine studbook keeper, Minnesota Zoo, [tom.ness@state.mn.us](mailto:tom.ness@state.mn.us)

Reprinted from: Nordens Ark Ann. Rep. 2014: 18-21, 2015. Nordens Ark Foundation

# EAZA Wolverine EEP Population Success & Role of Zoos Today



~144 WOLVERINES

 ~59 ZOOS

Coordinated by Nordens Ark (Sweden)

- ✓ Genetically Managed
- ✓ Insurance Population
- ✓ Long-Term Conservation Goals



Genetically Managed



Support Research



International Collaboration

~1,300  
IN THE WILD  
IN EUROPE

Wolverines in Europe

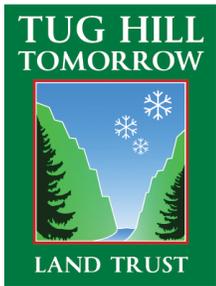




What about the North American Wolverine?

# Importance of Land Protection

# Measurable Impact



**Tug Hill FOR  
Tomorrow**

A Campaign to Save What Matters Most

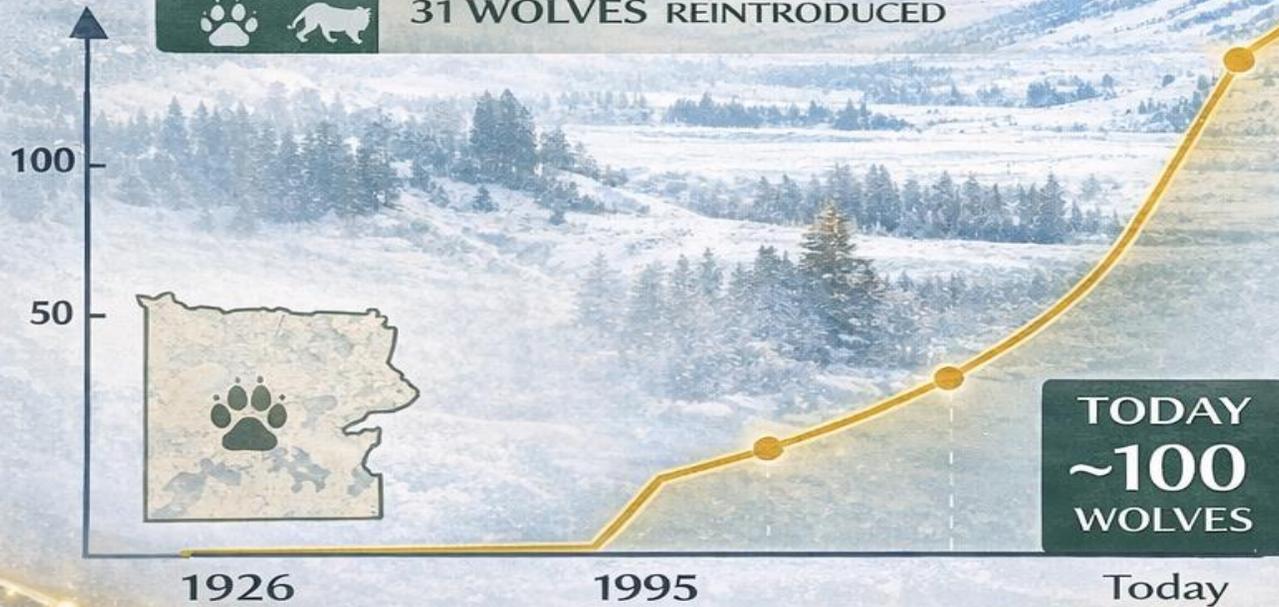


# Gray Wolf Recovery in Yellowstone



**1926** Extirpated From Yellowstone

**1995** Reintroduced to Yellowstone  
31 WOLVES REINTRODUCED



## HOW WOLVES RESTORED BALANCE:



Reduced Elk Overgrazing



Increased Beaver Populations



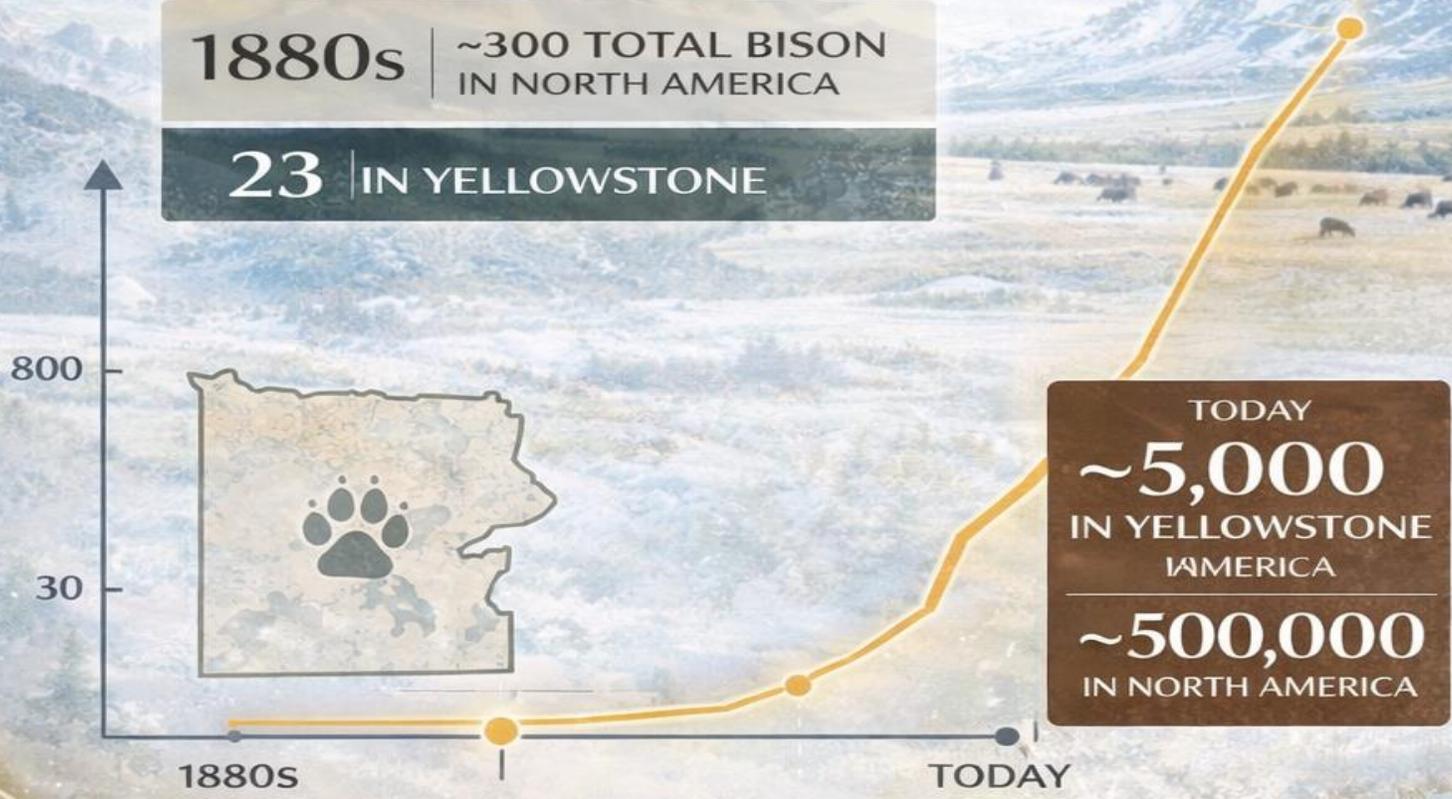
Encouraged Aspen & Willow Regrowth

**TODAY**  
**~100**  
**WOLVES**

Protected Land Made  
Wolf Reintroduction Possible



# American Bison Recovery in Yellowstone

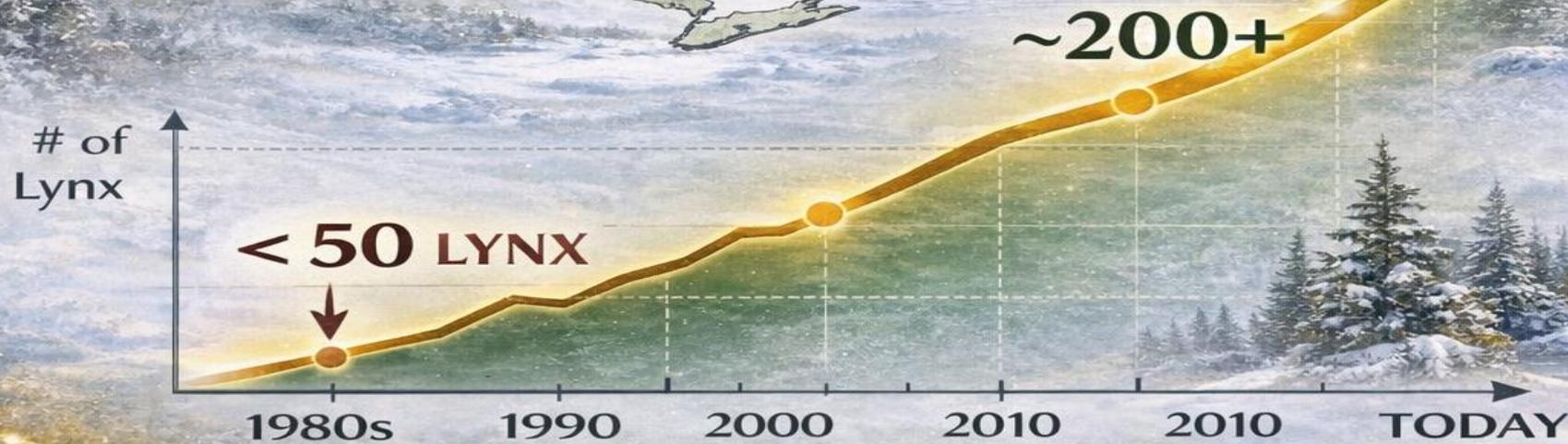


## Protected Land Prevented Extinction

- ✓ Primary Genetic Source for Modern Recovery
- ✓ Maintained Habitat & Migration Routes
- ✓ Secured a Future for the Species

# Canada Lynx Recovery in Adirondack Park

Thanks to Protected Wilderness



Population Climb Thanks to Protected Lands

# Mountain Lion Recovery *in Montana*

Protected Lands Fostered Population Increase



-  National Forests
-  National Parks
-  Wilderness Areas & WMAs

-  Expanded Back Throughout Historic Range
-  Occupy Most Suitable Habitat Across Montana Today
-  Population Supported by Vast Protected Public Lands



# River Otter Recovery in Western New York

## The New York River Otter Project

*Resurgence Through Conservation*



**~280  
Translocated  
Otters  
1995–2000**



**TODAY**



**Growing Statewide  
River Otter Range**

**Recovered  
Population**



- ✓ Grew Absent or Rare in Western NY by 1990s
- ✓ Reintroduced from 1995 to 2000
- ✓ Reconnected Habitat Corridors

# Wolverine Recovery in Scandinavia

Restoration Through Conservation Measures



# Could Wolverines Return *to* NY?



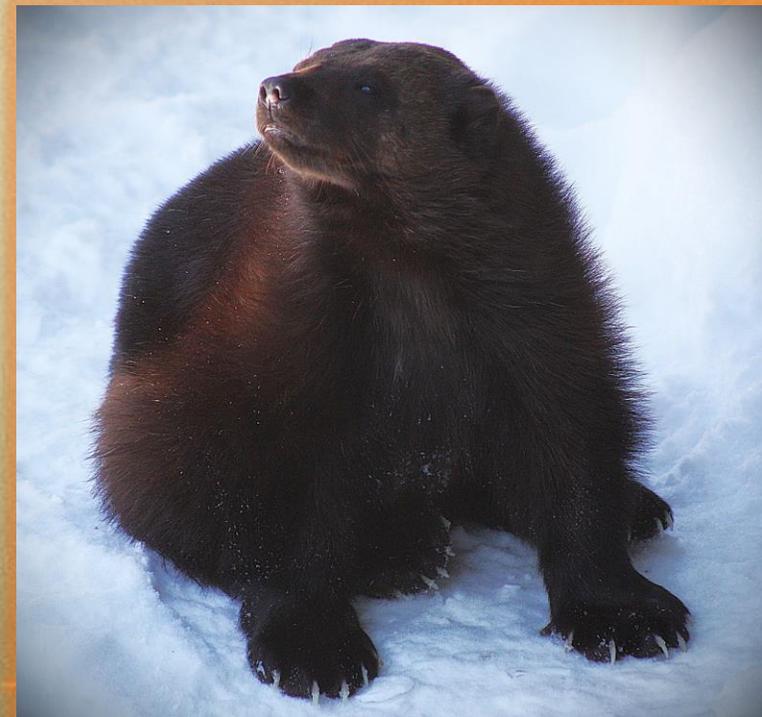


# Trivia Time!



Who is the most handsome Wolverine in all of New York State?

- A.) Abisko
- B.) Abisko
- C.) Abisko
- D.) Abisko





*"That's all Folks!"*



# Thank You!



Giveaway

Q&A w/ Keeper Steve