

# CARY SCIENCE CONVERSATION



LEILA PHILIP

**BEAVER  
LAND**

How One  
*Weird Rodent*  
Made America

Beaverland: How One Weird  
Rodent Made America

*Presented by*  
Professor Leila Philip and Dr. Joshua Ginsberg

# BEAVERS HAVE FASCINATED THE HUMAN IMAGINATION FOR CENTURIES

## ABERDEEN BESTIARY



13<sup>th</sup> Century

## HORTUS SANITATIS



15<sup>th</sup> Century

## HISTORIA ANIMALIUM



16<sup>th</sup> Century



*Caster Canadensis*

# BEAVERS: ECOSYSTEM ENGINEERS



Connecticut, Leila Philip



Wyoming, Dr. Emily Fairfax

WHAT IS THE LARGEST ANIMAL CONSTRUCTION ON EARTH?

a beaver dam measuring

**2,790 FT**

*Northern  
Alberta*

HOW MUCH WATER DOES THE AVERAGE BEAVER POND STORE?

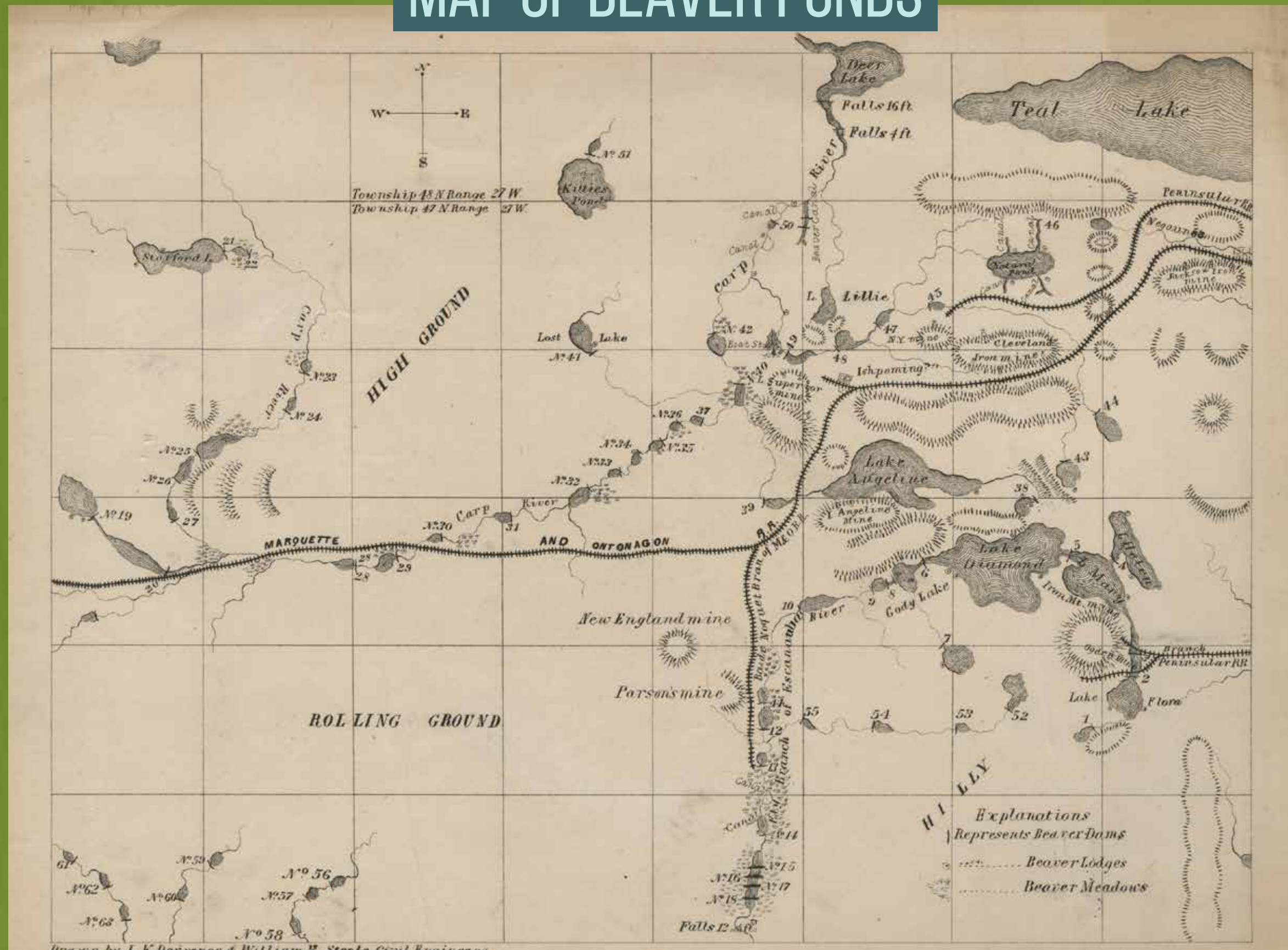
**1.1**  
MILLION GALLONS  
*above ground*

**6.7**  
MILLION GALLONS  
*under ground*

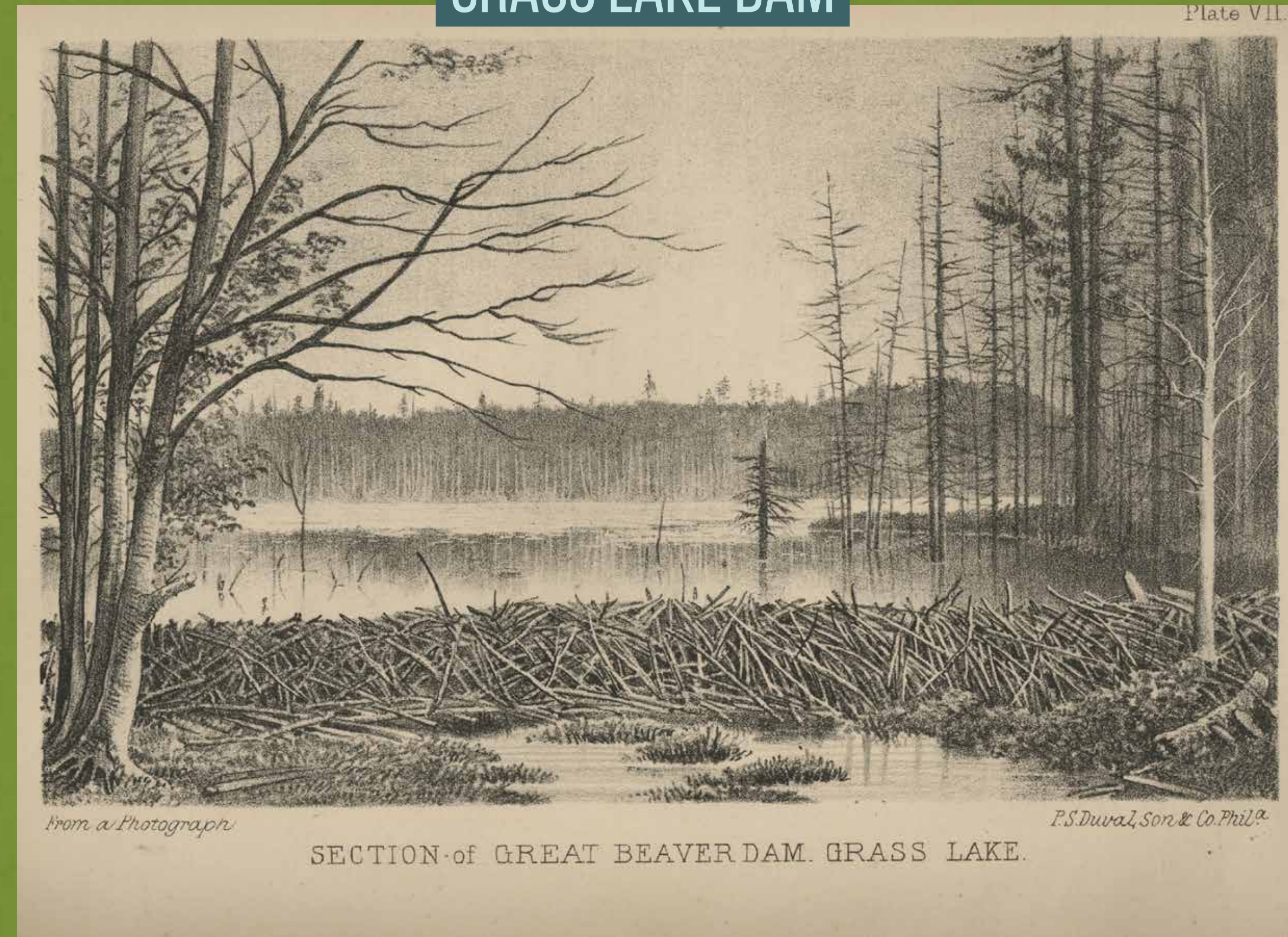
# LEWIS HENRY MORGAN

*The American Beaver and His Works, 1868*

MAP OF BEAVER PONDS



GRASS LAKE DAM



BEAVER DAMMING COMPLEXES IN THE UPPER PENINSULA, MICHIGAN (1855 - 1867)

# DOROTHY RICHARDS



**BEAVERSPRITE**

The first beaver sanctuary, Little Falls, NY

# NIBI THE RESCUE BEAVER

**WITH HER BALL**

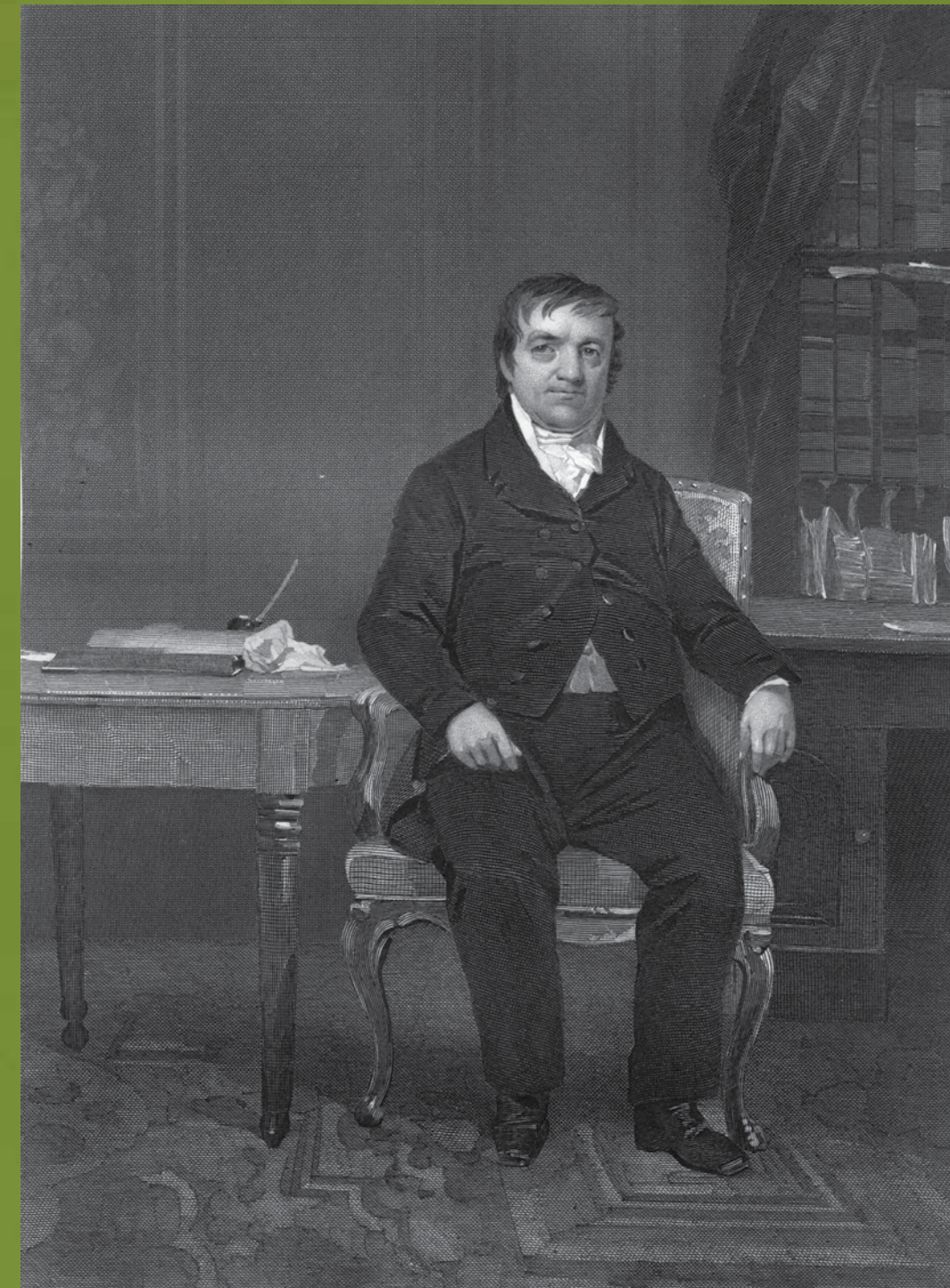
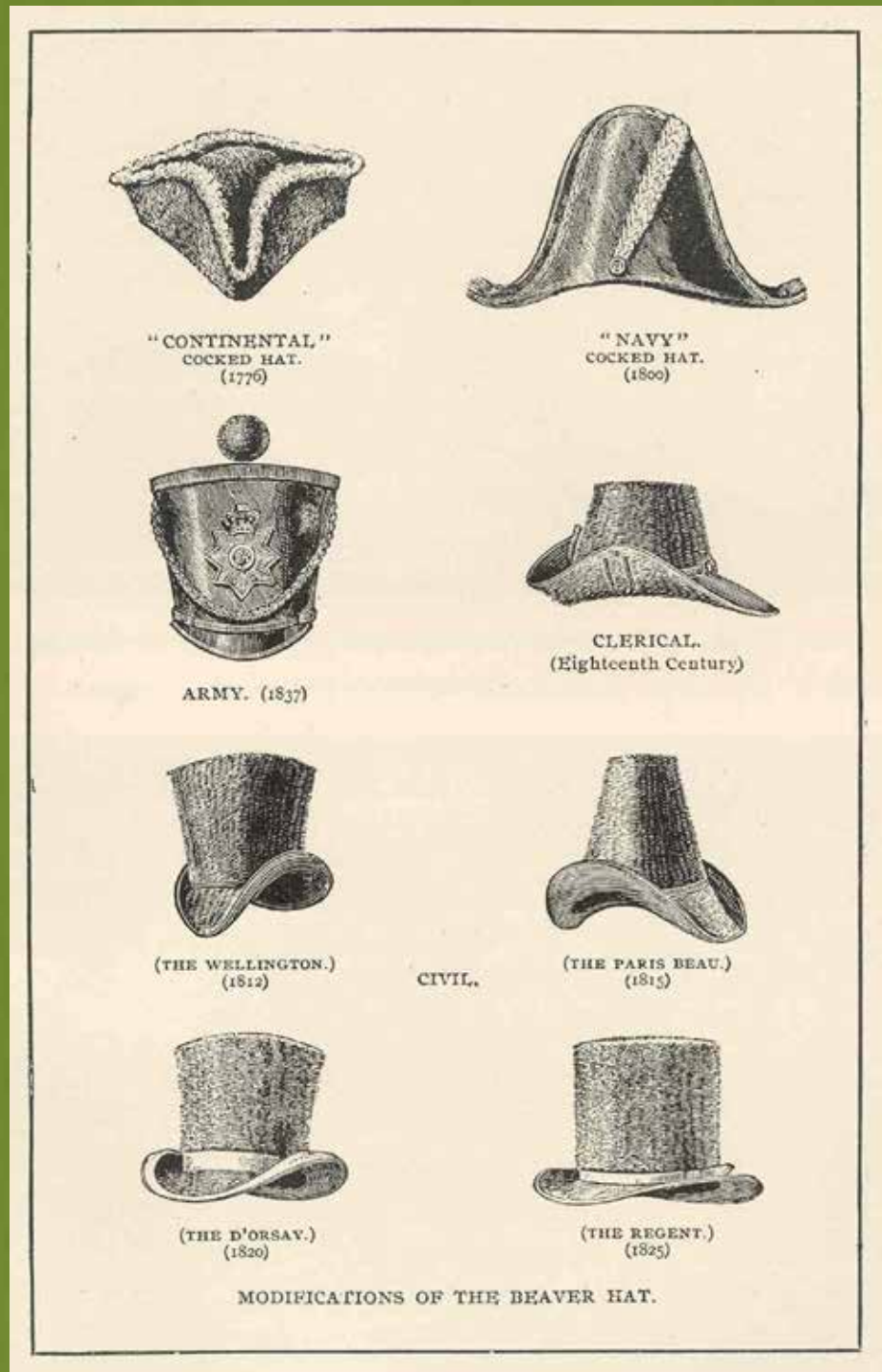


**SEPARATING STICKS FROM HER TOYS**



# ONCE THEY WERE HATS

JOHN JACOB ASTOR (1763-1848)



Modifications of the Beaver Hat (1771-1825)

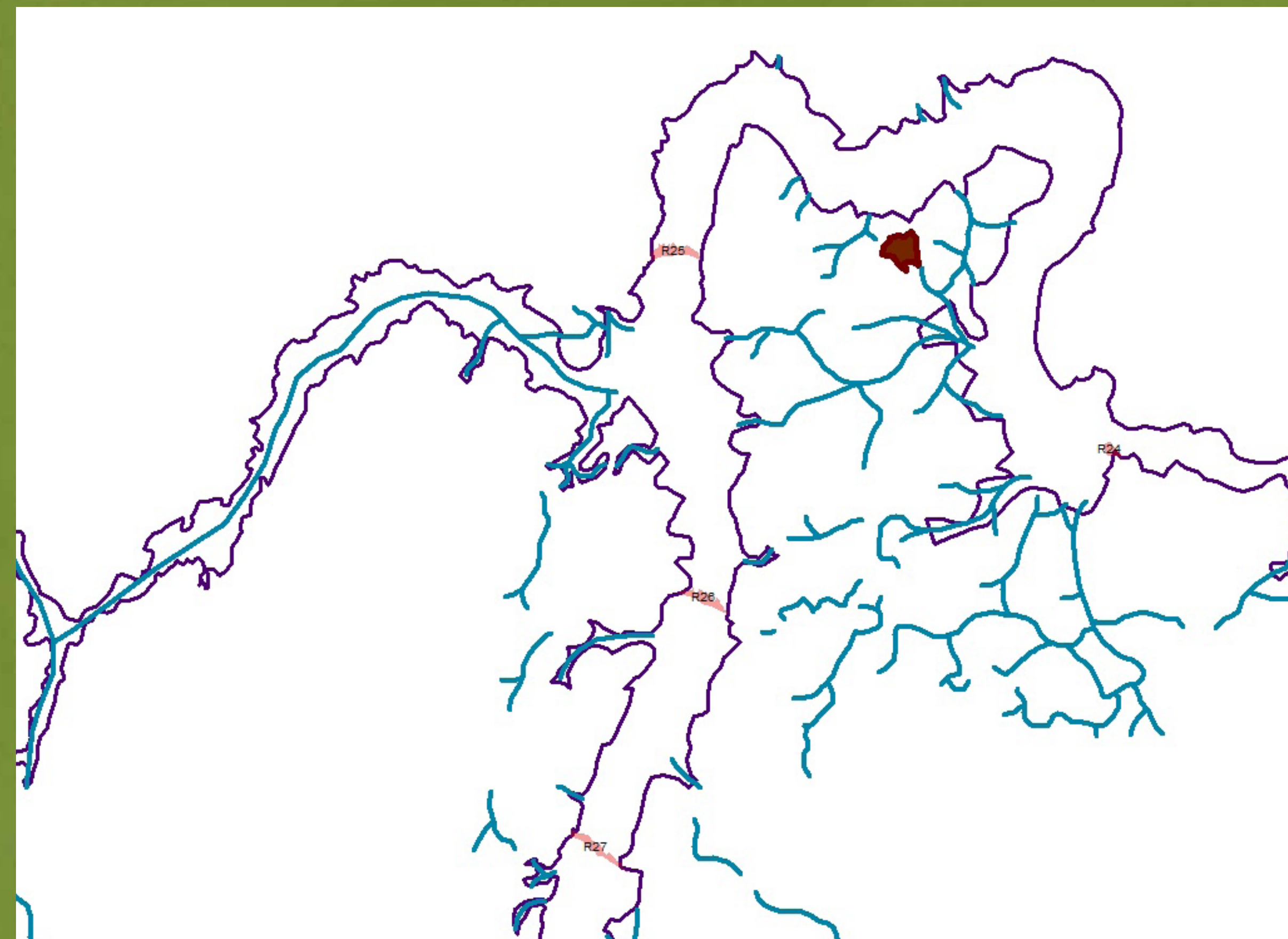
Hudson's Bay Company Beaver Tokens

Portrait by Alonzo Chappel

Map of Astor's Global Trade Scheme

# BEAVER DAMMING COMPLEX

*Blackfeet Territory, Montana*



Images: Montana, Dr. Jordan Kennedy

# THE “GREAT DRYING”: 1600-1900



Wyoming, Dr. Emily Fairfax

**GAINS IN BIODIVERSITY**

**BEAVER-ALTERED PONDS**

**CONTAIN  
15X  
MORE PLANKTON AND  
OTHER MICROBIAL LIFE**

**HOME TO  
30% MORE  
SPECIES OF ANIMALS**



# BEAVERLAND



Colorado, Dr. Emily Fairfax

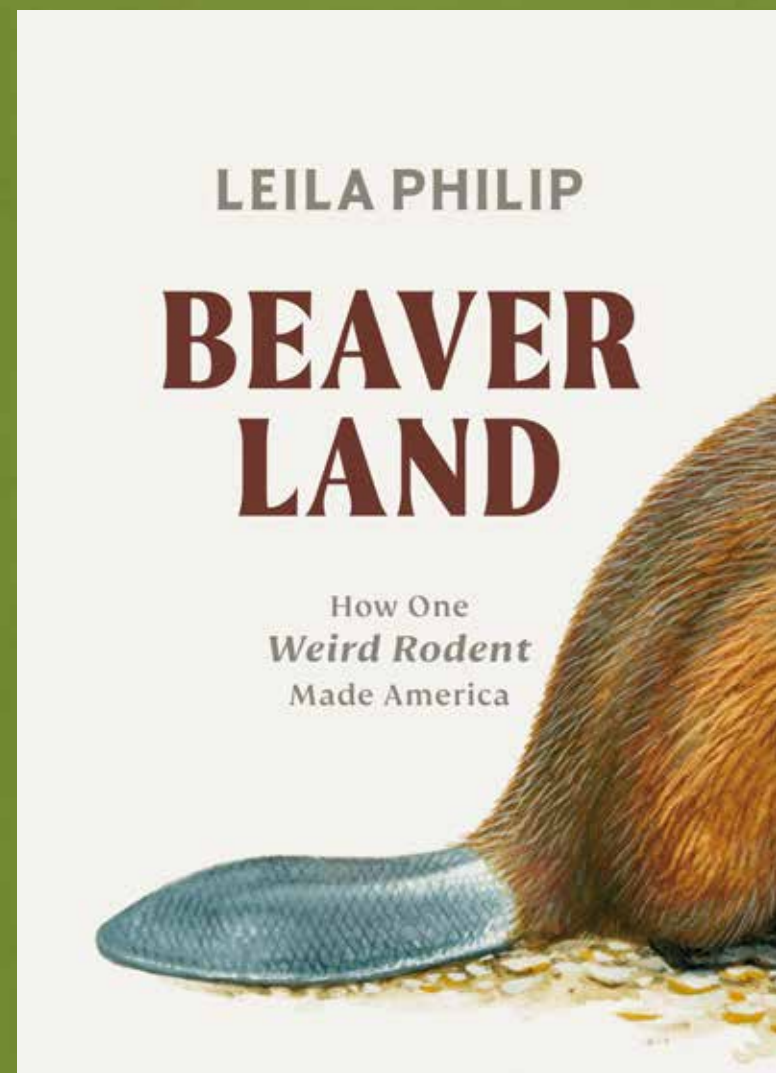
## BEAVER POPULATION IN NORTH AMERICA

BEFORE EUROPEAN COLONIZATION

60-400 MILLION

2023

10-15 MILLION



# BEAVERLAND: HOW ONE WEIRD RODENT MADE AMERICA

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*Books will be available for purchase from Merritt Bookstore after the program.*

## RESOURCES

### East Coast

Beaver Institute  
[beaverinstitute.org](http://beaverinstitute.org)

Beavers Wetlands & Wildlife  
[beaversww.org](http://beaversww.org)

Human - Beaver Coexistence Fund  
[coexistwithbeavers.org](http://coexistwithbeavers.org)

### MidWest / West Coast

The Martinez Beavers Worth A Dam  
[martinezbeavers.org](http://martinezbeavers.org)

The Superior Bio Conservancy  
[superiorbioconservancy.org](http://superiorbioconservancy.org)