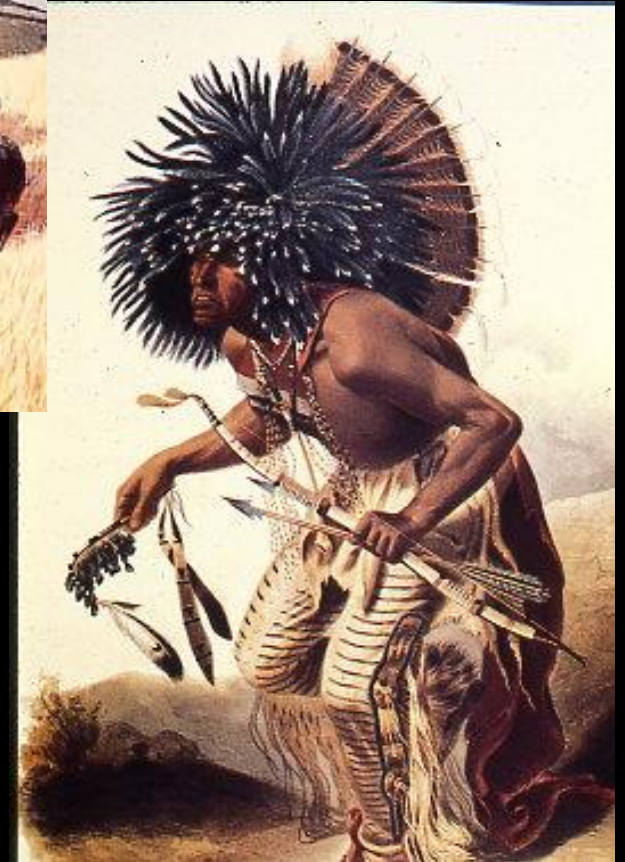


- Relic symbol?
- Domesticated novelty?
- Rewilding dream?

American Bison:



Past: subsistence and ceremony



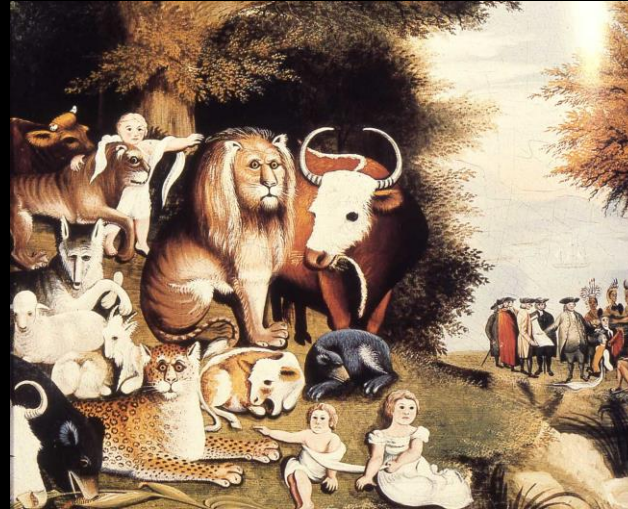
30 to 60 million
bison



Past:
new people, policies, firearms,
and transportation



<1000 bison
by 1900



Present: numbers don't add up to ecological success



- President Obama symbolically designated bison as the national US mammal in 2016
- 350,000 bison live in North America
- 90% bison are on private and tribal lands
 - 56 tribes with 15,000 bison
 - 2,500-4,000 private ranches have 162,000 bison
 - 60,000 slaughtered with state and federal inspections
- IUCN lists 64 conservation herds in No. Am. whose primary mission is nature conservation
 - 5,000 genetically pure bison in Yellowstone Park
 - 44 herds have 16,000 bison
 - Some small for display only

Future:

Are bison a relic symbol, domesticated novelty, or can we rewild our dreams?



- Same issues exist for African Buffalo, other large species, and large predators
- More difficult to manage than cattle in society and environments
- Need large spaces with few people and little infrastructure
- They require unique skills and technologies and rewards are marginal
- Traditional ranchers oppose bison and big city ideas
- New-age bison ranchers are in conflict locally
- Public and private collaboration is needed to gain the land base and that isn't easy!

Future: wildness characteristics of Bison herds

Bailey 2013



Wildness Components	Domestic 0	Semi-Domestic 1	Semi-Wild 2	Wild 3
Herd Size	<100	100-500	500-2000	>2000
Range	< 3 sq. miles	3-10 sq. miles	10-500 Sq. miles	>500 sq. miles
Constriction	Tightly confined	Exterior and Interior fences	Exterior fences only	Fences only in conflict areas
Roundups	Annual	Biennial	Occasional	None

Future: wildness characteristics of Bison herds

Bailey 2013



Wildness Components	Domestic 0	Semi-Domestic 1	Semi-Wild 2	Wild 3
Population control	Stable herd	Little natural fluctuation	Modest natural fluctuation	Unregulated
Culling	Highly selective by sex and age, commercial purposes	Some selection for commercial purposes. Very few die on the range	Random culling, juveniles only. Most adults die on the range	Hunting only on the range
Disease control	Annual, several diseases	Routine	Rarely	Never
Feeding	Constant	Seasonal	In crisis only	Never

Future: wildness characteristics of Bison herds

Bailey 2013



Wildness Components	Domestic 0	Semi-Domestic 1	Semi-Wild 2	Wild 3
Public access	None	Perimeter only	<50% of area, time open	Few or no restrictions
Cattle genes	<5% of markers show introgression	<2-5% of markers show introgression	<2% of markers show introgression	No known introgression
State legal status	Livestock only, wild bison prohibited	State has legal constraints for wild bison	Bison are wildlife in state recovery plan	Bison are wildlife in state recovery goals
Ecological interactions	Few native vertebrates, artificial habitat	10-50% of native vertebrates, >20% artificial habitat	Most native vertebrates, >80% natural habitat	Complete, natural ecosystem

Future: We need bigger dreamers and doers

- A mentor's tale
- Realistic possibilities
- Do it because we care and others depend on us!



Bison know what to do,
but do we?

