

WE ARE NATURE : Welcome to the Anthropocene

Big Idea: In order to process the Anthropocene we must first understand what it is.

30% DRAFT

1. Introduction to the Exhibition							
Exhibit Area	Goals	Theme	Story	Exhibit Technique	Object/Image/Media	Description	Cost
1.1 Title Wall	Attract Millenials		We Are Nature: Welcome to the Anthropocene	Sign or Label	logo		
1.2 Intro Text	<ul style="list-style-type: none"> introduce the idea of the anthropocene as a geological epoch introduce anthropocene as a conceptual tool for understanding humans' impact on the environment 	This is the anthropocene	<p>Anthropocene is a geological epoch defined by what humans have done to the planet, and not what the planet imposes on its residents. Has also become a conceptual tool for understanding the impact humans are having on the Earth.</p> <p>We are nature.</p>	Sign or Label	globe/earth	<p>This is a proposed geological time, but also a way of viewing all of the lasting effects humans are having on the Earth.</p> <p>Much of human action has unintended consequences.</p>	\$200
1.3 Sponsor & Collaborator Recognition	create a fundable project			Sign or Label	sponsor/ collaborator logos		\$100
1.4 Seating	create a comfortable atmosphere for visitors						\$700

2. Orientation

THEME: This section introduces the Anthropocene as a conceptual tool to help process what it means to be a human living during a time when there is emerging awareness of our species' impact on the environment. Impacts from our activities drive environmental change with consequences for all life on Earth, including ourselves and future generations.

Exhibit Area	Goals	Theme	Story	Exhibit Technique	Object/Image/Media	Description	Scientist	Object Available?	Cost	Conservation	Comments
2.1 Orientation	<ul style="list-style-type: none"> Nature is relevant to my life and the future of humanity. Break down the line separating humans from nature 	Me and the anthropocene	The human species has become a planetary force driving environmental change with unintended consequences for all life, including ourselves	Sign or Label	Quotes from a diversity of people that show relevance of Anthropocene to their life	"We have no feeling for the natural world. We'd as soon cut down our most beautiful tree, the most beautiful forest in the world. We cut it down for what? For timber, for board feet. We don't see the tree, we only see it in terms of its commercial value." - Father Thomas Berry			\$200		
2.2 The Anthropocene	Basic understanding of geological time	Anthropocene is a proposed geological epoch	Have humans have had the same sort of epic impact on the planet as a super volcano or an asteroid, one that will be marked by a global geological layer of stone.?	large graphic	Illustration/decision tree (is it an epoch?)	rock records show extinctions, change in climate, changes in chemicals present in rock			\$100		
2.2.1 Strata	Explain how scientists mark eras/periods/epochs	Anthropocene is a proposed geological epoch	Geological eras are marked by dramatic shifts in biodiversity. You can see evidence of these shifts yourself by looking at strata.	Object with label	layers of strata showing different time periods	use clock analogy (era is the hour on the clock, and within that hour it is made up of smaller increments known as epochs and periods)	Kollar	maybe	\$1,000		
2.2.1.a Modern Strata	Physical proof of change in strata through human interaction	Anthropocene is a proposed geological epoch	human created material has potential to form a marker of human activity in the rock	object with label	plastiglomerate	piece of plastiglomerate, showing new rock made of plastic	Kollar	no	\$300		

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2.3 We are nature	Break down the line separating humans from nature	Nature is EVERYWHERE What isn't nature? inescapable relationships between organisms	We assume that nature is what starts at the perimeter of human inhabited areas. But nature is everywhere, we live within nature, not outside of its boundaries. We are nature!	Hands-on Interactive label explaining our definition of nature as will be used throughout the exhibition	Illustrations or photographs: coyote trails; migration paths; breeding areas; deer paths; turkey colonies; plants; etc.	A satellite image of Pittsburgh shows dotted line separating city from surrounding area. Visitors are asked where nature begins. They interact with something (such as button controlling the light up dotted line) and learn that there is no dividing line between where humans live and where nature is, they are one and the same			\$5,000		same universal structure (tree branches, veins rivers, etc) we are our environment (microbes)
2.4 Anthropocene as tool	Use anthropocene as a tool to understand humans affect on Earth	anthropocene is more than a geological epoch	humans are primary drivers of planetary change, anthropocene puts a label on a wide variety of planetary changes that we are experiencing in our modern time	introduce the following: pollution, climate change, post-natural, habitat alteration, extinction	objects	see descriptions following					also ambiguous and non negative effects (national and state parks, genetic diversity)
2.4.1 Shifting Cognitive Baseline	<ul style="list-style-type: none"> Contemplate ramifications of actions/ behaviors/world-view Challenge one's own psychological barriers to action The confirmation bias around Anthropocene issues 	environmental generational amnesia	Each generation becomes accustomed to what has been lost during the last generation, normalizing their own interactions with nature. New normal.	label	Small timeline showing an animal or part of the environment that used to be found in abundance and its absence is considered normal to us	What was normal for past generations that we not consider normal for us? (compelling examples from everyday life).			\$100		6th extinction nature is resilient, but what is the timescale on that? (takes millions of years for CO2 levels to drop)

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2.5 Human Diorama	<ul style="list-style-type: none"> Contemplate ramifications of actions/ behaviors/world-view on the environment. Break down the line separating humans from nature 	Nature is everywhere	Use a historic natural history exhibition technique to place the lens on humans as a species to be studied. Introduce Evidence section through objects placed within the house to connect the visitor with the content they are about to experience.	diorama	human environment intermixed with taxidermy, common household objects, and labels	conceptual room (simple couch simple tv), to give sense of place, but without all the details. Clearly label 5 objects that represent the 5 main evidences that will be further explored in the next section of the exhibition. hide further objects in drawers, closets, etc to reward those who explore.			\$17,500		reference how these over arching concepts connect through biodiversity, invasive species, adaptation and resource depletion
2.5.1 Climate Change Orientation	<ul style="list-style-type: none"> Contemplate ramifications of actions/ behaviors/world-view on the environment. Break down the line separating humans from nature 	The effects of climate change are one evidence of the Anthropocene	Broadly orient visitors to climate change's effects on biodiversity, extinction, etc	object with label	basement drainage bill	Measurable precipitation increases have overwhelmed previously effective drainage systems, causing many Pittsburgh area basements to be flooded and need repair.		yes	\$450		
2.5.2 Pollution Orientation	<ul style="list-style-type: none"> Contemplate ramifications of actions/ behaviors/world-view on the environment. Break down the line separating humans from nature Nature content is relevant to my life 	The effects of pollution are one evidence of the Anthropocene	Broadly orient visitors to pollution's unintended effects on biodiversity/extinction/ resource depletion/habitat destruction	object with label	aerosol can	use story of ozone layer to discuss pollution and its effects on the environment through a common household item		yes	\$450		
2.5.3 Extinction Orientation	<ul style="list-style-type: none"> Contemplate ramifications of actions/ behaviors/world-view on the environment. Break down the line separating humans from nature 	The effects of habitat destruction are one evidence of the Anthropocene	Orient visitors to the sweeping effects extinction has, resulting in loss of biodiversity and permanent loss of species	object with label	framed photo or stuffed animal of extinct species	we can only connect with these animals in an abstract way now		yes	\$450		

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2.5.4 Habitat Alteration Orientation	<ul style="list-style-type: none"> Contemplate ramifications of actions/ behaviors/world-view on the environment. Break down the line separating humans from nature 	The effects of invasive species are one evidence of the Anthropocene	Broadly orient visitors to habitat alteration's effects on biodiversity, extinction, habitat destruction, etc	object with label	bananas bag of almonds (bumble bee population decline)	effect banana imports have by bringing in species not native to NA that then become invasive		yes	\$450		
2.5.5 Post-Natural Orientation	Contemplate ramifications of human interference with nature	The existence of post-natural lifeforms are one evidence of the Anthropocene	Post-natural is intentional change and generally happens in three ways (habitat alteration, reproduction, engineering)	object with label	can of corn	Discuss GMO corn and the effect modification and commodification has on our crops and farming		yes	\$450		Hopi/Iroquois crop selection
2.6 Inequity	Inequities and social justice issues surrounding the Anthropocene	The behavior of the rich has inequitable effects on the poor and disenfranchised around the globe.	Negative effects of anthropocene activity impact low income households more severely	object with label	glass of water	show how much more lower income households have to pay for infrastructure and safe, drinkable water			\$450		story stuff: where waste goes
2.6.1 Inequity	Inequities and social justice issues surrounding the Anthropocene	The behavior of the rich has inequitable effects on the poor and disenfranchised around the globe.	All of these people have already been effected by environmental change.	labels around the rooms	Quotes	Quotes from individuals effected by Climate Change surround a panel about the inequities and social justice issues surrounding the Anthropocene.			\$450		
2.7 Self Identify	Post questions/experiences feelings/hypotheses about the Anthropocene	Human impact	Identify your current belief in humans' ability to have a strong and lasting impact on the environment (follow-up question in Processing section)	label with interactive mode (post it, voting)	interactive	Do you think humans have had an impact on the environment? Can humans change the environment? What does the environment mean to me?			\$1,500		

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3.1 The Evidence	<ul style="list-style-type: none"> Advocate/Articulate the importance of collections using our own collection to tell stories Contemplate ramifications of actions/behaviors/world-view on the environment. 	Anthropocene	Use collections to share physical evidence of Anthropocene	This is proof of my species (humans) local and international effect on the environment	Sign or Label		Humans are a keystone species who effect everything			\$100		
3.2.1 Evidence: Climate Change	<ul style="list-style-type: none"> Inequities and Social Justice issues surrounding the Anthropocene Nature content is relevant to my life and the future of humanity 	Climate Change	Climate Refugees	Refugees are not just in Europe... when sea levels rise where will the refugees from Florida, Louisiana, and the coasts go?	Object Display with label	Suitcase	Isle de Jean Charles, LA (5/3/15 NY Times article) resettling first american climate refugees	Laurie G		\$1,150		
3.2.2 Evidence: Climate Change	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Climate Change	Glacial Melting	Will there be any glaciers left for my kids to see? Some have disappeared in my lifetime.	Simple Interactive	Photographic images of glaciers from beginning of 20th century to now	Bound booklet with large imagery			\$2,500		
3.2.3 Evidence: Climate Change	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Climate Change	Now that Polar Bears don't have enough arctic ice on which to hunt seals, some are traveling south to hunt inland. On their journeys, some are inter-breeding with Grizzly bears.	A new species is being created	Object Display with label	Skulls of each species, images of bear hybrids.	Polar bear fur and grizzly bear fur. Skull of both species with illustration of combined one in between	Wible/McLaren	yes	\$1,150		
3.2.4 Evidence: Climate Change	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Climate Change	Sea Turtles sex is determined by temperature after fertilization (male = 82.4 F and below, female = 87.8 F and above)	imagine knowing the sex of your baby by the temperature of your environment. What would it be?	object display with label	hatchlings and eggs	temperature determines the gender of the sea turtle, and with warming we may have more females than there are males to reproduce with.	Rogers	yes	\$1,150		

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3.2.5 Evidence: Climate Change	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Climate Change	Changing Migration and Breeding Patterns	Robins have been coming earlier and earlier to announce the coming of spring,	Simple Interactive	Powdermill data map. Corresponding bird specimen (American Robin).	Interactive map allows you to view migratory paths and breeding patterns. Choose 4 or 5 birds, see its old pattern and new pattern.	Luke/Wenzel/Rogers	yes	\$4,000		
3.2.6 Evidence: Climate Change	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Climate Change	Changing flowering phenology	Flowers start to bloom sooner, but could be ruined by sudden frost	object with label	shifts in flowering dates	compare old and new records from botany collection	Bonnie	yes	\$650		gardener's can grow plants they couldn't before (vice versa)
3.3.1 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	Industrial melanism	our energy sources can effect the evolution of a species	Object Display with label	Peppered moths in a range of colors (from light to dark)	color variation in the moth population as a consequence of the Industrial Revolution	Rawlins	yes	\$1,500		
3.3.2 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Contemplate ramifications of actions/behaviors/world-view 	Pollution	Maldives trash island (Thilafushi), tourists rubbish is dumped here	What does our tourism do to the natural beauty of the world?	Photo with label	Photo of trash island/show receding shore lines of island	Maldives are also disappearing due to rising sea levels			\$500		
3.3.3 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	Ocean plastic ingested by marine animals kills them and gets into the food chain	Could you get through one day without throwing away plastic?	Object Display with label	photographs by Chris Jordan (birds with plastic in them)	Show food chain connection through diagram.			\$650		
3.3.4 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	ocean pollution	Could you get through one day without using plastic?	Object Display with label	imagery, Adidas plastic shoes	Satellite views of trash gyres in the oceans.			\$650		
3.3.5 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	Pittsburgh's own steel history altered the air quality here	History of steel and coal	Object Display with label	chunk of coal old photographs from pittsburgh	how pittsburgh has come back from a highly polluted area	Kollar	yes	\$650		show soot covered building and clean building

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3.3.6 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	Golden Toad extinction in Costa Rica	Amphibians make good indicator species because they live in two environments, land and water. They sometimes breathe through their thin skin. Is your ecosystem healthy enough for frogs?	Object Display with label	Golden Toad	Frog's thin skin can absorb toxic chemicals, radiation, and diseases. If there are lots of frogs and other amphibians in a habitat, it means the ecosystem is healthy.	Rogers	no	\$650		
3.3.7 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	Tiger snail decline in PA		Object Display with label	Tiger snail featuring Tim Pearce research	Acid rain caused massive decline in snail population. now that we have reduced acid rain, snail population may come back	Pearce	yes	\$650		
3.3.8 Evidence: Pollution	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	using scientific collections to inspire change	Bald Eagle's eggs had thin-skin so would break prematurely from the prevalent use of DDT (pesticide)	Object Display with label	Bald-Eagle	DDT was banned and population immediately sprang back (Rachel Carson)	Rogers	yes	\$1,150		
3.4.1 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	Island species are especially vulnerable. The Dodo went extinct in 1662 when humans arrived on it island	What animal from today will become an exotic creature of "mythical" status tomorrow?	Object Display with label	dodo from Bird Hall	humans come to island and hunted animal with no natural predator	Rogers	yes	\$2,000		
3.4.1.a Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	Tomorrow's celebrity extinct creature can we exist with large mammals?	Which of these threatened animals from today do you think will have celebrity status once it goes extinct, like the Dodo	Simple Interactive	Black Rhino; Sumatran Elephant; Pangolin; Sumatran Tiger; Leatherback Turtle; Mountain Gorilla	Simple voting box invites you to cast your ballot for a critically endangered contemporary creature that, if it becomes extinct, would have the most mythical status.	Wible/McLaren		\$500		

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3.4.2 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	An entire species sent extinct by a single cat.	Has my animal ever hunted a species to extinction?	Object Display with label	Stephens Island Wren taxidermied house cat	This cat was brought to this island and wiped out an entire species.	Rogers	yes	\$650		
3.4.3 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	World's most populace bird reduced to extinction in a few decades through over-hunting.	It is hard to imagine that one day I could wake up and there were no more crows, robins, sparrows.	Object Display with label	Passenger pigeon	Also Post-natural story, trying to bring it back with Martha's (last pigeon) DNA	Rogers	yes	\$1,150	needs repair work	
3.4.4 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	Selected the closest genetic match to the wolves that used to populate Yellowstone, took gray wolves from Canada	Their reintroduction makes our national parks more diverse, beautiful, sustainable, and exciting to visit	Object Display with label	Canadian Gray Wolf	Humans created the extinction of wolves in the area, and humans interfered to bring them back (also interview local ranchers etc)	Wible/McLaren	yes	\$1,150		
3.4.5 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	With greater protection, some species are making a comeback	The methods for bringing this population have been truly outside the box (show outfits)	Object Display with label	Whooping crane	all or most of these birds could be wiped out from a single event such as a hurricane, disease outbreak, toxic spill, or prolonged drought. This makes the species vulnerable to extinction.	Rogers	no	\$1,500		
3.4.6 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	With greater protection, some species are making a comeback	These make an excellent burger! I heard they are interbreeding with cows.	Object Display with label	American bison	We hunted this animal to near extinction, large herds used to roam most of America	Wible/McLaren	yes	\$300		
3.4.7 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	some species are threatened because they are hunted for traditional medicines and sold on the black market		Object Display with label	Pangolin	the most illegally killed species on the planet	Wible/McLaren	yes	\$1,150		socioeconomic issues surrounding illegal trading, income inequality

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3.4.8 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	some species are threatened because they are hunted for traditional medicines and sold on the black market		Object Display with label	baby Black Bear	poaching NA black bear for its gallbladder, which is used in Chinese medicine and there are not enough Black bears in China	Wible/McLaren	yes	\$1,150	tree needs to be fabricated for it to "climb"	
3.4.9 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	hunted and used for its fur, scientists have not been able to find an established wild population	fur coats seem so beautiful, but there are real consequences to fashion	Object Display with label	Chinchilla	easy to breed in captivity, we may have lose our wild population of chinchillas	Wible/McLaren	yes	\$650	damaged ears, need repair work	
3.4.10 Evidence: Extinction	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Extinction	human hunting and habitat alteration have made this species highly vulnerable. island species are extremely fragile	these were one of the species that inspired Darwin	Object Display with label	Galapagos Tortoise	hunted extensively by early sailors and explorers, their numbers have dipped dangerously low	Rogers	yes	\$650		steve suggested, we have a nice mounted one at Etna
3.5.1 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Habitat Alteration	mollusks enter freshwater from boats		object with label	shopping cart covered in mollusks	mollusks are invasive when brought into an environment that they are not native too, but are also susceptible in their natural fresh water river homes to pollution	North Carolina Museum staff		\$650		
3.5.2 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Habitat Alteration	PA river otter reintroduction	why does the PA license plate have a river otter on it?	object with label	PA river otter license plate	river otters were in decline due to habitat destruction and river pollution, but managed reintroduction and habitat restoration have brought their population back	Wible/McLaren	yes	\$650		

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3.5.3 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Habitat Alteration	Urban geckos evolve longer toes in response to their environment	animals are adapting to our urban environments	Object Display with label	Gecko/video	video of experiment showing country geckos sliding and urban geckos adapting longer toes to climb	Rogers	no	\$1,150		need further clarification on the species for this story
3.5.4 Evidence: Habitat Alteration	Contemplate ramifications of actions/behaviors/world-view	Habitat Alteration	Honeybee biodiversity is lessening and populations weakening	How will I get my almonds if there is nothing to pollinate them?	Object Display with label	Bees	Threatened by pesticides and loss of habitat	Rawlins	yes	\$650		
3.5.5 Evidence: Habitat Alteration	Contemplate ramifications of actions/behaviors/world-view	Habitat Alteration	Monarch Butterfly https://www.nytimes.com/2016/11/18/world/americas/ambition-of-avocado-imperils-monarch-butterflies-winter-home.html?_r=0	But I love guacamole.	Object Display with label	Monarch butterflies	Avocado farms are affecting the southern homes of the monarch butterfly, deforestation dwindling their numbers in Mexico	Rawlins	yes	\$650		
3.5.6 Evidence: Habitat Alteration	Contemplate ramifications of actions/behaviors/world-view	Habitat Alteration	Crawfish	use crawfish as bait and dump when done, those dumped crawfish then compete with native crawfish for resources	live animal	live crawfish in tank	don't dump your bait bucket	Mallory	yes	\$5,000		
3.5.7 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Habitat Alteration	Chestnut and other species are vulnerable to changing fungal and parasite loads	Pennsylvania forests are changing dramatically before our eyes.	Object Display with label	Chestnut	Chestnut used to be everywhere in PA forests, dying from a plague from Asia (Post-natural: working on modifying genes to fight plague)	Bonnie/Alison Hale	yes	\$650		

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Exhibit Area	Goals	Theme	Story	Personal Relevance	Exhibit Technique	Object/Image/Media	Description	Content Liaison	Object Available?	Cost	Conservation	Comments
3.5.8 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Habitat Alteration	Hemlock is vulnerable to changing fungal and parasite loads	Trout fishing. Trout hide in the shade of the hemlock along the river, and without it where will we fish?	Object Display with label	mounted trout? Fishing equipment		Mandi		\$650		
3.5.9 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Habitat Alteration	Invasive species change species composition with onflow effects to ecological communities and landscape	Snakes in my backyard.	Object Display with label	Boa	Exotic snakes get set free in the wild in places like Florida, where they thrive and become part of that ecosystem	Rogers	yes	\$1,150	skeleton needs repair work	have a skeleton and smaller whole specimens in fluid
3.5.10 Evidence: Habitat Alteration	<ul style="list-style-type: none"> Nature content is relevant to my life and the future of humanity Advocate/Articulate the importance of collections using our own collection to tell stories 	Pollution	Ocean acidification leads to highly altered environments	Snorkeling planned for your next vacation? 30% of coral reefs have died in the last thirty years. Another 30% are projected to be gone by 2045.	interactive and an object	obituary for the Great Barrier Reef (sign a funeral book) display coal specimen	Satellite views showing decline of reefs off eastern seaboard and Australia	Kollar	yes	\$500		
3.6 Evidence: Post-Natural History	<ul style="list-style-type: none"> Contemplate ramifications of actions/behaviors/world-view Evidence that our behaviors have an effect on biodiversity 	Post-Natural	The concept of post-natural history, in which human activity is changing the course of evolution	How do we know the ramifications of genetic manipulation?	Object Display with label	Cabinet of Curiosities		Rich Pell		\$10,000		Pell is no longer doing a cabinet?
3.6.1 Evidence: Post-Natural History	Advocate/Articulate the importance of collections using our own collection to tell stories	Post-Natural	Bringing back woolly mammoth could help save us from the warming climate	New technology (CRISPR) used to bring back an extinct animal to help combat climate change	Object Display with label	mammoth specimen/tusks	re-populating the Arctic with herds of large herbivores is the world's last hope to prevent disastrous permafrost melting and releasing massive amounts of carbon into the atmosphere	Lamanna		\$1,150		

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3.6.2 Evidence: Post-Natural History	Advocate/Articulate the importance of collections using our own collection to tell stories	Post-Natural	Bulldog skull and wolf skull	we have modified dogs from their natural state drastically to create pets with natural genetic defects (pugs have a hard time breathing)	object with label	Cecil the Great Dane?		Warhol/Pell	yes	\$650		
3.6.3 Evidence: Post-Natural History	Advocate/Articulate the importance of collections using our own collection to tell stories	Post-Natural	giant pumpkins	genetically modify pumpkin to grow to several tons	object with label	seeds + photos, some sort of scale	there are national competitions for giant pumpkins	Rich Pell		\$650		
3.6.4 Evidence: Post-Natural History	Advocate/Articulate the importance of collections using our own collection to tell stories	Post-Natural	herbicide resistance	the weeds in my garden are resistant to the weed killer I use	object with label	bottle of weed killer	growing resistant to our attempts to control weeds	Rich Pell		\$650		
3.6.5 Evidence: Post-Natural History	Advocate/Articulate the importance of collections using our own collection to tell stories	Post-Natural	chicken factory farming	wait, the chicken at mcdonald's are fully grown in x amount of days when it should actually take y?	object with label	chicken specimen empty box of eggs fake container of chicken breasts	chicken are being pumped full of antibiotics and not allowed to freely roam, increasing antibiotic resistant virus in human population	Rich Pell		\$650		
3.7 Explore the Alcohol House	<ul style="list-style-type: none"> Advocate/Articulate the importance of collections using our own collection to tell stories Evidence that our behaviors have an effect on biodiversity 	Collections as resource for Anthropocene research	Allow visitors to explore the alcohol house, remotely	Find answers by exploring the collections of the Alcohol House, become a scientist	Multimedia Interactive	alcohol house specimens, interactive screens, labels	An aisle against the wall replicates the feel of being in the Alcohol house. Visitors can interact with touch-panels embedded into the display that allow them to inquire into the collection like a herpetologist might when researching effects of human activity on species distribution, etc.	IonTank/Rogers	yes	\$250		

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Exhibit Area	Goals	Theme	Story	Personal Relevance	Exhibit Technique	Object/Image/Media	Description	Content Liaison	Object Available?	Cost	Conservation	Comments
3.8 Changes to the Planet Over time	<ul style="list-style-type: none"> Contemplate ramifications of actions/behaviors/world-view Inequities and social justice issues surrounding the Anthropocene 	Human activity effects on the visible surface of the Earth since 1983	CMU interactive from Basecamp	satellite imagery provides view of massive change that is hard to witness from human perspective on the ground	Multimedia Interactive	Satellite video imagery of the earth from outer space.	imagery showing glaciers melting, etc	CMU	yes	\$250		Need to work with CMU to update and skin graphics

4. Processing

4. Processing

THEME: It's hard to process what it means to be living during a time when there is emerging awareness of our species' negative impact on the environment. How do we take steps to help? Can one person make a change? How can we feel part of a larger movement? There are some tools in this gallery that might help you figure out where you are with your acceptance of human induced environmental change, and how you may better align your behavior with your beliefs about living in the Anthropocene. Highly participatory, gives visitor chance for movement and action after reading their way through the evidence. From "Me to We", this is the Me section.

Exhibit Area	Goals	Theme	Story	Exhibit Technique	Object/Image/Media	Description	Object Available?	Cost
4.2 Processing	Inspire stewardship of the natural world	Coming to terms with living in the Anthropocene	Consider your personal perspective on what it means to be a human living during a time when there is emerging awareness of our species' impact on the environment	Sign or Label		Hopeful text prompts visitors to consider their personal perspective on what it means, to them personally, to be living during the Anthropocene.		\$200
4.3 Warhol's Endangered Species Series	Identify tools for processing and connect to an action	Anthropocene content inspires Artist responses	Artists around the world have used art to help process feelings, fears, and hopes for the future of the world. Warhol, an animal lover, "was approached by environmental activists in the 80s to make a set of rainbow silkscreens that showed the horrifying numbers of near-extinct animals around the world. These are Andy's Ark." https://www.theguardian.com/artanddesign/gallery/2014/nov/24/andy-warhol-endangered-species-in-pictures	Object Display with label	Paintings <ul style="list-style-type: none"> •African elephant–threatened •Bald eagle–Removed from the endangered list in 2007 •Bighorn ram (Sierra Nevada bighorn sheep) –endangered •Black rhinoceros–Critically endangered •Giant panda–endangered •Grevy's zebra–Endangered •Orangutan–critically endangered •Pine Barrens tree frog –Removed from the endangered list in 1983 due to erroneous data. •San Francisco silverspot (Callippe silverspot)–endangered •Siberian tiger (Amur tiger)–endangered 	These paintings are hung at eye level around the perimeter of the gallery walls; each has its own label		\$700

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4.3.1 Make Anthropocene Art	Identify tools for processing and connect to an action	Draw a picture, write a poem or short story Feature an artists work and then an activity to replicate?	Processing how we feel about the Anthropocene might result in art or poetry. Take a moment here to express yourself. If you aren't sure where to get started, here are some things to try.	Simple Interactive	Label should have images and descriptions of contemporary artists who use Anthropocene as an inspiration for their work	How to Haiku; draw an animal you would miss if it were gone; describe a time when you saw an environment that took your breath away (good or bad) - describe the relationships between the living and non-living things in that environment		\$3,000
4.4 Stages of Grief	Post questions/ experiences/feelings/ hypotheses about the Anthropocene	Figure out where you are on the spectrum from denial to activism.	Identify where you are in the stages of grief around Environmental Change: Disbelief, denial, bargaining, guilt, anger, depression, acceptance/hope, activism, "I'm fine"/not grieving	Simple, Participatory Interactive	voting mechanism, put a chip in a container	Visitors are invited to vote where they feel they are on a continuum from disbelief, denial, bargaining, guilt, anger, depression, acceptance/hope, activism.		\$1,500
4.5 The Dr. is In	Reconsider their identity as human being	Your personal identity, perception of self, can get in the way of positive change.	Your identity can include more than yourself.	Simple Interactive	<ul style="list-style-type: none"> • 2 fainting settee with personal speakers • Images of beautiful natural scenes with people in them (projection) 	Listen to meditation that guides you through expanding your identity from yourself, slowly and in steps out to the entire planet		\$4,000

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Exhibit Area	Goals	Theme	Story	Exhibit Technique	Object/Image/Media	Description	Object Available?	Cost
4.6 Confirmation Bias	<ul style="list-style-type: none"> The confirmation bias around Anthropocene issues Contemplate ramifications of actions/ behaviors/world-view on the environment. 	Do you know if you have confirmation bias? Try this Confirmation Bias Decision Tree	Define confirmation bias and then ask visitors to see how it works.	Simple Interactive	Large definition of confirmation bias on the wall.	Visitors are asked to pick a behavior that represents them well: "drive to work" "eat meat daily" "thermostat at 72", then asked to go through confirmation bias exercise to see if they are biased even when given information.		\$500
4.7 Design an Emoji	Post questions/ experiences/feelings/ hypotheses about the Anthropocene	Connecting with a part of our modern life that people use on a daily basis (texting)	Design an emoji for the Anthropocene... what would that look like? Could it be contained in one image?	Simple Interactive	art supplies, some samples available	visitors are asked to design an emoji for the Anthropocene, based on their new understanding of it from the exhibition they just walked through		\$3,000

5. Action

THEME: What Can I Do? Work locally! Become part of a larger community working to improve your local ecosystem and environment, leading to larger changes nationally and internationally. From "Me to We", this is the We section.

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Exhibit Area	Primary and Secondary Goals	Theme	Story	Exhibit Technique	Object/Images / Media	Description	Cost
5.2 Future Thinking Lab	<ul style="list-style-type: none"> Engage with local projects Identify tools for processing and connect to an action 	using systems thinking to address action	There are things you can do to make the negative impacts of humans less pervasive	Simple Interactive Facilitated by Staff, or done independently	Interactive system models based on CUSP activities.	A facilitator guides visitor through several locally relevant activities that connect visitors with local projects and connects them to an action.	\$4,000
5.3 E-Mail a Prompt	<ul style="list-style-type: none"> Engage with local projects Identify tools for processing and connect to an action 	I feel empowered to try this.	<p>This is something I can do to lessen the impacts my behaviors have on the planet.</p> <p>Create selfie taking station, with a sign (like a conversation bubble from a text) that says "I am going to" and fill in the blank. Then email to your self.</p>	Multimedia Interactive	<p>selfie station</p> <p>Ipad station</p>	Select from a list of possible activities or have one randomly selected for you to try. Email this to yourself with support information about how to successfully integrate this change into your life. Ask if you would like the same information emailed to you one year from now, to see if you were able to keep it up, why or why not?	\$5,000
5.4 Connect to a local project	<ul style="list-style-type: none"> Engage with local projects Identify tools for processing and connect to an action 	I can engage locally to make a broader impact	Join forces with these local initiatives working to make changes	label, pamphlet holder	BikePGH, citizen science, BirdSafe Pittsburgh, farm stands (when, where)	give the visitor a variety of local projects or actions that they can partake in to make small impacts that led to grater change. Actionable items.	\$250
5.4.1 Connect to a local project	<ul style="list-style-type: none"> Engage with local projects Identify tools for processing and connect to an action 	I can engage locally to make a broader impact	introduce RATS, and explain how this hawk was injured by a car, why, and how you can help	live animal	red-hawk	by engaging in small changes (no roadside littering) you can help these animals	\$1,000