

Science Fair Log Book 2026 - Circle of Life - Naomi M and Kate S

Jan 7, 2026

Today we completed our first form, decided to make our project around making a zoo plan and 3d model to make zoos more humane, and have completed some research:

Positives of zoos

Most Humane Zoos around the world:

- San Diego Zoo,
- Schönbrunn Zoo (Vienna)
- Toronto Zoo,
- Chicago zoo
- Bronx zoo(NY)
- Philadelphia zoo
- Singapore zoo
- Pittsburgh zoo and ppg aquarium
- Smithsonian National Zoo (MD)
- Henry Doorly Zoo

Good zoos around the world focus on animal enrichment, giving choices of activities, animal health and making sure the needs of each animal are met. They also have high standards, fund research and work hard on conservation efforts. Also a good zoo will only hold animals that have been orphaned, injured, born in the zoo, or can not live in the wild for other reasons such as habitat loss or imbalance in the ecosystem. They strive to create the best environment possible for the animals and work to educate the younger generations so the Earth can be a better place for everyone.

Calgary Zoo

-Over 9 decades old

The Calgary zoo's main goal is to engage local government to advance global conservation

-the Calgary zoo is known to be one of the most humane zoos in Canada as well as the...

Toronto Zoo

-the Toronto zoo has many charity programs and activities, raising money for the animals needs

- the Toronto zoo is raising awareness for climate change and extinction. Their goal is working towards helping the planet recover.

Jan 13, 2026

Today we did more research on zoos: Negatives of zoos

Bad things about zoos:

Confinement

Unnatural habitats

Zoochosis-psychological condition affecting zoo animals

Most zoochosis infected animals:

Elephants

Monkeys

Bears

Cockatoos

Coyotes

Orcas

Big cats

Boredom

Separation from others of the same species

Mistreatment

Pacing

Unsafe enclosures

Can affect mental and physical health

Forced performance

Oregon Zoo has had inbreeding, beating up animals, disease outbreaks, and high death rates for poor elephants.

Other inhumane zoos: Kiev Zoo (Ukraine, Giza Zoo (Egypt) , Jijamata Udyan Zoo (Mumbai, India), Surabaya Zoo (Indonesia), Khan Younis Zoo (Gaza), Edmonton Zoo

Jan 21, 2026 Jan 22, 2026

Today we worked on our plan for our zoo and drew it all out. We also searched up the animals at the Calgary zoo that we have to accommodate. Our new project name is The Circle of Life! We have a very creative plan so animals can switch habitats and so they are less stressed by the humans, but there are a few problems:

- The animals will get stressed and aggressive when moving habitats
- There can be diseases transferred between habitats
- Different animals need different things in their habitat.

Jan 24, 2026

Today we decided to make a savannah habitat and a jungle habitat. We also solved all of the problems. Here are our solutions:

- Spreading of disease: In water - filter in wall - doggy door for fish
Contaminating of habitats - one animal moves every 2 weeks and when there is an empty habitat it is deep cleaned. Every animal moves every 3 months. Also in the 2 weeks the diseases can die off and there is enough time in between the animals rotations so that there is no aggression about an animal previously living in the same habitat.
- Reduce stress when animals move: - move an object with them so its their comfort place (also 2 identical so they can build when the animals is in other habitat), quiet door, no people allowed to view for 3 days, calming medication to help them deal with stress (more or less effective based on the animal because the more effective ones have more side effects but some animals need it), also they will go with a group. Animals also practice commands daily to move to the new habitat and so they don't get territorial. As they get older and used to it the moving isn't as stressful.
- Different habitats for each animal: - we group them by their type of habitat and for savannah can change the amount of room, depth and temperature in water and for monkeys to adjust the middle tree (add special features or add extra branches/ropes). Also the indoor environment can be set to a different temperature depending on the animal, and in a lion habitat they might add rocks while an ostrich may have a shelter, and the wild boar have mud.

Jan 31, 2026

Today we finalized our habitat design and features and

Feb 1, 2026

Today we made all our clay animals. Here is all that we made:

African Savannah: Giraffes, Zebras, Lions, Ostriches, Hippos, Wild boar, East African grey crowned cranes, Blue Tilapia

Rainforest: Western lowland gorilla, White handed gibbons, Mandrill, Colobus monkeys, Red pandas, Black and white ruffed lemurs, Red fronted lemurs, Ring tailed lemurs, Southern bald ibis, Hadada Ibis, Hamerkop, Golden weaver, Whistling ducks, African pygmy geese, Spoonbill, Alexandrine parakeets, Gold-breasted starling

Also we made our base for both habitats and some walls for the savannah.

Feb 2, 2026

Today we painted the savannah base and did the safety forms.

Feb 3, 2026

Problem

Our problem is to make zoos around the world more humane for the animals. We want to fix the inhumane treatment of animals around the world to make zoos a safer place for the animals.

Feb 5, 2026

Today Kate made the tree for the monkey habitat and found a dome for the habitat. Also Naomi made the tall shelters, and rock structures for the savannah.

Feb 9, 2026

I made the saran wrap windows for the savannah. Also I started making a slide show for the diet, habitat, and important features for each animal.

Feb 12, 2026

Today Kate came over to my house and we worked on our project. We finished painting the clay animals and the vegetation walls. We started making trees and rocks for the savannah. We also made the water wheel and made some enrichment things for the zoo.

Feb 13, 2026

Today Naomi made the fence, shelters, and water hole for the middle. It's made of frisbee. Kate made the glass cover between the monkey and bird habitat and finished painting the ground, and the red panda shelter. We also finished the slide show and the citations.

We got the weight and conservation status, diet, and wild habitat from the Calgary Zoo website but this is where we got the other information.

Feb 21, 2026 and Feb 22, 2026

This last weekend I did the method and did some of the analysis.

- Naomi

Feb 23, 2026

Kate did the research for zoochosis and the problem and Naomi did the conclusion and made AI images for the header and project image.

What is zoochosis?

What is zoochosis?

Zoochosis is a type of psychosis that affects animals held captive in zoos. Zoochosis does not affect animals in the wild. It appears in the form of stereotypic behaviors, such as pacing, swaying back and forth, and swimming in circles, all with a blank look in the animal's eyes. These are repetitive actions that serve no purpose and are often just a way to pass time for the animals. This is the result of plain lives for animals in zoos. They don't get to roam free, problem solve, and interact socially resulting in a bland and boring life for the animals in zoos.

What are the signs of zoochosis?

Every animal kept in zoos experiences zoochosis differently. Depending on the species the signs of zoochosis can change. These are the most common effects of zoochosis:

- Pacing
- Bar biting
- Bobbing, weaving and swaying
- Rocking
- Self-mutilation
- Over-grooming
- Regurgitating and reingesting food
- Swimming in circles

What causes Zoochosis:

Animals in captivity are restricted in many ways and are often sensory deprived. We restrict what animals can do and who they can socialize with. Animals are often separated from their friends and family as well as every other animal of their species. We restrict their ability to make decisions and do meaningful things with their lives. Animals are restricted to living dull boring lives, causing mental illnesses.

How can you prevent Zoochosis?

Do not keep animals in captivity. Animals don't belong in zoos, they belong in the wild. The best way to keep an animal captive is to give them a sensory rich life that helps prevent Zoochosis. Do not visit inhumane zoos and circuses to help prevent abuses against animals.

Feb 27, 2026 Feb 28, 2026

These days we worked on finishing our project displays.

Mar 1, 2026

Today we finished our online project. We finished our analysis and we took photos and our video. We are really proud of how everything turned out.

